

JFQ

The Chairman's Priorities

Winning the Global War on Terrorism
Enhancing Joint Warfighting
Military Transformation

Incentive Pay

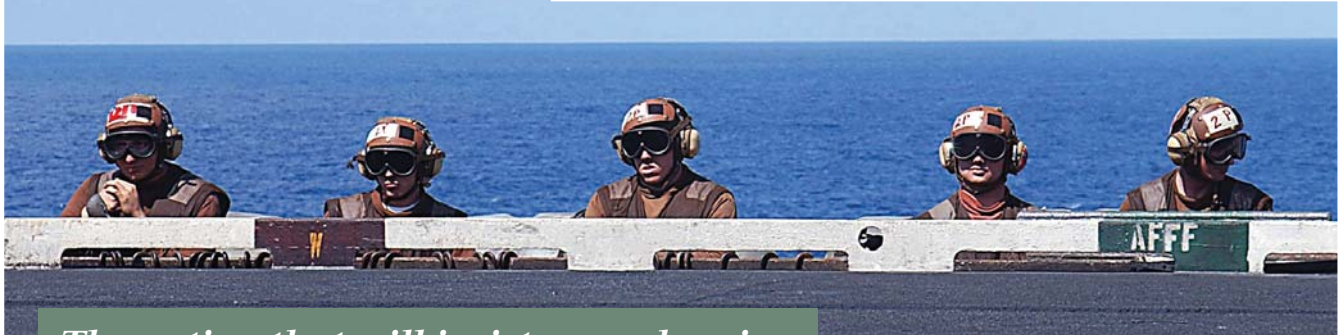
Central Asia

The Defense
Budget

Coast Guard

02
Summer

TENTH ANNIVERSARY YEAR



The nation that will insist upon drawing a broad line of demarcation between the fighting man and the thinking man is liable to find its fighting done by fools and its thinking done by cowards.

—Sir William F. Butler



A Word from the



Moving into Afghanistan,
Operation Anaconda.

Chairman

55th Signal Company (Keith D. McGrew)

This issue of *Joint Force Quarterly* starts its 10th year of publication. Over the past decade the journal has become widely read among both military professionals and defense analysts in this country and abroad. As such, it serves as an influential forum for discussing joint warfighting.

In this anniversary year, I want to review the state of the joint force and where we must go. The Armed Forces have made significant progress as a team over the last decade. Nonetheless, we are not where we should be. The rapidly changing international environment and the

global war on terrorism require that we create joint capabilities more quickly. Seams between organizations must be eliminated and service and joint core competencies integrated more effectively. Next, data must be shared among warfighters, civilian agencies, and coalition partners more efficiently. Finally, a faster decision-making process must be fully realized based on these initiatives. The result will be a decision-superior force—one that makes the right battlefield decisions faster than any enemy.

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The cover of this issue shows Stryker infantry carrier vehicle being unloaded from C-17 transport, Army Transformation Experiment '02 (U.S. Army/Sara Wood). The front inside cover features AH-64 refueling in Afghanistan, Enduring Freedom (55th Signal Company/Patrick Tharpe); sailors on *USS George Washington*, Mediterranean Shark (U.S. Navy/Mathew Keane); marines running search and seizure exercise, *USNS Guadalupe* (11th Marine Expeditionary Unit/Mace M. Gratz); and MH-60 arriving in Kandahar, Enduring Freedom. The table of contents finds P-3 preparing to takeoff during Enduring Freedom (Fleet Combat Camera Group, Pacific/Arlo K. Abrahamson) and General Patton in Sicily (U.S. Army).

The back inside cover captures marine in Urban Combined Arms Experiment, Millennium Challenge '02 (1st Combat Camera Squadron/Carla Kippes). The back cover depicts airmen, Cope Tiger '02 (1st Combat Camera Squadron/James E. Lotz); soldiers advancing on training site, Cobra Gold '02 (1st Combat Camera Squadron/Jerry Morrison); sailors en route to Dili in East Timor, *USS Decatur* (Fleet Combat Camera Group, Pacific/Gael Rene); and marines conducting non-combatant evacuation training, Cobra Gold '02.

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Gen Richard B. Myers, USAF
Publisher

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(continued from page 1)

A Decade On

Rereading the first issue of *JFQ* reveals what has and what has not undergone change in the last 10 years. In 1993, the services were enforcing no-fly zones over Iraq, protecting the Kurds in northern Iraq, patrolling the Persian Gulf to bar illegal Iraqi oil exports, enforcing an embargo in the Adriatic Sea with NATO allies, and conducting a humanitarian relief mission in Somalia.

Those missions have evolved. The Kurdish safe haven is temporarily secure, but Iraqi air defenses routinely fire on Allied aircraft; an expanded multinational coalition continues to interdict illegal Iraqi oil exports; and our primary military presence in the Balkans has transitioned from the air and sea to land as Americans participate in peace operations in Bosnia and Kosovo. Finally, we have resumed flying intelligence, surveillance, and reconnaissance sorties off the Horn of Africa. Although these efforts may have lost their nontraditional connotation, they are vital to our national interests. They contain the same if not an increased level of risk to the forces involved.

But the most significant change in the strategic environment is the global war on terrorism. Though difficult to conceive a decade ago, today this fight is our top priority. We face a challenge that differs from any threat in the past. The al Qaeda network poses a patient, cunning, ruthless, and dispersed threat in over 60 countries. It is conducting detailed planning for an opportunity to strike again. We must not underestimate its hatred of our Nation and value system. And al Qaeda is only one of several international terrorist organizations on the scene today.

The Joint Team

The President has set three objectives to protect the Nation: defeat terrorism, deny terrorists a safe haven, and prevent terrorists from gaining access to weapons of mass destruction. To meet these goals, we must have the mental agility to take the actions needed to defend ourselves and take the fight to the enemy. We must be unpredictable and adaptable in order to prevent future attacks. We must forge creative ways of defeating terrorism around the world. Since September 11, 2001, we have seized the initiative, but we must remain both engaged and vigilant.

As General Colin Powell pointed out ten years ago in the inaugural issue of *JFQ*, "Today, all men and women in uniform understand that we must fight as a team." We must heed his words in fighting terrorism. Our joint team is comprised of service capabilities as defined under Title X. One



U.S. Army (Robert L. Reeve)

Advancing into northern Kuwait, Desert Storm.

we must focus service core competencies in ways that make the whole greater than the sum of its parts

of my responsibilities is advising our senior leadership on how to maximize those capabilities without regard to the service which employs them. To fight as a joint team, we must focus service core competencies in ways that make the whole greater than the sum of its parts.

But there is room for improvement. A comparison of Desert Storm and Enduring Freedom demonstrates what I mean. A decade ago, the joint team fought literally side-by-side, in segregated lanes, with firepower separated on the tactical and operational levels. The air campaign kicked things off and lasted 38 days. When the ground campaign

began, the Marines attacked in a sector along the coast of Kuwait, Arab coalition forces assaulted the middle sector, and American soldiers of VII Corps and XVIII Airborne Corps swept around the western flank. Many close air support sorties were flown in the spectacular 100-hour ground campaign, but they were primarily used beyond the sight of the forces on the ground. The

joint force operated in the same battlespace, but each component fought a separate fight.

Afghanistan

Operation Anaconda offers a useful comparison. In that case, 1,000 combat-tested enemy fighters occupied terrain of their choice—rugged mountains in eastern Afghanistan (at eight to nine thousand feet above sea level), the same area where the *mujahadeen* had often bloodied Soviet forces during the 1980s. So the enemy was confident and seemingly secure in their positions.

To defeat the Taliban and al Qaeda forces, the American ground commander integrated all elements of the joint team in a superb fashion. He incorporated our Afghan military partners on the tactical level to occupy key blocking positions. He had video and intelligence from various sources immediately available. Then a task force the size of a U.S. infantry battalion (some 500 soldiers) attacked and defeated a defending force twice its size. Air Force fighters and carrier-based strike aircraft, together with bombers and attack



U.S. Marine Corps (William D. Crow)

**CH-53E over
Afghanistan, Operation
Anaconda.**

helicopters, provided air support to soldiers in close combat with the enemy. This joint force destroyed a larger enemy force and secured the mountainside. Although there are many lessons to learn, we and our partners won because of the bravery of the troops involved as well as the synergy gained from fully integrating the lethal effects of our joint capabilities.

One concern is ensuring that joint warfighters have a common picture of the battlefield and communications suite. During Anaconda, for example, air and land component commanders had different pictures of the battlefield. In the fight, tactical air control parties accompanying troops on the ground dealt with the combined air operations center (CAOC), bypassing the land component commander. Though unacceptable, this process was used because CAOC had superior situational awareness. Common command, control, communications, computers, intelligence, surveillance, and reconnaissance (C⁴ISR) is needed to properly align the chain of command.

Seamless Warfare

On a positive note, there was progress in eliminating barriers between organizations. Joint warfighting has benefitted from more timely and

relevant intelligence. Predator real-time video not only went directly to the air operations center, as doctrine requires, but straight to AC-130s. Also, P-3s flew missions over land to provide immediate intelligence information to ground commanders being deployed against the enemy. Ground liaison officers were onboard and provided immediate readings of P-3 sensors for troops on the ground. Such liaison enabled the joint team to eliminate seams among intelligence, special operations, air, and infantry units. But we must also find ways to apply modern technology to minimize the need for liaison because it is a cumbersome and labor intensive approach to sharing information.

Exchanging people among units is not a new concept. When ground commanders needed better air support to break out of Normandy, Ninth Tactical Air Command provided aviators to ride along with the lead tanks. These airmen gained insight into the tactical situation on the ground and brought expertise from another part of the joint team. The aviators translated the ground situation into language and terminology that allowed P-47 pilots to provide timely and accurate

**Interdiction in the
Arabian Sea, Enduring
Freedom.**



Fleet Combat Camera Group, Pacific (David C. Mercil)

air support. The result was a much better integrated air-ground team that destroyed countless enemy tanks and facilitated the Allied advance.

Global War on Terrorism

Sharing information must become more than exchanges between platforms and services—it should extend to the inter-agency community and coalition partners. The arrest of Abu Zubayda in March indicates that other instruments of national power have a need for timely information. In the case of Zubayda, U.S. and Pakistani law enforcement organizations (aided by civilian and military intelligence agencies) acted on such intelligence and dealt a severe blow to the enemy.

The global war on terrorism requires employing every instrument of national power; thus we must develop the means to automatically share data and intelligence among members of the joint team. Eliminating seams is a key step toward fielding a decision-superior force. Improved C⁴ISR networks are at the core of this capability. These improved, seamless, and expanded networks will enable us to see the enemy, decide a course of action, then act decisively. The record is

quite clear: the side that acts faster wins. This is the essence of a decision-superior force.

Fielding a decision-superior force is a complex process, but the operational benefits make it a top priority. This force is essential in defeating terrorism—an effort that demands employing all possible resources. It will create a more effective and lethal joint team. The result will be better exploitation of the unique competencies of individual services, coalition partners, and all elements of the national security team.

Joint Force Quarterly was launched to enhance joint culture. Do you have better ways of building a joint team? Then enter the fray. Put your ideas on paper and submit them to the journal. For a decade, these pages have served as an outstanding forum for exploring matters of jointness. Let's continue that tradition by stimulating ideas on the new challenges facing the Armed Forces.

RICHARD B. MYERS
Chairman
of the Joint Chiefs of Staff

**sharing information
must become more than
exchanges between
platforms and services**

Letters . . .

CIVIL AND MILITARY MINDS

To the Editor—I am writing in regard to the article by Richard Betts on linking the situational and fluid mentality of decisionmakers with more linear cause and effect ideas of military planners (see “The Trouble with Strategy: Bridging Policy and Operations” in *JFQ*, Autumn/Winter 01–02). Although the author does a good job of highlighting the basic issue of combining politics and war, he does not go far enough. In particular, the guidelines that he proffers for connecting policy goals with military operations are problematic.

First, Betts recommends estimating the culminating point of victory before combat begins. In other words, set your goals prior to fighting and stop when they are reached. For instance, it is suggested that if restoring the territorial integrity of South Korea had been established as a goal and followed, U.S. forces would have stopped their offensive operations after Inchon and avoided the march to the Yalu and Chinese intervention. This seems reasonable until one considers that combat can provide valuable data on the military balance between protagonists. From a political point of view, if war reveals that more stringent demands can be made, it would be unreasonable to fail to act on this new information. For instance, if this sort of advice had been adopted in World War II, the Allies might have terminated their efforts after securing Great Britain from enemy attack rather than going to Berlin. If Iraq had stopped its aggression in Kuwait when presented with the terms of the coalition in Desert Storm, its forces might have withdrawn intact and would present a much stronger enemy today. Sometimes sticking to original goals is not a good idea. Policymakers are unlikely to agree to quit when they are ahead, nor should they.

Second, Betts suggests that before committing to war there is a need to “decide the ceiling on acceptable costs and link it to the exit strategy.” The problem of cost ceilings is that war is often as much about bluffing as fighting. John Kennedy was playing poker when he insisted he would “pay any price . . . to assure the survival and the success of liberty.” If he had advertised that the United States would stop fighting after fifty thousand casualties, liberty might have been a good deal less successful. Beyond this point, as Truman and Johnson learned to their dismay, in the final analysis the ceiling on acceptable costs is really not up to them.

Finally, the author argues that there should be an exit strategy. Although I can’t argue with his point, I also must note that there are not many nations to which the United States has deployed troops over the years where they do not remain to

this day. It might be better advice for political leaders to develop governing strategies, then decide whether the war is worth winning.

Betts is right; civilian officials and military officers should put their heads together at every opportunity. Nevertheless, I’m not sure his three guidelines are the best place to start.

—Richard Andres
School of Advanced Airpower Studies
Air University

A COMPONENT COMMAND

To the Editor—Though the sidebar describing EUCOM in the *JFQ* Forum on “NATO, Europe, and Beyond . . .” (Autumn/Winter 01–02) does an admirable job of highlighting the command, its coverage of U.S. Marine Corps Forces Europe (MARFOREUR) needs to be corrected.

MARFOREUR is headquartered in Boeblingen, Germany, and not Norfolk, Virginia. It is the only Marine organization assigned to EUCOM; thus the statement that the commanding general of II Marine Expeditionary Force (II MEF) and his subordinates are included in MARFOREUR is inaccurate. Confusion arises from the fact that the MARFOREUR commander leads six separate commands: MARFOREUR, U.S. Marine Corps Forces

Atlantic (MARFORLANT), U.S. Marine Corps Forces South, Fleet Marine Forces Atlantic, Fleet Marine Forces Europe, and Marine Corps Bases and Stations Atlantic. Even though the MARFOREUR commander spends most of his time at headquarters in Norfolk, Marine matters within the area are charged to headquarters in southern Germany. As the MARFORLANT commander he exercises operational control of II MEF for the Commander, U.S. Joint Forces Command, he does not enjoy a command relationship with the Commanding General, II MEF, as Commander, MARFOREUR.

The MARFOREUR commander has parity with other service components in theater except for the lack of assigned subordinate forces. Accordingly, he advises EUCOM on the employment and support of Marine forces and conducts employment and redeployment planning and execution for either assigned or attached forces. Executing such tasks without subordinate operational forces distinguishes MARFOREUR planning efforts from other service components.

—LtCol Erik N. Doyle, USMC
U.S. Marine Corps Forces Europe

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The Chairman's Agenda

In his initial remarks in *Joint Force Quarterly*, the Chairman set out three priorities for his tenure: winning the global war on terrorism, enhancing joint warfighting capabilities, and transforming the Armed Forces. This JFQ Forum addresses that agenda through contributions which examine each priority from a variety of perspectives and disciplines. In addition, subsequent issues of the journal published during this tenth anniversary year will focus on military transformation in a regular series of feature articles. JFQ

THE GLOBAL WAR ON TERRORISM

The war on terrorism is the most significant mission the military has faced during my years of service. With the assault of September 11 and others over the past several years, the al Qaeda network and other terrorist groups have shown their willingness to attack the United States and its freedoms directly—and those of all civilized nations.

—From the Chairman, *JFQ*, no. 29 (Autumn/Winter 2001–02)

JOINT WARFIGHTING

Our joint team is comprised of service capabilities as defined under Title X. One of my responsibilities is advising our senior leadership on how to maximize these capabilities without regard to the service which employs them. To fight as a joint team, we must focus service core competencies in ways that make the whole greater than the sum of its parts.

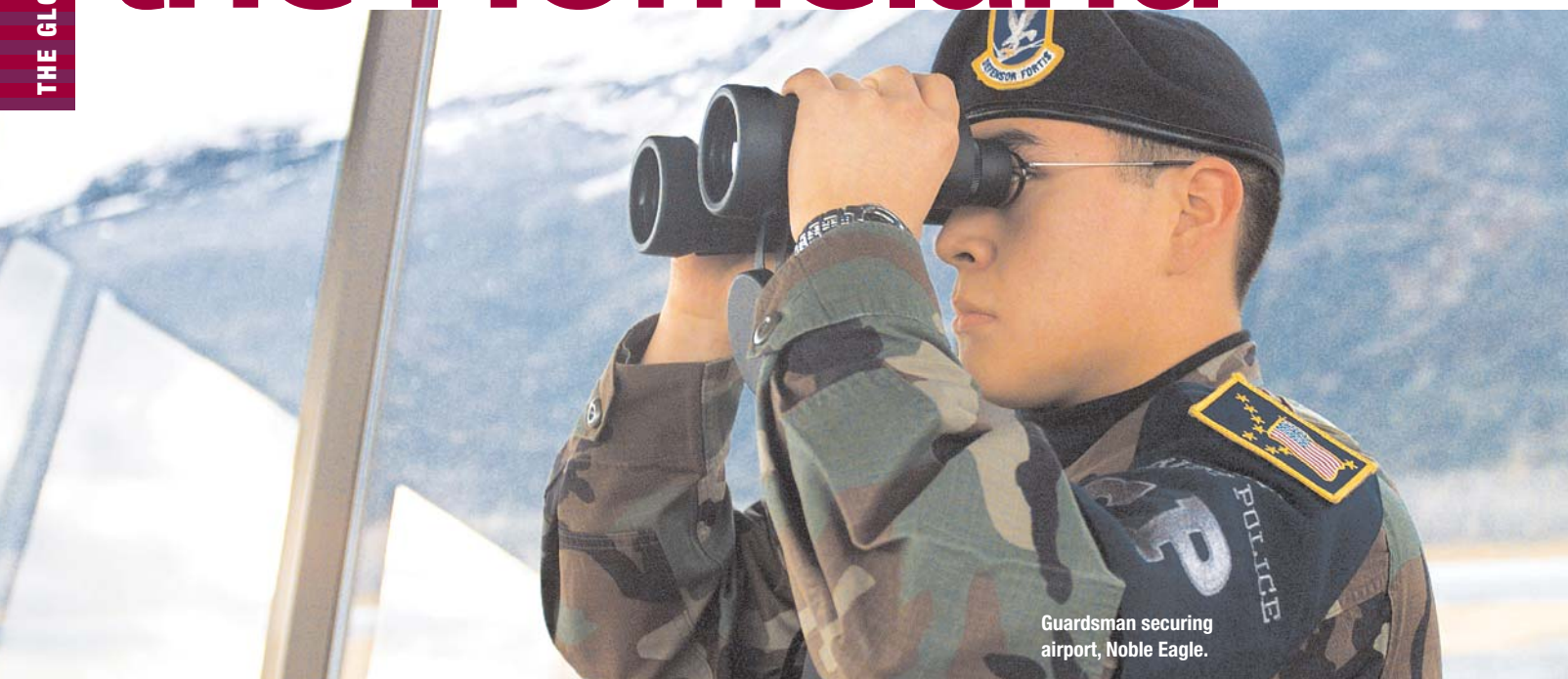
—From the Chairman, *JFQ*, no. 31 (Summer 2002)

MILITARY TRANSFORMATION

Whether transformation comes in incremental steps or radical leaps, it does not occur in a vacuum. As the world changes, so do the threats. The standing requirement to maintain readiness for today's conflicts and potential adversaries must be balanced with modernization investments and the need to accelerate the introduction of transformational changes.

—From the Chairman, *JFQ*, no. 30 (Spring 2002)

Defending the Homeland



Guardsman securing airport, Noble Eagle.

168th Communications Flight (Kevin L. Bishop)

An Historical Perspective

By JOHN S. BROWN

The emphasis on homeland security over the last year has generated intense interest in a range of possible threats. Understandably, the current focus has been on civil defense, with concern for protecting innocent populations from weapons of mass destruction. Planners today as in the past,

however, recognize that civil defense is only one part of a larger issue. In analyses conducted for both the Quadrennial Defense Review and the global war against terrorism, the U.S. Army Center of Military History added rear area security, border security, aid to the civil authority, internment, humanitarian relief, economic intervention, and domestic disturbances to civil defense in its consideration of homeland defense—the military component of homeland security.

Brigadier General John S. Brown, USA, is Chief of Military History and commander, U.S. Army Center of Military History, as well as the author of *Draftee Division*.

Rear Area Security

Warring nations have always sought to secure their heartlands from the depredations of the enemy. Prior to the 20th century, operations were intended to intercept enemy forces at sufficient distances to ensure that centers of agriculture, commerce, recruitment, training, and civil life could continue unmolested. With industrialization, the relevance to the war effort of protected territory became more pronounced, and with the mass armies of World War I the concept of a continuously defended front extending along an entire national border became feasible. During World War II, the continental United States became a consciously secured rear area where the so-called Arsenal of Democracy generated the material wherewithal to support its own war effort and that of its allies.

The United States adopted an isolationist posture during the interwar years. If necessary, it would defend itself without allies. The Navy and Air Force would intercept all comers far from American shores. A major fraction of the Army force structure was given over to coast artillery, assigned to fortifications carefully laid out to provide overlapping fires at extended ranges using the most modern technology to defend approaches such as Long Island Sound, the Chesapeake Bay, and estuaries on both coasts of the continent.

When the United States entered World War II, an actual invasion of the homeland seemed unlikely. Strategic

when the United States entered World War II, an actual invasion of the homeland seemed unlikely

bombardment was more probable. Film footage of the devastation wrought by Germany during the Battle of Britain galvanized America. Mayor Fiorello LaGuardia of New York City, for example, participated in elaborate air raid rehearsals with firemen, policemen, and other first responders. Industrial facilities undertook complex camouflage and concealment schemes. The Coast Guard seized Greenland, a possession of German-occupied Denmark,

Army surgeon treating Filipino, 1899.



and discovered a *Luftwaffe* weather station, raising speculation that a larger enemy establishment might have been contemplated had America not acted. Threat of strategic bombardment from the Pacific seemed even more real, given the catastrophic destruction Japanese aircraft inflicted at Pearl Harbor. The fear faded after the dramatic victory at Midway crippled the enemy carrier fleet. The ultimately successful Battle of the Atlantic foreclosed German options as well. The Japanese did pursue a bizarre initiative to launch balloons with incendiary devices on prevailing winds across the Pacific in the hope of starting forest fires in the American Northwest. The balloons had little success but did cause the Army to divert a battalion of paratroopers—the famous 555th “Triple Nickel”—to duty as smokejumpers.

Throughout the war the most realistic threats to homeland security were raids or sabotage against key facilities. The United States did suffer several Japanese submarine-launched shellings of Pacific coastal facilities, and German

submarines released two teams, each with four saboteurs with explosives, across Atlantic beaches. The Federal Bureau of Investigation rounded them up, but not before they fueled public panic. Local authorities argued that police and state troopers were too few and that when the War Department federalized the National Guard it removed the only state means of securing themselves. The political give and take resulted in an overreaction, and 19 of 34 divisions then in training were diverted to domestic security. This disruption threw ground force mobilization timelines off schedule by as much as six months as guardsmen who should have been preparing to deploy were guarding beaches, dams, factories, and railway bridges.

The War Department realized it had to relieve deployable forces of domestic security duties to fight the war. Civil defense efforts soon attracted five million volunteers who could fulfill some security and surveillance functions. Newly organized state guard units, consisting largely of overage former guardsmen and other nondeployables, were also useful. The best solution to meeting specific installation

security needs was deputizing Federal Auxiliary Military Police, individuals who often worked at the sites. Most factories had security forces, which proved to be useful with modest investments in training and equipment when they were integrated into larger networks for coordination and reporting. As dictated by circumstances, these 200,000 auxiliary policemen could be reinforced by state guardsmen, who numbered 160,000, or 50,000 military police retained in the Zone of the Interior to secure Federal property and provide reaction forces. There was also the broader surveillance provided by the five million civil defense volunteers. Ultimately, 16,007 factories were deemed essential to the war effort and placed under this security mantle, as were critical bridges, roads, dams, and other infrastructure.

Civil Defense

Many consider civil defense a secondary part of rear area security. For most of the history of the Nation that was the case. The attack on Pearl Harbor in 1941 and shock of discovering that the Soviet Union had the atomic bomb in 1949 altered that subordination. Capabilities for strategic projection and weapons of mass destruction combined to create situations in which civilians could be targeted with virtually no notice. The Civil Defense Act of 1950 established the Federal Civil Defense Administration to work with state and local officials to avert such a catastrophe. Agencies and lines of authority have evolved over time, but the principle of a Federal-state-local partnership to protect the public from weapons of mass destruction has remained.

At the outset of the Cold War, Soviet planes rather than missiles were the practical platform for delivering nuclear weapons. Both American and Canadian air forces developed capabilities to intercept them, including radars across northern Canada for early warning. Washington was ringed by 27 anti-aircraft gun and missile sites, and other cities were similarly protected. These sites could be quickly manned in an emergency because crews were drawn from local Reserve units. The prospects for intercepting attacking bombers were rather good.



Guardsman screening traveler, Noble Eagle.

U.S. Air Force (Joe Pastre)

American technologists attempted to keep pace as a ballistic missile threat began to supplant aircraft. Advances allowed friendly missiles to destroy incoming missiles in flight. The feasibility of interception generated controversy then as now. Today the aim is to identify a warhead among decoys and debris and destroy it with a direct hit. The antiballistic missile technologists of the 1960s only aspired to get close enough with a nuclear explosion of their own to immolate decoys, debris, and warheads based on the not unreasonable assumption that a nuclear explosion outside the atmosphere and hundreds of miles away was preferred to one inside the atmosphere and possibly in a friendly city.

Few believed it was possible to intercept all incoming strategic weapons, so civil defenders attempted to protect the American people from the effects of those that did get through. Successive administrations sought to create a nationwide fallout shelter system, with state and local help. The Army Corps of Engineers and Navy Facilities Engineering Command identified public shelters for the entire populace. This massive survey

was followed by efforts to stock shelters with food and water, ensure ventilation, and mark their location clearly with black and yellow signs.

Contingency plans of the Office of Civil Defense (a successor of the Federal Civil Defense Administration) were updated by reinforcement training units from the Individual Ready Reserve, who came on active duty once a year to review and amend the plans. Each state adjutant general had plans and resources to assume responsibility in the event of a collapse of civilian authority, and Federal assets deployed to assist would be assigned to adjutants general under such circumstances. Though imperfect, civil defense appeared to be robust enough to protect substantial proportions of the population through the early 1970s. But when the concept of mutual assured destruction and the Antiballistic Missile Treaty were embraced as policy, these capabilities began to shrivel.

Unfortunately, Moscow did not remain the only strategic player with the potential to attack using weapons of mass destruction. Terrorism by non-state actors became more ugly and lethal in the 1970s and 1980s. If terrorist prospects for acquiring nuclear weapons seemed remote, their capability to acquire chemical, biological, or

radiological weapons became more worrisome. After years of neglect, civil defense reemerged as an issue with the XXIII Olympiad in Los Angeles in 1984. The Army was designated as DOD executive agent, assisting law enforcement in securing the games. Other counterterrorist interventions, simulations, and exercises followed. The Defense Authorization Act for FY97 established the Domestic Preparedness Training Initiative within DOD. It focused on assisting municipalities and law enforcement authorities in preparing for chemical or biological attacks with emphasis on training. Americans are rediscovering civil defense, al-

since before the Revolutionary War, Americans have been suspicious of military intrusion into civilian affairs

though their efforts have not yet matched the scope of the 1960s.

Securing the Borders

Border defense has not been an essential feature of homeland defense since the first half of the 19th century. The War of 1812 ended in peace with Great Britain and its Indian allies on the northern frontier, and by 1823 some 750 soldiers were stationed along a border that was becoming increasingly somnolent. The overwhelming American victory in the Mexican War of 1846–48 also removed any serious military threat to the southern frontier. If border defense faded as an issue in the Southwest, however, border security remained a military proposition for another century. Cross-border lawlessness waxed and waned depending on economic circumstances, political turbulence, and the proclivity of hostile Indians and bandits for using this unsettled region to their advantage. The Army and the Texas Rangers engaged in the Cortina War in 1859–60, clearing Brownsville of a renegade band and chasing it deep into Mexico. This doctrine of hot pursuit would be invoked many times over the next several decades.

The most dramatic case of hot pursuit involved Pancho Villa in 1916–17. The revolution in Mexico

that began in 1910 had dangerously inflamed the frontier, and the situation worsened as President Woodrow Wilson maneuvered to support constitutionalist Venustiano Carranza against less acceptable local factions. Villa eventually retaliated against the United States for its support of Carranza by raiding Columbus, New Mexico, and killing 17 people before being repelled. Within a week, 6,000 troops assembled for the punitive expedition, and 161,664 National Guardsmen and Reservists mobilized to secure the border and back the regulars. Brigadier General John Pershing pursued Villa deep inside Mexican territory, killing 251 and wounding 166 while losing 15 killed and 31 wounded. These operations continued through 1929, with several brigades of cavalry and more than 200 camps and outposts

which secured pumping stations, bridges, railways, and border towns. By the 1930s turbulence in Mexico abated and the border became increasingly civilianized. When the military was next called on to participate in a border mission, it was under the guise of assisting the civil authority.

Aid to Civil Authority

Since before the Revolutionary War, Americans have been suspicious of military intrusion into civilian affairs, but the boundary between civil and military authority was nevertheless fluid on the frontier. The state of relations with Indian tribes was often in the gray area between war and peace, and much of the activity by the Army with respect to both Indians and settlers was akin to law enforcement. The closing of the frontier in 1890 lessened fluidity between civil and military authority, as did the Posse Comitatus Act in 1878. Former Confederate states had strong feelings about martial law, having experienced it during the Reconstruction era. In return for conceding victory to Rutherford B. Hayes, a Republican, in the disputed election of 1876, the South extracted the promise to end Reconstruction, the passage



Pershing in Mexico, 1916.

DOD

of Posse Comitatus to exclude the Army from local law enforcement, and other concessions to local sovereignty.

Inspired by an alarming increase in drug traffic, the Military Cooperation with Civilian Law Enforcement Agencies Act of 1981 (reinforced by the Anti-Drug Abuse Act of 1986) reversed this pattern of exclusion and established a National Border Interdiction System by combining Federal agencies to interdict the flow of narcotics into the United States. Such criminal activity exceeded the capabilities of local law enforcement to counter them without Federal assistance. The military role was providing equipment such as aircraft, vehicles, weapons, and night vision devices; loaning or granting matériel such as protective vests and consumable supplies; and training in the use of this equipment.

The military role in aiding civilian law enforcement broadened under the mounting pressure of the war on drugs. In 1989 Congress designated the Department of Defense as lead agency for detecting air and maritime transit of illegal drugs and the integration of Federal command, control, communications, and intelligence assets. Joint Task Force 6 (JTF-6) was formed to support four areas of activity: operational,



Japanese-Americans
in Santa Clara, 1942.

intelligence, engineer, and general. Operational support involved day and night aerial reconnaissance, border surveillance, dive operations, and transport. Intelligence support provided specialists to assist in analysis. Engineer support involved construction such as roads, border fences, lighting, and training facilities. General support included training, canine support, communications, and certain military skills. To this point the focus of JTF-6 has been the war on drugs, but the enormous mobilization of military assets for airport security and surveillance functions to support the war on terrorism presage a more permanent involvement of organizations like JTF-6 or similar efforts to assist civil counterterrorism efforts as well.

Internment

One aspect of border security and the war on terrorism that has excited major controversy is internment of foreign nationals and their rights while

interned. This is neither a new development nor a new debate. Since the 18th century civilized nations have interned or deported enemy aliens within their borders at the outset of war, not only to prevent them from spying or committing acts of sabotage, but also to protect them from being assaulted or killed because of the passions of war. The Federal Government pursued internment policies as early as the Alien Enemies Act of 1798 and has expanded this role to address illegal immigrants or refugees. When the task exceeds the capacity of civil authorities, the military has been called upon to undertake internment of aliens. During World War I, for example, the War Department held 2,300 Germans and Austro-Hungarian citizens seized in the United States, 1,356 German naval personnel seized from war vessels bottled up in American harbors, and 2,300 merchant marine crewmen seized in America, Panama, and the Philippines.

The Army role in internment expanded to include large numbers of illegal immigrants and refugees who could not be accommodated by civil authorities without threatening disruption. During the Mexican Revolution of 1913–14, soldiers of both the Federalist and the Constitutionalist forces fled the battlefield and crossed the border into the United States. The Army disarmed and interned them for eventual repatriation. On one occasion an entire Federalist division of 3,300 men (with 1,300 women and children) entered the United States and surrendered. Similarly, large scale internment was necessitated by 43,700 refugees from Cuba during the Mariel boatlift in 1980, and 12,500 Haitians were detained at Guantanamo Bay from 1991 to 1993. In each case, DOD cared for the refugees until immigration authorities could determine individual dispositions.

A particularly controversial episode involved the internment of Japanese-Americans during World War II. After the attack on Pearl Harbor, President Franklin Roosevelt issued an executive order with the avowed purpose of protecting the Nation against espionage and sabotage. The order allowed military commanders to exclude persons of Japanese ancestry from certain areas and led to the evacuation and internment of over 100,000 people from the west coast. Unlike the relatively few Germans and Italians interned at that time, and prior use of the Alien Enemies Act, most of the Japanese-Americans interned were either U.S. citizens or permanent resident aliens. In retrospect, neither fear of sabotage and espionage nor the notion of protective custody could justify this massive internment of Americans. One must appreciate the traumatized mindset of the public in 1942 to understand this overreaction.

Humanitarian Relief

The military has a long tradition of helping Americans in danger or under duress because of natural or manmade disasters. The potential of such catastrophes rose as the population grew and concentrated in cities. The Chicago Fire of 1871 was a case in point, killing hundreds and leaving thousands homeless. The Army supplied food, water, and tentage to the stricken inhabitants. After the San Francisco earthquake of 1906, the local commander mobilized 6,000 soldiers and marines to fight fires, provide medical care, patrol streets, and shelter the homeless. A War Department regulation in 1917 codified the Army flood relief role, which steadily expanded. Only the Army—specifically the Corps of Engineers—had interstate capabilities, command and control, transportation, stockpiles, and hydrological expertise to extend relief efforts across entire drainage basins such as those of the Mississippi and Columbia Rivers. In addition, National Guardsmen in each state immediately provided local governments disciplined manpower with inherent means of command,

control, and supervision. The Secretary of the Army was designated executive agent for military support to peacetime emergencies in 1973, and all Federal responsibilities were pulled together under the Federal Emergency Management Agency (FEMA) in 1979.

Neither nature nor FEMA ever sleeps. In winter heavy snow isolates communities, closes roads, and endangers travelers and the aged. In spring the snow melts and combines with rains to cause flooding. Summer dries out the ground and inhibits flooding but introduces vast brush and forest fires. And temperature differentials bring hurricanes in the autumn.

The military, and the Army in particular, can anticipate committing a portion of its manpower to public relief. Even during World War II, divisions were pulled out of training to assist their stricken countrymen. Requirements of up to 30,000 personnel have ample precedent. From September 23 to October 7, 1992, for example, Florida and Louisiana reeled from Hurricane Andrew, Hawaii from Hurricane Iniki, and Guam from Typhoon Omar. Military personnel re-

beyond humanitarian relief, there are long-term efforts conducted by the military to ensure the physical well being of the public

stored power, removed debris, and provided food, water, sanitation, tents, medical support, and transportation. Meanwhile, the California and Idaho Army National Guard fought forest fires, the Wisconsin Army National Guard reacted to tornadoes, New Mexico required military assistance to deal with water table contamination, and Rhode Island needed emergency water relief when sewage backed up into municipal water supplies. Humanitarian relief strains technical capabilities that are in short supply: water purification units, deployable medical assets, and horizontal engineers. All told, this array of emergencies required the services of 29,317 military personnel. Whatever else soldiers are doing, it can be anticipated that they will also be involved in the humanitarian relief at home.

Economic Intervention

Beyond humanitarian relief in the wake of disasters, there are long-term efforts conducted by the military to ensure the physical well being of the public. Intervention in the economy can be characterized as collateral, programmed, and crisis. Frontier Texas offers an example of collateral intervention. In performing its security mission, the Army spent \$70 million in the state between 1847 and 1900. Military pay supported merchants, commercial ventures, and real estate, while Army logisticians contracted for construction, provisions, livestock, water, and transport. Some historians believe that the Army jumpstarted economies in Texas and other frontier states, a pattern that continues to this day. The military annually spends \$4 billion in Texas and another \$1 billion in Georgia, Colorado, and Washington.

Economic intervention can be more deliberate. The premier military agency responsible for such programmed intervention is the U.S. Army Corps of Engineers. In the pursuit of strategic infrastructure, the Corps of Engineers has surveyed railroads, dug canals, erected public buildings, built roadways and bridges, constructed dams, improved ports and rivers, and reclaimed wetlands. Its enormous responsibilities include operating and maintaining some 12,000 miles of commercial waterways, 925 harbors, and 276 locks—two in operation since 1839. Taken together, these facilities handle \$700 billion in foreign commerce and generate 13 million jobs. In addition to waterways, railroads are indebted to military engineers, while the interstate highways began as a strategic initiative of the Eisenhower administration.

In economic crises, the large scale organizational capacities of the Army have made it useful in getting reservoirs of manpower to quickly execute national policies. During the Reconstruction era, the Freedmen's Bureau—an autonomous agency of the War Department—provided 21 million rations



DOD (Joseph Garrison)

to indigents, sponsored vocational education, acquired title to land and redistributed it, and moved 30,000 people into areas where they could support themselves. In the Great Depression, the Army diverted 3,600 officers and 13,000 enlisted men to manage the Civilian Conservation Corps, putting thousands of young people to work on public projects. Peak enrollment was 459,000, and three million cycled through the program, an enormous relief in a period of massive unemployment. During both World Wars I and II, the War Department was given authority to take over plants essential to the war effort if production was at risk. Perhaps because of this authority, it was seldom used. Labor and management generally behaved well, and the Army only took over nine of the 16,007 plants considered vital during World War II.

Crisis economic interventions often draw on specific skills in trying circumstances. During the postal strike in 1970, the Army identified personnel from all services with relevant experience and organized them to keep the mail moving until the strike was resolved. Similarly, during the air traffic controller strike in 1981, the military kept airports functioning to avert domestic paralysis.

Domestic Disturbances

Preserving domestic tranquility is a constitutional mandate. From the Whiskey Rebellion of 1794 to the Los Angeles riots of 1992, soldiers have more frequently been involved in restoring law and order than contending with foreign enemies. The vast majority of such missions have gone to the National Guard under state control, but the Calling Forth Act of 1795 has been invoked to bring Federal troops or Federalized National Guard to play as well. The Army approach to such missions was captured in a field manual published in 1953: “the suppression of violence without bloodshed or undue violence is a worthy military achievement” and must thus involve “a maximum application of manpower and a minimum application of force.” One can control the streets with manpower or firepower.

Federal intervention in civil disturbances has almost always been mounted in response to requests by the states. Exceptions occurred during the civil rights movement. Presidents Dwight Eisenhower, John Kennedy, and Lyndon Johnson mobilized Federal troops to protect the rights of black Americans on five occasions. The integration of James Meredith, who had served as a staff sergeant in the Air Force, at the University of Mississippi reveals that overwhelming presence can suppress violence without bloodshed.

Over 30,000 members of the active Army and Federalized Mississippi Army National Guard were involved. Meredith was physically protected by an inner core of 536 U.S. marshals. Four battalions patrolled the university campus, broke up disturbances, and secured property. Another three provided similar services in the city of Oxford, Mississippi. Rioting tapered off as the Army posted daily security for over six months. Only two deaths occurred during the disturbance, both arguably accidents. Eventually all parties saw reason and school integration became less difficult across the South.

Anti-war protests and the New Left led to domestic confrontation in the 1960s. The worst case of violence at home was racially motivated, however, and erupted after the murder of Martin Luther King in April 1968. Riots erupted in 125 cities across the country. Some 37,014 Federal troops and Federalized National Guardsmen were sent into Washington, Baltimore, and Chicago. The Army identified 18 on-call brigades, each of which could dispatch 200 soldiers in 6 hours, 600 in 12 hours, and 2,400 in 24 hours—altogether 43,000 assisted beleaguered law enforcement agencies within a day. The total inventory of troops available for domestic crises included 316,000 National Guardsmen, 192,000 Reservists, and 90,000 members of the active component. And this was possible at the height of the Vietnam War.

Americans have a long tradition of defending the homeland from diverse threats. Proposals for future security should take that history into account. Requirements for rear area security, civil defense, border security, military aid to civil authority, internment, humanitarian relief, economic intervention, and domestic disturbances are likely to continue. Taken together, they describe the broad range of what homeland defense has been in the past and what it is likely to remain in the future.

JFQ

F-16s patrolling skies over Washington.



148th Fighter Wing (Dean Kuhlman)

Strengthening Security at Home

By MICHÈLE A. FLOURNOY

The events of September 11, 2001, pierced the sense of invulnerability that most Americans had come to expect. Although the feeling of security at home waxed and waned with the perils of the Cold War—from duck-and-cover drills in the 1950s to détente in the 1970s—an expectation of being removed from any direct threat of war

became common after the fall of the Soviet Union. As the sole superpower, the United States pursued its interests as a nation at peace. If the Persian Gulf War warned that there were still threats around the world, it also reinforced the idea that America would fight its wars far from home. As one Pentagon wag quipped in the 1990s, the Armed Forces only played away games.

In the decade following Desert Storm, some defense analysts began to focus on asymmetric threats that could be directed at the homeland. At the

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same time the Clinton administration initiated various actions to help Federal, state, and local governments enhance their ability to defend against and coordinate responses to attacks on the United States. But Americans remained either unaware or unconvinced of any threat even after the attack on the World Trade Center in 1993.

In the wake of the worst terrorist attack in the history of the Nation, homeland security has become the top priority. Before September 2001 there was a growing commitment among many government officials to guard against such threats to the United States. Since then there has been an urgent public demand and an unprecedented political will to do whatever is necessary to enhance homeland security as quickly as possible. Congressional approval to give the President \$40 billion in an emergency supplement—twice the sum requested—was indicative of the new mood.

But a year after this wake up call, the United States still lacks a homeland security strategy to manage risk and guide resource allocation. Although Congress is debating how to organize for homeland security, no decisions have been made on which threats require attention, what programs should receive a priority, and how resources must be allocated. Given this policy vacuum, there is an urgent need for an integrated, strategy-driven homeland security program.

Prevention, Protection, Response

Homeland security means preventing, deterring, preempting, and defending against attacks against the United States, and managing the consequences of any attack. Inherent in this definition are three broad-based and enduring objectives that must underpin a new national strategy. The first is preventing attacks. This is central to the open, democratic, market-based American way of life. Prevention involves countering threats before they become manifest as far from the Nation's borders as possible. This can range from efforts mounted with allies to roll up terrorist networks or denying access to weapons of mass

destruction to immediate actions inside the United States to prevent terrorists from renting crop-dusters. Prevention is proactive, requiring offensive action to destroy or neutralize threats before an attack occurs. It involves "shaping the security environment to avoid or retard the emergence of threats to the United States," which can only be achieved by action abroad.¹ In this regard, the Departments of State and Defense, allies, and law enforcement agencies overseas play a significant role. In the final

decisionmakers must anticipate the kinds of attacks that might occur and details on their nature, location, and timing

analysis, the major element of prevention is detecting threats in advance, with enough specificity and warning to take preventive action.

To deflect attacks, decisionmakers must anticipate the kinds of attacks that might occur and details on their nature, location, and timing. This requires good intelligence collection and analysis and, in most cases, substantial sharing of information across national and agency lines.

Because not every threat can be prevented, the goal must be to minimize the likelihood that the most serious types of attack could be mounted successfully. As the Secretary of Defense said, "Our victory will come with Americans living their lives day by day, going to work, raising their children, and building their dreams as they always have—a free and great people."² The fact that Federal law enforcement and intelligence agencies have averted such attacks in the past by acting rapidly on specific indications is proof that a degree of prevention is possible.

The second objective of homeland security is enhancing the capability of the United States to protect itself against attack. This includes strengthening defenses against a range of threats that might come from a variety of directions against any number of targets.

Essential to the protection of American citizens is a capability to defeat or neutralize enemy action once an attack is launched. A range of capabilities that includes domestic law enforcement, intelligence, military, and public health organizations will be needed to mount effective barriers to such attacks whether they involve immediate responsive defense against either aircraft or missiles, a rapidly instigated search to find and foil a terrorist cell, or day-to-day security measures to patrol borders and protect critical infrastructure. This aspect of homeland security is particularly complex because of the variety of acknowledged threats, the increasing sophistication of known terrorists, and the ability of subversive elements to adapt their mode of operations to new countermeasures and exploit weaknesses in existing protective systems.

Efforts must focus not only on ensuring that terrorists can never again hijack airliners and fly them into skyscrapers. The United States must guard against planes, missiles, vehicles, ships, chemical or biological agents, nuclear materials in urban areas, and cyber and physical attacks on critical infrastructure. Both lethal and non-lethal disruptive threats demonstrate the complexity of the problem and range of participants in the public and private sectors who should be involved in protecting the homeland. This diversity highlights the need to prioritize. The United States cannot afford to give equal weight to defending against every conceivable threat scenario.

The third objective is improving the ability to manage the consequences of an attack. First, there must be a forceful capability to guarantee public safety; continuity of government; command, control, and communications; and essential services. Effective consequence management is central to maintaining public confidence and reducing the impacts of terrorism. As seen on September 11, first responders such as firefighters, police, and emergency rescue teams are often the most critical elements of consequence management. They should



Ground zero.

Fleet Combat Camera, Atlantic (Aaron Peterson)

The Pentagon,
September 11.



U.S. Marine Corps Photolab (Jason Ingersoll)

have the assets and training to coordinate their activities under extraordinary conditions, such as the use of weapons of mass destruction.

Second, the United States must be able to minimize disruption and restore the infrastructure rapidly in the immediate aftermath of any attack. This might involve restoring telecommunications service, repairing energy production and distribution systems, or providing alternative means and routes of communication and transportation. Hardening potential targets, developing contingency plans, and building a degree of redundancy into key systems will be critical to rapid restoration.

Third, the Federal Government must be prepared to quickly stabilize financial markets and manage economic consequences of an attack. This should involve agencies such as the Treasury Department and Federal Reserve System working in partnership with the private sector.

Fourth, Federal, state, and local agencies as well as nongovernmental organizations must provide immediate assistance to attack victims and affected communities. Central to protection and response are advanced planning, exercises, and simulations that

identify problems and coordinate efforts among government and private sector representatives.

The Long Pole in the Tent

Intelligence is indispensable in the global war on terrorism. However, given the nature of the enemy, there is no assurance that the quality of intelligence on organizations like al Qaeda will notably improve without institutional changes and a sustained effort by the intelligence community. As a flat organization composed of small cells of individuals in more than sixty countries, al Qaeda has demonstrated its ability to employ a range of communications, from low-tech means such as face-to-face meetings to high-tech devices such as encryption. When communications have been intercepted, it has been agile in changing its modus operandi.

Terrorist organizations do not rely on the kind of assets that make other intelligence targets such as governments easier to penetrate. Thus national technical means of collection—satellites, electronic eavesdropping,

and surveillance aircraft—are less effective. Moreover, extremism not only motivates recruits and cements otherwise loose networks, but makes them almost impossible for Western agents to infiltrate. Because of their strong ideological convictions, members of these groups are unlikely to defect even if offered incentives. Given these factors, the campaign against terrorism may pose the biggest intelligence challenge since the Cold War.

Homeland security presents a set of requirements that call for an understanding of the types of attack that various terrorist organizations are able to launch. If indicators suggest that an attack is imminent, authorities need specific warning on its location and type to enhance law enforcement, security, and consequence management. Such insight is unlikely to emerge without a synthesis of relevant information across bureaucratic lines into a coherent, timely picture.

One of the greatest challenges to homeland security is enhancing situational awareness—the ability to know what terrorists are doing inside national borders—without becoming a police state. Consider the fact that perpetrators of the September 11 attacks

lived, prepared, and hid in America for several years but went undetected. This lapse occurred because the intelligence community did not collect and evaluate the right information. There is a need to redesign collection and analysis strategies within the intelligence and law enforcement communities.

In addition, relevant bits of information were available in various agency files but remained needles in a proverbial haystack of intelligence data. This points to the need for new technologies to organize, store, and retrieve data already collected. Another

intelligence sharing must be overhauled to enable rapid, effective fusion and ensure situational awareness

concern is that agencies may have identified key elements of information yet failed to correlate them to present the larger picture. This argues for better data sharing across agency lines. But such efforts raise the specter of intelligence activities within U.S. borders, which has long been seen as a threat to civil liberties.

The campaign against terrorists requires coming to terms with the question of basic rights. Creating situational awareness will call for new methods of lawful surveillance of both citizens and foreigners living in America, while establishing adequate oversight mechanisms to ensure that they are not misused. In short, a better job should be done to track and find terrorists on American soil while protecting our fundamental liberties.

Since better intelligence is indispensable, it is imperative that the United States act quickly and prudently to address the most serious problems in the counterterrorism campaign. For a start, the President should require an interagency assessment to identify shortfalls in intelligence policy, capabilities, practices, and resources that could hamper effectiveness. Based on a comprehensive assessment, the administration must develop a multi-year action plan.

Second, the President should assign a high priority to strengthening bilateral intelligence-sharing and cooperation with countries that have the

most to offer on the terrorist organizations of greatest concern. After September 11, such arrangements are defining political issues in relations with many nations. A central diplomatic goal must be to broaden and deepen these arrangements as a cornerstone of bilateral relations with key countries. This should include continuing to seek greater cooperation in surveillance of the financial transactions of terrorist organizations.

Third, Congress should increase resources devoted to the intelligence community in general and the global war on terrorism in particular. This will be essential in addressing critical shortfalls in areas such as human intelligence, covert operations, analysts, linguists, area specialization, and the integration of new technologies, especially with regard to information management.

Fourth, the guidelines and processes for intelligence sharing must be overhauled to enable rapid, effective fusion and ensure situational awareness. This must occur not only on the national level but also among Federal, state, and local agencies. American lives are on the line, and there is no excuse for bureaucratic infighting that compromises the ability to exploit available intelligence.

Such initiatives will require a shift from a case file approach of domestic law enforcement to more fundamental and proactive data analysis. It will also demand substantial investment in data correlation and analysis capabilities, as well as sharing data across bureaucratic lines. Improving the ability to correlate data will mean reevaluating rules that govern collecting intelligence on private citizens and others living in this country. Specifically, the United States must organize combined-agency investigation centers supervised by officials who are named by the court authorized under the Federal Intelligence Surveillance Act. These officials would be real-time privacy ombudsmen to guard against the inappropriate use of new investigative techniques.

Fifth, intelligence and law enforcement agencies must conduct more red team assessments to better anticipate what types of attack terrorists might contemplate and how to respond. Though imperfect, such efforts can expose gaps in thinking and shortcomings in preparation.

Finally, the intelligence community cannot be expected to solve every problem on its own. It must pursue public-private partnerships to engage the best expertise to surmount technological hurdles. Particular investment must be made in new technologies to store and retrieve information. In the wake of September 11, it should not be hard to find private sector partners. More broadly stated, the intelligence community should seek to leverage the diversity and openness of America, engaging experts and linguists outside the Government through outreach and outsourcing.

The intelligence and law enforcement communities are recognized as crucial and in need of resources and reform. Nothing will be more important to fighting terrorism and homeland security than meaningfully improving the capabilities and performance of these two communities.

Preparing for the Worst

As the United States develops a strategy for homeland security, it should pay attention to the greatest threats to its way of life: bioterrorism and attacks on critical infrastructure.

While chemical agents could produce hundreds of thousands of casualties, an attack using biological pathogens could cause millions. It is well established that al Qaeda has sought biological means of attack and has contacts with states that have biological weapons programs. The anthrax attacks after September 11 ended the debate about whether or not an individual or small group can obtain and use biological agents.

The good news is that biological pathogens are generally difficult to weaponize; it is hard to produce them in large quantities and format their dispersal to cause mass casualties. The bad news is that dedicated terrorists would need only a small quantity of a highly contagious pathogen such as

smallpox to create a mass-casualty event. Every infected person would be a walking biological weapon. This danger is magnified in a mobile society. Local bio-attacks could turn into a national crisis that could be crippling. The Nation must therefore give highest priority to keeping pathogens out of the hands of terrorists and enhancing its ability to deal with such attacks.

Security measures at U.S. and foreign facilities have not been adequate to prohibit theft of dangerous pathogens. Samples of some pathogens such as smallpox are kept under tight control in America, whereas others like anthrax are stored in labs under minimal security. Across the former Soviet

an active, sustained partnership between the public and private sectors will be essential in the case of bio-defense

Union, literally tons of biological weapons agents are housed in non-secure facilities.

In addition, we are ill-prepared to manage the aftermath of a large-scale bioterrorism attack. The United States has neither sufficient stockpiles of vaccines and antibiotics nor means to rapidly distribute them. It also lacks adequate cadres of first responders trained and equipped to deal with such a crisis. The Government also needs management strategies, plans, and information systems. Senior leaders simply would not get the intelligence and expert advice required to make informed decisions. Federal and state officials could find themselves in the untenable position of using force to constrain the movement of citizens absent a viable means to contain a crisis. This may endanger civil liberties and also test decisionmakers. Indeed, the less adequate the response to bioterrorism, the greater both the likely panic and the threat to basic freedom.

Working with members of Congress and state and local government officials, the President should undertake a public-private initiative to enhance national capabilities. This effort must focus on the public health system to limit the catastrophic potential of bioterrorism.

Substantial investments are needed to strengthen public health expertise, infrastructure, and early warning systems. New approaches must be developed to deal with the diseases that might be used as weapons of terror, especially stockpiling vaccines and antibiotics, strengthening national and regional distribution, and researching and developing other means of facilitating rapid disease control such as easily deployable diagnostic tools using new biotechnologies. Administration and congressional action to create a stockpile of hundreds of millions of doses of smallpox vaccines is a step in the right direction, but much more needs to be done to safeguard against other pathogens. Particularly important will be developing an appropriate regulatory process to ensure the safety of vaccines and antibiotics as well as providing medical and pharmaceutical industries with incentives such as liability protection to rise to this national challenge.

This initiative must also include the development and implementation of a robust security protocol to protect laboratories that store pathogens which could be used in terrorist attacks; an extensive program of analysis, simulations, and exercises to improve knowledge of such threats and identify and prioritize shortfalls; development of detailed plans and decision-making protocols, including clarification of jurisdictional issues between Federal and state entities; and development of information systems on all levels to better manage such events.

In addition, the United States must deal with the legacy of biological weapons in the former Soviet Union through cooperative threat reduction programs. This effort should reinvigorate and reorient the Biological Weapons Convention to take into account new bioterrorism threats. Only in preparing for the worst case can the potential consequences be limited.

The security of critical infrastructure—physical assets and cyber-based systems essential to the minimal operations of the economy and bureaucracy—is another urgent challenge in addressing the risks and consequences

of terrorism. Widespread disruption and panic would quickly ensue if an aircraft breached the containment structure of a nuclear power plant, a major urban power plant was shut down, or the computer system of the New York Stock Exchange was sabotaged.

Between 80 and 90 percent of critical infrastructure is either owned or operated by private firms. It includes telecommunications, electrical power systems, gas and oil distribution, banking and financial institutions, transportation, water resources, and emergency services. In the new age of information technology much critical infrastructure has become automated, bringing efficiencies but also vulnerabilities, including susceptibility to cyber attack. An active, sustained partnership between the public and private sectors will be essential in the case of bio-defense.

Significant progress has been made, including the organization of Information Sharing and Analysis Centers by the Government in partnership with the private sector for addressing electronic threats, vulnerabilities, incidents, and solutions. But to date such efforts have largely focused on cyber-based rather than physical threats. Given that terrorist groups like al Qaeda have displayed interest in inflicting highly visible mass-casualty events, cyber strikes may not be a preferred mode of attack. The Bush administration should focus on physical vulnerabilities and threats in various sectors in its efforts to improve critical infrastructure protection.

The United States needs not only new threat and vulnerability assessments, but also a clear delineation of various responsibilities and authorities for the security of critical infrastructure. For example, who is responsible for security at over 100 nuclear power plants? The utility companies who operate the plants, local law enforcement agencies, or the National Guard under state control? These issues must be clarified through consultations between Federal, state, and local governments and industry. Private firms will have a particularly important role,



Providing security in Salt Lake City.

151st Air Reserve Wing (Mark Savage)

ranging from designing new facilities to better withstand attack, to enhancing physical security systems at existing facilities, to bringing relevant technologies and products to market.

Towards Homeland Security

Congress is scrutinizing the proposal for a department of homeland security, but regardless of the organizational structure that emerges, the challenges outlined above require that the Nation take five interrelated steps. First, it must conduct a thorough interagency assessment of possible dangers to the homeland, considering different kinds of threats and their consequences. Second, based on that assessment, it must develop a national strategy that articulates priorities for resource allocation—essentially where to place the emphasis and how to accept or manage a degree of risk. Third, it must create an interagency program review and budget process to integrate and prioritize homeland security efforts on the national level. Fourth, it must establish a program to simulate and train decisionmakers. Finally, it must develop operational concepts to

enhance homeland security. Only these steps can enhance national security at an acceptable cost.

Interagency threat assessment. The first step is tasking the Homeland Security Advisor to lead a comprehensive interagency assessment of current and future threats. The objective would be to develop a framework for understanding potential threats and establishing short-, mid-, and longer-term goals. Participants should include the intelligence agencies; Federal Bureau of Investigation; Departments of Defense, Treasury, Transportation, Commerce, and Health and Human Services; and Centers for Disease Control and draw on open as well as internal information sources.

To make the appraisal a living process rather than a one-time exercise, the President should establish a new terrorism assessment unit in the Office of Homeland Security designed to think like terrorists and study ways security could be breached. This must not be an unbounded exercise of human imagination, but rather a disci-

plined review of terrorist doctrine and techniques, intelligence assessments, and goals and effects sought by terrorist groups. The unit should draw on research as well as unconventional sources. Its aim must be to shape the strategy and programs of departments and agencies that share the homeland security mission.

National risk management strategy. Next, the President should task the Homeland Security Advisor to conduct an interagency review to define and prioritize objectives, articulate a strategy to meet those objectives, and develop a concept of operations that assigns responsibilities to specific agencies and actors for executing the strategy. While this is the charter of the Homeland Security Advisor, and there has been much talk of developing a national strategy, no rigorous interagency process appears to be underway. This planning process must build on the threat assessment described above and include an assessment of capabilities to deal with priority threats. The objective should be to provide policy guidance and prioritize shortfalls in national capabilities.

Informed by a strategy review, the Homeland Security Advisor should develop a multi-year interagency action plan. The plan must specify short-term actions to be taken on a priority basis, long-term investments to enhance critical capabilities, and a clear division of labor, including lead agency responsibility for specific areas and actions. This plan should be issued by the President to guide resource allocation. It must be a living document that is annually revised. The development process must include input from all Federal agencies responsible for homeland security, as well as consultation with state and local agencies and actors. Such an integrated action plan will be critical to getting the highest returns on an investment totalling billions of dollars.

Strategy-driven program and budget review process. Once the plan is in place, the advisor should establish a rigorous program and budget review process which annually reviews activities and

Marines on Capitol Hill.



U.S. Marine Corps (Bryant V. Cox)

expenditures of relevant agencies in light of multi-year requirements. The review must provide a mechanism for enforcing Presidential priorities. White House backing will be essential.

The Homeland Security Advisor must also fully integrate Federal programs and plans with state and local governments and aid those authorities in enhancing homeland security capabilities. Because state and local governments are likely to be the first to respond, they will bear the lion's share of responsibility in implementing decisions made in Washington. They will feel the impact of any attack most acutely. These constituencies will have to be included in decisions to strengthen security at home. The same situation is true within the private sector, particularly firms involved in operating or securing critical infrastructure.

Rigorous simulation and training. The Office of Homeland Security must institute gaming or simulation of homeland security scenarios. Such simulations can reveal discontinuities in plans for future events, offer insights into complex problems that can't be learned from reports, establish operational working relationships among players in peacetime that are crucial for

communication in crises, help organizations to surmount turf battles by recognizing what can be done as well as what various organizations bring to the table, and detect shortfalls in processes and capabilities that should be addressed. Comprehensive simulation and training must include periodic sessions for the President and cabinet as well as subcabinet and working-level officials in key positions.

Develop new operational concepts. Finally, the Office of Homeland Security should form an advanced concepts office that can develop approaches which bridge discontinuities and address shortfalls identified in simulations and training. It could use current research techniques to identify alternative operational concepts and provide guidance on capabilities to meet priority requirements.

Homeland security is front and center in America's consciousness, and it is likely to remain so, especially if further attacks occur. Unlike the Gulf War or even the decades of the Cold War, fighting terrorism will not have a clear endpoint. Rather, it will be similar to the wars on crime and drugs. Since intractable problems can't be eliminated, victory becomes a matter of reducing risks to an acceptable level. In sum, the realities of homeland secu-

ity require the Nation to think about conflict in different ways and overcome its varied challenges.

The Federal Government in partnership with state and local agencies and the private sector must enhance homeland security to win the global war on terrorism. This effort must be started by conducting a comprehensive threat assessment and developing a national strategy and program that outlines clear priorities for investment. It must adopt ways of doing business to integrate policies, programs, and budgets across bureaucratic lines on the national, state, and local levels as well as the private sector. This will require both political will and leadership on the part of elected officials and historic levels of public support. But meeting this challenge is not an option; it is imperative for the Nation to prevail in this fight against terrorism. **JFQ**

NOTES

¹ Michael Dobbs, "Homeland Security: New Challenges for an Old Responsibility," *Journal for Homeland Security* (March 2001), <http://www.homelandsecurity.org/journal/Articles/Dobbs.htm>.

² Donald Rumsfeld, "A New Kind of War," *The New York Times*, September 27, 2001, p. A21.

Mass-casualty drill at
Camp Bondsteel,
Kosovo.



56 Signal Company (Thomas Bray)

Detering Mass-Casualty Terrorism

By WYN Q. BOWEN

Western governments have become preoccupied with preventing mass-casualty terrorism. The American-led campaign against al Qaeda has shown that the preventive strategies most likely to succeed must focus on disrupting and destroying suspect groups and their

capabilities. Indeed the emphasis of the Bush administration on preemption as a central pillar of emerging U.S. strategic doctrine indicates that this approach is the best way to deal with chemical, biological, radiological, nuclear, or enhanced high explosive (CBRNE) weapons. While active disruption and destruction constitute the most realistic options at hand, does this mean that deterrence has nothing to offer as an element of a broader, comprehensive strategy for preventing mass-casualty terrorism?

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Simulated attack,
Foggy Shores 02-06.



30th Communications Squadron (Jennifer C. Wallis)

An Established Strategy

The object of deterrence is preventing real or potential enemies from initiating hostile acts. It differs from but is related to the concept of compellence—more often known as coercion—where the goal is getting an enemy to do something—to alter its behavior and an existing state of affairs. For example, air strikes by the United States against Libya in 1986 were intended in part to compel Colonel Qaddafi to stop sponsoring terrorist activity against American targets in Europe. The aim was changing Libyan policy, under which the regime sponsored terrorism, not preserving it.

A deterrent strategy can rely on one or both of two mechanisms. First, it can be based on threats to visit punishment on an enemy that significantly outweighs the gain of a particular course of action. This approach is traditionally viewed as targeting civilian assets and constituted the basis of the Cold War concept of mutual assured destruction.

Another approach is based on the concept of denial. Specific capabilities deter enemies from pursuing either a given objective or a conflict strategy.

This is achieved by undermining their ability, or belief in their ability, to realize a desired outcome.

Deterrent strategies can include both punishment and denial mechanisms. For example, the United States appears to favor such an approach to deter unconventional weapons usage by a regime by combining denial capabilities like missile defenses with the threat of punishment. Both mechanisms may support a comprehensive strategy to prevent mass-casualty terrorism.

A credible deterrent posture requires the capability to deliver on the deterrent message, or at least the appearance of it. The deterrer must demonstrate the intent and resolve to fulfill the message and effectively communicate this to an enemy, including which lines not to cross.

Deterrence also assumes that a target will be a cost-benefit calculator—a rational actor who evaluates options in terms of costs and benefits, including likely responses. But what is accepted as rational by one actor may not appear rational to another because of cultural factors or decisionmaking processes. This is a major consideration in the war on terrorism because of the asymmetric nature of the opposing sides in almost every respect. A preventive strategy in this context—deterrent

or other—requires knowing enemy motives, worldview, resolve, capabilities (including conflict strategies and techniques), and vulnerabilities.

Measuring the failure of deterrence is straightforward because the action that the deterring party seeks to avoid occurs. However, measuring success is more difficult, as it cannot be proven that the strategy was pivotal, marginal, or irrelevant to why an enemy opted not to act. This can be significant when attempting to prevent mass-casualty terrorism.

What role might deterrence play in preventing catastrophic terrorist attacks? How might such a strategy fit into broader counterterrorist policies? Should the aim be preventing actions that could create mass casualties or specific types of attack? Should the objective be preventing conflict escalation over a determined threshold (something that is hard to define) or buying time in order for preventive approaches to take effect?

Non-State Actors

Since deterrence is about preventing an enemy from acting in a particular way, success will depend on a target believing, or being made to believe, that the current state of affairs is preferable to the cost associated with a particular course of action, at least in the short term, if the purpose is buying time for other approaches. It follows that if an enemy is determined to act, deterrence could prove unworkable.

At first glance, this infeasibility appears to be the case in mass-casualty terrorism since the motives of nonstate actors to perpetrate such attacks are likely to be extreme and their level of resolve so high that deterrence is inapplicable. Indeed, groups that contemplate such activity have radical views derived from religious (al Qaeda) or apocalyptic beliefs (Aum Shinrikyo). Moreover, fanaticism is expressed in unrealizable goals, operates outside of commonly accepted political and moral norms, and remains impervious to negotiation and inducement.

For example, Osama bin Laden and members of al Qaeda claim to be



Offutt Air Force Base (late Bailey)

acting in the name of Islam in pursuing objectives such as eliminating Israel and destroying America. Moreover, it is clear that many members of the al Qaeda network think in suicidal terms and are willing to endure significant costs and destruction in pursuit of their objectives.

In the mid-1990s, the Aum Shinrikyo sect in Japan sought to cause death, destruction, and chaos on such

traditional organizations exercise self-restraint and avoid undermining sympathy for their cause

a large scale—through the use of chemical and biological weapons—that the resultant disorder and instability would cause the collapse of the political and social order.

It is vital to distinguish such radical terror groups from more traditional organizations such as the Irish Republican Army (IRA) and Basque Fatherland and Liberty (commonly known as ETA) that tend to attack people or places associated with relatively limited political goals. They exercise self-restraint and avoid undermining sympathy for their cause. In contrast to al Qaeda, they are open to negotiation

and susceptible to inducements. As a result they will self deter when it comes to mass-casualty terrorism.

The real challenge in determining whether nonstate actors like al Qaeda are susceptible to deterrence logic involves penetrating their black boxes. This means understanding the frame of reference of actors, how it is evoked, options considered in decisionmaking, and the lens through which they will perceive deterrent messages.¹ Specifically, there must be emphasis on evaluating how specific groups or individuals calculate costs and benefits:

Are they risk prone or risk averse? Do they think in terms of minimizing losses or maximizing gains? To what extent are they motivated by survival, security, recognition, wealth, power, or success? It will also be critical to assess the processes through which suspect organizations make decisions and avoid perceiving the capabilities and intentions of such actors as being like one's own. Addressing such questions will require concerted and targeted intelligence collection and analysis.

Inflicting Punishment

With regard to deterrence mechanisms, could punishment strategies deter in this context if directed against the leadership and members of terrorist groups? The key question is whether there are suitable high-value targets that could be threatened to make radicals such as bin Laden and his accomplices weigh the relative merits of various courses of action. Some argue that it is possible to threaten such targets, including family and supporters, and cause even the most radical leaders to engage in cost-benefit analysis.² The question also arises over symbols of importance to specific terrorists that could be threatened as part of a deterrent strategy. For example, what would be the equivalent of the World Trade Center to bin Laden?

Such approaches are difficult to legitimize if pursued overtly by democratically elected governments because of political, legal, and ethical constraints. Even if threats were made covertly a target would probably doubt their credibility on the assumption that the deterrer is operating under such pressures. Moreover, it is important to assess the impact of such threats against the wider goal of reducing the danger posed by nonstate actors. It could be argued that such threats would increase and not reduce the terrorist danger by alienating the deterring party even further from the existing and potential target support base.

Denial

The heart of a denial-based approach involves demonstrating that the capability exists to ward off—or to minimize damage in the event of—an attack, thus mitigating the desired effects of the terrorists. While some requisite denial capabilities are applicable to all potential modes of attack, some are mode-specific.

Generic capabilities include using intelligence, diplomatic, military, and law enforcement means to locate and interdict nonstate actors before they act. For example, developing, bolstering, and refining the core elements of counterterrorist strategies could have a generic deterrent effect.

Terms of Art

Mass Casualty. Any large number of casualties produced in a relatively short period of time, usually as the result of a single incident such as a military aircraft accident, hurricane, flood, earthquake, or armed attack that exceeds local logistic support capabilities.

Terrorism. The calculated use of unlawful violence or threat of unlawful violence to inculcate fear; intended to coerce or to intimidate governments or societies in the pursuit of goals that are generally political, religious, or ideological.

Weapons of Mass Destruction. Weapons that are capable of a high order of destruction and/or of being used in such a manner as to destroy large numbers of people. Weapons of mass destruction can be high explosives or nuclear, biological, chemical, and radiological weapons, but exclude the means of transporting or propelling the weapon where such means is a separable and divisible part of the weapon. **JFQ**

Source: Joint Pub 1-02, *DOD Dictionary of Military and Associated Terms* (April 12, 2002).

The main challenge is denial capabilities designed for specific modes of attack. In the realm of chemical, biological, and radiological threats, careful preparations for consequence management can have a dissuasive or preventive effect. Relevant capabilities include the demonstrated readiness of first responders to deal with chemical, biological, and radiological incidents. In part, this would entail knowledge of specific biological and chemical agents

a potential negative side effect of denial is the risk of it becoming a double-edged sword

and possession of vaccines and other medical countermeasures.

In addition, deterrence can be achieved by demonstrating a strong capability for preventing or hindering the spread of materials and knowledge nonstate actors need to develop and produce chemical, biological, and radiological weapons. Relevant capabilities include export controls and detecting and interdicting suspect shipments. The aim is convincing an enemy that acquiring such weapons is not worth the time, resources, and effort required.

Moreover, there may exist some scope for deterring nonstate actors by

developing forensic (biological and nuclear) attribution capabilities to underscore the threat of retribution. According to Jay Davis, if an enemy knows an event can be traced to the perpetrator, it can create “strong inhibitions in those that are not personally suicidal.”³

A potential negative side effect of denial is the risk of it becoming a double-edged sword. Specifically, there is the danger that denying or deterring one line of attack will push an opponent to strike against less protected areas, possibly using different means—the balloon effect.⁴ Other modes of attack could be less predictable and more dangerous. Was September 11 an example of this?

If the aim is buying time to frustrate an enemy who is strongly committed to alter the status quo, the consequences of succeeding may not always be foreseeable and positive. Indeed, short-term success could make a target more desperate. This is not to claim that developing a specific denial posture should be avoided. But it is essential to consider its negative effects.

Deterrence and Coercion

Beyond the terrorists themselves there is an added type of target for deterrence: regimes that provide refuge for them to operate. Here deterrence involves threats to punish regimes if

they are found to be aiding groups by sponsoring, harboring, or merely tolerating them.

The campaign against the Taliban regime in Afghanistan was informative because it had a powerful deterrent effect, signalling that the United States has the intent, resolve, and ability to punish and depose regimes that may contemplate supporting terrorist networks. Prior to the events of September 11, it could be argued that the United States had not amply demonstrated that. Although al Qaeda posed a threat to U.S. security interests in Africa and the Middle East, it was not deemed sufficient to justify all-out military, economic, and diplomatic measures to destroy terrorist groups. The high profile but low-grade response of the Clinton administration to the bombings of U.S. embassies in Africa is evidence. However, attacks in New York and Washington radically altered the strategic calculus because they struck political and economic power centers of the United States. The campaign to unseat the Taliban has made deterrence more credible in the context of dissuading regimes from supporting terror groups.

As noted, there is a subtle distinction between the concepts of deterrence and coercion that can prompt confusion in application. Strictly speaking, threats or actions designed to stop a regime from supporting terrorists will be coercive because the aim is altering the status quo. The effort to coerce the Taliban into complying with American demands—namely, handing over al Qaeda members—failed, and the U.S.-dominated coalition had to use force to impose a regime change in Kabul.

In sum, deterrence is about keeping things as they are and is only relevant to regimes not implicated in supporting terrorism but which might contemplate becoming involved. Thus, in the context of preventing mass-casualty terrorism, coercion and deterrence should be treated as related but different concepts.

Deterrence by denial is applicable when a target is a terrorist organization or network. However, because of extreme motives and resolve on the part

The Pentagon,
September 11.



U.S. Navy (Mark D. Faram)

of entities that have perpetrated or are likely to contemplate mass-casualty terrorism, this approach is a delaying option to buy time for other preventive approaches at best. A drawback is that deterring an attack in one area can force a nonstate enemy to change focus and strike at less protected areas with unpredictable and more heinous modes of attack.

When a target is a regime contemplating whether to support terrorists, deterrence by threat of punishment is most relevant. Allied action in the global war on terror should bolster both deterrence and coercion in the long term since it has indicated that the United States and its allies will act with determination against the perpetrators and would-be perpetrators of any mass-casualty attack.

Third, accurate and timely collection and analysis of intelligence is pivotal to countering the threat of CBRNE terrorism. The focus must be on the individuals, groups, networks, and states of greatest concern. Human intelligence will be key to understanding real and potential enemy motivation, resolve, culture, modus operandi, decisionmaking, resources, capabilities, locations, and conflict techniques. Such intelligence will be required for any preventive option. It will produce knowledge of how best to disrupt and destroy suspect groups and capabilities. In addition, it will also help in evaluating the susceptibility of such organizations—their leaders and other members—to deterrence logic.

Finally, because of the fanatical motives and resolve displayed by non-state actors such as al Qaeda, many observers will simply dismiss deterrence as a preventive option out of hand. However, the activities associated with alternative approaches should contribute to a deterrent effect. Examples include preparing for consequence management, developing intelligence and military capabilities to disrupt and destroy terrorist networks, and demonstrating the resolve of ongoing military operations against al Qaeda. **JFQ**

NOTES

¹ Herbert Simon, quoted in Richard Lebow and Janice Stein, "Rational Deterrence Theory: I Think, Therefore I Deter," *World Politics*, vol. 41, no. 2 (January 1989), p. 214.

² Gerald M. Steinberg, *Rediscovering Deterrence After September 11, 2001*, Jerusalem Center for Public Affairs, December 2001, <http://www.jcpa.org/jl/vp467.htm>.

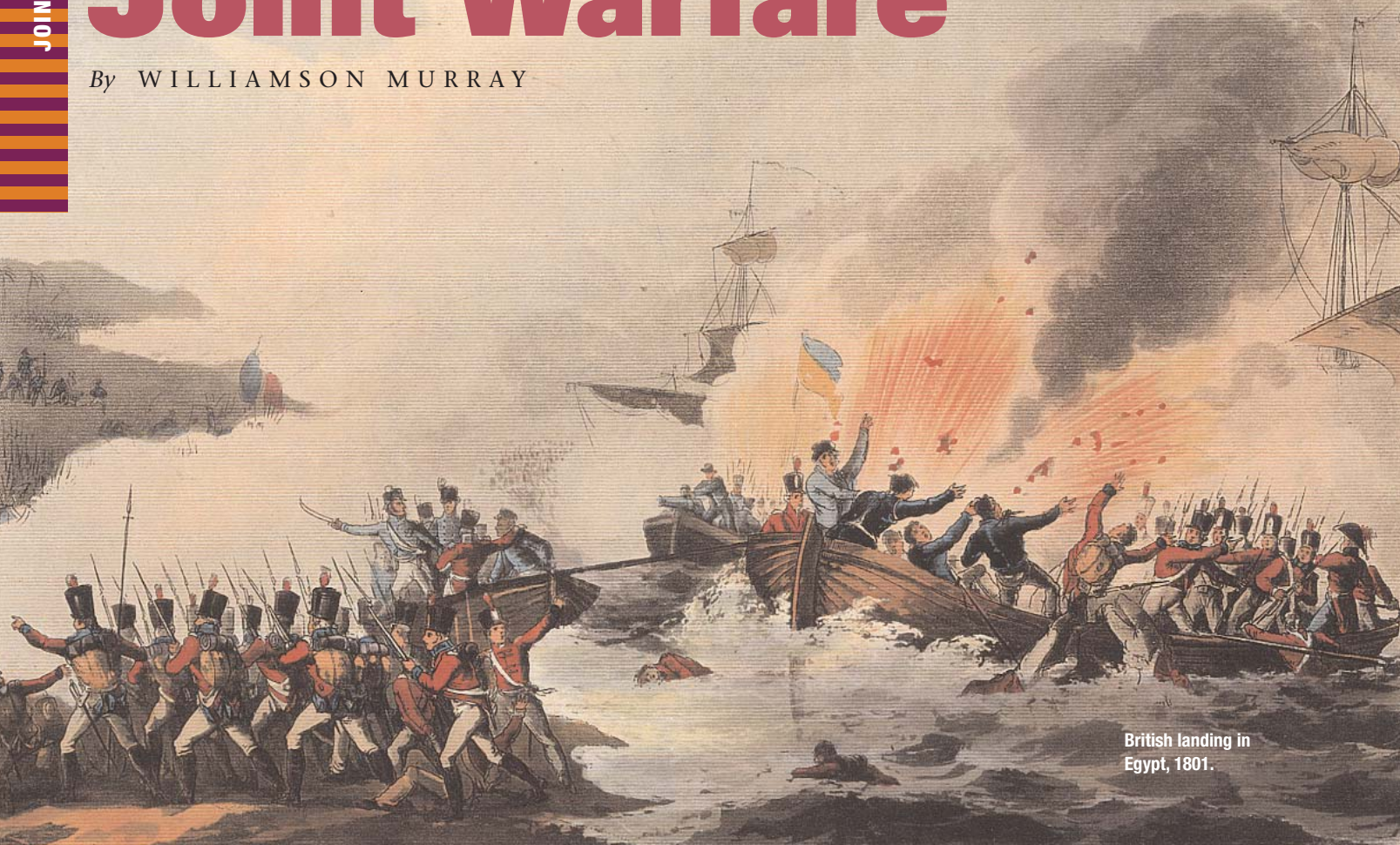
³ Jay Davis, *The Grand Challenges of Counter-Terrorism*, Center for Global Security Research, Lawrence Livermore National Laboratory, 2001, <http://cgsr.llnl.gov/future2001/davis.html>.

⁴ See Anthony H. Cordesman, *Asymmetric Warfare Versus Counter-Terrorism: Rethinking CBRN and CIP Defense and Response* (Washington: Center for Strategic and International Studies, December 2001), p. 14.

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The Evolution of Joint Warfare

By WILLIAMSON MURRAY



British landing in
Egypt, 1801.

Courtesy Special Collections, NDU Library

Joint warfare is largely a phenomenon of the last century. Yet ever since the 17th century, as Western militaries developed into professional, disciplined institutions responsive to their rulers, many states have sought to project power abroad. Technology has increasingly shaped the conduct of war, forcing

the use of military capabilities in concert. That is a complex process, not because of obstacles posed by individual service cultures alone, but because the evolution of joint warfare poses intractable problems. Moreover, such capabilities can require levels of spending that cannot be allocated to the military in peacetime.

The Continental Powers

Of the emerging states in the early 1700s, England had the greatest tradition of cooperation between land and

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sea forces. That nation originated with the invasion of William the Conqueror which brought the Normans to power. His descendants, particularly Edward III and Henry V, used domination of the English Channel and adjacent waters to invade the Continent, which came close to destroying France. While impressive, one cannot speak of those campaigns as joint warfighting because military institutions of the day were not professional or permanent. Perhaps one exception was the Battle of Sluys in 1340, when Edward III launched a fleet with archers bearing longbows to slaughter the French, leading to an era in which "Edward was lord of the sea."¹

Nevertheless, it was only with the end of the 16th century that Europeans began thinking in terms of joint cooperation. The destruction of the Spanish Armada in 1588 underlined the perils in coordinating forces on land and at sea. Planning an expedition in Madrid and moving a fleet in the Channel with armies in the Low Countries proved overwhelming. Such a combination had worked against tribal levies of American Indians, who had stone-age weapons and no knowledge of firearms, while diseases spread by the Spaniards killed those natives who survived combat. But Spain was unprepared for the complexity of land and sea warfare against a European power. Such difficulties were exacerbated by the skillful leadership of British maritime forces, and unfamiliarity with the Channel inevitably turned the great expedition launched by Philip II into a failure.

By the mid-17th century a number of European states, led by Holland and Sweden, created recognizable armies and navies that were responsive to war ministries and admiralties. The major ingredient in the rise of these institutions was intense competition for hegemony on the Continent, a struggle in which growing and disciplined armies grappled for domination. But as the century unfolded Europeans found themselves vying for empire. At first the competition involved navies contending for maritime supremacy, but at the end of the



Courtesy Special Collections, NDU Library

century more significant colonies like the Sugar Islands in the Caribbean boasted grand fortifications and garrisons. France and England emerged as great powers competing for empire by the dawn of the 18th century. At the same time the army of Louis XIV threatened the balance of power. The War of Spanish Succession broke out in 1702 and was the first world war. On the Continent, the Duke of Marlborough, with Dutch and Hapsburg allies, won a number of victories that rocked the French monarchy. London waged war at sea for supremacy over the Atlantic and Mediterranean while contesting control over North America, the Caribbean, and India. English colonists in North America called this conflict Queen Anne's War after the sovereign. Neither nation could project ample power beyond Europe to win decisively, but the war was the opening round in a struggle that lasted the rest of the century.

The New World

The Seven Years War—known as the French and Indian Wars in North America—decided which nation was the dominant power outside Europe. It also resolved that English would become the dominant world language. Moreover, it was the first instance in

which naval power projected land forces over great distances, supported them, and prevented an enemy from being reinforced. From an American point of view, the decisive campaign occurred in 1756 when the British under James Wolfe besieged Quebec. Historians argue that the fate of North America was decided on the Plains of Abraham when Wolfe defeated Montcalm. In fact, British forces occupying Quebec City spent a winter near starvation and under threat of attack from the French in the province. Yet when the spring thaw melted the ice on the river, the Royal Navy, with substantial reinforcements, sailed into the Gulf of St. Lawrence before the French, and the fate of North America was sealed.

The capacity to employ land and naval forces together over great oceanic distances allowed the British empire to survive the strategic and political ineptitude demonstrated in its war against the American colonists in the 1770s. Control of the sea and the ability to extend power almost at will could not overcome errors made by Lord Frederick North. Despite projecting great armies across the Atlantic, the British could not stifle the independence movement. The capture of New York in 1776—by means of a real

joint operation—and the offensive across New Jersey almost destroyed the revolutionary army. Nevertheless, General George Washington and his forces survived, and the campaign in the next year that launched the British under Sir William Howe against Philadelphia also left the invasion of upper New York by General John Burgoyne in the lurch, leading to defeat at Saratoga. The die was cast when other powers intervened. Nevertheless, the union of land and seapower extended British control from the Caribbean to India against a great coalition.

Basil Liddell Hart characterized the approach by London in this period as the British way of war. But as Sir Michael Howard pointed out, Britain was only successful when its opponents in Europe fought a continental and overseas war, which demanded the commitment of substantial land forces. France failed throughout the 18th century because its leaders were unclear on which war was being fought. In attempting to fight both, they lost both. French revolutionaries in 1789 and Napoleon had clear goals, largely involving conquest on the Continent. British amphibious expeditions against French-controlled territory were dismal failures, at least until the war in Spain. Joint warfare only worked in distant places in efforts to grab French possessions or areas removed from French power. Joint, in this context, meant

the Civil War saw the first genuine joint operations because of the riverways of the west

landing troops at some distance from an enemy and then supplying them by sea. But when Britain committed forces and a first class general to the Continent, it had a major impact on the strategic position of France. The Peninsula War against the French in Spain was one of the few instances of jointness in the Napoleonic era.

North and South

The Civil War saw the first genuine joint operations—an approach that developed because of the geographic situation, namely, the riverways of the west. At the outset, the



Admiral David Porter.

Naval Historical Center

Union dominated the maritime balance, which allowed Lincoln to impose a blockade on the Confederacy and control offshore forts. In the spring of 1862, General George McClellan launched a seaborne attack on the Yorktown Peninsula. The Navy landed troops and supported the Federal advance on Richmond. At that point a series of blows launched by General Robert E. Lee drove Union forces back down the Yorktown Peninsula. U.S. gunboats rendered signal service by stopping an enemy assault on Malvern Hill, inflicting horrendous Confederate losses. Nevertheless, there was only rudimentary jointness during these engagements.

The western theater was the scene of real jointness on the Mississippi, Ohio, Cumberland, and Tennessee Rivers which offered deep avenues for Union forces. The fall of Forts Donelson and Henry to General Ulysses S. Grant in winter 1862 opened Kentucky, Tennessee, and northern Mississippi to Muscle Shoals in Alabama to

the projection of Army forces by the Navy. Grant secured access to the southern heartland in one brilliant move. The victories at Forts Donelson and Henry gave the North an advantage in the West from which the South never recovered. It took close cooperation between Navy officers who ran the gunboat fleet and Army commanders to use this edge to the fullest. The importance of that cooperation was underlined in April 1862 when Union vessels reinforced Grant with troops under General Don Carlos Buell at Shiloh. Joint cooperation developed in 1862 was crucial to the campaign against Vicksburg in spring 1863. Admiral David Porter dashed past the defenses at Vicksburg in April, which allowed Grant to cross the Mississippi to the south and begin the most impressive campaign of the Civil War, which resulted not only in the capture of Vicksburg but of an entire Confederate army in the field.

The Great War

Joint warfare existed primitively and under specialized conditions before 1900. It became increasingly crucial with a fitful start in World War I. The Dardanelles campaign, which Winston Churchill launched over strong opposition from Admiral Sir John (“Jackie”) Fisher, failed largely because the British army and navy could not cooperate. This dismal example of jointness on the tactical and operational levels resulted in the collapse of the one strategic alternative to slugging out the war on the Western Front with an enormous cost in men and matériel.

One area of joint cooperation on the tactical level did enjoy significant success. By 1918 both the Allies and Germany were using aircraft to support ground attacks. The Germans actually designated close air support squadrons, specially equipped and trained for the Michael Offensive in March 1918. Similarly, the British supported tanks and infantry with air in the successful attack of August 1918—which General Eric Ludendorff described as the blackest day in the war, especially because



German maneuvers in Bavaria, 1931.

National Archives

of the “increased confusion and great disturbance” air attacks caused the ground troops.² However, only the Germans learned from such experiences in the joint arena.

There was more movement toward creating joint capabilities in the interwar period, though there were major differences among nations. In Germany, the *Luftwaffe* became a separate service in 1935. Its leaders showed considerable interest in strategic bombing from the outset, but they also supported other missions. As a result, they devoted substantial resources to capabilities to assist the army in combined-arms mechanized warfare. At the same time the navy and air force exhibited virtually no interest in working together, the results of which were evident in World War II.

The British organized the only joint higher command during the interwar years, the Chiefs of Staff Subcommittee. On the other hand, the military proved unwilling to develop joint doctrine and capabilities. The

Royal Air Force, fearing that joint cooperation would end its independence as a separate service, wrote such exclusionary basic doctrine on strategic bombing that real teamwork among services hardly existed. When war came in 1939, the air force proved quickly that it could support neither land forces with interdiction attacks nor maritime forces in protecting sea lines of communication in the Atlantic. In addition, the air force provided the navy with carrier aircraft that were obsolete in comparison to American and Japanese planes.

But the other services were hardly more forthcoming than the Royal Air Force. In 1938 the commandant of the Royal Navy Staff College raised the possibility of joint amphibious operations, which met with total rejection. The attitudes of senior officers ranged from a smug belief that such operations had been successful in the last war to plain confidence that they would not be needed again. The Deputy Chief of the Air Staff argued that Gallipoli revealed that nothing was really wrong with amphibious

techniques except communications. The navy was just as unenthusiastic. The Deputy Chief of Naval Staff, Admiral Andrew Cunningham, who eventually commanded naval forces in the Mediterranean, reported that “the Admiralty at the present time could not visualize any particular [joint] operation taking place and they were, therefore, not prepared to devote any considerable sum of money to equipment for [joint] training.”³ Finally, the Chief of the Imperial General Staff, Lord John Gort, declared that the railroad enabled landpower to be concentrated more rapidly than seapower. Thus the strategic mobility conferred by seapower, while politically attractive, would no longer work in favor of seapower. Such attitudes go far in explaining the disastrous conduct of the Norwegian campaign.

The American record is much better in several respects. The nascent air service, which was a branch of the Army administratively (first as the Army Air Corps, then as the Army Air Forces), displayed much the same disregard for past experience as did the Royal Air Force in Britain; it was uninterested in cooperating with land or naval forces. In the sphere of joint amphibious doctrine, however, the United States was ahead of other nations, undoubtedly because of the peculiarities of its military organization. The Department of the Navy had its own land force, the Marine Corps, and because no unified air component had been created, both the Navy and Marines had air assets. Maritime strategists considered joint amphibious operations by the realities of distance in the Pacific. It was clear that amphibious capabilities would be needed to seize logistic bases in the region.

The Marines led the effort on amphibious warfare throughout this period. By the outbreak of World War II, the Corps developed doctrine and procedures with considerable cooperation from the Navy and some help from the Army. Although the equipment required for such operations had not been fielded, the services had established a conceptual basis for joint amphibious operations.

Casablanca
conference, 1943.

U.S. Army

World War II

It is almost as difficult to extol joint warfare conducted by the Axis as combined warfare. Germany, with its ability to cooperate on the tactical level, achieved stunning results at the start of World War II. But the invasion of Norway, Operation *Weserübung*, was in large part the result of British bungling. The Germans lacked joint strategy or, for that matter, joint operational concepts. Planning for Operation Sealion in summer 1940—the proposed invasion of Britain—displayed no common concept of operations or even common language. Matters never improved. There was no joint high command—the Armed Forces High Command, *Oberkommando der Wehrmacht*, was little more than an administrative staff that supported Hitler. General Walter Warlimont, one of its members, noted: “In fact the advice of the British Chiefs of Staff and the U.S. Joint Chiefs was the deciding factor in Allied strategy. At the comparable level in Germany, there was nothing but a disastrous vacuum.”⁴ This situation was as much due to interservice rivalry as to *der Führer*.

The same was true for the other Axis forces. In the case of Italy, the so-called *Commando Supremo* exercised no real power over the services, which waged three separate efforts. The result was that the Italian military never proposed sound strategic or operational alternatives to a regime which in its ideo-

U.S. joint operations reached their highpoint in the Pacific

logical fog did not balance available means with attainable ends. Things were no better in Japan which had no joint high command. Without higher direction, the Imperial army and navy waged two separate wars until their misfortunes in early 1944. Thereafter, the preponderance of American strength was such that it mattered little what Japan did or did not do.

The conduct of joint warfare by the Allies was on a different plane. On the strategic level, the organizational structure for analyzing strategic and

military problems that the British had created before World War II played a major role. The system was not so impressive in the early years, but that was largely due to overwhelming Axis strength. But Britain was able to set the conditions for the recovery of Western fortunes once the United States entered the war. The analytic power of the system persuaded America to embark on major operations in the Mediterranean, a commitment that was fundamentally counter to Washington’s view of the war. The success of this approach by London to a joint articulation of strategy, particularly at the Casablanca Conference, led to the establishment of the Joint Chiefs of Staff and an organizational approach that emphasized jointness on the operational level.

U.S. joint operations reached their high point in the Pacific. The tyranny of distance meant that the services had to work together to project military power. In the Southwest Pacific, General Douglas MacArthur advanced up the coastline of New Guinea with the superb support of Fifth and Thirteenth

Recon platoon,
Vietnam, 1967.



U.S. Army (Howard C. Breedlove)

Air Forces under General George Kenney as well as naval components. By conducting joint operations, MacArthur kept the Japanese permanently off guard. Similarly, after the losses at Tarawa alerted Admiral Chester Nimitz and his commanders to the problems of opposed landings, the Central Pacific island-hopping campaign emerged as one of the most impressive operational-level campaigns of the war, especially the cooperation displayed by soldiers, sailors, and marines. The result was seizure of bases in spring 1944 which Army Air Force strategic bombers used for their attacks against the Japanese homeland.

The situation in Europe was similar. By spring 1944 the Allies developed the capabilities to enable the most complex joint operation of the war—an opposed landing on the coast of France. Cooperation was not always willingly given. The American and British strategic bomber communities struggled in March 1944 to escape being placed under the operational command of General Dwight Eisenhower. They lost because Eisenhower was willing to appeal to Roosevelt and

Churchill. Eisenhower and his deputy, Air Marshal Arthur Tedder, then used air forces, including strategic bombers, to attack transportation across France. By June 1944 the transport system was wrecked; in effect the Germans had lost the battle of the buildup before the first Allied troops landed.

Joint operations were less successful on Omaha Beach, where U.S. casualties were three times heavier than those suffered at Tarawa six months earlier. General George Marshall had been impressed by landings in the Pacific. Consequently, he detailed the commander of 7th Division at Kwajalein, Major General Pete Corlett, to pass along lessons learned. However, when he arrived in Europe, Corlett discovered that Army commanders responsible for Overlord had no interest in learning from “a bush league theater.”⁵ The result was that soldiers who went ashore at Omaha received twenty minutes of naval gunfire support from one battleship (whereas the enemy garrison at Kwajalein had been bombarded by no less than seven battleships). The landing at Omaha came perilously close to defeat, which might have led to the failure of Overlord.

Postwar Period

When World War II ended, Allied forces were poised to launch the largest joint operation in history—Olympic, the invasion of Japan—which would have dwarfed even Overlord. By then jointness had peaked. Unfortunately, such cooperation would not be equaled until Desert Storm in 1991. Many factors were at work. The first was the advent of nuclear weapons, which changed war to such an extent that many leaders, particularly airmen, believed the lessons of World War II were no longer valid. Secondly, those who had conducted the war in Europe came to dominate the postwar military, and that theater had seen less joint cooperation than the Pacific. Finally, while joint cooperation had reached significant levels, it was largely the result of operational and tactical requirements. The peacetime culture of the prewar military returned. Thus General Omar Bradley, who became Chairman in the late 1940s, in an effort to eviscerate the Marine Corps in the name of jointness, announced that there would never be another major amphibious operation.

The Key West Agreements, which were the result of interservice bickering, determined the course of joint operations until the Goldwater Nichols Act. They represented a weak compromise between the Army belief in a strong joint community and the Navy and Marine Corps desire for service communities. But to a certain extent the Army undermined its own position by attempting to eliminate the Marine Corps from the equation. Moreover, the establishment of the Air Force, with a corporate culture that denigrated all roles and missions except strategic bombing, a concept which was reinforced by nuclear weapons, did little to advance cooperation.

Jointness after Key West was unimpressive. The Air Force resisted supporting land forces throughout the Korean War. The Army and Marine Corps cooperated when necessary, but hardly waged what could be termed *joint operations* on the ground. Part of this predicament can be traced to the nature of the conflict during its final two years,

as Washington was willing to accept stalemate. Nevertheless, the services very often put American lives at risk in pursuit of parochial goals.

Vietnam was no better. A key factor in the mistaken assumptions which the United States entertained in summer 1965 were service perspectives that prevented the Joint Chiefs of Staff from speaking coherently or giving joint strategic and operational advice. Two tactical air forces waged independent campaigns. Air Force fighter bombers, flying mostly from Thailand, attacked in and around Hanoi. Naval aircraft from carriers in the Gulf of Tonkin limited themselves to targets near Haiphong and the North Vietnamese coast. But there was minimal

the Goldwater-Nichols Act made joint assignments an essential step in promotion to general and flag rank

joint cooperation, which resulted in mounting losses in an air campaign which had minimal focus.

Jointness in the ground war was also problematic. The nominal theater commander, General William Westmoreland, deployed Marine units in central Vietnam instead of using them in the Delta where amphibious capabilities would have been more effective. The Air Force dropped tons of ordnance across South Vietnam but paid relatively little attention to the requirements of land forces. While close air support often proved crucial to soldiers and marines, the Air Force considered it in terms of what was most convenient to a mechanistic view of war and measures of effectiveness rather than what would be most helpful to land forces under attack.

When the war ended in early 1973, the U.S. military was in shambles. Poorly disciplined, riven by racial strife, disheartened by defeat, and reviled by civilian society, each service had to put its own house in order during a period of downsizing, fiscal constraints, and changing missions. It is not surprising that redressing weaknesses in jointness

was not a high priority, especially in light of other problems. In spring 1980 the United States launched a raid to rescue embassy personnel held hostage in Iran. Luckily for most of the participants, the raid failed before it really began with the disaster at Desert One. But whatever the outcome, the planning and execution of the operation underscored a lack of cooperation among the services, weak command that was anything but joint, and a service focus that was inexcusable to most Americans.

The presidency of Ronald Reagan saw increased defense budgets and military capabilities. But the performance of joint operations left much to be desired. In autumn 1983 the

United States intervened in Grenada, ostensibly to liberate American medical students, but in fact to prevent Cuba from helping a revolutionary regime solidify its hold on the island. Given the power brought to bear on that small locale, there was never any question of failure. However, the services once again appeared to focus on parochial interests rather than the larger joint picture.

The Constitution gives Congress responsibility for every aspect of national defense except command, yet that body rarely involves itself on a theoretical or organizational level. For the most part it is content to bicker with defense witnesses and divvy up military spending among districts and states. Nevertheless, Congress sometimes intervenes, usually when the executive branch does not resolve a national security matter. Pressure from Capitol Hill that resulted in Army and Navy reforms at the turn of the century and the Morrow Board in the mid-1920s are both cases in point. The latter resolved that there would be no independent air service and that airpower would remain divided between the two services. This was the situation in the 1980s as Congress, upset by the lack of progress in enhancing jointness, passed the Goldwater-Nichols Act. That legislation would change the relationship between the Chairman and service chiefs, providing the former with greater authority, and granting wider

powers to the unified commanders. It also made joint assignments an essential step in promotion to general and flag rank.

Where Do We Go from Here?

The Armed Forces are facing rapid change. Some contend that technological advances are revolutionary and will allow the military to detect enemies from afar and destroy everything that moves. Some even contend that technology can remove the fog of war. But such possibilities are unlikely because they defy modern science and what science suggests about the world.

Nevertheless, technologists do have a point: modern information systems may significantly decrease the friction that U.S. and allied forces might encounter while increasing those of enemy forces. And it is in the realm of joint command and control that such technologies might make the greatest contribution. As Eisenhower wrote in 1946: "Separate ground, sea, and air warfare is gone forever. If we ever again should be involved in war, we will fight with all elements, with all services, as one single concentrated effort."⁶ Yet impediments to jointness remain today.

One problem is that the services still control budgeting. Thus unified commands have put capabilities on their wish lists such as unmanned aerial vehicles, electronic countermeasure aircraft, and other platforms dealing with intelligence, surveillance, and reconnaissance. The services have underfunded programs to the point that the Pentagon describes such capabilities as "high demand, low density." Unwillingness to fund such items that could contribute to joint operations is only the symptom of systemic problems within the Armed Forces. Bluntly, joint culture does not form the outlook of general and flag officers. Without that perspective, those serving in joint assignments find it difficult to develop realistic concepts of how one might actually use emerging technologies to fight future wars. Joint culture depends on complex factors—education, operational experience, and deep understanding of individual service capabilities.

F-100D over Vietnam.



U.S. Air Force

One suggested way to create a more pervasive joint culture would be to destroy service cultures. But that would throw the baby out with the bath water. The basis of a joint approach to operations is understanding warfare in a given medium: land, sea, or air. Until officers master a dimension of war, they can only be amateurs. Thus service cultures must develop warriors completely attuned to their own milieus, because if they are not, they cannot significantly contribute to the conduct of joint operations.

At the heart of the problem besetting joint culture is a military personnel system established in the 1940s. Subsequent changes have addressed only the symptoms of the problem. One purpose of this system was preventing atrophy in the officer corps during the interwar period. An up-or-out mentality captured rigid timelines for promotion. That system remains in place today with inducements to encourage officers to retire between the ages of 41 and 45. Moreover, Congress as well as the services have added requirements for advancement. The latest was a prerequisite for joint duty in consideration for promotion to general officer. This stipulation in Goldwater-Nichols aimed to solve the problem of the services refusing to send their best officers to the Joint Staff.

Officers face many requirements for promotion, including joint duty. Personnel systems in the 1940s did not take into account today's complexities of education and technology. Yet a system designed for the military in the industrial age is still in effect. The result has generally been to deprive officers of flexibility in professional development outside of narrow career tracks.

Although Goldwater-Nichols heightened the prestige of joint billets, the services must push a maximum number of officers through a finite number of positions to qualify an adequate pool for promotion. This means that most aspiring eligibles serve only the minimum time in the joint world, barely enough to learn their jobs, much less a broader perspective on joint operations. The obstacles that the personnel system present to joint culture are exacerbated by a general failure to take professional military education seriously.

U.S. Joint Forces Command should fill the gap. Unfortunately, it has real world missions as the successor to U.S. Atlantic Command. Accordingly, it has tended to place its best officers in jobs that do not involve experimentation or concept development. The Joint Staff, which supports the

Chairman and Secretary of Defense, is also partially responsible for joint concept development. But it is so consumed by day-to-day actions that long-range (beyond the in-box) thinking is almost impossible. This dilemma contributes to a weak joint community largely inhabited by officers who serve two-year tours with virtually no chance to do anything but learn their jobs. The prospects for changing this situation do not appear favorable because no senior officer in either the joint world or the services has been willing take on personnel systems that are deeply and happily entrenched.

The past three centuries have seen the evolution in joint warfighting, often at considerable cost on the battlefield. Yet military history since the outbreak of World War II has underscored the critical role of joint warfare. If the Armed Forces are to utilize new technologies to the fullest, they must foster authentic jointness based on professional thinking and education. As Michael Howard has suggested, war is not only the most demanding profession physically, but also intellectually. It is that latter aspect that military professionals must cultivate. Joint warfighting must be grounded in concepts that can provide the flexibility of mind and habit the future demands. **JFQ**

NOTES

¹ Clifford J. Rogers, *War Cruel and Sharp, English Strategy under Edward III, 1327–1360* (Woodbridge, U.K.: Boydell Press, 2000), p. 198.

² For a discussion of close air support in World War I, see Richard Muller, "Close Air Support," in *Military Innovation in the Interwar Period*, edited by Williamson Murray and Allan R. Millett (Cambridge, Mass.: Belknap Press, 2001).

³ PRO CAB 54/2, DCOS/30th Meeting, 15.11.38., DCOS Subcommittee, p. 4.

⁴ Walter Warlimont, *Inside Hitler's Headquarters* (New York: Praeger, 1964), p. 54.

⁵ Williamson Murray and Allan R. Millett, *A War To Be Won* (Cambridge, Mass.: Belknap Press, 2001), p. 419.

⁶ Dwight D. Eisenhower in memorandum to Chester W. Nimitz, April 17, 1946.

GOLDWATER- NICHOLS

Fighting the Decisive Battle

By JAMES L. LOCHER III

A decisive battle in American military history began on the morning of February 4, 1986. It was not a conflict of arms, but a momentous clash of ideas and interests in a Senate hearing room. The adversaries were not armed with weapons, but with concepts, statutes, and amendments. This battle

did not directly threaten anyone's life, but its outcome—depending on whether deeply entrenched, outmoded traditions and practices were reformed or sustained—could save or cost untold lives of American soldiers, sailors, marines, and airmen.

Strongly Worded Letters

At 9 a.m. that day, the Senate Armed Services Committee (SASC) initiated its long awaited markup of a 56-page defense reorganization bill. Earlier in the morning, the Pentagon delivered

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eight letters to the committee, one each from Admiral William Crowe, Chairman of the Joint Chiefs of Staff, along with the three service secretaries and the four service chiefs. The letter from Crowe was reasonably argued, like the one received the night before from Secretary of Defense Caspar Weinberger after Senators Barry Goldwater and Sam Nunn met with the Joint Chiefs of Staff. The letters from the seven service officials were quarrelsome and contentious. Perhaps seeking to neutralize Goldwater and Nunn's strong defense credentials, they all took the line that the bill reflected only the views of headstrong staff and not those of the SASC leadership.

Navy Secretary John Lehman's letter ranked as the most bellicose. "I am surprised and disappointed that the serious effort that the service secretaries and the service chiefs devoted to your

Lehman added that strengthening unified commanders "would make a hash of our defense structure"

hearings seems to have largely been ignored in the staff effort," he complained. After lauding Weinberger's management changes, Lehman wrote that the staff bill "charts a return to the discredited philosophy that led to the overcentralized bureaucracy we inherited in 1981."¹ Given the importance of the votes of the committee's nine Democrats, that slap at the Carter administration was ill considered.

Lehman added that the draft bill's proposed strengthening of the unified commanders "would make a hash of our defense structure." Five other service letters also strongly criticized increasing the authority of unified commanders. Only the Air Force Chief, General Richard Gabriel, did not object to those provisions. By attacking reforms that were supported by overwhelming evidence and a sizable majority of the committee, service officials undermined their credibility.

According to the Navy Secretary, the staff draft would "make the offices

of the service secretary and service chief essentially ceremonial. In place of the former would be five CINC pro-consuls freed from civilian control; and in place of the latter, one single voice (with deputy) to provide military advice to the President, National Security Council, Secretary of Defense, and Congress."

Lehman concluded by urging the committee members "to reject the staff draft, and consider true reform as recommended to you by Secretary Weinberger last year. We need less bureaucracy, not more; fewer bureaucratic layers, not more; less congressional micromanagement, not more; and more decentralization and accountability rather than a return to the 'whiz-kid' theories contained in your staff draft."

The Marine Commandant's letter matched Lehman's tough language. General P.X. Kelley repeated much of what he had told Goldwater and Nunn the night before, including: "If the 'draft bill' were to be enacted in its current form it would result in a significant degradation in the efficiency and effectiveness of the defense establishment—to the point where I would have deep concerns for the future security of the United States. In this regard, I know of no document which has concerned me more in my 36 years of uniformed service to my country."²

General Kelley said that he "was extremely disappointed by the obvious lack of balance and objectivity [in] the 645-page staff report." He accused the authors of the staff-drafted bill of having "been unfaithful to your [Goldwater and Nunn's] direction and [having] placed more emphasis on their own preconceived opinions than on 'consensus views.'" The Commandant complained that "The 'draft bill' virtually destroys the corporate nature of the Joint Chiefs of Staff" and attacked General David Jones by observing: "I know of only one former Chairman who would support this chapter of the 'draft bill' as written, and his views must be carefully weighed against his performance while in office." He added that his own "views on the Vice Chairman being senior to the [service chiefs] are a matter of record: I am

strenuously opposed! Moreover, the Joint Staff is currently a viable and efficient organization. I implore your indulgence to keep it that way."

Kelley castigated the proposed strengthening of the unified commanders, arguing: "In my professional view, this chapter of the 'draft bill' would create chaos between the duties and responsibilities of the service chiefs and those of CINCs. It provides a complex, unworkable solution to an ill-defined problem. This is an exceptionally dangerous chapter, one which has resulted from little, if any, dialog. It will create more disharmony than jointness. Of the draft bill's changes to military department statutes, Kelley wrote, "My opinion is that these proposals are alien to good logic and common sense, and the only 'consensus' is among the drafters themselves!"

After noting that his comments did not represent all of his concerns, the commandant concluded, "I strongly urge you to consider additional hearings to achieve conscious address of these vital issues."

The Chief of Naval Operations, Admiral James Watkins, wrote: "I believe our Nation would surely be standing in shoal water, with severe damage predictable, if we were to follow the course charted for us in the current draft bill now before your committee. In short, I consider the bill as drafted to be terribly flawed and certainly not in the best interests of national security."³

The letters from the Army and Air Force Secretaries and Chiefs of Staff were also critical, but they were less strident.

An Evolutionary Trend

All 19 SASC members were present for the decisive battle's opening moments. Ideologically, the committee tilted heavily to the political right. All Republicans were conservatives, except for William Cohen, who was a moderate. Greater diversity was found on the Democratic side, where four conservatives outnumbered liberals by only one, and two moderates, Jeff Bingaman and Alan Dixon, occupied the pivotal middle ground.

This may be the last piece of legislation that I will have the honor to offer for consideration by the Senate. If it is, I will have no regrets. I will have had the privilege of serving in the Senate on . . . the day that our soldiers, sailors, airmen, and marines were given the organizational and command arrangements that will enable them to effectively accomplish their vital missions. . . .

—Barry M. Goldwater
September 16, 1986

Barry M. Goldwater represented Arizona in the Senate for 30 years. A major general in the U.S. Air Force Reserve, he was the Republican Presidential candidate in 1964 and served as chairman of the Senate Armed Services Committee during the debates on defense reorganization.



[This bill] fulfills the aims of President Eisenhower, who said almost three decades ago, "Separate ground, sea, and air warfare are gone forever. . . . Strategic and tactical planning must be completely unified, combat forces organized into unified commands. . . ." Congress rejected President Eisenhower's appeals in the 1950s. Today, 36 years later, we can now report: mission accomplished.

—Bill Nichols
September 11, 1986

Bill Nichols, a Democrat from Alabama's 3rd district, died while serving his eleventh term in Congress. A combat veteran of World War II, he chaired the Investigations Subcommittee of the House Armed Services Committee during its 1983–86 work on military reform.



Reorganization was unlikely to be sorted out on the basis of ideology. The strength of the Senators' connections to various services and their party affiliation would play more significant roles. Thirteen members had served in the military: four in the Army, two in the Air Force, three in the Navy, and four in the Marines. Some members attached little importance to these previous relationships while others maintained strong ties. Still others maintained close connections with the services for entirely different reasons. For example, John Stennis tilted toward the Navy because the Pascagoula Shipyard ranked as Mississippi's largest employer. Party affiliation prompted some Republican Senators to defend the administration and Pentagon.

As the markup session began, Goldwater set the historical context: "The committee's action continues an evolutionary trend that began shortly after the Spanish-American War." He also established a constitutional context, calling the work "a solemn responsibility assigned by the Constitution to the Congress." He added, "We have neglected this important responsibility for too long. Many of the problems that we now seek to solve have been evident for decades." The chairman then urged the committee to "rise above narrow interests and emphasize genuine national security interests. This has been a problem for the Congress in the past. Narrow interests with strong constituencies have blocked or weakened necessary reforms."⁴

Goldwater announced that "the committee will conduct the markup in a deliberate and comprehensive manner. . . . We want to hear all points of view and carefully consider all aspects of these important decisions. We must exercise caution in mandating changes in the U.S. military establishment. At the same time, we must not shy away from correcting clearly identified deficiencies and from fulfilling our constitutional responsibilities."

The chairman added: "I'd like to make one personal point. I know that some senior Pentagon officials have been opposing what I am trying to do by telling Senators that this is not my initiative. Instead, I am supposed to just be going along with the staff and



Senator Nunn and colleagues.

other Senators. Frankly, these lies make me mad as hell! I have been deeply involved in this project from the outset. I have read every word of the staff report and the bill. I have attended every hearing, except when I had to be in Arizona. So I know these issues and I want to fix these problems."

In his opening statement, Nunn noted, "We have had nearly forty years of experience with the current arrangements. We have seen these arrangements in action and have many concrete examples of their shortcomings." Referencing SASC's extensive reorganization work, Nunn said, "I do not know of any other set of issues since I joined the committee over thirteen years ago that the committee has been better prepared to address."⁵

Courtesy of Special Collections, NDU Library

Following the two leaders' presentations, each member made an opening statement outlining his starting position. These statements and readings from the Pentagon letters consumed the morning. By noon it was clear that SASC was bitterly divided.

The morning also featured a squabble over whether the committee would conduct the markup in open or closed sessions. Antireformers wanted the sessions open to the public, believing that the committee would be more cautious under the Pentagon's glare. Goldwater and Nunn knew the importance of proceeding in closed sessions and gained approval for doing so. Their arguments centered on the need to discuss classified information, which would happen seldom, if ever, during consideration of this bill.

Just before the end of the morning session, a message from Ben Schemmer, editor of *Armed Forces Journal*, informed Gerry Smith of Goldwater's staff that the Navy had established a "crisis management center on DOD reorganization." Schemmer also provided the center's telephone number.⁶ The center's purported mission was to defeat the legislation, an activity of questionable legality. With mischief in his eye, Goldwater grabbed Smith and me and said, "Let's find out what this is all about."

Back in his office, Goldwater said, "I'm going to call this office and see what the Navy's up to." Smith offered to place the call, but the Senator insisted on dialing it. When his call was answered, Smith and I saw a Goldwater we had never seen before: an actor. Disguising his voice, Goldwater asked the secretary who answered, "Is this the Navy office that is working to defeat the reorganization legislation?" When she said, "Yes," he inquired who worked there. She answered, "Captain Cohen, and there is a Lieutenant Colonel Dole, and a Major Robert Roach."⁷ Goldwater repeated the names as he wrote them down.

Goldwater said he wanted to help and asked if she had an assignment for him. She said she did not have one at the moment, but if he would leave his name and number, the office would get right back to him.

Goldwater said he would have to call back later and thanked her. As he hung up, the Senator said, "Can you believe that? They're not supposed to lobby Congress on legislation. I can't wait to tell the committee." At the start of the afternoon session, the chairman took great delight in recounting his telephone call.

After the committee adopted the draft bill as the basis for amendment, Goldwater asked me to give an overview briefing. This led to what the chairman called "a good discussion of a number of broad issues" that consumed the entire afternoon.⁸

Death by Amendment

The following afternoon, Goldwater, sensing that work on the bill would be highly confrontational and time-consuming, decided he did not want other SASC sessions competing with the markup: "I am reaffirming, after consulting with Senator Nunn, my direction that no other full com-

military and veterans associations were bombarding Goldwater with letters objecting to the bill

mittee or subcommittee hearings be scheduled until we finish this markup." Goldwater also noted that it might not be possible to finish in three days: "We will continue the markups mornings and afternoons every day if it takes one week, two weeks, or three weeks to finish." He also conveyed his determination: "I want everyone in this room to understand that I will not be deflected or sidetracked in this effort even if I get a letter a day from everyone in the Pentagon."

In a campaign organized by the Pentagon, military and veterans associations such as the Reserve Officers Association and National Guard Association were bombarding Goldwater with letters objecting to the bill. The chairman fired off a tough response to each letter and set up a meeting for me to brief the associations.

Goldwater and Nunn had decided to address unified command reforms first because there was wider support for them. When Goldwater opened the floor for the consideration of changes,

John Warner presented a package of thirteen amendments. The third-ranking Republican had accepted the role of opposition leader. Although he had tried to stay out of the reorganization battle as long as possible, the pressure to take the lead eventually became overwhelming. The pressure came from his status as a former Navy Secretary, former marine, and Senator from Virginia, a state with a powerful Navy lobby. Nevertheless, Warner appeared uncomfortable with the intellectual arguments of the antireform coalition. Nunn later said, "Warner always was concerned, I think, in his heart of hearts, that he wasn't on the right track basically taking the Navy's line."⁹ Nevertheless, the Virginia Senator threw himself full force into the role of opposition leader.

As the committee considered Warner's amendments, my role was to assess the impact of each and begin a discussion of its advantages and disadvantages. I also offered recommendations as to what action the committee should take. I made every effort to perform these tasks objectively and to assist Warner with the presentation of his amendments. Some amend-

ments or portions thereof had positive aspects that I recommended be adopted, such as clarifying how aspects of administration and support would be identified for inclusion under a unified commander's authority. But many of Warner's amendments would have weakened reform. Lengthy discussion of each amendment by the members clearly indicated to Warner that he would not be able to have his reform-weakening amendments adopted, so he did not force a vote on the first day. The approach of deliberately talking through each issue became the norm for the markup. By the end of the afternoon session, however, we had finished only about half of the package laid down by Warner, and it was clear that he had many more amendments.

The afternoon's developments displeased Goldwater. It was clear that the committee would never finish in three days, as he had hoped. The chairman

also feared that the bill might face “death by amendment.” He did not want to cut off debate, but he worried about how seemingly unending amendments might affect prospects for completing committee action. Goldwater asked me to consider how he might put some pressure on the committee’s reorganization opponents and the Pentagon, which many believed was aiding Warner and his allies. Goldwater did not want to play an excessively heavy hand; he was looking for firm but not drastic responses that would create pressure and, equally important, demonstrate that he was serious.

I created a menu of SASC activities that the chairman could hold in abeyance while the markup sessions were still under way: no consideration of nominations for senior defense civilian and military positions, no consideration of promotions for military officers, no approval of reprogramming of monies from one defense budget account to another, no consideration of a supplemental authorization bill, and no approval for the Navy to begin expending funds for its Strategic Homeporting Initiative. Goldwater especially liked holding up the Navy’s project, which he called “strategic homeporting.”

As the chairman read down my list, a hint of a smile emerged. I had expected him to choose one or two. He looked up and said, “If Senator Nunn has no objection, do them all.” Goldwater wanted to close down the committee while it was considering the reorganization bill. He did not want another piece of paper to move.

The next morning, Goldwater announced his actions to the committee and indicated that these prohibitions would remain in place at least until the committee had completed its work on the reorganization bill. If he sensed that obstacles—like a filibuster—might be employed in an effort to prevent the Senate’s timely consideration of the bill, Goldwater said he might have to leave the prohibitions in place until the Senate had completed action on the bill.

The feisty chairman also announced that he was prepared to dedicate the entire year to working on reorganization. If this required the



Caspar Weinberger with his service secretaries.

DOO

committee to forgo its traditional defense authorization bill, this would, in Goldwater’s view, be an acceptable price for enacting critical Pentagon reform. Goldwater made clear that he and Nunn were prepared to hear and debate every argument in an effort to prevent the committee from making decisions on emotional and superficial bases like those that had dominated congressional action on defense organization in the 1940s and 1950s.

Later that morning, Warner forced a vote on one of his key amendments: to have acting JCS chairmanship in the chairman’s absence rotate among the service chiefs rather than be performed by a newly created vice chairman. Fifteen Senators were present for the vote, which Goldwater and Nunn won by a margin of ten to five, with Strom Thurmond providing the vital tenth vote. I told Goldwater that the four absent Senators, who would have until 5 p.m. to record their votes, would likely vote with opponents. This would narrow the victory margin to one vote. Goldwater wanted a bigger margin for this first crucial vote. He was determined to secure a favorable vote from one of the four.

With the list of absent Senators in hand, Goldwater and I headed for his office. By the time we arrived, the chairman had decided to target the lightly regarded Dan Quayle. He placed a telephone call to a surprised Quayle and said that he wanted his vote. Goldwater played political hardball, warning that if the Indiana Senator failed to support him he would first take the chairmanship of the Defense Acquisition Policy Subcommittee away from him. Then he would get him kicked off the Armed Services Committee. And then he would work for his defeat in the next election. When he finished, Goldwater put down the receiver and said with a smile of satisfaction, “Quayle’s voting with us.”

When the committee convened that afternoon, however, Quayle’s military legislative assistant, Henry Sokolski, approached me and said, “Senator Quayle wants to change his vote.”

I directed him to speak to Goldwater, who responded, “I have personally spoken with Senator Quayle, and I will not change his vote unless we speak again.” As Goldwater anticipated, the day ended without any further word from the Indiana Senator. Although the pro-reform side won the

first vote eleven to seven, Goldwater's power play backfired: it increased the tension between the sides and caused opponents to regroup. Normally, the chairman and ranking minority member would vote proxies from their party colleagues. However, because both Goldwater and Nunn were on the same side, antireform Republicans and Democrats collected their proxies and decided who would vote them.

Open Minds and Markup

Goldwater and Nunn's commitment to a patient, fair, everyone-gets-to-be-heard process provided the first important step in creating a high-quality dialogue on the bill. When Warner, a sincere and considerate gentleman, matched the two leaders' tone, the ingredients for a productive examination of the bill were present. Neither side lessened the intensity of its convictions, but after the initial trying days, a high degree of collegiality emerged. If a member asked for more research, opinion of a Pentagon official or officer, a briefing, or examination of additional options, Goldwater and Nunn made sure that the request was honored. Warner later commented, "At no time did the distinguished chairman or ranking minority member deny me any privilege under the procedures of the committee to make known my views and the views of those Senators working with me." Carl Levin observed that Goldwater "chaired the committee in a nonpartisan way; he has done it in the fairest way I have ever seen the chairman conduct the committee."¹⁰

Warner also won admiration for the way he led the opposition. He thoroughly challenged every idea and ensured that the Pentagon's perspective on each issue was well represented, but he was not intransigent. Christopher Mellon, Cohen's staffer, later said: "One thing about Senator Warner that I always admired . . . is that he maintained an open mind. He was willing to change his point of view based on new evidence and information. Senator Warner might go into something with a great deal of conviction on one side and argue furiously,

and yet as new information would come to light, he always listened."¹¹

In the lengthy debate of amendments and rewriting of bill provisions, Cohen and Levin emerged as Goldwater and Nunn's lieutenants. Both were brilliant and articulate lawyers, and they made insightful, thoughtful contributions. They also helped to shoulder the burden of defending and strengthening the bill.

At the end of the first week of markup, Congress recessed for a week. When committee activity resumed, the tactics and battle lines were unchanged. Activity focused on the stack of amendments that Warner offered on each bill chapter. Warner's and Jeremiah Denton's military legislative assistants, Colonel Romee "Les" Brownlee, USA (Ret.), and Allan Cameron, respectively, were preparing Warner's amendments. While Rick Finn, Gerry Smith, and I were burning the midnight oil to defend the bill, Brownlee and Cameron

if opponents could not defeat the bill in committee, they would set their sights on the Senate floor

worked late each night preparing amendments to attack it. Many staffers were convinced that the Navy was helping Brownlee and Cameron, a charge they denied. Arnold Punaro later commented: "There's absolutely no question that the Navy helped them. With their limited resources and lack of access to legislative counsel, who were helping Goldwater and Nunn, there's no way they could put that material together."¹²

Other members offered written amendments as well, but theirs totaled 27 compared to Warner's 53 amendments. The committee debated each of Warner's amendments in exhausting detail. Warner forced only three roll-call votes, each of which he lost.¹³

As Thurmond's steadfastness to Goldwater and reorganization became clear, the opposition set a new goal. If the opponents could not defeat the bill in committee, they would set their sights on overturning it on the Senate floor. A one-vote margin in committee would serve as the springboard for

convincing the full Senate that this legislation was ill-considered. To anti-reform Senators and their supporters in the Pentagon and elsewhere, it was imperative that they maintain nine votes in opposition. "Ten to nine" became the opponents' rallying cry, like "fifty-four forty or fight" more than a century before.

Punaro, a Marine Reserve colonel, had to withstand withering antireform pressure from active and retired marines, but he returned fire. After every markup session, he took the long way back to his office just so he could let the antireform officers in the Navy-Marine Corps legislative liaison office know that the pro-reform faction still had the upper hand on the committee. The officers responded with the "ten to nine" slogan and told Punaro to wait until the full Senate got its hands on the committee's bill.¹⁴

Although the solidarity of Goldwater and Nunn's ten votes convinced opponents that SASC would report a bill, antireform Senators were determined to make every effort to shape it more to their liking. The committee continued a detailed debate of each provision, addressing a staggering total of 140 written and oral amendments—nearly twice the average number of amendments during committee markup of a defense authorization bill.

In chairing the markup sessions, Goldwater continued to demonstrate that he would patiently allow each idea to be debated as long as needed. But he also signaled that he would not tolerate delaying tactics or other mischief. Symbolic of his preparedness to deal sharply with any disruptions was a small wooden rifle that he kept close at hand. My secretary, Barbara Brown, had given him the rubber-band shooter. Goldwater called it his anti-amendment weapon, or AAW. He kept it loaded at all times and more often than not held it in his hands. Although he was tempted to fire it often, he only shot it once, when staff director Jim McGovern came into the hearing room to speak with him after a session. The chairman fired a rubber band at McGovern's crotch. "Didn't hit anything," the staff director responded.



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Goldwater, known for a ribald sense of humor, replied "Target too small."

Goldwater and Nunn's decision to ensure a full debate turned out to be critical. Proreform arguments proved more persuasive, and the debate slowly strengthened the position of reform proponents. It was clear that many opponents were finding the Pentagon's logic superficial and indefensible, even though not a single vote had yet changed sides.

Goldwater and Nunn decided when to offer compromises, including those on the two extreme recommendations in the draft bill: mission-oriented under secretaries and the merger of the two headquarters staffs in the military departments. These offers were well timed. Bargains were

reached, and both sides were delighted. The opponents were relieved to have beaten back an extreme provision; Goldwater and Nunn were pleased to have their desired outcome endorsed by the entire committee.

Gaining Momentum

As the markup entered its third week, Goldwater and Nunn began slowly to pick up support in the debate. Phil Gramm was the first member to switch sides. But soon after, another Senator joined the proreform camp. When thirteen or fourteen Senators were on board, the opposition began to collapse.

Looking back at the committee's work, Mellon said: "It was an example of good government. It is the memory I would like to have of the Senate. There weren't parochial motives that I

was able to discern. Members were motivated by national security considerations. People were dedicated; everybody was engaged; they were working with a great deal of vigor, energy, and commitment. Issues were decided on the merits and substance. It was the kind of experience that makes you want to go into government and be involved and participate."¹⁵

Although the committee was nearing the completion of its deliberations, Goldwater and Nunn slowed the pace to permit it to hear firsthand from the Packard Commission on February 28, the day the commission was slated to deliver its interim report to the President. During the meeting, Packard said that "the portions of the commission's report dealing with defense organization and the committee's bill are consistent and mutually supportive." The interim report

dropped all mention of the Vice Chairman's seniority. On the issue of who should serve as acting Chairman, the report recommended, "The Secretary of Defense, subject to the direction of the President, should determine procedures under which an acting Chairman is designated." Goldwater and Nunn's press statement announced: "We are absolutely delighted with the report that the Packard Commission submitted today to President Reagan."¹⁶ The meeting with the commission did not produce any new ideas, but it reassured certain members and added to the rationale others could cite for their emerging proreform positions.

At the next SASC session, held on March 4, Warner offered an amendment to conform the provision on the Vice Chairman to the Packard Commission's language. The amendment—on a priority issue for the Pentagon—was defeated twelve to four, with only John Warner, John East, Pete Wilson, and Jeremiah Denton voting in favor.¹⁷ The vote confirmed what the debate had signaled earlier: only a handful of Senators continued to oppose key reorganization provisions.

The Navy was outraged when it became clear that its supporters in the committee had been defeated on reorganization. Navy leaders blamed Warner, Wilson, and Denton, the three Senators who had spearheaded the opposition, referring to them as the "three stooges." The criticism was self-serving and grossly unfair. The bill's opponents had put up a vigorous fight. Unfortunately for antireformers, much of the ammunition the Pentagon supplied had been duds.

The rigorous challenge to the draft bill carried important benefits. It forced the members to debate every word of the lengthy bill, question every idea, and examine every issue. This process strengthened the bill and achieved consensus. Mellon compared it to forging a sword: "Warner and the Navy were the hammer, and Goldwater, Nunn, and the staff were the anvil. Warner kept firing in these amendments and concerns and objections to provisions. In a way, they helped to strengthen, sharpen, and harden some of the provisions and forged the bill in a hotter fire."¹⁸

The committee accepted about 60 percent of Warner's amendments in some form, many after significant modification.¹⁹ None of the amendments that passed altered the basic thrust of the bill. Instead, they provided useful clarification, especially of roles and relationships, or provided safeguards governing the exercise of new authority. One major initiative by Warner required the President to submit an annual national security strategy report to Congress.

The Final Vote

On the night before the markup's last day, Finn, Smith, Punaro, and I speculated about the final vote on the bill. Fifteen votes in favor seemed certain, but would there be more? I predicted a vote of seventeen to two, with Stennis and Denton casting the nays.

The committee met on March 6 to conclude its work on the bill. Everyone present understood the historic significance of the coming vote. Goldwater did not rush this golden moment. He allowed the drama to build and for everyone to savor the committee's achievement at the end of a hard-fought battle. Finally, time for the last roll call came.

In line with practice, Chief Clerk Chris Cowart called the roll of the majority party first, starting with the most senior member after the chairman. It was fitting that Thurmond, who had represented the pivotal vote in the early going, cast the first aye. Warner voted yes next, then Gordon Humphrey, then Cohen, and all other Republicans, except for Denton, who passed.

Allan Cameron, Denton's military legislative assistant, assessed the final vote in a memorandum for the Senator. Cameron himself opposed the bill, arguing that it "reverses nearly 200 years of American military history" and earlier legislation that had "concluded that a single military adviser was unwise and that the military advice in a democracy should be provided by a corporate body."²⁰

Based on input "from the staff members of the Senators most likely to

vote no," Cameron predicted the outcome as follows:

Warner: Will vote yes because he believes that the JCS compromise requires it and because he believes that the bill has been sufficiently improved.

Humphrey: Will probably vote yes for reasons of comity, although he is not happy with the bill.

Quayle: Will probably vote yes.

Wilson: Will vote yes. Believes the issue is politically sensitive for him, that "the train on defense reform has already left the station," and that he cannot afford to vote against "reform" in the context of California politics and his reelection campaign in 1988.

Gramm: Unknown, but apparently feels some pressure to vote yes for reasons of committee comity and relations with the Chairman.

Stennis: Probably will vote no because he believes the whole idea of JCS reform is bad; Stennis went through the [same] wars on the earlier occasions.

John Glenn: Unknown, but much pressure to vote yes because of changes to the bill and the political realities of Ohio.

Cameron's memorandum summarized the situation: "I suspect a maximum of three or four no votes, assuming you vote no. I certainly believe that someone should vote no, but I would not recommend that you or any other Senator do so alone." As Cowart began to call the roll of Democrats, Denton's decision to vote yes or no depended on Stennis's vote.

On the Democratic side, Nunn led off with his vote in favor. Stennis was next. He began by explaining the vote he was about to cast. He revealed that Goldwater had asked to meet the night before and that they discussed the fundamental issues at stake. "I reiterated that it was an extremely important vote for the future of the Armed Forces," Goldwater later recalled. "I told him I was not speaking that way because of my background, but because of what I've learned here and what I see."²¹ Goldwater's final attempt to bring his longtime colleague on board succeeded. Stennis voted in favor. All the other Democrats also voted in the affirmative.

The clerk then asked the chairman for his vote; Goldwater proudly said, "Aye."

Only Denton's vote remained to be recorded. When the clerk returned to him, he voted in favor. His positive vote indicated prudence, not that he supported the bill. Nevertheless, when Cowart announced the tally, the com-

news of the committee's historic unanimous vote was extensively reported in the print media

mittee had approved the bill by an astounding vote of nineteen to none.

News of the committee's historic unanimous vote was extensively reported in the print media the next day. The same newspaper editions carried a belated ill-informed attack against the legislation by syndicated columnists Rowland Evans and Robert Novak. They had accepted wholesale the superficial arguments of the Pentagon's reform opponents. The two columnists sought to characterize reorganization as "an attempt by serious Democratic politicians to regain military respectability through reform" and a "final victory for McNamara's Whiz Kids, the super-bureaucrats, against the uniformed professional military."²²

Since I was the only former "whiz kid" on the committee staff, little doubt existed that Evans and Novak were shooting at me. The morning after the nineteen to zero vote, Evans and Novak looked foolish, claiming that "Goldwater followed the lead of Senator Sam Nunn, the committee's senior Democrat, and has been joined on key votes by only one other Republican, Senator William Cohen of Maine." Had this attack appeared several weeks before it might have gathered some attention. Instead, it was merely an embarrassment to its authors.

Goldwater and Nunn had done it. In fourteen months of hard work, they had broken the military service stranglehold and had forged new organizational concepts for the Department of

Defense. Many concepts were original—such as those strengthening the increasingly important, but long neglected, warfighting commands. Not only were Goldwater and Nunn able to gain approval of a comprehensive reform bill; they also achieved all of their desired reforms. The strategy of starting the process with extreme recommendations had succeeded in avoiding the watered-down results they feared. Overcoming the odds against them, Goldwater and Nunn produced a consensus on the entire spectrum of defense organization concepts, an agreement never before achieved during the Nation's history.

Only later did I learn that after the committee's final vote, Punaro made his normal trek to the Navy-Marine liaison office. "Well fellas, you got your 'ten to nine' vote," he told them. "Ten Republicans for defense reorganization and nine Democrats for defense reorganization."²³

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NOTES

¹ John Lehman, letter to Barry Goldwater, Senate Armed Services Committee, February 4, 1986.

² Paul X. Kelley, letter to Barry Goldwater, February 4, 1986.

³ James Watkins, letter to Barry Goldwater, February 4, 1986.

⁴ "Opening Statement by Senator Barry Goldwater, Chairman, Committee on Armed Services, for the Markup Session on the Legislative Proposal on Defense Reorganization, February 4, 1986," Senate Armed Services Committee.

⁵ "Opening Statement by Senator Sam Nunn, Ranking Minority Member, Committee on Armed Services, for the Markup Session on the Legislative Proposal on Defense Reorganization, February 4, 1986," Senate Armed Services Committee.

⁶ Gerald J. Smith, author interview, May 1994.

⁷ Michael Ganley, "How's That Again? You're Opposed to What?" *Armed Forces Journal*, vol. 123, no. 9 (March 1986), p. 18.

⁸ "Opening Statement by Senator Barry Goldwater, Chairman, Committee on Armed Services, for the Markup Session on the Legislative Proposal on Defense Reorganization, February 5, 1986," Senate Armed Services Committee.

⁹ Sam Nunn, oral history, September 9, 1996.

¹⁰ U.S. Congress, Senate, Senator John Warner of Virginia speaking on the Department of Defense Reorganization Act of 1986, S. 2295, 99th Cong., 2^d sess., *Congressional Record* (May 7, 1986), p. 5481; Senator Carl Levin, *ibid.*, p. 5500.

¹¹ Christopher K. Mellon, author interview, August 25, 1998.

¹² Arnold L. Punaro, author interview, March 29, 2001.

¹³ Richard D. Finn, "Written Amendments Considered during Markup," table, March 6, 1986, Papers of Richard D. Finn, included in James R. Locker III Papers, Special Collections, National Defense University Library; Chuck Alsup, "Summary of Executive Markup of DOD Reorganization Act of 1986," June 21, 2000, the James R. Locker III Papers.

¹⁴ Punaro interview.

¹⁵ Mellon interview.

¹⁶ James Locher, Richard Finn, and Jeff Smith, "Comparison of the Packard Commission's Recommendations and the Committee's Draft Bill on Defense Reorganization," memorandum for the Senate Armed Services Committee, March 3, 1986, Senate Armed Services Committee; President's Blue Ribbon Commission on Defense Management, *An Interim Report to the President* (Washington: President's Blue Ribbon Commission on Defense Management, 1986), 11; Senate Armed Services Committee, "Goldwater and Nunn Praise Packard Commission Report," February 28, 1986, Senate Armed Services Committee.

¹⁷ Chuck Alsup, telephone conversation with author, February 23, 2001.

¹⁸ Mellon interview.

¹⁹ Finn, "Written Amendments"; Alsup, "Summary."

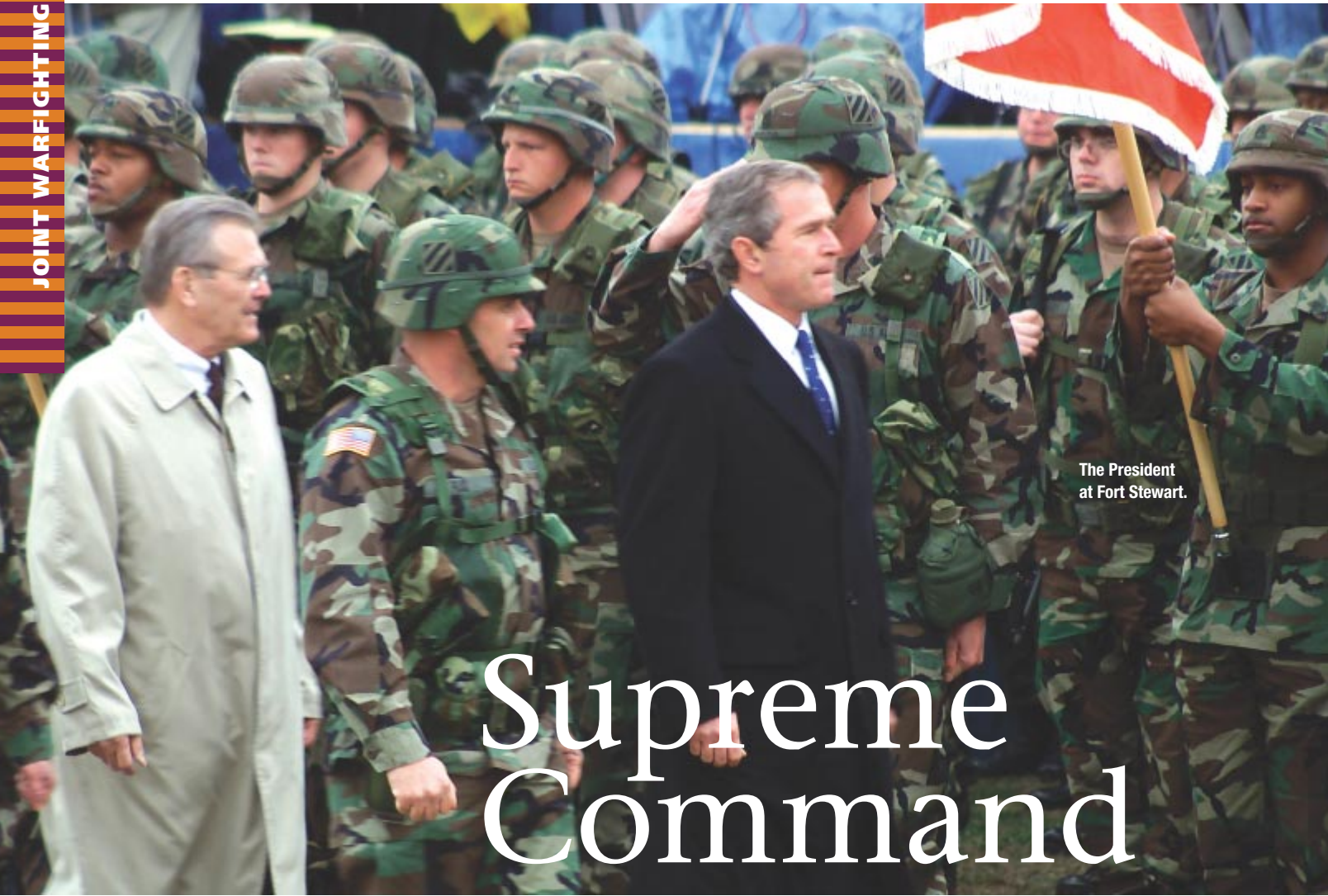
²⁰ Allan W. Cameron, "Final Vote on Defense Organization Bill," memorandum to Senator Jeremiah Denton, March 5, 1986, Senate Armed Services Committee.

²¹ Barry M. Goldwater, interview with the author, May 8, 1995.

²² Rowland Evans and Robert Novak, "Goldwater and the Whiz Kids," *The Washington Post*, March 7, 1986, A19.

²³ Punaro interview.

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The President
at Fort Stewart.

Fort Stewart (Don Teft)

Supreme Command

in the 21st Century

By ELIOT A. COHEN

The term *supreme command* figures in a book by the same title that is too rarely read today: a memoir of World War II by Maurice Hankey.¹ A small, neat, bald man, Hankey was a former Royal Marine officer and model

civil servant known to two generations of British politicians as “the man of secrets.” From 1912 to 1938 he served as the secretary to the Committee on Imperial Defence and the Cabinet, a position which gave him a unique perspective on supreme command. Ironically, this man of secrets struggled with the censors to get his sober memoir published. The tale told by Hankey is that of supreme command as bureaucratic

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process—interwoven political and military decisionmaking at top levels of government. The British, masters of the art of committee work, established the modern pattern of supreme command in the Committee on Imperial Defence, which was a rough model for the National Security Council in the United States in 1947.

Supreme command as bureaucratic process consists of three elements. The development of specialized and trained military staffs began in the 19th and matured in the 20th century. As late as the interwar period some American war plans called for Washington-based staffs to sally forth into the field or establish command posts at sea, but by the outbreak of World War II those ideas were understood to be impractical if not downright dangerous. War is a complex bureaucratic effort that requires evaluating intelligence reports, managing the flow of matériel, and preparing strategic and operational plans that look out six months to a year or more. Thus supreme command as process requires modern strategic command posts as centers of activity in the White House and Pentagon when war breaks out.

the story of supreme command is one of reciprocal complaints by politicians and generals

The second aspect of contemporary supreme command, standing committees to coordinate the work of the military and later of government agencies, was primarily a result of World War II, though the practice did not spread to some regions of the world until the end of the century. While the war gave birth to both the Joint Chiefs of Staff and a permanent secretariat to support them, it took nearly 40 years for the Joint Staff to assume its current form. Similarly, the National Security Council and its web of committees and multilevel working groups did not mature for decades and continues to evolve today with the organization of a homeland security department.

Finally, communication from the field to the center of government has progressed from the use by Abraham



Lincoln of the telegraph office in the War Department as the first situation room to the live video feeds to presidential airborne or buried command posts of today. As world politics reacted to instantaneous television coverage, so did the requirement for supreme command. Despite fear of overcentralized decisionmaking, the impulse to pull more information to the highest level persists and does not appear to lag behind technological advances in the civilian sector.

However, supreme command is not only a set of extremely vital mechanisms, procedures, and innovations, but a more fundamental phenomenon. In this sense, it consists of the relationship between civilian leaders and military commanders; it is civil-military relations at the top in wartime, and as such involves problems as old as war itself. To paraphrase Winston Churchill, the story of supreme command is one of reciprocal complaints by politicians and generals. In the United States politicians fret over military options while soldiers complain about micromanagement, interference, and ambiguous guidance.

The Normal Theory and Unequal Dialogue

Implicit in this latter set of complaints (the former gain scant attention) is a common view of what a healthy civil-military relationship should look like—that is, what one might call the normal theory of civil-military relations. This theory holds that there should be a division of labor between soldiers and statesmen. Political leaders should develop objectives, provide resources, set broad parameters for action, and select a commander—then step back, and intervene only to replace him should he fail at his task. But this almost never happens, and military history contains an unending account of resentments voiced by generals about political interference. Livy captures this approach in the irritable speech of a general about to embark for the Third Macedonian War in 68 B.C.:

Generals should receive advice, in the first place from the experts who are both specially skilled in military matters and have learned from experience; secondly, from those who are on the scene of action, who see the terrain, the enemy, the fitness of the occasion, who are sharers in the danger, as it were, aboard the same vessel.

Thus, if there is anyone who is confident that he can advise me as to the best advantage of the state in this campaign which I am about to conduct, let him not refuse his services to the state, but come with me into Macedonia. . . . If anyone is reluctant to do this and prefers the leisure of the city to the hardships of campaigning, let him not steer the ship from on shore. The city itself provides enough subjects for conversation; let him confine his garrulity to these; and let him be aware that I shall be satisfied with the advice originating in camp.²

Legislators level the same criticism on behalf of military leaders, though they usually reproach only members of the executive who represent the opposition party. Thus a Republican senator holding hearings on the conduct of the Kosovo conflict by the Clinton administration opined:

I firmly believe in the need for civilian control of the military in a democratic society, but I also believe we can effectively adhere to this critical principle by clearly outlining political objectives and then, within the boundaries of those objectives, allowing the military commanders to design a strategy in order to assure the achievement of those objectives.³

The normal theory is alive and well.

Yet the finest democratic war statesmen of the past did not act in accord with the dictates of this theory. They prodded, nagged, bullied, questioned, and harassed subordinates, although they rarely issued direct orders or overruled them. They invariably excited the irritation and even anger of talented military subordinates. William Tecumseh Sherman refused in cold fury to shake hands with the Secretary of War, Edwin Stanton, at a parade celebrating the end of the Civil War; Chief of the Imperial General Staff and Chairman of the Chiefs of Staff, Field Marshal Alan Brooke, ranted at Winston Churchill in his published diaries in a manner that at times verged on hysteria. Nonetheless, the fruit of this style of civilian leadership—which respected military professionalism but never merely deferred to it—was victory.



AP/Wide World Photo (Greg Gibson)



AP/Wide World Photo

Moreover, popular myth notwithstanding, the military failures of modern democracies have not resulted from micromanagement or interference, but the reverse. Lyndon Johnson and Robert McNamara did select targets in North Vietnam, but never questioned the assumptions of search and destroy operations. They repeatedly wrote something approaching blank checks for manpower and matériel for command arrangements devised by

the military for conducting that conflict. For years they put up with generals whose professional qualities seem remarkably dim—William Westmoreland, for example, lasted four years in command. Abraham Lincoln, who could decide that an officer was incapable in a matter of months, would not have abided that. In a similar vein disaster resulted between 1967 and 1973 when Israeli political leaders accepted the nearly reckless assumptions of their military advisers on the capabilities of the Arab states.

First and foremost, active control entails what can be called an *unequal dialogue* between civilian politicians and senior officers. Most great political leaders rarely give orders to generals and insist that they obey: rather, they abide by Churchill's dictum that "it is always right to probe." They expect and even welcome blunt disagreement among the military and civilians in the privacy of a council chamber but require solidarity and obedience outside. Indeed, during World War II, American generals and admirals failed to realize just how much British civilian and military leaders were at odds. This style

the norm for healthy civil-military relations is tension and what often looks like interference

of supreme command does not admit to principled boundaries between civilian and military authority. Rather it recognizes that, depending on circumstances, civilians can find themselves involved in decisions that might appear to be none of their affair. It is, however, an approach to supreme command that varies in intensity of oversight and control: if it is meddling it is selective meddling.

The unequal dialogue is necessary for three reasons that are constant through history. The first is the profoundly political nature of war. When Clausewitz stated that "war is only a branch of political activity . . . it is in no sense autonomous,"⁴ he made a radical and correct claim. Much in war, even seemingly tactical details, may have political consequences. Churchill found himself presiding over decisions on increasing the speed of transatlantic convoys by two knots. The issue confronting the Royal Navy was trade-offs between greater risks of exclusion from faster convoys and greater safety for those in them. At a time when every shipload contributed to the survival of Britain, the question of what risks were acceptable became political, as did decisions on what kinds of weapons to use, what sort of collateral damage to inflict, and what level of casualties to accept. The only issue is

whether politicians rely on the assessments by generals or their own judgment which, in all likelihood, is better; but, in any case, political leaders are ultimately responsible. For example, if joint planners make decisions (rather than recommendations) on what kind of forces are acceptable to another nation, or what kinds of losses the American public can put up with, they are making choices for which they are neither particularly qualified nor ultimately responsible.

Active civilian control also appears because of a peculiar aspect of military professionalism, uncertainty.

Generals and admirals often disagree vehemently on operational and tactical choices, and the stakes are sometimes too high for civilians to merely put faith in the senior officer present. The stakes have not been sufficiently high in recent wars to demand civilian intervention, but the potential remains. During World War I, Georges Clemenceau was compelled to arbitrate between his two senior generals, Ferdinand Foch and Philippe Pétain, over doctrine for defensive warfare. That case involved only one service: rivalries today among services and their perspectives on joint warfare rarely allow one to speak of a single view on the conduct of operations.

Finally, the uncomfortable truth is that those who often rise to the top in peacetime may be unsuited for high command in war. They may be too narrow, indecisive, or tolerant, or they may be insufficiently callous or merely unlucky. In the heat of war, politicians must reshuffle or relieve senior officers. That is a hard judgment to make: not all defeated generals are incompetent and not all victorious ones are able. Successful wartime statesmen create winning military establishments by forming sound judgments on character and personality. It is very different to determine whether a surgeon or engineer is professionally qualified. And only through intense dialogue can civilian leaders hope to evaluate the quality of military subordinates.

The norm for healthy civil-military relations at the top of government, then, is tension and what often looks like interference because civilians

do things that can indicate a lack of confidence in their commanders. The resulting friction is real. One should note parenthetically that not every instance of civil-military comity indicates a healthy relationship. Recall that General Westmoreland wrote of the President, "I have never known a more thoughtful and considerate man than Lyndon B. Johnson," an indication that both men failed to manage their relationship.⁵ A bland pleasantness in civil-military relations may also mean that civilians are evading their responsibilities or that soldiers have succumbed to the courtier mentality rather than that true harmony exists.

The Age of Global Predominance

The unequal dialogue between soldier and politician is more important than ever because of the role of America in the world, the way it conducts foreign policy, and the complexities in the use of force.

French officials and writers refer to the United States as a *hyperpuissance*—hyperpower. Americans shy away from that term, and most object to *global hegemon* or *imperial preeminence*. *Sole surviving superpower* or *indispensable nation* have a better ring to them because both of these terms imply a status derived from fortuitous circumstance rather than aspiration or benevolence and not domination. And yet when national political leaders speak it is unconsciously in the tones of a hyperpower. Foreign leaders are told what the United States expects of them and informed when the President is disappointed in their performance. More to the point, American power floods the planet to a greater extent even than in 1945. Cold War alliances and attendant commitments remain intact even if diminished. Meanwhile, American soldiers, sailors, marines, and airmen implement foreign policy in every corner of the globe—overturning regimes in Afghanistan, building bases in Central Asia, patrolling the Persian Gulf, throwing a protective shield around Taiwan, and chasing terrorists in the Philippines. Behind this force with its weaknesses—



Foch and ensemble,
Armistice Day.

AP/Wide World Photo

aging weapons and unneeded facilities—is an establishment fueled by a budget rising to nearly \$400 billion a year, something like seven or eight times as much as the next largest potentially hostile power, China, and two and a half times the combined spending of its NATO allies.

Furthermore, U.S. foreign policy had become increasingly militarized in a number of ways even prior to September 11. Theater or combatant commanders, whose powers were greatly enhanced by the Goldwater-Nichols Act, led to dominance by the Pentagon in the daily conduct of foreign affairs. DOD can do things: it can move people and matériel, and it can staff problems more effectively than other parts of the

bureaucracy. Unified commands have resources and geographical prominence that surpass the capabilities of regionally oriented assistant secretaries in Foggy Bottom or ambassadors abroad.

Not surprisingly, theater commanders have been thrust to the fore in making foreign policy. The struggle of General Wesley Clark with the Pentagon (including the Secretary of Defense) over intervention in Kosovo in 1999 demonstrates what can result. No matter what one thinks about the outcome, it is clear that Clark was a semi-independent actor who negotiated with European nations as well as Washington and sought to impose solutions (such as blocking the Russian

advance on Pristina airport) in the face of opposition from both allies and parts of his own government.

Unified commanders have become proconsuls, and it should come as no surprise that they move easily in the realm of diplomacy—sometimes formally. A former general is Secretary of State; in the last administration two important diplomatic posts, Great Britain and China, were held by retired flag officers; and when the President recently needed a special envoy to the Middle East, he turned to a retired four-star general. There is nothing sinister in the rising influence and participation of active duty and retired officers in foreign affairs. It reflects their experience and abilities. But with the gradual

extension of the roles of military officers in policymaking has come an unhealthily blurred outlook. When generals, active or retired, speak out on national security issues, they now do so less as military experts than as members of a broader policy elite. Pronouncements by senior officers on China, Yugoslavia, or the Persian Gulf contain considerably more on politics than military operations.

Active civilian control can always breed resentment, and the situation today is no exception. Surely the present Secretary of Defense is one of the more assertive in recent memory, particularly (as far as one can tell) in terms of managing the actual conduct of operations. Yet stepping back, it is admittedly difficult for civilians to get their way in anything from major changes in acquisition programs to options for military activities that involve something less than a massive use of force. The problems are exacerbated by the slow pace with which administrations are staffed, the relative weakness of the Office of the Secretary of Defense compared to the Joint Staff, and the demands of a political system that keeps senior civilians on a treadmill of congressional hearings and periodic reports. But they also reflect the stability of a system that has in many instances shifted the terms of reference in civil-military relations from a question of military means and political ends to policy in a much broader sense.

The Future of Supreme Command

The process of supreme command in the United States works well. We have an elaborate National Security Council system, with both the organization and technology (in particular, video teleconferencing) to make sound decisions on using force. To insiders, no doubt, the government often looks chaotic and incoherent, but by comparison with decisionmaking elsewhere it is sound. There is tinkering to be done, and any system only works as well as those who administer it. Nonetheless, the problems of supreme command as process are largely solved.

Supreme command as relationship is always difficult. This situation is partly a result of the inevitable friction between those who are products of closed, hierarchical, rigid organizations and those with different backgrounds—in politics, business, law, or academe—who have nominal and sometimes real authority over them. These intrinsic difficulties are exacerbated in two ways.

First, the use of force abroad will increasingly put civil-military relations under pressure. There will be very few clean wars of the kind the American public thought was waged in 1991

administrations always will deny that civil-military tension exists even as tenacious reporters uncover it

against Iraq—a conflict won in a cathartic burst of violence followed by declarations of victory and parades at home. Future wars will be—and the current war is—ambiguous, open-ended, and inconclusive; they will require missions that the military does not like, to include different types of military governance. This prospect by itself will generate a great deal of friction. Compounding the issue will be contending views of warfighting within the Armed Forces, among which civilians must choose. In Afghanistan civilian leaders observed and were drawn by applications of force that combined Special Operations Forces and long-range airpower, differing significantly from the conventional means used in the Persian Gulf. The rising influence of the special operations, space, long-range strike, and other communities will compete with advocates of more traditional platforms and outlooks, such as heavy armor, aircraft carriers, et al. This will lead to a struggle not merely among services but within them. As civilians select military leaders, they will favor some interests over others and find themselves caught up not only in debates over priorities, but over approaches to warfare. The ill feeling engendered by canceling the Crusader artillery system is only a foretaste of such tension.

Furthermore, even the resources of the United States will be taxed by attacking terrorists, dominating the Persian Gulf, and dealing with China while maintaining older commitments in areas like the Korean peninsula and Europe. In most recent major conflicts—Vietnam, the Persian Gulf, and the former Yugoslavia—America was flush with resources: the only question was choosing how much to project into a theater. As the demands of global predominance stretch the military, however, the time will come when civilian and military leaders find themselves compelled to accept real risks of a kind not seen since World War II. It is sobering to remember that by 1945 the Army had deployed all of its 89 divisions overseas, and all but two were com-

mitted in combat. It was, as one historian put it, a photofinish, which may have been a “surprisingly accurate forecast,” or equally likely “an uncommonly lucky gamble.”⁶

Such choices would be more manageable were it not for the second and larger problem of supreme command and a widespread unwillingness to talk or even to think about it seriously. Administrations always will deny that civil-military tension exists even as tenacious reporters uncover it. In public, soldiers and statesmen praise one another and stoutly maintain that they think and act in harmony, even as something quite different goes on behind the scenes. In fact, a careful reading of memoirs and press interviews after the event shows the normal difficulty of such relationships—as the artfully written reminiscence by Colin Powell, *My American Journey*, reveals. Such understandable and sometimes necessary disingenuousness must not obscure the truth or change expectations about difficult times at the top when the Nation goes to war.

The issue of civil-military relations has been exacerbated by a willful misreading of recent events. Simplistic and often erroneous interpretations of supreme command in both Vietnam and the Persian Gulf—the former supposedly representing a cautionary tale of interference, meddling, and



Clausewitz.

overweening subjugation of military judgment, and the latter offering an exemplary case of clear objectives, delegation, and civilian detachment—are extremely harmful. Both interpretations miss the mark: Vietnam for reasons already noted, in particular the strange detachment of civilians; and the Persian Gulf War because of the reality of political control (like compelling U.S. Central Command to throw assets at mobile missile launchers) and the deplorable consequences of absence in others (especially politicians who lacked involvement in negotiating the armistice).

Worst of all is the nearly irresistible temptation of political and military leaders (and for that matter journalists and pundits) to preach the normal theory of civil-military relations even when they must know in their hearts that it simply does not work. And yet platitudes on “letting the military do their job” and “not interfering” persist, with the result that military leaders are surprised and resentful when it happens, and civilian leaders sometimes at a loss to know precisely what role to play. The unequal dialogue in war requires a great deal of forbearance, mutual understanding, and good judgment. Even then it breeds friction and discontent.

But that dialogue will never occur if military education fails to prepare officers for it and civilians deceive themselves and others about its utility. The Nation looks ahead toward a century that will be less brutal, but which promises no diminution of strategic difficulties. Whether we will successfully navigate the perils that lie ahead depends in no small measure on the skill with which that unequal dialogue is conducted. **JFQ**

NOTES

¹ Maurice Hankey, *Supreme Command*, 2 vols. (London: George Allen and Unwin, 1960). On the issue of supreme command, see Peter D. Feaver and Richard H. Kohn, eds., *Soldiers and Civilians: The Civil-Military Gap and American National Security* (Cambridge: MIT Press, 2001); Dana Priest, “A Four-Star Foreign Policy?” *The Washington Post* (September 28, 2000), p. A1ff. [also see subsequent articles published on September 29 and 30, 2000, “Engagement In 10 Time Zones,” and “Standing Up to State and Congress”]; and Aleksandr A. Svechin, *Strategy* (Minneapolis: East View, 1992).

² Livy, *Histories*, Book XLIII, translated by Alfred C. Schlesinger (Cambridge: Harvard University Press, 1951), Vol. XIII, pp. 159–63.

³ Remarks of Senator Gordon Smith (R-Ore.), “The War in Kosovo and a Postwar Analysis,” U.S. Senate, Committee on Foreign Relations, 106th Cong. 1st sess., September 28 and October 6, 1999 (Washington: Government Printing Office, 2000), p. 77.

⁴ Carl von Clausewitz, *On War*, edited and translated by Michael Howard and Peter Paret (Princeton: Princeton University Press, 1982), p. 605. Emphasis in original.

⁵ William Westmoreland, *A Soldier Reports* (New York: Doubleday, 1976), p. 307.

⁶ Maurice Matloff, “The 90-Division Gamble,” in Kent Roberts Greenfield, ed., *Command Decision* (Washington: Government Printing Office, 1960), p. 381.

This article is based on the author's recent book, *Supreme Command: Soldiers, Statesmen, and Leadership in Wartime* (New York: Free Press, 2002).



Laptop user on beach during exercise.

U.S. Navy (Terry A. Cosgrove)

THE ONCE AND FUTURE Revolution in Military Affairs

By WILLIAM A. OWENS

It is hard to gauge precisely when the current American revolution in military affairs began. It was clearly underway by the mid-1990s. Within the Pentagon, the Director of Net Assessment, Andrew Marshall, claims that Soviet observers of

the United States were concerned about it in the late 1970s. Some historians point to the period of post-Vietnam introspection in the mid-1970s as the origin. Thus the Nation has been engaged in—or at least on the cusp of—such a revolution (or military transformation) for the better part of two decades, a time span roughly equal to two earlier military revolutions, the interwar transformation and nuclear revolution.

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Kandahar airport,
Enduring Freedom.

U.S. Marine Corps (Charles G. Grow)

The Beginnings

There was rumbling about a revolution immediately after the Vietnam War. As the focus of national security planning shifted back to defending Europe against the heavily armed, numerically superior forces of the Warsaw Pact, the United States confronted severe challenges because much had changed while it was preoccupied in Southeast Asia. It was evident by the mid-1970s that the Soviet Union was building a formidable submarine force that made the concept of close-in defense of vital lines of communications across the Atlantic and Pacific Oceans increasingly questionable. Likewise, new generations of nuclear and conventional Soviet weapons required novel approaches by the Army and Air Force to maintain the credibility of deterrence in Europe. It was in this milieu that technologies and operational

concepts arose that would be central to the revolution.

The Navy reasoned, for example, if close-in defense of vital sea lines was increasingly tenuous, that it would be feasible to defend forward—bottling up enemy submarines before they could reach the open sea—and threaten Soviet territory from the northern Pacific, Norwegian Sea, and eastern Mediterranean. And if this meant going into harm's way, why not spread the defense of the fleet outward, develop communications and collaborative defenses to compensate for distance, and push the ability to grasp Soviet action in deeper, more detailed, and timely dimensions? These changes laid the groundwork for what is known as network centric warfare.

If NATO forces could no longer rely on superior weaponry to oppose the Warsaw Pact with an impenetrable wall of steel, why not have the Army strike deeply behind the front, putting

time and distance gaps into the orderly flow of the enemy? And if such a strategy demanded more reach, higher precision, and real time, comprehensive awareness of what was occurring in a vast battleground, why not develop the communications, precision weapons, and intelligence system to provide it? This approach paved the way for Air-Land Battle and the digitized Army.

And if Soviet air defenses made penetration based on speed and high altitude problematical, why not develop technology for the Air Force that offered invisibility and precision weapons, backed by real-time awareness to enhance effects of economic, information, military, and political systems? That also happened, enabling stealth and nodal effects-based operations.

Throughout the 1980s the Army, Navy, Marine Corps, and Air Force con-

tinued to develop revolutionary ideas. Thus the roots of a new generation of weapon systems, communications, and intelligence collection took hold. But the services worked largely independently, under an implicit understanding that there would be enough funds to go around. Budget projections stated as much, and for most of the decade projections of the Soviet threat indicated that it had to be so.

Budget trend lines fell in 1986, but the dominant view was that this activity was temporary. Indeed, even in the face of the undeniable Soviet collapse six years later, national security strategy issued by the outgoing administration called on planners to prepare for a reconstitution of the threat posed by Moscow or a similar global threat that fueled defense planning for half a century.

The Middle Period

Desert Storm marked the end of the Cold War and beginning of the middle phase in the revolution, revealing the promise of technology and concepts begun in the 1970s. It was not only a vision of precision-guided

Desert Storm marked the end of the Cold War and beginning of the middle phase in the revolution

weapons striking intended targets that stirred imaginations. Some less notable innovations also worked. Global positioning opened a new chapter in military navigation. The digital terrain data demonstrated that objects could be located in three-dimensional space. The Internet augmented communications. The advantages of precision, reach, battlespace awareness, space-based observation, and advanced communications became prominent in the Armed Forces. Military professionals worldwide saw that the United States had a considerable lead in fulfilling the promise of the new weaponry, communications, and intelligence.

Desert Storm also revealed how much was left undone—the Nation still fought essentially as it had half a century earlier. Responsibilities were allocated among the services as they were in Vietnam, carefully delineating

areas of control and responsibility in a manner that suggested that joint campaigns were little more than three separate campaigns on the ground, at sea, and in the air. Just as the Armed Forces began to recognize the power of new technology, they started to identify their inability to communicate across service lines, let alone share battlespace knowledge. Planners increasingly appreciated that such technical difficulties were rooted in deeper differences of service culture, procedures, and operational concepts. Though not a revelation, this development did point to a sense that divisions—or stovepipes as some call them—were not only quaint, but dangerous. They hindered the ability to accelerate and take full advantage of technologies that promised greater effectiveness. And as the ability to accelerate the pace of operations rose, stovepipes enhanced the danger of fratricide.

The focus of the middle age of the revolution between 1991 and 1997 was jointness. The refrain of revolutionaries was: the technology exists—it's stovepipes that hinder us from using it to its full potential—let's break up the

stovepipes. The last point is easier said than done. Much that happened in the post-Vietnam era bolstered parochialism. Passage of the Goldwater-Nichols Act was a striking contradiction because it invested significant authority in the Chairman to transcend individual service views or an amalgam of service perspectives. But the law also militated against support of service prerogatives, cultural separateness, and diverse operational concepts.

Military professionalism under the All Volunteer Force contributed to the general success of Desert Storm but also to the earlier tragedy of Desert One. That failed rescue triggered Goldwater-Nichols, for professionalism had been increasingly defined and honed by the individual services. Moreover, the end of the draft led to change in institutions outside the military. Fewer members of Congress and civilian officials within the Pentagon with oversight responsibility had actual military experience. Thus they tended to accept what



F-22 over Edwards Air Force Base.

U.S. Air Force (Andrew Dunaway II)

senior officers claimed as requirements, albeit slowly and incrementally. And because the services viewed requirements through parochial lenses, a joint perspective remained the sum of four sets of needs, mostly unleavened by cross-service review or awareness of how the requirements and perspectives of one service affected others.

The revolutionaries sought to defeat parochialism with a broadly based assault. One axis of attack had to do with erecting a new conceptual framework that some called the *system of systems*. This concept depicts war as a deadly contest in which the side that best understands the battlespace and can best transfer that knowledge among its own elements to apply force faster, more precisely, and over greater distances wins. The key was seeing power in functional interactions and synergy. The framework suggested nothing about domains, service roles, responsibilities, or requirements.



MV-22B lifting vehicle
aboard USS Saipan.

U.S. Navy (Tina M. Ackerman)

Thereby it established a context in which discussion could move away from numbers of platforms and items that the services deemed as needs. Requirements were defined in terms of their ability to enhance the capacity to understand the complexities of combat, communicate, and deliver violence with speed, precision, accuracy, and effect over greater distances.

This framework served as the foundation for *Joint Vision 2010* which, among other things, attempted to push the general system of systems concept into a more explicit operational template. It also provided working assumptions for an assault on the great bastion of service parochialism, the presumed authority to define military requirements solely in terms of service interests.

Yet more than a conceptual framework was needed, and revision of the Joint Requirements Oversight Council (JROC) and the formal role of the Chairman in the planning, programming, and budgeting system (PPBS) were important supplements. The former involved efforts to transform the role of JROC members (service vice chiefs of staff) from essentially representing the services in the early stages of major acquisitions into a military

board of directors charged with addressing what was best for the Armed Forces and national security. The PPBS revision involved expanding the Chairman's Program Assessment and also issuing the Chairman's Program Recommendations. The JROC revision sought to stop the services, when ostensibly acting collectively, from defining requirements in terms of the sum of their desires or a lowest common denominator. The program assessment and recommendations served as hammers in that these documents became vehicles for the Chairman, as sole military advisor to the President and Secretary of Defense, to impose a joint perspective on requirements if the services could not reach one.

It is worth noting the rhetoric invoked by the Pentagon during the mid-1990s, a time that was characterized by a revolutionary vocabulary. The most obvious example was the growing use of the term *revolution in military affairs*, or RMA. That spawned subterms such as *revolution in defense business affairs* and *revolution in defense*

both presidential candidates during the 2000 campaign endorsed transforming the military

acquisition. These terms were loaded because a revolution signals the need for relatively radical, rapid change.

The Thermidor

Rapid, significant change in military institutions does not usually occur except in the wake of defeat. But the Armed Forces maintained their superiority during the conflicts of the last decade of the 20th century. Nevertheless, the record was marred by events such as the Blackhawk shootdown, Khobar Towers bombing, and difficulty in getting Apache helicopters into the conflict with Serbia in Kosovo. Yet it was easy to miss the significance of these events—all of which reflected in part the continued pernicious effects of stovepipes—against the background of successes in Bosnia, Serbia, and both Operations Northern and Southern

Watch, along with the greater effectiveness of weapon systems and command, control, communications, computers, intelligence, surveillance, and reconnaissance (C⁴ISR) entering the force. Thus, as some believe happens in all revolutions, the American RMA entered its Thermidor phase in the late 1990s.¹

The first indication of the slowdown emerged in the proposal by the National Defense Panel that the less unsettling term *transformation* should replace the revolution in military affairs. There were signs within the Pentagon in 1998 that a retrenchment was underway. JROC procedures had returned to the bureaucratic patterns of the late 1980s. Time expended by the vice chiefs on JROC affairs dropped, while time spent by the more recently established lower-ranking screening panels expanded and JROC procedures returned to practices that had long been associated with summing divergent service goals. The Chairman's Program Recommendations vanished. *Joint Vision 2010* was replaced by *Joint Vision 2020*, pushing operations contemplated for 2010 out another decade. The joint experimentation program, imposed on the Pentagon by Congress in 1999, was funded at less than one percent of what

most revolutionaries thought was needed. The defense budget, again rising fairly steeply, was driven by the same priorities on maintaining existing force structure, the normal pace of modernization, and procuring major systems designed for the Cold War era.

Both Presidential candidates during the 2000 campaign endorsed transforming the military, and the Bush administration, led by Secretary of Defense Donald Rumsfeld, pushed for steps that echo the revolutionary goals and approaches of the mid-1990s. Program and budget decisions by the administration, however, do not yet reflect its transformational rhetoric.

The State of the Revolution

The Thermidor may be ending. The current administration has brought in people like Vice Admiral Arthur Cebrowski, USN (Ret.), as Director of Force Transformation, as well as others who have both a profound

1st Combat Camera Squadron (Lisa Zunanyika)

grasp of the American RMA and a definite inclination to accelerate it. There is mounting evidence that concepts like dominant battlespace knowledge, advanced, robust communications, and precision weapons—and greater combat tempo, network-centric operations, and nodal warfare that such concepts enable—offer extraordinary military effectiveness. And new operational approaches and military organizations are emerging.

Officers who worked in and for the revolutionary vision and drive of recent years are now generals and admirals. More of them will soon be promoted to four-star rank. So what's really changed over the last decade? Several significant differences together could tip the United States into the revolution on which it has verged for almost a generation.

The first is conceptual. Many revolutionary assumptions have become part of conventional wisdom. Most military professionals know that revolutions in military affairs arise from more than technological advances. A decade ago the discussion on the base force essentially accepted the fact that

while improved technology and force reductions were inevitable, organizational change within the services and new operational concepts were not on the table. Today the dominant assumption is that leaps in military effectiveness are not possible without significant changes in organizational and operational concepts. Likewise, concepts underlying such hoary terms as *system of systems* or *dominant battlespace knowledge*—not just the rhetoric—are entering budget decisions.

Technology is having the anticipated effects. Ten years ago revolutionaries postulated that improved weapons precision and accuracy, better battlespace knowledge, and more comprehensive communications would reduce casualties, enhance joint warfighting, change international relations, and create new political-military possibilities. Today planners assume reduced friendly casualties (perhaps mistakenly, but with growing empirical support). The communications difficulties faced by the Navy in operating with ground and ground-based air forces in Desert Storm are gone and, as Operations Allied Force and Enduring Freedom indicate, joint operations are far more effective. The political-military effects are less clear, but it is hard

to believe that the Armed Forces would be operating from bases in the former Soviet Union except for U.S. technological leverage. And the concept of deterrence has arguably been altered by the precision, speed, range, and effectiveness of emerging technology.

Although uneven and slow, organizational change is now a fact. Air expeditionary forces are very different from the structure of the 1980s. The Navy routinely combines air, surface, and submarine components in much more flexible structures than a decade ago and for the first time can communicate more directly with the Army and Air Force. The Army is moving toward significant structural and organizational changes. And the notion of standing joint forces is taking root in the unified command system.

The Armed Forces operate differently. The Army truly owns the night. A new air-ground operational concept is emerging from the conflict in Afghanistan. Ground forces almost routinely operate from naval platforms in ways that were considered novel just a decade ago. Operational concepts based on attrition are being

abandoned in favor of network centric warfare.

An optimist might argue that because the glass is half full, we should simply let nature take its course in the incremental, cautious manner that has paid off handsomely over the last ten years. The United States is militarily superior. There is some indication that its superiority is increasing. So why not stick with a winning strategy? A strong optimist, however, might argue that instead of letting changes accumulate at the pace of the last decade, the

transformation is a process with two dimensions, one universal and the other relative

process must be accelerated, bringing about an earlier change in state.

Why Accelerate?

Reaccelerating the American revolution in military affairs will enhance national security and support foreign policy goals, while bolstering U.S. influence around the world. It is also obvious that threats to national security in the foreseeable future will be quite different from those in the last half century for which the Armed Forces were originally designed. Sticking with that force does not enhance security and may reduce it for a variety of reasons. In large part, potential enemies no longer strive to match American military power symmetrically. Instead they are building military and paramilitary capabilities to enable them to fight asymmetrically. They might take advantage of seams between components, counter mass with agility, and hide in urban areas, difficult terrain, or locales where mass becomes a liability.

Both Serb forces in Kosovo and al Qaeda fighters in Afghanistan attempted asymmetry. The United States was successful in those conflicts primarily because of revolutionary advances in agility, battlespace knowledge, and an ability to strike with precision. The Armed Forces should not be designed for that same sort of opposition. But the way in which the enemy sought to fight is instructive in terms of what to expect, and not only from weak forces like the Serbs or Taliban. Such enemies

can best be deterred and defeated by consolidating the revolution in military affairs. As for peer competitors who may develop the capabilities to confront a revolutionized American military, the solution is winning the race and not opting out.

Does accelerating transformation jeopardize the ability to fight by getting out too far ahead of allies? The evidence supports the opposite interpretation. It was U.S. superiority, particularly taking advantage of battlespace knowledge with speed and precision, that strengthened alliances in both the Balkans and Afghanistan. In part this is because the potential of the emerging information age military can be transferred to weaker nations. Unlike the industrial age, battlespace knowledge can be readily shared. It has political advantages that enable friendly forces to be far more capable. Moreover, many capabilities are based on commercial information and telecommunications; hence transformation will be easier to share and implement in allied militaries. As such it is a fulcrum for stronger alliances, not weaker ones.

Ultimately, the effect of military superiority depends less on its source than on what is done with it and how friendly forces operate. To the extent it deters hostile acts, it has inherent capacity to assure both allies and friends. An agile military that can move quickly and decisively and then remove itself with dispatch can add to that assurance. In short, though nations may be suspicious of a single superpower that outshines them, the character of the military of that power can mitigate that reaction. A ponderous, indiscriminate military, marked by mass and dependency on overseas basing, whose operational concept is rooted in attrition warfare, is likely to evoke distrust among allies, friends, and observers. Would Russia, Tajikistan, Turkmenistan, Uzbekistan, and Pakistan have been as cooperative in the conduct of Enduring Freedom if the operation had involved a more massive, long-term U.S. presence and footprint on their territory?

The Competition

The American RMA, which demonstrated its potential in Desert Storm, Bosnia, Kosovo, and Afghanistan, has stirred a new competition. It is the nature of military affairs. Transformation is a process with two dimensions, one universal and the other relative. It is universal in the sense that all militaries experience it. No force is entirely static today. Everything can change, driven by competition, technology, politics, and societal shifts. Militaries are moving in the same direction, from the attributes of the industrial age to those of the information age. In general, they are getting better at using violence effectively, for information age militaries are inherently more effective.

Transformation is also relative. While militaries may all be moving in the same direction, they are moving at different speeds. Those that are farther along have handily defeated those more common to the industrial age. Because relative effectiveness is a function of where in the transition antagonists are located, the competitive strategy of those ahead is to maintain their lead while those behind must reduce the gap.

Less advanced militaries need not repeat steps taken by organizations in the lead to achieve information age capabilities. Unlike investments in industrial capacity that generated tanks, ships, and planes that were hallmarks of the industrial age, many information age standards are available without staggering investments in capital. This produces two strategic effects. It provides states or groups lacking the power, wealth, and organizational ability of the United States with a potential for great destruction. And it means the Nation must transform to maintain its advantage.

How to Accelerate

Accelerating the revolution in military affairs is not so much a matter of new technology as of organizational, structural, and operational changes to exploit technological innovation. Though it was instituted in October



USS John S. McCain (Andrew Meyers)

1999 to stimulate military transformation, the experimentation mission of U.S. Joint Forces Command has neither the authority nor the resources to accomplish that task. It can lead only when the services have no interests at stake. Moreover, experimentation is funded at a level below that needed to gauge the best ways to capitalize on technology. Experiments tend to look at ways of modifying current procedures to achieve higher efficiency. In the future efforts should expand to embrace different organizational and structural approaches.

During peacetime, service components assigned to regional commands often do not train or act jointly, making them less capable of working together. Components are essentially unaware of technological and operational approaches of other components, and in actual operations that takes too much time to discover. The Armed Forces should not undertake any operation with pickup teams composed of components that are not truly joint. Consideration is reportedly being given to establishing standing joint task force command staffs, but that is not enough. Standing joint forces must be organized at the three-star level, rotate command among services, and compel components of each standing joint force to operate together in peacetime as they would in conflict.

Most current training, testing, and exercising of forces assigned to unified commands occurs within stovepipes. That ratio should be reversed, ideally with standing joint commands.

Joint experimentation—unconstrained in scope and devoted to defining military structures, organizations, and operational approaches that offer the best promise from new technology—joins joint standing forces as the most efficient, effective, and expeditious means of designing the future in parallel with improving the ability to fight jointly.

The Armed Forces must develop an approach to post-Cold War planning and programming that builds a civilian-military collaborative force. The current process affords too much initiative to the services in establishing requirements. That imbalance must be corrected and civilian influence must be reinvigorated. This does not mean a return to the contentiousness of the 1960s, when an activist Secretary of Defense established a planning, programming, and budgeting system that still exists. The model should be the system that emerged in the mid-1990s: a collaborative effort that uses the authority of the Chairman to force cross-service tradeoffs—a revitalized Joint

Requirements Oversight Council (and drop the term *oversight* and call it simply the Joint Requirements Council). This council would include senior players of the Office of the Secretary of Defense as full members whose primary role in acquisition, planning, and programming would serve as a board of directors to build the new military; two-year budgeting authority; and, most controversial but most needed, pulling service chiefs away from defining requirements and toward procurement, recruitment, and training to complement what the council designs and the Secretary and President approve.

Funding for C⁴ISR and networking technologies must be clearly designated. There should be full accountability to Congress and the public for such funding decisions. Spending in this area must increase severalfold. It is hard to find adequate resources for satellites, communications, data links, and sensors as well as to make sense out of the C⁴ISR priority. The language in the budget is always reassuring, but verifying the numbers to carry out the plan is another matter

None of the above steps will be automatic or easy to achieve. The Department of Defense can't take them without the support of Congress and the American people. They are revolutionary, but the United States is a revolutionary Nation. **JFQ**

NOTE

¹ The term comes from a classic study of revolutions by Crane Brinton, who argues that most political revolutions pass through a counterrevolutionary period—the *Thermidor* (a reference to the dates of the demise of Citizen Robespierre during the French Revolution). See Crane Brinton, *The Anatomy of Revolution* (New York: Vintage Books, 1965).

New Challenges



STRATCOM briefing room, Offutt Air Force Base.

1st Combat Camera Squadron (Clay Humphries)

for the Unified Command Plan

By W. SPENCER JOHNSON

The Pentagon released a new unified command plan (UCP) on April 17. It is contained in a classified document that defines military command structure and apportions responsibilities for global operations to unified commands. The Secretary of Defense characterized this iteration of the plan

as the most significant command structure reform since the immediate post-World War II era. Reviewed and amended biannually, the plan realigns the Armed Forces to effectively address recognized or emerging threats and respond to surprise. The Chairman noted that the new plan unifies homeland security missions of various combatant commands under one officer, enhances transformation, and assigns every part of the world to a combatant commander.

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Northern Command

Perhaps the most significant aspect of the new plan is the establishment of U.S. Northern Command (NORTHCOM), which has responsibility for land, sea, and aerospace defense of the continental United States (CONUS) and Alaska, the seaward approaches to the United States out to 500 miles, Canada, Mexico, the Gulf of Mexico, and large portions of the Caribbean. It will also have responsibility for all forces operating within the United States in support of civil authorities, particularly to counter terrorist threats and deal with terrorist attacks that are beyond the capacity of civil authorities, aid first responders in natural disasters, assist in counterdrug operations, protect national infrastructure through the critical asset protection program, and, with the services, enhance force protection for CONUS bases and installations. Additionally,

a unified command structure for homeland defense resurfaced in the summer of 1998

NORTHCOM will be the focus of civil-military planning and support to ensure close and continuous coordination with the Coast Guard, Federal Bureau of Investigation, Drug Enforcement Administration, Federal Emergency Management Agency, Immigration and Naturalization Service, Centers for Disease Control, and other Federal, state, and local agencies with homeland security roles. Accordingly, the command, which will be activated at Peterson Air Force Base on October 1, 2002, is likely to have personnel from civilian agencies, and its representatives may be situated with other agencies for liaison and planning. It is also expected to have command and staff representation from the active and Reserve components, including the Army and Air National Guard, which are integral to homeland defense and support civil authorities when requested and authorized.

While the Secretary of Defense cites NORTHCOM as the first time

homeland defense has been assigned to a single commander, the idea has been around for some time. During hearings on defense reorganization in 1958, Senator Henry ("Scoop") Jackson questioned the likely need for a homeland defense command similar to those proposed for overseas:

*Supposing a finding is made that the threat is not only in the Pacific where we have a unified command, or in the European theater, or in the Middle East where we have a unified command, but there is reason to believe that the first target might be the United States, the homeland. On what basis can you accept the unified command concept outside of the United States and reject it in?*¹

In response, Jackson and fellow senators as well as others raised the specter of the man on horseback, a military leader who might threaten civil liberties and the viability of the Republic. Such critics held that a commander responsible for the homeland and authority over CONUS-based forces or a strong Chairman with a general staff and operational authority could represent the threat to the Government that the founding fathers sought to avoid through militias and a constitutional proscription against large standing armies.

The notion of a unified command structure for homeland defense resurfaced in the summer of 1998 when the issue of preparing the National Guard and other units for response to a biological or chemical attack arose in high administration circles. The former Deputy Secretary of Defense, John Hamre, told NATO officers that the Pentagon was entertaining the idea of creating a regional commander for the United States and reinforced the longstanding DOD view of military assistance to civil authority: "We don't believe we have the primary responsibility, but within minutes of an event, people are going to turn to us."² Again civil libertarians and journalists portrayed the idea of a CONUS regional commander as a threat to individual rights, especially if the Armed Forces were involved in law enforcement. In response to the American Civil Liberties Union and other critics, the unified command plan issued in

1999 recommended organizing a standing Joint Task Force for Civil Support (JTF/CS) under U.S. Joint Forces Command (JFCOM) as an interim step. The task force served as a focal point for military planning and assistance to civil authority. It was initially commanded by a National Guard brigadier general, a citizen-soldier with ties to the civil sector, in an attempt to assuage concern over the new command as a threat to civil authority on any level.

The events of 9/11 caused a sea change in thinking on the political acceptability and military necessity of a homeland defense command. At the press conference announcing the establishment of NORTHCOM, the Chairman remarked, "If you look at how the department responded to needs up in New York after the World Trade Center, you might find that . . . there was not good unity of effort . . . we'll have a focus on what will allow us to provide what's needed at the right time to the right Federal agency or perhaps a state agency. . . ." In this respect, it is anticipated that this new command will control only mission-essential forces on a day-to-day basis. And like other regional commanders, additional forces will be provided to meet emergent threats and specific missions, dampening fear of one individual commanding sufficient forces to threaten the Republic.

Joint task forces. NORTHCOM will assume responsibility for JTF/CS on October 1. The task force is likely to remain in Norfolk under a two- or three-star flag officer. It will probably grow in size and capability as active and Reserve units are identified and new technologies are fielded to help civil authorities meet a nuclear, biological, chemical, radiation, or conventional terrorist attack in the United States or overseas, support other unified commands, and answer calls for assistance in natural or other disasters that tax the response capabilities of state and local authorities.

Moreover, NORTHCOM could serve as a model for restructuring other unified commands in the future by using the concept of standing joint task force headquarters. Such headquarters could focus on planning for

Unified Command Plan:

(effective October 1, 2002)

Unified Commands—An Overview

U.S. Central Command (CENTCOM), MacDill Air Force Base (Tampa, Florida). Activated in 1983 as the successor to the Rapid Deployment Joint Task Force (RDJTF), a temporary organization which stood up in 1980 to project military power in the Middle East and East Africa, CENTCOM component commands include U.S. Army Forces Central Command (ARCENT), U.S. Naval Forces Central Command (NAVCENT), U.S. Marine Forces Central Command (MARCENT), U.S. Central Command Air Forces (CENTAF), and Special Operations Command Central (SOCCENT).

U.S. European Command (EUCOM), Patch Barracks (Stuttgart-Vaihingen, Germany). Established in 1952, from a previous command initially organized in 1947, EUCOM component commands include U.S. Army Europe (USAEUR), U.S. Naval Forces Europe (USNAVEUR), U.S. Marine Forces Europe (MARFOREUR), U.S. Air Forces Europe (USAFE), and Special Operations Command Europe (SOCEUR).

U.S. Joint Forces Command (JFCOM), Norfolk Naval Base (Norfolk, Virginia). Successor organization to U.S. Atlantic Command (LANTCOM), established in 1947, and to U.S. Atlantic Command (ACOM) which was comprised of Forces Command, Atlantic Fleet, Marine Corps Forces Command Atlantic, and Air Combat Command in 1993; redesignated as JFCOM in 1999; to emphasize its role in military transformation, JFCOM will no longer have a geographic area of responsibility as of October 1, 2002.

U.S. Northern Command (NORTHCOM), Peterson Air Force Base (Colorado Springs, Colorado). To stand up on October 1, 2002, it will have responsibility for defense of the continental United States and Alaska, the seaward approaches to the United States, and large portions of the Caribbean.

U.S. Pacific Command (PACOM), Camp H.M. Smith (Oahu, Hawaii). Established in 1947, PACOM has Army, Navy, Marine Corps, and Air Force component commands.

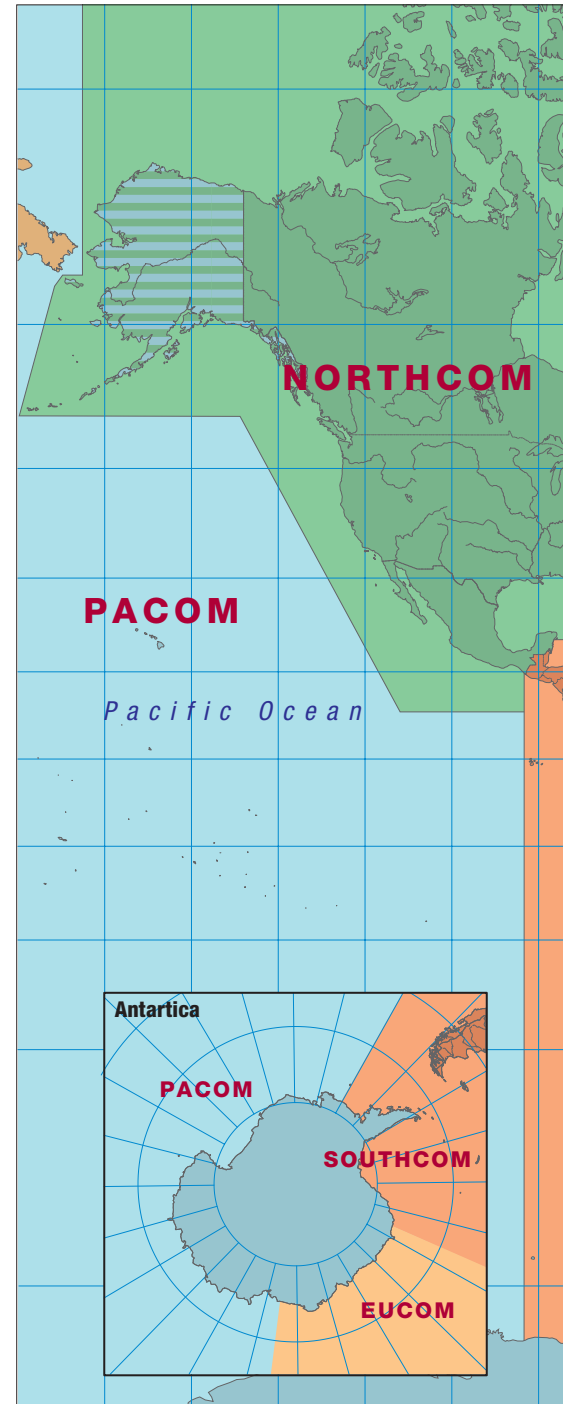
U.S. Space Command (SPACECOM), Peterson Air Force Base (Colorado Springs, Colorado). See entry below under STRATCOM.

U.S. Southern Command (SOUTHCOM), (Miami, Florida). Redesignated as SOUTHCOM in 1963, it traces lineage to Panama Canal Department, which activated in 1917, and the subsequent establishment of Caribbean Command in 1947; its component commands include U.S. Army South (USARSO), U.S. Southern Air Force (USAFSO)—12th Air Force, U.S. Atlantic (LANTFLT), U.S. Marine Corps Forces, SOUTHCOM (MARFORSOUTH), and Special Operations Command SOUTHCOM (SOCSOUTH).

U.S. Special Operations Command (SOCOM), MacDill Air Force Base (Tampa, Florida). Established in 1987, SOCOM has Army, Navy, Marine Corps, and Air Force component commands.

U.S. Strategic Command (STRATCOM), Offutt Air Force Base (Bellevue, Nebraska). Established in 1992 as the successor to Strategic Air Command, which was organized in 1946, it has responsibility for the planning, targeting, and wartime employment of strategic forces while training, equipping, and maintenance of forces remain under the Navy and Air Force; it will absorb SPACECOM and assume all duties for full-spectrum global strike, operational space support, integrated missile defense, and global C⁴ISR and specialized planning expertise as of October 1, 2002.

U.S. Transportation Command (TRANSCOM), Scott Air Force Base (Belleville, Illinois). Organized in 1987, it integrates activities of three service component commands: Military Traffic Management Command, Military Sealift Command, and Air Mobility Command.



Source: National Imagery and Mapping Agency, April 7, 2002.

[Note: The State of Alaska is in the NORTHCOM area of responsibility, but the forces based in Alaska remain assigned to PACOM.]

Areas of Responsibility



Supposing a finding is made that the threat is not only in the Pacific where we have a unified command, or in the European theater, or in the Middle East where we have a unified command, but there is reason to believe that the first target might be the United States, the homeland. On what basis can you accept the unified command concept outside of the United States and reject it in?

—Senator Henry Jackson, 1958



NORAD center inside Cheyenne Mountain.

U.S. Air Force (Val Gempis)



Cheyenne Mountain Complex, Colorado.

U.S. Air Force (Alex Lloyd)

certain regions or contingencies and could be deployed with variable and tailored forces to meet specific operational needs on short notice. The Secretary of Defense, Donald Rumsfeld, has declared that he is a fan of standing joint task forces: "If an event occurs and there is not a standing joint task force that is organized, arranged, staffed, well-coordinated, familiar with everybody, available to deal with something . . . it may not get started quite as fast as it otherwise would."

Pentagon officials are reportedly considering restructuring overseas component commands and supporting echelons to free 6,000 billets by the end of 2002, presaging emphasis on deployed standing joint task forces in the field awaiting employment. Task force headquarters could replace component commands, streamlining infrastructure and command channels. Such headquarters can focus on regional, functional, or specific operational tasks and are expected to improve flexibility and reduce response time to surprise events. As an example, one or more standing joint task force headquarters responsible for daily engagement could plan for operations in sub-Saharan Africa and ensure familiarity with local countries and leading personalities; improve the speed, flexibility, and quality of American responses to events; and be assigned to one of two geographic commands with responsibility for emergent contingency operations. Similarly, extensive regions—like the areas of responsibility under U.S. European, Central, and Pacific Commands—might benefit from several task force headquarters responsible to combatant commanders for planning and operations within smaller, more manageable portions of their regions.

Structuring unified commands around task forces is not a new proposal. It may be an idea, like a unified command for homeland defense, whose time has arrived. In discussing the Defense Reorganization Act of 1958, Admiral Robert Carney, USN (Ret.), told the Senate:

Another good reason for refraining from any all-inclusive, preset, and rigid command arrangements can be found in the task-force principle: When the task is

known, appropriate forces are assigned to the job, and command arrangements are set up to fit the task and the forces assigned. . . . Here flexibility is what is needed, not some rigid organizational structure. Why set up fixed arrangements for unforeseeable contingencies?³

The joint task force model also lends itself to creating interagency organizations for specific aspects of homeland defense. NORTHCOM may incorporate multiple joint interagency task forces (JIATFs) composed of representatives of various agencies with a narrow focus. There are JIATFs for counterdrug operations in the Atlantic and Pacific regions that serve as models. NORTHCOM will assume responsibility for counterdrug operations within its region, working with PACOM and SOUTHCOM to stem the flow of illegal drugs. Military support for interdiction on the border of the United States under JTF-6 will begin reporting to NORTHCOM in October. JIATFs could be organized to counter illegal immigration or other activities where military assistance is needed.

Finally, NATO experience gained from combined joint task forces composed of elements of several nations may serve as models for NORTHCOM to create similar task forces with assets from the United States, Canada, and Mexico for highly focused homeland defense and hemispheric security purposes. Moreover, Washington is expected to argue for restructuring NATO command structures at the Prague summit in November 2002, advocating the development of high-readiness commands and NATO mobile joint headquarters, perhaps beginning with special operations forces capitalizing on the close Allied cohesion in Afghanistan.

Maritime defense. NORTHCOM will be responsible for coastal approaches to the United States out to 500 miles, plus the Gulf of Mexico and portions of the Caribbean. U.S. European Command (EUCOM) will cover the Atlantic Ocean east of a line of longitude below the southern tip of Greenland. These actions remove the last vestiges of an area of responsibility

from JFCOM, leaving it as a functional command. The Coast Guard remains responsible for defending harbors, ports, and coastal waters, while the Navy will cover deepwater approaches. Arrangements will be worked out with regard to both Pacific and Atlantic defense responsibilities, perhaps in the form of standing joint task forces reporting through Maritime Defense Zone commanders or the commander of Pacific Fleet Forces and his counterpart in the Atlantic. In addition, there must be clear lines of authority for the Coast Guard within the NORTHCOM structure and among the Departments of Transportation, Defense, and Navy.

Land defense. With an ill-defined yet demonstrated asymmetric threat to the United States, the nature of the organizational structure for territorial defense will require study and innovation. Again, regional standing joint task forces with designated Army commanders responsible may be the organizing concept. The Reserve components will play a large part and may

the Reserve components may require reworking to create units optimized for homeland defense roles

require reworking to create units optimized for homeland defense roles and missions. Impediments in interpreting Title 10 and 32 authorities for mobilizing and utilizing the National Guard must be ironed out. The use of Guardsmen for airport security since September 2001 is an instructive case.

Air and missile defense. When NORTHCOM is formally established, its commander will assume duties as commander of the North American Aerospace Command (NORAD), a bilateral element focused on aerospace defense of the hemisphere with Canadian forces integrated on every staff and operational level. NORAD reports to both U.S. and Canadian authorities. This current arrangement is unlikely to change, having proven effective in providing a joint and combined capability for warning and response to threats and intrusions in North American airspace. It would seem logical, and within the scope of his responsibilities

for homeland defense, that when systems for intercepting ballistic and cruise missiles are fielded, the overall command of forces should be assigned to NORTHCOM. Missile defense units could be integrated with NORAD since they would be purely defensive or separately organized as a standing joint task force, although the former may be more advisable given likely Canadian participation in some if not all aspects of the future missile defense system and given the nature of a broader evolving threat.

Cyber defense. NORTHCOM may be the logical command to assume responsibility for computer network defense, an area critical to homeland defense which, like national infrastructure, will involve far more than DOD efforts. With ties to the civil sector, the command may prove best suited to integrate military capabilities and procedures with others to thwart this new age national security hazard. Computer network attack, on the other hand, might best be assigned to

another command, given the strategic nature, targeting requirements, and often unintended consequences of such an attack being authorized and carried out. Like strategic nuclear weapons, the decision to launch a cyber attack will probably be made by the President or Secretary of Defense, and plans to employ such weapons should be integrated into war plans of regional commands, much like some nuclear weapons. U.S. Strategic Command (STRATCOM) or U.S. Special Operations Command (SOCOM) may be the logical venue for centralized planning and implementation of cyber attacks.

Bilateral command headquarters. Just as NORAD is a bilateral command, NORTHCOM in the course of its evolution is likely to become a U.S.-Canadian (and in time Mexican) multinational command for all aspects of hemispheric defense—land, sea, aerospace, and cyber. This structure will probably take the form of an expansion of the current NORAD framework

F-15s over New York during Noble Eagle.



101st Fighter Squadron (William Ramsay)

to include land and maritime defense responsibilities, thus enhancing hemispheric unity of effort.

Joint Forces Command

As mentioned, with implementation of the new unified command plan, JFCOM will no longer have geographical responsibilities. This will enable the command to focus on the joint experimentation functions it was established to advance: joint training, providing joint forces to unified combatant commanders, and joint doctrine development. The Chairman, General Richard Myers, underscored how the new plan bolsters the JFCOM role in transformation: "With an eye on the future, [it] will allow us to integrate new ideas and concepts into our forces, into our doctrine and strategy, and our tactics, and it will keep the edge we need to quickly adapt to the uncertainties ahead."⁴ It will also enable JFCOM, as the provider of forces to regional commanders as authorized by the Secretary of Defense, to focus on training all CONUS-based forces for assignment to joint commanders. Some commanders had early doubts that a single force provider responsible for a region would place force development and apportionment needs above other responsibilities. This action should dispel those doubts.

One remaining issue is the role of Commander, JFCOM, as Supreme Allied Commander Atlantic (SACLANT). To focus on providing ready forces to unified commanders and enhancing joint force training, integration, and transformation, he must be divested of NATO responsibilities. Indeed, that intention has been announced and it is being negotiated with the Allies. Traditionally SACLANT has been the NATO major command held by Commander, Atlantic Command, a naval officer who is equivalent to Supreme Allied Commander Europe (SACEUR) within NATO. Even though the unified command plan does not directly address NATO or other international command responsibilities, the Alliance command structure remains a subliminal UCP consideration. General Colin Powell as Chairman polled his Allied counterparts in 1993 and found no major objection to SACLANT being other than a naval officer. Since then SACLANT has been headed by a Marine general, a Navy admiral, and an Army general.

Several options may be considered on both sides of the Atlantic with regard to the future of SACLANT. One is abolishing the current role, absent a

major maritime threat since the decline of the Soviet navy. This option is not likely to be favored given improved NATO naval operational doctrine and tactics as illustrated by integrated naval forces for Desert Storm, subsequent Adriatic and Balkan operations, and ongoing efforts in the Middle East, Persian Gulf, and Indian Ocean. In addition, SACLANT is charged with force experimentation and integration by NATO and with transformational thinking in parallel with JFCOM. Finally, many Europeans regard a major NATO headquarters in Norfolk as an anchor of the Alliance, ensuring that America remains a full partner.

Another approach is dual-hatting Commander, U.S. Fleet Forces Command/Commander U.S. Atlantic Fleet, as SACLANT. That would call for the position to be continuously occupied by a naval officer, placing a larger burden on the commander, who is responsible for the Pacific as well as Atlantic fleets for administration and training and is a newly established major voice in the Navy budgeting process.

Another option would be to establish another four-star billet as SACLANT. Aside from the additional position, there would be little personnel impact since a fully manned NATO headquarters already is functioning in Norfolk, with manpower contributions from the maritime Allies.

A final option would be subordinating SACLANT within the SACEUR structure and either a European or American naval officer filling the billet. The headquarters could move to Europe. This can be rationalized since the Atlantic area assigned to EUCOM/SACEUR is largely congruent with NATO subregional demarcations. On the other hand, this approach may be opposed by Allies who want to retain a headquarters in the United States for political and military reasons. More will be heard on this subject as the future of SACLANT is negotiated within NATO councils.

New Responsibilities

A third major change in the unified command plan is the allocation of previously unassigned geographic areas which, as the Chairman stated, "prepares us for the future by assigning



The Secretary and Chairman explaining UCP changes.

DOD (R.D. Ward)

every area of the globe to a combatant commander's area of responsibility, thereby streamlining and facilitating our military relationships with respect to all nations."⁵

Russia is assigned to EUCOM which, in coordination with PACOM for planning and engagement activities with that country in the Pacific, will be the focal point for all military relations with it. U.S. relations with the Soviet Union and its Russian successor were of such sensitivity as to demand oversight in Washington, where all proposed policies, contacts, and activities were considered and approved by an intera-

with the advent of NORTHCOM, Canada and Mexico become integral parts of the command area of responsibility

gency process, often on the highest levels. Following the end of the Cold War, the dissolution of the Warsaw Pact, and the demise of the Soviet Union, relations with Moscow somewhat normalized, permitting assignment of the military-to-military relationship to EUCOM within the European theater and further reflecting evolving Russian political and military relationships with NATO and Western Europe.

Antarctica falls under U.S. Pacific Command (PACOM), marking the first

time it has been assigned to an area of responsibility by the unified command plan. Although there is no intention of abrogating the treaty provisions that specify the demilitarization of Antarctica, since all military operations that support efforts by the National Science Foundation operate through Christchurch, New Zealand, and since New Zealand is within the PACOM area of responsibility, it was deemed appropriate to include Antarctica in the same area.

Canada and Mexico have remained unassigned in earlier unified command plans largely for political reasons, although U.S. Atlantic, Pacific, and Joint Forces Commands have been involved in Canadian-American defense planning and U.S. Southern Command has increasingly become the interface with the Mexican armed forces. With the advent of NORTHCOM, Canada and Mexico become integral parts of the command area of responsibility, and close cooperation will be required to ensure mission success in defending CONUS and the Northern Hemisphere. Responsibilities for these neighbors are centralized today under one unified command rather than several.

Remaining Issues

Several matters are under study for further action in the next iteration of the unified command plan.

The merger of U.S. Space and Strategic Commands. Integrating these two commands has been under consideration for some time and a decision to do so was announced in late June 2002. The merged organization will be U.S. Strategic Command and stand up at Offutt Air Force Base on October 1, 2002—the same day that Northern Command is established. Advocates thought that SPACECOM, as the command that will have first warning of a missile attack on the United States, should be merged with STRATCOM to place nuclear deterrence and other response elements under one commander, who has warning and indications responsibilities. They also argued that fewer nuclear weapons and a reduced strategic targeting base after the Cold War do not justify a separate unified command. Proponents for retaining STRATCOM in its present form emphasized that the devastating nature of such weapons and their residual effects militate in favor of having one officer to whom the President and Secretary of Defense can turn with a single-mission focus on nuclear deterrence and response. Thus the basis for a strategic command is independent of the number of weapons in the inventory. It is expected that there will be a modest migration of personnel from SPACECOM Headquarters at Peterson Air Force Base to the new headquarters at Offutt Air Force Base. Previous studies indicate that the number of manpower spaces to be saved by the merger will be only 100–300 billets with no appreciable cost savings.⁶

The Annual Report to the President and the Congress by the Secretary of Defense for 2002 reiterates the new administration paradigm for strategic deterrent forces. The old triad composed of land-based missile, strategic submarine, and air forces has been displaced by a triad of nuclear and conventional strategic strike forces, strategic offensive and defensive measures to include air and missile defense and information

warfare, and a vigorous strategic infrastructure to ensure nuclear weapons superiority and the needs of other elements of the new strategic triad. This new triad will undoubtedly require a review of missions for U.S. Strategic Command since they extend beyond nuclear deterrent forces and may overlap with current geographic command responsibilities. With regard to space, some have argued for the designation of space as a geographic area and creation of a geographic rather than functional command. Others go so far as envisioning a separate service for space as it becomes ever more important to national security and is recognized as an operational medium. In any event, the issues raised by the STRATCOM-SPACECOM merger will be difficult for one commander to master fully and will take time to sort out.

West coast forces. Another issue, although not addressed in the unified command plan, is the assignment of the largely Navy and Marine Corps forces on the west coast. Traditionally these forces have been apportioned to

lack of interest [in the region], then we are in deep trouble.”⁷

If the forces are reassigned, the responsible unified command is most likely to be JFCOM, with command of CONUS-based forces except for units assigned to other commands for mission-related purposes. Those who argue for reassigning west coast forces cite JFCOM responsibility for joint force training and integration and for providing ready forces to all unified commands, and that this mission is hampered without full access to west coast forces. This argument is defused in part by recent changes to service component command structures that effectively enable JFCOM to place non-deployed CONUS forces under U.S. Air Combat Command (less assets designated for U.S. Transportation and Strategic Commands), Commander, U.S. Fleet Forces Command, and U.S. Army Forces Command, component commands of JFCOM responsible for force training, readiness, and joint training and integration. A similar realignment is being considered that would place Marine forces under Fleet Marine Forces Atlantic or Fleet Marine Forces Pacific for training and administrative oversight. Even so, the issue of west coast forces remains thorny.

Director of Military Support and Office of the Secretary of Defense. With establishment of NORTHCOM and its responsibility for defending the Nation and supporting civil authorities, the Director of Military Support in the Department of the Army is largely redundant. The structure will likely be abolished and its resources reapportioned to JTF/CS, NORTHCOM headquarters, and the Joint Staff. In addition, there is likely to be reorganization in the Office of the Secretary of Defense to provide focused high-level civilian oversight to homeland defense matters and military support to civil authority and departmental representation in the inter-agency arena. The Secretary of the

Army is currently responsible for this function as executive agent for homeland security.

It is worth reemphasizing the influence of the unified command plan on current and future events. Approved by the President, it prescribes high-level command arrangements for operational forces on a global basis. In structural terms, the plan has a major impact on operations. As such it warrants attention by joint commanders, planners, and students of military affairs. As a pillar of strategy, the plan should not become stagnant, but rather should reflect the organizational structure necessary to respond to the tenor and threats of the emerging global environment. This new plan is a major step toward ensuring that command arrangements are structured for present circumstances and a future replete with uncertainty and surprise. **JFQ**

NOTES

¹ U.S. Congress, Senate, Committee on Armed Services, hearings on HR 12541, *An Act to Promote the National Defense by Providing for the Reorganization of the Department of Defense and for Other Purposes*, 85th Cong., 2^d sess., June 17–July 9, 1958, p. 199.

² Judith Miller et al., *Germs: Biological Weapons and America's Secret War* (New York: Simon and Schuster, 2001), pp. 245–46.

³ Hearings before the Senate Committee on Armed Services, p. 383.

⁴ Special Briefing on the unified command plan, news transcript, Defense Link, April 17, 2002.

⁵ Ibid.

⁶ Joint History Office, *The History of the Unified Command Plan 1946–1993* (Washington: Office of the Chairman of the Joint Chiefs of Staff, 1995), p. 111.

⁷ “Hawaii Retains West Coast Forces,” *Honolulu Advertiser*, April 18, 2002.



1st Combat Camera Squadron (Aaron D. Almon II)

PACOM and remain distributed to unified commands. Similarly, forces in Alaska remain under PACOM because of their projection capabilities, while responsibility for the defense of Alaska is moved to NORTHCOM. A study on the future of west coast forces, which is a highly charged political issue, should be completed by October 1. Senator Dan Inouye of Hawaii is a major voice for retaining the forces under PACOM: “If this is ever translated in such a way that the people in Asia would get the idea that we are beginning to withdraw our forces and thereby show a

Technological Innovations



Tactical high energy laser beam director.

The ACTD Program

By SUE C. PAYTON

In the 1950s and 1960s, many business firms assumed that they had optimized production. Consequently they removed production from the competition equation. In the two ensuing decades foreign competitors outproduced them. Manufacturing faced a hard choice: change or die.

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Now it is the turn of the defense sector, which followed the same approach for a long time. But the competition moved ahead, ranging from aggressor states to terrorists who use technologies that previous enemies never had, thus posing new challenges. The attacks on September 11 magnified the need for rapid change. Innovation within the Armed Forces is coming from the advanced concept technology demonstration (ACTD)



Line-of-sight anti-tank propulsion system.

Lockheed Martin

program, but such developments alone cannot ensure automatic preeminence or defeat terrorism. Technology as well as advanced concepts, tactics, techniques, and procedures must be applied to competitive areas defined in the Quadrennial Defense Review.

Enabling Preeminence

Military transformation is a major DOD focus. But what does it mean? It is about ensuring preeminence in competition to deter and defeat all enemies. Just as manufacturing bounced back in the 1980s and 1990s, the Federal government, defense industrial base, and nontraditional suppliers must respond decisively and continually to a changing marketplace. The response must maintain predominance in areas where the homeland and the

ACTDs are creating shifts that are more than linear extrapolations of the present day

security of allies are being challenged. It must be quick and continuous because of "disproportionate and discontinuous changes in the security environment," as emphasized by the Quadrennial Defense Review in 2001.

In addition, that report listed six transformational areas in which defense must ensure preeminence:

- protecting bases of operations and defeating nuclear, biological, and chemical (NBC) weapons and their means of delivery
- projecting and sustaining U.S. forces in anti-access or area denial environments
- denying enemies sanctuary by persistent surveillance and rapid precision strike
- leveraging information technology and concepts to develop a joint command, control, communications, computers, intelligence, surveillance, and reconnaissance (C⁴ISR) architecture
- assuring information systems that face attack and conducting information operations
- enhancing the capability and survivability of space systems.

How transformation is achieved is just as important as the key areas. It requires what the Secretary of Defense calls new approaches—the essence of ACTD procedure. This program identifies needs and ways to meet them. A warfighter-developed concept of operations, underpinned by innovative technology and demonstrated by the warfighter for the warfighter, defines success or failure.

Since 1994 this program has rapidly and continually fielded technologies. In its first thirty-six months it resulted in the Predator unmanned aerial vehicle that monitored the accords in

Bosnia. By 1999 some 20 percent of ACTD products were supporting Operation Allied Force in Kosovo. By 2001 thirty products were deployed for Operation Enduring Freedom in Afghanistan as well as Operation Noble Eagle at home.

The program enables military transformation in ways not commonly recognized. To date, 97 demonstrations have been initiated. Significant improvements in joint capabilities have occurred when innovative technology was inserted at little cost. Across the joint community, ACTDs are creating paradigm shifts that are more than linear extrapolations of the present day. Moreover, they are focused on the areas where the United States must ensure preeminence.

Protecting Bases and Defeating WMD

Geography once secured our most important base: the homeland. But today the Nation is not only vulnerable to attack from threats such as cruise and ballistic missiles, but to a terrorist who wears explosive-filled tennis shoes and flies into the country from abroad.

New approaches to early warning are needed. The *Area Cruise Missile Defense ACTD* is giving a more complete national air picture. Mobile units have filled gaps that previously existed in coastal radar coverage and are tied into radar as well as other land-, sea-, and air-based sensors. This demonstration also integrates air pictures. Prior to September 11, North American Aerospace Defense Command tracked aircraft approaching the United States but not domestic traffic, which was monitored by the Federal Aviation Administration. The two pictures have been fused.

Future attacks on the homeland are inevitable. This was anticipated in the *Consequence Management ACTD*, which supports domestic efforts by detecting and identifying biological agents within an hour. Another product assists firefighters, police officers, and rescue workers who were previously unable to communicate on the

same frequency. The *Homeland Security Command and Control ACTD* has software facilitating radio contact among first responders. It permits networks to share data, enabling situational awareness.

An attack on a port or air base could impede deployment. One demonstration developed sensor networks for known points of debarkation in Kuwait and Korea to detect eight biological agents in 15 minutes. Another product has deployable sensors for seaports of debarkation and several others will protect forward forces. The most transformational are directed energy ACTDs. The tactical high energy laser, which was demonstrated in three years, rapidly detects, tracks, and destroys multiple incoming rockets and complements other weapons in an air defense architecture. The challenge is making the system mobile. The active denial system will be the first non-lethal directed energy weapon. It projects millimeter wave energy to heat the skin of targeted individuals, and thus repel hostile crowds like those that threatened allied forces in Somalia and Kosovo. This system could be mounted on ground vehicles, transport aircraft, ships, and other platforms.

The best protection against weapons of mass destruction is destroying them before they are used. The *Counterproliferation ACTD* yielded air-delivered munitions for attacking hardened sites and the *Agent Defeat Warhead ACTD* produces an air-delivered penetrating munition to neutralize bunkered chemical and biological weapons while minimizing collateral effects.

Projecting and Sustaining

To defend against terrorism and other threats, the Armed Forces must take the fight to the enemy. This means possibly projecting power on short notice and in unexpected locations. Power projection requires pre-planning to match deploying units to transport assets. This was tedious and was hampered by interoperability in the past. Moreover, emerging demands resulted in constantly changing plans. The *Agile Transportation 21st Century ACTD* optimizes strategic assets for troop and equipment deployment.



TRW, Inc.

Power projection faces greater anti-access and area denial resistance. Air defense is getting tougher. During Allied Force, Serb operators illuminated attacking aircraft, launched missiles, and then shut down radars before

finding and hitting an enemy is the essence of war, and speed counts

NATO high-speed antiradiation missiles could lock on. The *Quick Bolt ACTD* is integrating global positioning system (GPS) receivers and millimeter wave radar into these missiles to counter threat emitter shutdown. This enables the missiles to find the last location of threat emitters and the millimeter wave radar to detect targets in the terminal homing phase.

Today an enemy may acquire advanced air defense systems on the international market that can be countered by the *Loitering Electronic Warfare Killer ACTD* with air-delivered MK83 bomb, which turns into an inflatable wing unmanned aerial vehicle with a radar jammer. This remotely controlled system is designed to remain in a target area for seven hours, detect air defenses, and degrade them by employing active countermeasures.

Small early entry forces must quickly dominate, even when confronting heavier forces. In this regard two products are helpful. The rapid force projection initiative demonstrated a sensor system for detecting distant enemy armor and weapons to engage it. The sensors have been fielded and the weapons are being produced. The second is the *Line of Sight Anti-Tank ACTD*, which is integrated into a high mobility multipurpose wheeled vehicle to rapidly engage multiple tanks.

Transformed forces require efficient logistic systems. The *Joint Logistics ACTD* provides decisionmaking tools to effectively plan, execute, and replan mission support. The tools are being incorporated into the global combat support system. The *Joint Theater Logistics ACTD* illustrates the utility of a near-real time, collaborative logistic planning system that can react to changes in operational plans, providing a truly integrated capability.

Better maintenance both ensures reliability and reduces footprints. Many corporations have adopted condition-based maintenance, using sensors to monitor equipment. Sensors also transmit to area networks and remotely collect data. The *Joint Advanced Health and Usage Monitoring System ACTD* indicates the benefit of providing real-time critical system information to flight and ground crews of Army and Navy helicopters. This open architecture system reduces maintenance and life threatening mishaps.

Rapid Precision Strike

Finding and hitting an enemy is the essence of war, and speed counts. Stopping the terror in Kosovo meant finding and hitting Serbian forces faster than they could act. In Afghanistan, the use of rapid precision strike prevented protracted warfare.

Several ACTDs can find enemy forces. Unattended ground sensors from a 1998 product have been available recently. Unmanned aerial vehicle demonstrations are better known. Predator provides an eye in the sky for

commanders. In Kosovo and Afghanistan it watched, targeted, and assessed. It observed noncombatants to prevent casualties and, armed with Hellfire missiles for Enduring Freedom, acted as remote controlled sensor and shooter. Global Hawk offered 24-hour station time over Afghanistan and hit numerous time-sensitive targets.

ACTDs launched in 2002 are focused on unmanned aerial vehicles (UAVs). The Defense Advanced Research Projects Agency will demonstrate a 6 to 9 inch, low-cost reconnaissance and surveillance micro air vehicle for ground forces to see beyond their positions. Unlike other small vehicles, it hovers, perches, and stares for extended periods without user interaction, unless alerted by a changing situation. A larger expendable UAV makes longer flights and carries more sensors.

Enemies know that if they are detected, they can be hit. Extensive surveillance caused Serb forces to use camouflage and concealment in Kosovo. The *Hyperspectral Collection and Analysis System ACTD* overcomes this problem by integrating hyperspectral sensors into platforms. These sensors combine two radar frequencies to track targets through foliage. This demonstration shares sensor data across intelligence networks.

Although precision targeting depends on precise knowledge of the terrain, timely collection of data and missile programming pose problems. The *Rapid Terrain Visualization ACTD* shortens this process. Two sensors mounted on aircraft rapidly generate high-resolution topographic data and highly precise digital terrain elevation data to target GPS weapons. The system reduces target-location error from eleven meters to one.

One significant problem is that enemy forces are going underground. In both Kosovo and Afghanistan opponents hid in tunnels, caves, and hardened facilities. New products are aimed at such targets. The *2002 Thermobaric ACTD* defeats tunnels and improves capabilities and concepts relative to munitions used in Afghanistan. In addition, a 2001 demonstration put Navy penetrators on Army missiles, providing forces in Korea with a critical capability.



Quick reaction launch vehicle.

1st Combat Camera Squadron (Garrett D. Rosier)

Targeting is often complex. In Afghanistan it was managed with software from the *Theater Precision Strike Operations ACTD*, which provides a blueprint for attacking targets. This software can establish priorities, maximize the opportunities to engage time-sensitive targets, and deconflict targeting throughout the battlespace.

Joint C⁴ISR Architecture

As Bill Gates has observed: "Changes will occur because of a disarmingly simple idea: the flow of digital information." This flow greatly depends on the digital network in an organization. A joint C⁴ISR digital network poses a challenge for DOD because of the number of incompatible systems to be linked. One demonstration breaking interoperability barriers is Link 16. Previously, two key networks were incompatible, the Link 16 tactical data link network, used by the Navy and Air Force, and the joint variable message format network, used by the Army and Marine Corps. This product provides a translator and fuses air and ground pictures and allowed commanders in Afghanistan to see E-8 joint surveillance and target attack radar system (JSTARS) ground targets and air targets in one precise and accurate picture.

Sensor fusion—meshing sensor data into one picture—is one way to reduce targeting time as well as errors. Tactical sensors and reconnaissance are integrated under the *Joint Intelligence, Surveillance, and Reconnaissance ACTD*, which demonstrates two-way links between firefinder radars, millimeter wave radars on Apache helicopters, and remote battlefield sensors. Moreover, the *Network Centric Collaborative Targeting ACTD* seeks to link sensors with machine-to-machine front-end processing on the RC-135 Rivet Joint, E-8 JSTARS, E-3 airborne warning and control system, Global Hawk, Predator, U-2, and EP-3. Fusing multiple intelligence sources will enable time-sensitive designation of mobile targets. Its purpose is reducing target location error on mobile threat emitters to 10 meters and providing warfighters with a targeting solution.

Another challenge is getting the right information to the tactical level. This was achieved by the *Extending the Littoral Battlespace ACTD*, with a three-tiered wide area network. Lightweight computers—which transmit text, images, and voice wirelessly—replaced radios. The system also distributed a common picture of the battlespace. This demonstration is transitioning to an effort known as the JTF wide area network to enable secure, reconfigurable tactical level interoperability throughout a theater. Although this network is not yet operational, a former commander of U.S. Pacific Command outlined its potential as follows: "special operators in Afghanistan would have had the same picture as 15th Marine Expeditionary Unit in Camp Rhino. . . . The same picture would have been in the F-15, F-18, and B-52 cockpits." He also indicated that it would have been in JTF and JFACC headquarters.

Information must also flow to coalition partners. The air tasking order for Afghanistan was electronically transferred between American and British systems by products resulting from the *C⁴I for Coalition Warfare ACTD*. This also speeded coordination among national air staffs. Coalition operations will benefit from the *Language*

and Speech Exploitation ACTD, an automatic translation tool. At present, personnel must translate operations plans and documents for coalition partners, a time-consuming process.

Information superiority is not enough. It must lead to decision superiority. In Afghanistan operations were aided by visualization tools within unified and subordinate commands. These new tools automatically compile data and display it on knowledge walls, providing situation awareness at a glance. The information can also be distributed, enabling a broad understanding of ground truth. These tools were from the *Commander in Chief for the 21st Century ACTD*.

Cyber Threats

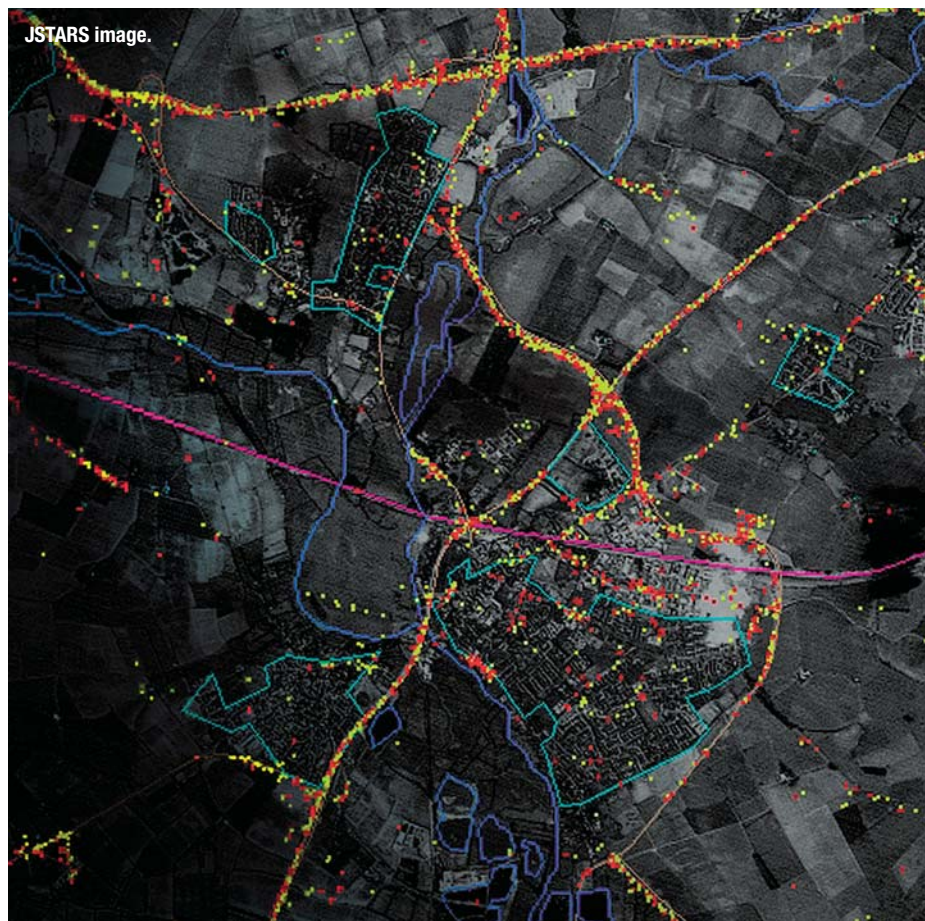
Information superiority is relative to enemy capabilities. Some will try to deny any friendly advantage by degrading networks. Iraq and other nations are reportedly developing the capability to mount cyber attack. Protecting networks is thus key to maintaining information superiority.

Recent exercises have tested our ability to detect and counter cyber attacks, a major challenge. Cyber radar was developed in the *Information Assurance Automated Intrusion Detection Environment ACTD*. The first tier of this architecture collects information on local environments using intru-

recent exercises have tested our ability to detect and counter cyber attacks

sions sensors. The next tier fuses the information into a big picture, and the top tier provides analysis to identify threats and determine responses. Several defense sites have been instrumented with this technology.

The capability to respond to network intrusions is manifest in the *Active Network Intrusion Defense ACTD*, which changes network components such as routers and firewalls to automatically block hackers. Network protection includes multilevel security, giving access to users cleared for classified data while denying entry to unauthorized users. Such protection is especially needed for coalition and interagency operations. A proof of concept for multilevel network



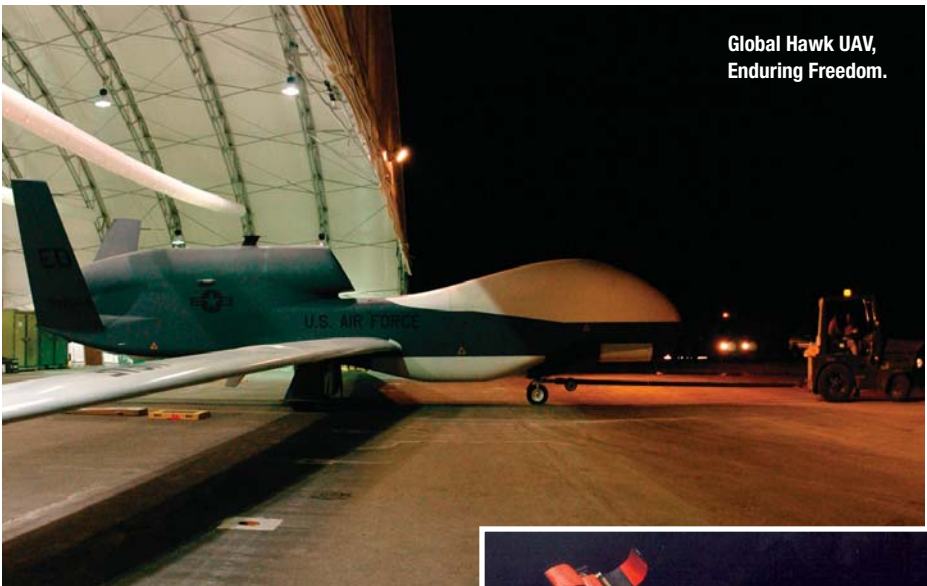
security is featured in the *Content-Based Information Security ACTD*, which allows authorized users to access secret information on a tactical-level coalition network and also operate on disadvantaged networks and those interfacing with public networks.

Offense is the best defense against cyber attacks. It also degrades enemy networks to gain warfighting advantages. The *Information Operations Planning Tool ACTD* helps these operations. It consists of linked workstations in combatant command and subordinate headquarters that enable collaborative planning as well as modeling and simulation tools to recommend targets. This asset was installed at U.S. Central Command in 1999.

Enhancing Space Systems

From directing land forces to pushing real-time intelligence into the cockpit, space systems possess myriad capabilities. The Nation is becoming more dependent on space assets—some think that investments in this sector could approach 10 percent of gross domestic product in this century. But the vulnerability of these capabilities is increasing. Satellites may become attractive targets for an enemy. Moreover, as the number of satellites grows, more systems will be affected by natural hazards and collisions between working satellites and space debris will become more common.

Protecting space assets starts with improved situational awareness. The *Space Surveillance Operations ACTD* uses the first satellite designed to track objects in high Earth orbit. Most satellite observation is done by ground-based systems, which have limited surveillance abilities because of location,



Global Hawk UAV,
Enduring Freedom.

1st Combat Camera Squadron (Reynaldo Ramon)



Brilliant Anti-Armor
Submunition.

Northrop Grumman

weather, and time of day. This space-based system has found more than 100 lost objects and reduced the number of missing satellites from 63 to 13.

Satellites must be able to diagnose their health and sense threats in the immediate area. But it can be difficult to distinguish between hostile actions and natural phenomena. Such ambiguity could seriously degrade crisis management. The *Compact Environmental Anomaly Sensor ACTD* provides on-board warning and diagnosis. It is deployed on a defense support program satellite to monitor the environment around spacecraft and warn of natural hazards such as electrical charging, single event upsets, and radiation effects, which can harm or kill a satellite.

In addition, natural hazards affect satellite-to-ground links (like ionospheric scintillation) that can disrupt satellite communications and global positioning signals. This can have serious military and economic consequences. The *Communication/Navigation Outage Forecasting System ACTD* provides a capability to forecast scintillation 4 to 6 hours in advance, and possibly for 24 hours, to allow better communications planning.

Some capabilities of the global positioning system are available to potential enemies. The *Navigation Warfare ACTD* prevents such use while enhancing friendly GPS employment. It has

developed both GPS jammers and a jam-resistant system.

The Hardest Step

Technological innovations are clearly possible and warfighters are using them, but they are not enough. Military transformation depends on cultural acceptance—convincing an institution to accept new ways of doing business. Harnessing innovative organizational and cultural changes is a stumbling block in corporate America and even more so within DOD. Sometimes it has required a generation to make improvements, even when they are recognized as being in the best interest of the Armed Forces. Technology advances faster than the ability of the human mind to accept it.

Time lag is a complex problem. There is a great need to get technology to commanders, which must often rapidly bridge a gap between what is already fielded and what is required to be preeminent. While the military departments are resourced to organize, train, and equip, they spend little on rapid acquisition. Forging stronger ties with the services for funding demonstrations and helping commanders to find resources are goals of the Advanced Systems and Concepts Office. Without forceful support from the services, time is lost in searching for funds that could be better spent on technology integration and utility assessments. One example is the demonstration that produced the Predator UAV. Although needed for warfighting, it faced cultural resistance that was described by the President: “Predator had skeptics because it did not fit the old ways.”

Technology is advancing at an unprecedented pace and is readily available to anyone, friend and foe alike. Fielding technology faster means solving funding problems. Enhancing the role of unified commanders in the resource allocation process can adapt the defense establishment to the needs of warfighters. “Transformation is simply fostering changes that result in a dramatic improvement over time in the way a combatant commander wages war,” according to the Chairman. Although the ACTD program is rapidly transitioning technologies, it is only a partial solution. The challenge of military transformation is more cultural than technological. **JFQ**

Special and Incentive Pay



Navy and Marine F-18s on USS John C. Stennis.

Fleet Combat Command Group, Pacific (A.J. Caioia)

out of joint

Sailing Away from Jointness

By DREW A. BENNETT

Two officers walk toward their F-18s. Both are squadron commanders of equal rank with similar responsibilities. Both have sworn to defend the Nation and deserve equal pay for equal work. They eat, sleep, and live on the same carrier, enduring similar hardships at sea. Yet one receives responsibility pay and the other does not. One is a naval officer and the other is a marine.

Navy compensation is a patchwork of programs, a product of the unique relationship between the military and society as well as fluid economic pressure. However, despite changes in the Armed Forces brought about by jointness, the end of the Cold War, the drawdown in strength,

the threefold growth in operational deployment, and the global war on terrorism, compensation has remained stagnant for decades. Special and incentive pay highlights the demand for a new system. Though each service has anomalies and inequities, the use by the Navy of sea pay, submarine pay, and responsibility pay needs an overhaul. This pay undermines jointness.

Military pay needs a complete review. Special and incentive pay works against the military ethic. The services should limit its use to reinforcing the concept of jointness. Moreover, if operational requirements prevent such changes, the services should adopt a common standard.

The Relevant History

Military pay has been controversial since the Revolution when George Washington argued the issue with the Continental Congress. Other than the period from 1870 to 1922, when officers received salaries, the compensation system has

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Joint Combat Camera Center (Scott M. Ash)

Mass reenlistment at the White House.

been composed of pay plus allowances. Designed for a cadre-type force made up of relatively unskilled single men, it offered subsistence, uniforms, and accommodations to augment low pay. Commissaries and exchanges were provided because of the isolation of military installations.

Like the Nation and the military itself, the compensation system has undergone change in the last two centuries. The evolution has not always been smooth. The Armed Forces have experienced complete policy reversals and radical alterations in pay. One reversal was the concept of additional pay for going to sea. In contrast to the current system, which rewards sea duty under certain criteria, for 75 years beginning in 1835, Navy officers who were not serving at sea received up to 15 percent less than Army officers since they were considered to be performing at less than capacity. Although

the general trend has been to increase pay with inflation, military pay has often stagnated for long periods, subsequently requiring sharp increases. In 1917, Congress authorized a 100 percent increase in the pay of privates to provide the minimum standard of living at that time. In addition, pay rates have not always gone up. During the depression in the 1930s, the President acted to reduce Federal spending by ordering a 15-percent cut in military pay.

Popular beliefs about the size and quality of the military also have significantly influenced the pay system. Monetary incentives to join or stay on active duty were less necessary in times of compulsory service. In 1947, after the United States began to demobilize following World War II, Congress established the Hook Commission to

examine military pay and allowances. Based on its commission recommendations, the Career Compensation Act of 1949 was passed, the first major change in the pay system in forty years. This law provided an 18.8 percent raise in military pay to bring it in line with industrial wages, and tied pay to rank and length of service and utilized special remuneration, incentive pay, and reenlistment bonuses. During the Cold War, citizen-soldiers and demobilization did not come into play because the Nation maintained a standing military. Another change occurred when the draft ended in 1973 as the United States withdrew from Vietnam. In the early 1980s, Congress passed two pay raises, a total increase of 25 percent, in order to recruit and retain the quality personnel necessary for the all-volunteer force.

Military compensation facilitates efforts to recruit, retain, and motivate an adequate number of qualified personnel to maintain a large, all-volunteer, highly technical joint force at a reasonable cost in peace or war. Economic studies generally concentrate on maximizing efforts to recruit and retain servicemembers in relation to national rates of employment and compensation. Such studies rarely examine the quality, morale, or professionalism of the personnel. Because of the evolution of the pay system, the nature of the military as an institution, and the role of the Armed Forces in society, it is hard to reduce the system to a simple labor issue. First, there are many constraints on the highly regulated military labor market, and wages alone do not bring supply and demand into balance. Second, quality, morale, and professionalism cannot be quantified.

Economic factors alone do not explain the ability to meet recruitment and retention goals. For example, between 1990 and 2001, the service which had the relatively highest recruitment and retention goals, namely the Marine Corps, was the only one that consistently achieved its goals and did so with the second highest number of high school graduates. Even more significant in terms of economic aspects, the Marines had the smallest budget for enlistment bonuses.

Current Inducements

Special and incentive pay compensates for hazardous duties or for enlistment, reenlistment, or duty in certain career fields. Each service manages such pay based on its needs and consistent with Federal law and DOD guidance. There are approximately sixty such forms of payment.

In some cases, special and incentive pay is compensation for highly trained and specialized personnel who are attracted to the civilian job market, such as aviators, doctors, and nuclear



Naval Submarine Support Facility (Nicole Hawley)

USS Dallas departing for extended deployment.

power officers. Another use is compensation for dangerous circumstances—so-called hazardous duty pay. Such cases include parachute, demolition, and flight deck duties.

Career sea pay. History provides a vehicle for examining certain special and incentive pay starting with career sea pay, which is designed to compensate for the extra hazard and hardship of sea duty and encourage reenlistment. Proponents claim it is necessary to recompense personnel for

low pay and duty that separates them from their families. While sea pay is available to all services, sailors acquire more because it is based on time assigned to a ship, not deployment at sea. Career sea pay increases for every year of sea duty and ranges from \$50 to \$620 per month. About a third of naval personnel serve in billets that qualify.

A major fault of sea pay is that it discriminates against embarked troops from other services who despite serving on board ships for extended periods are not assigned. In general, these personnel who are embarked for periods of training or operations at sea deploy for no longer than six months. Unlike the crews of ships, embarked troops do not serve on board when vessels are home ported or undergoing repairs in dry dock. A sailor can be assigned to a ship and qualify for a higher rate of career sea pay even though his vessel spends under six months at sea during that period. Under these circumstances, naval personnel may spend the majority of the time living off their ships. At the same time, embarked troops on other vessels will receive sea pay at a lower rate even though they actually experience hazard, separation, and hardship.

Moreover, sea pay fails to recognize personnel in other services who serve in hazardous or arduous conditions or away from their families. During unaccompanied tours, an airman loading ordnance on a flight line in Saudi Arabia, a soldier patrolling in South Korea, or a marine conducting live fire training on Okinawa all experience the same hazard and separation as a sailor on sea duty. Yet there is no comparable “field duty” pay. Sea pay is even more divisive when the sailors drawing it are in administrative billets aboard a ship or join their families because the assigned ship is in homeport. Sea duty in an “afloat billet” does not necessarily mean duty at sea, hazardous duty, or family separation, and even when it does, it is not more arduous than the duties personnel from other services perform without equivalent compensation.

Submarine pay. The purpose of submarine pay, like sea pay, is attracting volunteers. It is provided in addition to sea pay, implying that it is more difficult to recruit and retain personnel for submarine duty as well as more dangerous. Classified as incentive pay, it falls into two categories, operational and continuous. The former goes to personnel not receiving continuous submarine pay as long as they serve on a submarine, regardless of duties; the latter is paid to those who either are undergoing training for or already hold a submarine duty designator and remain in such service on a career basis. Those receiving payments must meet certain gates to verify duty in

the submarine force and serve at least 6 of the first 12 years and 10 of the first 18 assigned to submarines. When a gate is not met, continuous pay stops, but an individual is not required to repay the amount previously imbursement. Personnel can receive continuous pay to the 26th year of service regardless of duty on submarines. Pay-

providing responsibility pay to commanders deployed at sea degrades the promotion system

ment varies with rank and length of service, ranging from \$75 to \$595 per month. It is also worth noting that all U.S. submarines are nuclear powered and that qualified submarine officers, as indicated in the discussion of special and incentive pay, receive a significant amount in the form of nuclear accession bonuses, continuation pay, and annual incentive bonuses. These payments are distinct from submarine pay.

One problem with submarine pay is hazardous duty. While the early decades of submarine service were extremely dangerous, it has been relatively safe for 30 years. Without demeaning the courage of sailors who dive beneath the seas, they are no braver than many other servicemembers who risk their lives in peacetime training without added compensation. Indeed, those who serve on submarines incur fewer risks than many other specialties, according to fatality statistics. From 1991 to 2000, there were no reported operational fatalities in submarines while each year ground, surface, and air personnel of all services sustained numerous fatalities.

Another problem is hardship. Although submarine duty unquestionably involves hardship because of separation and living and working conditions, it does not impose greater hardships than service elsewhere. How does one compare conditions aboard a modern submarine with deserts in summer, mountains in winter, or jungles in monsoon rains? What suggests more hardship to personnel, working in the climate-controlled environment of a submarine or operating under standard

conditions in the field while performing physically demanding and risky tasks? In addition, arguments for hazardous and hardship compensation fails because, like sea pay, crews receive operational submarine pay when their boats are

in homeport or dry dock and not subject to danger or separation. Unlike sea pay, personnel receive continuous submarine pay even when they are not assigned to a submarine and not exposed to hazards or hardships.

Responsibility pay. Compensation is also paid for serving in billets that carry significantly increased responsibilities. Congress authorized responsibility or command pay despite requests in 1963 by the Pentagon to discontinue it. Responsibility pay is a permissive measure, and the Navy and Coast Guard are the only two services that use it. Since 1980, this pay has been provided to officers who command ships and aircraft squadrons at sea. The amount ranges from \$50 to \$150 per month, depending on rank.

Providing responsibility pay to commanders deployed at sea degrades the promotion system because responsibility is a function of rank. Ship and squadron commanders are selected by a competitive process, like commanders of units in other services, and command is a reward in and of itself that increases the chance of future promotion. In addition, responsibility pay for commanders of ships or squadrons at sea gives the appearance of rewarding the care of equipment over personnel, since other commanders go without such rewards even when responsible for larger numbers of people.

Fair Is Fair

Although an argument can be made for offering more pay to highly trained and specialized military personnel whose skills are competitive in the civilian marketplace, for recruiting and retaining servicemembers, and for compensating individuals who face hazardous duty, the rationales for sea, submarine, and responsibility pay do not meet such criteria. Unlike the job markets for aviators, doctors, and nuclear power personnel, there is no particular civilian labor market that is generating disproportionate demands for seagoing officers and crew members over other military specialties. Moreover, while there are needs for sailors to fill seagoing billets, every service has manpower requirements. This is why the Armed Forces use recruiting and reenlistment bonuses. Added funding in the form of sea, submarine, and responsibility pay is not the optimal response to recruitment and retention problems. Further, though duty aboard ships and submarines is not risk free, it is not necessarily more hazardous than many other occupational specialties which do not warrant special compensation. For this reason, sea and submarine pay are not placed in the hazardous duty category.

Based on a typical career in the submarine force, a naval officer is entitled to \$21,780 in sea



U.S. Navy (Lewis Hunsaker)

Sailors assigned to USS Abraham Lincoln.

operational submarine pay when their boats are



USS Essex (Gary B. Granger)

Marines training aboard USS Essex.

pay, \$119,160 in submarine pay, and \$2,400 in responsibility pay over a period of 20 years. It is impossible to explain to officers of other services with similar risks and responsibilities that their duties are worth some \$143,000 less than naval counterparts. And although amounts differ, and responsibility pay is not an issue, the same holds for enlisted personnel. Such policies are unfair.

Some Remedies

It is time for a commission to review military compensation as the Hook Commission did in 1947. The compensation system has not changed significantly since the Armed Forces made the transition to an all-volunteer force. Not only has the environment changed in the intervening years, but the use of special and incentive pay has increased independent of an overall compensation policy. The current pay system should support and not hamper military professionalism, service culture, and the principle of equity.

The use of special and incentive pay by the Navy suggests that all the services should limit such compensation to reinforce the military ethic and jointness. Although the Armed Forces value leadership, and no one works without compensation, change is necessary. To recruit, retain, and reward personnel, the services must place emphasis on professionalism over economic incentives. The Navy should lead this overall effort by phasing out sea, submarine, and responsibility pay.

If the Navy cannot meet its operational requirements without special and incentive pay,

then compensation must be adjusted to provide for a more equitable joint system. A significant move in this direction occurred when the Secretary of the Navy extended sea pay to all ranks and eliminated the minimum eligibility requirement of three years sea duty. A further step would set the rate of sea or submarine pay by actual days afloat. Furthermore, submarine pay should be provided in lieu of sea pay, not in addition to it. Both should go to everyone on ships and submarines regardless of their status as embarked, temporary, or permanently assigned personnel and regardless of service. Instead of responsibility pay, the Navy should institute an entertainment expense account for field grade commands. Commanders would be reimbursed for an established amount in actual expenses incurred, similar to reimbursement for authorized travel.

Though the Navy dominates the special pay category, which does vary significantly among the services, there are many issues involving the other services. There are differences in flight pay, educational benefits, incentives for military lawyers, and enlistment and retention bonuses, to name only a few examples. When evaluated from a joint perspective, such discrepancies are potentially divisive and detract from military professionalism.

Despite the advantages of a separate military culture within each service, everyone who serves must be compensated fairly. Policies that rely too heavily on either special and incentive pay or produce a sense of relative deprivation undermine that ethic. This does not mean that one size fits all, but rather that policies must be equitable. They must not encourage resentment among personnel who perform functions that differ in character, not in importance. It is more critical not to discriminate among servicemembers who perform similar functions. Serving in the Navy should not yield greater rewards than duty in the Army, Marine Corps, or Air Force. Otherwise, we are sailing away from jointness and toward a discriminatory compensation system that will result in discord in the military.

JFQ



Making the Most of Central Asian Partnerships

By LYLE J. GOLDSTEIN

Afghanistan demonstrated the global reach and fighting effectiveness of the Armed Forces. Although carrier aviation, long-range bombing, and specialized ground capabilities warrant praise, less noticeable efforts by military leaders and diplomatic officials can be easily overlooked. In fact, the deployment to Central Asia during this latest crisis was the culmination of years of preparation. As the first important American presence in the

former Soviet Union, Operation Enduring Freedom signals revolutionary change for the security of Central Asian region.

Laying the Foundation

A brainchild of General John Shalikashvili before he was named Chairman, the Partnership for Peace (PFP) program was adopted by North Atlantic Alliance in January 1994. Its objectives are supporting transparency, promoting democratic control of the military, increasing the readiness

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Rescue exercise in Uzbekistan.



1st Combat Camera Squadron (Bethann Hunt)

contact on the ground was complemented by expanding links on senior levels

and capabilities of partner nations to cope with crises, generating cooperative relations with NATO, and developing forces to operate within the Alliance. Early critics faulted the program as lacking in substance and as a political smokescreen for indecision on expansion. However the three exercises conducted in its first year illustrated that the Partnership for Peace would function in the realm of action, not just words. Significantly, one of the exercises, Cooperative Bridge, occurred in Poland and was the first on the territory of the former Warsaw Pact.

Despite economic and social problems, the newly independent states (NIS) of Central Asia proved to be enthusiastic participants in the PFP program. Kazakh and Kyrgyz troops took part in Cooperative Nugget at Fort Polk in 1995, a peacekeeping exercise, and soon officers from the new states were attending military schools in the United States. Both NATO and Central Asian leaders agreed to form the Central Asian Peacekeeping Battalion (CENTRASBAT) in late 1995, one of seven regional units organized under the Partnership for Peace. As an indication of the implication of these events, the Secretary of Defense visited the region in 1996. The battalion participated in a notable exercise in 1997, the longest airborne operation on record. Embarking in North Carolina, 500 soldiers from the 82nd Airborne Division and paratroopers from Central Asia flew 6,700 miles before jumping into Kazakhstan and Uzbekistan.

After the drop, the troops trained in checkpoint control, vehicle inspection, riot control, mine clearing, and humanitarian operations.

Cooperation between the newly independent states and the West became more urgent after 1998, when the Taliban captured terrain on the Amu Darya River, which divides Afghanistan from Uzbekistan and Tajikistan. Symbolic of a deepening cooperation, General Anthony Zinni, became the first Commander, Central Command, to visit Uzbekistan. He oversaw CENTRASBAT '98, which featured soldiers of 10th Mountain Division who exercised with Central Asian troops, along with contingents from Russia and Turkey, in both Uzbekistan and Kyrgyzstan.

These formative relationships saw their share of blunders and awkward moments. In one case during the exercise in 1998, Kazakh troops angered their Uzbek hosts by jumping in ahead of schedule. In another case, Zinni and his party became ill after flying in an inadequately pressurized Russian transport. But the object of such exercises is identifying problems. As one officer noted: "The goal is to prepare in advance, so that . . . we're not meeting people for the first time."¹ In 1999, 5th Special Forces Group trained Uzbeks in marksmanship, patrolling, and map reading.

Contact on the ground was complemented by expanding links on senior levels. Distracted by the Kosovo War, the media paid little attention when leaders of the Central Asian states came to

Guiding aircraft in
Uzbekistan.1st Combat Camera Squadron (Reynaldo Ramon)

Washington for ceremonies marking the 50th anniversary of NATO. But the visit clearly illustrated that these nations, though distant from Europe, aspired to closer relations with the Alliance.

Zinni traveled to Uzbekistan twice more in 1999, while the Secretary of State also visited Tashkent in 2000. At the request of the participants, the exercise was expanded to include several battalions in a combined brigade. It included small unit tactics, urban warfare, and mountaineering as well as peacekeeping and humanitarian training. When he was attending CENTRAS-BAT '00, the current commander of U.S. Central Command (CENTCOM), General Tommy Franks, made comments that revealed a keen awareness of unfolding events: "Afghanistan [is] a failed state [and] is destabilizing to this entire region. We remain concerned about the export of extremism. . . ."² Cognizant of the threat, the Pentagon rotated units through the region, including Navy SEAL teams in summer 2001.³ A solid foundation for Enduring Freedom had been created.

Familiar Ground

When Special Forces hit the ground after September 11 there was a reunion between Uzbek and

American soldiers.⁴ The United States had secured the northern flank of the coalition by early October after two visits to the region by the Secretary of Defense. Long-term investments paid off. A Uzbek officer who had attended the Air Command and Staff College reportedly coordinated his nation's response to U.S. requirements. Compared to limited cooperation in the Persian Gulf, not to mention the backlash in Pakistan, the newly independent states offer a relatively stable base from which to project power into the region.

Uzbekistan and Tajikistan, the frontline states, share an 850-mile border with Afghanistan. Bases are within 200 miles of Mazar-e-sharif, 300 miles of Kabul, and 600 miles of Kandahar. As the springboard for Soviet war in Afghanistan, Uzbekistan had a network of facilities and roads to project force south. Support by Tashkent has been significant and timely; Americans were being deployed to Khanabad air base in southern Uzbekistan less than a month following September 11. Three thousand troops have landed in Khanabad, including elements of 10th Mountain Division, which played a leading role in Operation Anaconda in March 2002. Because of concerns about the Islamic Movement of Uzbekistan (IMU), American forces in Uzbekistan have kept a low profile. But preliminary reports suggest that the



deployment has been well received by the Uzbek people. IMU was so intertwined with the Taliban that its leader and many fighters apparently were killed in the fighting for the north Afghan city of Kunduz in late 2001.

Special Forces have also operated from bases on the Afghan border in southern Tajikistan. In addition, C-17s have been refueling at the airport in the capital, Dushanbe. Although Tajikistan was not part of the Partnership for Peace or CENTRAS-BAT exercises, the Pentagon took a crucial step in January 2001, when the Deputy Assistant Secretary of Defense visited to establish bilateral ties. In contrast with Uzbekistan, Tajikistan is more dependent on Moscow, thus cooperation has relied largely on relations with Russia. Uzbekistan and Tajikistan proved to be ideal for supporting

the Northern Alliance. Indeed, it is not surprising that the Taliban fought desperately for Mazar-e-sharif and that it was the victory that began to unravel the Taliban in early November 2001, given that this vital crossroads controlled the best supply route into Afghanistan.

The more secular states of Kyrgyzstan and Kazakhstan have also been critical. Indeed, the allied base outside the Kyrgyzstan capital, Bishkek, was the focus of increasing attention in spring 2002. It is home to a squadron of Marine F-18s which began operating from the base in April and French Mirages which flew combat sorties during Operation Anaconda. These forces joined both cargo and tanker aircraft deployed at the 13,000-foot strip.

Unloading cargo at
Manas, Kyrgyzstan.



1st Combat Camera Squadron (Erin Gonzalez)

ties between ethnic groups also produced diplomatic and intelligence benefits

Since Kyrgyzstan is more liberal than Uzbekistan or Tajikistan, the local press has debated the virtues and costs of hosting the Americans. Polls offer conflicting evidence on public opinion. Events of late March 2002, including the involvement of U.S. soldiers in a serious driving accident in Bishkek and, more significantly, rioting in the poverty-stricken southern portion of the country, have shaken the political scene. But overall, the paucity of radical Islamists has made Kyrgyzstan a favorable location for basing troops. Kazakhstan has offered its aerodromes to the antiterrorism effort, but so far coalition aircraft have only made use of permission to overfly its territory.

Aside from providing bases in an environment of relative stability, Central Asia has made important diplomatic, military, and intelligence contributions. Having vocal support from a bloc of regional Muslim states has enhanced coalition legitimacy, demonstrating that the war is not against Islam. This support has been vital to securing the peace. Turks lead the international security force in Kabul, no doubt in the expectation that they will be less offensive to the sensibilities of the Moslems. For similar reasons, Central Asian forces are a logical choice to work with the Turkish military. Although deploying Uzbek or Tajik

troops as peacekeepers in the southern Pashtun areas of Afghanistan is inadvisable, Kazakh and Kyrgyz forces would be acceptable. As past exercises have illustrated, Central Asia possesses the requisite military capabilities.

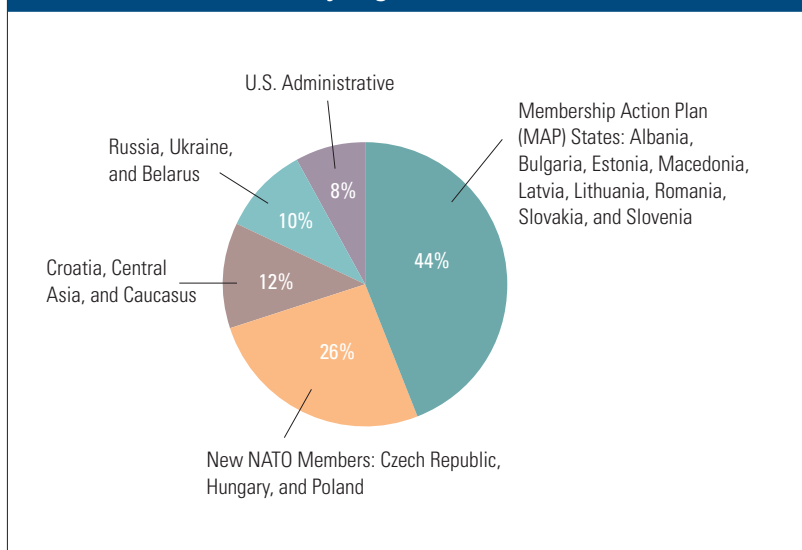
Ties between ethnic groups in Central Asia and Afghanistan also produced diplomatic and intelligence benefits. These relations were critical to the Northern Alliance. And, they are integral to the regime in Kabul. Finally, the newly independent states are essential for humanitarian efforts in Afghanistan. The Uzbek border city of Termez serves as a hub for aid shipments to the north. This aspect of cooperation should not be denigrated, because showing Afghans that their lives will be improved in prompt and concrete ways is crucial to long-term success.

The development of these relationships has been natured by political military engagement in the late 1990s, highlighted by the PFP program within the region. This cooperation is the logical outcome of common interests in regional stability and combating terrorism.

Not Without Contradictions

Two significant problems plagued the budding relationship between the United States and Central Asia. First, relations were limited in

Distribution of PFP Funds by Region, 1994–2000



scope. Although the states had been welcomed into the Partnership for Peace program from the start and soon took part in exercises, it is apparent that NATO gave Central Asian security a low priority. Not only did the scale of the CENTRASBAT exercises tend to be small, but the relative level of resources devoted to bolstering regional military effectiveness was minimal. A General Accounting Office (GAO) study on the PFP program notes that less than 12 percent of the more than \$590 million appropriated to assist foreign militaries went to Central Asian nations, with the vast majority going to new NATO members and East European applicants (see figure). These measures reflect two criteria that appear to be prominent in ranking PFP members: proximity to Western Europe and adherence to democratic norms.

Skepticism toward the newly independent states is apparent. For example, a GAO report in July 2001 on PFP effectiveness, *NATO: U.S. Assistance to the Partnership for Peace*, stated: "The partner states range from mature free market democracies in the European Union, such as Finland and Sweden . . . to autocratic command economies with outdated military structures such as Uzbekistan." Illustrating the pervasiveness of such thinking prior to September 11, this report also reveals that a DOD-sponsored review of the Partnership for Peace concluded that "certain programs emphasizing NATO interoperability are not well suited for the Central Asian States."

Low prioritization in the PFP program along with persistent skepticism resulted in serious regional misgivings. A story in the Kazakh press

noted reluctance on the part of both Uzbekistan and Kyrgyzstan to participate in CENTRASBAT '00: "Public opinion in Kyrgyzstan was greatly annoyed at the West's obvious inability to have an impact on the development of events."⁵ Indeed, Kyrgyzstan faced serious attacks that summer from the Islamic Movement of Uzbekistan, which had close links to the Taliban. The press account continued, "The question arises of what the real significance of the CENTRASBAT exercises is for strengthening security." A Eurocentric NATO view is natural to some extent but has not served the Alliance well under present circumstances. Central Asian states have proven to be invaluable allies in this phase of the global war on terrorism.

The West has underestimated the impressive receptivity in the region to its influence, and the prospects of the newly independent states more generally. Central Asian leaders are committed to fight terrorism, especially in the wake of expanding IMU activities. Indeed, Washington finds common cause with President Islam Karimov of Uzbekistan, who told the U.N. General Assembly one year before the September 11 attacks, "Afghanistan has turned into . . . a hotbed of international terrorism [which] stands as a threat to the security of not only the states of the Central Asian region, but to the whole world."⁶ Two other reasons why leaders of these states are likely to favor an American presence include the need to balance Russian and Chinese influence and the investment that is likely to follow once there is a Western promise to uphold regional stability.

A consistent objection to increasing U.S. and NATO ties is the poor human rights record of states in the region. Torture is widespread in Uzbekistan. Kyrgyzstan, briefly seen as an island of democracy, has violated civil liberties. It was probably unreasonable to expect that a democratic tradition would develop in Central Asia immediately after the collapse of the Soviet Union. Over the longer term, however, the prospects for democracy are quite promising—especially if the West remains engaged on the appropriate level.

Muslims in Central Asia practice Sufism, a form of moderate Islam, that contrasts directly with the much more radical Wahabism, an import from the Arab world. Sufis tend to be alienated by Wahabi practices, such as unshaven beards and the veil. As opposed to the militant Wahabi interpretation of *jihad*, Sufis tend to understand this concept in terms of spiritual self-perfection. Most peoples of Central Asia are not only Sufis, but Hanafi Sunnis, or followers of the teachings of Imam Abu Hanifa. They take a more accommodating attitude toward political power and do not condone rebellion against established authority. This may help explain why political instability has been relatively rare in post-Soviet Central Asia.

Americans training
Georgian military.



786th Communications Squadron (Latonia L. Brown)

Thus it is not very surprising that the IMU threat has been exaggerated and that relatively few fundamentalists have been recruited from Uzbekistan, an alleged hotbed of Islamic radicalism.

The simmering hostilities in certain states, and Tajikistan in particular, should be viewed as regional conflicts rather than religious disputes. The Tajik civil war stems from alienation among the Garmis and Ismaelis in Tajikistan, while the Islamic Movement of Uzbekistan is a symptom of regional stagnation in the Fergana Valley. Central Asia is not hovering on the brink of an Islamic revolution as some have supposed.

Moreover, moderate Sufi Islam is influenced by over a century of secularism. That era has inculcated respect for Western values in Central Asia, especially regarding science and education. Significantly, the states each have literacy rates of at least 90 percent, well above the dismal level in Afghanistan, but also much higher than Pakistan, Iran, and Egypt where radicalism has flourished. This factor helps explain why, despite predictions of economic meltdown, the newly independent states have all achieved positive economic growth. Their cultural, economic, and political milieu is more amenable to cooperation with the West than a first glance might suggest.

A second problem has been the failure of the United States and NATO to work with Russia to build better relations with Central Asia. This issue has been exacerbated by paranoia in Moscow and

tension surrounding wars in Chechnya and especially in the former Yugoslavia. But the West, apparently frustrated but also possessing a certain amount of self-righteous zeal, gradually tended to view that ties to new states were zero-sum: Central Asia would become pro-Western only to the extent that it could be disentangled from a web of dependency centered on Moscow.

That assessment is flawed in various ways. Historically it assumes a black and white view of the influence exerted by Moscow, forgetting that Russia under Boris Yeltsin pulled away from the union with the newly independent states, not the other way around. This was particularly true in Central Asia, where local leaders were loath to dissolve the Soviet empire. Moreover, it is not in the interest of these states from a purely practical standpoint to antagonize Russian minorities into fleeing since they represent an inordinate percentage of their skilled labor. Finally, it assumes Russian hostility to expanding Western influence, deeply underestimating the extent to which both Russians and Central Asians were willing to unite amongst themselves and with outside forces to fight terrorism and Islamic extremism.

In this context it is not unusual that Tajikistan had seemingly been relegated to civil war and Russian domination. Hindsight is always twenty-twenty, but the West overplayed the *great game* and underestimated the stabilizing role of Russia in Tajikistan and elsewhere in Central Asia.



U.S. Air Force (Jerry A. King)

Marine F-18D with
Mirages, Kyrgyzstan.

Brave New World

Despite tension in U.S. and NATO policy over Central Asia, the new states appear ready to cooperate in creating a stable environment. To accomplish this, two issues must be addressed.

Prior to September 11, NATO did not sense a major threat, yet it was trumped by ideology. Now it must think more strategically and less ideologically. Indeed, because of the attacks, many have wondered if the Alliance is relevant to the global war on terrorism—despite invoking Article 5 of the North Atlantic Treaty for the first time, which holds that an attack on one member represents an attack against all. For the Allies, this indicates a need to develop enhanced capabilities, but for the Partnership for Peace it suggests refocusing on more strategically vital regions: the Balkans, Central Asia, and Caucasus. Adherence to democratic norms remains a criterion for membership and thus attention within the program. Article 10 of the founding document does not, however, specify a precise standard for national political structures in considering new members. Moreover, this has not been an issue in the past. Greece and Turkey were welcomed to shore up the southern flank of NATO despite their domestic policies.

Even new members face challenges with regard to democratic norms. For example, despite gains in civilian control of the military in Poland, there is an “inability to delimit presidential authority in the area of defense affairs.”⁷⁷

The poor democratic standing of the new states has caused them to be marginalized, placing an undue burden on American diplomacy in the present crisis and reducing the potential for NATO to stabilize the region. The GAO report cited above described partners ranging from “mature, free market democracies like Sweden and Finland” to backward authoritarian states such as Uzbekistan. Although Sweden and Finland may deserve admiration, their affiliation with NATO does not rank with the importance of Uzbekistan in combating terrorism and other security challenges.

Stressing the status of Central Asia does not eclipse the relevance of enhancing democracy. Indeed the Partnership for Peace can be a powerful tool in achieving that objective. A situation in which enhanced engagement encourages transparency and civilian control and in turn spurs deeper cooperation seems realizable. This suggests

a second flaw in the program: failure of imagination. Attempts to divide Russia from Central Asia have been counterproductive, raising the prospects of a new great game. Washington must avoid the temptation to capitalize on regional tension. Instead the multilateral approach outlined by Franks as early as September 2000 is most appropriate: "There are a number of countries [which] are engaged with Uzbekistan. . . . Russia will be among the countries to offer that cooperation. . . . Central Command is here for coordination and cooperation, not for competition."⁸ The vision for the PFP program must make a priority of integrating Russia and the new states into a Eurasian security architecture. Measures adopted in Rome in May 2002 to energize the NATO/Russia Joint Council by including Moscow in decisions on certain issues is a positive first step. But there is an imperative to reach beyond kind words, to foster cooperation in the realm of action, for example with large-scale joint exercises.

After the next phase of NATO enlargement at the Prague summit in autumn 2002, the more radical step of admitting Russia and even the newly independent states of Central Asia as members should be carefully studied. Indeed, the Secretary of State has indicated with respect to Russia that "Nothing is beyond consideration these days."⁹ Such a restructuring of Eurasian security might be in the interest of the United States in a variety of ways. First, it may bring stability to Central Asia once and for all. Next, it would ensure Western access to energy resources in the region, limiting dependence on the Persian Gulf. Third, it would expand the number of pro-Western secularized Islamic states, demonstrating the feasibility of this approach. Fourth, it could enhance U.S. leverage versus revisionist states like Iran and China, which have benefitted from Russian ambiguity and the power vacuum in Central Asia. Finally, a contingent offer of membership, perhaps a decade in the future, would give these states incentives to improve their human rights records.

The charge that the Alliance could be diluted and rendered ineffective cannot be dismissed; but changes in procedures—such as moving from consensus to majority—would prevent members from vetoing action. Moreover, many concede that since the chaotic decisionmaking surrounding the Kosovo War that "a larger but slightly looser NATO makes more sense than ever."¹⁰ Like it or not, the North Atlantic Alliance has become primarily a political institution. Its relevance is not derived from aggregated military strength,

but rather from symbolic coalitions of like-minded states seeking to project force to uphold peace and stability in various regions.

Both the Clinton and Bush administrations deserve credit for forging working relationships with the newly independent states. These relations formed the basis for operations in Afghanistan. Now the United States can restructure Eurasian security to meet regional and national interests. To achieve this end, Washington must encourage a steady upgrade in PFP relationships with Russia and the nations of Central Asia to integrate these states into a sturdy security architecture. America must embrace countries willing to stand shoulder to shoulder with the Alliance on the front lines of the global war on terrorism. **JFQ**

NOTES

¹ Kenley Butler, "U.S. Military Cooperation with the Central Asian States," on the Web site of the Center for Nonproliferation Studies at <http://cns.miis.edu/research/wtc01/uscamil.htm>, p. 2.

² "CENTCOM Commander Franks Press Conference in Uzbekistan," September 27, 2000, on the Department of State Web site at <http://usinfo.state.gov/topical/pol/arms/stories/00100308.htm>, p. 3.

³ C.J. Chivers, "Long Before War, Green Berets Built Military Ties to Uzbekistan," *The New York Times*, October 25, 2001, p. 1.

⁴ *Ibid.*

⁵ Yaroslav Razumov, "The Genuine Significance of the CENTRASBAT 2000 Exercises Is Yet To Be Discussed," on *Eurasianet* at <http://www.eurasianet.org/org/resource/kazakhstan/hypermail/200009/0051.html>.

⁶ Islam Karimov quoted in Osman Yavuzalp, "On the Front Line," *NATO Review*, vol. 49 (Winter 2001–02), p. 24.

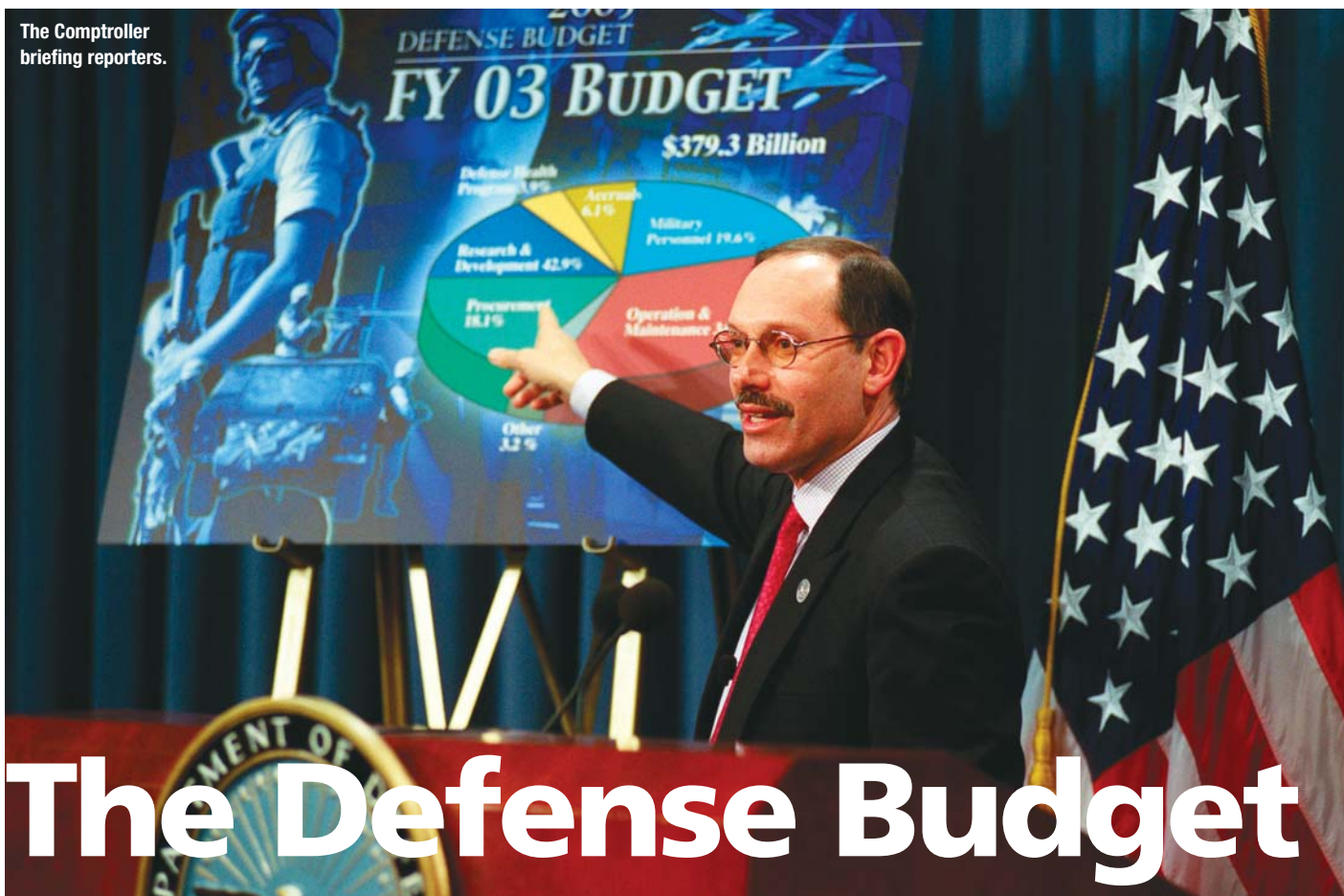
⁷ Jeffrey Simon, "Poland Prepares for the Alliance," *Joint Force Quarterly*, no. 25 (Summer 2000), p. 43.

⁸ "CENTCOM Commander Franks Press Conference," p. 4.

⁹ "Seismic Change in U.S.-Russian Ties, Says Powell," reported by *Deutsche Presse-Agentur* on the web at <http://www.europeaninternet.com/russia/news.php3?id=692065>.

¹⁰ Timothy Garton Ash, "A New War Reshapes Old Alliances," *The New York Times*, October 12, 2001, p. A25.

The Comptroller
briefing reporters.



DOD (R.D. Ward)

The Defense Budget Is It Transformational?

By DAVID L. NORQUIST

In the Presidential campaign of 2000, George Bush often addressed the need to transform the Armed Forces. Once elected, he gave military transformation a central role in defense strategy. The administration presented its defense budget for fiscal year 2003 after twelve months of review. Did that budget support transformation? The initial reaction is mixed.

The Center for Strategic and Budgetary Assessments, which has been vocal in advocating transformation, registered its disappointment: “[The] new defense plan appears very similar to

the defense plan this administration inherited. . . . Perhaps most questionable is the administration’s decision to continue to move ahead with three new tactical fighter programs. . . . Likewise, the Crusader artillery system seems inconsistent with the goal of having an Army that is light enough to rapidly deploy.”¹

Some other supporters of modernization were more encouraged. The Lexington Institute was optimistic in part because it did not take the DOD budget as a break with the past: “Last year’s trendy buzzword for what new management at the Pentagon would mean was ‘transformation.’ In the end they made the right choice, fully funding all three [tactical fighter] programs. . . . Even

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the Army's widely criticized Crusader howitzer program . . . turned out to be a major improvement necessary for the conduct of future land warfare."² But these critiques are focused on only a few programs that will neither bring about transformation nor prevent it.

The Lost Crusader

Modernization is the process of fielding more advanced items of equipment that basically perform the same function as the matériel being replaced. Military innovation, or transformation, means profoundly changing equipment and its operational employment to create a radically new approach to warfare. The effect of implementing such change is a revolution in military affairs.

Modernization is sometimes mischaracterized as an obstacle to transformation, as happened in the case of the Pentagon announcement that the Crusader artillery program would be terminated. Press reports indicated that aborting this program was a test for transformation. It is not, because transformation can succeed with or without Crusader. The fate of Crusader is a choice between enhancing the firepower of Army heavy divisions and accelerating the transition to a future system. Transformation does not depend on this choice; it relies on designing equipment and doctrine for a future combat system.

To gauge the new defense budget, one must accept that invoking the term *transformation* as a byword—as opposed to *modernization* or *reform*—was a conscious choice. It ties administration policy to a school of thought which posits that technology has dramatically changed the world and will lead to a revolution in military affairs.

For example, in the years between World Wars I and II, innovations such as the internal combustion engine and radio, combined with advances in doctrine, produced revolutionary combat units and ways of fighting. This revolution in military affairs produced the *Blitzkrieg* tactics used by *Panzer* divisions and strikes by carrier-based aircraft that rendered vulnerable any military force that relied on trench warfare and battleships.

The shift from the industrial to the information age, which radically altered the economy of the United States, has led many analysts to expect an equally profound change in the way we fight. The Tofflers describe how moving from an agrarian (first wave) society to an industrial (second wave) society has transformed the world. They believe the shift to an information (third wave) society involves an equally exciting change: "A true revolution goes beyond [individual inventions] to change the game itself, including its rules, its equipment, the size and organization of the 'teams,' their training, doctrine, tactics, and just about everything else."³ Or in other words, as

the Chairman has recently told Congress, "[Transformation] must extend beyond weapon systems and matériel to doctrine, organization, training and education, leadership, personnel, and facilities."

Transformation is a daunting task. Revolutions in military affairs are rare, and the military is traditionally poor at dramatic innovation. But it is against this ambitious goal of innovation that the defense budget should be judged.

The best way to determine the potential for future success is past experience. What have been the pitfalls? Why did some nations succeed while others failed? Has the administration taken the right fiscal, political, and organizational steps to overcome obstacles? If so, it has succeeded in laying the groundwork for transformation. If not, it is likely to learn the lessons of history.

Obstacles to Innovation

Sir Michael Howard observed: "I am tempted indeed to declare dogmatically that whatever doctrine the Armed Forces are working on now, they have got it wrong."⁴ His sentiment is typical of those who have studied innovation and the evolution of doctrine. A more encouraging appraisal by someone who examined many cases of innovation concludes, "Peacetime innovations are possible, but the process is long."⁵ There are valid reasons for such pessimism.

Major innovations are uncommon. Those with vision must grasp the relevance of changes in technology or the security environment and push for innovation. Decisionmakers must sort out the value of their proposals, which may be buried with more dubious ideas. In addition, military operations are complex. It is difficult to envision the effect of change in doctrine and technology without a prototype of the innovation for experimentation. But without a vision, it is hard to make a case for resources to develop technology. The history of carriers illustrates this problem.

By the end of World War I, the British had 12 carriers in service or under construction, more than all other countries combined; but twenty years later the Royal Navy was still using them for reconnaissance, not airstrikes. A carrier could only carry 12 planes in the early 1920s. Britain believed that such a small force, while valuable as spotters to guide the fleet, would be insufficient to sink a battleship. Lack of vision contributed to poor technical progress. With only 12 aircraft, it was safer and easier to store planes below deck. But a clear deck made it less critical to develop arresting gear, catapults, and safety barriers. Absent

High speed vessel,
Fleet Battle Experiment
Juliett.



U.S. Navy (Frederick McCahan)



1st Combat Camera Squadron (John Houghton)

Integrated battlespace
arena, Millennium
Challenge '02.

that equipment it was impossible to increase the number of aircraft aboard by storing more planes on deck, and it prevented the fast launch and recovery procedures necessary to implement a massed airstrike without the planes running out of fuel. Moreover, for much of the interwar period British carrier planes were built and operated not by navy but the air force, which put a low

priority on naval aviation. Thus the British experience derived from fleet maneuvers using aircraft carriers with a limited number of unimpressive planes. Rather than focusing on the offensive potential of carriers, the Royal Navy was more concerned about their vulnerability.

While the United States, like Great Britain, originally used carriers as the eyes of the fleet, it was also studying their potential. The Naval War College, for instance, conducted a wargame in 1923 which assumed that carriers could deploy many more planes than was considered possible at the time. Students discovered that when the blue team used all its 200 aircraft in a single strike, it crippled all red team carriers and sank a battleship. Rear Admiral William Moffett, the first chief of the Navy Bureau of Aeronautics, described the vision: "The function of a large carrier should be the same as that of a battleship . . . to

Loading self-propelled howitzer.



Fort Stewart (Donald Teft)

deal destructive blows to enemy vessels. Its offensive value is too great to permit it to be ordinarily devoted to scouting.”⁶ The Navy conducted exercises in the interwar years that explored carrier-based airstrikes with mixed results. But Moffett, a former battleship commander, built support both inside and outside the service to continue work on this capability. The vision tested at Newport

as additional carriers entered the fleet, the Navy grouped them to increase the size of airstrikes

became a reality as both the number of carriers and their capabilities grew. As additional carriers entered the fleet, the Navy grouped them to increase the size of airstrikes. The final step in the innovation process occurred in 1943 when the multi-carrier task force formally became part of naval doctrine.

Setting Goals

The Pentagon identified six transformational goals in presenting its budget: protecting bases of operation/homeland defense, denying enemies sanctuary, projecting power in denied areas, leveraging information technology, conducting effective information operations, and enhancing space operations. To meet these goals, the administration has initiated 13 programs and accelerated 22 existing ones, such as hypervelocity missiles, unmanned aerial and underwater vehicles,

high energy lasers, the expanded global positioning system, the Army future combat system, the Navy DD (X) family of ships, and a high-capacity secure digital communications system.

Beyond pursuing specific systems, DOD has requested large budget increases for agencies and activities that focus on developing new technologies and prototypes, for example \$432 million (19 percent) for the Defense Advanced Research Projects Agency in FY03, added to the 14 percent increase in FY02. This agency is charged with demonstrating high-risk, high-payoff research with a working prototype. The Advanced Concepts Technology Demonstration program, which would convert more mature technologies into militarily useful prototypes, should increase by \$79 million, or 65 percent, over two years.

In addition to technology, there is an increased focus on experimenting with new doctrine. Each service has wargames, battle labs, and field or fleet experiments to explore the implications of emerging technology on doctrine. To build on service programs, U.S. Joint Forces Command has an experimentation program for which another \$33 million, or 51 percent, has been requested over the 2001 level. Most importantly, the new budget provides \$20 million for a force

transformation directorate within the Office of the Secretary of Defense to assume the leading role in evaluating the transformation activities of each military department.

This approach avoids the problem that the Royal Navy experienced in the 1920s and 1930s by encouraging simultaneous development and experimentation to enable a variety of technologies, prototypes, and doctrines to contribute to transformation.

Bureaucratic Resistance

Once there are advocates for a potential innovation, the struggle shifts to finding support within the bureaucracy. However, militaries are complex organizations and major change involves risk and uncertainty. Since the Armed Forces must respond to crises on short notice, their leaders are hesitant to make changes that sacrifice readiness. Meeting this challenge requires developing both a compelling case for change and a core group of supporters within the military.

over the next six years unmanned combat aerial vehicles will enter production at the same time as the joint strike fighter

The revolution in tank warfare died a bureaucratic death in America between the wars. The U.S. Army was aware of the work of a British analyst, Captain B.H. Liddell Hart, who outlined the revolutionary potential of armored warfare. Military journals debated the possible impact of the tank. Nevertheless, the idea did not win the support of the service leadership.

The commander of the armor corps did not promote the development of independent armored divisions or the use of tanks for penetrating deep into enemy lines. Likewise, in a report released in 1919 on the lessons of World War I, the Chief of Staff, U.S. Army, concluded:

Important as has been the effect of these mechanical developments and special services, their true value has been as auxiliaries to the Infantry. Nothing in this war has changed the fact that it is now, as always heretofore, the Infantry with rifle and bayonet that, in the final analysis, must bear the brunt of the assault and carry it on to victory.⁷

The National Defense Act of 1920 eliminated the tank corps and its officers were assigned to other branches while the tanks and their development were left to the infantry. Former armor officers opposed the change but realized the cause was hopeless. As Dwight Eisenhower would recall, "In 1920 and 1921 George Patton and I publicly and earnestly expounded [ideas on armor] in the

service journals of the day. The doctrine was so revolutionary . . . that we were threatened with court-martial."⁸

Within the Army, this revolutionary approach to war had no champion and no career path. Bureaucratic opposition and inertia smothered hope for this peacetime innovation. But the service changed its approach when it developed the air assault division.

In the early 1950s the Army became concerned about the vulnerability of massed ground forces to nuclear, biological, or chemical attack. While helicopter technology was still immature, leaders such as General James Gavin believed that airmobility could reduce this vulnerability. He appointed General Hamilton Howze, an armor officer, the first director of aviation. Howze turned to exercises to demonstrate the potential of helicopters and to begin developing tactics and doctrine.

Taking a cue from Moffett and naval aviation, the supporters of airmobility recruited mid-career officers into aviation. Howze recalled, "In order to get some real enthusiasts, people who would associate their lives and progress in the Army with aviation, we had to go outside of the current aviation ranks. I selected many of those people myself."⁹

Meanwhile, technical advances caught up with the bold ideas. Helicopters were becoming more reliable and powerful. Both UH-1s and AH-1s had turbine engines. And within a few years later Vietnam provided the baptism by fire that solidified the place of the helicopter in Army force structure and warfighting doctrine.

Limited by Legacy?

When the budget for FY03 was unveiled, a lack of terminations in major programs caused many defense analysts to conclude that the services had stopped transformation. It would be more accurate to say that the battle was deferred.

The new budget funds the key modernization efforts in addition to the more revolutionary concepts while taking organizational steps to minimize bureaucratic resistance which the new ideas will encounter when these options clash. For example, the administration has added \$1.5 billion to the Air Force over the next six years for unmanned combat aerial vehicles. This approach means that these vehicles will enter production at the same time as the joint strike fighter. Future leaders of the Air Force will be in a position to make informed decisions on the mix of these two systems in light of their demonstrated capabilities, not merely their theoretical capabilities.

The proposed Navy budget provides for the acquisition of DDG-51 destroyers but replaces the

next generation of DD-21 land attack destroyer with research and development on new ships, technology, and fighting doctrine. In addition, the Pentagon is adding a billion dollars to convert four Trident nuclear submarines to a conventional strike mission, allowing the Navy to evaluate the combat value of a submerged long-range strike capability.

The Army budget would continue to fund upgrades to the existing heavy divisions, but there is no follow-on funding to develop a future heavy division. Instead, the budget accelerates the development of the future combat system, a family of manned and unmanned vehicles and weapon systems designed from the beginning to take advantage of the information revolution. In the meantime, the budget will also fund the fielding of medium weight brigades, which combine existing equipment with new technologies and, most importantly, new organization and doctrine.

While the Pentagon recently initiated studies to scale back several modernization programs, its approach raises a basic question. Does modernizing existing equipment or maintaining a legacy force structure prevent transformation? There is little historical evidence that it does. The United States spent five times more on battleship modernization than the British before World War II, yet had more success in developing carriers. At the same time, Germany continued to focus heavily on training horse cavalry divisions even as they experimented with armored warfare. Furthermore, even after developing tanks, Germany actually expanded its army to 120 infantry divisions. These units, operating on foot and often with horse-drawn artillery, did not prevent ten *Panzer* divisions from executing *Blitzkrieg* tactics.

Stocking the Bureaucracy

The struggle is about more than technology. It also involves people. When the Secretary of Defense created the Office of Force Transformation, he selected as its head Vice Admiral Arthur Cebrowski, USN (Ret.), the former commander of *USS Midway* and *USS America* battle groups. In addition to holding traditional commands, Cebrowski has a reputation for promoting innovative ship designs and warfighting concepts. And in selecting the next commander of U.S. Joint Forces Command, a position central to joint experimentation, the Secretary turned to his senior military assistant, Vice Admiral Edmund Giambastiani, USN. The decision to drive transformation is alive and well among senior leaders at the Pentagon:

I would hazard a guess that five years from now, looking back, we'll say that the single most transformational things we did were to select those people [the

4-star officers in charge of the major commands]. . . They will then fashion their staffs and their key people, and they will be involved in the promotions of the people under them. And it'll affect the United States of America for the next decade and a half.¹⁰

The military undermines innovation when it prevents experimentation and the prototyping of ideas or when it opts to continue old ways after a new system is demonstrated. The proposal under the new plan provides time, resources, and leadership to demonstrate multiple technologies and related doctrine. When prototypes are used in exercises or conflicts—like the armed Predator unmanned aerial vehicle in Afghanistan—enthusiasm spreads. Users develop hands-on expertise and provide practical feedback. As the system evolves and greater capabilities are demonstrated, it becomes possible to design a revolutionary weapon system. Military decisions on the fate of such systems will determine if transformation either succeeds or fails. This approach relies on ensuring that the right individuals are in the right positions to make those decisions.

Changing Requirements

Developing a new concept of warfare is expensive. Developing and fielding hardware to implement the concept is not. Therefore civilian leaders insist that the Armed Forces only pursue those systems that are compatible with expected security requirements. Unfortunately innovations develop slowly while national security requirements can change quickly.

Perspects for innovation in armored warfare prior to World War II were bright in Britain. The army had used tanks in World War I. Moreover, several forward looking thinkers articulated the revolutionary potential of the tank. As Liddell Hart argued:

[Tanks] are not an extra arm or a mere aid to infantry, but are the modern form of heavy cavalry, and their correct tactical use is clear—to be concentrated and used in as large masses as possible for decisive manoeuvre against the flanks and communications of the enemy, which have been fixed by the infantry—themselves mechanised—and artillery.¹¹

In August 1919, however, the War Cabinet formulated the ten year rule, stating that Britain would not be involved in a major war over the next decade and thus no expeditionary force would be needed. According to the civilian leadership, the army would focus on protecting the Empire. The tank was ill suited to tropical climes or low-intensity conflict that London expected. Even in 1937, when war seemed likely, Neville Chamberlain pursued a policy of limited liability,

X-47A experimental
unmanned air combat
vehicle.



Northrop Grumman Corporation

in which the country would provide air and naval forces but rely on allies to furnish large armies. With the outbreak of World War II, the political leaders once again focused on the need for a modern army to fight a major land war in Europe. However, the delay in developing the equipment and doctrine for tank divisions put England at a distinct disadvantage compared with Germany, which had more consistently exploited armored vehicles.

In World War I, Germany planned to quickly defeat France and then turn on the Russians. Although this strategy failed, its security requirements remained the same. It was a land power faced with the possibility of a two-front war. The Versailles Treaty limited the Germans to seven infantry and three cavalry divisions and prohibited it from the production of tanks, yet these obstacles did not prevent the development of *Panzer* divisions.

General Hans von Seeckt, commander of the army from the end of World War I to 1926, saw mobility as a way to offset the small size of his forces: "In a few words then, the whole future of warfare appears to me to lie in the employment of mobile armies, relatively small but of high quality and rendered distinctly more effective by the addition of aircraft."¹² Though the focus was on preparing horse cavalry for this mission, he recognized that "motor transport is one of the most urgent questions of military organization."¹³

The Germans monitored the development of the tank in Great Britain throughout the 1920s and 1930s, and their journals discussed tactical problems with armored warfare. The government arranged in 1926 for the military to use a secret tank-training center in Kazan, Russia. In 1932, the army held maneuvers in Germany using tank battalions, even though its tanks were armored plates mounted on trucks. From this developed the concepts that would lead to the *Panzer* division. As General Heinz Guderian recalled:

My historical studies, the exercises carried out in England, and our own experiences with mock-ups had persuaded me that tanks would never be able to produce their full effect until the other weapons on whose support they must inevitably rely were brought up to their standard of speed and cross-country performance. . . . It would be wrong to include tanks in infantry divisions: what was needed were armoured divisions which would include all the supporting arms needed to allow the tanks to fight with full effect.¹⁴

Though the rise of the National Socialists in 1933 brought dramatic changes to Germany, the leaders realized that armor was consistent with their expansive goals. But the program was not without its problems. In maneuvers tanks encountered maintenance failures, including XVI *Panzer* Corps under Guderian. In the invasion of



U.S. Navy (Dawn C. Montgomery)

Underwater vehicle hunting mines.

Austria, “no less than 30 percent of his vehicles broke down or ran out of petrol . . . [while others] put the figures even higher, at 70 percent.”¹⁵ Nevertheless, despite these operational failures, the Versailles Treaty, and changes in leadership, *Panzer* divisions were promoted because they were consistent with German strategy.

Capabilities-Based Planning

According to the Chairman, while the Nation doesn’t know who will threaten its interests, a capabilities-based strategy is focused on how a potential enemy might fight. It helps to identify the assets that the Armed Forces will need to deter and defeat a variety of threats.

The notion of two major regional conflicts (MRCs), specifically another Persian Gulf War and Korean conflict, became the measure by which the military was judged after Desert Storm in 1991. In the wake of September 11, some might argue that terrorism is the wave of the future, and the Bush administration concluded that the two-MRC scenario has outlived its usefulness. To avoid surprise, the Pentagon believes it is more important to demonstrate a breadth of capabilities than to focus exclusively on depth against one scenario.

As a result, the force planning requirements that drove budget development are no longer based on the two-MRC approach of the 1990s but on a broader capabilities-based model. If a very specific strategic challenge were to arise, as Germany did in both wars, this change might dilute the military’s focus. But the United States today is

much closer to Great Britain’s earlier experience, with global interests and a range of potential conflicts. Thus this shift away from the two-MRC focus is a sound approach to avoiding Britain’s mistake with the ten year rule.

Effective Innovation

Another risk deserves attention. A nation may successfully pursue innovative ideas but still meet with disaster if enemy advances are more effective. For example, France built the Maginot Line along its border with Germany to protect its industries in Alsace-Lorraine. The defenses were a sophisticated set of bunkers, tunnels, and gun turrets which represented a huge advance over the fortifications of World War I. The French halted the defenses on the Belgian border partly because of financial constraints but also as part of their strategy. By forcing Germany through Belgium, France believed they could guarantee both Belgian and British participation in the war. In addition, it hoped to avoid the devastation of another invasion of its territory.

While plans for the Maginot Line went forward, French tank doctrine stagnated. The basic field manual published in 1929 on armor warfare, *Instruction sur l’Emploi des Chars de Combat*, stated that tanks were “only a means of supplementary action temporarily set at the disposal of the infantry” and that they “considerably reinforce the action of the latter, but they do not replace it.”¹⁶ French armored units lacked mechanized support, thus preventing their use in breakthroughs. The 1937 manual rejected the exploitation mission.

France had 3,000 tanks and Germany had 2,400 in 1940. But the Germans structured their military to support *Blitzkrieg*. France was blinded to this revolution in warfare and was decisively defeated because of it. The sobering point is that the Maginot Line did what its planners expected. The Germans were forced to circumvent its defenses. It allowed France to concentrate its army on a narrow front. It ensured both Belgian and British participation in the war. Yet France still lost. It was not enough for Paris to try a new approach to war; it needed to be aware of German efforts and prepared to counter them.

The New Budget

Since the United States has a high-tech economy, much of the debate on transformation is focused on information technology. The capabilities the military is pursuing are generally designed to take advantage of information that can be moved and analyzed by computers. New technologies this makes possible include unmanned aerial vehicles and precision-guided munitions.

But it is conceivable that military transformation will be driven by different technologies, or perhaps by exploiting vulnerabilities in a force dependent on computers. To avoid creating a digital Maginot Line, it is critical to understand the technology and tactics that an enemy may pursue, such as weapons of mass destruction, ballistic missiles, cyberwarfare, and terrorism.

The DOD budget approaches this problem by directing resources toward a range of threats. Outlays for 2001 to 2003 contain \$528 million (an increase of 130 percent) for additional research on chemical and biological defenses, \$2,173 million (40 percent) for ballistic missile defense, and \$262 million (51 percent) in equipment for U.S. Special Operations Command. Similar growth in spending was made for intelligence, information security, space, and homeland defense. Although it is impossible to eliminate the risk of surprise, the new defense budget provides sound levels of funding across various programs that should greatly reduce vulnerability.

Because the budget request for FY03 initially retained the Crusader and also declined to cut tactical fighter programs or reduce the number of carriers, critics quickly characterized the outcome as business as usual. It appeared that the bureaucracy won and transformation lost. This analysis was wrong. Proposals to scale back on these programs will be viewed as a make-or-break test for military transformation. But that analysis is wrong as well. The administration is taking steps to address obstacles that have prevented other nations in the past from transforming their militaries. That level of thoroughness is not simply good fortune; it is intentional.

A critical fight over military transformation did not occur with the development of the FY03 budget. It will unfold over the next five to ten years as the services acquire the next generation of matériel as well as the doctrine and organization to operationalize them. To ensure that those future decisions actually transform the military, innovative technologies must become sufficiently mature, political and military leadership must foster innovation, and national security strategy must support a new approach to warfighting. The current defense budget certainly takes those steps. This is the path to transformation. **JFQ**

NOTES

¹ Steven Kosiak, *2003 Defense Budget Request: Large Increase in Funding, Few Changes To Plans* (Washington: Center for Strategic and Budgetary Assessments, 2002), p. 1.

² Loren B. Thompson, "Did Rumsfeld Get it Right?" *San Diego Union-Tribune*, February 17, 2002.

³ Heidi and Alvin Toffler, *War and Anti-War* (Boston: Little, Brown and Company, 1993), p. 29.

⁴ Michael Howard, "Military Science in the Age of Peace," *RUSI Journal*, vol. 19, no. 2 (March 1974), p. 7.

⁵ Stephen Peter Rosen, *Winning the Next War* (Ithaca, N.Y.: Cornell University Press, 1991), p. 105.

⁶ *Ibid.*, p. 70.

⁷ Walter Millis, ed., *American Military Thought* (Indianapolis, Indiana: Bobbs-Merrill, 1966), p. 355.

⁸ Wesley Yale et al., *Alternative to Armageddon* (New Brunswick, N.J.: Rutgers University Press, 1970), p. 76.

⁹ Rosen, *Winning the Next War*, p. 90.

¹⁰ The Secretary of Defense quoted by Vince Crawley in "New CINCs to Shape U.S. Military Policy for Decade," *Defense News*, February 25–March 3, 2002, p. 68.

¹¹ B.H. Liddell Hart, *The Remaking of Modern Armies* (London: John Murray, 1927), p. 59.

¹² Hans von Seeckt, *Thoughts of a Soldier* (London: Ernest Benn, 1930), p. 62.

¹³ *Ibid.*, p. 84.

¹⁴ Heinz Guderian, *Panzer Leader* (London: Michael Joseph, 1952), p. 24.

¹⁵ Charles Messenger, *The Blitzkrieg Story* (New York: Charles Scribner's Sons, 1976), p. 118.

¹⁶ Barry R. Posen, *The Sources of Military Doctrine* (Ithaca, N.Y.: Cornell University Press, 1984), p. 131.

Escorting *USS Hue City*
into Mayport Naval
Station.



U.S. Coast Guard (Dana Warr)

The Fifth Side of the Pentagon

Moving the Coast Guard

By JAMES C. HOWE

The U.S. Coast Guard and its predecessor organizations have played a pivotal role in the safety and defense of the Nation for more than two centuries. The modern Coast Guard grew out of a merger of the Revenue Cutter and the Lifesaving Services in 1915 and has been a component of the Department of Transportation since 1967, when it was transferred from its traditional home in the Treasury Department. One of five military services by statute, its mandated duties run from security

tasks and Federal law enforcement to administrative and regulatory functions.

The recent terrorist attacks ushered in a new era for the military in defense of the homeland. They also led to dramatic changes in the operational priorities of the Coast Guard, creating new and lasting port security and littoral control missions. Such duties will consume up to a quarter of the overall operational effort of the service for the foreseeable future.

To strengthen the national antiterrorist posture, the administration has proposed a massive realignment to establish the Department of Homeland Security (HLS). Under this structure, the Coast Guard would be entirely moved to this new department alongside other agencies charged with

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Inspecting container
in Alaska.

U.S. Coast Guard (Marshalena Delaney)

protect ports of entry, transportation centers, and the coastal zone.

Such a reorganization will yield improvements, garnering closer working relations among various HLS components. But the impact of such improved partnerships will be felt primarily by civilian agencies that work together in a regulatory and inspection-based milieu. Their institutional focus is markedly different from that of the Coast Guard, which primarily operates at sea to carry out law enforcement, emergency response, and defense functions in a dynamic environment. On the water, the Coast Guard is the predominant Federal agency; ashore, its duties are typically limited to safety and pollution controls while the Customs Service, Border Patrol, and Animal and Plant Health Inspection Service handle the brunt of law enforcement and inspection duties.

These dual responsibilities are clearly reflected in the monumental challenge that will face the new department: inspecting thousands of sealed cargo containers entering the country each day. This task is performed ashore, spearheaded by civilian enforcement agencies, and the inclusion of the Coast Guard in the Department of Homeland Security will have little impact in generating more vigorous and desperately needed inspections.

The post-9/11 role of the Coast Guard in maritime homeland security lies in controlling the littoral, patrolling harbors and coasts, boarding and escorting vessels entering port, responding to hazardous material incidents, and providing maritime point defense of installations. This is a major responsibility given the 361 sizable ports and 95,000 miles of coastline in the Nation, requiring the Coast Guard to field highly proficient, multimission units to respond militarily to a range of crises.

Controlling the littoral requires identifying all vessels out to 200 miles or more from shore. This effort, known as maritime domain awareness, is like the detailed surveillance and tracking by North American Aerospace Defense Command of aircraft in American airspace. The tenet of maritime domain awareness—"every arriving, departing, transiting, and loitering vessel will be known and subject to a risk assessment before the vessel can become a direct threat to the U.S."¹—will require massive offshore detection and monitoring as well as information sharing among Federal agencies and the civil sector. Since the events of September 2001, the Coast Guard has attempted to foster this awareness, admitting nonetheless that it is a "critical, yet not fully developed component, of homeland security."²

controlling national borders. Public reaction to this proposal has been positive, with many current and former officials and members of Congress endorsing the reorganization. Still, as the proposal is debated, the exact changes remain unclear. Conspicuously absent from public discourse is whether the new departmental structure offers the most prudent place to situate the Coast Guard.

the Coast Guard primarily operates at sea to carry out law enforcement, emergency response, and defense functions

Although this transfer of the Coast Guard has merits, a closer examination reveals that there may be a more suitable arrangement—making the service a component of the Department of Defense. In that way the Coast Guard could maximize its national defense capabilities; reap benefits in doctrine, training, professionalism, and funding; and enhance execution of traditional missions as well new homeland protection duties. It is thus in the best interests of the Nation to widen the debate and to consider transferring the Coast Guard to become the fifth side of the Pentagon.

A Fish Out of Water

The purpose of moving the Coast Guard as well as other agencies to become the border and transportation security arm of a new department is institutional synergy and efficiency. Along with other organizations—the Customs Service, Border Patrol, Immigration and Naturalization Service, Transportation Security Administration, and Animal and Plant Health Inspection Service—the Coast Guard will be better positioned to share intelligence, respond to threats, and



U.S. Coast Guard (Sarah Foster-Snell)

Responding to crash site in Seattle.

Exerting control over the littoral will highlight a structural inconsistency that will confront the Coast Guard if it is shifted to the Department of Homeland Security. No other agency slated for incorporation into the new department offers significant resources to patrol or respond to threats in coastal waters. But with 300-plus naval ships, myriad surveillance aircraft, and various land and space-based sensors, the Pentagon could vastly augment the Coast Guard-led effort. As the littoral control mission matures, it will require close teamwork and coordination—not primarily between the Coast Guard and HLS counterparts, but between the Coast Guard and the Department of Defense.

Growing Defense Missions

The requirement for Coast Guard-DOD cooperation to control coastal waters reflects a trend that has seen the service playing a progressively larger and more formal defense role over the past two decades. The national strategy released in 1985 assigned command maritime defense zones to the Coast Guard with responsibility to oversee

coastal naval operations in time of war. In the late 1980s the service formalized its capability for expeditionary port security by creating 120-man port security units, which were used to great effect during the Persian Gulf War and now have become a regular component of joint military operations. Peacetime engagement, in support of combatant commanders or at the request of the Department of State, has grown impressively. Since 1995, four major cutters have been deployed each year under U.S. Southern, Pacific, and European Commands, while Coast Guard trainers have conducted hundreds of overseas visits to teach foreign naval personnel various skills. Furthermore, in recent years three high endurance cutters have deployed to the Persian Gulf to assist the Navy and multinational forces carrying out economic sanctions against Iraq.

The Coast Guard relationship with the Pentagon was defined in 1995 under a memorandum of agreement between the Departments of Transportation and Defense that addressed support of

national military strategy and stressed deliberate planning and doctrine to include the Coast Guard. The memo listed five contributions: maritime interception operations; port operations, security, and defense; coastal sea control; peacetime engagement; and environmental response operations. This agreement was the most significant step in peacetime toward integrating the Coast Guard into the joint warfighting establishment.

The bulk of the defense capability of the Coast Guard lies in deepwater cutters, designed to operate more than fifty miles from shore. Although not equipped for high-end naval combat, these ships are well suited for low-intensity mis-

sions like coastal sea control and maritime interception, in recent years becoming relatively more important in support of DOD naval missions. According to Admiral James Loy, a former commandant of the Coast Guard, "In the era of a 600-ship Navy, 40 or so cutters were a virtual afterthought. But today with regional instability and strife around the world and 116 surface combatants in the Navy, cutters . . . take on a new significance."³

During a major war or sustained crisis, the Coast Guard is a force multiplier for the Navy, providing cutters, aircraft, and expeditionary units in support of combat operations. World War II and the Vietnam War demonstrated the significance of this responsibility. While recent conflicts have been short lived or modest in scope, requiring minimal Coast Guard participation, America is faced with the global war on terrorism, increased tension in the Middle East, and an unpredictable situation on the Korean peninsula. It does not stretch the imagination to envision contingencies where service assets would be needed in strength.

The urgent issue is preparing the Coast Guard to fill these national defense responsibilities while maximizing the effectiveness of maritime homeland security and other mandated missions. During thirty-five years as the only military service in the Department of Transportation, the Coast Guard experienced an erosion of its military capabilities as its defense role increased. The danger of a transfer to the Department of Homeland Security is that a similar pattern will emerge: in a tight budgetary environment, the new department may only receive funding for its top priorities, to the detriment of broader defense capabilities.

A properly managed move to the Pentagon could avoid this eventuality. Homeland security and other duties can be regarded as a lesser included set of missions when compared to

defense-oriented responsibilities. A Coast Guard that is programmed, budgeted, equipped, manned, and trained for national defense missions will also be able to conduct low-intensity and less complex operations. The reverse, however, is not true.

Two examples illustrate this case. Cutter crews trained for maritime interception, and thus expert in conducting visit, board, search, and seizure operations in a high-threat environment, are inherently ready to prosecute the less demanding functions of maritime law enforcement or coastal zone security. Ashore, Coast Guard pollution response forces, when trained, equipped, and ready to respond to incidents involving weapons of mass destruction, are far better at handling the less hazardous responses to oil and chemical spills. In both examples, training to the lower capability would not generate the expertise needed to prosecute more challenging defense-related missions.

Because of the diversity of its mandate, the Coast Guard bridges the gap between civilian and military operations. However, its core functions have tilted heavily toward law enforcement and national defense over the last three decades, with the 2001 terrorist attacks adding new security missions that firmly set the long-term focus on military or military-related duties. Though transfer to a security-oriented organization such as the Department of Homeland Security will undoubtedly yield gains in interagency coordination, the single focus of such a department may not allow the Coast Guard to reach its full potential as a military force.

Would the transfer of the Coast Guard to the Department of Homeland Security make that service stronger and more capable? In most respects the move would be sound for the service. But its incorporation in the Department of Defense would provide greater capabilities for the Nation.

A More Capable Service

Moving the Coast Guard to the Pentagon would produce significant gains and efficiencies. First, it would strengthen the service as an institution. The transfer would allow the Coast Guard to "gather organizational strength through the camaraderie of residing in an undivided house" with the other services according to Admiral Loy.⁴ Within the Department of Transportation, and almost certainly if transferred to the new Department of Homeland Security, the Coast Guard stands alone as a military entity, with subtle (sometimes overt) cultural, structural, and institutional differences creating frictions that could add a degree of difficulty in communications, resource allocation, and unanimity of effort between the service and its civilian counterparts. Common

because of its mandate, the Coast Guard bridges the gap between civilian and military operations



U.S. Coast Guard (Tom Sperduto)

Port security boat on Hudson River.

sense dictates that the Department of Defense offers the only safe haven in government where the Coast Guard could reap the benefits of full-time alignment with the Armed Forces.

For instance, the Coast Guard lacks a body of dedicated written doctrine, and attempts to establish a doctrine system have failed. Integration into the Pentagon would provide access to other military doctrine programs, facilitating development of a service-specific system. Similar benefits could be obtained in training, career development, and joint professional military education, where adopting the programs of the other services would lead to a more knowledgeable force and more effective operational capabilities. Such advantages would not be available within the Department of Homeland Security.

Fiscally, the Coast Guard would align well with the DOD budget system, wherein funding and acquisition is keyed to cutting-edge military capabilities. Though unable today to keep abreast of advances in technology, the Coast Guard would benefit from compatible research, development, procurement, and experimentation in the development of new ships, aircraft, command and control systems, and operational tactics. In addition, becoming a part of the Department of Defense would align pay and compensation among all services, eliminating entitlement surprises that occur when Congress mandates increased compensation for military members but does not provide the funding to the Department of Transportation.

Another benefit is strengthening the military ethos. It is the culture of the Coast Guard like that of other services that enables its personnel to perform challenging duties—responsibilities that

have grown since 9/11 and require “strong police and warrior attributes.”⁵ Unfortunately, decades spent under the Department of Transportation offered no incentive to stress military values and led to a stagnation of military culture.

A transfer to another civilian-dominated organization such as the Department of Homeland Security would do little to bolster the warfighting ethos or capabilities of the Coast Guard at a time when it is most needed. Only a move to the Pentagon would strengthen the service by surrounding it with the best professionals in the world, rekindling military culture and enhancing effectiveness across a range of missions. Even though the Department of Homeland Security would maintain the institutional status quo for the Coast Guard, the opportunity to grow in both capabilities and responsiveness to national needs lies within the Department of Defense.

A Stronger Defense

As much as a move to the Pentagon would provide America with a stronger Coast Guard, the converse is also true: the service would bring capabilities that would improve national security. In peacetime the Coast Guard would add value to the theater security cooperation plans developed by combatant commanders through closer coordination of international engagement efforts. Some 70 percent of the navies around the world perform missions similar to those of the Coast Guard, giving the service great influence among foreign counterparts. This security assistance role will be amplified over the next twenty years as the Coast Guard acquires new cutters and aircraft for its integrated deepwater system, which also is expected to generate extensive sales to friendly nations. As other countries purchase components of this system they will forge closer training, operational, and doctrinal links, enhancing military-to-military ties with the United States and supporting engagement initiatives.

Closer alignment of the Coast Guard and Navy would boost the ongoing effort to organize a vital national fleet, a concept developed in the late 1990s to improve the effectiveness of the two sea services across a range of maritime missions. A national fleet would ensure that both services developed complementary and interoperable ships, aircraft, communications, and support systems. The potential of a national fleet will not be realized with the services residing in different quarters, forced to cross interdepartmental lines to coordinate every facet of the program. There is evidence that the national fleet initiative is foundering, primarily because of a lack of aggressive departmental advocacy and murkiness in congressional oversight. A move to the Pentagon

Boarding vessels,
Enduring Freedom.



Fleet Combat Camera Group, Atlantic (Johnny R. Wilson)



Fleet Combat Camera Group, Atlantic (Johnny R. Wilson)

would eliminate this fractured relationship and shore up this vital program.

The Coast Guard would bring extensive expertise to the Department of Defense in dealing with the civilian agencies on all levels of government. With more than 400 small units nationwide, the Coast Guard has extensive daily contact with these agencies in matters relating to emergency response, border patrol, police functions, and maritime industry. The Joint Staff has indicated that for homeland defense “unprecedented cooperation and understanding (vertical and horizontal) will be required between local, state, and Federal agencies and the DOD.”⁶ This is obviously an area in which the Coast Guard

could assist the other services and boost national maritime security.

The most important advantage would be putting the Coast Guard and the other services on the same footing. Interface will be important between U.S. Northern Command, which is charged with the military defense of the Nation, and the Coast Guard, which is the prime maritime patrol agency operating in American littoral waters. For control of the coastal zone, the interface with the new command must be seamless for surveillance and tracking, preventing loss of intelligence, and swift action against vessels threatening U.S. territory.

With homeland defense at the top of the national agenda, there is no more compelling logic for transferring the Coast Guard to the Department of Defense than the need to establish a reliable and mutually supportive relationship among the five military services.

Moving to the Pentagon

One notional arrangement would be designating the Coast Guard as the third sea service in the Department of the Navy, a structure modeled on the existing Navy-Marine Corps relationship.

USCGC *Tahoma*,
September 2001.



U.S. Coast Guard (Tom Sperduto)

tools for expeditionary missions and protecting the homeland and also militate in favor of the Pentagon obtaining resources, operational assignments, and budgetary support for the Coast Guard. For integration, it would be imperative for DOD leadership to make support of a multimission Coast Guard a lasting priority.

Another argument against moving the Coast Guard to the Department of Defense is that it may weaken lines between civil and military authority, erode the provisions of posse comitatus, and draw the Armed Forces into a direct law enforcement role. This concern could be addressed in legislation by preserving the law enforcement authority of the Coast Guard while prohibiting direct police efforts by the other services.

The strict codification of this relationship would have major benefits. The last two decades witnessed a blurring of the line between law enforcement and military operations, first with the DOD role in counterdrug efforts, and today in the complex relationship between homeland defense (a military mission) and homeland security (led by civilian agencies). Moving the Coast Guard to the Pentagon could clarify this distinction by establishing a strong barrier against a police role for the other services. Any homeland security or law enforcement actions would support a designated civilian agency or the Coast Guard, which would provide both expertise and an institutional buffer to ensure that other services remained clear of direct law enforcement entanglements.

A final argument against transferring the Coast Guard to the Department of Defense is that the safety and regulatory missions of the fifth service would not fit well into the overarching functions of the Pentagon. This is not true: most duties of the Coast Guard have equivalent DOD functions, and folding such missions into the Pentagon would be relatively easy. Search and rescue, one of the major duties of the Coast Guard, is a prime example. Although some hold that this mission has no place in the Department of Defense, the other services play a key role in the national search and rescue effort. The Air Force oversees inland search and rescue coordination for the contiguous United States, operates the Air Force Rescue Coordination Center for nationwide around-the-clock response, and sends instructors to the National Search and Rescue School run by the Coast Guard. In the field, the other services regularly perform search and rescue missions in a combat mode or at the request of the Air Force or Coast Guard. A search and rescue culture exists among the services and the Navy is a logical home for Coast Guard maritime search and rescue responsibilities.

With naval forces concentrating on high-level warfare and blue water operations, the Coast Guard could provide low-intensity conflict capabilities and serve as the DOD link to the new Department of Homeland Security.

Several arguments have been raised against integrating the Coast Guard into the Department of Defense. The first is the fact that its small size could be a disadvantage within the Pentagon; with a funding level that is only 5 percent the size of the Navy budget, the status of the fifth service may suffer. Nonetheless, like the Seabees or SEALs within the Navy, the Coast Guard has niche capabilities not found elsewhere, including coastal sea control, small vessel, and law enforcement. Such attributes could provide the Department of Defense with

most duties of the Coast Guard have equivalent DOD functions, and folding such missions into the Pentagon would be relatively easy

USCGC Midgett alongside USS Constellation.



U.S. Coast Guard (Alice Semmott)

This is true for other missions that appear out of place. Maritime law enforcement receives support from the Pentagon and could be easily transferred with appropriate legislative safeguards. Marine environmental protection, which comprises a tenth of Coast Guard resources and budget, fits well with the Navy, which itself has a substantial pollution response and salvage capability. Moreover, aids to navigation, waterways administration, and domestic ice operations have current parallel functions within the U.S. Army Corps of Engineers.

Wherever it is located in the Federal Government, the Coast Guard will have a mission set that is not completely aligned to its parent organization. If the Coast Guard is expected to perform as a homeland security entity, then transfer to the new department offers the most comfortable fit. But if it continues to be tasked with more demanding support of the national military strategy, then the Department of Defense provides a solid home that could allow the smallest service to maximize its capabilities.

Military Transformation

Three trends make moving the Coast Guard to the Pentagon a compelling argument. First, there is a consensus that the Nation needs this vital service. Aged resources and thin manpower far outmatch the new homeland security duties of the Coast Guard and require improved operational capabilities and institutional culture. The Department of Defense can provide that boost.

Second, there has been a steady increase in interaction between the Coast Guard and other services in drug interdiction, maritime interception, and port security. According to one analyst, "the Coast Guard's defense mission is growing,

while the national security agenda of interest to the Defense Department is widening."⁷

Third, there is a need to improve national security capabilities to both defend the Nation and fight wars abroad. Though transferring the Coast Guard to the Department of Homeland Security would undoubtedly enhance border protection, moving it to the Pentagon would best employ service resources and capabilities to defend the homeland, enforce the law, prevent pollution, save lives at sea, and secure the borders.

Following World War II, America dramatically reorganized the Armed Forces to fight the Cold War, a strategy heralded forty years later with the fall of the Berlin Wall. The global war on terrorism marks another paradigm shift that will require changes in national security architecture to deter deadly asymmetric threats and combat an elusive foe.

Consolidating enforcement agencies into the Department of Homeland Security is a positive step in enhancing border control and safeguarding Americans. As part of military transformation, however, Congress and the Bush administration should consider transferring the Coast Guard to a position alongside the other military services.

The damage inflicted on the Pentagon in September 2001 is an apt metaphor. As reconstruction of the fifth side of that building is completed, the United States can reinforce military capabilities by adding the fifth service to the Department of Defense. **JFQ**

NOTES

¹ Robert G. Ross, "Maritime Domain Awareness: The Key to Securing the Blue Frontier," Office of Strategic Analysis, USCG Headquarters, information paper, September 19, 2001, p. 1.

² U.S. Coast Guard, Office of Intergovernmental and Public Affairs, *Homeland Security and the New Normalcy*, November 1, 2001, p. 1.

³ James M. Loy, "Shaping America's Joint Maritime Forces: The Coast Guard of the 21st Century," *Joint Force Quarterly*, no. 18 (Spring 1998), p. 15.

⁴ Loy, interview with author, January 30–February 4, 2002.

⁵ Bruce Stubbs, "Preparing for the New War," *Armed Forces Journal International*, vol. 139, no. 6 (February 2002), p. 51.

⁶ Joint Staff, Directorate for Strategic Plans and Policy (J-5), "Homeland Security, Defense, and Civil Support," briefing, December 6, 2001.

⁷ Colin S. Gray, "The Coast Guard and Navy: It's Time for a National Fleet," *Naval War College Review*, vol. 54, no. 3 (Summer 2001), p. 132.

Invading Sicily

A Tale of Branches and Sequels

By KEVIN J. DOUGHERTY



Coming ashore near Gela.

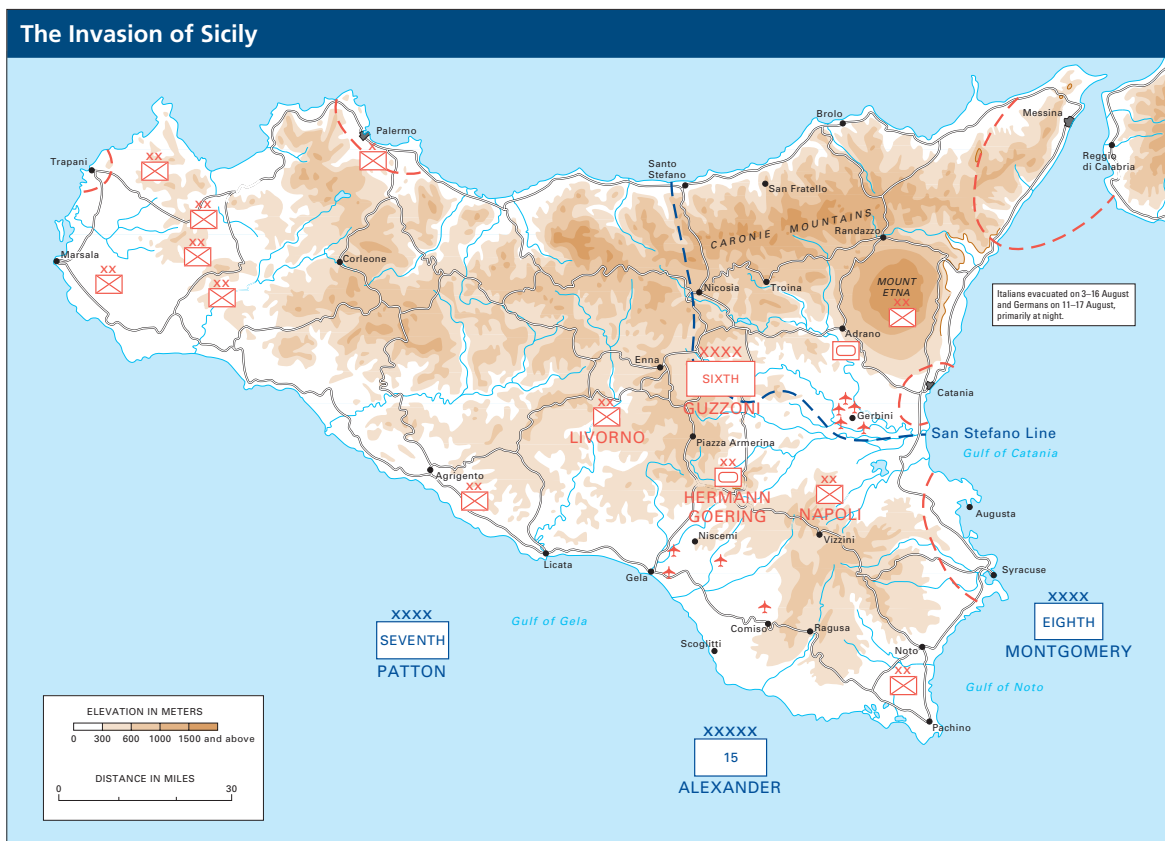
Naval Historical Center

In July 1943, the Americans and British executed Operation Husky, the invasion of Sicily. It was the first major opposed amphibious landing since Gallipoli in World War I, a seven-division amphibious assault echelon that made it the largest such assault in modern history. The Allies met weak resistance which soon caused the Axis forces to evacuate the island.

Operation Husky is frequently cited as a prelude to the Normandy invasion. As one writer notes, "Sicily was essential for Normandy: a real-life live-fire training exercise [in which lessons were learned] in planning and executing amphibious operations, and in joint and combined organization, planning, and command and control."¹ Among the lessons was the role of planning branches and sequels. Sadly, failure in this step turned the operation into a hollow triumph.

As Joint Publication 3-0, *Doctrine for Joint Operations*, states, "Many [operational plans] require

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adjustment beyond the initial stages of the operation. Commanders build flexibility into their plans to preserve freedom of action in rapidly changing conditions.” Usually such changes are made through branches and sequels. The former are “options built into the basic plan” and the latter are “subsequent operations based on the possible outcomes of the current operation—victory, defeat, or stalemate.” Allied planning for Sicily omitted details beyond the operation. According to Liddell Hart, “The decision to land in Sicily [was] unaccompanied by any conclusion as to further aims.”²

Preliminary Planning

The United States and Britain discussed two basic courses of action at the Casablanca Conference in January 1943. They included avoiding land combat with Axis forces or invading Sardinia, Sicily, Italy, Greece, or the Dodecanese Islands. Even General George Marshall, Chief of Staff, U.S. Army, supported the idea of avoiding contact with the enemy to prepare for Operation Roundup, but the heads of state rejected the proposal. The British favored actions in the Balkans, but the Americans feared that such a step would delay a cross channel invasion. No one believed

that the Allies were strong enough to invade Italy, so the options narrowed to Sardinia and Sicily.

Sicily had several advantages. Its capture would make the Mediterranean safe for shipping, engage and destroy a greater number of German divisions, capture more and better airfields within bombing range of southern Italy, and perhaps cause the Italian government to seek peace. A Sicily operation would satisfy the United States because it would save shipping, employ troops already in theater, and conclude the Mediterranean campaign. In fact, the Americans accepted Sicily largely because it seemed a dead end. These considerations would facilitate the true U.S. objective—cross-channel invasion. The British agreed to Sicily for shipping considerations, a desire to punish Italy, and hope of eliminating Italy from the war. The loss of Sicily would weaken the enemy.³

In actuality, the logic for attacking Sicily is best described as a rationale. Operation Husky was not planned within the context of leading to an overarching strategic objective. At Casablanca the Allies chose Sicily not because of anything inherent to Sicily but because, as Samuel Morrison concludes, “Something had to be done in the European theater in 1943,” and “it was entered upon as an end unto itself; not as a springboard

B-17 over Messina.



Allied landing,
July 1943.

for Italy or anywhere else.”⁴ The choice “was a strategic compromise conceived in dissension and born of uneasy alliance—a child of conflicting concepts and unclear in purpose.”⁵ There was no operational sequel planned after Sicily.

Part of the reason for this omission was that it had been a difficult process just to agree on Sicily. The participants in the Casablanca Conference did not want to tackle what to do next. As Liddell Hart puts it, “An attempt to decide on the

next objective would have revived divergencies of view—but in such matters tactful deferment is apt to result in strategic unreadiness.”⁶ The Allies would pay a price for failing to come to terms with a common strategy at the outset. General Omar Bradley, who commanded II Corps during the invasion, wrote, “There were no decisions reached about how to exploit a victory in Sicily. . . . It was an egregious error to leave the future unresolved. It led to misguided planning for and a cloudy conclusion to the Sicily operation and to costly mistakes beyond Sicily.”⁷

Distracted Commanders

The Combined Chiefs of Staff selected the operational commanders at Casablanca. General Dwight Eisenhower would be supreme commander. Admiral Sir Andrew Cunningham would be in command of naval forces and Air Chief Marshal Sir Arthur Tedder would command air forces. General Sir Harold Alexander would command 15th Army Group, consisting of Seventh Army under General George Patton and Eighth Army under General Sir Bernard Montgomery. Eisenhower had his staff immediately begin planning. Unfortunately, the commanders were currently engaged in fighting in Tunisia and could not participate in the process. Montgomery described this time as one

of “absentee landlordism.”⁸ General Mark Clark, Fifth Army commander, was more pointed. His diary for April 28 contains the following entry: “It is inex-

cusable that high planning on an overall scale is not taking definite form. Planners should project themselves forward and set up a grand-scale strategic plan for the Allied forces. We can’t win a war by capturing islands.”⁹

The Allies held the Trident Conference on May 12, 1943. The Americans quickly secured British commitment to a cross-channel invasion, but the issue of what to do with troops already in the Mediterranean area was unresolved. Britain proposed eliminating Italy from the war, and the United States agreed that forcing Italy to surrender would result in German divisions replacing Italian troops and thus weaken the forces opposing the cross-channel invasion.

Final agreement came on May 19, with Eisenhower being told “to plan such operations in exploitation of Husky as are best calculated to eliminate Italy from the war and to contain the maximum number of German forces.” Various possible plans beyond Sicily had been discussed, but no decisions were made. Such matters were reserved for the future, an unfortunate habit of pushing decisions down the road. Trident turned out to be another stage in a protracted debate rather than a determination. The invasion was less than two months away, and “The Americans were still asking ‘Where do we go from here?’ and the British were still irritated by the query.”¹⁰

The Invasion

An armada of 2,590 vessels rendezvoused in the central Mediterranean on July 9. Admiral Sir Bertram Ramsay commanded the landings. At 0245 hours on July 10, the ships reached their debarkation points without incident. The landing

suffered from problems that could be expected of a nighttime operation conducted in a high wind and swell. Ships lowered the landing craft too far out at sea. Boat waves formed late and many landing craft missed assigned beaches, became stuck on sandbars, or capsized in the surf. Nonetheless the landings were largely successful since there was almost no resistance from Italian coastal forces. Montgomery, for example, occupied harbors at Syracuse and Augusta without firing a shot. Field Marshall Albert Kesselring, the German Commander in Chief South, who observed that “one disappointment followed another,” wondered if the Italian defenders were guilty of “cowardice or treachery.”¹¹

Both Montgomery and Patton elected to precede their landings with airborne assaults. The 505th Parachute Infantry Regiment and the Airlanding Brigade of the British 1st Airborne Division assaulted fifteen minutes before the landings, but problems with the air force caused neither unit to be effective. Only one in eight of 226 planeloads of the American paratroopers landed on assigned drop zones and only 12 of 137 British gliders landed near their objectives.

At 0600 hours on July 11, General Alfredo Guzzoni, who commanded Sixth Italian Army, mounted a counterattack with the Livorno and Herman Goering Divisions. By noon German tanks were within 2,000 meters of the beach and firing at unloading parties. But determined resistance and massive naval gunfire forced the Axis units to retreat after losing a third of their tanks.

The following day, Guzzoni began to systematically withdraw to the San Stefano line. His intention was to evacuate Sicily after delaying the Allied forces as much as possible. Still reeling from losses in Stalingrad and Tunisia, Hitler opted not to issue his usual hold-at-all-costs order.

Moving Inland

The attack by Montgomery up the east coast of Sicily was slower than Alexander desired. On July 17, Patton proposed that his troops overrun western Sicily and take Palermo. Alexander approved and Patton entered the port on July 22. The following day he captured the western tip of Sicily. The next day Alexander ordered Patton to turn eastward toward Messina, the primary transit port between Sicily and the Italian mainland. Montgomery was bogged down at Catania, and it was apparent that Eighth Army could not capture Messina alone. Alexander redrew the army boundaries, authorizing Patton to approach Messina from the west while Montgomery continued to push from the south. But even as both Patton and Montgomery raced for Messina, time

the United States agreed that forcing Italy to surrender would result in German divisions replacing Italian troops



Naval Historical Center

Montgomery and Patton.

one obvious branch that could have disrupted the German evacuation would have been an amphibious landing in Calabria

was running out. On the morning of August 17, elements of 7th Infantry Regiment, 3^d Infantry Division, entered Messina but it was too late.

Sicily was a victory, but according to Bradley, it had “a cloud on the title.” As he claimed, “. . . there was no master plan for the conquest of Sicily. Nothing had been worked out beyond the limited beachhead objectives.”¹² This planning lapse was critical. Just hours before the Allies

reached Messina, the last Axis troops boarded ships for Italy.

Escape

On July 26, the Italian King, responding to the weariness of his people, placed Mussolini under arrest. With this unstable political situation in his rear, Kesselring ordered the evacuation of Sicily. The withdrawal was a masterpiece that ended on August 17 with the Germans salvaging much of their men, equipment, and supplies.

The Allies were seemingly aware of the Axis intention to evacuate Sicily but lacked a plan once again. Admiral Cunningham, after careful thought, concluded that there was “no effective method . . . of stopping the evacuation by sea or air.” But he was surprised that “no use was made

by the Eighth Army of amphibious opportunities. The small [landing ships] were kept standing by for the purpose . . . and landing craft were available on call.”¹³ Nonetheless, Montgomery elected not to employ airborne troops or make an amphibious move to speed his advance and cut off the evacuation, instead using “much the same plan he had developed four days after the invasion,” before the recent developments.¹⁴

Patton and Seventh Army did conduct two small amphibious end runs to outflank obstacles on the Palermo-Messina road which, although beneficial, were too small and too late to have much impact on the campaign. Indeed, as the official historical account concluded, by the time of these efforts, “the game was over.”¹⁵ One reason the maneuvers were too late was that they were not planned ahead of time as branches. The Allies were ultimately unable to interfere significantly with the evacuation.

One obvious branch that could have disrupted the German evacuation would have been an amphibious landing in Calabria, on the toe of Italy, behind Axis forces fleeing Sicily. Kesselring had no means of meeting such a threat and confessed, “A secondary attack on Calabria would have enabled the Sicily landing to be developed into an overwhelming Allied victory.”¹⁶ But instead, “The absence of any large-scale encirclement of the island or of a thrust up the coastline of Calabria gave us long weeks to organize the defense with really very weak resources.”¹⁷

On the political-military level, the lack of Allied planning of branches and sequels is also painfully obvious. The overthrow of Mussolini took the Allies by surprise, and it was not until July 31 that President Franklin Roosevelt and Prime Minister Winston Churchill agreed to a set of armistice terms to present to the Italians. Exactly what Italy would accept was still unclear. Thus the fall of Il Duce was not a turning point in Allied strategy. It hastened the decision to invade the Italian mainland, but it did not in itself produce a decision.

Amidst this continued indecision, the Allies not only failed to halt the evacuation; they did not pursue the retreating forces until September 3, giving Kesselring an advantage in preparing for the defense of the Italian mainland. In fact, until the end of the Sicilian campaign and the escape of the four German divisions, Kesselring had only two German divisions to defend southern Italy.

Kesselring criticized this Allied hesitancy:

The enemy failure to exploit the last chance of hindering the German forces crossing the Straits of Messina, by continuous and strongly coordinated attacks from

Enemies meeting in Palermo.



(U.S. Army) Naval Historical Center

*the sea and the air, was almost a greater boon to the German Command than their failure immediately to push their pursuit across the straits on 17 August. Unquestionably the troops on both sides had to face extraordinary exertions in the heat of a blistering midsummer sun in the rocky and almost treeless mountain regions, but the halt called by the Allies until 3 September, which was not absolutely dictated by the situation, was again a gift to the Axis.*¹⁸

Indeed, it was by no means the situation that dictated that the Allies halt. It was the failure to plan for the situation through branches and sequels.

The Gift of Hindsight

In late May, a month before the invasion, Churchill with General Sir Alan Brooke, Chief of the Imperial General Staff, and Marshall met Eisenhower at his headquarters “to discuss further the objectives of the Sicilian campaign, other than the mere capture of the island to assure free use of the Mediterranean sea route.”¹⁹ Eisenhower reports that these discussions “left exploitation of the Sicilian operation to my judgment but expected me to take advantage of any favorable opportunity to rush into Italy. . . .”²⁰ Obviously the rush did not happen and Bradley would blame Eisenhower for the failure. After lamenting the woefully poor “extent of the strategic considerations about Sicily and its follow-up operations,” Bradley commented that “Seldom in war has a major operation been undertaken in such a fog of indecision, confusion, and conflicting plans.”²¹ For this error, he concluded, “Ike must . . . share a large part of the blame. . . . Inasmuch as his three

deputies were absorbed in the Tunisia fighting, it seems to me it was all the more important that Ike give the Sicily operation his utmost care and attention. He was the logical man to conceive the operation as a whole, impose his imprint, see it through, and accept responsibility for the consequences. But Ike did not rise to the challenge.”²²

Many lessons were learned in Sicily, but planning branches and sequels was not one of them. As Montgomery lamented, “If the planning and conduct of the campaign in Sicily were bad, the preparations for the invasion of Italy, and the subsequent conduct of the campaign in that country, were worse still.”²³ Curiously, the Army would conclude after the war, “Sicily was also a victory for . . . the staff planner.”²⁴ This may be the case in terms of some details of amphibious operations, but certainly not for the larger elements of campaign planning. Planners today should learn from Sicily the criticality of planning branches and sequels. **JFQ**

NOTES

¹ Uldric Fiore, “Sicily: An Essential Exercise in Futility,” *Military Review*, vol. 73, no. 7 (July 1993), p. 64.

² Basil Henry Liddell Hart, *History of the Second World War* (New York: G.P. Putnam’s Sons, 1970), p. 438.

³ Thomas Buell et al., *The Second World War: Europe and the Mediterranean*, Vol. 1 (West Point: U.S. Military Academy, 1979), pp. 423–24.

⁴ Hanson Baldwin, *Battles Lost and Won: Great Campaigns of World War II* (New York: Harper and Row, 1966), p. 193.

⁵ *Ibid.*, p. 188.

⁶ Liddell Hart, *History*, p. 438.

⁷ Omar Bradley and Clay Blair, *A General’s Life* (New York: Simon and Schuster, 1983), p. 160.

⁸ Albert Garland and Howard Smyth, *Sicily and the Surrender of Italy* (Washington: U.S. Army Center of Military History, 1986), p. 60.

⁹ Bradley, *A General’s Life*, p. 166.

¹⁰ Baldwin, *Battles Lost and Won*, p. 195.

¹¹ Albert Kesselring, *Kesselring: A Soldier’s Record* (New York: William Morrow, 1954), p. 196.

¹² Bradley, *A General’s Life*, p. 186.

¹³ Liddell Hart, *History*, p. 446.

¹⁴ Garland, *Surrender*, pp. 378–80.

¹⁵ Andrew Birtle, *Sicily* (Washington: U.S. Army Center for Military History, 1993), p. 24.

¹⁶ Liddell Hart, *History*, p. 446.

¹⁷ Kesselring, *A Soldier’s Record*, p. 199.

¹⁸ *Ibid.*

¹⁹ Dwight D. Eisenhower, *Crusade in Europe* (Garden City, N.Y.: Doubleday, 1949), p. 166.

²⁰ *Ibid.*, p. 168.

²¹ Bradley, *A General’s Life*, p. 167.

²² *Ibid.*, pp. 168, 198 fn.

²³ *Ibid.*, p. 203.

²⁴ Birtle, *Sicily*, p. 25.

Admiral William Morrow Fechteler

(1896-1967)

Chief of Naval Operations

VITA

Born in San Rafael, California; graduated from U.S. Naval Academy (1916); served on battleship *USS Pennsylvania* during World War I; assigned ashore and afloat in interwar years; operations office, Destroyer Command, Battle Forces, U.S. Fleet; commanded *USS Perry*; served in Bureau of Navigation (1942–43), *USS Indiana* in Gilbert, New Hebrides, and Marshall Islands (1943–44), Amphibious Group 8, Seventh Fleet Amphibious Force (1944–45); participated in landings at Morotai, Leyte, and Lingayen; commanded VII Force in assault on Biak and Sansapor; responsible for landings in southwestern Luzon and Palawan, Philippines (1945); Assistant Chief of Naval Personnel (1945); commander, Battleships and Cruisers, Atlantic Fleet (1945–47); Deputy Chief of Naval Operations, Personnel (1947–50); Commander in Chief, Atlantic and U.S. Atlantic Fleet (1950–51); Chief of Naval Operations (1951–53); Commander in Chief, Allied Forces, Southern Europe (1953–56); died in Bethesda, Maryland.



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Naval and Marine forces must continue to be deployed in various strategic areas throughout the world in support of foreign policy. These forces are capable of rapid redeployment to meet shifts in global strategy. Specifically, the Navy and Marine Corps will maintain forces in mobile combat readiness to deter aggression, protect citizens, promote the interests of the United States, provide aid to our allies and support them in the execution of their responsibilities, and to support the operations of the other services.

—From hearings before the House Committee on Appropriations (February 11, 1952)

Portrait by Dayton Brown.

Doctrine

THE VISION THING

The global war on terrorism and the threat of weapons of mass destruction have both added a sense of urgency to the call for military transformation. The lessons from recent operations conducted in Afghanistan and elsewhere are influencing joint force development. Two initiatives will transform the Armed Forces—the revision of *Joint Vision* and the release of *Full Spectrum Dominance*.

The forthcoming revision of *Joint Vision* will outline the transformational changes required by joint force to protect U.S. national interests. This document is a conceptual template issued by the Chairman at periodic intervals to facilitate the development of joint capabilities by the services, defense agencies, and unified commands.

Finally, in the coming months, the Chairman will release *Full Spectrum Dominance*, a capstone document that will enable the Armed Forces to operationalize the changes advanced in *Joint Vision*. It will link the vision and operational and functional concepts. This document will help in defining joint requirements, capabilities, and experiments. It will lead to a more adaptable and fulsome set of capabilities that are more complementary and interoperable. **JFQ**

Exercises

A NEW MILLENNIUM

More than 13,500 U.S. military and civilian personnel will participate in Millennium Challenge 2002, a joint warfighting experiment bringing together both live field forces and computer simulations at various locations from July 24 to August 15, 2002. Mandated by Congress and sponsored by U.S. Joint Forces Command, the event is designed to simulate a realistic 2007 battlefield to assess the interoperability of new methods to plan, organize, and fight.

The experiment will feature both live field forces and computer simulation and incorporate elements of all military services, U.S. Special Operations Command, most functional/regional commands, and various Department of Defense and other Federal agencies.

The live and simulated warfighting events will be conducted at various training and testing ranges in the western United States, and the virtual combat simulations from across the country will

be controlled from the Joint Warfighting Center's Joint Training Analysis and Simulation Center in Suffolk, Virginia. The experiment will be the culmination of over two years of concept development examining how to best accomplish rapid and decisive operations in this decade using transformational knowledge and command and control concepts with today's equipment and weapon systems.

For additional information visit the U.S. Joint Forces Command Web site at <http://www.jfcom.mil>. **JFQ**

Education

JOINT REPORT CARD

In his recent report to Congress, the Secretary of Defense indicated that 5,545 officers on active duty with a critical occupational specialty (COS) at the end FY01 had completed joint professional military education. The number of officers by service (and their specialties) include: Army, 1,413 (infantry, armor, artillery, air defense artillery, aviation, special operations, and combat engineers); Navy, 1,461 (surface, submariner, aviation, sea-air-land, and special operations); Marine Corps, 492 (infantry, tanks/assault amphibian vehicles, artillery, air control/air support, anti-air warfare, aviation, and engineers), and Air Force, 2,179 (pilot, navigator, command/control operations, and space/misile operations). For more details, see http://www.defenselink.mil/execsec/adr2002/html_files/apdx_b.htm. **JFQ**

JPME UPDATE

The Director of the Joint Staff and leaders of the intermediate and senior colleges met in May 2002 to discuss issues in joint professional military education (JPME) to include the following:

- Expansion of access to advanced JPME for the total force. Under the National Defense University, work is underway to develop a course for Reserve officers. Incorporation of lessons learned from a test conducted last year have aided in developing a pilot course consisting of a mix of resident and distributive learning to be instituted in 2003.

- Interactive multimedia CD-ROM for senior NCOs in joint duty assignments. This is the first JPME effort tailored to the needs of NCOs in the field and fleet. It will facilitate assimilation and increase contributions to the joint team. The disc will be in production by late summer 2002 and made available through unified commands in autumn 2002.

- Accreditation of JPME Phase I at the Marine Corps Command and Staff College has been renewed through 2007 and the Air War College and Air Command and Staff College are scheduled for reaffirmation visits later in the year.

- Efforts to speed joint lessons learned from the battlefield to the schoolhouse.

- Congress has called for an independent study of joint officer management and education in 2002-2003. This is the first congressional examination of these two areas since the late 1980s.

For the latest information on joint education, visit <http://www.dtic.mil/doctrine>. **JFQ**

INSTANT LIBRARY

The holdings of military libraries can be accessed through the Military Education Research Library Network (MERLN), a Web-based information portal designed to promote international outreach. Divided into geographic and content-specific areas, the home page offers access to MERLN (North America) through a central node in the National Defense University (NDU) Library. Other points include: MERLN (Asia-Pacific) with a central node at the Asia-Pacific Center for Security Studies; MERLN (Latin America-Caribbean) under the Center for Hemispheric Defense Studies at NDU; MERLN (Europe), with a central node at the George C. Marshall Center for European Security Studies; and MERLN (International Fellows) and (Near East-South Asia) with access to licensed electronic products for NDU alumni.

Three content-specific areas include resources, online publications, and the digital library. Resources present holdings from catalogs, library home pages, and bibliographies of participating libraries. Listings include terrorism and homeland security and also bibliographies on topics such as asymmetric warfare, civil-military operations, and strategic deterrence. Information is updated daily. Online publications afford centralized access to periodicals like *Joint Force Quarterly* and *Parameters* and titles released by the Marshall Center, Partnership for Peace Consortium, and other institutions. The digital library presents unique collections, including archives on command and staff colleges, papers of John M. Shalikashvili and Maxwell D. Taylor, and student work from the National War College.

MERLN is available worldwide on a 24/7 basis at <http://merln.ndu.edu>. **JFQ**

THE CHAIRMAN'S GOUGE

A MEDLEY OF BOOKS

Selected by

RICHARD B. MYERS

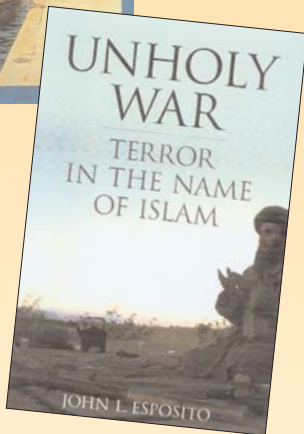
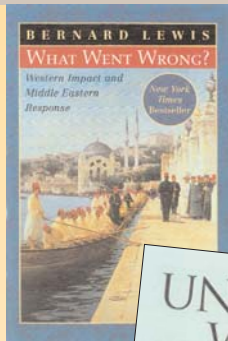
This issue of *Joint Force Quarterly* presents a new occasional column, "The Chairman's Gouge." In the spirit of jointness, I am using a Navy/Marine Corps term of art for this contribution; *gouge*, meaning either a scoop or essential information. The global war on terrorism has prompted interest in a number of areas of inquiry, from geopolitical environment and grand strategy to civil-military relations and defense reform. Drawing on a wealth of recently published books, I hope to bring some relevant and thought-provoking titles to the attention of *JFQ* readers on regular basis.

As we fight the global war on terrorism, a body of literature is emerging that contributes to an understanding of the

What Went Wrong? Western Impact and Middle Eastern Response

by Bernard Lewis

Oxford: Oxford University Press, 2001.
192 pp. \$23.00
[ISBN: 0-19-514420-1]



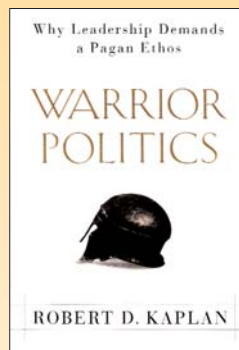
Unholy War: Terror in the Name of Islam

by John L. Esposito

Oxford: Oxford University Press, 2002.
208 pp. \$25.00
[ISBN: 0-19-515435-5]

strategic landscape and radical Islam. Among them are *What Went Wrong: Western Impact and Middle Eastern Response* by Bernard Lewis and *Unholy War: Terror in the Name of Islam* by John Esposito. A highly regarded scholar of the Muslim world, Lewis provides keen insights into the underlying causes of tensions between the West and Islam. Esposito, whose article on "Political Islam and the West" appeared in issue 24 of *Joint Force Quarterly* (Spring 00), explores the battle being waged over control of the course of Islam, tension between modern trends and tradition, and socio-economic factors that fuel support for groups such as al Qaeda.

Warrior Politics: Why Leadership Demands a Pagan Ethos by Robert Kaplan



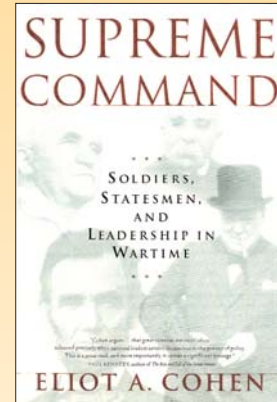
Warrior Politics: Why Leadership Demands a Pagan Ethos

by Robert D. Kaplan

New York: Random House, 2001.
179 pp. \$22.95
[ISBN: 0-375-50563-6]

is focused on geopolitics and emerging threats. With a fresh look at Livy, Thucydides, Sun-Tzu, et al., Kaplan presents a realist worldview and framework for considering challenges that lie ahead. He suggests that governance based on compassion and moral rectitude gradually leads to a weakened position in the world order. In his view, U.S. foreign policy should acknowledge that international relations is a struggle for power and survival. In this regard, we have much to learn from the ancients.

Civil-military relations continue to be an issue of interest. In *Supreme Command: Soldiers, Statesmen, and Leadership in Wartime*, Eliot Cohen argues that four successful wartime leaders (Lincoln, Clemenceau, Churchill, and Ben-Gurion) did not delegate decisions on military affairs. His analysis emphasizes that war is a profoundly political act.



Supreme Command: Soldiers, Statesmen, and Leadership in Wartime

by Eliot A. Cohen

New York: Free Press, 2002
288 pp. \$25.00
[ISBN: 0-7432-3049-3]

Grand strategy is the subject of "Defining and Achieving Decisive Victory" by Colin Gray. This monograph describes strategy as the use of military force to obtain political goals. One of the critical steps in achieving victory is determining the means needed to attain ends. Gray argues that it is difficult to quantify that requirement, something that one must remember in the war on terrorism. (This title is available online at www.carlisle.army.mil/usassi/ssipubs/pubs2002/victory/victory.htm).

JFQ



Defining and Achieving Decisive Victory

by Colin S. Gray

Carlisle Barracks, Pennsylvania: Strategic Studies Institute, U.S. Army War College,
April 2002
45 pp. n.p.
[ISBN: 1-58487-089-3]

CAMPAIGNING IN THE BALKANS

A Review Essay by

MICHAEL C. DESCH

Waging Modern War: Bosnia, Kosovo, and the Future of Combat

by Wesley K. Clark

New York: Public Affairs, 2001.

512 pp. \$30.00

[ISBN: 1-58648-043-X]

War in a Time of Peace: Bush, Clinton and the Generals

by David Halberstam

New York: Simon and Schuster, 2001.

543 pp. \$28.00

[ISBN: 0-7432-0212-0]

Two books on war in the 1990s, which deal with events before September 11, 2001, may appear to be accounts of a time when Presidents had the luxury of focusing on domestic issues and dabbling in international affairs. If that is true, *Waging Modern War* by Wesley Clark as well as *War in a Time of Peace* by David Halberstam will fade into memory. But that fate is unlikely since the conflicts of the recent past were not aberrations but harbingers of a new era.

In presenting a military view of Bosnia and Kosovo, Clark contrasts traditional wars of the 19th and 20th centuries with modern wars. The former were waged for territory and survival of states, fought by conscripts, animated by nationalism, and conducted by regimes which sought decisive victory over other nation-states. Modern wars, by contrast, are rarely about the control of territory or the survival of states. They are waged not with vast armies of conscripts but rather with small professional forces. They are often asymmetric, pitting different sorts of forces against each other. They divide rather than unify states, and victory is at best ambiguous and often highly qualified.

Clark is a practitioner and not a theorist, however, and his object is recounting the modern wars in which he participated. What is so striking about his book, compared with the traditional memoir, is that much of the fierce combat he



27 Marine Division (Craig J. Shell)

encountered was not on the battlefields of the Balkans but in the halls of the Pentagon. Indeed, modern war is deeply divisive not only between countries but within them. This was not just true in Bosnia and Kosovo, which were torn apart by ethnic conflict, but in the U.S. Government—especially the Armed Forces, which could never fully come to grips with waging modern war.

Clark broke ranks with his comrades and embraced an activist U.S. policy to counter Serb aggression in Bosnia and Kosovo. He started out like most the Army leadership as a skeptic over the sort of limited warfare and nation-building that civil war in the Balkans required. Vietnam lay as heavily on his soldiers as it did on the rest of his cohort. But something changed in his attitude. Perhaps it happened on a mountain road in Bosnia when he lost three colleagues in an accident or maybe in one of the seemingly endless late night confrontations with Slobodan Milosevic during the Dayton process. Whenever he changed, Clark gradually became a rare bird: a military hawk on the Balkans.

It is striking that *Waging Modern War* offers few details on the campaign against the Serbs over Kosovo. The book largely consists of a report on bureaucratic struggles between Clark—as Supreme Allied Commander, Europe—and most of the defense establishment. It is told with an amazing lack of rancor, given the intensity of institutional strife. Nevertheless, there is little doubt that the battle between the theater commander and the Pentagon was waged with a ruthlessness that reflected the

ethnic conflict in Kosovo. The reason for this exchange was simple: Clark challenged an article of faith, that the post-Vietnam military would not “acquiesce in halfhearted warfare for half-baked reasons.” As a result, his colleagues increasingly shunned him for being too close to interventionist administration officials like Richard Holbrooke and Madeleine Albright. So intense was the animus that Clark was rewarded for winning the modern war in Kosovo by being replaced by an officer who was more in sync with the Pentagon ethos.

While Clark deals with the politics of waging modern war within the military, Halberstam looks at the battles that played out in the Government as a whole. These politics turned Clausewitz on his head. Again, the chief adversaries are not so much the butcher of Belgrade or Haitian junta but members of the bureaucracy both in and out of uniform.

Halberstam portrays modern war as a contest between hawks in Foggy Bottom and doves across the Potomac. Even before Clinton campaigned on an interventionist platform in 1992 over Sarajevo, voices at the Department of State were calling for a forceful response to ethnic cleansing in the former Yugoslavia. Not surprisingly, given the account Clark provides, their chief enemies were members of the military who wanted to avoid what they viewed as the Balkan quagmire. To be sure, this version is somewhat simplified: many civilians in the first Bush administration and on

Michael C. Desch is the author of *Civilian Control of the Military: The Changing Security Environment*.

Capitol Hill shared the reluctance of the military on waging modern wars. Nevertheless, the story in *War in a Time of Peace*, especially after 1992, is primarily about how modern war affected civil-military relations.

Two figures stand out in this context. General Colin Powell played a straightforward role as Chairman. But whereas Clark broke with conventional wisdom, Powell epitomized it. In fact, the principle that force should be used decisively and in defense of vital interests was originally his doctrine. Both on and off active duty, Powell was a major combatant on the domestic front in the wars of the 1990s. According to Halberstam, the other figure, William Clinton, was a reluctant warrior who is portrayed as caught between the interventionists in his camp and the skeptics in the military and on Capitol Hill. Modern war was a contest for the heart and mind of the President; the interventionists got his heart, the skeptics his mind.

Certainly, Clinton was not out front. When push came to shove, he appeared to side with the Pentagon doves on the use of force in the Balkans. But perhaps his heart was not really in it, as Halberstam and others believe, and Clinton wanted to devote himself to domestic politics, like another reluctant warrior, Lyndon Johnson. That is one plausible explanation. Another is that he was actually with the humanitarian hawks, which explains his bellicose words on the campaign trail and his propensity to appoint interventionists like Anthony Lake, Madeleine Albright, Richard Holbrooke, and Wesley Clark to

key posts in his administration—but that he understood it would be impossible to prevail in bureaucratic confrontation with military professionals. Maybe the story will become clear when the former President publishes his memoirs.

But what does all this reveal about the nature of war after September 11, 2001? Surely the bureaucratic infighting and civil-military skirmishing has subsided and the war on global terrorism is being conducted within a more traditional framework. After the direct attacks on the homeland, one might expect an end to the petty bickering of the 1990s. But that is not a sure thing.

Terrorism has all the hallmarks of modern war. It does not involve national survival, nor is it about controlling territory. It will not be fought with large national armies, but rather with small elite forces. Since this war is likely to have a major political component, including nation-building, it has generated intense debate on how it is to be waged. Finally, as in most modern wars, we may win battles in Afghanistan and elsewhere but it will be difficult to be sure when we have won the global war on terrorism. For the foreseeable future, we are likely to face modern wars rather than traditional wars, so the experience of the 1990s will be relevant for decades. *Waging Modern War* and *War in a Time of Peace* should be read not only as chronicles of a unique period in American history, but as previews of the bureaucratic skirmishes ahead as the Nation wages the modern wars of the 21st century. **JFQ**

THE OUTLOOK FOR AIR WARFARE

A Book Review by

MARK CLODFELTER

The Transformation of American Air Power

by Benjamin S. Lambeth
Ithaca, New York: Cornell University Press, 2000.
320 pp. \$29.95
[ISBN: 0-8014-3816-0]

As Benjamin Lambeth states in *The Transformation of American Airpower*: “Operation Desert Storm was a watershed event in modern American military history.” For the author, the Persian Gulf War changed airpower from a force geared towards either nuclear war or support of the Army to one that could achieve independent strategic effects in a conventional conflict by attacking enemy military capabilities. He argues that this transformation should have a profound impact on how the United States fights in the future.

Transformation hinges on many factors. Stealth, high accuracy from standoff ranges, and information dominance are cornerstones. A new mindset is essential—one that no longer assumes strategic attacks are raids on industrial or leadership targets, but rather on the key assets of fielded forces. That mindset contends that the concept of airpower as only a supporting element of ground forces no longer applies, given the technological wizardry that now enables the Air Force to shape the deep battle. In addition, according to Lambeth, transformation is predicated on fighting a major theater war against a conventional enemy which employs armor and mechanized forces.

The underlying thesis in *The Transformation of American Airpower* also defines military aviation broadly—as a blend of hardware and intangibles such as doctrine, concepts of operation, training, tactics, leadership, adaptability, and experience. Spacepower falls under this definition of airpower, and Lambeth devotes a chapter to “The Synergy of Air

Lieutenant Colonel Mark Clodfelter, USAF (Ret.), is the author of *The Limits of Air Power: The American Bombing of North Vietnam*.

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B-2 bomber.

2nd Marine Division (Craig J. Shell)

and Space.” He further claims that airpower is inseparable from battlespace information and intelligence. Lastly, the author does not limit himself to the Air Force. “Airpower, properly understood, knows no color of uniform.” He gives considerable attention to the development of air components within the Army, Navy, and Marine Corps following the Vietnam War.

For airpower professionals and novices alike, there is much that is good, indeed superb, in this book. The chronological review of American airpower since Vietnam is masterful. Relying on a mix of primary and secondary sources as well as his own expertise as a defense analyst who has logged 280 flights in 35 types of aircraft, Lambeth spins a narrative that reads easily. While much of his work highlights technological developments, he adroitly explains the essence of new capabilities without getting mired in mind-numbing detail. The book is organized logically in broad chapters with a liberal use of subheadings to make the text readily accessible. These include “Red Flag and Its Offshoots” and “Tank Plinking and Its Impact” in the chapter on Desert Storm, and “The Promise of Space Power in New Era Warfare” and “Stray Weapons and the Loss of Innocents” in the chapter on Kosovo.

The author complements solid organization and clear style with an argument that is even-handed and well-reasoned. He takes pains to present both sides of an issue. On Vietnam he states: “There is no denying that the American defeat in Southeast Asia was, first and foremost, a product of a flawed strategy and a lack of abiding national commitment and purpose.” Then he adds: “. . . U.S. air operations throughout most of the war also leave little room for doubt

that there were significant deficiencies in the character of the American air weapon, in the appropriateness of its use in many cases, and in the organization and ability of its wielders to make the most effective use of it.” Lambeth is mindful of the Army view in the debate over roles and missions after Kosovo: “The problem is not simply one of petty bickering over rice bowls, as interservice rivalry is so often portrayed as being, but rather one of honest disagreement among professionals who find themselves viewing the world through very different perceptual filters.”

Yet the filters used by Lambeth for both Vietnam and Kosovo call into question the ultimate viability of his transformation thesis. He says that his analysis “concentrates on airpower’s combat potential in major theater wars, as opposed to smaller-scale operations and irregular conflicts such as urban combat, since it is the former situations in which airpower has registered its greatest effects and is most likely to prove pivotal in determining combat outcomes.” Then he devotes part of his book to Vietnam, particularly the predominantly guerrilla war from 1964 to 1968. He also devotes a long chapter to Kosovo, which he acknowledges was fought by a dispersed enemy that waged irregular warfare in which only a few troops could terrorize a village with ethnic cleansing.

The author admits that many factors were likely key in the decision by Slobodan Milosevic to capitulate, and that the most discomfiting factor “may well have been what he perceived, rightly or wrongly, to have been the prospect of an eventual NATO ground intervention of some sort.” Yet he contends that “the campaign’s successful

outcome despite its many frustrations suggested that U.S. airpower may now have become capable enough to underwrite a strategy of incremental escalation irrespective of the latter’s inherent inefficiencies.” He continues,

What made the gradualism of Allied Force more bearable than that of the earlier war in Vietnam is that, in the more recent case, the Allied advantages in stealth, precision stand-off attack, and electronic warfare meant that NATO could fight a one-sided war against Milosevic with near impunity and achieve the desired result even if not in the most ideal way. That was not an option when U.S. airpower was a less developed tool than it is today.

The implication is that the transformation of airpower has made it a valuable instrument in all wars, not just major theater contingencies.

Such assertions give a polemical character to *The Transformation of American Airpower* similar to the writing of Giulio Douhet and Billy Mitchell, which Lambeth decries throughout this book. But he does not subscribe to the strategic ring theory developed by John Warden. He continually faults Warden for his focus on bombing so-called *center ring* targets like leadership, infrastructure, and modes of production, and insists that such attacks are only of marginal benefit to an air campaign. Instead, he calls for attacks on military capabilities—particularly fielded forces—a thesis found in *Bombing to Win: Airpower and Coercion in War* by Robert A. Pape. Lambeth only disagreed with the belief that attacks against fielded forces yield the greatest dividend. While Pape labels such attacks as tactical, they are strategic according to Lambeth, and *strategic bombing* is an invalid concept that distorts the strategic effects which airpower may have against virtually any target.

One might add that the ultimate strategic goal of defeating enemy military capabilities is far more likely to be obtained under the author’s original assumptions and if potential enemies wage major theater war with armor and mechanized forces. In the final analysis, it is not that American airpower has been transformed; rather its overwhelming advantages have transformed the type of war an enemy will fight against the United States into one that minimizes air assets. Doubtless Lambeth is correct in asserting that airpower “has fundamentally altered the way the U.S. might best fight any major wars over the next two decades.” But the best way may not conform to what the other side presents. **JFQ**

A PRUSSIAN GUIDE TO DIXIE

A Book Review by

HOLGER H. HERWIG

A Prussian Observes the American Civil War: The Military Studies of Justus Scheibert

edited by Frederic Trautmann
Columbia, Missouri: University of Missouri Press, 2001.
272 pp. \$34.95
[ISBN: 0-8262-1348-0]

The Civil War occurred during a decade of violence in Europe that began with the Franco-Italian war against Austria in 1859 and ended with the Franco-Prussian War of 1870–71. It also came at a time of intense debate over the relative merits of rifled versus smooth-bore artillery and the efficacy of brick and masonry forts versus earthen entrenchments. Thus it was not surprising that Prussia dispatched a young captain of engineers, Justus Scheibert, to observe the war in America.

Scheibert originally arrived in New York but chose not to observe Union forces, in which some 200,000 German-born soldiers served. Instead, he entered the South covertly from Nassau on a blockade runner because his country was anxious to avoid recognition of the Confederacy by sanctioning an official mission. Over seven months in 1863, Scheibert came to know Robert E. Lee, Stonewall Jackson, and Jeb Stuart. He witnessed 14 engagements and also fought alongside another German, Heros von Borcke, at Brandy Station. He saw the Army of Northern Virginia in action at Fredericksburg, Gettysburg, and Charleston.

A Prussian Observes the American Civil War presents two works by Scheibert: *The Civil War of the North American States and Cooperation between Army and Navy: A Study Illustrated by the War for the Mississippi, 1861–1863*. According to the editor, Frederic Trautmann, neither has previously appeared in English.

Scheibert offers detailed accounts of infantry, cavalry, artillery, engineering, and medical units as well as naval forces. This gives him claim to being the most



Foreign observers in Falmouth, Virginia.

National Archives

competent foreign observer of the war. With regard to strategy, operations, and tactics, which are lumped together, Scheibert distinguished three separate phases of combat. The opening campaigns of the Civil War up to Bull Run (1861) consisted of isolated and disjointed skirmishes fought at great distances and noted for uninspired leadership and lack of discipline. The second phase (1862–63) saw the emergence of linear tactics in which armies were deployed in two or three lines with skirmishers well in advance. The third phase (1863–65) was dominated by tactical defensive, what Scheibert called “workaday warfare” featuring “shovel and axe.” Shock tactics remained the “fundamental principle of cavalry combat,” in which the Confederates excelled because of their hunting tradition. Union cavalry was little more than mounted infantry that eventually succeeded under Philip Sheridan due to mass.

As an engineer, Scheibert reported in full on artillery and fortifications. He was impressed by the range and accuracy of the rifled siege guns fielded by the Union as well as by the efficacy of earthen bombproof quarters of the kind the Confederates used at both Fort Wagner and Charleston. The day of brick and masonry forts had been eclipsed. Moreover, barrier forts and fortified cities instilled a stifling defensive mentality in the troops, as Scheibert noted at Vicksburg and the French would corroborate at Metz and Sedan in 1870. The offensive

was critical and generalship was the crux of strategy. Lee taught Scheibert the value of temporary field fortifications after Gettysburg. From the North, perhaps the most important lessons for a European were field hospitals, transport, and excellent railways, which Prussia would emulate in 1866.

Scheibert was most impressed by the Mississippi River campaign, which he studied from official dispatches. It was an example of unparalleled combined operations across an area the size of western Europe, from north to south. After the initial Union failure to storm Island Number 10, the campaign illustrated how naval forces could suppress land batteries, transport both troops and supplies, and accord armies mobility previously

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Holger H. Herwig is Canada research chair in military and strategic studies at the University of Calgary.

unknown over such vast distances. Naval power enabled the deployment of amphibious forces at will. "Success and victory," Scheibert concluded, "come with coordination, interaction, collaboration, and teamwork."

As a historian, Scheibert, like many European observers of the Civil War, was enraptured by the myth of the Old South. "I fought for the South and believed in it body and soul." The Confederate officer was "a born leader, soldier, and manager" who learned by "bossing Negroes in numbers." Born of "austere Old English" stock, his upbringing made him "physically, mentally, and morally fitter than Yankees reared in cities." He despised careerism and was devoted "to the Cause." A "vital Christianity" and "moral code of rectitude" allowed him to match an enemy three times as strong. The Union, on the other hand, was driven by "Yankee traders" who "regarded everything as a business deal." Supply and demand, "mathematical combinations," and "technical science" ruled their hearts and souls. They eventually won because they "could muster manpower beyond measure, hordes." For the Confederacy, war was an art; for the Union, it was a science.

This book has all the advantages and drawbacks of all contemporary accounts. It is written with passion. It conveys a gripping sense of the men and the times in which they fought. It offers an outsider's view of an intrinsically American event, and places it in a European context. On the other hand, it lacks real objectivity. The perspective of *A Prussian Observes the American Civil War* is Virginia in general and the Army of Northern Virginia in particular.

Scheibert attributes changes in Confederate operations more to numerical inferiority than to the increasing effect of firepower. He remained wedded to the offensive and refused to accept the final phase of the workaday war at Cold Harbor (shovel and axe) as a harbinger of things to come. Although he recognized Northern superiority in manufacturing, he clung to a romantic belief that Southern psychological treasures could overcome mass and machines.

The translation by Trautmann is first rate. He has untangled convoluted prose in the original and provided a riveting narrative. Notes augment the original text. Unfortunately, there are no maps, making it hard for the reader to observe reminders by Scheibert to "consult the map."

JFQ

DAWN OF A COLONIAL ERA

A Book Review by

EDWARD M. COFFMAN

The Philippine War, 1899–1902

by Brian McAllister Linn

Lawrence, Kansas: University Press of Kansas, 2000.

416 pp. \$39.95

[ISBN: 0-7006-0990-3]

The United States fought a costly three-year war at the turn of the century which has largely been ignored in more recent times. Army troops defeated Filipino forces in a traditional campaign and, with help from the Navy and

During the Spanish-American War, the Philippines was a side show as America focused on Cuba. The fact that the revolutionary leader, Emilio Aguinaldo, returned from exile and declared independence a couple of weeks before the first American troops arrived was lost in the euphoria of the quick victory in Cuba. Once the United States annexed the Philippines, relations between nationalist and American forces became increasingly strained until fighting broke out in February 1899 near Manila. The Army won a traditional campaign by autumn despite problems: senior U.S. officers down through field grade were largely Civil War veterans, many of the troops were green, and the terrain and climate was daunting, with 46 inches of rain in summer.

When wartime volunteer units went home in 1899, other volunteers who enlisted for two years replaced them and,



Marine Corps, in a subsequent guerilla war. Several years ago, Brian M. Linn wrote *The U.S. Army and Counterinsurgency in the Philippine War, 1899–1902*, an excellent account of American forces carrying out unconventional warfare in four regions of that country. In *The Philippine War: 1899–1902*, he presents the best narrative history of the conflict.

Edward M. Coffman is the author of *The Old Army: A Portrait of the American Army in Peacetime, 1784–1898*.

together with regulars, won the ensuing guerilla war, which lasted until summer 1902. An increased number of garrisons—from 53 in November 1899 to 639 thirteen months later—illustrates the expansion of efforts against the insurgents. From such bases, junior officers tried to control villages and patrol the countryside with their companies. Senior officers in launched large sweeps as the situation demanded. The intensity of hostilities varied. In half of the provinces there was no fighting, while in others periods of quiet prevailed. Gunboats blockaded the key islands among the 7,000 in the archipelago, making it

almost hopeless for Filipino leaders to control their forces, much less transport supplies between the islands.

Spreading terror through ambush, assassination, and torture is inherent in a guerrilla war. Initially, the psychological advantage was with the guerrillas, but in time they lost that edge as well as the support of the populace, who were horrified by atrocities inflicted by the guerrillas on their own people. More and more, the Filipinos turned to the Americans for protection. But there also were atrocities committed by U.S. forces, which were widely reported in the press. But America brought a much more powerful weapon to bear—benevolent assimilation—which demonstrated genuine concern for the people by setting up schools initially taught by soldiers, and establishing communications via telegraph lines and improved roads. While some military in the field thought there was too much emphasis on the carrot and not enough on the stick of military action, a proper balance paid off as the people came to grasp the possibilities of what the United States offered and switched their allegiance. The fact that former insurgent leaders surrendered and then participated in the government also helped the American cause.

A lieutenant who took part in the last months of the war on Mindoro later studied the War Department records to find out what had happened. George Marshall told his biographer, Forrest Pogue, that he was impressed by the demands placed on young officers, the accounts of loosely disciplined troops getting out of hand, and the friction between civil and military authorities.

But readers do not have to pore over multi-volume official histories. Linn has effectively mined the reports, unpublished records, memoirs, and papers of participants, as well as Philippine sources to develop a balanced account of the war. From the plans and relations of leaders on both sides to small unit tactics used in the field, he explains the initial campaign and guerrilla operations that followed. He emphasizes the value of intelligence and its timely distribution to those in need of it. Then he perceptively analyzes the merits of the Filipino as well as American leaders and their junior officers and troops, organizational structures of opposing forces, and operations. Finally, he describes the experiences of those who fought their way through the jungles and mountains. *The Philippine War: 1899–1902* is likely to become the definitive history of this war. **JFQ**

MAPPING THE GEOPOLITICAL LANDSCAPE

A Book Review by

EWAN W. ANDERSON

Trouble Spots: The World Atlas of Strategic Information

by Andrew Duncan and Michel Opatowski
Stroud, United Kingdom: Sutton
Publishing, 2000.
324 pp. \$39.95
[ISBN: 0-7509-2171-4]

As the title implies, *Trouble Spots: The World Atlas of Strategic Information* is focused on areas of the world that have seen conflict in recent years. It is impossible to include every actual or potential trouble spot in a book of this size, but the major areas of strategic importance are covered. One problem with a regional approach is that not all conflicts are equally volatile. For instance, the section on the Middle East could have been developed further, while it was hard to identify many critical flashpoints in Latin America.

The book has 15 sections—12 of which are regionally focused on trouble spots—together with a useful stop-press addition. Each section is lavishly illustrated with maps and photographs, mostly in color, and there are helpful summaries and tables in the margins. Entries vary in level of detail, but are well written throughout.

As the delimitation of U.S. military commands illustrates, regions are essentially in the eye of the beholder. This volume contains sections on Europe and the Balkans, while what is normally deemed to be the Middle East is subdivided into three sections. One result of this partition is that Turkey is accorded relatively little attention. However, from the standpoint of the problems which are discussed, if not from geography, the subdivision is reasonable.

The section on the United States provides a sound analysis of the military reach and global intentions of the only superpower. In addition, there is a realistic examination of ballistic missile

defense and a critical survey of sanctions. The treatment of Russia and the former Soviet Union raises many more problems, given the abundance of trouble spots. Apart from the development of Russia itself and its military capabilities, the areas considered are the northern Caucasus, the Baltic States, and the Kuril Islands. Though the northern Caucasus has been a scene of continuing crisis, a case could be made for including Belarus, Ukraine, and Moldova. With regard to boundaries, the Sino-Russian frontier has produced greater tension than the Kuril Island maritime border.

In the case of Europe, save for the Balkans, boundary issues between Greece and Turkey including the partition of Cyprus seem to be paramount. Each is considered in some detail with emphasis on the difficulties that have arisen. The balance of the section is focused on NATO enlargement and the European Security and Defense Identity. The section on the Balkans presents the most complete coverage in the book. Each state is considered in the context of past, present, and future problems, and myriad issues are treated under the rubric of "The Crescent of Crisis." The highlights are oil in the Caspian Basin, the Kurds, and the Tigris and Euphrates. Among these trouble spots are the southern Caucasus and Afghanistan. Since there are so many issues to cover under the Caucasus and Central Asia, one must not be critical of omissions. But the desiccation of the Aral Sea, with its local, regional, and global effects, might have been included.

Middle East flashpoints appear in three sections entitled "The Middle East," "North Africa," and the "Middle East-African Interface." Prominence is given to the continuing Arab-Israel conflict and future water problems. Other significant subsections examine the future of Iraq and Iran. The section on North Africa is concerned with the Maghreb while the interface section deals with issues of African states abutting the Red Sea. However, neither Egypt nor Libya are considered.

The section which follows on "Sub-Saharan Africa" offers examples from each area of the continent. It is both detailed and well illustrated. All the major states are included in the section on South Asia, and there are useful subsections on Kashmir and Myanmar. The section on East and Southeast Asia considers most trouble spots in the region. Of particular note are East Timor and the South China Sea. The final section is focused on Latin America.

Ewan W. Anderson is the author of *An Atlas of World Flashpoints: A Sourcebook of Geopolitical Crises*.

Throughout the regional parts of the text, historical background provides an appreciation of the current issues which are detailed in a clear and unbiased fashion. The key points are tabulated in the margins, and each section concludes with a bibliography and list of Web sites. As a concise guide to trouble spots, these sections compare well with other available reference works.

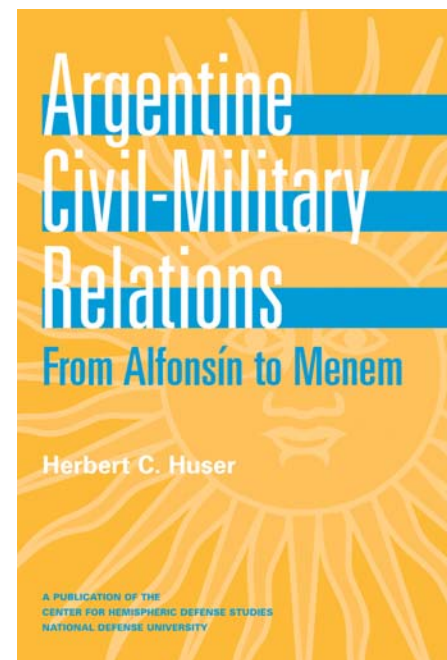
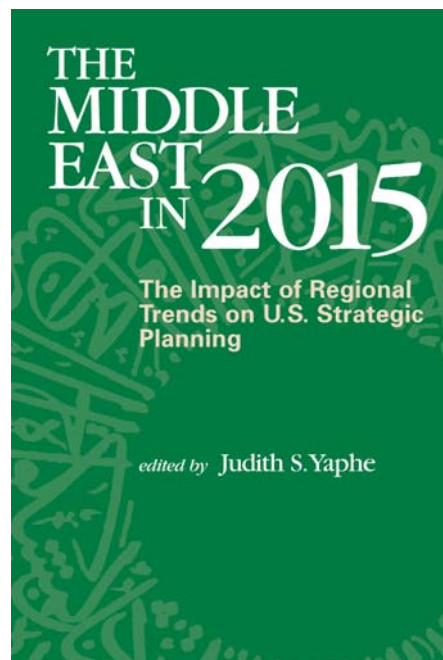
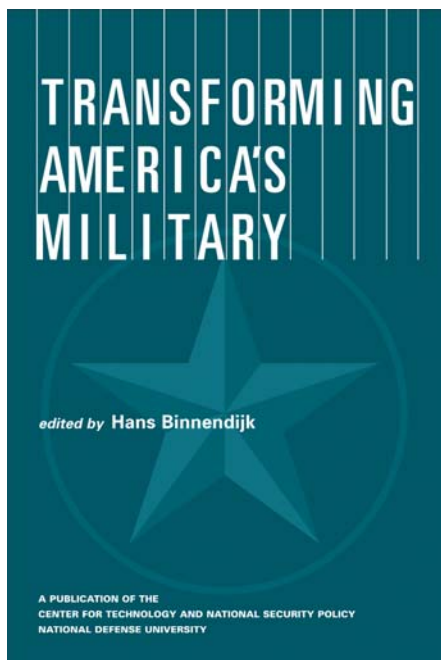
In many respects it is unfortunate that the remaining sections on strategic matters were included. Some subsections

attempt to cover huge topics in only a few pages, while the overall selection reveals obvious omissions, such as pollution. The section on "Global Concerns" deals with a range of issues. Environmental challenges alone have occupied tomes and the treatment here can only be categorized as modest. Under "Freedom of the Seas," the treatment of maritime boundaries is incomplete at best. Chokepoints are mentioned but are not defined. The subsection on terrorism is contentious and lacks clarity. The next section on "Weapons of Mass Destruc-

tion" is more limited in scope and, like the last section on "Space—the New Battlefield," its inclusion as a separate entity is difficult to justify.

On balance, *Trouble Spots* is an invaluable reference for both experts and armchair critics who depend on television for news coverage of world events. It deserves a place on the bookshelf of anyone interested in international security affairs, if only for its excellent maps. **JFQ**

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