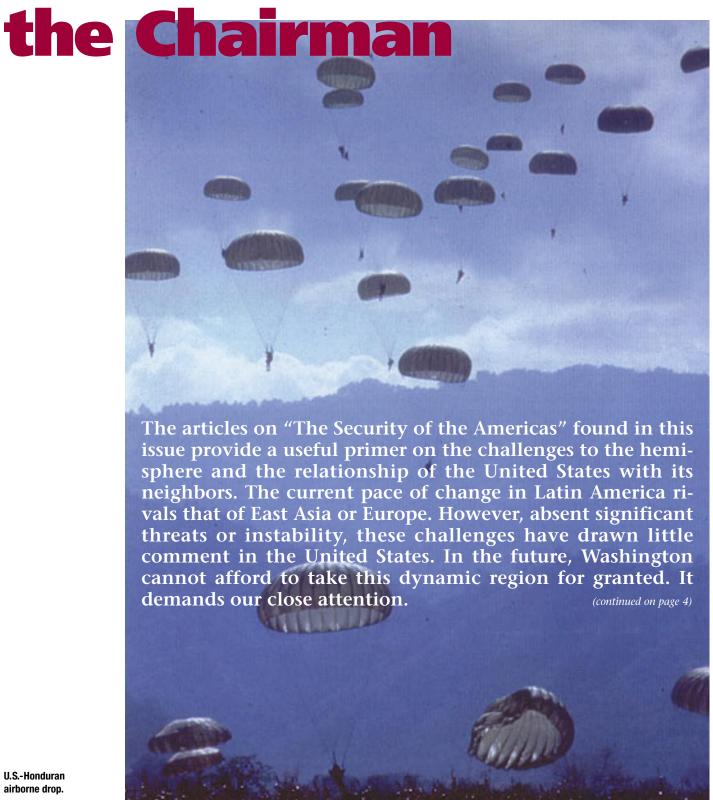






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The cover features F–117 being refueled (U.S. Air Force/Val Gempis); the cover insets (from top) show Stinger missile launch during Roving Sands '94 (U.S. Air Force/Steve Thurow), Venezuelan troops at National Pantheon in Caracas (DOD/R.D. Ward), M–88A1 recovery vehicle crossing into Bosnia (U.S. Air Force/Lisa Zunzanyika-Carpenter), airborne troops boarding C–141 (U.S. Air Force/Jerome G. Suson), and Chester Nimitz looking over maps during World War II (Naval Historical Center).

The front inside cover incorporates (clockwise, from top) marine firing down range during Bell Thunder '95 (U.S. Navy/Stephen Batiz), high endurance cutter *Gallatin*

(U.S. Coast Guard), ski-equipped CH–47D Chinook during training in Italian Alps (U.S. Air Force/Mike Reinhardt), C–5 taking off for Vigilant Warrior (U.S. Air Force/Brett K. Snow), and *USS Seahorse* enroute to the Mediterranean (U.S. Navy/Kenneth H. Brewer).

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The back inside cover captures SH–2F landing on *USS O'Bannon* during passage through Straits of Magellan (U.S. Navy/Richard Boyle).

The back cover shows mobile aerostat in Caribbean (Ú.S. Coast Guard/Chuck Kalnback).



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Joint Force Quarterly

Hans Binnendijk

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Patrick M. Cronin

Consulting Editor

John A. Cope

Contributing Editor (Issue 11)

Robert A. Silano

Martin J. Peters, Jr.

Production Coordinator

Calvin B. Kelley

Copy Editor

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Editor

Joint Force Quarterly
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Telephone: (202) 685–4220 / DSN 325–422 FAX: (202) 685–4219 / DSN 325–4219

Internet: JFQ1@ndu.edu

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May 1996

Joint Force Quarterly

GEN John M. Shalikashvili, USA **Publisher**

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A PROFESSIONAL MILITARY JOURNAL

I A WORD FROM THE CHAIRMAN

(continued from page 1)

Latin America is a vast region with remarkable potential, a vibrant blend of New and Old World traditions, of modern societies and ancient cultures. It is a geographic term for an amalgam of 450 million people living in 33 diverse states, each with a unique history and sense of national purpose. To the United States, the countries of Latin America and insular nations of the Caribbean are partners in three distinct though interactive ways: in the development of democracy, in commerce, and in the creation of hemispheric security.

This region has undergone extensive political development. A decade ago Latin America was politically troubled, with half of its states ruled by authoritarian regimes which repressed their people and mismanaged their economies. Central

Latin America spends the least on defense and has the fewest military personnel per capita

America in particular was a hotbed of instability, much of which emanated from the influence of the Sandinistas in Nicaragua and Manuel Noriega in Panama. Most of that instability has vanished from the scene. For the first time in history, every nation in Latin America is a democracy except Cuba. Each of these nations is determined to foster representative institutions, respect human rights, and incorporate itself into a wider world. Latin America today is striving to meet the ultimate goal enunciated by Simon Bolivar: "to be free under the auspices of liberal laws, emanating from the most sacred spring, which is the will of the people."

While much economic reform is still needed, Latin America has jumped into the mainstream of international economic life. Many economies in the region are surging and several rank among the fastest growing in the world. This has enabled U.S. exports to Latin America to increase at an average annual rate of 21 percent in recent years, twice the rate of those to the European Union. By the end of the century, U.S. trade with Latin America will likely exceed trade with Europe.

Moreover, Latin America has achieved striking growth while avoiding ruinous arms races. Of all regions in the world, it spends the least on defense and has the fewest military personnel per capita. Gone also is the notion that resources must be redivided to attain prosperity in the

hemisphere. Latin American nations are working together to increase their prosperity, which will swell their economies to \$2 trillion by the turn of the century.

U.S. cooperation in the search for hemispheric security has made admirable progress. As we have combined efforts to improve perfor-



Grenadian vessel on patrol.

mance of our respective armed forces, we also have expanded our efforts to suppress narcotics traffic and conducted multilateral operations throughout the hemisphere. As old adversaries find new democratic partners, combined training is becoming commonplace. Ten Latin American nations are participating today in 13 peacekeeping operations around the world, including one on the border between Ecuador and Peru.

Most notable among the recent peace operations has been Operation Uphold Democracy in Haiti. There, under the banner of the United Nations, 24 states, including 12 from Latin America and the Caribbean, joined in a well planned operation that stabilized this beleaguered nation. The operation represents a high water mark in hemispheric security cooperation. As Secretary of Defense William Perry noted, "Peacekeeping in the Americas, in support of conflict resolution and democracy, is more than a principle—it is a reality."

In 1995, military cooperation in the hemisphere reached an all-time high when the defense ministers of 33 nations met to discuss further cooperation. They agreed to support openness and transparency to lower threat perceptions, subordinate militaries to democratically elected regimes, and resolve outstanding disputes through negotiations. Because of this conference, cooperation

between our defense forces in support of legally constituted roles is at an unprecedented level.

While much has been accomplished, much remains to be done for hemispheric security. In particular, the United States, working with its neighbors, seeks to:

- increase cooperation and broaden regional success against drug traffic, a major threat to U.S. security and to the economic and social order in many Latin American countries
- $\hfill \blacksquare$ improve controls over immigration within the region
- deepen military-to-military contacts and further multinational training opportunities
- restructure the U.S. command and control organization to accommodate conditions in the region, including the relocation of U.S. Southern Command headquarters to Miami in 1997.

While Latin America remains an active part of the world community, U.S. military activity there is inexpensive. Given the low level of the threat from extra-regional powers and the spread of democratic institutions, a high level of security has been achieved within the hemisphere with the United States contributing only a fraction of a percent of its defense budget and less than 5 percent of its world-wide security assistance outlays. Given these facts, as well as U.S. interests and commitments, a strategist might conclude that Latin America, though an important region, is an economy of force area. That is true, and with continued emphasis on democracy, the free market system, and collective security, it will remain so.

JOHN M. SHALIKASHVILI Chairman of the Joint Chiefs of Staff

Letters ...

BRIDGING THE GULF

To the Editor—In "The Middle East: Challenges Born of Success" (*JFQ*, Autumn 95), Ambassador Freeman points out the inadequacies in security arrangements among members of the Gulf Cooperation Council (GCC). Developing these nations into a collective security organization should be a top priority of U.S. policy. Providing the six GCC members with capabilities to clear mines, track submarines, and assist the United States in maintaining regional security makes sense in military as well as economic terms.

It allows Washington to help foster a standing coalition with a common goal of securing the Persian Gulf for commerce. U.S. policy in the past has been to support one power in the region, which left us at the whim of that regime and exposed us to potential Islamic radicalism and various external threats. A multinational coalition alleviates this problem as the possibility of all the GCC members simultaneously suffering internal or external strife is unlikely. And economically, each nation could contribute to the cost of collective defensive forces.

It is paramount that we take advantage of the cessation of hostilities to shuttle diplomats and defense experts to the Persian Gulf with a strategic plan on which nations in the region can agree. Freeman's comments on the importance of developing GCC is both timely and pertinent. The next step is to make both military and economic cooperation among Gulf states a national security issue.

—LT Youssef Aboul-Enein, USNR Fleet Surgical Team Six

TO BE AMONG THOSE NUMBERS

To the Editor—After scrutinizing the article entitled "Operation Downfall: The Devil Was in the Details" by D.M. Giangreco (JFQ, Autumn 95) which criticizes my book, The Invasion of Japan: Alternative to the Bomb. I wondered if he had read the same book I wrote. Giangreco reproaches me for things I did not say and views I do not hold. His aim and purpose appear to be to pillory my book because it might give aid and comfort to revisionists. A reader might come away from this article believing that my principal intention was to rehash the seemingly interminable debate over casualties and to find low casualty estimates as part of another effort to prove that dropping "the bomb" was unnecessary. This distorts both my views and purposes in writing The Invasion of Japan. Let me try to set the record straight.

While it is impossible to analyze plans to invade Japan without discussing casualties, that was not my chief purpose. The chapter on casualties fills only 10 of 250 pages. While the issue of casualties is the most hotly contested subject in the debate over the atomic bomb, it is far from the centerpiece of my book. Projecting casualties for an operation that never occurred and that was still in the planning stages at the end of the war obscures more than it reveals. We simply do not know what the casualties would have been, and we can never know. With that in mind, I set out merely to determine the casualties that were projected by the military planners. Within those limits, the documentary record is not particularly rich, but the numbers I found were not inconsistent with other major operations in Europe and the Pacific. Casualty estimates were made only for Olympic, not for Coronet. Furthermore, I found no revisions of casualty estimates as a result of the massive enemy buildup in southern Kyushu in May through July 1945. I found no original contemporary document that projected the kinds of numbers used by Stimson, Churchill, and Truman after the war (aside from the discredited "Hoover memorandum"). The absence of large casualty estimates does not indicate, however, that the military planners were unconcerned about casualties. Clearly, a major Japanese buildup in southern Kyushu revealed by Ultra intercepts in Summer 1945 shook U.S. planners because it promised to translate into higher U.S. casualties. I do not argue that the planners were unconcerned about casualties—only that there is no credible evidence for the large numbers cited after the war. If my numbers give aid and comfort to the revisionists, so be it.

I did not set out to write a book that conformed to a particular interpretation about the end of the Pacific War, nor do I consider myself a revisionist. In fact, I differ fundamentally with most of the conclusions of the revisionists—especially the belief that America utilized two atomic bombs on "an already defeated Japan that was desperately trying to surrender." Though this issue is much too complex to discuss in detail here, let me say simply that the massive buildup of Japanese forces in southern Kyushu in Summer 1945 did not appear to U.S. planners as if Japan was "desperate to surrender." Finally, my book looks at the proposed invasion of Japan from the perspective of our own military—a perspective that revisionists have largely ignored.

I tried in *The Invasion of Japan* to have the documents speak and base conclusions solidly on their contents. While readers of Giangreco's article would not know it, the purpose of my book was not

only to examine casualties and connections between the invasion plans and the bombs but to answer some intriguing, long-ignored questions. Why did JCS choose a strategy of invasion? What were the invasion plans? How were they made? What was to be the role of the Soviets and the British, French, Canadians, and Australians? To what extent did the invasion plans depend on redeploying forces from Europe? No author can account for the intellectual baggage readers bring to his book. I invite Giangreco to reread my work. Perhaps then he will see more balance in it.

—John Ray Skates

To the Editor—D.M. Giangreco provided a spirited critique of John Ray Skates's recent book in your Autumn 95 issue. For my part, I want to respond to a few points on pre-invasion thinking and sources as well as the use of the atomic bomb. Giangreco states that Marshall, presumably on July 25, 1945 at Potsdam, informed President Truman that total U.S. casualties for the invasion of Japan "could range from 250,000 to 1,000,000." Giangreco also defends the alleged recollection by Truman, supposedly based on Marshall's advice, which Skates has challenged.

There is direct evidence on this recollection which neither Skates nor Giangreco consulted that bears directly on the matter: What did Truman recollect, and did Marshall advise him of the possibility of a million U.S. casualties? The relevant evidence has been available for over a decade in the files of the President's secretary at the Truman Library. They reveal that the famous January 12, 1953 letter by Truman to Air Force historian James Cate (found in volume 5 of *The Army Air Force in World* War II, pp. 712–13), which is the basis of the "million" recollection, was not really by the former President. In a handwritten reply in late 1952, he told Cate: "[At Potsdam] I asked General Marshall what it would cost in lives to land on the Tokio plane (sic) and other places in Japan. It was his opinion that 1/4 million casualties would be the minimum cost as well as an equal number of the enemy. The other military and naval men present agreed."

In early January 1953 a White House aide, troubled by Truman's low numbers, decided to inflate them to bring them in line with a claim by ex-Secretary of War Stimson (published in *Harper's*, February 1947) that military advisors before Hiroshima had estimated a million or more American casualties in the invasion of Japan. The aide acknowledged that Truman's initial recollection of a quarter million or more U.S. casualties "sounds more reasonable than Stimson's, but in order to avoid conflict [with Stimson's claim], I have changed the wording to read that General Marshall expected a minimum of a quarter of a million casualties and probably a much greater number—as much as a

million." That is how and why the final letter, signed by Truman, greatly inflated the numbers to include a million casualties and therefore is not a reliable source.

Strangely, Stimson's postwar claim is unsupported by reliable pre-Hiroshima sources that any scholar has unearthed. Admittedly, President Hoover in Spring 1945 did twice suggest very high casualties, but his numbers were quickly dismissed by Army planners, including notably General George A. Lincoln, with whom Marshall agreed. On one occasion, a physicist suggested very high U.S. casualty figures, but there is no evidence that this estimate ever reached Stimson or that the physicist would have been accepted as a credible source on issues which he admitted were beyond his purview. But McGeorge Bundy, Stimson's ghost writer during the period in question, tactfully acknowledged in Danger and Survival (p. 647) that the numbers probably were inflated: "Defenders of the use of the bomb, Stimson among them, were not always careful about numbers of casualties expected." In short, don't trust Stimson's figures.

Importantly, postwar claims by Stimson both in the Harper's article and a 1948 memoir, On Active Service—never included any statement that Marshall was the source for the million-or-more estimate. There is substantial indirect evidence—Admiral Leahy's diary for June 18, 1945, Truman's "Potsdam" diary, and Marshall's August 7, 1945 cable to MacArthur—that Marshall did not make such an estimate before Hiroshima. No scholar (including Marshall biographer Forrest Pogue or the editor of the Marshall papers, Larry Bland) has found any pre-Hiroshima estimate by Marshall that reaches a million or even a quarter million. The highest available number is 63,000. Whether Marshall in fact gave Truman any estimate at Potsdam is even unlikely. No contemporary archival source provides direct substantiation. There is oblique evidence in Truman's "Potsdam" diary entry for July 25, 1945: "At 10:15 I had General Marshall come in and discuss with me the tactical and political situation. He is a level headed man-so is Mountbatten." Whether the phrase "tactical and political situation" even referred to the forthcoming Olympic operation (the invasion of Kyushu) is unclear. It may only refer to the use of the bomb. The evidence is simply inadequate to allow more than a cautious surmise.

Hence, to conclude as Giangreco does that Marshall gave Truman advice on July 25 about a possible million U.S. casualties seems highly questionable. The date of any such counsel, even much lower numbers, is suspect. Moreover, though going somewhat beyond Giangreco's claims, it is unlikely that Truman ever had a formal meeting at Potsdam with his top military leaders—Marshall, Leahy, King, and Arnold—on probable casualties or the question of using the atomic bomb. None of the available diaries (the archival versions) for Potsdam, including those by Leahy, Arnold, and Truman, as well as those by Stimson and McCloy, mentions such a meeting. Only Truman, well after Potsdam, ever claimed that such a meeting occurred.

At one point Giangreco, apparently conflating casualty with fatality estimates, claims that Skates stated Olympic would not have cost more than 20,000 casualties. Elsewhere, Giangreco admittedly got matters right and notes that Skates foresaw no more than 60,000–75,000 total U.S. casualties, including that upper limit of 20,000 dead, in the entire Olympic operation.

Giangreco is probably correct, as another reviewer of Skates's book has suggested, that the work could have benefitted from a detailed discussion of how the author arrived at the estimate of 60,000–75,000 casualties. But perhaps such reasoning, with counterfactual scenarios, appeared to be both cumbersome and distracting for an operation that never happened. Nevertheless, Skates's substantial explanation of his numbers would have been valuable.

In his final sentence, Giangreco mentions possible U.S. fatalities, contends that even a pre- or post-Hiroshima estimate of 20,000 would justify the use of the atomic bomb, and warns against "assuag[ing] the guilt of the revisionists." One wonders if he is counting Eisenhower, MacArthur, Leahy, King, Nimitz, and other World War II leaders in the ranks of those "revisionists."

Barton J. Bernstein
 Department of History
 Stanford University

SOMALIA LESSONS

To the Editor—I am grateful for the letter from GEN Downing (JFQ, Winter 95-96) clarifying the point that SOCOM was not included de jure in the odd command relations which characterized TF Ranger operations in Somalia (though SOCOM de facto involvement probably awaits the future judgment of historians). However, we disagree on the assertion that the chain of command during UNOSOM II was somehow justifiable under current joint doctrine or the Goldwater-Nichols Act. These doctrinal and legislative authorities make CINCs the focal points of operational command in order to give them the greatest possible flexibility in matching command arrangements with unique mission requirements. Of course, neither doctrine nor law can prevent mistakes, such as the one in which CENTCOM decided to retain operational control of a joint force over nine thousand miles away.

The conclusion to draw from that experience is noted in a UNOSOM II after action report: "Unity of command and simplicity remain the key principles to be considered when designing a JTF command architecture. The warfighting JTF commander must retain operational control of all forces available to him in theater and to posture those forces as allowed under UNAAF doctrine." Even though GEN Downing apparently favors a loose form of "coordination and de-confliction," in my view onscene command authority should include control over all assigned forces, including those from SOCOM. While command relationships may vary with every mission, the JTF commander must always be able to say, "You get off the plane, you work for me." Yet until that concept becomes a standard for delegating combatant command authority, we will have "lessons identified" rather than "lessons learned."

> COL C. Kenneth Allard, USA Institute for National Strategic Studies National Defense University

put your pen to paper...

Welcomes your letters and comments. Write or FAX your correspondence to (202) 685–4219/DSN 325–4219, or over the Internet to JFQ1@ndu.edu

Joint Force Quarterly

ESSAY CONTEST ON THE

REVOLUTION

in Military Affairs

o encourage innovative thinking on how the Armed Forces can remain at the forefront in the conduct of war, *JFQ* is pleased to announce the second annual "Essay Contest on the Revolution in Military Affairs" sponsored by the National Defense University Foundation, Inc.

The contest solicits innovative concepts for operational doctrine and organizations by which the Armed Forces can exploit existing and emerging technologies. Again this year, those essays that most rigorously address one or more of the following questions will be considered for a cash award:

- ▼ The essence of an RMA is found in the magnitude of change compared with preexisting warfighting capabilities. How might emerging technologies—and the integration of such technologies—result in a *revolution* in conducting warfare in the coming decades? What will be the key measures of that change?
- ▼ Exploiting new and emerging technologies is dependent on the development of innovative operational concepts and organizational structures. What specific doctrinal concepts and organizations will be required to fully realize the revolutionary potential of critical military technologies?
- ▼ How might an adversary use emerging technologies in innovative ways to gain significant military leverage against U.S. systems and doctrine?

Contest Prizes

Winners will be awarded prizes of \$2,000, \$1,000, and \$500 for the three best essays. In addition, a special prize of

Contest Rules

- **1.** Entrants may be military personnel or civilians (from the public or the private sector) and of any nationality. Essays written by individual authors or groups of authors are eligible.
- **2.** Entries must be original and not previously published (nor under consideration for publication elsewhere). Essays that originate from work carried out at intermediate and senior colleges (staff and war colleges), service schools, civilian universities, and other educational institutions are eligible.
- **3.** Entries must not exceed 5,000 words in length and must be submitted typewritten, double-spaced, and in triplicate. They should include a wordcount at the end. Documentation may follow any standard academic form of citation, but endnotes rather than footnotes are preferred.
- **4.** Entries must be submitted with (a) a letter clearly indicating that the essay is a contest entry together with the author's name, social security account number (or passport number in the case of non-U.S. entrants), mailing address, telephone number, and FAX number (if available); (b) a cover sheet containing the contestant's full name and essay title; (c) a summary of the essay which is no more than 200 words; and (d) a brief biographical sketch of the author. *Neither the names of authors nor any personal references* should appear in the text (including running heads).
- **5.** Entries must be mailed to the following address (facsimile copies will not be accepted): RMA Essay Contest, *Joint Force Quarterly*, ATTN: NDU–NSS–JFQ, Washington, D.C. 20319–6000.
- **6.** Entries must be postmarked no later than August 31, 1996 to be considered in the contest.
- **7.** *JFQ* will hold first rights to the publication of all entries. The prize-winning as well as other essays entered may be published in the journal.
- **8.** Winners' names will appear in *JFQ* and prizes will be presented at an appropriate ceremony in Washington, D.C.

\$500 will be awarded for the best essay submitted by an officer candidate or a commissioned officer in the rank of major/lieutenant commander or below (or of equivalent grades). A selection of academic and scholarly books dealing with various aspects of military affairs and innovation will also be presented to each winner.



JSTARS aircraft and light ground station modules.

By DENNIS J. REIMER and RONALD R. FOGLEMAN

The Army and Air Force are natural partners in the conduct of combat operations on and over land. Since day-to-day operations are intertwined, particularly in areas of service support, we often take this partnership for granted. It was forged during World War II, Korea, Vietnam, and most recently in the Gulf War. The most important teamwork occurs on the battlefield, where our combined capabilities produce a synergistic increase in joint combat power that provides a decisive advantage over an adversary. The Army-Air Force team is robust and forward looking, unequalled among the armed forces of the world. We

intend to strengthen that partnership as we work together in the future.

General Dennis J. Reimer, USA, and General Ronald R. Fogleman, USAF, are the chiefs of staff of their respective services.

Cooperation does not imply that we have identical views on every issue, nor that we should be combined. Each service optimizes its unique strengths. National security depends upon distinct warfighting capabilities on land, at sea, and in the air. Moreover, each service brings separate core capabilities—the missions they perform best—to the joint table. One lifetime is barely sufficient to master every skill needed to fight and lead in one medium of war. Learning to fight jointly in three is a tough business—leveraging unique capabilities, specialties, and individual competencies to the warfighting advantage of all.

Such efforts are especially important in a resource constrained environment. Together we can

relations between the Army and Air Force became strained as each tried to incorporate lessons learned in the Gulf selectively apply advances in technology to compensate for the redundancies that we have lost through the force drawdown. This process of leveraging one another's strengths builds on current doctrinal foundations to evolve a more

mature, complementary perspective of joint operations. The savings will be measurable in both lives and resources, and ultimately by mission success.

The Persian Gulf War provided a glimpse of the dramatic changes in warfare and results of rapid evolutions in technology. It also demonstrated the tremendous power which the Army and Air Force could generate by working together and with the naval services and coalition partners. After an intense air offensive disabled Iraq's key capacities and reduced its warfighting capability, the ground offensive, supported by maximum tempo air operations, demonstrated the effectiveness of teamwork in defeating an adversary and minimizing American casualties.

Both of our services gained important insights into 21st century military operations from the Gulf War; however, there are divergent interpretations of that brief conflict. Relations between the Army and Air Force became strained as each tried to incorporate and capitalize on lessons learned in the Gulf. We recognized doctrinal disparities and quickly began an effort of cooperative review to ensure our preeminence as the world's finest air-land team.

Developing Understanding

Since the Gulf War, in what has become an annual event, senior leaders of our respective services have met to discuss lessons learned as well as opportunities for improving joint operations. At the Army-Air Force Warfighter Talks in 1994 we set up a working group to tackle tough issues.

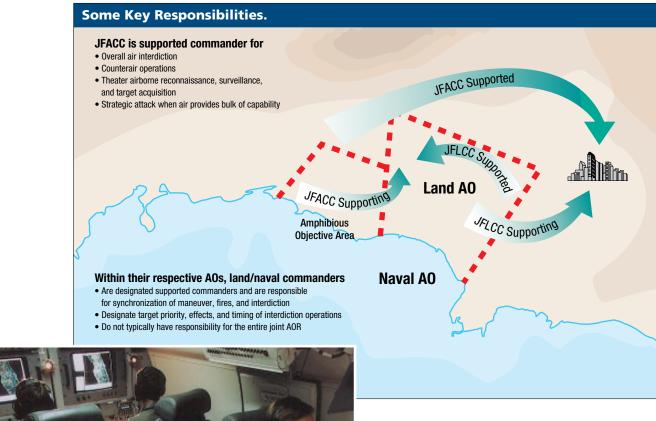
Chartered by the deputy chiefs of staff for operations and plans of both services, the group took on the job of identifying and resolving these issues. Building on a heritage of teamwork and mutual respect, Army and Air Force officers have devoted months to clarifying matters of common interest and finding useful solutions. This has led to shared understandings, increased trust, and pragmatic agreements. Numerous organizations, including Air Combat Command, U.S. Army Training and Doctrine Command (TRADOC), 1st Battlefield Control Element (BCE) at Fort Bragg, and 9th and 12th Air Forces, have helped the group. After a mid-year review revealed there were more areas of agreement than disagreement between our two services, the working group refocused on air and missile defense and on joint control measures.

The first issue centers on controlling air and missile defense assets not directly assigned to corps commanders and on theater missile defense (TMD) attack operations in the area of operations (AO) of land component commanders (LCCs). Since CINCs often employ echelon-above-corps (EAC) air and missile defense assets as theater assets, the Air Force held that such units should be put under the operational control (OPCON) of joint forces air component commanders (JFACCs). As stipulated in joint doctrine, JFACCs are normally area air defense commanders (AADCs) and will usually control all theater air and missile active defense efforts. Likewise, the Air Force saw TMD attack operations—actions to locate and destroy hostile missile launchers and their associated command, control, and supporting infrastructure regardless of their location—as counterair efforts under JFACC purview. The Army viewed TMD attack operations inside the land AO as an integral part of the LCC scheme of maneuver and supporting counterfire operations.

The group also examined joint control measures because of the apparent friction over which component commanders should plan and control deep operations beyond fire support coordination lines (FSCLs). The Air Force considered JFACCs as best suited to coordinate operations beyond FSCLs, while the Army thought LCCs should plan and synchronize fires in the entire land AO. When the working group could not completely resolve TMD or joint control measures, we agreed to address them in a four-star review at the Army-Air Force Warfighter Talks in December 1995, the results of which are described below.

Joint Doctrine

Service concerns arise when areas of responsibility potentially overlap, creating questions over control of combat assets. But on a fluid, dynamic battlefield joint force commanders (JFCs) cannot





Interior of JSTARS aircraft.

permit disagreements on issues such as targeting and missile defense to remain unresolved. Regardless of how complementary our views on joint operations might be, specific responsibilities produce legitimate differences among component commanders. We must minimize the differences and move toward greater understanding of one another's strengths and limitations.

Each component has area and functional responsibilities as well as custody of the people and resources under its command. These responsibilities may intersect when components work together. Thus we must allow flexibility for responsibilities to shift during various phases of a campaign and act to minimize mutual interference and maximize mutual support. What may be optimum for one component can come at the expense of others—by decreasing combat power or increasing risk. Joint doctrine is an excellent starting point for assisting LCCs and air component commanders (ACCs) in efforts to resolve any overlaps. Together we must learn to tailor air-land solutions to circumstances, missions, risks, and opportunities at hand.

Commanders normally seek to conduct operations to gain maximum advantage at minimum risk to their forces. For example, ground commanders stress counterfire and maneuver operations while air commanders stress strategic attack, counterair, and interdiction; yet all seek to attack deep targets and enemy air defenses to provide maximum flexibility for their forces. Such operations are not always mutually supportive, especially when resources are scarce.

Joint Publication 3-0, *Doctrine for Joint Operations*, published in September 1993, offers direction for every element of a joint force. It instructs JFCs, as senior commanders, to provide guidance and set priorities. Moreover, it establishes the latitude required to optimize and fine-tune arrangements between land and air forces under various

as partners in the air-land team, we are committed to smooth, seamless operations throughout the theater circumstances. This publication serves as a common baseline for understanding both in and among services, and also within our warfighting arrangement, the unified com-

mand structure. No component should develop doctrine that directly contradicts this validated baseline.

Joint doctrine ascribes authority and responsibility to JFCs and provides a framework for conducting joint operations and designating the roles of supporting and supported commanders. Both services recognize that LCCs are normally supported commanders in assigned AO boundaries and ACCs are normally supported commanders for theater air operations. Joint doctrine provides flexibility to allow JFCs maximum latitude to devise the best solution for a mission. If conflicting priorities arise, JFCs will determine the precedence of priorities. However, a solid basis of trust between component commanders will go a long way towards alleviating potential problems.

Key to Success

Coordination among components is critical on the battlefield. One of the best methods for ensuring proper coordination of operations is sound command and control (C2). Modern warfare requires us to increasingly share real-time, common views of the battlefield. We must understand overlapping as well as occasionally intersecting needs of component commanders, reconciling their different views with improved risk management techniques. The commanders have optimum tools in their staffs and headquarters to conduct detailed planning and execute missions. Moreover, they liaise with other components to facilitate both the flow of information and timely decisions. Senior liaison elements are important in sharing the broad concerns of component commanders.

BCE is a critical Army element attached to the senior command and control agency within the Air Force, the Air Operations Center (AOC). Similarly, the Air Force provides Tactical Air Control Party (TACP) representatives at key Army headquarters. BCE and TACP should be fully staffed with highly trained personnel to support component commanders. Senior members of both agencies must understand the intent of commanders as well as provide timely, informed decisions.

As partners in the air-land team, mutual understanding of command relationships must be strong and clear. Just as Generals George S. Patton and O.P. Weyland, the respective commanders of III Army and 19th TAC in World War II, recognized the need for a strong C² relationship between land and air components, we are committed to smooth, seamless operations throughout the theater.

Areas of Concern

Using the efforts of the working group as a point of departure, the senior leadership of our services prepared five agenda items for discussion last December: the role of the Joint Targeting Coordination Board (JTCB), joint control measures, command and control arrangements for air and missile defense, offensive counter-air and TMD attack operations, and dual hatting of JFCs. Many of these issues overlap and some may never be resolved. But when possible, candor will pave the way for greater understanding. In addition, we covered tangential areas that impact our overall relations on the battlefield. Further advances in connectivity, coordination, and perception of sister service doctrine will decrease differences and increase mutual trust.

Joint Targeting Coordination Board. The JTCB concept has been controversial since the Gulf War. The Air Force held that the board would hinder operations, while the Army contended that it was necessary to establish targeting priorities. Joint Pub 3-0 codifies JTCB without going into great detail. JFCs typically create JTCBs and define their roles. The services accept the vision of JTCB, but we agree it must be focused at a macro level. JTCB as a planning support function assists components in following the intent of JFCs in executing operations by preparing targeting guidance, refining joint target lists, and reviewing target information. The board must maintain a campaign-level perspective and should not be involved at levels best left to the component commanders, such as selecting specific targets and aimpoints or developing attack packages.

Joint Control Measures. The heart of this doctrinal discussion concerns operations beyond FSCLs but within the land force AO. Since both commanders seek to maximize results in this area consistent with their intent to shape the battle-space, it represents the greatest overlap of land and air objectives. The land component's capability to exploit deep attacks before an enemy can



Patriot battery during Roving Sands '94.

adjust to them will vary with depth, terrain, resistance, and resources. Air component capabilities will vary less with distance, but since air forces operate beyond FSCLs on a normal, continual basis, ACCs must also manage risks to their forces. Coordination and deconfliction are essential to reducing duplication, conserving resources, maximizing results, and managing risks in this area. Managing risks requires careful design and tuning of control measures and authority to minimize restrictions on all forces and maximize combat power. JFCs will normally establish forward AO boundaries and adjust as necessary to balance the needs of LCCs to rapidly maneuver with the needs of ACCs to rapidly mass and employ airpower with minimal constraints.

Between FSCL and AO forward boundaries, LCCs are supported commanders and must coordinate operations with ACCs when possible. LCCs should judiciously use control measures such as FSCLs to facilitate attack operations. ACCs should coordinate attacks inside the land AO to complement support of both the needs of LCCs and the overall theater campaign plans of JFCs. Improved friendly and enemy situational awareness, rapid information sharing, expertise in BCE and TACP,

and more advanced tactics, techniques, and procedures (TTP) will also improve mutual support between the land and air components.

Whenever we discuss targeting the placement of FSCL inevitably comes up. Joint doctrine grants LCCs authority to place this line anywhere within their AO. To maximize the effectiveness of both land and air forces, LCCs should coordinate the placement of this line with ACCs to ensure maximum coverage of all enemy targets with available assets. It is incumbent on each component commander to establish a level of mutual trust with the other commanders to make this relationship work. ACCs must provide LCCs making FSCL decisions with relevant facts that will help them, but must trust LCCs to place FSCLs in the best location to support the objectives of JFCs.

Air and Missile Defense. Coordination of fires naturally leads to this next area of concern. This issue centers on the degree of control the area air defense commander should have over EAC air defense assets. The Air Force holds that JFACCs—who are normally designated as AADCs—are supported commanders for overall theater air and

missile defense and should exercise OPCON over air defense units unassociated with a corps. The Army is reluctant to release such control over its organic EAC air defense assets.

While no one disputes the right of each unit to self defense, we must balance that right with the need for close coordination of fires against enemy threats beyond FSCLs to prevent fratricide. Since JFACCs will be operating forces in this area for counterair, interdiction, strategic attack, and surveillance and reconnaissance, coordination

political and operational pressures on JFCs were the crux of the dual-hatting issue

and deconfliction are crucial. Both services agree that while corps commanders will retain OPCON over their organic air defense units, AADCs as supported commanders will es-

tablish rules of engagement and assign air defense missions for EAC assets. LCCs must communicate their desires but trust AADCs to make the correct decisions.

The Army and Air Force have made great strides in target identification, attack cueing, and responsiveness since the Gulf War, and more improvements are on the horizon. The threat posed by weapons of mass destruction emphasizes the need to share information, tailor countermissile dispositions and response postures, and work together to create the greatest possible risk to enemy missiles. LCCs must communicate their needs to JFACCs/AADCs in developing air and missile defense plans. This close coordination is essential to ensure timely and correct decisions.

TMD Attack Operations. Closely tied to air and missile defense are TMD attack operations. While the Air Force believes TMD is part of the counterair effort requiring theater-wide integration, the Army holds that these operations are broader in scope and considers existing fire support as the most responsive for attacking enemy missiles in an LCC's AO. Regardless of opinions, common sense dictates that between FSCL and the AO forward boundary, LCCs and ACCs must coordinate TMD attack operations to maximize effects and minimize fratricide. There will be times when an airborne asset provides a more timely response to pop-up targets than a corps commander's assets. At other times a corps may have the appropriate weapon. The Air Force is considering increasing the amount of "on-call" assets available for TMD attack operations. With improved connectivity, coordination and approval will become easier. Until that time, current doctrine provides JFCs with the flexibility to develop the necessary C² arrangements based on the situation in theater.

Dual Hatting. Political and operational pressures on JFCs were the crux of the dual-hatting issue. Because dual hatting a corps commander as a division commander or a numbered air force commander as a wing commander would be irregular, the Air Force contended that a dual-hatted JFC or CINC would also be irregular, resulting in a possible loss of focus on theater or component details. During our discussions, senior Army leaders acknowledged that this could occur, but the likelihood is low. Dual hatting must be handled on a case-by-case basis. CINCs must determine, subject to the approval by the Secretary of Defense, whether to simultaneously retain command of an entire operation as JFC and a component-land, maritime, or air-or to designate another senior leader as component commander. This is in line with joint doctrine. Situation-specific political or operational considerations will influence JFC decisions to retain leadership of a specific functional component in addition to the overall JFC role.

Looking to the Future

In addition to those issues discussed at the Warfighter Talks, there are many areas in which interservice cooperation has made great strides. While the Army-Air Force working group offers an avenue to pursue such developments, other organizations including TRADOC and ACC, Army fire support elements, and various Air Force wings and numbered air forces are constantly striving to enhance Army-Air Force team operations.

To improve TTP, the services have been developing a multiservice targeting TTP under the Air, Land, Sea Application Center (ALSA). Common TTP will allow component commanders to know how other components operate. Common procedures, as well as improved C⁴I, will help ensure proper prioritization, deconfliction, and attack of targets.

There has also been an extensive effort to improve connectivity in combat identification and tracking. Tests conducted by the All Service Combat Identification Evaluation Team (ASCIET) in Gulfport, Mississippi, in September 1995 identified specific areas which needed attention. We must develop both the hardware and processes to pass real-time combat identification data among elements of all services to reduce the possibilities of air-to-surface, surface-to-air, and air-to-air fratricide. Although the work of ASCIET has just begun, its contributions will receive careful attention because we stand to gain much from its successes in the area of combat risk management. The Army and Air Force plan to incorporate

ASCIET into the next Roving Sands and Blue Flag air-land combat exercises.

Integration of this information with evolving capabilities such as the joint surveillance and target attack radar system (JSTARS) and unmanned autonomous vehicles will provide commanders with improved battlefield information. Real-time imagery is a step towards the information dominance that we are striving for.

We are making significant progress in increasing connectivity between Army and Air Force planning and fire control elements. These initiatives have the potential to greatly increase the ability to share and deconflict data on emerging targets in real time. Ongoing work to link the Air Force contingency theater automated planning system (CTAPS) and Army advanced field artillery tactical data system (AFATDS) will ensure our forces put the right weapon on the right target at the right time, increasing effective firepower while reducing waste and delay. Connectivity between air and missile defenses (such as the Army TMD Force Projection Tactical Operations Center and the Air Force combat integration capability) also helps to rapidly deconflict air and surface targets. This is increasingly important as weapons and threats change and a commander's reaction time decreases.

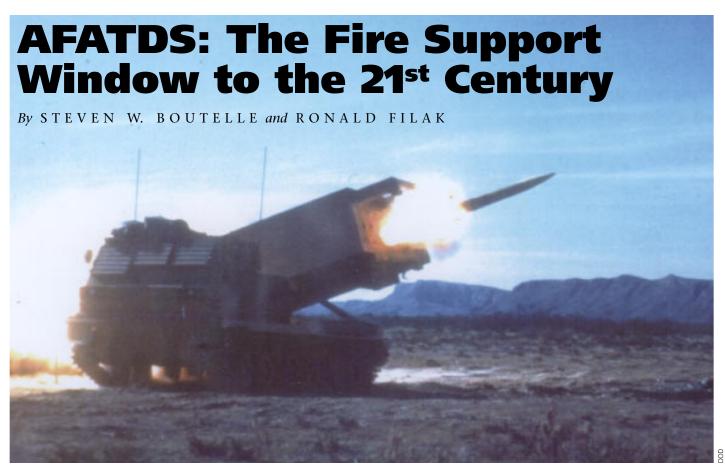
The Army-Air Force Warfighter Talks, as well as working group and interservice efforts, are each small steps towards greater understanding between our services. Improving connectivity, strengthening command relationships, and developing trust are key elements in ensuring the Army and Air Force remain the premier air-land team. We have witnessed numerous advancements over the past year that increase a commander's awareness of the battlefield. By the turn of

the century, through interservice initiatives and systems like JSTARS, our commanders should enjoy increased interoperability and a more complete view of the battlefield. Both technological enhancements and sound joint doctrine are essential in strengthening ties between our services. But great technology and good doctrine alone are insufficient. Without trust and mutual understanding, an enemy could exploit our weaknesses and possibly defeat us.

Trust is based on insight and familiarity, knowing who will do the right thing in the proper way. A soldier's expectation of airpower must be based on the realization that airmen have theater-wide perspectives and responsibilities. An airman must appreciate the vital role of airpower in land combat and understand that air flown in support of LCCs must complement the plans of LCCs. The Army and Air Force depend upon and leverage the capabilities of one another to be decisive in battle. Our separate strengths, as well as differences, will ensure that we remain an air-land team without equal. In fact, no other military will even come close.

Destroyed Iraqi fighter.





Multiple rocket launch system.

he trend toward "third wave warfare" (namely, de-massing and customizing forces and weapons) and creation of a digitized battlefield has been widely discussed within the Army. And although doctrinal and organizational implications must be finalized, it is clear that smaller, more dispersed forces as well as joint and combined capabilities will be hallmarks of future operations. Furthermore, command and control (C2) systems that support JFCs must provide horizontal and vertical interoperability and be able to exchange situa-

This also is true of fire support—that is, cannons, rockets, missiles, mortars, naval guns, and bombs-which provide lethal, flexible, and decisive assets to JFCs in prosecuting the battle. While fire support has long been characterized by

tional awareness information across the force.

massed fires such as artillery barrages or carpet

bombing, it is becoming more identified with accurate sensors, weapons systems, and munitions.

A Joint Resource

Advances in weaponry and targeting have increased the burden of managing fire support operations, always a complex and exacting process. This difficulty, however, is being lessened greatly by automation. The Army advanced field artillery tactical data system (AFATDS) is about to make its third wave warfare debut. This state-ofthe-art system supports the need for horizontal and vertical interoperability, distribution of situational awareness information, and automation in the process of matching fire support weapons systems against high-payoff targets.

From the field artillery digital automated computer of the 1960s to the tactical fire direction system (TACFIRE) of the 1980s and the initial fire support automated system of today, the field artillery community has been in the forefront in automated support for commanders in combat. AFATDS developers have drawn on experience from earlier systems—coupled with requirements

Colonel Steven W. Boutelle, USA, is project manager for Field Artillery Tactical Data Systems and Lieutenant Colonel Ronald Filak, USA (Ret.), is a member of Computer Sciences Corporation.

analysis and ongoing feedback from soldiers and marines in the field and advanced warfighting experiments—to develop a C² system responsive to a commander's needs by supporting:

- the integration of all fire support assets into the planning and execution of support for the maneuver commander's operation
- the application of commander's guidance to prioritize targets, enabling fire support assets to be directed at the most relevant and important enemy assets
- the automated exchange of digitized target information and situational awareness with other units throughout the joint force.

While AFATDS was originally an Army system, it is now joint and under development by the Army for its own requirements and those of the Marine Corps. A major portion of version 2

the Armed Forces are taking a quantum leap in conducting fire support operations in aid of a single service or JFC development incorporates Marine-unique requirements. Furthermore, preliminary discussions are underway on the applicability of the "core software engine" of AFATDS to the fire support roles of the Air

Force and Navy. This article discusses operational, technical, and interoperability features of AFATDS that provide JFCs and fire support coordinators (FSCOORDs) with these capabilities.

Operational

With AFATDS, the Armed Forces and fire support community are taking a quantum leap in the ability to provide timely help for conducting fire support operations in aid of a single service or JFC. The operational capability of AFATDS is made up of 27 major functional capabilities in five functional categories. The breadth of fire support functionality and horizontal interoperability of AFATDS make it the most comprehensive information warfare combat system available. The fire support planning function provides FSCOORDs with several key capabilities.

First, since the concepts of operation and guidance are entered into its database, AFATDS can assist in performing course of action analysis on alternative battle plans. Operators can adjust any combination of variables to identify the impact of the changes on the ability of fire support to sustain a commander's plans. The same degree of flexibility allows for the application of analysis against several options proposed by JFCs to determine which plan is most supportable from a fire support perspective. AFATDS performs this analysis using information on all types of available fire support: air attack (including attack helicopter and fixed-wing close air support), naval gunfire, mortars and offensive electronic warfare, as well

as field artillery assets (cannons, rockets, and missiles). This automated analysis process also enables a fire support commander to automatically generate and digitally distribute fire support annexes and plans.

Second, the exchange of situational awareness information allows AFATDS to constantly provide up-to-date graphic depictions of battlefield information. This provides commanders timely information with which to formulate or adjust guidance while eliminating the need to transport and post (via grease pencils and tape) bulky situation maps.

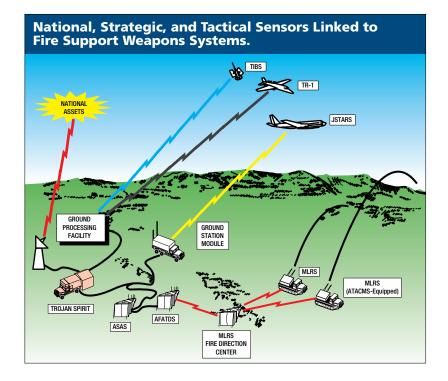
Target Acquisition

Since it is interoperable with a variety of C² systems, AFATDS provides commanders with major advances in the ability to see the battlefield and plan future operations. Intelligence collection systems can develop large amounts of data on potential targets throughout a battlefield. AFATDS provides commanders interoperability with the all source analysis system (ASAS), an automated Army C2 system used by the intelligence/electronic warfare community. ASAS, in turn, provides access to targeting information via Trojan Spirit and tactical intelligence collection systems. Trojan Spirit offers a communications gateway to national intelligence databases and multiservice tactical intelligence systems including material from the Central Intelligence Agency, Defense Intelligence Agency, and National Security Agency, as well as tactical target data from systems such as the joint surveillance target attack radar system (JSTARS), the Guardrail and Rivet Joint electronic intelligence collection systems, and the Air Force tactical reconnaissance aircraft (see figure on next page).

Planning

At the same time weapon systems are becoming more capable of attacking identified targets with pin-point accuracy. It may no longer be necessary to launch a wave of bombers or mass an attack by tube artillery to take out a critical target. Instead, planners—through the AFATDS—ASAS interoperability capability—can open the door to a storehouse of available targeting information and use automated target analysis and target attack capability from AFATDS to match weapons assets against selected targets. If a situation warrants—against tactical missiles such as Scuds—this can be done in seconds and without human intervention.

While providing access to this vast array of information, AFATDS also uses distribution criteria and graphic overlay filters to ensure that users



receive only needed information. Operator controlled distribution lists filter the information which is conveyed by AFATDS to its subordinate stations. For example, an AFATDS operator can establish distribution criteria for remote stations that will provide only information of importance.

Although vast amounts of information reside in the AFATDS computer, map, and overlay tools, human interfaces have been designed so that op-

AFATDS allows JFCs or their representatives to centrally control fires by approving each mission

erators can selectively screen information. Examples include multiple tactical overlays with varying parameters as well as the ability to control the area depicted by scrolling and zooming to portray different information. Both opera-

tors and commanders can select the information and area they want to view. Moreover, potential targets can be portrayed graphically and, at an operator's discretion, additional information on targets can be viewed by clicking on an icon and reviewing database entries.

The AFATDS database contains data which is relevant to all levels of command. However, the information routinely portrayed at a field artillery or maneuver battalion level likely differs from that portrayed at division or corps level. AFATDS addresses this situation by providing operators with the ability to establish parameters on the scope (breadth of information) and granularity (depth of information) that is routinely presented. By monitoring activities down two levels,

AFATDS operators in a corps fire support element (FSE) normally observe status down to the battalion level. However, the AFATDS database has information on firing platoons and batteries that constitute each battalion. This data is successively "rolled up" to develop status on the battalion. Corps FSE operators can institute a parameter that tells the computer to distill the information on subordinate units and report status at battalion level. (Concurrently, counterparts at division FSE or division artillery level can establish parameters, with the same database, at battery or firing platoon level.) Corps FSE operators can change a parameter to allow insight into specific information that applies to any of the firing platoons within a given area.

The fire support execution portion of AFATDS implements many functions which have not been previously automated. In providing automated target analysis—ensuring that the right target is engaged at the right time by the right weapon/ammunition mix—AFATDS offers major increases in speed fire mission processing. (Performance tests indicate that AFATDS processes missions in 10 to 50 percent of the time for Army training standards.) Fire support execution features include:

- elimination of "first in, first out" processing and engaging of targets: target management matrix and high payoff target list tools provide for sensor inputs to be matched against concept of the operation and fire support guidance to move important targets to the front of the queue
- a database of unit information, extant battlefield geometry, and fire support coordination measures to verify that target engagement complies with restrictions and guidance criteria
- software that automatically assesses the capabilities of each available type of fire support weapon system: weapon status, ammunition effectiveness and availability, commander's guidance (such as limits on selected units to conserve ammunition), and factors which determine the optimal means of engaging a target and generating an "order to fire" for selected units to engage.

AFATDS is designed to provide JFCs, FSCOORDs, and system operators with flexibility in responding to emerging needs. Each of its features is directly controlled by operator inputs. In all cases, operators have the option of inputting parameters that identify the points and conditions at which human intervention and decisions are required to continue the process. This allows JFCs or their representatives to centrally control fires by approving each mission or, conversely, to provide more decentralized execution by enabling missions that meet certain criteria to automatically be forwarded without human intervention.



Battle command vehicle with ASAS.

The remaining AFATDS functions are movement control, field artillery mission support, and field artillery fire direction operations. Movement control provides the ability to request and coordinate convoy movements while the field artillery mission support furnishes logistical backing. Field artillery fire direction operations bolster the fire support execution function by maintaining the status of weaponry, ammunition, and unit capability, and by making technical fire direction calculations.

Technical Concepts

AFATDS will ultimately become a part of the Army battle command system (ABCS), an overarching scheme conceived as the keystone of a digitized battlefield. When developed, it will furnish seamless connectivity from the tactical (squad/platoon) to strategic level (national command authorities), ensuring an integrated digital information network to support warfighting systems and C² decision-cycle superiority. This system will be realized by a migration of systems—including the current Army tactical command and control system (ATCCS)—using both an evolutionary and transitional process.

Today, AFATDS is one of five battlefield functional area (BFA) control systems that make up ATCCS. As with all ATCCS BFA control systems, AFATDS makes use of ATCCS common hardware and software. Under this concept, a project manager provides the ATCCS component systems with a suite of common computers and peripheral devices on which to host their respective BFA-specific applications software. The project manager for common hardware and software also provides common support software for basic

functions (such as operating system, graphical user interface, and communications management) as well as modules for common applications (such as terrain evaluation). This support software is being upgraded to meet joint standards for a common operating environment with automated information systems to increase interoperability. This will help assure that commanders or their staffs can, from any terminal, access the common picture of the battlefield and communicate with other operational facilities, regardless of service.

Fire support-specific software has been integrated with ATCCS hardware and software to form AFATDS. Fire support software is modular, user friendly, and can be tailored. In addition, it includes an embedded training module. The whole package is integrated in wheeled and tracked shelters developed under the ATCCS standard integrated command post system program. Shelters have one, two, or three AFATDS workstations, depending on mission requirements.

Throughout the development process, the hardware platform housing AFATDS has been consistently upgraded to state of the art. Initial fielding of AFATDS will be on a Hewlett-Packard 735 reduced instruction set computing machine; subsequent fielding will be on a Sun Sparc dual processor terminal. These configurations offer a tremendous computing potential for meeting the challenges of the dispersed Force XXI battlefield.

The operational fire support requirements were thorough and accurate. The nature of the threat, doctrine, force structure, missions, and technology have dramatically changed since initial development in the mid-1980s. With these changes has come the need for AFATDS to evolve to address future requirements. This has been done through involving AFATDS in training exercises and advanced warfighting experiments.

AFATDS was designed to operate with all standard Army tactical communications systems. Within an operational facility, AFATDS terminals share data using an internal local area network. In a maneuver command post, AFATDS exchanges information with other components of ATCCS using local area network. For communications between command posts, AFATDS transmits and receives information on the single channel ground and airborne radio system, enhanced position location reporting system, and mobile subscriber equipment packet network. Operating with these systems gives AFATDS a high degree of flexibility in satisfying its communications needs.

The challenge of minimizing bandwidth usage has also been met. For AFATDS–AFATDS communication, transfer syntax is employed to update the databases of remote stations. Under this technique, all data items are time-stamped



JSTARS aircraft.

and only those which have changed since the last update are sent. For communication with non-AFATDS stations, the variable message format (VMF) is used in lieu of the U.S. message text format (USMTF). Studies indicate that VMF messages yield bandwidth utilization savings of 50 percent over the USMTF format.

The technical design of AFATDS meets Army goals for commonality and interoperability and fully promotes fire support mission requirements.

Interoperability

AFATDS is designed to be interoperable with various systems and subsystems and to exchange information with other ATCCS elements, namely,

AFATDS V2 will include automation processes related to requesting and executing close air support missions

the maneuver control system, combat service support control system, and forward area air defense command and control system, in addition to ASAS. This includes utilizing messages that conform to USMTF and joint VMF standards, and database transfer processes which employ distributed computing environ-

ment and data distribution services software.

Using messages that conform to the TACFIRE or VMF standard, AFATDS can exchange information in the fire support community, including fire direction for the multiple launch rocket system (MLRS), cannon battery computer system, and

JSTARS ground station module. With messages that observe a four-nation common technical interface design plan, AFATDS is interoperable with British, French, and German automated fire support C² systems. The design plan was framed by these nations under the auspices of the artillery systems cooperation activities program. The basis of the technical interface is a common tactical concept document also developed under the program. The common tactical concept emphasizes a commitment to ensuring that all four nations are able to conduct fire support operations on a combined basis.

Using messages conforming to the TACFIRE and VMF message standards, AFATDS can exchange information with emerging systems such as the combat vehicle command and control system. In the future AFATDS will interoperate directly with overhead sensor systems via the commanders' tactical terminal (until that capability is provided, AFATDS will get that information through ASAS).

Program Outline

AFATDS development is a phased effort. The first phase will yield AFATDS version 1 software that automates half of the Army's fire support operational requirements. The next phase is divided into subphases and will result in AFATDS version 2.0 and 2.1 software. Operationally, version 2.0 software is focused on satisfying requirements established by the Marine Corps while version 2.1 will automate additional Army requirements. While satisfying service-unique needs, this sec-

ond phase will also incorporate major additional software modules to enhance the ability of AFATDS to participate in joint operations.

The inclusion of unified-build software—the heart of the joint global command and control system—provides software compatibility at the joint level for 19 fundamental computer processes ranging from network administration to database management. Aided by the further use of a standard application program, this will help to direct AFATDS towards the ultimate goal of full interoperability with the automated systems of all services.

As a result of ongoing work by the Naval Research and Development Center in San Diego, AFATDS V2 capabilities will include automation of processes related to requesting and executing close air support (CAS) and battlefield air interdiction (BAI) missions. This capability will ease the daily coordination and planning of fires with the facility to electronically transmit preplanned and immediate air support requests to the Air Force contingency tactical automated planning system (CTAPS). AFATDS will also be able to receive confirmation of preplanned CAS missions via the CTAPS-produced air tasking order (ATO). The operator can parse, store, and display ATO data by sortie type (such as CAS, BAI, or search and rescue) and incorporate sortie data for ATOs in the process of deconflicting air attack missions from cannon, rocket, and missile activity.

The final phase (version 3) will lead to the production of the AFATDS objective system. This phase will automate remaining operational fire support requirements and incorporate technical fire direction functionality currently resident in the battery computer system (for cannon operations) and the fire direction system (for rocket and missile operations).

AFATDS version 1 software underwent initial operational testing and evaluation in August 1995 and a Milestone III production decision was made by the Army System Acquisition Review Council (ASARC) in December 1995. The 1st Cavalry Division, as an operational test unit, has AFATDS Beta software and will become the first organization in the field to receive version 1. After ASARC III, it was fielded to elements of the 4th Infantry Division comprising the EXFOR (Task Force XXI).

Employment

To ensure that the design meets the requirements of warfighters, AFATDS has been placed with units and taken part in advanced warfighting experiments. The 1st Cavalry Division received the system in July 1993 and has taken it

through force development test and experimentation, field and command post exercises, and rotations at the National Training Center. Moreover, the division used AFATDS in Kuwait from August to October 1995 during Exercise Intrinsic Action. Feedback has led to improved human interface and selected operational characteristics.

In Germany, V Corps headquarters employed AFATDS during Atlantic Resolve in 1994. As a direct result, implementation of a deep strike support capability, first scheduled for version 3, was accelerated, and AFATDS currently can support emerging operational requirements such as attack on hostile tactical missile launchers.

AFATDS is the fire support command, control, and coordination system of choice for the following advanced warfighting experiments: Prairie Warrior (Fort Leavenworth), Warrior Focus (a Joint Readiness Training Center experiment at Fort Polk with the 10th Mountain Division), and a theater missile defense experiment at Fort Bliss during Roving Sands. Each advanced warfighting experiment allowed AFTADS developers to refine functional and interoperability capabilities.

More recently, AFTADS was used during CJTF Exercise (CJTFEX) '96 which involved more than 53,000 British and U.S. personnel in the southeastern United States and along the eastern seaboard.

The Task Force XXI advanced warfighting experiment slated for February 1997 will be the first event designed to survey the Army digitization concept on a wide scale. A brigade-plus of the 4th Infantry Division will be outfitted with computers and force management software. AFATDS will be fielded to two dozen operational facilities that deploy with the maneuver forces (including FSEs, officer vehicles, and combat observationliaision teams) and ten operational facilities that are designated to support field artillery operations (including battalion and platoon fire direction centers and field artillery battalion commanders, S-2s, and S-3s). The software delivered has been modified for the VMF message set designed for Task Force XXI operations.

AFATDS is an automated tool that will assist both JFCs and FSCOORDs in managing and assessing large amounts of available information and making effective use of forces and weapons. In meeting the operational needs of today, AFATDS offers the flexibility to support the evolving requirements of Force XXI doctrine and third wave warfare.

A PRIMER ON Naval Theater Air Defense

By ALAN G. MAIORANO, NEVIN P. CARR, JR., and TREVOR J. BENDER

Theater air defense is one of the Navy's fundamental and enduring missions. It evolved both technically and tactically following World War II to counter the threat to friendly forces posed by manned aircraft, anti-ship missiles, sea-skimming cruise missiles, and tactical ballistic missiles. The ability to quickly develop and maintain an accurate air surveillance picture, coordinate defense-in-depth with available air defense forces, and provide a high firepower response have been critical to naval operations for over fifty years.



Kamikaze attack on **USS Bunker Hill off** Okinawa, 1945.

Evolution Based on Experience

In the 1970s and 1980s, system development, tactics, and training were largely driven by the threat of massed Soviet missile attacks far at sea from long-range bombers, missile ships, and submarines. The decline of the Soviet threat and simultaneous proliferation of offensive weaponry to littoral states prompted a reevaluation of the Navy's contributions to the new world order. First outlined in . . . From the Sea, and updated in Forward...From the Sea, the focus of the Navy has shifted from an open-ocean threat to near-land

kamikazes revealed shortfalls in air defenses and ushered in an era

operations against increasingly capable regional powers. Now the global maritime threat has been replaced by regional challenges that are

equally as demanding for theater air defense forces. This change in focus has altered the primary naval air defense mission from a blue-water, open-ocean defense to a more offensive extension of naval air defenses overland. Naval theater air defense objectives are clear:

- initiate and maintain control of airspace early in a crisis or conflict
- permit safe entry of follow-on U.S. and allied forces into a theater of operations
 - protect and support forces and facilities ashore.

Navy air defense capability is built on a solid foundation of leadership in combat systems integration, experience in combined arms warfare, and decentralized command and control. These are the key strengths on which to build a theater air defense capability in the 21st century.

 USS Bunker Hill firing missile from vertical launching system.

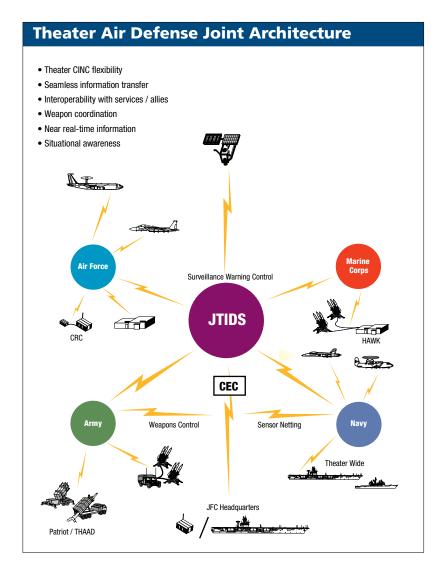
of systems development

U.S. Navy

Commander Alan G. Maiorano, USN, is the prospective commanding officer of USS Vincennes; Commander Nevin P. Carr, Jr., USN, is Aegis requirements officer in the Office of the Chief of Naval Operations; and Trevor J. Bender is an analyst with Logicon-Syscon, Inc.

In the 1920s, General Billy Mitchell introduced a new threat by sinking a target battleship, thereby demonstrating the vulnerability of ships to air attack. Early naval air defenses relied upon massive, uncoordinated fire from anti-aircraft artillery such as 20mm, 40mm, three-inch, and five-inch guns. In those days, the battlespace extended only to the visual horizon, normally less than 15 miles. Air defense was made up of a series of local anti-air battles fought close aboard, strictly in self defense. Ships counted on visual sightings and primitive, inaccurate voice communication. Subsequent advances in precision aerial bombing and torpedo bombing during World War II posed severe threats which demanded defensive capabilities.

Deploying air search radar on naval ships dramatically altered the air defense environment. Long-range detection of the enemy enabled carrier-based fighters to attrite incoming raids a number of miles from the target task force. Early detection of distant raids provided defending ships with critical reaction time to initiate limited coordination of fire among friendly units under attack. Early detection and advance warning were essential to effective air defenses when kamikazes appeared in 1944 as the first true guided missiles. Tactics evolved quickly, including tightly grouped defensive ship formations and picket ships for early warning. Although primitive by current standards, the concept of effective, coordinated defense-in-depth took shape. But tactics were limited by stand-alone equipment, intermittent voice radio communications, primitive analog fire control computers, the inability to rapidly exchange accurate target position data, and the lack of a long range weapon. The war ended before an effective anti-aircraft defense was deployed. Nonetheless, the lethality of kamikazes revealed



shortfalls in air defenses and ushered in an era of systems development.

The advent of unmanned missiles and longrange Soviet bombers led the Navy to develop defensive weapons and enhance ship-to-ship coordination. Transitioning from attacking aircraft to faster, smaller anti-ship missiles required cultural as well as technological changes in warfighting. Paradigms of air defense based on lookouts and shipboard guns were scrapped in favor of systems that integrated radar data, high speed fire control computation, and surface-to-air missiles (SAMs).

In the 1950s the Navy began deploying three guided SAM variants known as 3–T missiles: long-range Talos (65+ miles), medium-range Terrier (20 miles), and short-range Tartar (10 miles). Simultaneously, a large-scale program to convert previously non-missile ships to missile shooters was initiated with vessels capable of firing one of

these missiles. A guided missile capability was incorporated in the designs and construction of several new classes of cruisers and destroyers by 1957, built from the keel up with air defense as a primary mission.

The combination of advancements in air search radars, deployment of 3–T SAMS, and shift to carrier-based fighter jets significantly improved air defense capabilities. The extension of target detection ranges, coupled with long-range fighters and missiles, expanded the battlespace of naval task forces to over 100 miles. Targets could now be engaged far beyond the visual horizon. New command, control, and coordination requirements were placed on naval air defense forces.

Despite significant advances in radar and SAM technology, performance shortfalls against an increasingly demanding threat highlighted weaknesses in stand-alone systems. Improvements in search radars, fire control radars, computers, launchers, missiles, and displays were piecemeal, built and supported individually with design and development agencies working independently. Search radars and display systems were managed in the Bureau of Ships while fire control radars, computers, guns, and missile launchers were handled by the Bureau of Ordnance. Often the first chance to test and operate multiple system components occurred after installation. Combat systems were wired together by shipbuilders, not system engineers. Lack of technical and organizational coordination created expensive and nearly insurmountable system interface problems. The reaction time gained by increased radar detection and target engagement range was offset by manual data evaluation, display, and dissemination. Continuous attention and action were required to deal with a growing volume of tactical data required by a disparate set of warfighting equipments.

The transition from guns to missile batteries was the first step in a series of initiatives to address high speed threats. In the late 1950s, the Navy recognized that technology would one day permit an enemy to develop weapon systems that could overwhelm first generation missile sensors and equipment. The flaw was in the speed and reliability of target information exchange between ships and aircraft. Voice communication was too slow and unreliable to be effective against large numbers of supersonic missiles launched by regiment-size Soviet bomber formations. As missiles could carry nuclear warheads, ship formations became more dispersed to minimize damage from single missile strikes, further aggravating air defense coordination. Faster and more reliable means of surveillance and identification data exchange were required.

The Navy tactical data system (NTDS) was introduced in 1958, the world's first shipboard tactical data system based on programmable computers. This was an initial step in the integration of multiship systems in a force-wide air defense system. Conceived as a means of exchanging air surveillance radar information throughout a task force, NTDS replaced and automated older manual displays and reduced dependence on voice communications for air defense. NTDS incorporated target position and identification information from a ship's sensors, as well as information inserted over an electronic data link by other ships in a task force, into one computer-managed track file. Data were exchanged and updated among ships several times per minute via an elec-

E-2A Hawkeye expanded air defense surveillance and battlespace beyond a ship's radar horizon

tronic data link known as Link-11. Early warning and reaction time, information exchange speed, and information reliability improved strikingly. Link-11 data standards and protocols were adopted by Britain and

Canada and soon by NATO as a whole. The system's efficacy is reflected in the fact that NTDS, upgraded over the years to keep pace with threat and technology advances, remains at the heart of naval and joint air defense management systems today.

NTDS linked long-range surveillance sensors and surface-to-air weapons for the first time with an automated information management system to support the coordinated defense of widely distributed forces. Air defense tactics continued to evolve as individual ships became more potent defenders and anti-air warfare commanders (AAWCs), responsible for defending battle groups or task forces, became capable of monitoring battlespace beyond the range of their organic sensors. With more reaction time and reliable target identification and position data, further decentralization of air defense command and control became possible. Able to oversee numerous individual ship engagements, AAWC could quickly and reliably provide command by negation or direct specific target assignments when necessary. In response, a centralized control/decentralized execution anti-air warfare organization was implemented. Area defense provided from forces at sea or near land became a reality. With an information exchange system (NTDS) and the requisite firepower (3-T missiles) coordinated through an effective command and control mechanism, naval forces could regulate the air battlespace within a designated theater.

These tactical and technical advances came none too soon. The Soviets began deployment of a series of air and surface launched cruise missiles in the 1960s, including the subsonic Styx. The following year Badger C and Bear B/C long-range bombers were equipped to fire supersonic, nuclear-capable AS–2 Kipper and AS–3 Kangaroo air-to-surface missiles from ranges in excess of 100 miles. The launch range of some weapons extended beyond the surveillance range of radars aboard ships. Undetected missile launch and supersonic speeds combined to reduce reaction time, while increasing raid density threatened to saturate defenses.

The Navy recognized that stand-alone defense components would eventually not be capable of responding to air threats. Search and fire control radars were based on analog technology and first generation computers. SAM launchers depended upon hydraulic loading operations and large rotating magazines, restricting the rate of fire to one or two missiles a minute. High speed, low altitude cruise missiles stressed existing missile fuzing systems. In combination, the standalone components were manpower intensive and could not react in the required time.

The widespread introduction of digital and other electronic technologies initiated a period of combat system improvements that affected almost every aspect of sensor, weapon, and launcher design. This development included true combat system integration for the first time. In 1963, the 3-T missile effort transitioned into a dual-track Standard missile (SM) program which incorporated earlier designs. Though Talos was discontinued, Tartar became SM-1 (MR or medium range) and Terrier became SM-1 (ER or extended range). Responding to the threat of cruise missiles, SM had an improved autopilot, proximity fuzed target detecting device, greater range, jamming resistance, and inertial navigation to guide the missile from the launch ship to a designated homing basket.

Advancements in combat system capability were not limited to ships. In 1964, the E-2A Hawkeye airborne early warning aircraft entered the fleet. With an aircraft version of NTDS to exchange track data with other ships and aircraft, Hawkeye expanded air defense surveillance and battlespace beyond a ship's radar horizon, restoring costly reaction time for fleet air defense units. With the advance warning provided by E-2 airborne radar, carrier-based fighters and guided long-range SAMs became the first line of air defense for task forces as tactics stressed "shoot the archer" before an arrow was launched. Fighter and ship actions, target assignments, and the employment of weapons were initiated by preplanned operational orders and coordinated via NTDS by AAWC. Together, missile ships, E–2s, and fighters exchanged data continuously via Link-11 to mutually reinforce defense-in-depth. This tactic focused on heavy attrition of incoming raids, forcing enemy aircraft and missiles to penetrate multiple, coordinated layers of defense.

Vietnam provided the first test of new air defense capabilities. Not only did systems prove to be reliable and effective for air defense of forces at sea; the Navy also found that it could extend the air defense envelope over land in support of forces operating near the coast. Various enemy air bases were within shipboard and E–2 radar range, allowing naval forces to monitor and respond to launch and recovery activities. In 1965, the guided missile cruiser *USS Long Beach* engaged two MiGs detected 60 miles inland with shiplaunched SAMs. From offshore, naval forces showed that they could protect friendly forces operating in port facilities, beachheads, and coastal airfields.

Theater Air Defense Matures

Throughout the conflict in Vietnam, enemy aircraft frequently flew in the same battlespace as friendly air forces. Tactics and procedures proved sufficiently responsive and flexible to enable AAWC to manage the complex battlespace as well as adjust to various operating environments and threat conditions. Air defense tactics were tested and refined. Fleet air defense identification zone procedures were drafted to control the intense air surveillance and identification environment over the Gulf of Tonkin and to confirm the identity of returning friendly aircraft. Later, the procedures were used extensively to track, identify, and deconflict thousands of flights over land and water in the Persian Gulf War. Zero blue-on-blue engagements remains an essential air defense criterion.

In spite of advances, new dangers from high speed sea skimming cruise missiles required more than incremental improvements. Rotating radars updated data too slowly on targets travelling at supersonic speeds. A widespread reliance on stand-alone combat system components imposed manpower intensive and time consuming steps in the detect-track-engage sequence. A shipboard combat system was required to automate manpower intensive functions and to enable employment of on board weapon systems more rapidly. In response to these air defense challenges, the Navy began full scale development of the Aegis shipboard weapon system in 1973.

Aegis combined virtually every aspect of anti-air warfare management in a fully integrated, multi-sensor, computer-aided combat system. Introduced operationally in 1983, the heart of the Aegis weapon system is the SPY-1 phased array radar, which provides automatic detection and

fire control quality tracking for hundreds of targets simultaneously. Since its radar also communicates directly with SMs in flight to provide midcourse guidance information, the demand to dedicate a separate fire control radar for the duration of a missile's flight is eliminated. Target illumination, required for semi-active homing missiles, is provided only for the final seconds of missile flight, or endgame. The result is a dramatic increase in the number of simultaneous engagements, since the ship is no longer limited by the availability of tracking fire control directors. The uniqueness of the fully integrated Aegis weapon system is not only in the increased number of actions completed automatically, but also in the ability of operators to alter the conditions under which actions can be performed using automated doctrine. This is accomplished by programmable "if-then" statements that associate track criteria such as speed, altitude, IFF (identification, friend or foe), and range with a specific automatic or semi-automatic action.

Throughout the Aegis design and development process, five performance factors were used to evaluate its capabilities: reaction time, fire-power, electronic countermeasure and environmental resistance, continuous availability, and coverage. With design efforts focused, new initiatives and potential warfighting capabilities had to contribute to the improvement of one or more of these key performance factors. The era of standalone components and black boxes, which required added shipboard manpower and unique logistics tails, had ended. In the past twenty years, these factors successfully guided every modification or upgrade to the Aegis system.

Three other recent developments promise to have a dramatic impact on theater air defense: cooperative engagement capability (CEC), joint tactical information distribution system (JTIDS), and the proliferation of tactical ballistic missiles. CEC is a computer-based information exchange system that allows ships or aircraft to remotely share raw radar measurement data at near real-time exchange rates. Cooperative engagement is a natural result of tactical computer networking which captures major technological and reliability advancements in high speed computer processing and communications. With sensor netting fire control, quality sensor data can be exchanged among multiple cooperating units (CUs) including ships, aircraft, and ground forces, enabling participants to view the same tactical picture. The potential for force-wide automated doctrine to assist track evaluation, identification functions, and engagement decisions could optimize the speed,



Aegis cruiser launching multiple Standard missiles.

reliability, and utility of data exchange. Leaders can spend more time evaluating data than processing it.

CEC is being tested at sea today. Planned for operational introduction in 1996, it provides a quantum leap in data accuracy exchange between air defense forces. CEC-equipped forces will be able to engage hostile targets not seen on their sensors. The unparalleled accuracy of composite track data will allow missiles in flight to be handed off to other units better positioned to control the engagement endgame. The implications for coordination of air defense actions across the entire theater of operations are enormous.

In addition to CEC, JTIDS is being fielded by all services. This system is a high speed, secure, jam-resistant, voice and tactical data communications system over Link-16. It provides users with real-time position, status, special purpose, and identification information on friendly, unknown, and hostile tracks. The associated command and

control processor (C^2P) introduces the capability to exchange information between tactical links (such as Link-11, Link-16, and CEC) and conduct multiple simultaneous data link operations. JTIDS will be the joint surveillance, warning, and command and control coordination net of the next century.

Finally, the widespread proliferation of tactical ballistic missiles (TBMs) is the most recent and threatening challenge to effective air defense. The Gulf War clearly demonstrated the tactical and strategic impact of TBMs and stressed the political and military importance of TBM defense. Like anti-ship cruise missile defense at sea, TBM defense of forces ashore has become an essential to successful operations in regional conflicts. To achieve this capability quickly and affordably, the Navy is capitalizing on prior investments in SM and the Aegis weapon system, which are being



Task Force 70 in western Pacific.

modified to incorporate a TBM capability. Defense against TBMs from ships at sea will permit a safe entry of joint forces into a hostile theater.

The real-time exchange of tactical information among the services is fundamental to joint operations along littorals. With multiservice track data exchange provided by JTIDS and planned CEC deployment with real time shooter-to-shooter coordination, the C² architecture to orchestrate theater air defense units at sea and

flexible and robust tactics are in place to support Navy, joint, and allied air defense requirements

ashore will be in place. Synergism among recent air defense advances—Aegis, CEC, JTIDS, and theater ballistic missile defense (TBMD)—makes them

force multipliers and ensures robust air defense and seamless transition to a joint command structure on arrival of follow-on forces.

Since Vietnam, air defense tactics and procedures have been developed to address specific requirements of near-land and amphibious operations, emphasizing early coordination with marine and joint forces ashore. The reorientation of the Navy toward littoral operations imposes added C³ requirements on commanders ashore. Forces operating ashore or in an amphibious objective area require defenses against cruise missiles, hostile air, and tactical ballistic missiles. The increasing emphasis on joint operations in regional conflicts established a clear demand for theater air defense battle management procedures to quickly transition from an area air defense

commander (AADC) afloat to a counterpart ashore without loss of continuity.

Navy theater air defense is a model of jointness and the product of technological evolution, training, and operational lessons. AAWC is normally stationed on board an Aegis cruiser. In the open ocean they control and coordinate air defense assets, including guided missile ships and early warning, combat air patrol, airborne tankers, and electronic warfare aircraft. Landbased aircraft are coordinated through AAWCs who are responsible for proper identification, check-in, and flight safety. Coordination among air defense units is accomplished via Link-11 (increasingly by JTIDS) and optimized by CEC among shooters. Flexible and robust tactics are in place to support Navy, joint, and allied air defense requirements, near-land or in open ocean, including operations from crisis prevention to regional conflict.

The Navy theater air defense capability is derived from equipment, computer programs, tactics, and training that have evolved over fifty years. Periodic validation in combat has proven the efficacy of these capabilities and demonstrated the Navy's essential contribution to air defense. Driven by a changing threat, tactical and technological improvements have ensured that the Navy maintained its air defense capabilities in every potential theater of operations. For the foreseeable future, the Navy role in air defense will include four key components:

- fleet and amphibious objective area air defense against cruise missiles, aircraft, and tactical ballistic missiles
- overland area tactical ballistic and cruise missile defense of joint and coalition forces
- tactical TBMD for defense-in-depth and reassurance of allies
- joint theater air defense battle management and C³ prior to and during transition to AADC ashore.

Navy ships and aircraft are forward deployed 365 days a year in virtually every region of the world. They can establish an air defense umbrella at sea or overland, bring organic firepower for area and self defense, and provide doctrinal automation to help watchstanders remain vigilant for long periods of time under stressful conditions. CEC-equipped, TBMD-capable Aegis ships (with SM block IV variants) ensure that the Navy stays in the vanguard of joint theater air defense in the 21st century.



P-51s escorting bombers during World War II.

oint force commanders (JFCs) must achieve and maintain air superiority against a range of threats. Controlling the air is a prerequisite for force projection, surveillance, interdiction, strategic attack, and surface maneuver. Politically, command of the air environment can be an integral aspect of coalition cohesion, especially when population centers are at risk.

The joint warfighting capability assessment (JWCA) process was instituted to ensure that the

myriad aircraft and missile threats must be neutralized to attain air superiority warfighting needs of CINCs are met. To support this process, the air superiority JWCA team established a framework, based on a strategy-to-task analysis, for controlling the air. It focuses on

gaining unimpeded use of airspace while denying it to an adversary. One aspect of the strategy-totask analysis is that myriad aircraft and missile threats—aircraft, cruise missiles, ballistic missiles, and surface to air missiles—must be neutralized to attain air superiority.1

Because all components and allied forces have some assets to counter such threats, JFCs face a dilemma in integrating them. Lessons from World War II to Desert Storm highlight the role unity of command plays in neutralizing threats. In terms of emerging capabilities, these lessons also reinforce the relevance of command which unites offensive and defensive operations, since the former can profoundly reduce stress on the latter. Moreover, countering aircraft, cruise missiles, and ballistic missiles is tied to theater air operations and is central to airspace control. For instance, fighter and surface based air defenses must be integrated under a single air commander to maximize effectiveness, minimize fratricide, and avoid inhibiting offensive air operations such as close air support and interdiction. Therefore, joint force air component commanders (JFACCs) must have responsibility and authority to control joint operations to counter aircraft and missile threats.

Major Vincent P. DiFronzo, USAF, is a fighter pilot assigned to the directorate of operational requirements at Headquarters, U.S. Air Force.

The World War II Record

Operations in Western Europe in the latter part of World War II, when contrasted to Desert Storm, reflect the importance of unity of command in air superiority. Allied unity of command

> for air superiority fifty years ago was marginal, whereas in the Gulf War there were very clear lines of authority. In the European theater the Allies had two commanders with different concepts of how airpower might achieve their objectives. General Carl Spaatz, commander of U.S. strategic air forces, felt the Luftwaffe had to be defeated before the Normandy invasion by striking enemy aviation and oil industries as well as the Luftwaffe itself. But Air Chief Marshall Sir Trafford Leigh-Mallory, who had responsibility for Allied tactical forces dedicated to support the land invasion, held that air superiority could be achieved by waiting to fight off the Luftwaffe over the beaches of Normandy dur-

ing the landing. It is an understatement to characterize Leigh-Mallory's approach as high risk.²



Squadron Leader Joseph Berry, RAF, credited with downing 60 1/3 V-1s.

Strategic bombing losses had become prohibitive in 1943 and the Allies had not established air superiority. Spaatz realized that an all out effort, including P–51s and medium bombers under Leigh-Mallory's control, would be needed to defeat the Luftwaffe. But the air marshall would not release medium bombers for counterair operations. After debating this question for weeks, Spaatz won support from Air Chief Marshall Sir Arthur W. Tedder, the deputy supreme commander, who directed Leigh-Mallory to support the counterair operation. P-51s began escorting heavy bombers deep over German territory as fighters and medium bombers attacked Luftwaffe airfields. Direct air and ground attacks against the German air force greatly increased Allied bomber survivability and imposed a 20 percent monthly pilot attrition rate on the Luftwaffe.

Meanwhile, Spaatz ordered controversial attacks against the enemy oil industry. Primarily because of persistent attacks on the *Luftwaffe* and its source of fuel, not a single German aircraft successfully threatened the landing force during the daylight hours of June 6, 1944.³ Within the first week of the invasion, the few operational German fighters within striking range were directed to "abandon the ground support role" and concentrate on air defense. Meanwhile, the continuing bomber offensive destroyed 90 percent of enemy aviation fuel by the end of June 1944, rendering the *Luftwaffe* ineffective against ground forces and only marginally effective against air operations.

Even though coordination alone is normally not adequate to achieve unity of effort, most of these operations occurred prior to the invasion when competition for Allied air resources was not based on requirements for ground combat or air defense and there was time to debate strategy. But despite overcoming command discontinuity in operations against manned aircraft, the Allies were not as fortunate with Operation Crossbow—countering V–1 cruise missiles and V–2 ballistic missiles—for which a special committee was established to direct intelligence and operational efforts.

Crossbow directives were inconsistent and, despite ample information on launch sites and their infrastructure, the lack of perfect intelligence became an excuse for delaying critical targeting decisions. For instance, the original launch infrastructure for V-1s was completely destroyed prior to the initial attacks, delaying the V-1 offensive by several months. But the committee chose not to target alternate launch sites which were under rapid development. Ultimately, the Germans staged the V-1 offensive from those sites and Allied operations against them were erratic. Moreover, the committee failed to direct targeting against three supply dumps used for the final assembly of V-1s, despite the fact that a single attack on one site led to a marked reduction in launches for a week.

Nor did the committee come to decide on the best weapon system to employ against launch sites. Despite evidence that low altitude fighter attack had the pin-point accuracy to neutralize such facilities with minimal sortie expenditure, the committee refused to commit fighters, preferring to use heavy and medium bombers which were too inaccurate for the task. The Allies compensated in mass and committed 31,000 sorties, or 22 percent of the air effort between November 1943 and May 1944, to strike the original launch infrastructure. However, the payoff was marginal because alternate launch sites and supply depots were ignored.

Defensively, the Allies had no capability against V–2 ballistic missiles, employing fighters and anti-aircraft (AA) guns against V–1 cruise missiles. Fortunately, because they had successfully countered the aircraft threat, air defenses in London, Antwerp, and Liege were optimized against V–1 missiles, greatly increasing air defense effectiveness.

Air Marshall Sir Roderic Hill was responsible for AA, fighters, and barrage balloons in the defense of Britain. Initially AA guns were not appropriately calibrated to engage V–1s, so Hill restricted gun operations and modified the rules of engagement to take full advantage of fighters. After the guns had been modified, he saw an opportunity to improve the entire air defense system

by repositioning guns to optimize their effectiveness while restricting fighters. Six weeks after the guns were repositioned, air defense performance peaked as the guns and fighters intercepted 90 of 97 cruise missiles in one day. Although unity of command for this regional defensive effort was valuable, it was not sufficient.

As the locus of V–1 attacks shifted to the continent and V–2 attacks began, Hill could not efficiently redirect his fighters for preemptive strikes or defense of critical assets across the channel because there was no theater commander concentrated on counter V-weapon operations with which timely coordination could be effected.

Overall, the Crossbow committee was a poor vehicle for offensively countering V-weapon operations. According to one official history, the Allies, "hampered by their failure to make clear-cut choices between the various courses open to them, never achieved the singleness of purpose which might have helped them to stake successfully on information that fell short of certainty." ⁴ The chroniclers of the Army Air Forces were even more pointed:

There were serious faults...in the organization of controls over the [Crossbow] campaign.... As to the failure in organization, below the supreme commander's immediate staff, Crossbow channels were, in their complexity and gradually fading dispersion of authority, hardly to be rivaled.⁵

In the end, the Allies suffered 32,000 military and civilian casualties as the result of V-weapons.

In retrospect, despite disunity of command the Allies succeeded against the manned aircraft threat because General Spaatz was able, through persistence and personal commitment, to marshal unity of effort against the *Luftwaffe*. Operations against the V–1 and V–2 lacked unity of command and effort and thus failed to neutralize the threat.

The Lessons of Desert Storm

We again floundered over unity of command for air operations during both the Korean and Vietnam conflicts. Then, in 1986, the Joint Chiefs of

Iraq had an advanced air defense system with SAMs and fourth generation fighters

Staff codified the concept of a single joint air commander in Joint Pub 3–01.2, Counterair Operations. According to it, counterair operations are "all measures such as the

use of SAMs, AAA, fighters, bombers, and ECM to defeat the enemy air and missile threat both before and after launch." Fortunately, this doctrine was applied during the Gulf War, with unity of command for all air operations to include air superiority. As JFACC and area air defense commander,

Lieutenant General Charles Horner, USAF, integrated offensive air operations as well as directing "a combined, integrated air defense and airspace control system in coordination with component and other friendly forces."

In Desert Storm, we confronted a sophisticated, battle-proven air threat. Iraqi fighters had made mass raids during the Iran-Iraq conflict, including chemical weapons delivery.6 Moreover, intelligence assessed possible chemical and biological storage bunkers at several airfields, leading General Norman Schwarzkopf to fear a massive "Tet-like" attack by Iraq's air force. The enemy also had employed Scuds against Iran, and the coalition was concerned that these missiles could be used to deliver weapons of mass destruction (WMD). In addition to posing a significant offensive threat, Iraq also had an advanced air defense system with SAMs and fourth generation fighters, all coordinated through a complex command and control system.

The coalition launched Desert Storm with the distinct advantage of unity of command for air operations and a clear strategy to deny sanctuary to the enemy. All elements of Iraq's air force, ground-based air defense system, and supporting C³ were attacked simultaneously the first night of the war. This included synchronized attacks on early warning sites as well as command nodes by Army attack helicopters and Navy Tomahawk missiles. The missions were planned under JFACC by the joint air operations center in Riyadh and disseminated on the air tasking order.

During the initial hours of the campaign, Iraqi SAM operators came to fear high-speed antiradiation missile (HARM) attacks and transitioned to non-radar guided launches, greatly increasing survivability but severely limiting lethality. We persistently targeted airfields since enemy fighters posed a multi-role offensive and defensive threat. Airfield attacks, compounded by 14 Iraqi air-to-air losses in the first two nights, convinced Baghdad to disperse its air force rather than challenge coalition airpower, much like the SAM operators who chose survivability over effectiveness.

Offensive missiles, primarily Scuds, also were a challenge. Allied aircrews had not trained against Scuds, and intelligence on infrastructure was sparse. A total of 1,245 sorties were flown against the Scud infrastructure, including production facilities, hide sites, lines of communication, and C³. Another 1,215 sorties were launched as combat air patrols (CAPs) to attack launchers and support vehicles. Of these, a thousand were diverted to alternative interdiction or strategic targets after the time allotted for a CAP expired. Inadequate sensors and cumbersome communications made it difficult to find and attack transporters, erectors, and

launchers (TELs). However, fighter presence may have deterred Scud launches.

Special operations forces (SOF) were also integrated into counter-Scud operations. Initial aircrew reports of success, combined with compelling battle damage video, reinforced by a sharp decline in Scud launches, convinced air planners that these attack operations were effective. Despite limited battle damage assessment capability, coalition SOF teams also verified several Scud TEL kills. Moreover, the Scud launch rate during Desert Storm was 35 percent lower than against Iran in the so-called "War of the Cities" of 1988 despite the fact that Iraq possessed more launchers and missiles during the Gulf War.7 Attacks against infrastructure and TEL facilities—operations not exercised by the Iranians in 1988—were a likely cause for reduced launches. Furthermore, the enemy executed 80 percent of its launches at night, most in poor weather. This is a logical way of limiting vulnerability, consistent with the actions of Iraqi air defense and air force counterparts who also more highly valued survival. Overall, there was a trend that reflected a reduction in launches by enemy aircraft,



Iraqi aircraft bunkers during Desert Storm.

guided SAMs, and Scuds despite the capacity to employ those weapons.8

Patriot represented the coalition's only defensive theater ballistic missile (TBM) capability. Despite the controversy over tactical effectiveness, Patriot missiles protected forces and population centers in both Saudi Arabia and Israel. While primarily relying on Scuds for offensive air attack, Iraq launched one mission with two F–1 Mirages into Saudi airspace, possibly with Exocet anti-ship missiles. Saudi F–15s destroyed the fighters under AWACS control. In this case, our forces were protected in a time-critical situation with standardized procedures and unity of command.

Throughout the campaign, unity of command for air operations led to a coordinated offense and defense that included assets from all components and coalition members, unlike experiences in World War II. A fully integrated joint approach is even more important against emerging threats.

Threat Trends

The aircraft and missile threat of the future will be more capable and diverse than in past conflicts, including increased lethality, range, accuracy, stealth, and progressive countermeasures. Fourth generation threat aircraft such as the MiG–29 are being produced and exported, while older aircraft like MiG–21s are being modified with fourth generation weapon capabilities. Additionally, advanced SAMs are being acquired worldwide and counter-stealth capabilities are in high demand.

Offensively, ballistic missiles are being acquired by developing nations as more advanced missiles are produced with increased ranges. For instance, the maximum range of Iraq's modified Scud is 600 kilometers. North Korea recently tested the 1,000-kilometer Nodong missile and also is working on the Taeodong II, a missile with a 3,500 kilometer range. Anti-ship cruise missiles have been a threat since the 1960s, and the spread of stealth technology will increase the risk to naval forces, especially in littorals. Land attack cruise missiles could also be a serious threat if guidance improvements are married with stealth capability. The accuracy of cruise missiles will improve with access to advanced internal navigation technology and satellite navigation information, such as the American global positioning system and Russian global navigation satellite system.

But the most serious trend, WMD proliferation, does not typically rely on accurate delivery vehicles. A number of states, including Iraq, Iran, North Korea, Syria, Libya, and former Soviet republics, possess or are seeking the technology for nuclear, biological, and chemical capabilities. These weapons can be paired with aircraft, cruise missiles, or ballistic missiles.

Air Superiority Trends

The United States is moving to counter the diverse aircraft and missile threat. A review of future systems illustrates how different systems must be synchronized to achieve unity of effort. Future fighters such as the F–22, with its high speed and low observability, will enable our forces to dominate the air over enemy territory early in the campaign, clearing the path for other attack and surveillance aircraft and protecting friendly forces from aircraft and cruise missile attack as well as preventing aerial observation.



Apache cruise missile awaiting buyers.

Improved surveillance systems will ensure early detection of cruise missiles and aircraft. AWACS, E–2s, and potential aerostats will offer cues via LINK–16 to fighters as well as terminal systems. Wide-bandwidth communications, such as the Navy cooperative engagement capability

systems must remain integrated in air defense architecture to provide layered defense

(CEC), will allow raw data from multiple sensors to be fused in realtime to enhance the common air picture. With sufficient sensor data, CEC can extend

the engagement range of terminal systems beyond the horizon line-of-sight.

SAMs can be neutralized by HARM, the joint standoff weapon (JSOW), the Army tactical missile system (ATACMS), and the Navy tactical land attack missile system (TLAMS). Non-lethal SAM suppression will depend largely on the upgraded Navy EA–6B. Detailed centralized planning along with joint battle management will support timely decentralized execution.

The Patriot PAC-III will offer an improved capability over the PAC-II of Desert Storm and, along with Navy lower-tier assets, will provide a basic TBM point defense while preserving or improving defenses against the air-breathing threat. Therefore, these systems must remain fully integrated in air defense architecture to provide a layered defense in the future. The Army THAAD and Navy upper-tier will engage TBMs at higher altitudes and defend larger areas. The airborne laser will intercept TBMs during the boost phase, protect wide areas, and deposit warhead debris over enemy territory—a deterrent to WMD use. Because such systems take time to field, we will be even more reliant on offensive measures as part of an overall counterair strategy in the interim.

Collectively, improvements in attack operations systems since Desert Storm are significant. For post-launch strikes, overhead detection of TBMs is now processed more effectively to locate launch sites, probably the greatest shortcoming in attack operations during the Gulf War. Soon after launch, evolving battle management systems will be able to pass launch point estimates to fighters, ATACMS, and attack helicopters. Currently, F-15Es, F-16s, and F-18s have moving target indicator (MTI) radar modes that allow them to track fleeing TELs. Additionally, U-2 sensor information is being processed in-theater in near real-time, in contrast to Desert Storm operations where control and processing resided in the United States. JSTARS offers a wide area capability with MTI for moving targets and synthetic aperture radar for fixed target location. Unmanned aerial vehicles provide similar capabilities deep in enemy territory.

Much remains to be done to exploit inherent sensor capabilities to detect and identify time-critical targets. Intelligence and surveillance information must be combined in near real-time, analyzed, and preferably data-linked to shooters to minimize time-lines. Further, from a planning and execution standpoint, joint battle management will be essential for capitalizing on these varying capabilities which will also be in high demand for other mission areas.

Overall, a significant investment is being made in weapons systems which either directly or indirectly contribute to attaining air superiority. These will be complimented by battlespace awareness and battle management tools. A challenge to JFCs will be ensuring unity of effort to prevent piecemeal use of these systems. The first step toward success is a logical doctrinal construct.

Air Superiority

According to joint doctrine, "The purpose of unity of command is to ensure unity of effort under one responsible commander for every objective." Current doctrine recommends that JFCs normally designate JFACCs as supported commanders for counterair operations. This obviously includes command authority for all joint operations to defeat both aircraft and SAM threats, based on JFC guidance. However, for operations against cruise and ballistic missiles, doctrine sanctions divided responsibility among the components.

There are a number of advantages to completely integrating counter-TBM and cruise missile efforts with overall air superiority operations. First, JFC needs to ensure forces and vital interests are free of air attacks. Defeating part of the air

threat is inadequate in an era when delivery vehicles are becoming more accurate and lethal and can project WMD. Second, all systems with an aircraft defense capability also have capabilities against missiles—Patriots, Aegis destroyers and cruisers, and Hawks either can or will soon be able to counter aircraft, cruise missiles, and ballistic missiles as fighters engage aircraft and cruise missiles. JFACCs, who derive their authority from JFCs and maintain a dialogue with JFCs and other components, can capitalize on strengths in one defensive system to offset weaknesses in others, based on the overall enemy air order of battle. Last, offensive operations can be prioritized to compensate for weaknesses in defense and viceversa.

Operational capabilities used to counter aircraft threats often overlap with those used against cruise missiles. To operators of surveillance and weapon systems, cruise missile and aircraft radar tracks will often appear identical in their flight profile, airspeed, and altitude. This normally means that rules of engagement, combat ID, and weapons control measures will be similar if not the same for defense against aircraft and cruise missiles. Furthermore, overlaps and voids in engagement capability between surface-based systems and fighters must be managed to optimize overall system capability. For example, surface based systems designed to engage TBMs at high altitude can be augmented by fighters to take on low-altitude cruise missile and aircraft threats. This level of teamwork requires clear command authority and an integrated communications system.

In addition, overall rules of engagement and defensive force lay-down must be consistent with the air concept of operations and airspace control measures. 10 As airspace control authorities, JFACCs are charged with safe passage of joint and combined offensive, surveillance, and support missions to include military airlift and civil aviation. Integrating air defenses with other airspace requirements in a combat zone is daunting because of the enormous demand on limited airspace. For example, JFACC deconflicted 3,000 sorties per day during the Gulf War while monitoring and controlling 160 restricted operational zones, 122 airborne refueling points, 32 CAP areas, 10 air transit routes, 60 Patriot engagement zones, 312 missile engagement zones, 60 restricted fire areas, and 17 airbase defense zones. Because of the underlying friction between airspace control measures and air defense (including missile defense), any change can cause a ripple effect. Thus, centralized planning under JFACC is essential with a streamlined battle management structure to support decentralized execution of air defense while simultaneously providing airspace Ultimately, JFCs must integrate air defenses to maximize the attrition of enemy air vehicles while minimizing fratricide. Previous exercises have identified a positive correlation between high threat attrition and high fratricide. Several variables influence that link, including clear command authority, joint training, combat ID capability, and interoperable communications links. JFCs and components can influence our capability in the short term by integrating aircraft and missile defense operations under JFACCs and pursuing joint training consistent with this approach.

Historically, positive control over terminal systems by JFACCs through decentralized battle management systems such as AWACS has limited fratricide. Positive control of terminal systems also minimizes procedural routing constraints on CAS and short range air interdiction missions, effectively giving corps or MAGTF commanders more offensive airpower to support close combat operations. This will remain the case against aircraft and cruise missiles because of their similar flight profiles. Finally, positive control never infringes on the right to self defense and does allow surface commanders the flexibility to position organic air defense units as required to protect their forces. However, procedural control is normally adequate for ballistic missile engagements, given that engagement airspace is deconflicted, since there is minimal risk of fratricide. Of course, JFACCs can also influence overall defensive performance by reducing the diversity and number of threats through offensive operations.

More importantly, JFACCs can prioritize offensive operations to compensate for weakness in defense. Unfortunately, current joint doctrine considers attack operations against cruise missiles and ballistic missiles to be part of "counterair, strategic attack, interdiction, fire support, maneuver, antisubmarine warfare, antisurface warfare, strike warfare, amphibious operations, or special operations." This approach, wherein attack operations are considered as part of every mission, dilutes focus on the objective.

Additionally, responsibility for planning and execution is divided among components based on shifting areas of operation (AOs). Doctrine allows AOs to extend beyond the traditional depths of maneuver force operations which enables surface commanders to influence interdiction against forces that will have a near-term impact on operations. Consistent with joint doctrine, targeting of short range ballistic missiles that primarily threaten surface forces should fall under the purview of surface commanders as part of

their counterbattery objective. But changing responsibility based on ground maneuver boundaries for strikes against theater-ranging air threats, which may not be the priority for surface commanders, could expose all forces to increased risk.

Conversely, maintaining command continuity in the counter-TBM fight serves the interests of a theater. JFACCs plan as well as execute theaterwide deep strike operations, to include joint suppression of enemy air defense (JSEAD), air-to-air, surveillance, joint interdiction, and strategic attack. In addition to attack assets, offensive operations against individual mobile missiles such as Scuds may require surveillance and reconnaissance support when organic weapon sensors are not adequate for target discrimination. Until the aircraft and missile threat is defeated, both air-toair and JSEAD assets must be synchronized not only to support attack missions but also to protect surveillance and reconnaissance assets. Moreover, attack operations will compete with demands by JFCs for interdiction, strategic attack, and other

the current JFACC counterair process offers a solid foundation to counter theater missiles

counterair operations. Because of their deep strike and air superiority responsibilities, JFACCs can efficiently integrate

attack operations into campaigns for JFCs. By stepping up attacks on the threats that are most difficult to defend against, they can also compliment aircraft and missile defense.

The current JFACC counterair process offers a solid foundation for joint unity of command to counter theater missiles, both offensively and defensively. Centralized planning will occur at the joint air operations center. Liaison personnel integrate component capabilities into the master attack and air defense plan in accord with JFC guidance. Liaison personnel are key to this process since they provide weapons systems expertise for joint planning. They can also articulate the concept of operations as well as the protection priorities of their respective components which allows JFACCs to resolve issues at the lowest level. However, because there is often a shortage of assets, no plan will satisfy everyone, and some issues must be resolved by JFCs. For decentralized execution, component battle management nodes play a critical role, and as these systems become more jointly interoperable overall effectiveness will increase significantly.

This matter can be reduced to either air superiority as one mission with a single commander for theater-wide efforts or to counteraircraft and countermissile operations as separate entities. The

former was the approach in Desert Storm and was successful given the constraints of the coalition. The latter reflects the World War II model which led to gross inefficiencies and marginal results. Current and emerging capabilities potentially overlap and there are some voids in offensive as well as defensive operations. To optimize capabilities, a clear command and control process is required for centralized planning and decentralized execution. If air superiority is more difficult to achieve in the future because of threat diversity and WMD, we must maximize our potential by ensuring unity of effort through unity of command. A single commander is at the center of this command process and must be vested with the authority to make decisions and resolve conflicts. To accept anything less threatens the warfighting capabilities of JFCs.

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- ³ Omar N. Bradley et al., *The Effect of Airpower on Military Operations in Europe* (Wiesbaden: n.p., 1945), p. 21.
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- ¹⁰ Joint Pub 3–52, *Doctrine for Joint Airspace Control in a Combat Zone* (Washington: Government Printing Office, 1995), p. II–6.
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The Security of the Americas

By HANS BINNENDIJK and JOHN A. COPE



Caracas. DOD (R.D. Ward)

hile ethnic strife and regional conflict continue to erupt around the world, the geopolitical situation has markedly become more peaceful in the Americas. This transformation is obvious in the discourse used to describe the area. Gone are terms that once distorted North American images of Latin America and the Caribbean—communist subversion, military dictatorships, death squads, nuclear proliferation, hyperinflation, and U.S. imperialism. These terms have been replaced over the last

decade by constructive images replete with a fresh vocabulary—democratic reform, market economy, peace operations, confidence building, transnationalism, and cooperative security. Such expressions are evidence of a revolution that has quietly awakened the hemisphere, offering greater hope for solidarity and security than at any time in history. New economic, political, and cultural rhythms that are gaining strength in many nations are not random or unrelated developments, nor are they cyclical in nature. These are unique responses to profound local

experiences and a transformed international environment. This largely unfamiliar and undervalued area to the south of the United States encompasses 33 Latin American and insular Caribbean states, ranging from Brazil, the fifth largest country in the world (with a land mass greater than that of the continental United States), to Barbados, one of the smallest. There are some 451 million people in the region, a third of them in Brazil and a quarter in Mexico. The population is expected to exceed 750 million by 2010, as São Paulo and Mexico City become two of the largest cities in the world.

The emerging market democracies of Latin America have replaced the traditional means of protectionism and statism with private initiative, foreign investment, and export-oriented growth. Additionally, the region has

Hans Binnendijk and John A. Cope are, respectively, director and senior research professor in the Institute for National Strategic Studies at the National Defense University.

experienced the ascendancy of subregional cooperative regimes such as the North American Free Trade Agreement and the Southern Cone Common Market as well as an end to internationalized conflict in Central America. Overlaying the slow processes of economic reform and realignment is a shift from authoritarian government to constitutional democracy.

In 1979, the democratic community included only Costa Rica, Colombia, Venezuela, and the Caribbean members of the British Commonwealth, and stability in the region was

except for the Cuban missile crisis, no country in the hemisphere has posed a direct threat

deteriorating. Today, however, 32 of 33 Latin American and Caribbean states have representative governments. Only Cuba retains an authoritarian system. This "quiet revolution" has stimulated substantial Asian and European trade with and investment in American markets. Of greater potential consequence, this transformation has promoted an unprecedented awareness of hemispheric community based on common values, interests, and concern about the future. Domestic developments have led nations in Latin America and the Caribbean to reconsider their attitudes toward Washington, resulting in more harmonious relations despite longstanding asymmetries in North-South power and episodic U.S. engagement. The possible outcome of the shift toward political and economic homogeneity, while still indeterminate, suggests the emergence of Brazil as a power and, as well, the concept of South America as a distinct region with its own strategic perspectives.

The Stakes

The overreaching U.S. security objectives in Latin America and the Caribbean are to ensure the area remains stable, democratic, and friendly to commerce and trade, and to maintain a regional military presence. Since the enunciation of the Monroe Doctrine, this goal has entailed diplomacy and,

occasionally, the use of force to prevent rivals from undermining the influence of the United States and its ability to keep regional events from getting out of control. Except for the Cuban missile crisis, no country in the hemisphere has posed a direct threat to the United States.

During the Cold War, Washington focused on the Caribbean Basin and was less attentive to South America. U.S. strategic priorities stressed protecting access to and movement within the region (including unrestricted use of the Panama Canal), maintaining

presence through its military bases in and around the Caribbean, and assuring access to fuel and nonfuel minerals. Neighbors regarded the U.S. approach as fixed exclusively on its own goals, with little regard

for the interests or priorities of other states. Their leaders sensed a tendency to look southward only through North American eyes and rely on U.S. solutions to local problems. Actions often were taken unilaterally and without consultation, resulting in diplomatic confrontations and mutual distrust.

During the 1980s Washington found that security was not the only regional policy issue. There were core democratic values to be upheld in the Americas. The United States perceived that it had an obligation to back moderate forces which advocated a commitment to human rights, social justice, and representative government, and championed democratization. Support for this political transition took many forms, ranging from public manifestations and technical assistance for newly elected governments to relatively significant amounts of military aid for the Salvadoran state during its civil war and U.S. military action to restore democracy in Grenada and Panama, and more recently in Haiti.

North-South relations are more positive and cooperative in the current transformed context. In December 1994, for example, leaders of the hemisphere's 34 democracies gathered in Miami for the Summit of the Americas. Then, in July 1995, senior defense officials from these nations convened in Williamsburg for the Defense Minister-

ial of the Americas. Moreover, there was a rapid effective response in early 1995 to fighting between Ecuador and Peru over a contested part of their frontier in the Amazon. Close partnership among the guarantors of the 1942 Rio protocol, which includes the United States, facilitated a cessation of hostilities and separation of forces, creating the basis for a diplomatic solution. The recent case of Haiti also demonstrated effective and extensive regional cooperation during maritime interdiction of arms and oil prior to September 1994 as well as during Operation Uphold Democracy and the follow-on phase under the United Nations.

The United States is beginning to realize that it has a substantial stake in peaceful, stable, and prosperous Latin American and Caribbean nations and that Washington's traditional onesided strategic approach is no longer useful in assuring its security interests. By collaborating with allies and friends in the region, the United States will benefit from trade and investment opportunities, some relief in immigration and other spillover effects of instability outside its borders, and long-sought after advancements in core values. Working together is a function of necessity in order to be free of traditional and non-traditional threats and apprehensions in the region, such as territorial claims, drug-trafficking, organized crime, and terrorism.

The Core Issues

Although the Caribbean basin still commands public attention, often narrowing the scope of U.S. interests and blurring distinctions between domestic and foreign policy, Washington is trying to interact on a wide range of issues across the hemisphere. Opportunities and vulnerabilities are increasingly transnational in nature. Thus the need is greater than ever for the United States and its neighbors to successfully address regional core issues: trade and development; political, economic, and social reform in fragile democracies; and stemming drug traffic.

Latin America is once again the fastest growing market for U.S. exports and investment. The average annual

rate of growth in exports was 21 percent from 1987 to 1993, twice the rate of the European Union. Oil is another economic factor. Venezuela is the largest supplier of refined petroleum to the United States. Mexico, Trinidad, and increasingly Colombia are major suppliers, reducing U.S. dependence on the oil fields of the Middle East. World commerce continues to pass through Panama, where the issue of reduced U.S. military presence after final implementation of the Panama Canal treaty is still open to exploratory discussion. The possible retention of a small military infrastructure after the year 2000 has strategic significance, signaling that the United States has both a commitment to the region and a desire to cooperate in facing transnational threats.

The sustained appeal and credibility of democratic governance and free markets are vital to the United States. Of immediate concern is the outcome of political, economic, and social reforms that affect commerce and trade and, perhaps most significant, drive decisions to emigrate. Sixty percent of over a million legal immigrants annually to the United States in recent years come from the Americas, mainly Mexico. But this picture is incomplete. The region also generates well over half of the estimated two to four million undocumented arrivals and an additional 1.1 million who are apprehended and turned back. Control of illegal migration and refugees can only begin abroad.

The region is also the source of all the cocaine, most of the marijuana, and a growing share of the heroin en-

the most serious threats to national stability are caused by domestic crime and violence

tering the United States. This amounts to an estimated 300 metric tons of cocaine, two-thirds of which enters via Mexico, roughly 2,000 metric tons of marijuana, chiefly Mexican, and 37 metric tons of heroin from Colombia and Mexico. The inter-American response to the illicit traffic in drugs involves attempts to cut the U.S. demand, coordinate the interdiction of

Rangers securing drop zone during Fuertes Defensas '95.

Chilean vessel

Almirante Williams
during Unitas 32–91.



the flow, and cooperate in the curtailing of money laundering. There also is deep U.S. interest in reinforcing justice and democracy by helping neighbors defeat internal threats from illegal narcotics activities to core institutions—political parties, legislatures, courts, and law enforcement.

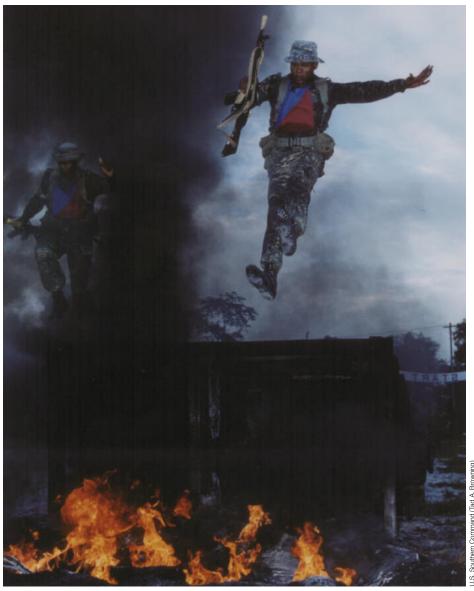
As the United States draws closer to its neighbors, there are opportunities for cooperation, but there is also the danger of adverse consequences from setbacks

and disturbances in the region. It will take time for most Latin American and Caribbean states to strengthen fragile governments, create accountable institutions, counter corruption, right injustice, and meet the

needs of minorities. Elected leaders still fear social conflict within their borders. The most serious threats to national stability are caused by domestic crime and violence which is increasingly linked to poverty, drug traffic, and unresponsive public policy. Fortunately, political and economic reforms over the last decade and a secure intra-American environment have eased tensions over territorial disputes. But old enmities and suspicions persist and conflicts are still possible. The difference is a commitment which exists now to use legal frameworks and diplomacy to find equitable, lasting solutions.

Defense Engagement

The Department of Defense has long exercised an important role in Latin America and the Caribbean by encouraging military cooperation on shared professional interests. However, the nature of U.S. security interests today, the emergence of common concerns, and a steady reduction in military resources have caused engagement in the region to become more diverse and innovative. As articulated in U.S. Security Strategy for the Americas, issued in 1995 by the Office of the Assistant Secretary of Defense for International Security Affairs, this defense engagement encompasses providing intelligence, operational, and logistical support for counterdrug efforts; encouraging the peaceful resolution of



Guyanese troops negotiating obstacle

course. disputes, adopting confidence and security building measures, and achieving nonproliferation and conventional arms control goals; promoting democratic norms in civil-military relations; and deepening professional contact among military counterparts. Traditional and non-traditional U.S. policy objectives place a high premium on leveraging defense assets to expand security contacts and strengthen professional collaboration. The focus is no longer solely on forces deployed in the region, but rather on military and civilian defense contacts and programs in the United States and overseas. Examples include meetings of

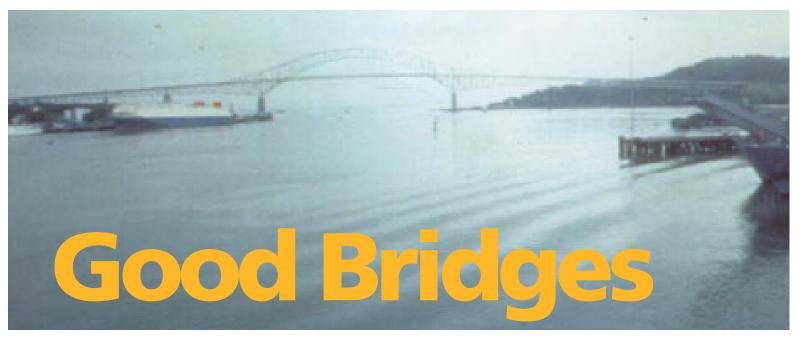
defense ministers and their staffs, bilateral working groups, academic activities which facilitate political-military dialogue, combined planning and information sharing, military deployments that bolster U.S. diplomatic efforts (such as restoring democracy in Haiti or deploying peace observers and logistic support along the Ecuador-Peru border), multinational military exercises, humanitarian relief, and innovative human rights initiatives.

Defense strategy today in the Americas reflects the influence of unprecedented political and economic transformations in the hemisphere. Emphasis is on developing low-profile multilateral cooperation to address shared security concerns, expanding professional contact, and encouraging development of a military ethos suitable for democratic society. For the foreseeable future, engagement will be successful to the extent it meets U.S. core interests, continues to demonstrate commitment to the region with a rapid-response capability for natural or diplomatic emergencies, and lowers the odds of intra-regional conflict and need to deploy forces in a crisis.

Partnership

Is the United States ready for inter-American partnerships? Does it recognize that security now and for the foreseeable future will be more closely tied to its American neighbors than before? Secretary of State George C. Marshall, a distinguished statesman not usually associated with the Americas, replied affirmatively to these questions in 1947 while testifying before Congress on the Inter-American Military Cooperation Act: "... with the Atlantic Ocean on one side and the Pacific Ocean on the other, between us and the great disturbances in the world of other peoples, it is all the more important that the Western Hemisphere be maintained on as unified a basis as possible. That is to our interest and to the interests of every country in the Western Hemisphere, and therefore I think in the best interests of the world."

As in Marshall's day, the United States is drawn to the East and West outside its immediate neighborhood in pursuit of its global interests. In the past, attention to inter-American affairs has tended to wane and the focus on solidarity and security has vanished from the national view, often to our mutual detriment. Secretary of Defense Perry, General McCaffrey, and other distinguished American authors from North and South who contributed to this JFQ Forum put the hemisphere in proper perspective and underscore the complexity of regional defense issues. They introduce a scene that is rich in fresh possibilities for greater mutual understanding and partnerships as well as more flexible and positive professional thinking. JFQ



Make Good Neighbors

By WILLIAM J. PERRY

small group of U.S. soldiers is serving in a peacekeeping operation in the jungles on the border between Ecuador and Peru after both nations agreed to end their boundary dispute at the negotiating table rather than on the battlefield. The agreement

to stop fighting and demilitarize the border was brokered by Brazil which along with Argentina,

Chile, and the United States provided troops to monitor the agreement.

This is only one example of the historic opportunities that now exist for the nations of the Western Hemisphere to build stable bridges of communication, cooperation, and trust that increase the security of our neighborhood. Times have changed. The hemisphere has embarked on a new era of democracy, peace, and stability.

Most previous Secretaries of Defense looked south and saw only security problems. When I look south today, I find security partners. Just ten years ago, nearly half the nations of the region were ruled by military dictatorships. Now all but Cuba are democ-

the hemisphere has embarked on a new era of democracy, peace, and stability

racies led by elected governments. Nearly every part of the Americas is free. The end of the Cold War offers a chance to consolidate these many democratic gains. With a decline in insurgency and increase in bilateral and multilateral cooperation, peace dominates the region.

Negotiation has replaced confrontation. All parts of the hemisphere are reaching out to one another as even traditional enemies become trading

> partners. In the process, the Americas have been

linked in a considerable and expanding economy. The gross hemispheric product will exceed \$13 trillion by the end of the decade. Thanks to this growth, per capita income in Latin America is expected to increase by a fifth—a success that promises to ease poverty and raise living standards to enhance political stability. If these trends continue, including new agreements on free trade, Latin America will be a larger U.S. trading partner than Western Europe.

With such a growing harmony of interests, the Americas have an unparalleled opportunity to create an era of trust, cooperation, and unity, and a community of free, prosperous, and secure nations. As President Clinton has indicated, "We've arrived at a moment of very great promise and great hope for the Western Hemisphere."

That promise and hope were conspicuous in December 1994 at the Summit of the Americas in Miami. This was the first gathering of hemispheric leaders in more than a generation and the

The Honorable William J. Perry is Secretary of Defense.



Bridge of the Americas over Panama Canal.

first of exclusively democraticallyelected leaders. The participants explored a number of common interests—democracy, trade, technology, and environment-and outlined an action plan on the economic and political future. Because a meeting of freely elected heads of government would not have been possible during the Cold War, the summit was a notable political symbol; but it was also significant for its political substance. The nations agreed that the future would be built on strong democratic institutions, sustainable development, and free trade. Moreover, they agreed to develop a Free Trade Area of the Americas to ensure that goal.

After the summit, which concentrated on political and economic matters, the governments also recognized the need to cooperate on security matters. Creating closer links among defense and military establishments and committing to uphold the democratic process will bolster democracy, stability, and economic reform. Specifically,

defense and military links will help address threats to peace and stability, promote hemispheric cooperation, and foster the growth of military institutions that serve and benefit democracy. As the first step in further cooperation, the defense leaders of the 33 democratic nations present accepted an invitation from the United States to attend the first Defense Ministerial of the Americas in Williamsburg, Virginia, last summer.

Williamsburg—where Jefferson, Washington, and Madison drafted the framework for the first democracy in the hemisphere two centuries ago—was the perfect site for this historic meeting. Among stately halls and cobblestone streets,

the ministers met to sketch out a framework to secure democracy throughout the hemisphere. They

set realistic goals and did not endeavor to resolve the hemisphere's security challenges. Rather, they focused on ways in which defense establishments could build ties. Such personal relations are invaluable to communication, trust, and cooperation among nations—sometimes even more than written agreements or formal relationships.

While this meeting was held in and hosted by the United States, it was not a "U.S." event. Instead, it was an American event in the broadest meaning of the term, with North, Central, and South America as well as the Caribbean participating equally. In the same sense, the meeting did not operate under a U.S.-imposed agenda. It was guided by an itinerary collaboratively developed following discussions among all the nations throughout the previous year. This mutually accepted agenda set the right tone because it reflected a democratic process and demonstrated, in a practical sense, the best way to secure and advance democracy in the hemisphere.

The agenda consisted of three major areas—transparency and confidence building, defense cooperation, and the role of the military in democratic societies. Each is important to post-Cold War hemispheric security.

Transparency and confidencebuilding mean being open about defense plans, programs, and policies. They involve sending soldiers to each other's military schools and holding combined training exercises to reinforce cooperation and trust. Openness is an unusual concept when applied to defense because the art of war involves secrecy and surprise while the art of peace involves the opposite. Openness about defense matters reduces chances that nations will arm and act out of fear of the unknown. It fosters trust between the military and public, a key ingredient in a democracy.

The second area of discussion was defense cooperation. While the hemi-

many militaries in the region are making fundamental changes in the way they relate to democratic governments

sphere is generally peaceful, sporadic security issues do arise. Among them are illicit drugs that poison communities, threaten societies, and undermine national security. Working cooperatively on such challenges is an effective and efficient use of our resources. In the process, nations and militaries can learn from one another and about one another, as well as how to perform better in cooperative operations.

The third area of attention was the proper role of armed forces in 21st century democracies. In varying degrees, defense and military establishments face major changes in reducing their forces and reconfiguring for missions in the next century. In the same way the Armed Forces have seen their strength and spending reduced over the last ten years and are reexamining their roles and missions in the post-Cold War era, many militaries in the region are making fundamental changes in force structure, plans, policies, or even in the way they relate to democratic governments.

At the ministerial meeting defense establishments were urged to share experiences and ideas on how to approach change and forge stronger ties between civilian and military institutions. Just as the latter learn more about serving in a democracy, civilian expertise is required in defense and military matters. Similarly, armed forces might contribute to national development in areas such as infrastructure and public works, functioning like the U.S. Army Corps of Engineers and National Guard. As agreed in Miami both civilians and the military must protect human rights, and military training can be adapted to reflect that.

Participants at the Williamsburg meeting accomplished more than reaching an agreement on a common agenda. As Jefferson outlined the principles of a new democracy two centuries ago, the defense leaders of this hemisphere outlined six principles to guide regional security relationships into the next century which they called the Williamsburg principles:

- the preservation of democracy as the basis for mutual security
- the critical role of the military in supporting and defending sovereign democratic states
- the respect of the military for democratic authority, constitutional law, and human rights
- the spread of openness in discussing defense programs, policies, and budgets
- the resolution of disputes through negotiated settlements—not military actions
- the need for greater cooperation in peacekeeping and the fight against narcoterrorists.

These principles are truly revolutionary since they represent consensus and commitment on the part of 33 nations to the cause of peace and democracy in the hemisphere. That unity of purpose would not have been possible ten years ago. The precepts are all the more revolutionary because they are already being implemented.

At the meeting, the United States demonstrated its commitment to openness in defense and security matters by announcing a policy of notifying all democratic governments in this hemisphere before holding significant multilateral military exercises in the region. To further underscore the resolve for openness, I distributed copies of the 1995 Department of Defense Annual Report to the President and the Congress. This document informs the



country and world about the kind of forces we are building, the rationale for them, and the amount being spent on those forces.

Canada also presented its national defense policy document. And all participants discussed a variety of information-sharing measures, such as standardized reporting to the United Nations on defense expenditures, full participation in the U.N. Register of Conventional Arms, and sharing these reports with the Organization of American States.

There have also been positive results from implementing the commitment at Williamsburg to redress hemispheric conflicts through negotiation. A coalition headed by the United States and joined by many neighbors of Haiti worked with the United Nations to create a stable environment for the safe return of its democratically-elected president and conducting national elections. And the collaboration among Argentina, Brazil, Chile, and the United States played a critical role in the agreement between Ecuador and Peru to demilitarize their border. That agreement and Operation Support Democracy in Haiti set a significant precedent: peacekeeping in the Americas in support of conflict resolution and democracy is more than a principle—it is a reality.

Secretary Perry briefing the press on July 26, 1995. In the area of defense cooperation, we are building on significant

contributions which the region has made to international peacekeeping. For example, 20 countries from this hemisphere support 15 of the 16 current U.N. peace operations around the world. Forces have served together to restore order in both El Salvador and Haiti. Regional militaries have combined for humanitarian hurricane relief efforts. U.S. Reserve forces are getting hands-on training by working with Latin American militaries to build roads, schools, and wells in rural areas. The hemisphere's annual Unitas exercises help navies cooperate while other multilateral exercises expand our ability to join together in peacekeeping and counterdrug missions and build interoperability.

Pursuant to the Williamsburg agreements, there will be a full range of combined exercises. Also, Argentina and Canada offered to open more places in their peacekeeping training centers to students from other countries, and the United States proposed expanding education for civilians in national security studies.

Already this year in Santiago, governments of the hemisphere reached accord on military confidence-building and transparency measures. For example, they agreed to give advance notice of military exercises, exchange information on defense policies and doctrine, invite observers from other nations to exercises, and develop border communications. The U.S. Southern Command and the Inter-American Institute of Human Rights co-hosted a conference on human rights training in February 1996, which resulted from discussions in Williamsburg. The guarantor nations to the Ecuador and Peru peace process agreed to extend their border presence through June 1996.

With the support of U.S. Southern Command, a special Spanish-language edition of this JFQ Forum on "The Security of the Americas" is being published simultaneously for distribution by U.S. Military Group commanders throughout the region.

The United States has also participated in improved bilateral activities that serve as a model for cooperation. In October 1995 at the invitation of the Mexican minister of defense, I became the first Secretary of Defense to make an official visit to that country. Since the United States and Mexico have developed closer economic ties under the North American Free Trade Agreement and closer political ties with President Clinton's visit to Mexico, this was another opportunity to build a new bilateral security relationship based on openness, trust, and cooperation.

The U.S.-Mexican security relationship is already underway in several areas, particularly in disrupting narcotrafficking. Beyond that, military-to-military bonds are growing as leaders build working relationships; our navies have begun staff talks; airborne forces have jumped out of each other's aircraft; U.S. officers teach English at Mexican military schools, while Mexican officers teach Spanish at U.S. facilities; and the carrier *USS Kittyhawk* recently received a warm welcome on a port call to Acapulco.

Such bilateral activities will erect a new bridge between Washington and Mexico City. The United States already engages in similar activities with many nations in the hemisphere, including a

the challenge ahead is to transform common interests into concrete activities and achievements

bilateral working group with Argentina and, more recently, with Chile. In March 1996, I became the first Secretary of Defense to visit Venezuela. I am encouraging every hemispheric nation to fully participate in a range of activities, such as more officer exchanges, more multilateral peacekeeping training and exercises, and more cooperation on other real-world missions (such as disaster relief). Nations should develop more defense and military contacts, broader dialogue, and openly share information on everything from defense plans, policies, and priorities to specific missions.



Venezuelan airborne troops.

The nations of the hemisphere can still do much more. To ensure that we do, the defense ministers decided at Williamsburg to develop a process for working together. Just as James Madison created a democratic process for our Republic by drafting the U.S. Con-

stitution, the hemispheric defense leaders developed a process to achieve the six Williamsburg principles, a mechanism the Argentine minister fittingly dubbed the "Williamsburg process." This

procedure is based on dialogue and consensus-building and techniques to energize and consolidate democracies, and extends from formal agreements to personal relationships.

The Defense Ministerial of the Americas laid a foundation for interhemispheric defense cooperation. The challenge ahead is to build on that and transform good intentions, good will, and common interests into concrete activities and achievements. The Williamsburg principles must be imbedded in security relationships throughout the hemisphere. Turning them into action will require consistent dialogue and frequent meetings. Argentina volunteered to host the next

ministerial later this year, and defense leaders across the hemisphere are now shaping the agenda for it.

If these activities continue, the defense establishments of the Western Hemisphere may well fulfill the dream of the great Latin American liberator, Simon Bolivar, who spoke of the Americas becoming the greatest region on earth: "...not so much by virtue of their area or their wealth, but by their freedom." The United States has a tremendous stake in Bolivar's dream becoming reality and a major opportunity to advance it by building bridges with neighbors throughout the Americas. The poet Robert Frost suggested that "Good fences make good neighbors," but this does not always hold true. Instead, when neighbors share common ideals and concerns, and work together to achieve goals, it is good bridges that usually make good neighbors. JFQ

A Former CINC Looks at Latin America

By BARRY R. McCAFFREY

Latin America and the Caribbean are poorly understood by many North Americans whose superficial awareness of the nations to their south is limited to Cuba and Mexico, and perhaps to a belief that the other countries of the region are homogeneous and Spanish-speaking. These people do not understand that the largest community in South America speaks Portuguese, that most in the Caribbean speak Spanish, and that Dutch, French, Guarani, and Quechua are important languages. This perspective is further distorted by the prism of the 1960s and 1970s, when Latin America was regarded as a land of military dictatorships where elites ruled and human rights were violated. That false impression still endures today and influences U.S. policy toward the region.

For this reason, Latin America is ranked low by Washington when it comes to economic, political, and international security priorities. Indeed, only one of six stated U.S. principal foreign policy objectives, countering drug trafficking, is regarded as at stake in the area. The low prominence of the Americas partially reflects a perception that there are no vital national security interests to the south of the United States that threaten our survival. Nor does the region have many problems in common with other areas of the world. It is not haunted by unstable regimes that blackmail other states. Neither are there hegemons that threaten their neighbors and necessitate a counterbalancing U.S. presence or rapid reinforcement. Nor are there rogue states that challenge the international order or sponsor terrorism. Eth-

nic and religious strife do not tarnish the political scene. Finally, no failed states are fomenting civil war, chaotic fiefdoms, deprivation, or unchecked violence. From all perspec-

tives, it is a good news part of the world. But unfortunately this means that the United States is tempted to ignore the area.

During the 1980s the reality was different, and many contend that U.S. attention to that part of the world was

greater. In South America, a troubled Argentine dictatorship miscalculated and tragically went to war against Great Britain. At home, there was a rancorous debate over how to influence the civil wars in Central America—a controversy that culminated with the Iran-Contra hearings. Nicaragua was seen as a communist foothold and Washington was appropriately intent on preventing a victory by Marxist insurgents in El Salvador. Indeed, U.S. policy toward Latin America was understandably heavily influenced by East-West ideological struggles. As late as 1987 there were 25 Marxist insurgencies supported by the Soviet Union, Cuba, and Nicaragua in the area. In response, U.S. naval forces loitered off Central America, Washington trained and advised conventional and guerrilla forces, and the U.S. military considered how to more actively support allies who were mired in vicious internal warfare throughout Central America.

Today the scene has improved dramatically. The Central American instability of the 1980s is essentially over. A U.N. peacekeeping operation

in South America, the transition from authoritarianism to democracy has largely been completed

successfully oversaw a reconciliation process in El Salvador. The disruptive Sandinista regime has been voted out of office in Nicaragua. The corrupt dictatorship of Manuel Noriega was replaced by democracy in Panama. Only in Guatemala has turmoil persisted in a civil war which now seems to be slowly ending. In South America, the transition from authoritarianism to democracy has largely been completed.

General Barry R. McCaffrey, USA (Ret.), is director of the Office on National Drug Control Policy and previously served as commander in chief, U.S. Southern Command.



While Jeffersonian democracy may not be the rule, political systems are becoming more responsive to wider constituencies. Military institutions are essentially loyal to constitutional and democratically elected governments. More than 830 million people in the Western Hemisphere live in democratic regimes, with only Cuba enslaved in tyranny. Our collective economies constitute a \$13 trillion market. Intrahemispheric commerce is striking. U.S. trade is greater with Brazil than China and with Venezuela than Russia, and greater with 3 million Costa Ricans than 100 million Eastern Europeans and with 14 million Chileans than a billion Indians. By the turn of the century, Latin America will have a \$2 trillion economy. It will trade more than \$600 billion in goods and services, and the level of U.S. trade with the region will exceed that with Europe.

Clearly, this part of the world warrants continued U.S. attention based on positive political and economic developments. Despite its being an area where no vital national security interests are at stake, we must still address the flow of drugs from and through it. Moreover, we must prevent uncontrolled immigration from the region. In the past five years, eight of twenty-seven operations conducted by the Armed Forces dealt with unchecked immigration from Cuba and Haiti.

Given the low level of threat to U.S. interests, few defense resources are apportioned to the region. Less than .2 percent of our military (both active and Reserve) is assigned there. In fact, there are more DOD civilians in Japan than U.S. troops permanently assigned in Latin America. The share of the defense budget expended in the region is similarly small. So why does one of the five U.S. regional combatant commands watch the area? Absent the focus that a unified command brings to U.S. security dialogue with any region, meaningful security relations languish. A look at our security affiliation with sub-Saharan Africa supports that assertion.

Regional Cooperative Security

The role of U.S. Southern Command (SOUTHCOM) is to support the objectives of U.S. policy in its assigned area of responsibility (AOR)—Central and South America with contiguous waters—and assist friendly nations. It is distinguished from the other regional commands in how the military instrument is used. SOUTHCOM is not about power projection or forward presence to dissuade potential adversaries or assure access to strategic resources, but it could be. Planning conventional military operations is not

U.S. and Ecuadorean forces during Unitas exercise. the central focus, although this type of planning is done. Nevertheless, the

command is a strategic military headquarters which has as its primary function the command and control of deployed U.S. forces committed to national security policy objectives. Toward that end, SOUTHCOM each year oversees the deployment of more than 50,000 soldiers, sailors, marines, and airmen from the active and Reserve components. The three major elements of this strategy are building regional cooperative security, supporting the national counterdrug strategy, and fostering the development of appropriate Latin American militaries.

Historical insecurities and border disputes continue to affect Latin American contingency planning, procurement decisions, and force deployments. SOUTHCOM believes that increasing professional interaction among militaries fosters cooperation in the security arena. This contact can reduce the insecurities that influence defense planners and can help resolve long-standing disputes. National forces can then concentrate on peacekeeping, counterdrug operations, illegal migration, arms smuggling, and the cooperative effort to manage land, sea, and air frontiers.

The primary SOUTHCOM vehicle for promoting contact among the armed forces of Latin America is the foreign military interaction program. This program includes multinational exercises, conferences and symposia, personnel and unit exchanges, staff assistance and assessment visits, and orientations that are pursued without seeking to mediate or eliminate disagreements. Instead, we seek collaboration through activities that involve common interests.

Peacekeeping Exercises. The militaries of Latin America contribute to various multinational peacekeeping operations. Argentina, Brazil, Colombia, and Venezuela have participated with great valor and effectiveness in former Yugoslavia. Brazil has played a superb leadership role in peace operations in Angola and Mozambique, both Portuguese-speaking nations,

while 39 percent of the highly professional Uruguayan army has peacekeeping experience. Currently, 10 Latin American countries are participating in 13 U.N. missions around the world.

In August 1995 SOUTHCOM facilitated a multinational peacekeeping exercise in Argentina to foster cooperation among national military forces within the southern cone. The effort was led by the visionary chief of staff of the Argentine army, and featured a scenario that replicated challenges facing

MOMEP is being conducted at essentially no cost to Argentina, Brazil, Chile, and the United States

peacekeepers in Bosnia. A computer-assisted command post exercise drew players from the U.S. Army Peacekeeping Institute, U.S. Army School of the Americas, XVIII Airborne Corps, 10^{th} Infantry (Mountain) Division, and U.S. Army South. This was the first time that protagonists in the War of the Triple Alliance (1865–70)—Argentina, Brazil, Paraguay, and Uruguay—came together in an exercise that emphasized the benefit of multinational military activities to regional security. A similar exercise is scheduled for Montevideo in August 1996.

In addition, SOUTHCOM supported multinational exercises (at the Joint Readiness Center, Fort Chaffee, Arkansas; San Juan, Puerto Rico; National Simulation Center, Fort Leavenworth, Kansas; and Joint Task Force-Bravo, Honduras) which addressed mutual interests such as narco-guerrillas, disaster relief, or peacekeeping. Moreover, wargames that once focused on neighbors are no longer played. During the last year, approximately 10,000 Latin American troops took part in SOUTHCOM-supported training aimed at building regional cooperative security.

Peacekeeping on the Ecuador-Peru Border. In January 1995, a traditional dispute between Ecuador and Peru over an undemarcated section of their border erupted. Although the fighting was confined to a remote jungle area, mobilization by both sides threatened a bloody conventional war similar to

one conducted in 1941. Fortunately, this latest episode was halted by quick diplomatic and military efforts on the part of Argentina, Brazil, Chile, and the United States, who committed to guarantee the accord reached after the 1941 clash. Since March 1995 military contingents from these guarantor nations have progressively solidified a standing cease-fire. The Military Observer Mission to Ecuador and Peru (MOMEP) has supervised the separation of some 10,000 personnel located

in the disputed area. Another 150,000 troops were demobilized and returned to peacetime garrison duty. We are enormously proud that Ecuadorians and Peruvians have been integrated into the four-power ob-

server force in which they constitute the majority of mission personnel.

This casualty-free observer mission is being conducted at essentially no cost to Argentina, Brazil, Chile, and the United States. Ecuador and Peru agreed to provide \$15,000 daily, a bargain if compared to fighting a war-a half billion dollars for one month of tactical skirmishing. The mission has created military conditions that could lead to a diplomatic settlement. This process must be given time to take root. If an accord is not reached, the hemisphere risks serious fighting between these nations. SOUTHCOM has a small contingent high in the Andes to support the effort. U.S. soldiers and airmen are providing helicopter lift, intelligence, logistics, and command and control for this remarkable peacekeeping mission.

Counterdrug Strategy

Latin America is the source of the world's cocaine. Peru is the origin of two-thirds of the world's coca and Bolivia is the second largest producer. Colombia is the only other country that raises a significant crop. The cocaine potential of South American coca in 1994 exceeded 800 metric tons with a value of over \$30 billion in the United States. The cultivation of Colombian opium has exploded over the past five

years. In 1990 Colombia produced no heroin, yet today it accounts for 5 to 10 percent of the international supply. Heroin sold on U.S. streets is ten times more pure than in the 1970s and sells at 1.5 times the price. Each year, the drugs that come to the United States from Latin America—including almost 300 tons of cocaine—cause irreparable harm, contributing annually to 10,000 deaths and a \$67 billion price tag associated with drug abuse.

The economic power of drug traffickers makes them almost invulnerable to the unassisted counterdrug efforts of Latin American governments. In Colombia, for example, annual proceeds from trafficking by the cocaine cartels is about \$8 billion. This is more than total legal exports in 1992 and about 10 percent of the gross domestic product (GDP). The influence of the cartels is so great that allegations of their contributions to the 1994 presidential campaign led to a constitutional crisis. Undoubtedly, the notion of a narco-democracy is a threat to the entire region.

Closer to home, the route for 70 percent of all cocaine entering the United States is Mexico. Traffickers made an estimated \$30 billion profit last year according to Mexico's attorney general. Drugs have been transported into Mexico with almost total impunity on commercial jets and then to the U.S. market. Methamphetamines, once an almost exclusively domestically manufactured drug pushed by California biker gangs, is produced in Mexico for buyers in the United States. Clearly, the illegal drug trade is a transnational threat that requires international cooperation to be countered.

Over the past six years SOUTH-COM counterdrug efforts have sought to build a consensus on the drug threat in the region. Among them is the development of multinational capabilities that can be directed against the drug trade. There have been numerous encouraging tactical successes. Sustained operations against small planes flying coca paste between Peru and Colombia are paying off. Smugglers risk interception and being shot down or having their aircraft impounded or destroyed after landing. That increased risk is reflected by a nine-fold increase

in costs, amounting to \$180,000 per flight in 1995. It is also seen in depressed prices for coca leaves in Peru where the cost has dropped by over 60 percent in some cases as supplies exceed the ability to process and transport coca paste. We have great respect for the valor and skill of the Colombian and Peruvian police and military in their struggle against this violent international threat.

Nevertheless, such successes are not directed by an operational instrument that is capable of having a pronounced effect on the price, purity, and availability of cocaine in the



Unloading C-5 at

Howard Air Force Base, Panama.

Coast Guard inspecting merchant ship.

United States. Nor have international efforts succeeded in reducing the overall supply. In Bolivia, for example, where the U.S. Government has maintained an extensive counterdrug presence for the last decade, there has been no significant decrease in acreage dedicated to coca. A contributing problem is that there is no government agency analogous to SOUTHCOM to consolidate international counterdrug efforts.

Thus the approach to this transnational problem has been to work on a country-by-country basis. One solution is to create a regional coordinator for counterdrug programs undertaken

by U.S. agencies. The tactical success of interdiction efforts inspired by SOUTHCOM—which amount to less than 1 percent of the U.S. counterdrug budget—suggest that unity of effort can bring greater success. This menace demands international will, cooperation, and sustained operations.

National Military Forces

The primary value of SOUTHCOM programs is extensive interaction with national military forces in the AOR. At the forefront of the command's efforts are security assistance organizations (SAOs) and defense attaché teams that are part of U.S. missions. These activities serve complementary but mutually exclusive functions. SAOs are subordi-

nate to SOUTHCOM and normally have command and control over deployed U.S. military elements within the country to which they are accredited. Defense attachés on the other hand respond to the Defense Intelligence Agency and are essentially friendly and overt intelligence collectors. Some have suggested merging these two organizations to conserve manpower. Yet there are fewer than

defense spending in Latin America is extremely low; in fact, no other region expends so little on a per capita basis

200 military personnel assigned to such positions in Central and South America, and consolidating them could result in both functions being executed poorly.

SOUTHCOM experience suggests a variety of observations about the militaries of the region to examine.

Despite accusations to the contrary, national military forces do not cause most regional ills. Defense spending in Latin America is extremely low; in fact, no other region expends so little on either a per capita basis or as a percentage of GDP. Like most militaries of the world, these proud national institutions are products of unique historical, political,

(continued on page 50)



Air Force (Frank Onlanic)

U.S. SOUTHERN COMMAND

MISSION: The primary mission of U.S. Southern Command (SOUTHCOM) is to establish and implement plans, programs, and policies in peacetime, conflict, and war which will contribute to the defense of the United States and its allies, and protect and promote U.S. interests in Latin America. Other major missions include conducting disaster relief and humanitarian operations; monitoring security assistance programs in the region; conducting combat, counternarcotics, counterterrorism, counterinsurgency, and nation assistance; defending the Panama Canal Treaty-2000.

BACKGROUND: The command traces its origins to the arrival of marines in Panama in 1903, days after Panama

declared independence from Colombia. The Army arrived in 1911, three years before the canal opened. U.S. military strength peaked at 67,000 in Panama during World War II. After the war, Army, Navy, and Air Force components were joined to form Caribbean Command which was redesignated SOUTH-COM in 1963. Under the Panama Canal Treaty, signed in 1977, the waterway will be turned over to Panama on December 31, 1999. However, the United States is committed to guaranteeing the neutrality of the canal "indefinitely."

AREA OF RESPONSIBILITY: The geographic region assigned to SOUTHCOM recently was expanded to include the waters adjoining Central and South America and the Gulf of Mexico, areas that were formerly the

responsibility of U.S. Atlantic Command (ACOM). This change satisfies two key objectives. The first is to enhance the command's interaction with the navies of Central and South America. The second is to have one commander in control of all U.S. military activities in the Caribbean basin as well as in Central and South America. Because of long-standing relations between the Caribbean and ACOM, including ongoing U.N. operations in Haiti and counterdrug operations across the region, the transfer will occur in two phases (see map). Phase I, implemented on January 1, 1996, transferred responsibility for the waters adjoining Central and South America. Phase II-to be executed only on order of the Secretary of Defense, but not earlier than June 1, 1997 will transfer responsibility for the Caribbean Sea and its island nations, the Gulf of Mexico, and an additional portion of the Atlantic Ocean.



Naw (Tracy Lee Didas)

COMPONENT COMMANDS:

U.S. Army South (USARSO); U.S. Southern Air Force (USAFSO)—12th Air Force; U.S. Atlantic Fleet (LANTFLT); U.S. Marine Corps Forces, SOUTHCOM (MARFORSOUTH); and Special Operations Command SOUTHCOM (SOCSOUTH).

SOUTHCOM headquarters, Quarry Heights.





(continued from page 47)

and social dynamics. Each reflects these factors in its organization and corporate ethic. Less military is not the solution to challenges of poverty, injustice, economic development, and drugs in Latin America.

Most national military forces are professional and honorable. Moreover, many have strong support and trust from citizens. They are led by superbly qualified officers such as Martin Balza of Argentina, Benedito Leonel of Brazil, Moises Orozco of Venezuela, and Jaime Guzman Morales of El Salvador who understand national security and fiscal realities. They are working to maintain disciplined, modern forces capable of accomplishing their constitutional tasks.

National military forces may be inappropriately organized and equipped. Some navies seek blue water capabilities instead of more functional brown water ones, purchasing diesel submarines and destroyers instead of coastal and riverine patrol craft, while air forces acquire jet air-to-air fighters instead of short takeoff and landing utility aircraft, coastal patrol aircraft, and helicopters. Their armies feature main battle tanks, artillery, and conscript regiments instead of professional active/reserve units organized for peacekeeping, counterdrug, and engineering/medical operations. In most cases a focus on external threats may be less appropriate than one addressing the new challenges of the 21st century. Some Latin Americans see the belief that a force's professionalism is a function of its similarity to First World military forces as contributing to a disconnect between organization and missions. It is encouraging to note that our senior colleagues reject the notion that the trappings of a modern military force—doctrine, echeloned headquarters, traditional branches, war colleges, etc.—automatically confers professionalism.

Our allies reject the notion of national military forces that are corrupt, distrustful of civilian rule, and concerned primarily with self enrichment. One example of such an organization was the Panamanian Defense Force that under Manuel Noriega formed a partnership with Colombian drug cartels.

SOUTHCOM contacts with regional allies have reinforced this continued focus on more professional and democratic values.

In all dealings with Latin American militaries, SOUTHCOM seeks to function in a collegial manner. It is only through shared, respectful dialogue that change can be achieved. The reality is that the command cannot be the agent of radical change in the region's militaries. SOUTHCOM must assist in a balanced manner, ever mindful of the right of each nation to establish its own forces and doctrine as a function of national sovereignty.

Human Rights

While the region has been marked by enormous political and economic success, there have also been egregious abuses of human rights committed by state and non-state actors including the military, police, insurgents, political organizations, and individuals. But there is reason to believe the human rights record will continue to improve. Strengthening of democratic institutions and the end of Cuban-Soviet inspired insurgency make subversion, terrorism, and associated restraints on civil liberties less likely. Individual rights have also been strengthened by societies that hold governments more accountable and by contributions from non-governmental organizations.

As each nation debates how to address the legacy of human rights abuses, SOUTHCOM has moved to integrate human rights into all of its interactions with Latin American mili-

the sweeping progress in Latin America calls for new strategic thinking and international security arrangements

taries. The military utility of respecting human rights in peace as well as war is stressed. In February 1996, SOUTH-COM and the Inter-American Institute of Human Rights sponsored a conference in Miami on "The Role of the Armed Forces in the Protection of Human Rights." Six government ministers and eight chiefs of services attended this first regional military hu-

man rights conference. Other participants included the Secretary General of the Organization of American States, Cesar Gaviria, and representatives from academe, the media, diplomatic corps, and nongovernmental organizations. The involvement of interagency, nongovernmental, and academic spheres in the SOUTHCOM human rights program has been key to its success. It reinforces the concept that the military is accountable directly to civilian governments and indirectly to the people they protect.

The Future

The Panama Canal Treaty signed in 1977 by Presidents Carter and Torrijos transferred both the ownership of and responsibility for the canal to Panama. Moreover, it stipulated that the U.S. military presence in Panama would end at noon on December 31, 1999. U.S. forces are drawing down and returning facilities at a pace that can be accommodated by the local authorities. While no U.S. vital national security interests demand a continued forward presence in Panama, it could have military utility. Many argue it would also contribute to regional stability. A post-1999 presence would only be feasible if the U.S. and Panamanian governments conclude that a common good can be served by such an arrangement. In September 1995 Presidents Clinton and Balladares agreed to hold exploratory talks on the matter.

In 1997, the 800 personnel of the joint SOUTHCOM headquarters will relocate to Miami, the point of conver-

gence for the Caribbean and Central and South America. Miami was selected for its regional ties: 85 percent of the flights by U.S. flag carriers to Central and South Amer-

ica operate out of Miami; all Latin American and Caribbean countries have consulates there; 30 percent of U.S. trade with those countries goes through its port; and more than two million Latin Americans visit yearly. By all indicators, Miami is the economic, communications, and transportation



Scout training in Panama.

hub of the Americas. It is the logical place for the headquarters responsible for U.S. military operations in the Caribbean and Latin America—the SOUTHCOM charter under the recently modified unified command plan (see map on page 49).

The sweeping progress in Latin America, the result of democratic and economic reform, calls for new strategic thinking and international security arrangements. As a free trade area embracing all of the hemisphere emerges within the next ten years, a goal set at the Miami Summit of the Americas in December 1994, we cannot afford to ignore the nontraditional threats to our national security that emanate from the region: illegal migration, drug trafficking, terrorism, and violations of intellectual content and patents of U.S. products. In fact, many people see lower trade barriers as a downside that creates vulnerabilities which will be exploited by international criminal organizations. This is a serious concern as customs formalities on the U.S.-Mexico border are liberalized under the North American Free Trade Agreement.

Most problems cannot and should not be addressed in military terms. Instead, they require collective efforts by all societies affected. Absent a coherent interagency strategy to address these threats, U.S. successes will be tactical and episodic. They will mostly cause non-state ac-

tors to shift their patterns of operation. The drug cartels and sophisticated illegal alien smuggling rings will continue to violate state sovereignty almost at will. Nevertheless, the Armed Forces can contribute to national and regional security by continuing modest interactions with the militaries of Latin America. We can help defuse conventional military crises—as we did on the Ecuador-Peru border. We can help committed nations stop drug traffickers from violating sovereign land, sea, and air space—as we have done with coordinated efforts against the Colombia-Peru airbridge. We can contribute to the ongoing debate over appropriate roles and missions of the armed forces in democratic societies. While this is a debate that must take place in each country, we can share our experience. Forums such as the Williamsburg Defense Ministerial which brought together defense leaders from the hemisphere and SOUTHCOMsponsored symposia facilitate those debates. We can also help countries reorganize and modernize their forces under democratic leadership.

Extracting marines during exercise on HCOM Panama Canal.

SOUTHCOM believes that military operations

today offer a model for security dialogue in the context of interstate relations that are not fundamentally based on traditional security concerns. The command is about professionals collaborating to tackle transnational problems and achieving efficiency through shared ideas. It focuses on advancing regional security through exchanges and confidence building measures. Finally, the intention of SOUTHCOM is to contribute to stability, the precursor of democracy and economic growth. Current U.S. military strategy for the Americas is sound. Washington spends only a fraction of its defense resources in the regionless than .2 percent of its budget and under 5 percent of security assistance funds. These are sums that many partners of the United States in the region feel is money well spent.



Santiago River (foreground) and Yaupi River on Ecuador-Peru border.

U.S. Army (Stuart J. Gubler)

Operation Safe Border: The Ecuador-Peru Crisis

By GLENN R. WEIDNER

In January 1995, the hemisphere was shocked by an outbreak of fighting between Ecuador and Peru over a long-festering border dispute. During a six-week period, more than 100,000 men were mobilized, fleets were deployed, air forces capable of striking the respective capitals of each protagonist were reposi-

Colonel Glenn R. Weidner, USA, is commander of the U.S. Military Group-Honduras and served as commander of the U.S. Contingent, Military Observer Mission, Ecuador-Peru.

tioned, and both sides suffered as many as 300 casualties in fierce combat in the upper Cenepa Valley. Coming in the wake of the December 1994 hemispheric Miami summit, the conflict posed a serious threat to regional stability. Rapid, effective responses by guarantors of the 1942 Protocol of Rio de Janeiro—Argentina, Brazil, Chile, and the United States—helped to stop hostilities and created conditions for negotiating a diplomatic solution to a complex and highly emotional problem of long standing.

The Military Observer Mission, Ecuador/Peru (MOMEP) may become an historic example of effective multinational peacekeeping. This operation was successful because of unprecedented cooperation between political and military representatives of the guarantors and the strong desire of the belligerents to end the hostilities quickly.

The roots of the conflict lie in a dispute between the two countries over the delimitation and demarcation of the border along an isolated stretch of jungle highlands characterized by extremely difficult terrain and continuous cloud cover.¹ Although the dispute extends back to the colonial period, the consequences of a war between these countries in 1941 was particularly relevant to the observer mission. In that year, Peru invaded southern Ecuador and forced a settlement under the 1942 Rio Protocol.

both sides managed to introduce more than 5,000 troops in a 70-square kilometer area of jungle

That agreement committed both parties to a cessation of hostilities and defined a common border based on the limited geophysical data which existed at that time.

Unfortunately, the demarcation was never completed because of a geophysical anomaly that was discovered in the upper Cenepa Valley in 1946. Since 1960, Ecuador has insisted that the protocol is not executable in that area and is suggesting a claim to extensive territory in the Amazon Basin. Peru, on the other hand, asserted that the protocol is valid and has considered the disputed territory to be sovereign. As a result, numerous small-scale clashes have erupted in the area over



A corner of disputed territory.

the past fifty years, usually near the January anniversary of the signing of the protocol.

Border War

In December 1994, Peruvian intelligence confirmed that the Ecuadoreans had established base camps in the disputed area.² Combat operations began with Peruvian air and ground at-

tacks in the vicinity of the Cenepa and at the confluence of the Santiago and Yaupi Rivers. Over six weeks, both sides managed to introduce more than 5,000 troops in a 70-square kilometer area of extremely dense

jungle. Meanwhile, general mobilization produced the forward deployment of six Peruvian divisions along the coastal plain, as well as the equivalent of four Ecuadorean brigades to their immediate front. With fleets at sea, high-performance aircraft forward-deployed, and combat in the Cenepa region, the danger of escalation was significant. By mid-February, however, as the extent of casualties and the economic impact of the fighting became increasingly clear, a battlefield stalemate developed. Diplomatic pressure from the guarantor nations of the 1942

protocol brought the parties to the negotiating table and ultimately to a peace agreement, the Declaration of Itamaraty on March 17, 1995.

The declaration required that both sides cease hostilities, demobilize, and support activities of a military observer mission provided by the guarantors that had an initial mandate of ninety days and could be extended on request of the parties. The accord's language provided for the separation of forces under observer supervision and obligated observers to establish operations centers and recommend an "area to be totally demilitarized" by each side. The accord committed both parties and guarantors to construct a definition of procedures for the observer mission which would detail its organization and employment. Finally, it committed the two parties to begin substantive talks, with the assistance of the guarantors, on the underlying border issue, with a view to demarcation and a return to normal relations.

Brazil's offer to provide a general officer as the chief of the observer mission was accepted by the guarantors with qualifications. Deliberations over the definition of procedures, principally on the issue of command relationships, lasted for almost a month, during which time a number of cease-fire violations erupted in the conflict

Reaching outpost by air.





Briefing visitors at Coangos.

zone and around isolated outposts along the demarcated border some 60 kilometers to the northeast.

A compromise on command relationships was finally reached in early March. To preserve the coequal status of guarantor contingents, the Brazilian general was defined as coordinator rather than commander. Each nation would contribute up to ten officers as observers, led by a colonel, and the United States would provide an element consisting of aviation, operations, intelligence, communications, and logistical support.

The Brazilian general would exercise operational control (OPCON) over the observers from all four nations, while the colonels retained command for administrative and disciplinary purposes, less OPCON, over their contingents. The U.S. colonel would retain command as well as OPCON over the support element. The political direction of the mission would be exercised via a committee consisting of a representative of the Brazilian foreign ministry and the ambassadors of Argentina, Chile, and the United States resident in Brasilia. (This function was later assumed by a group of so-called high functionaries who represented the guarantors directly from their respective capitals.) The ad hoc committee of ambassadors was advised by attachés in Brasilia, under the coordination of a general officer from Brazil's armed forces general staff.

MOMEP Deploys

On March 10, the definition of procedures was signed. Late that same night, a JCS execute order was released permitting deployment of the U.S. contingent. An advance party of the support element arrived in Ecuador and began to receive deployment aircraft at Patuca and Macas, a C–130-capable strip some 60 kilometers to the north. The observer contingents deployed from Brasilia on March 11, dividing between the Peruvian regional military headquarters at El Milagro and the Ecuadorean base at Patuca.

The coordinator, Lieutenant General Candido Vargas de Freire from Brazil, and a staff that consisted of senior colonels from each national contingent, arrived at Patuca on March 12. There they found that the U.S. support element had established headquarters facilities, an encampment for troops, and barracks for observers on a base occupied by the Ecuadorean 21st Jungle Infantry Brigade. UH-60s had arrived earlier that day, self-deploying from an intermediate staging base at Guayaquil. As the sun fell behind the mountains, the MOMEP staff met to spell out an approach to operations and a strategy for initial contacts with local commanders of the two parties.

Concept of Operations

U.S. Southern Command (SOUTH-COM) had analyzed the mission and provided the U.S. contingent commander with guidance on certain fundamentals. For example, no operation would be undertaken unless it led to achieving the results outlined in the Declaration of Itamaraty; also, the safety of personnel and equipment was paramount. MOMEP had no mandate to enforce the peace since it was only constituted to observe and verify compliance under the terms of the accord. For those reasons, the United States adopted a policy of no foot patrols in the conflict zone because of the danger of mines and the proximity of the contesting forces, and forbad use of the helicopters of either party for observer operations. The U.S. representative also stressed the requirement for the parties to accept a defined demilitarized zone (DMZ) as a precondition for operations.

General Freire felt strongly that the DMZ was too sensitive an issue to raise at this point; the parties would begin endless haggling, preventing the mission from proceeding to the separation of forces. To Freire, the DMZ represented the end result of MOMEP actions rather than a control measure for conducting operations. Nonetheless a general outline for a four-phase operation was accepted. Describing the conditions for both parties, and the corresponding tasks for MOMEP, it contemplated a preparatory phase (MOMEP deployment, liaison, a security area as a substitute for the DMZ, and initial requirements for the order of battle in the area), supervision of the cease-fire, separation of belligerent forces, and finally the demobilization of units outside the conflict zone and establishment of the DMZ. This concept was accepted by both parties.

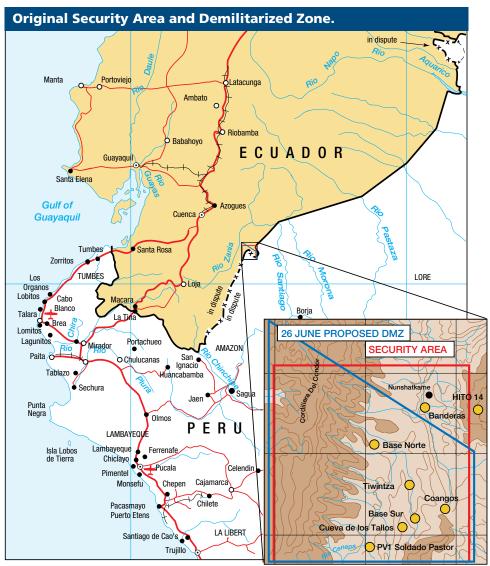
In the meantime, Latin American observers, less U.S. counterparts and

MOMEP concentrated on observer reliefs and plans to separate forces in the security area

communications, deployed to two concentration points by Peruvian and Ecuadorean helicopters and relieved attachés who had acted as interim observers while the Brasilia negotiations were concluded. On March 17, UH-60s brought a complete multinational observer team to Coangos. On the 21st, the requisite assurances of control over air defense weapons were obtained from Peru, and a U.S. observer and communicator were transported to PV1 to join Argentinean, Brazilian, and Chilean observers who rotated by Peruvian helicopters from El Milagro. From then on, relief of both posts was conducted at 3-day intervals (weather permitting) without incident.

Separation of Forces

Between March 12 and 31, MOMEP concentrated on conducting observer reliefs at the two concentration points and preparing plans to separate forces in the security area. The two parties had cooperated with the



Source: U.S. Southern Command

mission requirement to submit a listing of units, personnel, and weapons in the area but were reluctant to trust the other party to comply with MOMEP directives. The staff considered a series of factors in preparing the plan before communicating it to the parties:

Units were intermingled on the battlefield due to the density of the jungle and the narrow concealed trails between fighting positions. Mines had been emplaced throughout the area—some 6,000 by Ecuador alone—often without proper registry. Generalized withdrawals were certain to provoke firing incidents or mine injuries.

- Ecuador had managed to infiltrate a unit into the Peruvian rear, capable of attacking their primary base at PV1 or cutting their main supply route into the upper Cenepa. It was clear that the Ecuadorean unit had to be removed at the start to permit future Peruvian withdrawals.
- Two contested bases, Tiwintza and Base Sur, were invested with a degree of emotional significance that far outweighed their political or military significance. Both sides claimed to have taken them. Ecuador insisted that MOMEP publicly take physical possession of their version of these bases to confirm its battlefield gains. MOMEP refused to do any such thing.
- Peru's national elections were scheduled for April 9. President Fujimori had announced the taking of Tiwintza and



any action by MOMEP that tended to prove or disprove that statement would complicate Peru's domestic political situation.

■ Because of its relative logistical capabilities, Ecuador could conduct aerial extraction from a number of landing zones within the conflict area, but Peru had to move forces on foot to PV1 or Cueva de los Tallos for pickup by helicopters—a process that could require up to 48 hours for each unit, given the terrain and weather.

The MOMEP staff designed a sixweek program of directed withdrawals of 60-odd units deployed in the conflict zone. Each side was told to first concentrate by echelon, drawing combat outposts and patrols to squad-level positions, and squads to platoons. They then received phased requirements for extraction of specific units. Each unit was notified to move to designated points. Helicopters then took them to the MOMEP observers, who logged in departing soldiers, weapons, and equipment. Troops moved on from there by air and road (in the case of Ecuador) to garrisons. This procedure, despite evident flaws from an accountability standpoint, resulted in the extraction of over 5,000 soldiers, without incident, in just five weeks. It was successful simply because the parties were eager to comply with a process that permitted them to disengage without renouncing their honor or territorial claims and the fact that MOMEP provided a veneer of control.

As the separation of forces continued, both Ecuador and Peru pressured

Military representatives of guarantor nations (Argentina, Brazil, Chile, and the United States) and MOMEP coordinator general.

MOMEP to verify demobilization in areas outside of the conflict zone. Sensing eagerness on the part of

both sides to demobilize, the staff directed them to provide a demobilization plan to MOMEP. Then the staff met with both liaison officers to construct a simultaneous and proportional schedule of withdrawals into peacetime garrisons of those units deployed forward during the conflict.

From May 3 to 13, two MOMEP verification teams traveled to various demobilization sites on each side of the border. Each received a briefing by the unit commander, presided at formal demobilization ceremonies, and inspected the garrison or abandoned position to verify that forces had returned to a peacetime readiness posture. The verification was admittedly superficial, given the rapid pace of demobilization and small size of the observer mission. Nonetheless, by May 13 each side had substantially returned to its pre-conflict military posture. If slight variations existed in the postwar configuration of forward units in peacetime garrisons, they were not significant enough to permit either side a destabilizing capability.

DMZ Agreement

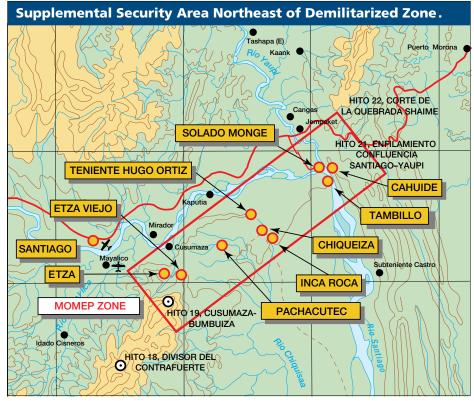
By early May 1995, MOMEP had accomplished most of the specified tasks in the Itamaraty accord and also settled into a routine of aerial patrols over the security area, relief of observers on Coangos and PV1, and periodic insertion of operations centers at Base Sur and Tiwintza. With the upper Cenepa clear of troops except for token forces at Coangos and PV1, MOMEP had achieved conditions for the recommendation to the parties of a DMZ, as required in the mandate.

Six options which had been prepared as early as April ranged from a narrow strip between Coangos and PV1 to a 20 kilometer strip that ran the length of the border. Each was analyzed from the standpoint of military justification and political significance. MOMEP had to maintain complete impartiality and divorce the DMZ from ultimate adjudications of territorial claims while considering each side's view of its sovereign interests.

Accordingly, MOMEP proposed to guarantor diplomats in Brasilia that the existing security area become the DMZ with garrisons of 50 troops at PV1 and Coangos. The recommendation was delivered on May 3. While Peru accepted immediately, Ecuador rejected it, citing that it was unjust and betrayed earlier MOMEP assurances that the security area was not to be related "either to a final border solution or to a demilitarized area." At the heart of Ecuador's protest was a minor logistics base, Banderas, within the DMZ.

During the last stage of the separation, the Ecuadorean liaison officer brought up the issue with MOMEP, stating that Ecuador should not be required to evacuate Banderas, because it was in uncontested Ecuadorean territory and had long been the site of a border detachment. He based the continued need for occupying Banderas on the security and humanitarian support of the indigenous population of 60 to 70 families.

Two-tiered negotiations by guarantor high functionaries and the vice foreign ministers of Peru and Ecuador were held on June 19–26. While the diplomats dealt with normalizing relations, the MOMEP staff explored DMZ adjustments and a draft definition of



Source: U.S. Southern Command.

hito=boundary marker

procedures with the liaison officers. However as the Ecuadorean presence at Banderas was revealed, the Peruvians threatened to break off negotiations. MOMEP met through the night of

this agreement was announced at the closing of the Hemispheric Defense Ministerial in Williamsburg

June 25–26, promoting an adjustment that had been sketched out in a private meeting between the liaison officers. Both sides informed the guarantors that they wished to suspend talks to consult their respective capitals. The MOMEP staff returned to Patuca faced with the obligation to take action regarding the apparent Ecuadorean presence at Banderas.

At the urging of the guarantor diplomats, the MOMEP staff initiated a three-week series of meetings with the liaison officers in Quito and Lima to break the impasse. Based on adjustments drafted in Brasilia and a MOMEP

verification team situated at Banderas, a compromise was finally reached. An historic meeting was arranged in Lima for July 24–25 for the two liaison officers to sign a DMZ agreement on be-

half of their respective governments. It described a quadrangle (see the inset map on page 55) covering the majority of the security area but left Banderas excluded. As a confidence

measure, each side agreed to periodic inspections near the DMZ to assure an equilibrium of forces.

News of this historic agreement was transmitted in time to be announced by Secretary of Defense William Perry at the closing session of the Hemispheric Defense Ministerial that was being held in Williamsburg—a fitting example of regional cooperation on defense issues in line with the principles enunciated at that important meeting.

MOMEP II

With the establishment of the demilitarized zone on August 1, the MOMEP staff returned to negotiating procedures for continuing the mission. Early on, U.S. Ambassador Luigi Einaudi had outlined a long-term plan whereby most observer tasks would be turned over to military officers of the parties to permit a drawdown of guarantor presence. This approach, together with an expanded MOMEP mandate to verify demobilization and demilitarization, was at the heart of the draft given to the liaison officers. The integration would be conducted incrementally from the top down over ninety days and result in a combined MOMEP staff, support element staff, and observer teams.

Both parties agreed in principle to this approach at the Brasilia talks. But at Quito in early August they opted for a more gradual integration process linked to diplomatic progress but not to a drawdown of MOMEP. As stipulated in the draft, the liaison officers wanted an effective veto on withdrawing guarantor observers from the mission. While the United States favored more rapid integration, the consensus was that changes in the wording would not be accepted by both parties. All concerned recognized the implicit right of the guarantors to make decisions with regard to the continued commitment of their observers; as a result, the definition of procedures was endorsed by the guarantor high functionaries and accepted by the governments of the two parties on August 22.

With this success and the stage set for integration and negotiations on the underlying issue, a situation arose that threatened to derail the peace process.3 Since the completion of the separation of forces in May, a number of cease-fire violations had occurred in areas adjacent to, although not part of, the security area/DMZ. Between May 3 and September 30, the two parties reported over 20 incidents accompanied by pleas for MOMEP intervention. Many involved mines which resulted in three killed and one wounded, and small arms fire which escalated to mortar and artillery duels. In both cases, each party accused the other of deliberately provoking the incident and attempting

to sabotage the peace process. Refusing to endanger observers, and wary of exceeding its mandate, MOMEP exhorted the parties to cease active patrolling, concentrate in border outposts, and remove indirect fire weapons from the area. But neither side would comply without MOMEP verification.

The mission adopted a strategy similar to that which had produced favorable results earlier. An area extending 10 kilometers to either side of the demarcated border from the DMZ to a point east of the confluence of the

Yaupi and Santiago rivers was designated as a supplemental security area (see map); inventories of outposts, troops, and weapons were demanded from the two sides; and a phased withdrawal of garrisons and indirect fire weapons was designed, leaving a maximum of 80 soldiers for each side at the designated outposts. MOMEP observers verified that troops and weapons had arrived at the nearest battalion headquarters (Santiago, Ecuador, and Ampala, Peru).

These steps, together with increased helicopter patrols, helped stabilize the situation. Since March 1996,

18 officers from Peru and Ecuador have been integrated into MOMEP and the guarantor observer contingents have been reduced to four members each. The U.S. support element remains at a strength of 60 troops. A long-standing policy on border contacts has been readopted by both sides, and significant progress has been made on the diplomatic front. The January 1996 meeting of foreign ministers in Lima led to a formula for sustained negotiations on the underlying issue.

With a minimal investment in resources by the guarantors of the 1942 Protocol of Rio de Janeiro, MOMEP can claim extraordinary success in manag-

ing the situation both at the tactical level and through participation in negotiations to establish the demilitarized zone as well as the structure of an extended (and integrated) peace observer mission. Substantive negotiations on demarcation are the next step for guarantor diplomats. The hope is that integrating both parties into the observer mission will obviate armed encounters and also produce a climate of confidence and self-reliance in which to negotiate. The fear is that without continued participation by guarantor observers in dayto-day operations, the mission could lose credibility and control as diplomats deal with the lengthy and difficult problem of achieving mutual concessions to produce a final settlement. **JFQ**

11 FEBRUARY 1996

DECLARATION OF COMMITMENT TO PEACE BETWEEN ECUADOR AND PERU BY THE GUARANTOR NATIONS' ARMED FORCES

Recognizing the successful efforts by the armed forces of Ecuador and Peru to support the peace process by showing constraint, discipline, and professionalism, fully integrating Ecuadorian and Peruvian observers into the Military Observer Mission (MOMEP), and creating the conditions for peaceful diplomatic negotiations we acknowledge these

- 1. To further encourage the Ecuadorian and Peruvian armed forces to move toward increased trust, openness, and candor in their bilateral military relations.
- 2. To fully support the diplomatic initiatives toward peace undertaken by our respective governments, as well as to encourage the diplomatic bilateral efforts conducted by the
- 3. To maintain open communication and transparent actions between Ecuador and Peru and the military commands of the guarantor countries and to share our observations 4. To develop confidence.
- 4. To develop confidence and security-building measures between the Ecuadorian and flict to resolve differences.

 5. To continue our analysis of peace.
- 5. To continue our commitment to the Military Observer Mission Ecuador Peru (MOMEP), provided there is continuous progress toward the peaceful resolution of the

We pledge to meet together as necessary to strengthen our firm resolution to promote unity and friendship between the armed forces of Ecuador and Peru.

Having visited Lima and Quito together on 9 through 11 February 1996, we declare our mutual support and commitment to peace between Ecuador and Peru.

Lieut. Gen. Mario Cándido Díaz Chief of the Joint Staff ARGENTINA

Lieut. Gen. Raúl Tapia Esdale Chief of the National Defense Staff CHILE General Benedito Onofre Bezerra Leonel Chief of the Armed Forces General Staff BRAZIL

General Barry R. McCaffrey CINC, U.S. Southern Command UNITED STATES OF AMERICA

NOTES

- ¹ See William L. Krieg, *Ecuadorean-Peruvian Rivalry in the Upper Amazon* (Washington: Department of State, External Research Program, 1986).
- ² This overview is based on a combination of SOUTHCOM reports and briefing material provided to MOMEP by the liaison officers of the two parties.
- ³ The sources for events that occurred after the author's departure on August 23, 1995 are SOUTHCOM reports and interviews with both Colonel Steve Fee, U.S. contingent commander, and Coronel Jorge H. Gomez Pola, senior Argentinean representative to MOMEP.

A Brazilian



Strategic Outlook

BY LUIZ PAULO MACEDO CARVALHO

he end of this millennium will go down as the era that witnessed the collapse of the Berlin Wall, the demise of the Soviet empire, and the termination of the Cold War, a period characterized by the repudiation of totalitarianism, the resurgence of democracy and nationalism, the awakening of the Pacific, and the geopolitics of economic blocks. Ruptures and changes have resulted from the clash of fragmentation and globalism. The Old World became a battlefield with the breakup of the former Yugoslavia, while Czechs peacefully separated from Slovaks. The escalation of ethno-nationalist violence,

compounded by religious fundamentalism and international terrorism, has no respect for borders. Narcoterrorism, underscoring the impact of organized crime on urban centers afflicted by migration, has emerged as a new social threat. The predominance of market economies and strengthening of trading blocks are cause to rethink the traditional concept of sovereignty.

Decline in the strategic importance of the nations of Latin America in the face of geopolitical quirks, except for the Caribbean, has turned them into outcasts. This has forced them to compete, without much hope, for a place among the megablocks with

transnational economic power. Thus, the heterogeneous freight train of Latin America, lacking national reserves and foreign investment, lies motionless in the station of underdevelopment awaiting a mighty locomotive to pull it into the terminal of modernization. In the meantime, Latin America imports capital goods and technology and is an exporter of raw materials and cheap manufactured goods. It is also an attractive market. In Central and South America, a range of border disputes, the Malvinas, and multilateral interests in Antarctica contribute to political instability. In the Caribbean, the agonizing swan song of the Castro regime can already be heard.

The decline or collapse of nationstates can be anticipated with the formation of regional, continental, and extra-continental blocks or conglomerates. Paradoxically, there is a strengthening of nation-states in search of national identity as they witness the inability and lack of resources on the part of international organizations to resolve their disputes. This suggests that nation-states are too large to settle small controversies, yet too small to settle large ones.

The new international order still lacks clear definition, yet one finds no shortage of friction or threats to security. There is an assumption that no solutions exist without U.S. support, at least in the short term, although it appears that reason may prevail over might as we enter a new century.

A Cold Peace

Alternating periods of war and peace have been a feature of world history. Each generation perceives war as a solution to continuing conflicts, many fueled by self interest or a desire to reign over other men. The 20th century has been scourged by professional politicians who have failed to use reason to reduce tensions that caused two world wars. Since the fall of Rome, 75 percent of the deaths attributed to war have occurred in this century.

The end of the Cold War created a wave of euphoria based on the supposition that the threat of a nuclear holocaust was finally averted, leaving

Coronel Luiz Paulo Macedo Carvalho, Brazilian Army, is director of the Brazilian Geography and Military History Institute and the Brazilian Army Library.

mainly limited regional or local armed conflicts.

Augusta/Sikorsky helicopter.

But the reality of the ensuing years has been a series of unexpected events: the Persian Gulf War, massacres in Somalia, armed conflict in Sudan, renewed fighting in Angola and Mozambique, the return of guerrillas in Namibia, ethnic disorders in South Africa, ceasefire violations in the eastern Sahara, separatism in Assam, Punjab, Kashmir, and Timor, chronic strife in Cambodia, continued carnage in Lebanon, civil war in Afghanistan, brutality in Bosnia, Russian genocide in Chechnya, further instability in El Salvador and Nicaragua, crisis in Haiti, border disputes between Ecuador and Peru as well as Colombia and Venezuela, clashes between Armenians and Azerbaijanis and Georgians, Abkhaz and Ossetes, Hutus and Tutsis, Kurds and Turks, Tamils and Sinhalese, and Israelis and Palestinians, and others. The world faces a torrent of conflicts even if they are legacies of the past.

The Gulf War did not eliminate the threat of conflict in an important strategic area, given the national interests of the "group of seven" (G-7)— Canada, France, Germany, Great Britain, Italy, Japan, and United States. Moreover, the international community has responded differently to each threat that has emerged, showing no consistent strategy for peace after the Cold War. One reason is that present conflicts differ from those for which their forces were traditionally prepared. Another is that the world is undergoing a great transformation, and the international community has yet to redefine its role, thus generating mistrust among weak and less developed countries.

Today's insecurities are worsened by a range of uncertainties virtually unknown to previous generations. Numerous contemporary internal conflicts are a legacy of colonialism since the borders of half of the U.N. members were arbitrarily imposed by the colonial powers. Thus, it should come as no surprise that separatist and irredentist movements have surfaced.



In reality, the post Cold War era will be known by a specter of violent disaggregation of states that may lead to war. Unless the international community identifies and courageously faces the roots of conflicts resulting from noncompliance of individual human rights, disrespect towards racial identities, and sovereignty of national

the new world order assumes continuation of global military apartheid—disarmament of weak states in favor of the G-7

states, world violence as a whole will not diminish, and humanity will fail to correct its dangerous course.

Much has been said about disarmament, and progress has admittedly been made; however, development and production of modern weapon systems continues, especially in the industrialized northern hemisphere. Billions of dollars are still being spent in the sale of weapons from the First to the Third World. Other than the 1993 Chemical Weapons Convention specifying the destruction of production facilities, no existing treaty calls for either dismantling or converting weapons plants. The new world order assumes continuation of global military apartheid—

that is, disarmament and reduction of the armed forces of weak states in favor of the G-7 nations which, under the pretense of U.N. sponsorship, would assure collective security. This could pose serious threats to the concept of national sovereignty.

Despite stabilization or reduction of nuclear arsenals, existing stockpiles still have enough power to annihilate all life on the planet. Moreover, no nuclear powers promise total elimination of atomic arsenals; yet they assume the right to prevent others from mastering the complete cycle of atom disintegration even for peaceful ends, since possessing

nuclear weapons confers political and military status in diplomatic negotiations. Moreover, conventional weapons stockpiles are growing and proliferating which promotes instability. Europe is the most militarized region, in contrast to the Third World where unresolved conflicts fuel arms races in which 60 percent of the hardware comes from G-7 countries, a practice inconsistent with their advertised disarmament policies.

The image of blue helmets as global policemen is questionable. The General Assembly, which is dominated by many new and insignificant countries, has its decisions contested by the great powers; likewise, the veto power of larger countries on the Security Council raises suspicion among smaller states. Moreover, lack of a permanent budget for peace operations, combined with growing debt and late contributions by numerous member states, exacerbates crises. Complicating matters is article 2 of the Friendly Nations Charter, which does not confer the authority to intervene in matters that essentially fall under the internal jurisdiction of a state. It is becoming

international law does not justify foreign intervention in internal matters

increasingly difficult to distinguish between internal and international conflicts and predict their repercussions. The concept of self-determination collides with that of humanitarian action.

The interpretation of international law, even in the face of serious human rights violations, does not justify foreign intervention in internal matters. Thus, even though it has never been stated absolutely, sovereignty becomes more important in terms of the rights and duties of states. Hence, it is no surprise that some alleged foreign intervention in weak states is not universally accepted. In the future, nations will be hard-pressed to justify such practices.

Finally, peacekeeping requires above all that peace be achieved, since powerful states only resolve questions pertaining to their interests, confirming La Fontaine's adage that the best reason is always that of the strongest. The days of amateurism are gone. Both diplomats and politicians have not been realists. The credibility of the United Nations will be compromised if conflicts are resolved for the economic and political interests of world powers or multinational corporations, to the detriment of universal principles of respect for human dignity. Such suspicions are based on the decisions taken by the Security Council, an organization that ignores human rights violations when convenient or uses them to justify interventions.

It is illusory to expect the United Nations to prevent every limited conflict from assuming violent and large-scale proportions. Deterrence alone, through effective employment of a powerful force when necessary, will guarantee the right of mankind to live in peace and liberty.

Future War

After both world wars, new international orders appeared with the creation of the League of Nations in Geneva

(1919) and the United Nations in San Francisco (1945). The victors became keepers of the peace based on a balance

of power. With the end of the Cold War, the United States emerged as the sole superpower, although it has shared this role with other G-7 members.

Accordingly, great wars will only be fought by more developed states. In other words, as we reach the end of the millennium, only the United States has the ability to fight and sustain a total nuclear war, a fact that in itself makes such an occurrence unlikely. Otherwise, full-scale conflicts between Third World countries would be avoided or resolved by U.S. predominance or G-7 global power, using the United Nations as a tool, or by international economic sanctions. If diplomatic negotiations or economic pressures fail, then a U.N.-sponsored force would be employed with the consent of the Security Council. However, such coveted universal peace remains far from a reality.

Scientific and technological breakthroughs in the coming decades will produce significant material developments which will change the nature of warfare, with profound implications for the structure and the employment of armed forces.

- State-of-the-art, high precision conventional weapons must replace nuclear weapons of similar destructive power, without their malignant and devastating consequences.
- The line distinguishing nuclear and conventional weapons will disappear.
- Automated, computerized, high precision weapon systems will be available, carrying more powerful explosives and highly penetrating munitions and possessing electronic components and target acquisition

and targeting equipment capable of processing data at incredible speeds.

- Microelectronics will allow the further development of invisible weapons of extreme automatic precision. The main limiting factor will be the high cost.
- The art of war will undergo profound changes.
- Vertical coordination will gain greater importance: ground forces, traditionally supported by aircraft, will trade roles and support air operations. Consequently, the role of naval air forces will be reconsidered.
- There will be no need to find and totally destroy enemy combat, political, and economic power—or to break enemy will by employing massive ground forces and occupying its territory.
- Precision attacks against previously selected targets, using stand-off strategic weaponry, will reduce casualties and collateral damage but lead to disintegration of an enemy political system because of severe damage to industrial and power facilities, communication centers, transportation networks, and populations. Such weapons will not distinguish civilians from soldiers.
- Electronic warfare and intelligence will become especially important.
- Operations will be considerably shortened.
- Command, control, and communications (C³) will be extremely valuable.
- Air defenses will have to be modernized to counter invisible high precision weapon systems, undetected even by radar under adverse weather and visibility conditions
- The computer will dominate the battlefield; accordingly, victory will lean toward the side with effective information systems, operated by highly qualified specialists in data processing, that exceed enemy command and control capabilities.
- Data automation will eliminate excessive manpower and require well-trained personnel in relatively smaller numbers.
- Aircraft will give way to unmanned aerospace vehicles.
- Smart weapons will replace conventional and nuclear ones. However, nuclear weapons might be used in desperate situations, which will attract new members to the atomic club with comparatively primitive systems and limited stockpiles.
- Combined operations will reach their apex through increased aerospace and naval power.
 - Space will be a decisive factor.

Most states cannot stay abreast of the scientific and technological developments as applied to the art of war



which forces them to accept the new order imposed by the larger powers. Weaker states can only fight limited or regional small wars, using conven-

despite international peacekeeping, there is no justification for converting Third World armed forces into militias

tional weapons or old nuclear and chemical weapons to counter the power of the strongest countries.

For some time, an astonished world will witness hostilities among emerging nations that risk peace. The new international order—in which any military institution unable to take part in an unrestrained arms race is viewed as a national guard or militia dependent on the great powers under the shield of international organizations—anxiously awaits a new strategy.

Armed Forces

Although the world may be less dangerous politically, it is more complex economically and faces greater risks of conflict. Great wars may be averted, but fierce economic competition warns of dangers arising from a widespread loss of control which degenerates into armed conflict. Thus,

despite the contributions of international organizations to peacekeeping, there is no justification for converting Third World armed forces into militias.

> No outside system can suppress all the tension afflicting unjust societies that lack the means to maintain order and secure their place on the world stage. Hungry, ignorant, and socially inferior combatants cannot resist the onslaught of developed and better

trained adversaries. Without good health and education, no armed force will be able to ensure respect and stability among states.

Years ago, Adlai Stevenson stated at the United Nations that we do not envision a world devoid of conflict. Regardless of how war evolves in the new world order at the dawn of the next century, the universal and enduring role of armed forces remains constant: to deter aggression, defend the homeland, and guarantee law and order both internally and externally. Thus the role of the armed forces must be consistent with the goals of society in general. Militaries are extensions of the societies to which they belong, which is why they are national institutions. Any disharmony between the armed forces and society can hamper stability, liberty, and social peace.

To address the appropriate role of the armed forces in society, it is necessary to know how they are institutionalized. This requires a knowledge of their lawful missions—in other words,

Avibras launching Astros II SS-60.

their constitutional role and goals. Generically executable mis-

sions are permanent in almost all armed forces and are only distinguished by the political and ideological connotations imposed on them by their legal role.

The role of the armed forces is a function of the regime and the times; hence, it varies with political fluctuations. While in some nations military expression is institutionally adapted to one party or the personal power of a discretionary ruler, in democratic states the law normally decrees that the armed forces guarantee a regime legitimized by popular representation. Their role therefore changes only when a new group assumes power and sets a new course. Examples include passage of the Tzar's forces to the Soviets and their return to the Russian nation; democratic transformation of Nazi and socialist military institutions into a reunited Germany; the greatness of the military role in the United States and Britain; and the tumultuous history of many Ibero-American regimes.

When a people achieve the level of nationhood and create the state, one of its essential traits is maintaining independence and ensuring that national will is not subjected to any outside powers. The state also underwrites the supremacy of internal order—interpreted as the inherent power of the state to impose itself on the other institutional powers within its territory.

In keeping with Brazilian constitutional tradition, article 142 of the current constitution states that the armed forces are permanent and regular national institutions and destined for the defense of the homeland, the guarantee of constitutional powers, and the maintenance of law and order. This role is consistent with the nation's level of political evolution. But maintaining law and order is not within the scope of the armed forces in some countries.



Defense of the homeland means integrating and protecting national territory and democratic institutions of the representative regime, federation, and republic from aggression, be it internal or external, overt or covert. The guarantee of constitutional powers specifies providing security to the executive, legislature, and judiciary so they may conduct their legal responsi-

the first inviolable commitment of the armed forces is defense of the nation

bilities, independently and harmoniously, free from any type of pressure. The guarantee of law and order is summarized as enforcing respect for established legal norms or those derived from them, which puts the armed forces in a peculiar position. Even if the law did not prescribe such a role, society would find it difficult to accept the military being impassive in times of chaos. It would be illogical and utopian for the state to forego the use of force in the face of an external or internal threat. The old aphorism that the armed forces should be a giant mute only finds acceptance among the ill-intentioned. The incapability of speech is an organic handicap that must not become a military attribute.

The first inviolable commitment of the armed forces is defense of the nation—its moral and material patrimony, territorial integrity, political-economic independence, and institutions. Second, the military is required for the collective defense of the American continents against aggression. Hemispheric stability resides in the preservation of peace from north to

south. Finally, the armed forces are the instrument for meeting the international commitment to maintain world peace

among nations. These three objectives summarize the basic missions of Brazilian military institutions.

Without hampering missions established by constitutional decree, the armed forces carry out activities of military interest in scientific-technological, economic, and social areas where there is a lack of participation from the private or governmental sectors. They also support civil defense in disaster relief, emergencies, or humanitarian assistance.

During a seminar on "Army Education Policy for the Year 2000" held under the auspices of the Brazilian army staff and including military personnel and civilians from the First World, there was unanimous consent that the generic roles of armed forces consist of defending the homeland, participating in multinational forces to

support collective security, and providing relief assistance in catastrophies

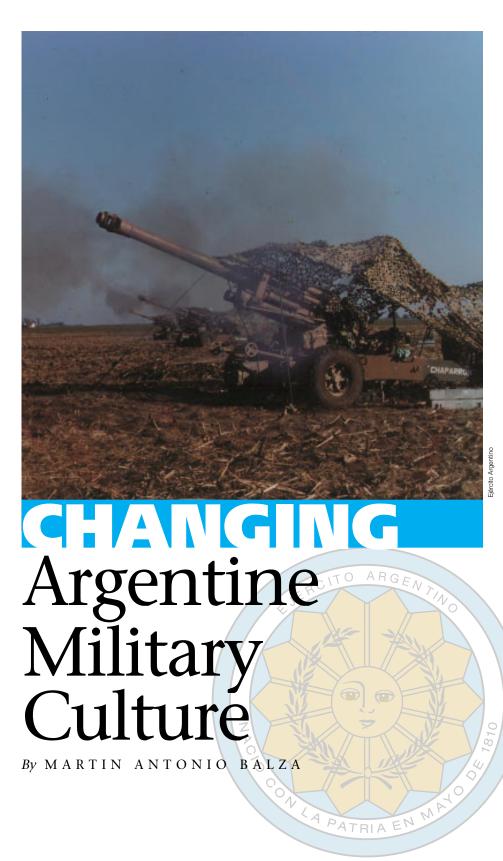
Brazilian destroyer CT Paraíba. and emergencies. It has become clear that in all countries the military forms

the basic element of coercive organization that serves the law.

Resting on the shoulders of the armed forces-on their structural efficiency, training, and respectability—is social peace in the international arena and national prestige in the commonwealth of nations. Hence, they are material safeguards of both the existence of a sovereign state and the achievement of its goals. It is on their power that the status and self-determination of the state rely in national and international crises. Thus, we cannot accept the notion of entrusting the defense of the state to alliances or third parties, nor rely on mercurial decisions by international organizations to assure national integrity.

Regardless of whether the world feels less threatened in the aftermath of the Cold War, the military is less dispensable than ever in the new world order. It is a permanent national institution whose roles—originating in the constitution—remain universal and largely unchanged and cannot be relegated to militias, other states, or international organizations. Were this not so, the principles of sovereignty and self-determination, the foundation of international law, the declaration of human rights and duties, and the U.N. charter would be compromised.

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Teniente General Martin Antonio Balza is chief of staff of the Argentine army.

n 1990 Argentina began a transformation of the land component of its armed forces based on assessments of current and future defense needs, national objectives, economic conditions, and a changing international situation. This historical challenge was met by the Argentine army which implemented actions to achieve that end. The army is a disciplined and cohesive institution that performs its mission with composure, perseverance, motivation, devotion to duty, and faith in a future which it deems bright. It has also adapted to structural changes undertaken by the

155mm Citer gun.

nation and shared in the sacrifices which these diffi-

cult reforms have imposed on the Argentine people. This has led to the first changes in force structure since a reorganization in 1964. Both geopolitical developments and extraordinary technological advances during the 1980s precluded the army from responding to demands posed by this national challenge.

The Malvinas War clearly indicated the failure of our doctrinal and operational framework. Budget policies and cost reductions embraced by the Argentine government, like other countries, compounded structural problems. To meet this reality, studies were required to guide development of the army. Thus, a long-range goal was implemented by a comprehensive and ambitious project, "The Military Ground Component of the Future," which spanned over twenty years (until 2010). That project, with subsequent revisions and adaptations, has become synonymous with the army's future. From the start the effort has been focused in a coherent and coordinated manner. Its most distinctive characteristic is that it is not static. On the contrary, it is flexible enough to assimilate changes deemed necessary by the defense establishment while also ensuring room for evolution.

Notwithstanding the lack of additional funding to embark on this evolutionary process, by the end of 1991

the required actions had been taken and continue to be systematically implemented. The concept behind restructuring the army was a process of transformation which implicitly had to start with cultural modernization. Our actions had to lead to profound changes in the corporate culture of the army including:

- respect for and subordination to the constitution and the law
- a positive attitude toward community service to integrate the army into society
 - a call to excellence
 - command based on shared objectives
- encouragement of higher levels of responsibility, participation, and initiative among subordinate levels of command
 - assignments based on competence
 - promotions based on merit
- modification of seniority throughout a military career
- modernization of the army's educational system
- replacement of mandatory military service with a voluntary army.

Qualitative changes in the education provided to personnel is fundamental to the process of transforming

implementation of a voluntary army was a historical milestone and our greatest challenge in the 1990s

any organization. In this sense educational requirements were raised in an effort to gradually adjust the professional skills required for the 21st century during the course of training and development. With that in mind the curricula at institutions such as the military academy now enable graduates to earn university degrees. Noncommissioned officers graduate with high school diplomas. This transformation also includes establishment of military institutes of higher education for civilian personnel, which has led to a paradoxical situation at our military university where the majority of the students are civilians.

Likewise, the implementation of a voluntary army was a historical milestone for Argentina and our greatest challenge in the 1990s. The idea was to address the formation of the



soldier of the future, defense needs, resource availability, and demands posed by society. Its adoption led to

> profound changes, both cultural and structural, ranging from education and training volunteers to the operation of units, equipment, personnel

practices, legal developments, etc.

We should underscore that the army implemented this particular recruitment system without any prior experience or a transition period—an

Argentine peacekeeper, Croatia. unprecedented situation among nations which have

introduced a volunteer force. The possibility for individuals to voluntarily choose to join the army as an officer or noncommissioned officer is an innovative and invaluable recruitment alternative not previously employed in Argentina. Another remarkable change is the fact the army decided to offer women the same recruitment opportunities as men, opening a series of positions which will be gradually expanded as the system is consolidated.

At the same time the Argentine army has maintained and continues to stress the importance of ethical values that are fundamental to the military profession. Discipline, honesty, devotion to duty, loyalty, obedience, self-sacrifice, courage, and individual example have been emphasized in the past and will continue to be objectives for developing the Argentine soldier.

Defense is a function of state that can only be entrusted to the military for implementation. Our primary mission is and will continue to be the defense of vital national interests, regardless of the existence of internal or external threats. The challenge for the future is to identify threats that may arise in the international order. In this new world order our traditional mission remains valid. It essentially consists of having a credible deterrent. However, new dangers have resulted in new subsidiary

Torpedo boat *Indomita* at Ushuaia.



pert L. Scheina



Super Etendard, Espora Naval Air Base.

roles that armies—as the institutions with the greatest aptitude—have assumed.

The Argentine army has conducted peacekeeping operations among various other missions in an effort to help maintain international order and balance in compliance with resolutions of the U.N. Security Council. Our military has thereby gained national and international recognition for its professionalism, devotion to duty, and discipline evidenced while participating in multinational peacekeeping forces. This motivation has enabled us to overcome other difficulties and strengthen our commitment to world peace, in keeping with the objectives of Argentine foreign policy.

Argentine and Spanish observers monitoring Cuban withdrawal from Angola.

This would not have been achieved without

the active, intelligent, and selfless participation of our servicemen and women who, in turn, are able to count on the understanding and support of Argentine society. The respect of the army for republican institutions and constitutional power has deep roots, which is one of the most important achievements of the modernization process.

Additionally we have been able to overcome barriers that isolated us from the community. Society as a whole now has the political will to attain peace and well-being. This has been possible through mutual understand-

ing and the establishment of civil-military relations which are devoid of prejudice and misconceptions. The first step was to abandon our apocalyptic vision and arrogance and begin accepting the right of dissent and respecting the will of the people. We have been doing that for several years to leave the past behind and to build the Argentina of the future—a nation that has found maturity in pain, and one that someday will come together in a fraternal embrace.

The Argentine army will meet and exceed all these expectations. It is prepared to fulfill its commitment while upholding the traditions and ethical values that are fundamental to the military profession. Our human as well as spiritual heritage, solid and virtuous, is consistent with the truth and with the values, interests, and objectives of Argentine society.

Security and Democracy in the

Region

By LUIGI R. EINAUDI

egional dynamics currently facilitate military support for democracy and peaceful conflict resolution in the Western Hemisphere. Yet although conditions have greatly improved, continued success will require both civilian and military leadership. With Canada, Mexico, and the United States in the North American Free Trade Agreement (NAFTA), the Anglophone Caribbean still as solidly democratic as ever, and democratization in South America complementing the resolution of in-

rates in several Latin American countries have for some years been higher than in the United States and Canada. If this trend continues, the glaring gaps in the quality of life between North and South America could narrow in the future.

But the most impressive trend is political convergence. Since the early 1980s, democratic systems have withstood leadership changes, severe austerity, and major adjustments. Democracy and economic modernization are proving compatible and are

contributing to a reborn awareness of the value of freedom. But there is no guarantee that new opportunities for regional cooperation will be fully developed. Already there are reactions against the reformist optimism that opened the 1990s. Yet the potential for a new era of hemispheric prosperity and good neighborhood is real.



Argentine, Barbadian, and U.S. police monitors in Haiti.

ternationalized conflicts in Central America, the 1994 Miami summit credibly set the integration of the entire hemisphere as a common goal.

Change toward a more harmonious regional order is broadly evident. In sharp contrast to strategic rivalries in other parts of the world, Argentina and Brazil ended their nuclear competition and accepted international safeguards. With Chile, they banned chemical and biological weapons. In another sphere, Argentina, Bolivia, Colombia, Mexico, Peru, and Venezuela followed Chile in dismantling centralized economies.

And giant federal Brazil is adapting well to new democratic and productive forces. Growth

Security Concerns

Extracontinental threats have lost significance, but travail in Haiti and looming instability in Cuba make clear that local problems re-

main. More generally, the ills of poverty, misgovernment, terrorism, drug traffic, and mass migration can overwhelm the most settled boundaries, entrenched relationships, and precise legal guarantees.

A southward flow of automatic weapons through Miami has replaced Cuban-trained guerrillas as threats to local authorities. Criminal and terrorist groups hostile to organized societies possess levels of technology and fire-power that contrast starkly with the historically unarmed governments of the Commonwealth Caribbean and even the capabilities of some Latin American nations. From Chiapas down the Central American isthmus and along the continent's Andean spine,

Ambassador Luigi R. Einaudi is a senior policy advisor at the Department of State and served as U.S. permanent representative to the Organization of American States. explosive mixes of race, poverty, political violence, and institutional failure cause more casualties than the head-line-grabbing calamities of earthquakes and hurricanes combined.

Democratic traditions largely enabled the Commonwealth Caribbean to escape totalitarian temptations even in the 1960s and 1970s. But articulated interests and favorable changes do not guarantee social stability. Exacerbated by economic dislocations and modern

old injustices and social problems can challenge international cooperation

communications, old injustices and social problems can challenge the responsiveness of national elites and international cooperation. And unattained development and missed opportunities can expose and magnify the faultlines of otherwise forgotten resentments against neighbors.

Our hemisphere cannot be isolated from the broader world. The end of the Cold War has challenged global order on a scale comparable to the end of the world wars. The response to the disintegration of the Soviet empire remains unclear. Will we overcome centrifugal nationalisms as happened after World War II or includge them as occurred following World War I? Moreover, will we find workable responses to deforestation, population overflow, and global warming?

Not only are such issues taxing in themselves, however; we are barely able to discuss them for lack of common reference points. Politics, like nature, abhors vacuums, so this is one in name only; but it is filled with far more particularisms and localisms than the grand strategists have been accustomed to accommodating, which may actually be part of the problem.

Regionalism

For all its shrinkage the planet is big and complicated. The United Nations can't do it all, nor can the United States. And most other countries have their hands full with domestic concerns. A compromise between the abstraction of globalism and weakness of unilateralism already exists. It is called "neighborhood" and has the attributes

of proximity, language, culture, shared problems, and history. That neighbors can solve some problems best is being demonstrated from NAFTA to the European Union, from the Southern Cone Common Market (MERCOSUR) to the Association of Southeast Asian Nations and the Organization of African Unity.

Yet an acceptance of regionalism comes only grudgingly. Globalists see it as second best or as indicative of fail-

> ure, nationalists as another threat to national identity, and liberal economists as a protectionist "circling the wagons." In today's uncer-

tain conditions, however, regionalism can be a building block to work out principles and relationships for broader global cooperation.

Historically the United States saw itself solidly anchored in the Americas from the Monroe Doctrine to the Good Neighbor policy. But World War II ended the "America First" debate, and the United States has had worldwide commitments ever since. This global outlook was reinforced during the Cold War. With the dissolution of the Soviet empire, the United States became the only genuinely global power. It is the only country that sees itself as having a role in every region in Europe, the Middle East, Asia, and Africa as well as throughout the Western Hemisphere.

From this perspective, NAFTA may be a first step toward re-anchoring the United States in the region. Certainly Washington has not moved so directly to bolster its position in its immediate neighborhood since the days of Franklin D. Roosevelt and the Good Neighbor policy. However, NAFTA cannot be a mask for a Fortress Americas policy. Canada and the ABC states (Argentina, Brazil, and Chile) are mainstays of the General Agreement on Tariffs and Trade (GATT) and peace operations. Future success "beyond NAFTA" will be neither exclusionary nor isolationist, but rather GATT-compatible in economics, democratic in politics, and universalist in spirit.

Cooperation

With the entry of Canada in 1990 and of Belize and Guyana in 1991, the Organization of American States (OAS) became for the Western Hemisphere what the United Nations represents for the world: a body whose membership includes its entire potential universe. (The only obvious exception, Cuba, is still formally a member and many look forward to the day when a democratic Cuba will reoccupy the seat it was suspended from in 1962.) More importantly (unlike the U.N. charter which does not invoke the word "democracy"), the OAS charter commits all its members to representative democracy. Acceptance of the principle of nonintervention by President Roosevelt in the 1930s gave meaning to the sovereign equality of states, thus helping to lay the cornerstone of the modern inter-American system. For years, however, OAS wallowed in internal contradictions, cheap rhetoric by dictators, and Cold War distortions which combined to sap its potential and earn public disdain.

Conditions changed as this decade began. In 1991 the annual OAS general assembly was hosted in Santiago by a Chilean government eager to draw attention to its transition from military to civilian rule. In 1973, the coup by General Pinochet against the elected government was not even commented on by OAS, many of whose members were under military rule. All 34 delegations in Santiago represented democratic governments. The result was revolutionary: unanimous adoption of resolution 1080 calling for automatic consideration of any interruption of democratic processes in a member state. Over the next two years, this OAS procedure was applied in the case of Haiti to withhold recognition of the regime issuing from a military coup, and also in Peru and Guatemala to oppose unconstitutional seizures of power by civilian presidents.

Since 1990 the organization has been in the forefront of efforts to define the legal grounds for international cooperation in support of democracy. OAS missions have disarmed insurgents in Nicaragua and Suriname while protecting human rights. Moreover, observers supported elections in



Nicaragua, Paraguay, Peru, El Salvador, Haiti, Venezuela, and Guatemala. Implementing the Miami summit will rely to an extent on the success of OAS as a coordinator and a sounding board.

Sovereignty

The world is marked by truly transnational forces, some with appalling destructive power. Added to the evils of dictatorship and protectionism are pollution, mass distribution of

democracy may be as important among nations as within them

drugs with their antisocial effects, and population growth that often overwhelms existing social arrangements. At the same time, electronic communication has created a new and transcendent universe.

The search for solutions must respect what is invisible from space and increasingly ignored on earth: the international boundary distinguishing one sovereignty from another. Although very much under challenge by impending waves of anarchy, with entire areas beyond the reach of any central government, the nation-state remains the basic unit of world organization. And states need to be organized and energized before they can

cooperate, even to face urgent global problems.

From the standpoint of international cooperation, in fact, democracy may be as important among nations as within them. In our hemisphere, the veto-free OAS structure and accompanying search for consensus brings a notable dose of democracy to relationships expressed through the organization. A regional approach has two advantages: bringing all concerned

parties together is an efficient form of communication, and maintaining the equality of states by sharing information and discussion on

a one-country/one-vote basis reduces the asymmetry of purely bilateral settings and facilitates cooperation—even bilateral cooperation. The first advantage typifies multilateralism and is singularly useful in supplementing normal communication channels. The second has special significance in this hemisphere, where bilateral cooperation can be inhibited by the disproportionate power of the United States. Gradual negotiation of common positions in a regional setting is thus a way to resolve transnational issues without sacrificing the rights of sovereignty.

The Military

Democratization in Latin America in the 1970s and 1980s involved transitions from military to civilian rule. As the backbone of displaced authoritarian regimes, military institutions were seen as opponents of democracy even among civilian leaders and move-

Cubans being searched on arrival at Guantanamo.

ments who owed their success to support from men in uniform. Such tension must be over-

come and new understandings developed if democratic governments in the region are to function in the midst of social discontent, economic reform, and international uncertainty. Building institutions and promoting justice requires setting boundaries between civilian and military authority. Are military personnel accused of human rights abuses subject to military or civil courts? Who makes the decisions on counternarcotics policy or spending on arms? Should military personnel vote?

Such questions can be controversial. Moreover, they are complicated by lack of an agreed model of authority. Liberal traditions subordinate the military to civilian authority in all matters but grant military personnel the political rights of citizenship. Corporatist traditions emphasize military autonomy in spheres of military competence, hence limiting or denying civilian authority in military affairs, but refuse political rights to military personnel.

Well into this century, Latin American constitutions regularly gave the military a corporatist right, even duty, to preside in a nonpartisan manner to determine when politicians had violated their constitutional mandates. Those practices, incomprehensible to those educated in a liberal tradition, have all but vanished from constitutions written over the last generation. But corporatist attitudes remain powerful, nowhere more than among military officers, whose function is to defend the state from its enemies and who likely see freedom as meaningless without social order. Officers have all too often been caught in cultural polarity with and against advocates of individual rights.



Both civil-military and liberal-corporatist differences can be reconciled over time by habits created by the rule of law. But the challenge is mutual. The military must realize that democracy is not anarchy, that human rights are essential to their own dignity and honor, and that civil authority is the only source of legitimacy. Civilians, in turn, must accept that the nation is symbolized by the uniform as well as the flag, that unarmed world peace still remains a utopian ideal, and that military cooperation is essential to consolidate democratic gains and economic reforms.

Civilian and military leaders must deal with the single most pernicious and destabilizing element in hemispheric politics today: impunity. Abuse of power and privilege, corruption, human rights violations—these evils know neither nationality nor civil condition nor uniform. Impunity from punishment—whether the accused are civilian or military—greatly destabilizes state authority. The path to mutual respect can only be built when all are equal under the law and must obey it.

The Past

Democratization in the hemisphere has strengthened regional political cooperation, but not military relationships. Moreover, the end of the Cold War has undermined the extrahemispheric threat rationale on which regional military cooperation has been based for more than half a century, first against the Axis, then the Soviet bloc.

The 1982 Falklands/Malvinas War highlighted fundamental differences in perceptions and military alliances. In Latin America (as distinct from Canada and the Caribbean), association with the United Kingdom made the United States almost as much a loser as Argentina, some of whose leaders had acted believing the United States would understand their cause. The Rio Treaty, then already under ideological attack, appeared scrapped by U.S. loyalty to NATO.

In Latin America as a whole, the abandonment of Cold War rationales turned the clock back to historic national rivalries, arms transfers, long-standing boundary disputes, and mutual distaste derived from writing one's history as an anti-history of neighbors. In Central and South America, these external issues were compounded by uncertainties over civil-military relations, mechanisms of command and control, or internal distribution of police and intelligence functions.

There is also a panoply of problems associated with the United States. The disproportion of power between the United States and its neighbors, turned into fear by the historic use of that power to intervene militarily, has blocked clear subordination of the military instrument—the Inter-American Defense Board (IADB)—to the political body (OAS). The reasoning is that, if the latter is authorized a military arm, the

United States (with its disproportionate power and the votes it will control) can justify military intervention in Latin America or the Caribbean under international law. One extreme formula-

Raiding drug laboratory in Bolivia. tion of this anxiety is that, using democracy and human rights as excuses, the

United States seeks to use OAS and IADB as mechanisms to place armed forces in Latin America under its command as enforcers of U.S. intervention.

Two other hypotheses about U.S. policy circulating within Latin American military circles are that with the Cold War over the United States wants to abolish all national military forces in the region because it considers them obstacles to democratic enlargement and commercial expansion, and that the United States seeks to coopt Latin American militaries as police to fight the drug war outside its borders. There are two major flaws in these conspiratorial depictions of U.S. policy. The first is that these are "big lies," incorporating enough from authentic concerns emanating from Washington to give them an air of plausibility. The second is that such misunderstandings in the past prevented effective regional cooperation that could have forestalled the use of force.

In Panama OAS took on Noriega without success for several months in 1989 before events led to U.S. action. In Haiti OAS and IADB had an opportunity to provide military training during 1991-92 under conditions that might have contributed to a political solution. But anti-military and anti-interventionist attitudes precluded OAS from acting. When the United States initiated another effort a year later, this time under the United Nations, Haitian paramilitary goon squads had been reinforced and conditions had polarized and deteriorated even further. The opportunity to reverse the coup and reduce the suffering of the Haitian people had been lost.

With the Rio Treaty in disuse and no provisions in the OAS charter for the use of force, armed peacekeeping activities will be left either to the United Nations or to unilateral action



by the United States. Neither is a satisfactory embodiment of collective regional will.

Mission Expansion

The end of the Cold War prompted a search for new military missions and rationales-even as downsizing was underway. One of the most important is peacekeeping, a mission spurred by the Gulf War reminder that danger still abounds despite the "new world order." While Canada has a peacekeeping tradition, out-of-area activities by Latin American militaries have been infrequent. Brazil and Mexico fought in World War II and Colombia took part in Korea. Such contributions are multiplying as countries of the region participate in peace operations—Argentina in Croatia, Cyprus, Mozambique, and the Persian Gulf; Brazil in Angola, Mozambique, and former Yugoslav republics, as well as on the Rwanda-Uganda border; Chile in Cambodia, Kashmir, and Kuwait; and Uruguay in Cambodia, Mozambique, the Persian Gulf, and the Sinai.

Within the hemisphere, Brazil contributed officers to the OAS mission in Suriname and the U.N. effort in El Salvador, Venezuelans served with the United Nations in Nicaragua, and an OAS-authorized, IADB-planned demining effort in Nicaragua was

Haiti drew less military than political support from the hemisphere

manned by Argentina, Brazil, Chile, Colombia, Paraguay, Peru, and Uruguay. Argentina, Canada, Caribbean Community and Common Market (CARICOM) states, Guatemala, Honduras, and Suriname participated in Haiti in an effort which drew less military than political support from the hemisphere.

These efforts should not be mistaken for a new equilibrium. International organizations are by definition mendicants, and it is hard to think of a faster way to financially bankrupt

them than to ask them to undertake missions. Even more importantly, participation in peacekeeping operations will not replace the process of redefining the role of the military. Moreover, we should not have needed Somalia to remind us to greet changing missions

> with skepticism. History is replete with situations in which new missions and doctrines can lead to trouble. Their adoption without

careful preparation can create political instability and bring discredit to military institutions. In the 1960s, counterinsurgency and civic action missions in Latin America contributed to displacement of civil authority and ultimately to military coups. In the 1980s, assigning increased military assets to the drug war resulted in political controversies but fortunately not in coups. As the 1990s progress, redefining the role of the military will require careful and unprecedented consultation with civilian authorities. Most issues are much more difficult than

peacekeeping, which, though expensive, has obvious benefits for military modernization and international order.

Some difficulties are economic in form but political in content. What materiel acquisitions are necessary in an environment of reduced tensions? What will be the budgetary balance between military and social spending? In an era of government downsizing, no sector will get all it wants. Other questions are quintessentially political. How much downsizing is enough? How can civilian demands for transparency be reconciled with security?

national sovereignty and security are different sides of the same coin

What happens in rural areas where military units are virtually the sole representatives of authority? What happens when criminals have more firepower and mobility than police? The traditional authoritarian answer is to order the military into action. The democratic answer is slower but maybe more stable in the long run—to bring military and civil authorities together to decide what to do.

Finally, there are voices for military intervention against domestic corruption, inefficiency, and crime. Such calls are typically softened by populist appeals and promises; but interference by the military in the prevailing legal order offers little hope for the disadvantaged. It would be hard to imagine a quicker end to the promise NAFTA holds for the hemisphere than a return to the false solutions of authoritarianism embodied in even the most apparently "justified" coup.

Future Directions

The border conflict between Ecuador and Peru in 1995 brought into focus several issues with major implications for hemispheric security. Perhaps the most crucial have to do with military missions and how to organize cooperation.

First, traditional concerns such as defending national frontiers remain legitimate missions for the military. Settling such disputes is key to stability, economic progress, and modernization. But until these conflicts are resolved, governments will have to factor territorial concerns into their defense plans. Military modernization and arms transfers will thus stay on the hemispheric agenda for the foreseeable future. Much of the Cold War security system was built on U.S. excess stocks from World War II and Korea which have not been available for some time. Moreover, even with bargains the cost of weapons from the developed world are close to prohibitive. Worse, minimal acquisitions may

be perceived as threatening by other countries. The purchase by Ecuador in 1995 of four Kfir fighters was enough to raise fears of a

South American arms race. Yet these aircraft were one-for-one replacements that introduced no new technology.

A logical approach would be an arms transfer regime responsive to the twin imperatives of defense and restraint, and respected both regionally and internationally. It should provide for prior consultation and confidence building measures among and within countries and be flexible enough to ensure weapons for national defense yet restrained enough to preclude destabilizing and wasteful transfers. For example, restraint on one system could be accepted in return for assured supplies of another. No transfers would be consummated without involving both military and civilian leaders. Conditions for a supply/restraint regime are coming into being. Weapons of mass destruction have been banned. Constitutionally elected democratic governments are dominant. But levels of civil-military communication required to define a regime with confidence and verification are still weak.

Second, the Ecuador-Peru clash showed that multilateral cooperation on sensitive security issues is possible. Close coordination between civilian and military officials in guarantor nations, among guarantors, and between guarantors and both parties was critical. That required patience, discretion, respect for sovereignty, and intelligible procedures. The Rio Protocol, the Declaration of Peace of Itamaraty, and the mission terms of reference covered

every step and enabled MOMEP to maintain independent communications and transport. Another secret of its success was that the mission focused on military concerns it could address professionally; it was explicitly precluded from political matters. For example, while MOMEP had responsibility for separating forces and defining a demilitarized zone, resolving the underlying conflict was left to the diplomats. MOMEP actions were distinctly identified as not bearing on where the border was or should be.

Finally, experience has shown that, despite political convergence, inter-American security cooperation still must be approached with caution. National sovereignty and security are in many respects different sides of the same coin. Despite common rhetoric, working principles emphasize limits and separate spheres of action and interest.

The 1995 Defense Ministerial of the Americas gathered together defense officials regardless of whether they were civilian or military. The meeting was pivotal to using political convergence in fostering not only better inter-American communication but also civil-military dialogue within a constitutional context. Future conferences could develop common guidelines for training exercises and arms transfers (including reliable supplies and controls). But in the immediate future, the best way to further communication may be through informal dialogue, education, and study rather than any organized action. Civilian and military leaders still tend to inhabit separate universes with no general agreement on their respective roles. More should be done by training civilians in security matters, military officers in human rights, and both in public administration and regional comity. In a similar vein, OAS has emphasized confidencebuilding measures.

The United States should avoid acting alone in hemispheric security matters. Working with other nations will sometimes fall short, but consultation will uncover allies. And if Washington develops solutions with others rather than unilaterally by the sheer weight of its power, it will help consolidate security and democracy to the benefit of all the peoples of the Americas.



PB4Y-1 on patrol, 1943.

Defense of the Hemisphere: An Historical

By JOSE F. MATA

Postscript

n times of major crisis, the nations of the Western Hemisphere have traditionally put aside their differences and united in a common cause. Such was the case during World War II when the Americas came together in collective defense well before becoming actively involved in that terrible conflict. The defense of the hemisphere was a top priority then as it is today. Historically, the Monroe Doctrine has been the cornerstone of U.S. security policy in the region. An outside threat to one country was viewed as a threat by all its neighbors. Thus, when aggression in Europe and Asia began to spread across the Atlantic and Pacific Oceans between 1939 and 1941, Washington, in partnership with many nations in Latin America, took steps to deal with what was becoming a world-wide conflict.

In April 1939, the Joint Army-Navy Board determined that the only way in which the hemisphere could be assailed was from a base of operation on the coast of West Africa. The board

estimated that subsequent operations could project combat power to Brazil. The fall of France in 1940, the anomalous status of French colonies in Africa during 1940-41, and German successes in North Africa in 1941-1942 gave substance to this view. As the crisis intensified continental security became more critical for the Americas. In March 1942, General George Marshall, chief of staff of the U.S. Army, expressed his concern to the Inter-American Defense Board (IADB) and requested a quick response to the threat: Without delay, we soldiers must show the way to our countries, not only how to defend our nations and the heritage of our American tradition, but also to make sure there will be no challenge to our strong position and united strength.

Defensive Arcs

Before World War II, Washington adopted the so-called "good neighbor" policy to promote a spirit of cooperation throughout the region and facilitate a series of conferences addressing

the defense of the hemisphere. At the Buenos Aires conference in 1936, President Franklin Roosevelt articulated the need for the new world to unite against threats from the old world to avert war. The Declaration of Lima in 1938 reaffirmed that American republics would help each other if attacked. Subsequent meetings took place in Panama in 1939 and Havana in 1940. The former resulted in the Declaration of Panama that promulgated a neutral zone of 300 miles into the Pacific and Atlantic for belligerent warships. The latter, prompted by the defeat of France, Belgium, and the Netherlands, discussed administration of French and Dutch possessions in this hemisphere, especially regarding potential Axis interference. Finally, the Rio de Janeiro conference of foreign ministers in 1942 established IABD to coordinate and plan defense measures. It was comprised of military, naval, and air attachés from most nations of the hemisphere who met regularly to consider improvements in regional defense. The Rio conference also recommended an immediate meeting of military and naval technicians from each nation be convened in Washington to suggest defensive measures. This conference was significant because it was the first time military representatives of each nation discussed hemispheric

Colonel Jose F. Mata, USA, is director of the Inter-American program at the U.S. Army Center of Military History which fosters historical contacts with Latin American armies.

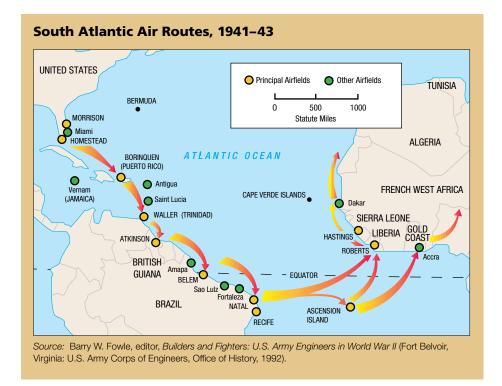
security. A common threat unified the Americas as the "good neighbor" policy gradually evolved into a more cohesive strategy that promoted both co-

hemispheric security revolved around a defensive arc of bases from Newfoundland to the Windward Islands

operation and the interests of every American state.

In the Atlantic, hemispheric security revolved around a defensive arc of land, naval, and air bases from Newfoundland and Bermuda to Puerto Rico and the Windward Islands. In the Pacific, a similar security perimeter stretched from the Aleutians through the Hawaiian Islands to Panama with outposts in the Philippines and islands. While all Rainbow war plans incorporated defensive arcs or perimeters, they relied on participation by all nations in the Western Hemisphere through bilateral or multilateral agreements and provision of support bases and forces. The United States therefore pursued basing rights in the hemisphere for defensive perimeters. The Destroyer-Base Agreement between Washington and London in 1940 secured bases in Bermuda, the Bahamas, Jamaica, St. Lucia, Antigua, Trinidad, and British Guiana in exchange for 50 vintage destroyers. At the same time the formation of the U.S. Army Caribbean Defense Command provided for multinational defense of the Caribbean, Panama Canal, and the corresponding sealanes.

The U.S. Army Caribbean Defense Command formed part of a larger Continental Defense Organization which included Eastern, Central, Southern, and Western Defense Commands. Of the 379,000 soldiers assigned to continental defense, 185,000 were combat troops including 140,000 who served in antiaircraft and coast artillery units. The Navy created Eastern, Western, Gulf Sea, Caribbean, and Panama sea frontiers to defend sealanes. The Army had responsibility for land-based air defenses while the



Navy protected the sea approaches. The former had to safeguard the trans-Atlantic routes and convoys of merchant ships with troops and critical supplies bound for allied nations. Only when the threat of invasion subsided were the theaters reduced and eventually inactivated. In practice, the Allied offensives in Europe, Axis inability to project power overseas, and German intelligence ineptitude limited Axis effectiveness in the Western Hemisphere to the U-boat campaign.

Since a critical portion of the defensive perimeter consisted of land fortifications, the Army upgraded coastal defenses with the latest artillery pieces and target detecting radars. These measures significantly improved the range and effectiveness of ground defenses, enabling them to engage targets at longer range. Washington also offered displaced guns to its Western Hemisphere allies under provisions of Lend-Lease legislation to improve their coastal defenses, thereby helping them to establish a more coherent defense against invasion.¹

Following the attack on the U.S. Pacific Fleet and Hawaiian Islands in December 1941, the Western Command received a higher priority. The theater was reinforced by antiaircraft units and 250,000 soldiers to defend the west coast. The Navy had initially given top priority to the Pacific theater. At the time the Japanese posed the greatest sea threat while the British navy was strong enough to control the Atlantic and contiguous waters. But as victories at the Coral Sea and Midway reduced the Japanese threat in the Pacific, the havoc caused by German submarines in the Atlantic became a pressing problem. During the first six months of 1942 Allied losses to U-boats rose from about 200,000 tons to 700,000 tons monthly, mostly from merchant ships sunk off the coast of Brazil and in the Caribbean.2

The sinking of merchant ships probably posed the most significant threat to the hemisphere and war effort since it could interdict the flow of troops and materiel. The situation so concerned Marshall that on June 19, 1942 he told Admiral Ernest J. King, chief of naval operations, that "losses by submarines off our Atlantic seaboard

and in the Caribbean now threaten our entire war effort...." At that time the Navy was still preoccupied with halting the Japanese advance in the Pacific and also lacked the forces to conduct a comprehensive anti-submarine campaign in the western Atlantic.

Cooperation and Foresight

The Atlantic crisis was overcome only by innovation, cooperation, dedication, sacrifice, and support of each service throughout the hemisphere. One initial response to U-boat attacks was the conversion of commercial yachts to patrol ships for the northern ship lane patrol. These vessels policed coastal waters and provided advance warning to convoys. Similar unarmed ships, the so-called "hooligan navy," were used, with yachtsmen forming a coastal picket patrol by May 1942. Moreover, civilian pilots disqualified from military service because of medical or age restrictions volunteered without pay to establish the Civil Air Patrol, which ultimately reported 173 enemy submarine sightings. The Army agreed to allocate bombers to the Navy for long range anti-submarine patrolling. An anti-submarine warfare school opened in 1942 which trained 1,374 men from 14 nations. Production of submarine chasers was a national priority that resulted in hundreds of ships being available for convoy escort duty by 1942. The coastal convoy system, also organized in 1942, ran the length of the U.S. east coast and interconnected with other major shipping points in the Gulf of Mexico and Caribbean as well as off Brazil and West Africa.

Each nation in the hemisphere played a defensive role by patrolling its coasts and waters. This was especially the case in the Caribbean where critical shipping lanes to Europe and Africa as well as traffic passing through the Panama Canal had to be protected. Many nations agreed to base U.S. forces to reinforce the defensive perimeter. The United States augmented this coalition under bilateral agreements and security assistance, and the Navy stationed vessels and aircraft in the Caribbean and South America to facilitate patrol and escort missions.

Mexico, for example, allowed the forward basing of U.S. aircraft to support Panama. In the process, the United States and Mexico drafted plans for defending the Mexican northwest and U.S. southwest. Farther south, Brazil was critical because of its proximity to north Africa. Thus, the United States sought bases in the ports of Recife, Natal, and Salvador, and on Fernando de Noronha Island. Marines guarded Brazilian airfields at Belem, Natal, and Recife. The Army built a major airfield in Puerto Rico. Trinidad and Aruba contributed minesweepers, cutters, and bases, while Cuba furnished small gunboats to escort Florida-Havana seatrains, and one sank a German U-176. Moreover, a reaction force of 50,000 troops was available to

the security of the Americas was critical to establishing bases for launching offensive operations

defend against enemy landings. Continental security was a joint and coalition effort.

Although the western theater saw extremely limited combat compared to others, the security of the Americas was critical to establishing bases for launching offensive operations. This secure environment facilitated production of equipment and resupply of global forces. The cooperation and foresight of key leaders throughout the hemisphere regarding basing agreements and security assistance made collective defense possible. Bilateral agreements also served to anchor security in the hemisphere. The United States and Mexico, for example, agreed to allow their forces to cross each other's border if warranted. Some nations also provided offensive forces. Mexico deployed a fighter squadron to Luzon in the Pacific while Brazil marshaled an infantry division and support troops which fought with the U.S. Fifth Army in Italy. Brazil also sent a fighter squadron to the European theater and its navy helped to escort convoys across the Atlantic. Moreover, Brazil had planned to deploy a larger expeditionary force—comprised of three infantry divisions, an armored division, and aviation squadrons with support units—but encountered difficulties in organizing and transporting it. Nevertheless, such contributions increased the strength and effectiveness of Allied combat forces and solidified the war effort by providing access to raw materials. Additionally, the deployment of combat forces by Latin American nations underscored their commitment to the war.³

Allied landings in North Africa further reduced the threat to the Western Hemisphere, and the defeat of the Afrika Korps in 1943 removed the prospect of an invasion of Brazil. In addition, the enemy submarine fleet

had been greatly reduced together with any threat to the continent from the Pacific. However, the defense structure of the hemisphere remained intact until the end of World War II and ultimately provided the foundation for postwar cooperation.

World War II united a hemisphere and in the process brought together the peoples of many nations. The timely commitment by the United States to the "good neighbor" policy facilitated this climate of cooperation. Genuine unity of effort led to both stability and security in the hemisphere despite a grave outside threat.

NOTES

¹ Stetson Conn and Byron Fairchild, *The Framework of Hemisphere Defense: U.S. Army in World War II* (Washington: Office of the Chief of Military History, 1960); and Stetson Conn, Byron Fairchild, and Rose C. Engelman, *Guarding the United States and Its Outposts: U.S. Army in World War II* (Washington: Office of the Chief of Military History, 1964).

² For shipping losses to U-boats and details on other events, see Barrie Pitt, *The Battle of the Atlantic: World War II* (Alexandria, Va.: Time-Life Books, 1977).

³ Charles E. Kirkpatrick, *Defense of the Americas: The U.S. Army Campaigns of World War II*, World War II commemorative series (Washington: U.S. Army Center of Military History, 1991).

NATO'S Military Future

By DANIEL W. CHRISTMAN

ohenfels is a household name to many American soldiers. For decades, 7th Army trained in this part of Germany for large scale mechanized combat on the plains of Central Europe. While the old Warsaw Pact that provided the focus of that training has disappeared, our soldiers still hone their combat skills-from tank gunnery to small unit maneuvers—there and at nearby Grafenwohr. Even though tank main gun rounds are still cracking down range, profound changes are underway at the 7th Army training center: former Cold War warriors of the 1960s, 1970s, and 1980s would be struck by its transformation. Hohenfels remains capable of accommodating thousands of troops in a combat maneuver setting. But of equal importance, it is also now a proving ground for the new NATO non-article V missions that extend beyond collective defense.

This capability was illustrated vividly when Secretary of Defense William Perry toured Hohenfels and Grafenwohr in November 1995 to observe the 1st Armored Division preparing for the Bosnia operation. First he visited a range where M1A1 crews were firing qualification tables for tank gunnery. Less than an hour later, he encountered American soldiers at mock villages in peasant costumes and assorted uniforms playing Bosnians, Croats, and Serbs. Hohenfels proved to be ideal as a setting in which to prepare troops for the Implementation Force (IFOR), just as it had prepared troops for armored mobile warfare in past years.

There is tremendous symbolism in the Hohenfels of the mid-1990s. While tank gunnery is the traditional NATO article V mission of collective defense, mock villages and role playing represent the new NATO role in operations other than

There is tremendous symbolism in the Hohenfels of the mid-1990s. While tank gunnery is the traditional NATO article V mission of collective defense, mock villages and role playing represent the new NATO role in operations other than war. This highlights an essential truth: the military future of NATO depends on achieving a balance between continuity and change. For the United States in particular, this means balancing readiness and training for high intensity combat with preparation for non-article V operations such as those in the former Yugoslavia. European militaries, on the other hand, must maintain their combat competencies in the rush to adopt new missions. Striking an appropriate balance is not easy, especially in a period of sharply constrained resources.

Continuity

Any discussion of NATO's military future should begin with the theme of continuity since that is the foundation for NATO adaptation. As adaptation proceeds, it is crucial that the Alliance not divest itself of the fundamentals that have

Lieutenant General Daniel W. Christman, USA, is assistant to the Chairman and has served as U.S. military representative to NATO.

served it so well in the past. Rather than remaking NATO, we must build on the qualities and attributes that have made it a success.

It is useful to recall the agreed Alliance approach to security, one only recently reconfirmed. In the 1991 strategic concept NATO recognized that "The military dimension remains essential. Maintaining an adequate military capability and clear preparedness to act collectively in the common defense remain central to the Alliance's security objectives." This mission requires a capability to guarantee the territorial integrity and fundamental security interests of all Alliance members as well as politico-military decisionmaking structures and procedures needed to effectively employ forces.

NATO military authorities have normally achieved this mission with capable conventional forces, integrated military command structure, and workable standardization agreements. The benefits

some NATO countries find it difficult to sustain more than a battalion-sized deployment

of such capabilities were obvious to the world during Desert Storm. The seamless integration of NATO ground and air assets by the coalition contributed significantly to the defeat of a re-

gional hegemon whose antics threatened not just regional stability but the interests of Alliance members thousands of miles from the Persian Gulf.

But core military capabilities are not only decisive for a contingency like the Persian Gulf. They are also important for reasons closer to home in Brussels. First, an adequate conventional force structure offers a rotation and training base for non-article V missions such as the Balkans. Regrettably, some NATO land component force structures have been cut so severely that many countries find it difficult to sustain more than a battalion-sized deployment for an extended period. This reality will hopefully provide a floor under existing structures and lead to a review of the adequacy of conventional capabilities for a range of NATO missions. As an aside, the French, though not currently fully integrated, are the first of our major European partners to recognize the need to fundamentally restructure their forces to make them deployable and sustainable in sufficient numbers to deal with likely challenges.

Second, the great increase in military-to-military contact programs with Central and Eastern European nations highlights the importance of an adequate structure with which forces can interact and train. For North America, this means staying engaged on the continent. For Europe, it means retaining sufficient structure for Central

and Eastern European nations to realize their expectations with regard to contact with the West.

The final reason relates to reconstituting conventional defense capabilities by the Alliance should a major threat materialize in the future. Leadership development is widely recognized as the long pole in the tent in this reconstitution effort. Force reductions—clearly necessary in the wake of the Warsaw Pact's dissolution—must not leave the Alliance with an inadequate basis for leadership development; that is, too few units into which developing leaders can be integrated. Nations must ensure that new generations of military leaders can both learn and practice military fundamentals. If we forget this important point, we dangerously mortgage the Alliance's future.

We need, in short, to ensure we do not lose our core combat competencies and structures as we embrace new missions. Collective defense remains the fundamental purpose of NATO and should be the basis for a rational transformation of the Alliance to respond to new demands. Non-article V capabilities are derivative from article V requirements—not the reverse.

We also need to preserve and build on structures and procedures that enable 16 sovereign nations to discuss and agree to political objectives, then transform the objectives into guidance for NATO military authorities. This is a unique strength of NATO which must be preserved.

Change

However profound the changes over the past six years have been for the Alliance, the next six years are likely to create an even greater transformation of European security space. As one analyst noted, NATO is being reinvigorated in unanticipated ways, not simply by its participation in IFOR, but also as a result of the prospect of enlargement.² In this light, three challenges are likely to arise for those serving the Alliance in uniform.

Operations. We must ensure that our conceptual differences over reorganizing NATO do not stand in the way of undertaking new tasks, even if that means an ad hoc organizational response to get the operation off the ground. NATO simply cannot be paralyzed by debates on theory. The Alliance deployment to the Balkans is a reassuring case in point. Currently 60,000 NATO troops are deployed there, and earlier deployments under Sharp Guard and Deny Flight reflect ministerial and head of state decisions in London, Rome, and Oslo that endorsed NATO peacekeeping activities. Participants at the meetings may not have envisioned the scope of these deployments; but they did recognize the need to broaden the traditional NATO approach to military involvement as well as to alter structures and procedures to facilitate new operations.

U.S. and Russian commanders at Tuzla air base.



Intending 6, 130 in

Unloading C-130 in Sarajevo for Joint Endeavor.

Unfortunately, the deliberate pace of restructuring the Alliance internally was overtaken by the more dramatic and more rapid pace of external events. As a result, NATO has been forced to adapt on the fly. Although it has been a difficult and at times frustrating path to get to this point, operations on the military side are proceeding superbly. This is largely true because NATO members have not waited to get the theory right before acting. As some observers have said, we are literally reconstructing the Alliance "brick by brick, from the ground up; it's not the theory that is going to drive the practice but the practice that will drive the theory." ³

Secretary Perry placed this point in context when he addressed the Wehrkunde conference in Munich on February 4, 1996. "It is in Bosnia, where future NATO members are showing themselves ready and able to shoulder the burdens...," he stated. "It is in Bosnia where we are showing that we can work as partners with Russian forces. Bosnia is not a peacekeeping exercise; it is the real thing." The members of the Partnership for Peace (PFP), including Russia, are likely to learn more about us from this year of practical

interoperability experience, and we about them, than could be learned in a decade of seminars and classroom instruction.

Combat Camera Imagery (Ken Bergmann

Nothing could be more illustrative than the operational integration of Russian and French forces in IFOR. Their incorporation on the practical level is proceeding extremely efficiently. On Russian integration, a significant effort was made last autumn by Generals Joulwan and Shevstov, endorsed by their respective defense ministers, to get the military playbook for Bosnia right. And they succeeded. The effectiveness of this coordination in Mons and Brussels has been evident on the ground with the remarkably smooth inclusion of the Russians in the U.S. sector. The Russian brigade serves under the tactical control of General Nash, commander of the 1st Armored Division, and receives operational instructions from General Joulwan through General Shevstov. One will not find this command arrangement in any field manual, but it works. As one senior officer in theater remarked, the relationship between General Nash and his counterpart is "as good as you can get."

Further, the Russian troops, operating in a particularly delicate and difficult area of Bosnia, have shown great professionalism and serious commitment to the mission. All indications are that interoperability between the Russian Federation and NATO is both feasible and practical. Clearly, there is potential for combined operations on a larger scale. As Secretary Perry has stressed in

this regard, Russia and NATO *do* have a special relationship in Bosnia; every day that the Russian brigade commander, Colonel Lenstov, engages with General Nash displays Russia's commitment to participate in the future security architecture of Europe. It is a perfect example of building the new NATO architecture from the ground up, brick by brick.⁴ These are important bricks.

Similarly, French integration has not been an issue during the IFOR deployment. As any American officer with NATO experience can attest, on

on the practical military level, U.S. forces have always worked superbly with their French counterparts the practical military level, U.S. forces have always worked superbly with their French counterparts. Desert Storm and Bosnia highlight that fundamental point. Differences do exist at the policy level about the the-

ory behind non-article V operations. However, theoretical differences expressed in Brussels or elsewhere have not blocked progress on the ground. As with NATO's Russian experience, the challenge will be to take the practical lessons learned in standing up IFOR and use them in finalizing the architectural drawings of the new European security structure.

Notwithstanding the success in interoperability and coordination demonstrated in Bosnia, at some point we must draw on these experiences and implement the restructuring that has been long studied. When this is done, we must ensure that a coherent and integrated alliance remains, one that can carry out military operations across a spectrum of missions it may be called on to perform. NATO must be careful not to establish military, crisis management, or military planning committees which function uniquely for non-article V missions. In the short term, we simply cannot afford two alliances. And, in the long term, bifurcation in the approach to non-article V and article V missions is a certain way to disengage this hemisphere from the European continent.

Internal Adaptation. The second issue has already been suggested: the Alliance must ensure that it does in fact adapt itself internally to respond even more efficiently to new missions and political requirements down the road. The need for such adaptation was recognized at least two years ago. At that time, military authorities were advised that expenditures on NATO overhead would soon crowd out nearly all operational and discretionary funding for key programs such as PFP. The NATO Senior Resource Board concluded that the Alliance could no longer accept salami tactics in budgetary and structural cuts. This realization prompted the NATO chiefs of defense to commission a long-term study (LTS) to streamline

the NATO command structure. LTS is a crucial element in the process of examining and transforming the Alliance.

Besides resource priorities, however, other issues are impacting the outcome of the study. First is the realization that we must move from an essentially static, defense-oriented structure to one that is more flexible, mobile, and responsive in a crisis—that is, to one more reflective of the Alliance's new strategic concept. The recent announcement by France that it intends to participate more actively in the military activities of the Alliance has also impacted on the study. The decision reveals, in part, a growing realization in Paris that the so-called European pillar must be grounded within the Alliance, not separate from it. In fact, France has, for all practical purposes, abandoned the notion of a two-pillar alliance in favor of an enhanced European role in NATO.

The overall goal of this internal examination must be to strengthen the ability of the Alliance to respond to a variety of crises while maintaining its core mission of collective defense—and to do so while cutting overhead in a manner which respects regional sensitivities. This will not be easy, but NATO military authorities are already some distance toward this goal.

One element of this organizational evolution merits special mention: the combined joint task force (CJTF). This is a concept that would extend the strength of the integrated military structure into new mission areas and more easily accommodate operations outside the territorial limits of the 16 NATO members. CJTF also facilitates the inclusion of PFP nations in non-article V operations such as Joint Endeavor in Bosnia.

The NATO Military Committee agreed on six principles for CJTF development to guide the Alliance as it comes to closure on this important internal adaptation:

- preserve the integrated military structure
- provide for separable but not separate forces in support of European Security and Defense Identity (ESDI)
- maintain a single command structure for article V and non-article V missions
- retain the role of the Military Committee in advising and transmitting strategic guidance from the North Atlantic Council (NAC) to NATO Military Authorities⁵
 - avoid *ad hoc* participation in NATO bodies
- preserve the ability of Major NATO Commands to do timely contingency planning.

NATO member countries are close to agreement on this concept. Although we have cut through theological arguments in the field to establish several CJTFs (for example, Sharp Guard,

Italian troops during Strong Resolve.



Landing craft crossing Norwegian fjord.

Deny Flight, and Joint Endeavor), it is time to stop doing things on an ad hoc basis and implement a badly needed structural reform.

More broadly, it is imperative that we get on with a more sweeping structural adaptation of the Alliance for future operations and implement quickly those aspects most important to meeting the new security challenges to European stability. We cannot afford to continually study the issue. Instead, we must take the lessons learned from the ongoing IFOR deployment and institutionalize the 90 percent solution. Structures and procedures can be further refined as the Alliance grows.

NATO and PFP. Internal change will not be enough. For long-term viability, NATO must adapt externally. Initiatives such as NATO enlargement, a formalized NATO-Russia relationship, and PFP represent important measures that project stability and security to the East. Because of the central role which NATO's military is playing and must continue to play in PFP, however, this program will be the focus of the third and final challenge.

Few understand what the projection of stability means in practice. Consider two examples drawn from recent NATO experience with PFP. The first took place in the midst of the euphoria that accompanied the launching of PFP, prior to the Budapest summit conference on Security and Cooperation in Europe in December 1994. At the time Hungary and Romania were resisting practical steps toward military cooperation partly because of the traditional ethnic tension. Yet, prodded by the West and the realization that these differences were impeding integration in European security institutions, the two countries scheduled unprecedented combined ground and air maneuvers on and over each other's territory. This small but significant step added a measure of stability to an historically unsettled part of the continent.

Perhaps a more timely example is the 1995 naval exercise sponsored by Bulgaria under PFP.

Bulgaria served as the bridge between Turkey and Greece to reduce tension in the Eastern Mediterranean. Despite being members of NATO, both

PFP enables nations to evolve toward the political-military structures common to the Alliance

nations have traditionally found it difficult to exercise sideby-side; but for at least one month, PFP helped to lower a significant barrier to

stability in the Alliance by bringing them together in a military training setting.

This partnership is one of the most important security investments the Alliance can make. PFP enables nations in Central and Eastern Europe to establish true interoperability with Alliance forces and, perhaps more significantly, to evolve toward the political-military structures and habits of cooperation common to the Alliance.

A quick review of PFP activities shows just how far we have come in the past two years in reducing the barriers that for so long artificially divided Europe:

- 27 nations have joined the partnership.
- Partnership coordination cells have been established in Mons at Supreme Headquarters Allied Powers Europe to conduct the military planning needed to implement partnership programs; there is also representation at NATO headquarters in Brussels.
- Partner nations have conducted nearly 50 exercises throughout both Central and Eastern Europe and on NATO allied territory, including at the Joint Readiness Training Center (JRTC) at Fort Polk, Louisiana.
- Partnership programs have moved beyond simple tactical skills, incorporating a range of military as well as political-military elements.
- Most noteworthy is participation by 13 partner nations in the NATO-led IFOR mission in Bosnia, with their forces working side-by-side with the Alliance in a peacekeeping operation.

Despite tangible accomplishments, much remains to be done. NATO is postured to take the partnership to an essential second stage of maturation. In this regard, we must strengthen the defense planning element of the partnership to accelerate the movement of partner nations toward higher levels of interoperability. This planning process, which has existed within the Alliance for decades, has provided a remarkable mechanism for integrating national forces into an interoperable whole. In fact, defense planning is the foundation on which the highly effective NATO military structure is built. It is now time to extend a version of that mechanism into the partnership. This will reap enormous benefits for NATO, profoundly deepening cooperation and also preparing the willing and able for eventual membership in the Alliance.

Further, the Alliance must transform PFP exercises into a robust, integrated program, built on

unglamorous but essential training events. This would eventually lead to conducting complex, large, free-play exercises that extend partner capabilities in agreed mission areas of peacekeeping, humanitarian assistance, and search and rescue. Partners must, in turn, expand their representation at Mons and Brussels; they must also ensure that representatives are properly qualified, so they can conduct detailed accession negotiations which, for some, surely lie ahead.

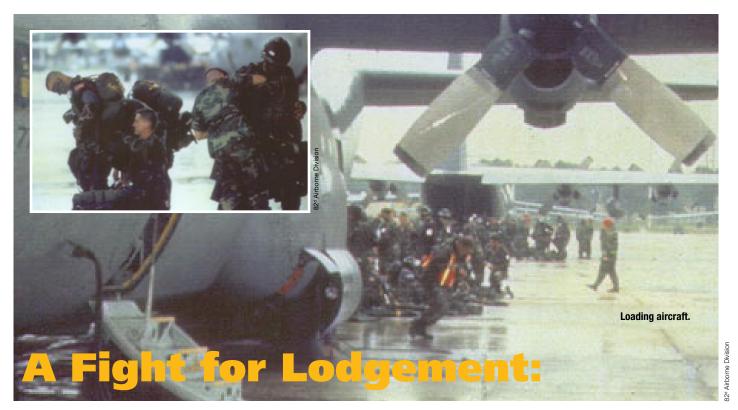
Perhaps most importantly, the Alliance must ensure that PFP has the resources to meet its goals. U.S. contributions totaled \$130 million for 1995–96 which reflects the importance attached to the program and our leadership. We must ensure that this critical program is similarly resourced by our allies in the out years. Funding is literally the lifeblood of the partnership.

During the summit in Brussels in January 1994 the North Atlantic Council reaffirmed that NATO remains the core security institution in Europe as well as the forum for U.S. engagement there. As the participants agreed: "We confirm the enduring validity and indispensability of our Alliance. It is based on a transatlantic link, the expression of a shared destiny. It is reaching out to establish new patterns of cooperation throughout Europe." 6

The United States sees, and must continue to see, an important role in this shared destiny. This is reflected in our national military strategy by the central role accorded engagement. We have learned at great cost, in two world wars in this century, the significance of both engagement on the continent and continued U.S. leadership. The somber and majestic American cemeteries which dot the European landscape speak clearly of that commitment to Europe and of the role of institutions such as NATO in maintaining this vital linkage during a time of unprecedented change.

NOTES

- ¹ "The Alliance's Strategic Concept," *NATO Handbook* (Brussels: NATO Office of Information and Press, 1995), p. 241.
- ² Elizabeth Pond, "Europe Welcomes American Military Leadership," *The Wall Street Journal* (European Edition), December 6, 1995.
 - ³ Ibid.
 - ⁴ Ibid.
- ⁵ The three NATO Military Authorities are the Chairman of the NATO Military Committee, the Supreme Allied Commder Europe, and the Supreme Allied Commander Atlantic.
 - ⁶ NATO Handbook, p. 242.



Future Joint Contingency Operations

By ANTHONY J. TATA

During the summer of 1994 the world watched in horror as Rwandan government forces composed of members of the Hutu tribe killed their rival Tutsi countrymen in a ghastly civil war. That campaign of terror was intended to methodically destroy the Tutsi minority while isolating the outside world from the conflict. Hutu forces seized Rwanda's only major airport, openly stating that their goal was to block the West from sending airland relief forces and supplies to surviving Tutsi men, women, and children. The Hutu victory was total. While stark, brutal images of this tragedy remain, the strategically relevant issue is that the Hutus knew how to hinder intervention. The Rwandan

Lieutenant Colonel Anthony J. Tata, USA, is special assistant to commander in chief, U.S. Army Europe; he formerly served as executive officer, 3d Battalion, 504th Parachute Infantry Regiment.

civil war will go down in history for its savagery, yet it is a model that can shape future contingency plans and forces. Simply put, in an era of sovereign borders and nationalistic forces, dissidents simply need to deny a strategic lodgement to their adversaries. There will not always be seaports like Dhahran or facilities like Howard Air Force Base through which to build up combat power. Contingency operations will most likely require forcibly opening lodgement. Only by exploiting the capabilities of the Armed Forces under joint task forces (JTFs) can the Nation conduct strategic power projection to seize lodgements and also achieve quick, decisive victory with minimal casualties.

The Theory

To establish a theater of operations a joint force must translate a few concepts into reality. Because the United States no longer enjoys prominent forward basing, a joint force must possess, first and foremost, a base of operations to build and further project combat power. Only then can it establish lines of communications through which a tactical plan is executed.

Naturally, the base of operations and supporting lines of communications are predicated on the enemy disposition. Therefore, the joint force must also identify decisive points at which it may direct its combat power. Frequently these decisive points may also be the enemy center of gravity or more indirect targets aimed at weakening the enemy's strength prior to engaging it directly.

Concepts such as bases of operations, lines of communication, decisive points, and centers of

gravity translate into forcible entry plans for JTFs that focus on lodgements and simultaneously seizing other objectives. Even an unsophisticated enemy understands that intervening forces must have bases of operations. To refuse a base is to

forestall intervention. Conflicts will accordingly boil down to initial struggles to establish lodgement, without which little else is possible.

Power projection means getting there quickly with something that can make a difference. Whether a base of operations exists in permissive or nonpermissive entry environments is largely irrelevant. To be effective, joint forces must plan for the worst case scenario when threats arise: nonpermissive entries require rapid projection of overwhelming combat power. U.S. Army Field Manual 100–5 provides succinct guidance on this point:

An important strategic consideration for planning contingency operations that involve the potential for combat is to introduce credible lethal forces early. Commanders should be prepared to deploy sufficient combat power to resolve a crisis on favorable terms.¹

Campaign plans must call for joint forces capable of seizing and establishing bases of operations that will support construction of a theater of operations and facilitate the concept of operation.

Courses of Action

Since the nonpermissive solution is somewhat simpler to predict, the following discussion makes the assumption that forcible entry is required to establish the base of operations. JFCs have an array of forces to choose from when planning a contingency operation. They may select Marine amphibious or air assault forces, Army light, air assault, or airborne forces, or special operations forces. Indeed, they may decide to employ a combination to maximize the strengths of each.

In considering all types of forces, power projection methods may be categorized as strictly airland or sealand, a combination of airland or sealand and airborne assault, or strictly airborne assault. As in the case of Somalia, using a strictly airland and/or sealand approach for lodgement drives the joint force to sequentially apply combat power. Regardless of the service component, all airland and sealand techniques require ferrying back and forth or economizing the force to the point that the risk may become unacceptable. It also takes longer to secure a lodgement, get onto lines of communication, and begin seizing decisive points.

The airland and sealand options depend on the availability of open airfields, usable ports, or accommodating beaches. Even if airfields and ports are available and are not blocked by enemy forces, sequential combat power build-up is slow. With multiple permissive entry ports as well as airfields, Desert Shield required five months to build sufficient combat power for Desert Storm.

As a force begins to project from a lodgement, airspace becomes congested with helicopters and planes competing for air corridors, increasing the risk to an operation. But most dangerous to the joint force is that it is tied to one location, which may become easy for an enemy to interdict. In Rwanda government troops preemptively seized the airport before any outside forces could airland. Sealand or air assault from naval platforms were not an option in the landlocked nation.

Using the abstract model a strictly airland/ sealand course drives JFCs to seize a lodgement, build sufficient combat power, then execute ground tactical plans. The period between the seizure of lodgement and executing the ground tactical phases allows an enemy time to seize the

nonpermissive entries

of overwhelming

combat power

require rapid projection



Troop leaders prep.

initiative in areas not proximate to chosen lodgements, and perhaps even to increase defensive postures, take hostages, or attack friendly vulnerabilities. Adversaries could also exploit this time lag to influence international media to undermine national will and distort perceptions by the public.

In a generic theater with one airfield, one port, and three groups of 40 targets, wargaming confirmed that a force of eight combat battalions could airland or sealand, build combat power, and then seize objectives in 48 to 72 hours. It further revealed that cratering airfields or demolishing ships in port could exponentially delay closure and contribute to a piecemeal commitment of force.

Airland/Sealand and Airborne Assaults

Augmenting joint forces with airborne assets creates a course of action that utilizes a mix of airborne and air/sealand forces. Airborne forces seize airfields and decrease the risk of airlanding once assault objectives are seized. These forces can also airdrop airfield repair packages, vehicles, and tanks to give JFCs capabilities to repair airfield damage and simultaneously seize lodgement. Capturing a second drop zone away from airfields affords JFCs with flexibility in initiating ground tactical plans immediately or reinforcing the fight for lodgement.

Airland forces then arrive when the airfield was estimated to be opened by airborne assault forces. However, an enemy can extensively damage airfields, thereby increasing repair time and potentially disrupting subsequent time phased force deployment lists. Yet if airland forces are also rigged for parachute assaults, runway conditions become immaterial. Forces may be dropped onto

airfields or alternate drop zones. If airland forces cannot conduct parachute drops, closure will depend on the availability of operational airfields.

Wargaming revealed that the essential advantage of combining airland/sealand and airborne forces is an accelerated build-up of combat power. Sixty C–130s can drop four fully equipped battalions in thirty minutes compared to thirty-six hours to airland the same size force. This course of action also allows commanders to place combat forces away from lodgement so that joint forces can seize critical objectives at the outset. More aircraft can drop added battalions and enough heavy equipment to give a force tactical mobility. The airland force could be rigged for airdrop to provide flexibility.

Analysis based on wargaming shows that the key disadvantage in this course of action is that the airland force may be tasked with critical missions, while its closure is dependent on airfield availability. An enemy would still have time to react to the objectives of airland forces. Moreover, although decreased, the time for combat power build-up still suffers at the hands of a sequential air flow determined by the maximum operating on ground capacity of airfields. Typical airfields can handle four C-141s or eight C-130s every hour, which equates to nearly a battalion. That ground capacity is calculated to include the time it takes an aircraft to land, taxi to an offload point, offload, back taxi, and take off. Under analysis, these calculations resulted in the combination force seizing all 40 objectives in 24 to 48 hours.

Airborne Assault

JFCs may employ a strictly airborne assault force to seize lodgements and execute portions of a ground tactical plan which offers the most rapid closure. The Air Force can provide adequate C–130s and C–141s to airdrop assault echelons of nine combat battalions with enough equipment, supplies, and support personnel to seize a lodgement and other objectives simultaneously.²

As one assessment of the difference between airborne and airland forces in the planning for Operation Just Cause pointed out: "The fact is, we could get an airborne division on the ground in ten minutes or we could get an airlanded brigade in a day and a half." That comment emphasizes the fact that an airborne unit requires only the pass time over a drop zone and assembly time to be a cohesive combat force, while an airland force builds combat power sequentially and slowly. With simultaneity as a linchpin for quick, decisive victories with minimal casualties, the airborne assault option appears the best suited to meet the Nation's high expectations.

Wargaming demonstrates that airborne assaults quickly assimilate combat power and deny an enemy influence over operations. Other advantages are that when airfields are heavily defended or damaged, forces could simply use alter-

the Army can exploit all means of employment to seize lodgement and establish lines of communication nate drop zones, then attack airfields. This confirms that the airborne assault option is a sound method for establishing bases of operations while seizing the initiative at outlying objectives. Force build-up and objective

seizure rates are linked and prove that simultaneity in forcible entry operations is best achieved by maximizing airborne capabilities.

The Army Role

The Army can exploit all means of employment—airland, sealand, air assault, and airborne assault—to seize lodgement and establish lines of communication necessary to enable JTFs to carry the fight to an enemy. Accordingly, the Army has a vital role in fulfilling joint power projection requirements of national military strategy. While combatant commanders attempt to resolve crises in their AORs with available forces and flexible deterrent options, force projection may be needed.

The Army offers the unique capability to a combatant commander to put trained and ready forces on the ground anywhere in the world on short notice—a rapidly deployable force to seize, hold, and control territory, with staying power that complements other forces in achieving tactical through strategic objectives. Army divisions are the basic contingency force fighting unit and they are instructed to prepare for such instances: "The first rule of anticipation in a force projection era is to expect to be alerted and deployed. Commanders everywhere in the Army must hold that view." 4

Operation Uphold Democracy, the planned invasion of Haiti, validates the model described above. Analysis of the invasion plan provides accurate and timely visibility on the Army's ability to contribute in a forcible entry joint contingency operation where no friendly lodgements existed in country and those available for seizure were scarce.

The charter of all Army divisions is to contribute to joint forces by being trained and ready for H-hour. Indeed, when President Clinton recalled the 82^d Airborne Division, the 10th Mountain Division executed a permissive entry as JTF–190. Uphold Democracy showed that division level contingency operations from the continental United States (CONUS) are possible in the future.

A division must focus its efforts by identifying the likely war plan. Then the staff should coordinate with higher headquarters as well as other services to develop detailed planning. A division can then derive its mission essential task list (METL) and develop its emergency deployment readiness exercise (EDRE) program that integrates contributions by the other services. A training management cycle should define wartime missions and develop plans, establish METLs, then plan, execute, assess training, modify plans, and finally retrain.

Planning

The impetus to train and be ready for H-hour is dominated by the planning process. While tactical decisionmaking produces a concept that can drive training, other steps are required to create a well synchronized, successful plan. One proven technique for contingency planning is to employ the four phases of airborne operations: ground tactical, landing, air movement, and marshaling.

A division must first develop a ground tactical plan based on the course of action conceived during tactical decisionmaking. The staff develops a template of the threat and directed objectives, then groups them by proximity or similarity, finally matching friendly resources against all areas which call for force. Uphold Democracy required the 82^d Airborne Division to seize 40 objectives in 12 hours over an urban center with the population of Denver and geographic area of Boston. Accordingly, a requirement was stipulated to close maximum force as quickly as possible.

Resolving a ground tactical plan leads to developing a landing plan to include selection of drop zones, beach landing areas, or landing zones which best facilitate mission accomplishment. A landing plan facilitates executing a ground tactical plan, including seizure of lodgement. For the Haiti mission, 82^d Airborne chose two drop zones that afforded flexibility as well as rapid seizure of several primary objectives.

After designating a landing plan, air and sea movement plans must be developed to close the force into country. Initially, staffs must avoid making a ground tactical plan conform to stated airlift and sealift constraints. Efforts must be made to provide resources for ground tactical plans. The 82^d Airborne Division had 60 C–130s for drops over Port au Prince International Airport and 45 C–141s for drops over Pegasus drop zone. Another eight C–141s carrying 864 personnel were rigged for an airdrop but slated to airland at H+4 hours, providing the airport was open for airland operations. Also, three ships were scheduled to off-load at the port within the first 48 hours.

Finally, marshalling plans are perhaps the most difficult for a division-level contingency operation. The 82^d Airborne Division plan accommodated 113 aircraft involved in the assault force air movement plan and three ships available in the sea movement plan, as well as follow-on airland by using multiple air and sea ports of embarkation in CONUS.

While the four phases of airborne operations provide an excellent framework for planning contingency operations, detailed synchronization is required to account for the overlap and myriad actions of all phases. Wargaming and synchronization of battlefield operating systems are the best means of integrating contingency operations from the marshaling through ground tactical phases.

Training

A contingency division can extract METL from the newly developed "most likely war plan" with an eye on fitting into JTFs. Tasks such as "maintain division readiness to deploy worldwide within 18 hours notice directly into combat," "alert, marshal, and deploy the division," and also "conduct an (airland, sealand, or airborne) assault to seize an (airfield, landing zone, beachhead, or port) and/or establish a lodgement" become obvious METL items in a power projection world.5

Determining related battle tasks allows division commanders to isolate key components of likely war plans and establish aggressive joint force oriented EDRE programs. By challenging readiness each month, commanders can increase readiness and shape contributions to joint forces. In time EDREs should be more complex and difficult in order to exercise the maximum number of forces. For example, the 82d Airborne Division with the Air Force conducted a battalion airfield seizure and noncombatant evacuation on an unfamiliar runway in South Carolina in late 1993. The heavy drop included two bladders of fuel to sustain aviation operations during the exercise.

In July 1994, by contrast, the entire division, several Air Force wings, Marine and Navy airnaval gunfire liaison company teams, and special operations forces participated in "Big Drop," an EDRE in which fifty C-141 equivalents and twenty C-130s dropped eight battalions, a security element, and 28,000 gallons of aviation fuel. The aviation brigade used strategic self-deployment, concluding with a four-hour flight over ocean at night, refueling at a new aviation assembly area, and mounting an air assault of three battalions on multiple objectives within an hour of a parachute assault. Establishing a lodgement and executing a ground tactical plan require extensive battlefield operating system synchronization which can be trained steadily while not deployed.



The intelligence community must focus on utilizing national assets and translating a wealth of information into exploitable intelligence at battalion level. Thorough intelligence preparation of the battlefield is a requisite. Accurate worst case analyses that does not underestimate an enemy must be provided. Timely en route intelligence is essential to contingency operations. A division probably cannot insert its long range surveillance detachment prior to H-hour. Other methods exist to attain early entry intelligence. Timely imagery is the prime source of intelligence in contingency operations requiring forcible entry. G-2 staffs must practice these tasks during EDREs to develop the skills to operate in a contingency environment.

The maneuver community is responsible for synchronizing all battlefield operating systems and other services in its tactical plans. When training is planned, a division staff should recall that an assault force ground tactical plan drives a joint force plan. Airland and sealand start only when lodgements are secure. As such, to train and be ready for H-hour, a division must continuously plan and execute complex joint training that tests actual force levels and timelines.

Great Inagua Island, Bahamas.



The primary fire support tasks in a contingency operation are to provide and/or control fires across a division zone as well as to integrate psychological operations and nonlethal fires into the scheme of maneuver. A division should rehearse counterfire techniques in training with AC–130s. While JTFs are responsible for preassault fires, a contingency division should routinely practice employing them in support of assault forces.

Engineers play a vital role in providing mobility support to ensure a lodgement can receive the

command and control of forcible entry operations requires that key leaders communicate en route and on the ground follow-on flow of forces and equipment. Light airfield repair packages, port opening teams, tanks to push containers off runways, and hotwire teams to start and move vehicles

which serve as obstacles are the kinds of tools used by engineers and assault forces in response to rudimentary but effective capabilities of adversaries.

Air defenders have a critical role in protecting lodgement and staging bases from air attack, particularly during vulnerable periods before significant assets are airlanded. Both Stinger missile gunners and Avengers can be airdropped with assault forces for immediate protection. When air

threats are minimal, air defense forces should practice using "weapons safe" controls whereby grip stocks and rounds are connected only by order of the commander.

Training combat service support for contingency operations requires a division to work the full marshaling phase of its EDRE program, then execute CDS resupply and medical evacuation planning. Combat lifesavers, tactical mobility, and advanced trauma life support packages dropped with assault forces provide initial medical coverage until sophisticated equipment can be airlanded. Assault forces should train taking three days of supplies into theater without overloading soldiers. In reality, combat service support planners should lighten individual loads, deliver rucksacks, and push package resupply by combat direction system drop, slingload, or airland.

Command and control of forcible entry operations requires that key leaders communicate en route and on the ground. JTF and division staffs should practice using airborne command posts such as EC–135s, airborne command and control centers, and joint airborne command and control command posts. Also, EDREs and other exercises should use secure en route communications and hatchmount satellite communications on aircraft with key leaders. Forces then should practice the evolution of communications in theater, moving from rucksack radios to vehicle radios, then to retrain directed communications,

and finally ending with theater-wide mobile subscriber equipment communications supported by contingency communications packages.

Soldiers and Equipment

Being ready for H-hour means recruiting and retaining quality soldiers who are prepared for difficult training and missions. Joint forces are responsible for accomplishing missions while caring for both soldiers and their families. Aggressive family support group programs, including suitable facilities and instruction, allow the individual soldier to concentrate on the task at hand.

Today's high quality soldiers are afforded leadership opportunities that increase readiness to meet the demands of lodgement and contingency operations. NCO courses produce team and squad leaders who can take charge in the absence of orders. Historically, lodgement battles have often rested on actions by small bands of paratroopers executing a mission in a decentralized way. The battle staff NCO course provides divisions additional expertise in tactical operations centers. Airborne, air assault, and Ranger training instill confidence in junior leaders. Officers attend basic and advanced courses to increase tactical proficiency while the U.S. Army Command and General Staff Officer College teaches field grade officers about employing forces on the operational level to achieve strategic goals. Professional development programs and individual reading programs must also reinforce lessons taught in the classroom. Although smaller, the Force XXI Army consists of well trained leaders and soldiers capable of training and executing forcible entry operations.

Modern equipment is key to outfitting soldiers for seizing lodgements and force projection. The Army continues to exploit the mismatch in capabilities of its adversaries. For example, night vision goggles and OH–58s provide contingency forces with the ability to exploit the darkness and achieve tactical surprise. Other technological advances critical to contingency operations are Q–36 counterfire radars, Avengers, and all source analysis systems.

Developing a plan, training to it, and employing state of the art technology enables today's Army division to be a credible asset for JTFs. The unique ability to seize a base of operations and rapidly stifle an enemy makes it particularly suited as the force of choice for power projection. As enemy forces realize that an opposing force cannot effectively intervene without a lodgement, and that airpower alone is insufficient as demonstrated in the Balkans, the first order of business for JFCs will be to open the door to a theater of operations.

Uphold Democracy

With no friendly lodgement or forces in country, the concept for Haiti called for a genuine forcible entry plan. The mission statement of the 82^d Airborne Division indicated that the operation would involve an attack by conducting multiple airborne assaults with follow-on airdrop/airland as the situation dictated. The essential tasks were to establish three JTF lodgements, protect American citizens and property as well as designated foreign nationals, and neutralize the Haitian military and police to create the conditions for restoring democracy in Haiti.

With 40 D-day objectives, the 82^d Airborne Division required an airborne assault force of 3,848 paratroopers using two drop zones and 113 aircraft. The 504th Parachute Infantry Regiment would seize the primary drop zone, Port au Prince International Airport, and follow-on objectives, including facilities that served as the seaport for lodgement. The 325th Airborne Infantry Regiment would relieve the 504th and expand the lodgement. The 505th Parachute Infantry Regiment would seize a second drop zone, Pegasus, a large division support command element, the aviation brigade assault command post, fuel/ammunition handlers, and a security element. Notably, this drop zone was designed for the 82^d Aviation Brigade to arrive from an infiltration site, drop its external store fuel tanks, and pick up the air assault task force. Some 71 heavy equipment platforms would be dropped into Pegasus, providing 28,000 gallons of aviation gas airdropped with refueling pumps, six M551 Sheridan tanks, enough mobility to move a rifle company, the better part of an antitank company, and back-up engineer equipment.

Operationally, Pegasus drop zone was an extension of the division's base of operations and an alternate drop zone in the event an airborne assault at the airport was untenable. Tactically, the drop zone was a consolidation point for most of the division's mobile assets, providing a force that could swing around the exterior of Port au Prince to seize outlying objectives and block the ingress and egress of enemy forces to and from the lodgement.

Division artillery would provide indirect fires from the airfield and command and control of joint fire support assets. The division support command would consolidate containerized delivery system bundles at Pegasus and help to run the airfield once the airland began. Since the division would fight primarily at night, every soldier in the airfield assault force had night vision goggles.

The Scenario

Light rain fell on the assault force at Pope Air Force Base as its paratroopers rigged their equipment beneath the wings of C–130 Hercules and

C–141 Starlifter transports in preparation for a combat airborne assault on two drop zones in Haiti. Another 4,500 paratroopers were processing through marshaling areas for airland operations to execute follow on missions and link up with 810 pieces of equipment the division sent by fast sealift and another 323 to be brought in by airland.

As directed by President Clinton, 32 C–130s left Pope and conducted an aerial link-up with 28 C–130 heavy equipment drop aircraft from McDill Air Force Base. In addition, 53 C–141s at three different ports of embarkation taxied into position for subsequent airdrops.

Meanwhile, the division exchanged 24 liaison teams with higher, adjacent, and subordinate units. The 82^d Aviation Brigade strategically self-deployed and infiltrated 33 UH–60s, 17 CH–47s,

the President had put in motion the largest airborne invasion since Market Garden during World War II

and eight OH-58s to Great Inagua, a remote island in the Bahamas off the northwest tip of Haiti, where crews were exchanged and the aircraft refueled. They were being preparing to travel

the last 200 miles to a selected pick-up zone and to execute three battalion level air assaults in the first eight hours of the operation. JTF–180, with the 82^d Airborne Division en route, was trained and ready to seize lodgements and execute the tactical plan.

The President had put in motion the largest airborne invasion since Market Garden during World War II and one day prior to Uphold Democracy. That a JTF was capable of placing eight infantry battalions, one armor battalion, an assault helicopter battalion, a cavalry squadron, and three days of combat service support assets in theater in four hours in a tactically coherent fashion demonstrates that the Army and its sister services can meet the joint force commander's needs in establishing a lodgement while simultaneously executing a ground tactical plan.

Force Projection

The preparations by the 82^d Airborne Division for Uphold Democracy offer considerations for joint contingency forces. They indicate what must be done in order to depart CONUS in good repair and deploy directly into combat.

- Be trained and ready not only to fight but to marshal and move on short notice.
- Focus training on the most likely war plan—battle focused training.
- Develop a plan which exploits and maximizes the capabilities of all components.
- Identify an enemy's center of gravity and attack it directly or through decisive points with overwhelming force using simultaneous operations.

- Conduct emergency deployment readiness exercises that rehearse key components of the plan, particularly with joint forces.
- Plan marshaling, air movement, landing, and ground tactical phases in detail.
- Be innovative in planning—where particular types of forces are not required employ them in versatile ways as force multipliers.
- Emphasize troop-leading procedures at division level—enforce the one-third/two-thirds rule, execute rest plans, and conduct rehearsals.
- Never underestimate an enemy—study the courses of action open to each adversary.
- Rehearse mobilization plans because they always require support from other units.

By adhering to these guidelines, a division staff can provide major subordinate commands with planning and training necessary for combat success. Uphold Democracy involved all types of forces. This discussion has focused on how one division fit into the establishment of a theater of operations, prepared for that role, and executed two phases of its assigned portion of the operation.

Joint forces will demand more resources and greater integration to keep pace in the future. First, we should replace aging C-141s with sufficient C-17s to project power and conduct forcible entries around the world. Without strategic lift for airdrop, the Armed Forces will be hamstrung in conducting strategic forcible entries. Second, we should procure fast sealift to move forces quickly to regional hotspots. Without adequate forward basing, fast sealift becomes paramount to following airborne or airlanded forces with sustainment for continuous operations. Finally, CINCs should continue to hold annual joint training exercises and focus them on power projection, forcible entry scenarios. No service can conduct forcible entries independently of JTFs. CINCs must continue to practice establishing JTF headquarters, and staffs should be tested on command and control of the myriad forces involved in JTFs.

NOTES

- ¹ Department of the Army, FM 100–5, *Operations* (Washington: Government Printing Office, 1986), p. 2–1.
- ² 82^d Airborne Division, "Uphold Democracy: Military Operations in the Republic of Haiti," Operation Plan, annex C: Air Movement Plan (September 9, 1994).
- ³ Thomas Donnelly, Margaret Roth, and Caleb Baker, *Operation Just Cause: The Storming of Panama* (New York: Lexington Books, 1991), p. 89.
 - ⁴ Department of the Army, FM 100-5, p. 1-1.
- $^{\rm 5}\,82^{\rm d}$ Airborne Division mission essential task list (May 1994).

Medical Dimensions of Joint Humanitarian Relief Operations

By LEONARD M. RANDOLPH, JR., and MATTHEW W. COGDELL

As missions shift from major war to regional conflict, the medical structure is also adopting jointness and a different posture in support. A significant humanitarian focus has been given to regional affairs, and health care plays an important part in it. This analysis examines joint medical operations during Provide Relief, Restore Hope, and support for UNOSOM II.¹

U.S. Air Force (James Mossman)

Provide Relief

The effort to feed the starving masses in southern Somalia began in August 1992 with the arrival of a U.S. Central Command (CENTCOM) humanitarian assistance survey team (HAST) in Mombasa, Kenya. Its role was to determine the command and control and the logistical support necessary for the joint task force (JTF) to conduct relief operations. The team's medical members assessed the medical infrastructure in Mombasa and Nairobi. Based on the relatively small number of personnel who were to deploy in support of Provide Relief—about 700—and the suitability of host nation facilities, arrangements were made to use hospitals in Mombasa for patient stabilization

Restore Hope was more logistically intense and required expanded resources

and temporary holding. One hospital stored U.S. blood products in the event they were needed for American personnel. Further specialized care was available from host nation facilities in

Nairobi. Definitive care was available within U.S. European Command (EUCOM) or the continental United States (CONUS). Organic assets of deploying units provided initial medical care and treatment.

Aeromedical evacuation (AE) flights were either scheduled or diverted from Dhahran in Saudi Arabia with assets supporting Operation Southern Watch (the no-fly zone in southern Iraq). A costlier alternative was to request a dedicated AE mission from Ramstein, Germany. Because of the arduous ten-hour flight from Kenya to Germany, refueling would take place in Djibouti where a French military hospital was available for patients whose conditions had deteriorated and required care that the AE crew could not provide.

Throughout the operation, food was airlifted to relief centers in southern Somalia as well as northern Kenya near the Somalia border. For four months Provide Relief ran coincident with Restore Hope and concluded at the end of February 1993.

Restore Hope

Despite providing the equivalent of 112 million meals, the magnitude of the famine and the breakdown of government meant that the Provide Relief airlift could not ameliorate the starvation in Somalia.² Consequently, Restore Hope commenced on December 9, 1992, the result of a decision to step up relief with a command and control element known as Unified Task Force (UNITAF).

Brigadier General Leonard M. Randolph, Jr., USAF, currently commands 60th Medical Group, and Lieutenant Colonel Matthew W. Cogdell, USAF, is assigned to Medical Readiness Division (J–4), Joint Staff.

A surgeon's office was established as part of UNITAF. The JTF surgeon, a Navy captain, was a medical officer with a staff of three medical service corps officers from the Army, Navy, and Air Force. Later the functions of JTF surgeon were assumed by dual- and ultimately triple-hatted medical commanders. Preventive medicine assets, which included an Army problem definition and assessment (PDA) team and a Navy rapid diagnostic forward laboratory, augmented the staff. The early deployment of these teams was a lesson learned in the Gulf War.

From a medical outlook, Restore Hope was more logistically intense than Provide Relief and required expanded resources. Because its scope had changed, a new medical mission was developed to accommodate joint and combined operations in Somalia. It would involve a range of medical services for disease and for both noncombat and combat injuries. Theater medical services would include evacuation, hospitalization, logistics, laboratory, blood management, veterinary, preventive medicine, dental care, and unit command, control, and communications. Planning was to include routine care of U.N. forces and humanitarian medical care of local citizens though these were not specified tasks. The following assumptions guided medical planning for Restore Hope:

- casualties were to be expected, as were illness and injuries
- host nation medical infrastructure would be inadequate or nonexistent
- medical capabilities of troop contributing nations would not meet U.S. standards
- $\hfill\blacksquare$ U.S. medical forces would be required to treat Somalis
- hospital capabilities would be afloat (on Navy ships) for the first 30 days
- shore-based capabilities would be most vulnerable to Somali requests for assistance (not a significant factor)
- some continued hospital capability afloat would be a haven for U.S.-only casualties (also not a factor)
- hospital beds would be manipulated by type of specialty
- $\hfill \blacksquare$ a public assumption that we would treat Somalis was not assessed
- afloat hospital capability would require alternative capability ashore
- too much medical support would be recoverable, but too little would not.

The deployment of a hospital ship was considered in the planning stage of Restore Hope. The chief advantages of deploying a hospital ship were to reduce the possibility of being inundated by host-nation patients like shore-based facilities, providing a more secure environment for medical resources, and reducing requirements for shore-based logistical support. In lieu of a hospital ship,

a shore-based deployed hospital was chosen after consulting with the Joint Staff.

Medical capability in the area of operations (AO) was austere and limited to treating patients with illnesses or injury of short duration. This was done to expedite their return to duty or stabilize wounds before evacuation from theater. During phase I of Restore Hope (approximately the

Make-shift pharmacy in Somalia.



Joint Combat Camera Center (Terry Mitchell)

first 25 days), Marine collecting and clearing companies offered limited medical care ashore. Enhanced medical care was provided afloat. Host

American personnel were to treat coalition and Somali casualties on an emergency basis only

nation hospitalization in Somalia was not considered for use by U.S. personnel.

USS Tripoli, an amphibious assault ship, provided sup-

port until a shore-based hospital became operational in mid-January 1993. Medical facilities aboard USS Tripoli consisted of two operating rooms, two intensive care unit beds, 29 ward beds, and 144 overflow beds which had been Marine bunks prior to disembarking. With appropriate staffing, medical care was provided to casualties with minimal injuries using these bunks.

Early in the operation two surgical teams (with a total of 23 medical personnel) augmented the ship's company of one medical officer and ten corpsmen. Among the members of these teams were an orthopedic surgeon, three medical officers, an anesthesiologist, and a nurse anesthetist.

During phase II (days 25 to 91), organic medical support accompanied forces deploying to Baidoa and other major interior relief centers. Personnel assigned to an Army evacuation hospital established shore-based hospitalization capability using deployable medical systems (DEPMEDS) equipment ashore at Mogadishu International Airport. The equipment for the landbased hospital was initially to come from a prepositioned ship, *Green Valley*. Difficulties in off-loading because of inadequate berthing facilities resulted in transporting equipment from the United States by air. The evacuation hospital's capabilities included orthopedic, thoracic, neuro, and general surgery.

An Army medical group provided command and control for the evacuation hospital as well as two veterinary and four preventive medicine detachments, a medical clearing company, a dental detachment, a medical logistics battalion, a surgical detachment, a mental health detachment, and both an air ambulance company and ground ambulance company. The medical group commander also assumed the duties of JTF surgeon. Three battalion aid stations and three medical companies were also located ashore.

In addition, an aeromedical evacuation system composed of active and Reserve personnel was established early in the AO during phase I. Its major components consisted of an aeromedical evacuation control center (AECC), a mobile aeromedical staging facility (MASF), an aeromedical evacuation liaison team (AELT), and aeromedical evacuation crews. AECC provided the command and control for the deployed AE system. MASF provided a holding and treatment facility for up to 50 stabilized patients for 4–6 hours before evacuation. AELT provided a communication link, and aeromedical evacuation crews consisted of flight nurses and technicians. Because of the distances, an aeromedical evacuation operations team (AEOT) and six AE crews deployed to Cairo West Air Base to provide mission support and strategic crew staging for transiting AE missions.

Aeromedical evacuation personnel and flight surgeons primarily used C–130 aircraft within Somalia to evacuate patients to Mogadishu. Retrograde C–141 aircraft were used for patients who needed further medical care in EUCOM or CONUS. Flight surgeons deployed to provide clinical assessments of the suitability of casualties for aeromedical evacuation.

On March 10, to conserve the system strength of aeromedical evacuation, AECC functions at Mogadishu transferred to AEOT at Cairo West. One AELT and two modified AE crews (each with a flight nurse and two technicians) remained in Somalia. Aeromedical evacuation personnel, based at Cairo West, rotated in and out of Somalia as mission requirements dictated.³

An air transportable hospital deployed to Cairo West provided resuscitation, basic surgery, and emergency dental capability at the intermediate staging base level. The function of the hospital, like the French military hospital in Djibouti, was to attend to patients requiring medical care beyond the capability of the aeromedical evacuation crew at the refueling stop.

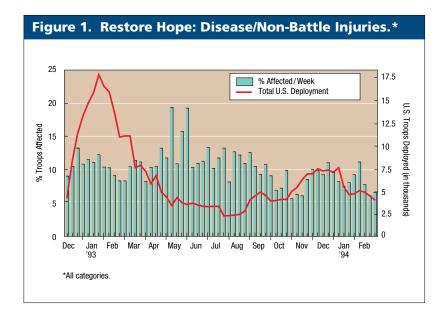
A field hospital replaced the evacuation hospital on April 23, shortly before operations in support of UNOSOM II began. It was situated in the American embassy compound because of the crowded conditions at the airfield and was replaced by a combat support hospital on August 14. The medical group rotated without replacement. A newly established medical task force (MTF) absorbed its functions. MTF was controlled by a field hospital commander who was dual-hatted, having assumed the responsibilities of JTF surgeon.

UNOSOM II

When U.S. Forces Somalia Command was established as part of UNOSOM II to support the transition of humanitarian relief operations to U.N. control, which began on May 4, the MTF commander became the U.S. Forces Somalia surgeon, a third hat. Terms of reference developed by CENTCOM stipulated that medical assets were provided specifically for U.S. forces. American personnel were to treat coalition and Somali casualties on an emergency and exception basis only. UNOSOM coalition hospitals from Sweden, Pakistan, and Romania cared for all other personnel and treated a small number of Americans during mass casualty situations. When Pakistani troops were ambushed on June 5, the U.S. MTF supported U.N. medical facilities. This mass casualty incident was a turning point for the forces supporting UNOSOM II.

On October 3, three UH–60 helicopters were downed in an unsuccessful effort to capture Mohammed Aideed. Eighteen Americans were killed in this action and in the ensuing combat and rescue operations. MTF treated 73 patients during mass casualty operations that day. A few days later, a second mass casualty operation was initiated after a mortar attack on Mogadishu's airfield. Thirteen patients were treated by MTF. From October 3 to 9, the workload included 96 hospital admissions, 70 evacuations, and 45 surgical procedures, with five deaths. This week represented the highest U.S. combat casualty load during the operation.

As the situation turned hostile, transporting casualties from the medical task force hospital to Mogadishu airport became unsafe, and Army medical evacuation (Medevac) assets were used to complete safe and timely transfers of evacuees.



Preventive Medicine

Like the Desert Storm/Desert Shield theater in its initial stages, current and specific disease prevalence information concerning Somalia was not available from medical intelligence sources or even international health organizations. Compounding this deficiency was the virtually complete degradation of health care infrastructure in Somalia. This necessitated a preventive medicine effort to not only support U.S. forces but assist in providing limited support for other U.N. troops and those civilians who are invariably involved during such operations.

Since health care providers were not familiar with diseases in Somalia, diagnostic problems

the Somalia experience resulted in significant progress in conserving mission strength

were anticipated. Moreover, most U.S. troops were immunologically naive to endemic diseases and hence more susceptible to increased morbidity and mortality than the in-

digenous population. Drug resistances were a known and expected treatment problem. To counter the infectious disease threat, some preparatory measures were taken. Information was distributed to heighten awareness of disease potential, immunizations and chemoprophylaxes were addressed, an in-country disease surveillance program was readied, and redeployment disease precautions were planned.

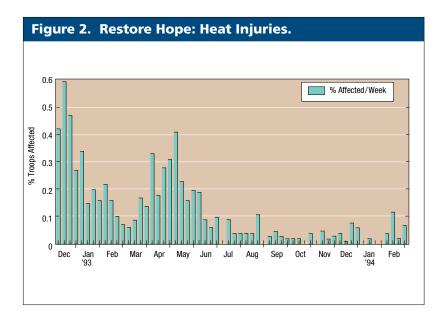
Two publications that addressed the disease threat were widely distributed at the start of the deployment. One was aimed at medical and preventive medicine personnel as well as commanders and troops. It assessed both infectious diseases and environmental health factors with operational import, disease vector ecology information, personal protective measures, and preventive medicine countermeasures. The other publication dealt with anticipated diagnostic difficulties. It reiterated clinical aspects of significant diseases, including clinical presentation, laboratory test interpretation, treatment, prognosis, and prevention of infectious diseases. It also addressed malnutrition, stress, and neuropsychiatric problems.

The first line of defense against some diseases is immunization. Administering a range of immunizations in a compressed period of time prior to deployment was a challenge that continued in-theater in the form of administering immunizations missed during the rush of deploying. Drugs for malaria chemoprophylaxis were chosen based on scant geographical distribution data. In May 1993, a number of soldiers and marines who had served in Somalia surfaced at medical clinics in CONUS with malaria. Noncompliance with chemoprophylaxis and poor protective measures were the most notable causes. But prophylaxis breakthrough noted in several patients was consistent with similar findings in other malarious areas of the world.

Predeployment tuberculin skin testing was also required. The extreme flurry of activity due to the immediacy of deployment resulted in a notable loss-to-follow-up in reading many tuberculin skin tests. Early 1992 tuberculosis (Tb) mortality rates among Somali refugees were reported to be extremely high. Even prior to the civil unrest the disease was a major health problem, moderately to highly endemic, and known to be resistant to multiple drugs. In addition, some U.N. personnel came from countries in which Tb is a major health problem. Thus importing drugresistant Tb into the United States was a serious concern.

Redeployment screening procedures for Tb and other health hazards were implemented for all personnel. Some units reported minimal to high (about 5 percent) rates of skin test conversions because of Somalia exposure, although many cases were ambiguous with regard to predeployment tuberculin-reactive status. Documentation on measurements (or even positive/negative readings) of tuberculin tests was traceable to flawed immunization records that could have led to over-estimating exposure. Also, various units which were retested three months after redeployment from Somalia showed an unexplainable loss of reactivity.

Obtaining immediate disease surveillance data was key to establishing disease prevalence in Somalia and early identification of disease/injury



trends. The PDA team, augmented with a rapid diagnostic lab-capability (joint forward laboratory), deployed with the initial JTF directly under the control of the theater surgeon. Through their energetic efforts, a disease surveillance network that reached all service medical treatment facilities was established immediately and continued until the major withdrawals ended in March 1994. As a result, timely outbreak information was obtained for trend analysis and disease investigation that also was performed by the PDA team in its first non-exercise utilization. Its merits were conclusively proven by remarkably low disease/non-battle injury (DNBI) rates throughout the operation.

The level of activity associated with rapid deployment as well as the mental stress which accompanied Restore Hope and operations in support of UNOSOM II were predictable problems. The factors that increased health risks included: time zone adjustment, heat acclimatization, dietary change, increased accident rates from moving/packing/unloading and the high tempo of activity in new surroundings, and the psychological strain from family separation, culture shock, geographic disorientation, uncertainty about mission duration, threat of bodily harm, et al. A combination of chaplains, combat stress teams, briefings, and publications for commanders, servicemembers, and health-care workers addressed these challenges. Although many factors were difficult to measure, DNBI surveillance data was far lower than predicted (see figure 1). Specifically, orthopedic/minor injury, gastrointestinal disease, and psychological complaints were very low. Though heat injuries were high during initial deployment when compared to the balance of the operation,

this number was still extremely low, given the risk in the AO (figure 2).

Because of the temporary nature of the operation, redeployment was considered early in the game and potential problems were addressed: general health during deployment by means of health questionnaires (filed in health records); messages alerting health care workers to potential disease considerations (also recorded); briefings to alert troops of disease manifestations; implementation of terminal malaria chemoprophylaxis; and repeat tuberculin skin testing 10–12 weeks post-return. Moreover, servicemembers, commanders, chaplains, social workers, and families were alerted to the psychological adjustment problems of returning to normalcy.

Preventive medicine influences are typically easy to measure only when ineffective. Given numerous adverse factors in theater (for example, the austere environment and logistical character of the area, difficult climate, unknown threats from a range of diseases, and unpredictable nature of the operation), preventive medicine efforts reflected by low DNBI rates must be regarded as unprecedented. While this triumph was partly due to lessons learned during Desert Shield/Desert Storm, the Somalia experience resulted in significant progress in conserving mission strength, which must be remembered.

Medical Logistics

The Gulf War was a starting point for planning medical logistics support. Marines initially provided class VIII (medical supply) support. After thirty days of Restore Hope, the Army picked up the mission as single integrated medical logistics manager (SIMLM) for class VIII support to all units in theater. Just as in Desert Shield/Desert Storm, coordination was effected with EUCOM to utilize the U.S. Army Medical Material Center, Europe (USAMMCE), as the source of class VIII material to sustain medical logistics battalions (MLBs) in Somalia as well as the air transportable hospital in Egypt. Class VIII support for emergency requisitions and routine items that were not stocked by USAMMCE also were provided by the Defense Personnel Support Center.

Overall, medical supply support was deemed a great success, with the single item manager concept proving more effective than in Desert Storm/ Desert Shield mainly because medical units deployed with the appropriate initial support supplies plus resupply packages of 15–30 days. This allowed MLBs to more easily sustain the force without outfitting units with class VIII at the outset of the operation. In addition, MLBs not only deployed early but carried their initial inventories.





Surgical module, Mogadishu.

In the deployment phase of Restore Hope, communications in the tactical AO were austere, a characteristic of modern contingency/humanitarian operations. Communications thus took place over tactical single channel ultra high frequency satellite communications (SATCOM), commercial SATCOM-international maritime satellite, single channel radio (SCR), high frequency radio, and limited super high frequency SATCOM links. Units communicated in the AO predominantly over voice links. Limited data communication was available via facsimile or data transfers over tactical satellite or SCR, a constraint which medical logistics units overcame. MLBs utilized a prototype system, known as the quad-service satellite transmission and receiving system for medical supply support, without

which logistics would have been ineffective. It combines government proprietary message handling software and off-the-shelf hardware for satellite communications and message preparation. This system can send and receive requisitions, supply status, and various transactions over landlines or satellites under the defense automatic addressing system (DAAS). It operated via satellite communications offered by the INMARSAT commercial system that is linked by portable, collapsible terminal with telephone and data transmission service.

Some Lessons

The creation of a JTF surgeon element during the initial days of Restore Hope was critical. The surgeon's staff expedited coordination of joint medical support and requirements. During a lull in activity, the functions of the surgeon were passed to the medical group commander, and later to MTF commanders. When the level of unfriendly activity in Somalia increased, it was difficult to augment the staff. The surgeon was faced with a herculean task of acting as hospital commander, U.S. Forces Somalia surgeon, and JTF Somalia surgeon. The retention of a dedicated skeleton surgeon's office would have constituted a significant asset in the coordination of medical activities as the operational tempo increased.

Relying on *USS Tripoli* for emergency hospitalization was crucial during the first month of Restore Hope. Lacking medical infrastructure in Somalia, the capability aboard *USS Tripoli* was the only source of hospitalization prior to land-based support. Because the weather, darkness, and other conditions could have compromised evacuations, a rapidly deployable land-based facility was needed. Establishing a pre-positioned hospital aboard *Green Valley* was problematic. High seas and shallow harbors prevented unloading. DEPMEDS equipment from CONUS provided an alternate land-based hospital to be deployed and set up in the 30-day planning window.

Predeployment preparations must include preventive medicine assets during the early stages of planning. Education was a cornerstone in predeployment preparations for Somalia. It involved reacquainting health care workers with diagnosing diseases endemic to the region and education in local medical threats/countermeasures. Immunizations, Tb testing, and chemoprophylaxes are high priority measures that must be emphasized. The illusion that chemoprophylaxis offers total safety must be replaced by awareness that protective measures are vital in preventing many vector-borne diseases. Units targeted to specific regions should be maintained at 100 percent

medical readiness for deployment. While this is the best tactic to counter a failure to complete medical predeployment processing, units do not always enjoy the prior knowledge of their target destinations.

There appears to be a shortfall in medical intelligence which is probably a problem inherent in any intervention. PDA teams provide dynamic disease data on which constant adjustments in medical tactics can be made. Deploying a team early with initial forces, forming a comprehensive disease surveillance program, immediate disease outbreak investigations, and command level of recognition (directly under the theater surgeon) were factors that contributed immensely to success. Similar use and control of PDA teams should be the standard in future military deployments.

Finally, the most important factor in all military preventive medicine endeavors, command support, must be secured. It ensures timely and regular reporting of disease surveillance data and enforces recommended countermeasures as problems are identified. Command support is the only effective means of ensuring implementation of preventive measures. But it can be optimized only by educating commanders, a developmental process in which health care workers must ensure that commanders understand the priority of prevention over treatment.

Dedicated Medevac helicopters were indispensable not only for evacuating casualties from the interior to Mogadishu, but within the capital itself. They were not available in the early days of the deployment, and such support was provided by general support helicopters whenever possible. Competing requirements would have seriously detracted from the medical mission if combat had increased. The Medevac helicopters came by sea from Europe necessitating ship deck qualification training for Army Medevac pilots.

Aeromedical evacuation was another critical element that performed well during this effort. Air Force medical personnel at Cairo West and Mogadishu airport, in concert with other medical task forces and ships, provided timely support to evacuees. The establishment of staging bases at Djibouti and Cairo West was an important factor in safe and successful aeromedical evacuation.

Communications austerity in the early stages of force projection is a characteristic of rapid tactical military operations today. It is essential that medical communications contingency planning be closely integrated with the total contingency communications planning process. In addition, it is crucial for the medical communications personnel, supported command J-6, and JTF J-6 to work closely during the deployment and execution phases to ensure that suitable communication assets are allocated to the medical mission.

Medical support for forces engaged in humanitarian relief operations in Somalia was highly successful because of forward thinking and flexibility in the planning and delivery of health service support on all levels. Joint medical planning expertise and activities were crucial in meeting health requirements. As the Armed Forces evolve in the post-Cold War era, the medical lessons drawn from Somalia may prove to be typical and thus should be carefully evaluated for future application.

NOTES

¹ The authors collaborated with CAPT Sterling E. Garnto, USN; LTC John T. Harris, USA (Ret.); MAJ Douglas S. Phelps, USA; and LTC Steven J. Yevich, USA, in the preparation of an earlier version of this article and gratefully acknowledge their support and comments.

² Joseph P. Hoar, "A CINC's Perspective," *Joint Force Quarterly*, no. 2 (Autumn 1993), p. 58.

³ See 1st Aeromedical Evacuation Squadron, "Operation Restore Hope After Action Report," June 15, 1993, and 32^d Aeromedical Evacuation Group, "Medical After-Action Report for AEOT: Operation Restore Hope," March 18, 1993.

⁴ Headquarters, Medical Task Force 46, "Situation Report for Operation Continue Hope, October 4–10," October 11, 1993.



and Virtue

By JAMES H. TONER

James MacGregor Burns has stated that "Leadership over human beings is exercised when persons with certain motives and purposes mobilize... institutional, political, psychological, and other resources so as to arouse, engage, and satisfy the motives of followers." Although he is an acclaimed scholar, this proposition, though not erroneous, seems somehow incomplete, colorless, and impotent. But if Burns's grasp of leadership is inadequate, one can peruse hundreds of works in search of a definition of leadership without finding a wholly satisfying explanation. Augustine of Hippo, the fifth century philosopher and Father of the Church, noted that one knows what *time* is

James H. Toner teaches international relations and military ethics at the Air War College and is the author of *The Sword and the Cross:* Reflections on Command and Conscience. until asked to define it. *Leader-ship* may resist definition in the same way.

Terms which have the greatest meaning for us—love, faith, honor, and justice—invariably withstand simple (or even complex) definition. But can one really comprehend something without being able to define it? Thus I offer this succinct definition: leadership is the ability to inspire appropriate action beyond the expectable.² While this denotation is unlikely to find its way into the academic literature on the subject, it serves as a point of departure for looking at leadership.

If some action or conduct is routine, ordinary, and predictable—that is, expectable in every

leadership inspires appropriate conduct beyond the expectable

sense—leadership is very likely unnecessary. It is in the nature of leadership to offer something beyond the expectable. If a group of people may be

expected, for instance, to achieve a desirable outcome regardless of leadership, one might fairly assume that, with effective leadership, the same group might be able to achieve even greater things. Thus, leadership contributes to success on the margins—it is value added. One might think of it as yeast that has a positive catalytic effect.

For example, the motto of the U.S. Army Infantry School at Fort Benning is "Follow Me!" It is an effective credo, capturing in two words the essence of leadership: the infantry leader, exerting the power of his own will and influence, enables a squad or platoon to do things that they would be unlikely to do absent his direction. But most of this is pretty self evident. If leaders are effective, they get results not otherwise calculated in and from people.

Most definitions of leadership contain synonyms. One thesaurus gives direction, guidance, instruction, administration, authority, command, control, domination, superiority, and supremacy, which are all very useful terms. But nouns dodge a very critical adjectival question: How do we separate good leadership from bad? Returning to the analysis offered by Burns, one finds that his dissection of the subject (at least in the brief quotation cited above) is value-neutral. My definition suggests that leadership inspires: a positive, productive influence. Another denotation, "to guide or control by divine influence," reveals that the infinitive is intended almost exclusively to convey something affirmative and beneficial. While one might refer to Hitler as having inspired Germans in the 1930s, as having been *charismatic* (which originally meant a spiritual or divine gift), using such terms in the context of Nazi Germany is wrong. Bennis and Nanus correctly point out that "Managers are people who do things right and leaders are people who do the right thing." 3 Use of the adjective *right* is of paramount importance.

The definition proposed herein emphasizes that leaders inspire appropriate (correct, fitting, suitable, rightful) conduct. Leadership that promotes inappropriate (incorrect or wrongful) conduct may be tyranny, despotism, or dictatorship, but it is not genuine leadership, which one takes to be a positive influence. The dictionary states that to lead is "to go before or with to show the way." One must again acknowledge that "the way" can be harmful—such as when gang leaders incite followers to violence and crime—though a fair reading seems to suggest something constructive as well as hopeful. Therefore leadership inspires appropriate conduct beyond the expectable. That is, I contend, what leadership does. But if that is what leadership does, how does it do it?

How Leadership Works

Over the course of decades, military professionals have rightly insisted that leaders inspire appropriate conduct beyond the expectable by appealing to duty, honor, and country—and refusing to lie, cheat, and steal. Yet these venerable concepts, which have encouraged thousands of leaders to do what they ought to even in times of peril and crisis, are vague. Strong adjurations to virtue and admonitions against vice are necessarily indistinct. The ancient Greeks told us that exceptions to broad rules might sometimes have to be granted. Equity means fairness. Aristotle taught that equity could mean the rectification (correction) of the law when law was deficient by reason of its universality. That is, if rules and regulations apply to everyone, a law might well be wrong when it applies to someone under certain circumstances. It is wrong to steal. But what of taking a loaf of bread to feed a starving family? Can there be mitigating or extenuating circumstances? Can the injunctions of duty, honor, and country always teach what we want them to? If soldiers, sailors, airmen, or marines inscribe duty, honor, country on their hearts, will they lead appropriately?

We know how critical the notion of duty must be to soldiers who exist—and leaders who lead—in order to accomplish the mission. Soldiers go into harm's way—they risk life and limb—to get the job done. They are, properly, taught to say "yes sir" or "yes ma'am" when given an order—and to execute that order promptly and efficiently. At the U.S. Military Academy, cadets are taught to say "No excuse, sir" when confronted with their shortcomings. Results matter, and complaints are impermissible about why the orders or magnitude of the job precluded success in the assignment. "Duty," said Robert E. Lee, "is the sublimest word in the English language."

But we also know, since the post-World War II war crimes tribunals, that devotion to duty is not enough. Orders occasionally must be questioned. The notion that only the superior officer responds to questions of propriety is gone, as it should be. Every soldier is responsible for the orders that he or she issues—or follows. Blind obedience is wrong. There may well be a duty not to be dutiful. Duty is not the highest good of the soldier.

Honor sometimes seems so rare that I shrink from writing that honor itself is not enough, for what is meant can be terribly mistaken. In the film *A Few Good Men*, a young Marine NCO regards unit, Corps, God, and country—one presumes in that order—as his source of honor. The story presents two twisted, grotesque leaders, a lieutenant and a colonel, with a sense of "honor" that is warped beyond recognition. A twisted sense of honor may be worse than no honor at all. At the Naval Academy, midshipmen recently

the highest obligation must be to honor, and then to duty, and then to countrymen cheated on an exam and subsequently covered up for one another, contending that loyalty to one's buddies was higher than loyalty to the honor concept at Annapolis. That no-

tion may hold sway among members of a street gang but cannot be allowed to take root in an institution educating commissioned officers. Honor of this sort is not the highest good of the soldier.

Country—a short term for patriotism—is a desirable quality to most Americans. We react with sorrow and anger to a traitor who sells out his homeland for greed and personal debauchery. We expect the Armed Forces to represent our country well. Every day soldiers don the uniform of the United States, and they should understand that wearing it is a privilege and responsibility. But patriotism can be carried to extremes, and history is replete with cases of those whose first loyalty to their homeland resulted in evil. Religious people, for example, cannot value loyalty to country ahead of faithfulness to God. Patriotism is a valuable sentiment and a worthy conviction, but it is not the highest good of the soldier.

But if the watchwords and creed of "duty, honor, country" are not enough to tell us how to be leaders—and which values to exalt—who do we consult? This is not to offer a new formula to West Point but to suggest, for purposes of instruction, a new ordering of "duty, honor, country."

Taken properly, the highest virtue of a soldier, and hence his leader, is honor—authentic, not warped. Things done in the line of duty that violate a proper awareness of honor tarnish the shield and disgrace the uniform. Genuine honor is based on integrity. As a former service chief put it, "Any order to compromise integrity is not a lawful

order. Integrity is the most important responsibility of command." ⁴ *Legal* orders must be obeyed. Leaders inspire *appropriate* conduct.

We try in so many ways to soften the language, but the soldier's job is to kill and prepare to kill, to die and prepare to die. The Code of Conduct is very clear about the ultimate obligation of the soldier, whose very life may be put in danger to accomplish the mission. Officers are never to endanger the lives of their soldiers for light reasons; but never must they shrink from the terrible responsibility of accepting risks, even mortal danger, for their troops and themselves if necessary. The military may well be involved in operations other than war, but the first responsibility of the Armed Forces is to win the Nation's wars. When a choice must be made between troop safety and mission accomplishment, the duty of the soldier must be mission first.

The infantry lieutenant forever has the responsibility of pointing at one soldier and saying, "Smith, point man!" None but the cavalier, however, would say such things carelessly. There must be no question that genuine concern for the welfare of soldiers (or patients, pupils, clients, or customers) is key to leadership. What the leader gives to followers is very likely to be returned. But for the military leader, concern for troops cannot replace devotion to duty; and devotion to duty cannot replace fidelity to a high sense of honor. The trinity of principle, purpose, and people thus complements the idea of honor, duty, country(men).5 The highest obligation of a soldier must be to honor, and then to duty, and then to countrymen. If any leader mistakes the proper order—putting, say, people ahead of principle and thus implicitly condoning cheating at the Naval Academy—he or she cannot inspire appropriate conduct. The leadership offered will be defective and dangerous.

But we have said that principle can be misunderstood. How can leaders be educated to understand the proper order of principle (honor), purpose (duty), and people (countrymen)? Since the ancient Greeks, educators have sought to inculcate wisdom and virtue into students, frequently without success. Indeed, in many if not most universities and colleges today, even discussion of trying to teach "wisdom and virtue" will terrify professors and, in particular, administrators. "You shall know the truth, and the truth shall make you free" has been transmuted into "You shall know the truth, and the truth shall make you flee." Whose version of "wisdom" shall we teach? Whose notions of "virtue" shall we inculcate? In a multicultural society, does any public university have the right to teach "wisdom and virtue?"



Specific questions of campus politics can be left to faculties in Tuscaloosa, Ann Arbor, and Tempe—until graduates of those institutions pin on the gold bars of second lieutenant or ensign. Once commissioned, those young leaders must know how to order principle, purpose, and people, for there is the fountain of leadership. Personal background, even educational experience, may be at odds with the views, values, and verities which have sustained the Armed Forces for more than two hundred years. How are young officers to learn the time-tested truths of military leadership? How are they to master what "principle" and "honor" are about? How are they to discover what "purpose" and "duty" really mean? How are they to grasp what taking care of people demands? Experience in the workplace or the streets is hardly enough. An education—at Alabama, William and Mary, Holy Cross, even Annapolis, it seems—is not enough. This is certainly not to impugn any institution; nor is it anti-intellectual, intended to denigrate higher education. Rather, the point is that leaders today need a socialization, maturation, and seasoning beyond the academic expertise represented by degrees. That socialization process is the responsibility of each service.

The Source of Integrity

To lead well—to inspire appropriate action beyond the expectable—leaders must have both wisdom and virtue, customary products of long experience and worthwhile education. As obvious as it is, one can forget that the colonels of the future are the lieutenants of today. If the lieutenants are poorly educated, we must expect misfits and malcontents among colonels within a generation. Leaders educated by Federal service academies, ROTC, and OCS/OTS are likely to have the raw intelligence to *become*—I do not say to *be*—good leaders. But they will require the seasoning, experience, conditioning, and mentoring of their profession in order to mature into the kinds of leaders the Nation wants and very much needs.

In one word, leaders will learn virtue (and thus be able to inspire appropriate conduct) by being responsable. I have not misspelled the word responsible; I mean "responsable"—being able to respond. Leaders must know what to respond to. If they respond first to opportunities for success and advancement, they will be careerists but not professionals. If they misunderstand the order of principle, purpose, and people, they will make the kinds of mistakes referred to earlier. Leaders must be able to respond to the chief challenge of leadership: being technically and tactically and ethically proficient.

It is obvious that good leaders must know their profession. Competence in soldierly skill is fundamental. But competence without character is an invitation only to masterful despotism. And character consists in "responsability"—that is, being able to respond to challenge and crisis in a manner based on integrity. Here we have at last come to the chief difficulty in almost all writing



on the ethics of leadership. It requires little study, after all, to say that good leaders are men and women of integrity. But what is integrity? I offer the simple definition that it is "responsability." Those with integrity respond to crisis and challenge as their profession would urge. In moments

as vital as honor is, another concept of compelling importance is *shame*

of indecision, leaders with integrity respond to the silent promptings and the unspoken guidance of those who have gone before; in moral and military emergency, leaders find unvoiced counsel in the

history of their services and biographies of the champions of yesteryear.

Leaders are never alone. They walk in the shadow of great lieutenants. Each service has rites and rituals, trappings and traditions, customs and conventions, that disclose volumes on what is done and must be done, what is not done and must never be done. Leaders soon perpetuate a community of service. Those who went before—and served well and nobly—admonish, instruct, and counsel young leaders who are prudent enough to listen. Heroic murals and statues, customs, uniforms, and reveille and taps—all these things faithfully teach new leaders that they have entered a

profession. In making decisions, leaders are responding not just to present circumstances but to standards set in the past, and aspirations and opportunities of the future. As professionals, leaders profess faith in comrades. They are *responsable*—that is, able to respond—to those comrades.

Alasdair MacIntyre of Notre Dame, perhaps our foremost moral philosopher, observed that "I inherit from the past of my family, my city, my tribe, my nation, a variety of debts, inheritances, rightful expectations, and obligations. These constitute the given of my life, my moral starting point. This is in part what gives my life its own moral particularity." 6 It is this inheritance, this sense of community, from which we derive a sense of purpose and ethical orientation. It is to this feeling of oneness, bonding, and confraternity that we are responsable. This brotherhood is found in Paul's letter to the Romans: "What I wish is that we may be mutually encouraged by our common faith." That feeling was described by Walter Lippmann when he wrote that there is a sense of community which, "though so insubstantial to our senses binds, in Burke's words, a man to his country with 'ties which though light as air, are as strong as links of iron.' That is why young men die in battle for their country's sake and why old men plant trees they will never sit under."7 In his farewell at West Point, Douglas MacArthur made much the same point: "The long, gray line has never failed us. Were you to do so, a million ghosts in olive drab, in brown khaki, in blue and gray would rise from their white crosses..."8

A simple definition of *integrity* tells us that it means "the quality or state of being complete; unbroken condition; wholeness; entirety." In the sense that an integer is a whole number and not a fraction, integrity suggests community. Young leaders who absorb the sense of wholeness and of tradition and of common faith which writers from Paul of Tarsus to Lippmann and MacArthur have believed and taught thus ground their moral educations in virtue; they begin to know how to order *appropriate* conduct and how to conduct themselves wisely.

As vital as honor is, another concept of compelling importance is *shame*, the feeling that by inappropriate words and actions, one has disappointed the best of his community. Shame is the belief that, by failure of moral or physical courage, one has proven unworthy of the tradition he or she is expected to uphold and exalt. The shamed one is thus unable to look professional colleagues squarely in the eye and implicitly say, "I took this action because, in my best

judgment, it was right." Actions and words that produce shame are ordinarily wrong. They destroy the wholeness (past, present, future) of a profession and devastate the bonding, community, and sense of unity of those whose deeds built the integrity of that profession.

Integrity, then, is about wholeness and community and having sufficient piety and decency to know when one ought to be ashamed of betraying it. Every leadership decision but the most mundane involves ethical judgment. Therefore, every significant leadership decision is potentially "transforming," leadership that occurs when we "engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality."9 Good leaders do not simply want their followers to do something; good leaders want their followers to be somebody. The repetition of appropriate action develops the kinds of habits which help us act as we should. In doing the right thing, leaders set examples, build purposeful organizations, create and enhance community, inculcate virtue because they are wise, and are wise because they are virtuous. "Good leaders," Malham Wakin observed, "are good teachers." 10 Teachers do more than transmit ideas; they practice a kind of transforming leadership, educating students, soldiers, and patients. Good leaders show their subordinates "the way."

James Bond Stockdale, a prisoner of war in Vietnam for eight years, contends that good leaders "need to be moralists—not just poseurs who . . . exhort men to be good, but thinkers who elucidate what the good is. This requires first and foremost a clear idea of right and wrong and the integrity to stand behind your assessment of any situation." 11 Good ethics must be taught by good leaders; and good ethics is caught from good leaders who inspire appropriate conduct beyond the expectable. Leaders learn from the past, are responsible in the present, and plan for the future. They know their principles, purposes, and people; and their sense of community and their pride of profession endow their actions and orders with mature judgment. In such mature, settled judgment will be found the union of leadership and virtue, of effective command and wise conscience.

NOTES

- ¹ In a book by the same name (New York: Harper Colophon, 1978), Burns defines leadership as "inducing followers to act for certain goals that represent the values and the motivations . . . of both leaders and followers" (p. 19).
- ² James H. Toner, *The Sword and the Cross* (New York: Praeger, 1992), p. 49; and *The American Military Ethic* (New York: Praeger, 1992), p. 54.
- ³ Warren Bennis and Burt Nanus, *Leaders: The Strategists for Taking Charge* (New York: Harper and Row, 1985), p. 21. But their next sentence totally misses the point: "The difference may be summarized as activities of vision and judgment—effectiveness versus . . . efficiency."
- ⁴ John D. Ryan, quoted in *War, Morality, and the Military Profession, 2*^d ed., edited by Malham Wakin (Boulder, Colo.: Westview Press, 1986), p. 180.
- ⁵ See my book *True Faith and Allegiance: The Burden of Military Ethics* (Lexington: The University Press of Kentucky, 1995), chapter 4, for more detail.
- ⁶ Alasdair MacIntyre, *After Virtue*, 2^d ed. (Notre Dame, Ind.: University of Notre Dame Press, 1982), p. 220.
- ⁷ Walter Lippmann, Essays in the Public Philosophy (Boston: Little, Brown, 1955), p. 36.
- ⁸ "Duty, Honor, and Country," *Vital Speeches of the Day*, vol. 28, no. 17 (June 15, 1962), p. 520. The power of this valedictory is not denied; but "duty, honor, country," though valuable and venerable as rhetoric, is not an amulet that guarantees good leadership.
- ⁹ Burns, *Leadership*, p. 20. His other type of leadership is "transactional," which means "one person tak[ing] the initiative in making contact with others for the purpose of an exchange of valued things."
- ¹⁰ Malham W. Wakin, "Foreword," in *Military Leadership: In Pursuit of Excellence*, edited by R. L. Taylor and W. E. Rosenbach (Boulder, Colo.: Westview Press, 1984), p. xiv.
- ¹¹ See James Bond Stockdale, "Educating Leaders," in *Military Leadership: In Pursuit of Excellence*, edited by R. L. Taylor and W. E. Rosenbach (Boulder, Colo.: Westview Press, 1984), p. 67. See also Roger H. Nye, *The Challenge of Command* (Wayne, N.J.: Avery, 1986).

BRILLIANT

Warriors

By JAY W. KELLEY

There is little doubt that military education is an important complement to military training. But while everyone would agree on the value of both training and education to the Armed Forces, just how much professional military education (PME) a warrior needs, its form and timing, and the impact of information technology on what is taught is open to debate. This article seeks to animate and encourage that exchange.

One thing is certainly undebatable: people are the most critical element in the military. They must fight our wars. Technology provides the tools to fight, and training enables a warrior to

If we should have to fight, we should be prepared to do so from the neck up, instead of from the neck down.

-Jimmy Doolittle

use them to his best advantage. And the purpose of PME is to leverage the most powerful factor in the warfighting equation: the human mind. Our training institutions and their capabilities are superior. Training has repeatedly reengineered itself to take account of advances in information technology, simulation, and discoveries about how mature students learn best. It is

challenging, experiential, and sometimes fun. But PME has not even kept abreast of improvements in training, let alone with needs of national military strategy.

Unless PME better prepares warriors, our best training may be wasted. To understand the changes that must be made in PME, we must differentiate between training and education.

Lieutenant General Jay W. Kelley, USAF, is commander of Air University and previously served as vice commander of Air Force Space Command.



Training and Education

Military training and PME do not aim at providing jobs or adventures. They are necessary for success in warfare. Training creates competence in using machines or tools required for tasks. It is about teaching things that are known and using things that operate mechanically, electrically, or somewhat predictably. Education, on the other hand, aims at teaching intellectual constructs and appropriate principles so that the right tools are available and can be selected to achieve a desired effect. It is about learning whatever we do not know but envision we must know to survive and succeed. Said another way, training teaches the archer how to use the bow and arrow—how to aim the right arrow at the right bull's-eye. Education ensures that the archer also sees the value of gunpowder as an improvement over archery. The test of training is competence in environments that exist now and are understood. The test of education is success in different environments that are perhaps not fully understood.

Over the last several years, Air University has engaged in studies of the future. Spacecast 2020 is being followed by Air Force 2025, which is being conducted at the direction of the chief of staff,

U.S. Air Force. The latter study examines the air and space capabilities that the Nation will need, systems and technologies that might contribute

the test of education is success in environments that are perhaps not fully understood

to them, and concepts of operations for best utilizing new capabilities. Closely related are DOD studies and

seminar wargames that explore the revolution in military affairs (RMA). Each service and the Joint Staff are looking into the future to understand the operating environments that the Armed Forces might face.

Alternate Futures

Moving into the future, Carl Builder has reminded us, is like driving into fog.¹ Turning on the high beams to see specific objects only illuminates the fog more brightly. To make out shapes requires lower beams, peripheral vision, and the ability to observe relationships between shapes, the road ahead, and the means of illumination. It also requires making implicit assumptions about what is perceived explicit and then challenging them. The first thing one sees, to pursue Builder's analogy, is that there is more than one future visible in the fog. Each alternate future is internally consistent, often equally plausible, and could actually be the future. Some are benign while others are arduous. Combined, they delimit strategic planning, identify risks, and suggest challenges and opportunities that may lie ahead. Alternate futures are descriptive, and not predictive or normative. They are planning stories or scenarios. Aware of these alternatives, planners can ignore any or all. The objective is to clarify the shapes in the fog to reduce surprise and risk for decisionmakers.

Alternate futures need not be precisely right, just plausible and approximately right. This is preferable to stumbling along in the dark or clinging to the present and ultimately being ill-prepared for the unexpected. While a creative process, generating alternate futures is rigorous and exacting. Just as we know the past by inference, we can gain similar insight into futures. Businesses spawn alternate futures at great expense because they pay off. Failing to look ahead might lead to missing new customers or losing their market share. Militaries that do not look ahead may lose nations.

There are other methods for looking ahead besides alternate futures, some better than others. But all have a common objective: to provide insights into tomorrow so that our present actions can prepare us. Thus, the task is to look ahead, describe the operating environment, delineate the skills it may demand, and postulate actions likely to produce the desired results.²

Some things are common to all futures. Simply put, soldiers, sailors, marines, and airmen of 2020 must become as "brilliant" as their tools. For example, the Army mobile digitized Force XXI and the Marine Corps initiative Sea Dragon—or whatever they become on the way to the far future—can only be understood or prosecuted by thoroughly trained and superbly educated forces. Given the distinct possibility that nontraditional missions will increase, and that the Armed Forces are not likely to grow in size, the education and training hurdles that we face are immense.

What should planners study to enable them to devise simultaneous strikes on 5,000 targets with precision-guided munitions? What sort of education will prepare combatants to deploy from CONUS to link up with coalition forces to fight within twelve hours? How does one train marines to fight brush fires in California one week and survive firefights in combat the next?

The Environment

Studies indicate that the operating environment of the far future probably will include five attributes important to those who are planning military training and PME today.

Humans will still fight. Combat can occur anywhere from the earth's surface to cislunar space. It can break out in environments ranging from jungle to polar ice, from cities to orbital heights. It can involve national armies, irregular forces, terrorist groups, or organized crime. And even though nation-states will not wither away, they may have more powerful competitors in the future.

The military will be smaller. Capabilities will be more tightly integrated: speed, precision, and the expertise to operate in ambiguous circumstances will become treasured operational values. Cost will be as important as capability in organizing, training, and equipping this force.3 A cadre of nearly transcendent professionals—but not six-million dollar men or robocops—will constitute the force. The services probably will not be merged, and neither a space nor information corps is likely to be created. We will still need the means to develop experts in land, sea, and air and space warfare—including information operations that cut across all combat media. This force will work together with many members of the interagency community as well as contractors. All elements of this future force must understand their contributions and how other contributors are integrated to meet the objective. Knowing how one's own part of this force functions will not be good enough; one must know how others work too.

M-1 main battle tanks.



If I experience it, I'll learn.

—Lao Tze

F-117 Stealth fighter.

The standard for this force will be its ability to make rapid precision strikes, both physical and electronic-photonic, and operate in situations of

high ambiguity. Precision and engagement speed (strikes and restrikes) will compensate for smaller forces. Events will unfold so rapidly that time and timing become critical. The ability to act rapidly over great distances with a minimum of casualties or damage (including harm to the ecosystem), then withdraw or terminate quickly, may deter potential adversaries.

There will be myriad interactive smart machines. The explosion in information technology, accord-

ing to Carl Builder, is the key disturber of our time. "Brilliant" systems—many small—are inescapable consequences of an eruption in computing power as well as information technologies. Microchips could turn up in almost anything by the middle of

the next century, which would make "dumb" things smarter. Microchips communicating with a central processing unit will constitute a smart network. And when smart networks communicate, almost brain-like systems will emerge. Admiral William Owens and others have referred to such an occurrence as a coming "system of systems." In thirty years intelligence will be embedded in most things, many interacting with humans. Thus it is likely that the Armed Forces could ultimately become an "organism of organisms."

Coalitions will be the norm. Technology and a common dedication to improving quality of life will combine to shrink the planet and harmonize interests without a loss of cultural or national identity. Electronic linkages among economies, increased leisure and business travel, and ease of interpersonal contacts will facilitate greater cooperation. Threats to one global partner will imperil others more than today. Yet military-to-military exchanges, coalition training exercises, and actual operations will link allied warriors and promote a kindred spirit among them. We should preserve the capability to act unilaterally, but—like it or not—coalition operations will be the norm.

Tomorrow's subordinates and leaders will be different. The same genetic material will be influenced by a vastly different environment. By early in the next century both leaders and the led may appear as different from our perspective as those

By 2025 we will have been joint for nearly fifty years, and the speed bumps of today will have been flattened. The demographic composition of Congress will be different. Whereas less than 40 percent of current

members have served in the Armed Forces, the percentage may be much smaller over next thirty years. A significant aspect of continuity is that the military will obey the President, respect the Constitution, and operate under the control of civilian authority.

Determining the Output

Given the likely attributes of the future environment, we must examine the desired output as a prelude to describing the input and the contribution of training and education. What skills and

of 1965 appear to us now. If you tell me, I'll listen. If you show me, I'll see.

actions are needed in a world with these attributes? In the most compressed terms possible, education must help military professionals acquire a variety of knowledge, skills, and attitudes.

A constantly improving understanding of human motives and interpersonal skills necessary to achieve cooperation. In other words, the essence of leadership may be perceiving what makes people tick. Understanding how human beings of different

military professionals in the far future must learn more about leadership and human behavior

backgrounds and cultures (or services) act in different circumstances is integral to understanding the sources and nature of cooperation, friction, and con-

flict among people. Military professionals in the far future must learn more about leadership and human behavior—their own as well as that of their subordinates and adversaries.

A strong commitment to right conduct that almost invariably results in right behavior. Note the qualifier "almost." Because human nature will not change, and freedom to choose is important, there will be misconduct and mistakes in spite of our best efforts. In thirty years democracy will evolve, but it will remain based on a passion for individual liberty and the belief that people ought to respect the rule of law. As public servants in a society that cherishes a free press, we will come under closer scrutiny than today. Erosion of public support may be worse than defeat in battle. Education can provide confident assurance of virtue, right conduct, and fidelity to core values.

The eagerness to discover new tools, the ability to find inventive uses for existing tools, the initiative to innovate, and the ability to know—as well as the willingness to take-acceptable risks. The tools and machines available for everything, including fighting, may be as numerous in the far future as they are marvelous. Comparing technologies of 1965 with those of today, space systems (except for spacelift), stealth, and sensor improvements stand out as initially military innovations. Strong advances in information, biochemistry, and medicine were developed by the private sector. Yet warriors of 1996-2025 must have the knowledge and incentive to identify and select emerging developments that can enable dominant military capability: basic science (chemistry and physics), pharmaceuticals, electronics, air and space, and information technology. We need to know more about space operations since our quality of life and success in battle will increasingly rely on them.

Certainly areas of technical competence that training must provide will be more numerous, but

education aims at big constructs acquired in complicated ways. Knowing the environment and the desired output, what then is the input? The President of 2025 may be attending high school at present. The Chairman and service chiefs of the far future are cadets or midshipmen, lieutenants or captains today. The environment and experiences which form them will be significantly different. We thus begin with a different input: different people with a different orientation.

The 13th Generation

Differences in this generation are marked.⁴ They are the first to grow up with television and mature with computers, video games, and portable communications devices. They are fitter and healthier and destined to live longer. They care for the planet and the environment. They have experienced more (earlier) than previous generations. They demand stimulation, excitement, and fast paces in their lives. They seek diversity. They will enter the Armed Forces for challenges and responsibilities unavailable elsewhere. What should PME offer these leaders of the next century?

One answer is to ignore their differences and force them into the mold of traditional PME; an environment, John Warden once said, in which "Socrates would be comfortable." However, they will come to our hallowed halls already trained and will expect no less challenge in education. The traditional approach is not likely to work. Rather, PME must come at the right time, offer the right experience, point to the right information, provide a nearly risk-free laboratory to innovate, apply technology to unusual conditions, make connections, and reach conclusions that can be tested. If we can envision alternate futures, we can employ technology to create them as virtual realities. If we can use technology to teach students to operate in them, we can prepare them to cope with the real future. The role of tomorrow's professional military educator is thus more important, not less. Those responsible must, in short, prepare each of their charges to be a "brilliant warrior."

Brilliant means training and educating people committed to the warrior ethic in such a way that by 2025, compared to today, they will be smart, adept, agile, savvy—professional warriors. They should have the attributes to survive, succeed, and lead others in whatever future presents itself. They must be lifelong learners, thinkers, and prudent risk-takers. Our gift to them will be a PME system that forces them to think, encourages them to learn how to learn, and gives them the confidence to perform in new operating environments.

Remember that there will be fewer warriors in the future and that cost will rival capability as a criterion for organizing, training, and equipping them. Two standards for evaluating PME are *effectiveness*—when the desired knowledge is achieved and right actions result—and *cost*—when the highest value is acquired and best return on an investment occurs. Both must be applied with an awareness of the changes that will unfold naturally between now and the far future. The debate has begun, now it must be enlivened.

Forming Brilliant Warriors

Alternatives for meeting specific knowledge and behavioral objectives are many. Choosing will define their characteristics; but a PME system must also choose its general characteristics. The process of choosing is difficult: there are public laws to be satisfied; the Joint Staff is involved; and services, training commands, and using commands participate. Strategy reviews, force structure, roles and missions commissions, and new legislation will also affect choices.

As the Armed Forces integrate and the defense establishment shrinks, there will be efforts to reduce infrastructure costs and investment. Today, each service has both a command and staff and a war college. Tomorrow, service competencies may be taught by robust departments on one campus—a move that the British are making.

if we fail to adapt and innovate, we are not fit to be leaders, let alone educators

Another alternative is to combine all the intermediate and senior colleges into one school for each service and transform the National Defense University into

a PME institution for general/flag officers. Currently, warriors are likely to attend both staff and war college, spending twenty or more months in residence. Tomorrow, resident study may be much briefer. Today, selection for resident PME is the responsibility of the services. Tomorrow, joint selection boards may identify officers for schooling.

At present PME is technology-poor. In the future, and if the private sector is encouraged, it could have powerful technologies which could create different virtual realities and use resident PME as the crucible for learning experiences that may not be duplicated in or provided to the field.⁵ For example, we might want a warrior to experience operating in a known environment such as Somalia or Bosnia. But we may also want to create a less certain or future environment.

PME is discontinuous and episodic. Resident and non-resident programs in the future may find warriors engaged in a deliberate life-long learning process. Whereas today many civilians at PME institutions may have tenure, tomorrow they may be contract employees, visiting scholars, and former warriors. Today, curricula are built around Clausewitz, Mahan, and the great captains. Tomorrow, curricula may provide stressful experiences in virtually real leadership situations and use joint doctrine and combined arms in coalition wargames, along with instruction on ethics and area studies. Envisioning, creating, and teaching such curricula requires competent educators.

These and other challenges await us all: Congress, special commissions, the Office of the Secretary of Defense, Joint Staff, unified commands, services, training and education commands, and troops. Those with responsibility for PME should remember Ervin Rokke's tongue-in-cheek challenge: "As academies, we will advise others to change but will likely ensure that revolutionary change takes place most slowly within our own organization." This will not suffice. If we fail to adapt and innovate, we are not fit to be leaders, let alone educators.

Characteristics of PME

Even as general characteristics of a system to produce brilliant warriors are being chosen, specific choices must be made. These elements, like the general ones, must satisfy certain criteria. I proposed effectiveness and cost. The aim is to bring the powerful learning experiences of life, leadership, and warfare to PME. Experience may remain the best teacher. Given such objectives, what are the alternatives? The answers are hypotheses which should be tested and debated.

A constantly improving understanding of human motivation and interpersonal skills is necessary to achieve cooperation to attain the desired objective or effect.

- more psychology, anthropology, or social science?
- interactive learning with artificial intelligence as a tutor or more classroom teachers?
- virtual reality systems that allow the student to live in future environments?
 - more role-playing, case studies, biography?
- increased international officer and civilian enrollment?
 - more theoretical models to study and evaluate?
- \blacksquare more virtual travel or military-to-military exchanges?
 - studies of mathematics and chaos theory?
 - multidisciplinary teaching teams?
 - more history or less?

Educating brilliant warriors requires that distance learning expose the leaders to continuous PME. Yet even distance learning must be tiered so that everyone receives a customized curriculum

USS Independence.



with more eager students receiving a more challenging course of studies. Some warriors, although in PME, may remain at the "maintenance" level for their entire careers. Only those demonstrating command potential will attend resident PME. It need not last a year or occur at traditional sites. It could be a series of short resident learning opportunities. These would aim to provide experiences that distance learning cannot. Foremost among them is performing in stressful circumstances of alternate futures. Thus, resident PME must begin to offer a more experiential curriculum that bears on conflict, human relations, and military leadership. Knowledge is about making connections and choices, so the approach must be multidisciplinary and multicultural. More international officers and civilians must participate. One sort of learning opportunity in residence for air officers might focus on joint and coalition air and space operations in an alternate future environment. A different type for naval officers would allow them to experience that operational environment. These PME learning opportunities might occur several times a year between the 10- and 15-year point in their

careers—some intentionally on short notice—to prepare the warrior for senior command and staff responsibilities. Exceptionally well qualified officers, as indicated by their selection for general or flag rank, would go on to a National Defense University of the future just past the 20-year point.

A strong commitment to right conduct that almost invariably results in right behavior.

- more ethics education or less?
- deeper study into the American system of government?
- a curriculum requiring difficult personal resource allocation choices?
- placing students in alternate future environments with high ambiguity and uncertainty?
 - more health and fitness activities or less?
 - more, fewer, or no seminars?
 - more or less reading and writing?
 - more personal mentoring or less?

Richard Kohn of the University of North Carolina and others have expressed concern over the current state of civil-military relations in this country. For America to maintain its position in the world, our leaders must appreciate national ideals, how government and decisionmaking work, and the Constitution. Moreover, they must be educated in the core values of their services as

well as professional ethics. It is on these foundations that distance learning in the next 5 to 10 years ought to be built, since civilian institutions may not sufficiently emphasize them for warriors. In any event, education must broaden awareness of possible future challenges, and technology could allow warriors to experience them by performing in virtually real futuristic environments.

The eagerness to discover new tools, the ability to think creatively of new uses for existing tools, the initiative to innovate, and the ability to know—and willingness to take—acceptable risks.

- a wargame, research, or book-centered curriculum?
- more studies on the relationships between technology and war or less?
- formal education and experience in creative thinking?
- formal education in logic, rhetoric, and critical thinking?
 - a mandated or self-selected curriculum?
- opportunities to experiment with and fight different force structures?
- formal education in operations research and operations analysis?
- more emphasis on the sources of conflict and change or less?

Brilliant warriors must be critical thinkers. I.B. Holley of Duke University has identified the lack of education in critical thinking as a serious shortfall in today's PME curricula. Such skills are enhanced by a curriculum that emphasizes research. The French use a research-centered model in senior joint PME. Research into the past may be less germane to brilliant warriors than creative and disciplined thinking about the future, although studying the past warns us against repeating its mistakes. More and better wargames (including analytical ones) are needed to bolster curricula to improve critical and creative thinking. The study of joint matters—of the JOPES variety which is not educational, does not require critical thinking, and clutters senior PME curricula today, would fill the 10- to 15-year interval of continuous distance learning. Readings and interactive discourse in strategy and history, making use of advanced distance learning, would offer basic discernment for warriors who lead warriors. Performance in distance learning programs should be a factor in selection for resident PME.

As critical components of national security strategy, military training and PME intersect the interests of three of our most conservative institutions: the military, academe, and the bureaucracy. These institutions are not so much adverse to change as they are slow to change and quick to resist unnecessary change. We have the brilliant educators to help produce brilliant warriors, but we lack a vision of where we want PME to go and what we want it to be. While classrooms may be wired and students may be issued laptops, these developments could be little more than natural, although unimaginative, improvements without vision.

There is no time like the present to begin thinking and debating changes necessary to keep PME relevant and valuable. The future, whatever it proves to be, will be our measure. Unless we act now, thinking about the future will become so much intellectual arm-waving. We will not have brilliant warriors to face tomorrow unless we prepare today. This discussion suggests some ways, but they are not the only ones. We cannot dodge the obligation to choose: PME will change. That being the case, we must choose wisely.

NOTES

- ¹ Carl Builder, "Guns or Butter: The Twilight of a Tradeoff?" paper presented to the Air University National Security Forum, Maxwell Air Force Base, May 1995.
- ² Richard C. Chilcoat, "The 'Fourth' Army War College: Preparing Strategic Leaders for the Next Century," *Parameters*, vol. 25, no. 4 (Winter 1995–96), pp. 3–17.
- ³ Gene McCall et al., *New World Vistas: Air and Space Power for the 21st Century*, summary volume (Washington: U.S. Air Force Scientific Advisory Board, 1995), pp. 4–5.
- ⁴ Neil Howe and William Strauss, "The New Generation Gap," *The Atlantic*, vol. 270, no. 6 (December 1992), pp. 67–89.
- ⁵ Nicholas Negroponte, *Being Digital* (New York: Vintage Books, 1995), pp. 116–28.
- ⁶ Conference Report: Professional Military Education and the Emerging Revolution in Military Affairs, SAIC document 95–6956, May 22–23, 1995.
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Beneath the rule of men entirely great the pen is mightier than the sword.

-Lord Lytton

Research, Writing, and the Mind of the Strategist

By GREGORY D. FOSTER

s the pen truly mightier than the sword, or are these timeless words mere hyperbole? The pen and the sword are literal instruments for dealing with the world around us. But they also are metaphors for shaping our actions by brain or brawn, wit or muscle.

Whether one chooses pen or sword may depend on whether one believes knowledge is power. That belief, in turn, may hinge on how knowledge is defined and power understood. Can the expression of ideas move others as swiftly, as effectively, as permanently as the use of force or the lure of riches? Does truth—or simply the command of ideas—provide leverage over others? Are ideas weapons? Conversely, can force inspire and persuade or only coerce?

If strategy is ultimately about effectively exercising power, the answers to these questions may convey a good deal about our faculty to think strategically; and that ability, especially among military officers, may reveal even more about the future of the U.S. military and America's place in the world. Based on recent events, there is ample ground to conclude that our ability simply to

cope with—much less shape—a future of pronounced complexity, uncertainty, and turbulence will depend in large measure on the prevalence of strategic thinkers in our midst.

Ideas and the ability to generate them seem increasingly likely, in fact, to be more important than weapons, economic potential, diplomatic acumen, or technological advantage in determining who exercises global leadership and enjoys superpower status. Thus it is imperative to develop, nurture, and engage strategic thinkers at all levels—critical, creative, broadgauged visionaries with the intellect to

strategic thinkers are broadly educated, not narrowly trained

dissect the status quo, grasp the big picture, discern important relationships among events, generate imaginative possibilities for action, and operate easily in the conceptual realm.

Almost by definition, strategic thinkers are broadly educated, not narrowly trained. They seek not simply direction but to grapple with the

> underlying questions of whether, why, and what if.

A broad-based education expands—and fuels the self-guided growth of—one's horizons. It develops the intellect and inculcates the spirit of inquiry for a lifelong pursuit of learning. The measure of education, far from

being the level or even the sum of formal schooling, rests more in the degree of open-mindedness and active mental engagement it engenders.

Any institution that relies on professionals for success and seeks to maintain an authentic learning climate for individual growth must require its members to read (to gain knowledge and insight), discuss (to appreciate opposing views and subject their own to rigorous debate), investigate (to learn how to ask good questions and find defensible answers), and write (to structure thoughts and articulate them clearly and coherently).

The only military enterprise actually designed with education in mind is the senior level of professional military education (PME). Since PME is primarily oriented to training, and since the pressure to dilute education with practical training is always present, there are several things worth noting about officers who attend war colleges. First, they are successful and able professionals by military standards. Their fifteen or more years of service have demonstrated that they are mission-oriented and get things done. Most arrive prepared to engage in discussion, even

though they may find themselves immersed in a climate of candor largely alien to them. Many come prepared to read, something they may have regarded as a luxury in past assignments. Some arrive ready to write. But few are really equipped to do research, which they see as too academic. They have succeeded thus far without it and don't expect to do it in the future, especially as they attain higher rank. Finally, they see themselves as real-world decisionmakers

who act, not scholars who ponder.

Gregory D. Foster teaches political science and sociology at the Industrial College of the Armed Forces where he has held the J. Carlton Ward distinguished professorship.

What do these observations suggest about the military as an institution? On the one hand war college students, although a special and relatively small segment of the officer corps, are entirely representative of their profession. They have attitudes and beliefs that mirror prevailing military culture. They also form the pool from which tomorrow's generals and admirals will be selected. As such, their views will have a major impact on the dominant military ethos. What is important to them is what will be important to the military as an institution. What they think led to their success is what the institution will emphasize in preparing their successors.

War college students provide clear evidence that the military places little stock in serious, expository writingmuch less in research. These officers are the cream of the crop. Some write well; most do not-although they think they do. Some show an affinity for research; most do not and generally see no reason they should. They are victims of a system that prizes decidedly non-objective advocacy, adheres to stultifyingly routine staff procedures, and relies on rigid protocols for transmitting the written word. Taken in combination and over time, such practices breed habits that are largely antithetical to sound research and good writing.

Even conceding such conditions, the question remains: Should the military be producing academic eggheads? Certainly not. But it should be producing strategic decisionmakers, planners, and advisers whose expertise is defined less by narrow knowledge and arcane technical and operational detail, less by dutiful obedience to authority, than by a sophisticated grasp of complex issues and a capacity to influence major events. That is where research and writing—and the requisite intellectual disposition and discipline to do them—come into play.

Eyes and Ears of the Mind

What is research? The answer, less obvious than one might suppose, is critical to establishing the utility of the enterprise. Is research navigating through

dusty archives or looking for obscure texts? Is it conducting controlled experiments in a sterile laboratory? Is it meticulously observing and documenting human behavior? It could, of course, be any or all of these things; but it need not be—and in fact, in the sense intended here, it generally isn't.

In simple terms, research is substantial inquiry into a question, problem, or subject which requires the identification, collection, and objective treatment of evidence on all sides of an issue to reach a well-reasoned, defensible conclusion. Research is an exploration in critical thinking, not a polemical exercise; an investigation,

the military largely discourages independent thought and critical inquiry

not a crusade; a quest for truth, not a vehicle for propaganda; evidence in search of an answer, not an answer in search of evidence.

What is the value of doing research? For one thing, it adds to our knowledge. At least that should be its intent. Only by looking beneath the surface can we escape the wages of ignorance. Ignorance is not bliss. It is the height of irresponsibility—a breeding ground for incomprehension, incompetence, and intolerance. What we don't know will hurt us; even worse, it can hurt others.

We are surrounded by a flood of information-more than ever before. But information is just an input to the thought processes that supposedly produce knowledge. More, or even better, information does not necessarily lead to more, or even any, knowledge. In fact, relative to the amount of information available, there now may be less knowledge. Is that possible? Could we literally know less than our forebears? The evidence must speak for itself. It certainly is true that the more we learn, the more we realize the extent of our ignorance. It also is true that for every question we answer, new ones arise that beg for yet more answers.

Just as we are inundated with information, so too are we deluged by opinion—on every conceivable topic.

Like information, opinions are not knowledge. Rather they validate the truism that a little knowledge is a dangerous thing. Opinions often derive from nothing more substantial than impression, assumption, or speculation—things qualitatively quite distinct from reasoned judgment born of concrete fact. Where there is a foundation of knowledge, it is typically only partial knowledge that obscures its own incompleteness and feeds the sort of false conviction that can so easily mutate into zealotry or bigotry.

It is knowledge—not preconception, predisposition, or conventional wisdom—that we ought to strive for.

That is what research helps us acquire. Moreover, doing research is a window to the process of reasoning. It is one thing to hold attitudes or beliefs. It is another to understand how we arrived at such imperfect conceptions of reality—whether by way of gut or brain. Experience arms

way of gut of blain. Experience arms us almost always with conviction, hardly ever with wisdom—yielding what is, to our minds, unassailable received truth. These convictions often blind us to real truth and, in the process, lead us to deny the validity and even the legitimacy of alternate points of view.

As an institution, the military largely discourages independent thought and critical inquiry. This is an unfortunate, self-defeating contradiction for a profession whose raison d'etre is closely tied to outwitting adversaries and grappling with uncertainty. Undue emphasis on obedience and loyalty to the chain of command stifles dissent and erodes the spirit of inquiry so critical to institutional vitality. Pervasive doctrine, regulations, and operating procedures breed an orthodoxy that drives out any felt need for originality. Even the deeply ingrained sense of individual duty so central to the institutional ethos tends to be subverted into a mind-numbing workaholism that leaves many dedicated military professionals drained of sufficient energy to systematically develop their powers of reflection and contemplation. Moreover, there are few rewards for such "unproductive" intellectual pursuits.

By the time officers reach senior rank, they have been thoroughly schooled in *what* to think, yet poorly prepared in *how* to think. And if they have spent the staff time expected of most officers by this stage in their career, they will have fully internalized distinctly antirational thought processes of successful bureaucratic and political advocacy.

Aside from yielding knowledge, research releases its practitioners from the grip of certitude that characterizes apparatchiks or true believers. Unlike the latter—who are content to let authority figures tell them what to think—those who follow the rigors of inquiry learn firsthand how elusive answers can be, how much effort goes into the search for them, and how dependent for success any such search is on the questions that precede it.

While research is basically about searching and re-searching for answers, it is the habit of inquiry growing out of such pursuits that is ultimately important—to strategic thinkers no less than to intelligence analysts, detectives, or other investigators. When we do research, we learn how to ask good questions, what constitutes good answers, and what it takes to find them. We discover where to look for evidence, how to weigh it, and how much credence to give its sources. We learn what is and isn't defensible. Most critically, we learn to identify shoddy or specious reasoning. In the final analysis, the ability to see through mental

smoke and beyond rhetorical mirrors is what distinguishes the exceptional decisionmaker or strategist.

As strange as it may seem, wouldbe generals or admirals are potentially more vulnerable to manipulation by alleged experts than neophyte political appointees-at least when it comes to major policy issues. Officers spend their pre-executive careers in a rigidly hierarchical system where they are expected to defer to authority and attend to all-consuming details that free their seniors to deal with weightier matters. This leaves little opportunity to look up from the weeds. By the time they are eligible for senior schooling, deference-to rank and expertise-is ingrained in their character. Moreover, they are likely to be narrowly focused specialists who, if they have literary interests beyond doctrinal manuals and military biographies, are more attracted to trade publications than to broad-gauged policy journals.

When these officers are then exposed to larger issues and the daunting volume of opinion on the market, their tendency is to defer to purported experts who have found their way into print. At that point, realizing there is little that hasn't already been said or thought on any subject, they confirm Abraham Lincoln's adage: "Books serve to show a man that those original thoughts of his aren't very new at all." Once past this initial stage of intellectual subjugation, though, these officers quickly discover how much more detritus there is than quality. They then will

have begun the transformation from unquestioning consumer to critical—perhaps even original—thinker.

Tongue of the Mind

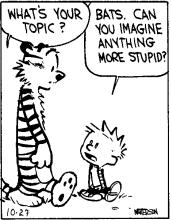
When Cervantes referred to the pen as "the tongue of the mind" he may well have meant to distinguish the mental relationship from the physical one that connects mouth to brain. After all, many people speak at great length without prior thought. The mouth doesn't require high-octane fuel; it can run on fumes. Writing is different. It can't be supplemented by vocal inflection, body language, or immediate clarification. It has to stand on its own. Thus Boswell characterized truly good writing as "disciplined talking."

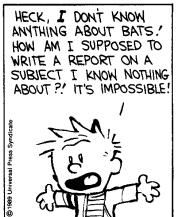
However, only in an elementary sense is writing merely a tool for communicating. More importantly, it is a catalyst for ideas. Think of what happens when one writes—even if it is only a perfunctory memo. Is the pen simply a mechanical extension of the hand by which thoughts flow from head to paper? Or doesn't the act of writing stimulate the mental juices and give birth to new ideas? Doesn't the struggle to choose the right word or weave a seamless paragraph elicit notions that weren't there before? Doesn't this force us to be more exact?

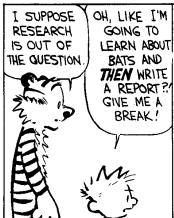
Writing has two consequential purposes. First, it enhances our ability to think. In fact, it could be called a high-stress performance test for the mind. Second, it is a way to leave

Calvin and Hobbes









by Bill Watterson

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something tangible to posterity. Few of us think about legacies. But when all is said and done, ideas, schools of thought, and worldviews are the lifeblood of institutions, regimes, and societies. This is a point that should not be lost on the military.

How does writing affect thinking? Studies indicate that writing activates a part of the brain that otherwise lies dormant. Only when hand and eye work in tandem to put words on paper do some thoughts buried in our subconscious come to life. And when we seek clarity, coherence, and a convincing counterpoise to anticipated criticisms, we exercise our minds more

good writing and good thinking are not the same thing; but they are highly correlated

strenuously than if we engaged in more conversation or even debate.

Experienced bureaucrats might argue that one need only draft readable correspondence and generate cryptic point papers and vu-graphs to succeed. Serious writing is neither required nor appreciated. Bosses want completed actions that signify productivity—and that beget routinization and standardization—and decision—makers insist that whatever impinges on their schedules be short and sweet. Being busy, they prefer to be briefed rather than to read. These managerial

imperatives engender a minimalist approach to writing that sets its own diminished standard of literacy.

One might ask what effect the stunted forms of normal bureaucratic communication have on the thinking of decisionmakers and their staffs. Do strategic failures reflect a dearth of strategic thinking stemming from retarded thought processes? Might these processes, in turn, be developed more fully—tapping unused regions of the brain—by more attention to good writing?

Good writing and good thinking are not the same thing; but experience suggests that they are highly correlated. The mere effort of trying to

write well almost assuredly improves thinking. By contrast, sloppy, convoluted, pedantic writing reveals thinking of comparable quality. Good writing requires practice and exposure to the good

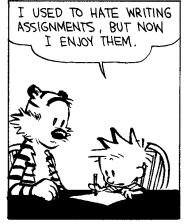
writing of others. While writing more doesn't guarantee writing well, it improves the odds. But if one works where mediocrity is the norm, it may be impossible to tell the difference. Exposure to truly good writing, then, is the only remedy.

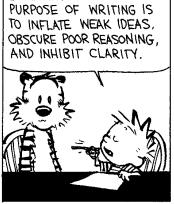
There are no universal standards of good writing nor foolproof ways of learning it. Substantive writing that is riddled with technical flaws may be considered every bit as good or bad as technically flawless writing that is banal. As with all aesthetic forms, the final arbiter is the eye of the beholder. But what if readers, immersed in bureaucratic discourse, are unable to distinguish the good from the bad?

Most military writing tends to be descriptive and reportorial. This is comforting to a culture that values the factual over the hypothetical, the literal over the figurative, the authoritative over the speculative. But descriptive writing, far from being mind-expanding, can be mind-numbing. It requires little thought beyond the linear, one-dimensional variety—only awareness and accuracy.

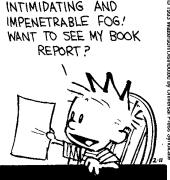
Good writing thrives on conceptualization born of originality. Thinking for oneself requires the higher order intellectual skills of analysis (dissecting and illuminating concepts), synthesis (combining concepts and generating new ones), and evaluation (establishing criteria and making judgments). Whereas employing these higher order skills focuses on matters of substance, another feature of good writing—logical organization—concerns the structure and coherence of an argument. It exposes the anatomy of one's thinking by asking: Is there a logical flow of ideas from an introduction, which states an author's hypothesis, to the main body of the composition, where he develops a central thought and presents evidence, to a conclusion, where he brings his formulation to closure? If there is no such

Calvin and Hobbes by Bill Watterson



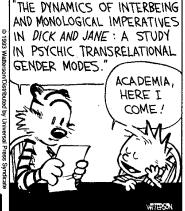


REALIZED THAT THE



WITH A LITTLE PRACTICE,

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flow, if the elements of the argument and their linkages are not clear, if readers are left confused, the author has failed. A meandering argument reflects haphazard thinking, while merely stringing together the words of others betrays a lazy mind.

Style is the most telling indicator of quality writing. It gives writing the power to inspire. To the denizens of any bureaucracy-including military professionals—style is basically antistyle: the turgid, stilted bureaucratese that over time has infiltrated their minds, subverted their language, and become their lingua franca. As anyone exposed to it for a nanosecond knows, bureaucratese is a bastard tongue distinguished by its reliance on passive voice (the time-honored way of obscuring accountability), its often-inscrutable circumlocutions to accommodate the rules of formal English, and its blatant glorification of jargon.

Jargon has no purpose other than to enable insiders to converse among themselves while excluding the uninitiated. It reaches its zenith in the unabridged correspondence and memoranda that are bureaucracy's lifeblood. Even material written for public consumption, which is subject to radical editorial surgery before release, can provide a telling glimpse into just how deep-seated the predisposition to "languaginal mayhem" truly is.

The antithesis of—and antidote to—jargonizing is, simply, plain English. Writing clearly is the first rule of style. The key to writing plain English, say its proponents, is to "write the way you talk." This is indeed sound advice for those with a firm command of the English language. But since many of us—senior officials included—don't always speak distinctly or cogently, more appropriate advice would be to write as we *ought to* talk.

Writing with clarity establishes only a floor of stylistic acceptability or competence. True stylistic elegance comes from the more sophisticated use of such techniques as allusion, irony, and the nonliteral figures of speech that literary types call "tropes": metaphor, simile, hyperbole, and the like. Such devices enrich language and offer authors higher levels of both conceptualization and precision—if only to

ensure the appropriateness and credibility of their imagery.

Felicitous style can lift the mind to impressive heights. Quite the opposite might be said of the most elemental feature of good writing—grammatical and mechanical soundness—where the emphasis is on strict adherence to recognized standards of correct language usage. For many, such considerations are too mechanistic and inconsequential to warrant serious attention. Yet it would be a mistake to conclude that

it is ironic that virtually all the reputed "experts" on strategic affairs are civilian

seemingly rote compliance with rules of word form and placement, punctuation, and spelling is somehow unrelated to the quality of one's thinking.

There is much to be said for flouting linguistic conventions whose only justification seems to be that they derive from grammarians of yore. But it is an altogether different matter to assault literacy through unclear, imprecise, inconsistent, even illogical thought: subject-verb disagreement, dangling modifiers, mixed construction, vague pronouns, or sentence fragments. By the same token, technical correctness alone cannot compensate for or disguise the link between monotonous prose and monotone thinking—as when someone invariably uses declarative sentences punctuated only by commas and periods.

The elements of good writing—higher order intellectual skills, logical organization, stylistic elegance, and grammatical and mechanical soundness—bear a demonstrable relation to the powers of the mind. And these powers, more than arms, wealth, technology, or diplomatic and political maneuvering, will determine how well we steer our way into the future.

Warriors as Intellects

To be effective in the strategic realm, the military must produce its own strategic thinkers. This demands an institutional commitment to education that includes serious and sustained attention to writing and research. The task is to convince the military that such a commitment, long absent, is in its best interest.

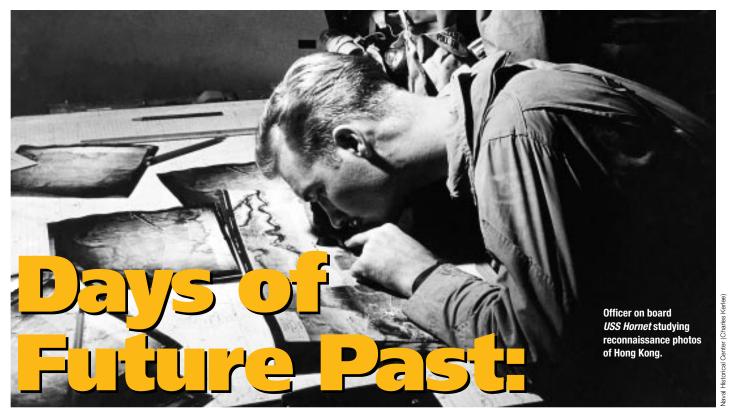
It is ironic and disappointing that virtually all the reputed "experts" on strategic and military affairs familiar to the public are civilian academicians, consultants, and journalists. Where are the great military minds of our day? Are there any? Or are they too busy to

care? Is that why we must suffer experience-impaired analysts pontificating on strategy after advancing straight from graduate school to think tanks, or journalists-cum-seers expounding on the future of warfare? Is that why disparaging referance.

ences to the so-called "military mind" endure?

These are questions we should ask. The military, as the most action-oriented institution in a mind-numbingly action-oriented society, tends to eschew intellectual pursuits. Like others who subscribe to the work ethic, military professionals work extremely hard and feel good about having exerted all that effort in the service of the Nation. But the work many of us do is far more consumptive than productive; it burns calories and consumes time but leaves little more in its wake than new work for others.

Actions are fleeting, but ideas endure—primarily through the written word. If men like Clausewitz, Mahan, and Liddell Hart are icons of strategic thought, it is because their ideas and the wisdom contained in them have been transmitted through their writings. Armed only with the pen, they left indelible marks that extended their influence beyond that of their swordwielding brothers in arms. There is no reason we should not be capable of developing future generations of strategists of the same caliber who can leave an equally rich legacy. IFO



Joint Intelligence in World War II

By JAMES D. MARCHIO

Ample experience has demonstrated that neither Army intelligence nor Naval intelligence is complete without the other. On theatre and higher level, joint intelligence is necessary. Liaison and interchange of information is not enough to secure complete exploitation.

—Report issued by the Joint Intelligence Center Pacific Ocean Area (November 8, 1945)

oint intelligence existed long before the Goldwater-Nichols Act and the Persian Gulf War. During World War II, joint intelligence organizations and operations were initiated at national and theater level. These efforts increased collection, enhanced production, and expedited dissemination of critical intelligence to commanders as well as national policymakers. The emergence of joint intelligence between 1942 and 1945 and its fate after the war provide valuable lessons for today. The problems it confronted—conflicting intelligence reports, inaccurate battle damage assessment, and inadequate

dissemination—remain familiar to JTF commanders and J-2 staffs today. So too are problems posed by bureaucratic infighting over roles and resources as well as reluctance on the part of some to fully support joint efforts.

Ultra and Magic are terms that frequently come to mind when military professionals and scholars discuss the role of intelligence during World War II; but joint is a term that deserves inclusion in such discussions. While lacking the impact of Ultra or Magic, joint intelligence efforts contributed to Allied operations in virtually every theater. Joint intelligence operations enhanced collection, improved production, and expedited dissemination of critical information. Nonetheless, joint intelligence efforts during the war were neither universally accepted nor appreciated.

Major James D. Marchio, USAF, is assigned to the Joint Exercise Support Division, Directorate for Intelligence (J-2), Joint Staff, and has taught at the Joint Military Intelligence College.

Origins of Joint Intelligence

Several forces played a role in shaping the evolution of joint intelligence operations during World War II. Intelligence failures in the first year—from Pearl Harbor to North Africa—were the most important factors that pushed reforms and, in turn, joint intelligence. However, the changing nature of the conflict, the British experience, and bureaucratic battles over a national intelligence organization which predated the war all influenced how joint intelligence emerged.

Senior military leaders were aware of intelligence problems and were leading proponents of

joint intelligence operations emerged at both national and theater levels

joint solutions. General George C. Marshall and Admiral Ernest J. King recognized that national intelligence was fragmented. Multiple agencies were producing intelligence without

coordination. This led to duplication, incomplete analysis, and inadequate dissemination. Ultimately what was provided had little use to planners, decisionmakers, or operators. As Captain Ellis M. Zacharias, USN, observed: "We found that very little truly valuable information was produced which higher echelons could accept as absolutely reliable and useful for orientation and action."

The conduct of the war in Europe and the Pacific also played a large role in determining the extent of joint intelligence operations. In trying to satisfy the requirements of large-scale offensive operations, intelligence personnel slowly discovered that the solution lay with joint efforts.

Joint intelligence bloomed during 1943 and 1944 as U.S. forces transitioned from basically defensive to offensive operations requiring extensive interservice cooperation. The island hopping campaign in the Pacific and Allied operations in the Mediterranean and in Europe emphasized large-scale joint operations which, in turn, required joint intelligence. As one senior naval intelligence officer observed about the central Pacific: "As we move westward the Army part is becoming more and more important. We need Army men we can expose to Ultra and who [can provide] . . . assistance in Army Order of Battle, in Army Air Force Order of Battle, and if they have such a thing in Army traffic analysis." Increased land-based air operations and massive bombing in both theaters likewise generated requirements for target and flak intelligence and post-strike analysis.

The availability of new sources also increased the need for joint intelligence exploitation. Little intelligence other than Ultra was initially available in the autumn of 1942; but the volume of captured documents, prisoners, and aerial photographs increased greatly as operations began in the Solomon Islands and North Africa. But problems arose with added requirements. Duplication of effort, competition over collection resources, delayed or unsuitable dissemination, and conflicting assessments over enemy losses increasingly affected military and civilian intelligence support. For instance, in arguing for creation of a special joint body to weigh enemy casualties in March 1943, the secretary of the Joint Intelligence Committee (JIC) lamented that a joint estimate of casualties had not yet been made; moreover, estimates available in Washington varied by over 100 percent.

Other forces spurred joint initiatives. The British experience during the first three years of the war provided a combat tested endorsement of joint operations. London had operated a joint intelligence committee since 1940, using centralized, coordinated intelligence to guide military and civilian intelligence operations. Congressional prompting and previous efforts by the Joint Board to encourage joint operations and greater interservice cooperation added pressure as well. Finally, William J. Donovan's push to establish a national intelligence organization—embodied first in the Coordinator of Information and later in the Office of Strategic Services (OSS)—generated further interest in reform and joint solutions.

An Organization Emerges

Joint intelligence operations during World War II emerged in each phase of the intelligence cycle—collection, production, and dissemination—and at both national and theater level.

Collection. One of the first areas to witness joint operations was collection. The creation of joint intelligence collection agencies (JICAs) in 1943 was intended to ensure adequate support at both national and theater levels. The Joint Chiefs and other national-level organizations recognized early that theater intelligence organizations had "neither the trained personnel nor the time to collect and prepare the information needed in Washington for strategic planning and training purposes." In arguing for JICAs, proponents cited less duplication, more effective use of skilled personnel and resources, and reduced operational expenditures.

JICAs were operational in four theaters: North Africa (JICANA, later renamed JICAMED), Africa-Middle East (JICAME), China-India-Burma (JICACIB, which in 1945 became only India-Burma), and China (JICA/China). They were attached to their respective theater headquarters as separate staff sections. Composed of Army and Navy officers together with civilians and enlisted support personnel, JICAs ranged from 27 personnel in JICA/China to 77 in JICAME.

Namur Island, Kwajalein Atoll, in January 1944, prior to pre-invasion bombardment.



JICAs performed three primary tasks. First, they collected, screened, and transmitted to Washington "all information, exclusive of combat intelligence, within the theater" desired by the War and Navy Departments. As theater collection coordinators, JICAs provided logistical support, tasking, and guidance to all human intelligence (HUMINT) sources, including OSS agents, in the JICA area of responsibility. Lastly, JICAs ensured lateral dissemination of pertinent intelligence among various agencies, military and civilian, within each theater.

JICAs were assisted by the Joint Intelligence Agency Reception Center (JIARC), created in August 1943 in Washington. JIARC managed administrative instructions and support to JICAs. Importantly, it coordinated War Department collection requirements and requests for information (RFIs) sent to theater JICAs. JIARC worked closely with theater JICAs to ensure the appropriate agencies or JICA assets were tasked to satisfy the collection requirement.

Production. At national and theater level, joint intelligence production accompanied joint collections. JIC was formed in 1941 to prepare daily summaries and such special information and intelligence studies as were needed by higher authority or indicated by the situation. The J.I.C. Daily, and later the Weekly Summary, partially met this requirement. JIC eliminated a host of largely redundant intelligence publications by replacing the OSS The War This Week, War Department Situation and Capabilities of the Enemy, and Office of Naval Intelligence (ONI) Fortnightly Summary of Current National Situation.

Serving as the permanent JIC working committee, the Joint Intelligence Staff (JIS) turned out intelligence estimates on enemy strength, capabilities, and intentions, and specialized technical subjects. Intelligence estimates drafted in 1942 reported on both German and Japanese economic and military status as well as studies on the "Feasibility of Supplying Russia via the Bering Strait" and "Axis Munitions Capabilities." By 1943, JIS was working closely in producing intelligence estimates in direct support of the Joint War Plans Committee.

But efforts went beyond current and estimative intelligence support. The Joint Intelligence Study Publishing Board (JISPB), with representatives from the War Department G–2, ONI, OSS, A–2 [Army Air Corps], and Office of Chief of Engineers, was created in May 1943 when it became clear that the activities of G–2, ONI, and OSS were duplicative, particularly in preparing foreign area studies. Consequently, JISPB commissioned a series of joint Army-Navy intelligence studies (JANIS) that provided basic topographical data on likely operational areas. These studies included information from 20 government agencies and ranged from Bulgaria to Japan and Indochina. Over 2,000 copies of each JANIS study were disseminated.

Joint production also emerged in target, technical, facilities, and battle damage assessment intelligence. In late 1942, the Joint Army-Navy Assessment Committee (JANAC) was convened at Marshall's request to provide more accurate estimates of enemy naval strength and to eliminate service disputes over enemy naval and merchant losses. This committee functioned throughout the war and produced reports with detailed informa-

initiatives to vest more power in joint bodies met resistance throughout 1942 and 1943

tion on each sinking. Similarly, the Joint Target Group, Technical Air Intelligence Center, and Joint Airfield Group brought together officers from each service and often represen-

tatives from OSS, Foreign Economic Administration, and Royal Air Force in the hope of avoiding redundant and conflicting production. Launched between June and November 1944, these activities proved essential in identifying Japan's strategic vulnerabilities and guiding allied exploitation efforts.

Joint intelligence production extended to theater level as well. Each JICA, for instance, produced limited theater intelligence, conducting studies when other means were unavailable. The most significant theater production effort, however, occurred in the central Pacific, with the Joint Intelligence Center Pacific Ocean Area (JICPOA). This activity was established in September 1943 to collect, collate, evaluate, and disseminate strategic and tactical intelligence for the commander in chief, Pacific Ocean Areas. Truly joint, it fully integrated representatives from all the services. By 1945, it had 1,800 personnel assigned to its facility in Hawaii as well as hundreds at its Advanced Intelligence Center (AIC) on Guam and at other locations. JICPOA became an intelligence factory, producing various area handbooks, maps, and intelligence summaries aimed at supporting theater combat operations. The products were used by operational planners and commanders in drafting plans for operations from Galvanic (Tarawa) to Downfall (the invasion

of Japan). In fact, JICPOA weekly production eventually reached 2,000,000 sheets of printed intelligence and over 150,000 photographic prints.

Dissemination. Mirroring and facilitating collection and production were efforts in the area of dissemination. Both JIARC and the Joint Electronics Information Agency (JEIA) had key roles in speeding dissemination of critical intelligence. JIARC, for example, formed a joint selection panel for prompt inspection, selection, and centralized distribution of all JICA reports. The panel helped reduce the number of copies needed from the field while providing a more efficient mechanism to disseminate information. JIARC also managed courier service to ensure prompt, secure delivery of JICA-collected intelligence that made weekly distribution runs and provided direct contact and exchange of opinions between intelligence officers in Washington and those in the field.

The purpose of JEIA was to improve dissemination of time sensitive technical intelligence. Established by the Joint Communications Board in October 1943, its efforts to speed dissemination of electronic information among and within the Army, Navy, and the Office of Scientific Research and Development were critical to maintaining our lead in radio communication, radar, and electronic devices, and in developing effective countermeasures. As part of the JEIA effort, a joint panel met daily to examine collected information. When necessary, critical technical intelligence reports were reproduced overnight and disseminated the next day. JEIA also prevented needless duplication and unnecessary dissemination by cross-checking incoming reports against previously received ones. JEIA processed 10,000 electronic documents during its two-year existence, with nearly 80 percent on an expedited basis (16-24 hours).

Resistance and Success

Establishing and operating joint intelligence organizations like JICA, JICPOA, JISPB, and JEIA was anything but quick or easy. Initiatives to vest more power in joint bodies met resistance at national and theater level throughout 1942 and 1943. Moreover, even when launched many joint intelligence efforts were not as broad or binding as some had hoped. Ambivalent support resulted in ad hoc committee arrangements based more on voluntary cooperation than structured agreements or procedures.

The failure to set up the Joint Intelligence Agency (JIA) is the most poignant example of such resistance. Although backed by King and Marshall in Autumn 1942, JIA was never established. The original proposal envisioned a strong,

centralized agency that could unify disparate intelligence collection, production, and dissemination efforts by the services. After favorable review by the Joint Chiefs, the JIA proposal was returned to both the War Department G-2 and ONI director for further study and development. Yet significant differences remained. Ultimately a compromise was forwarded to JCS in March 1943 which reduced JIA authority and role. But the Joint Chiefs were reluctant to approve it. Admiral William D. Leahy told his colleagues that he saw no reason to establish the agency. He asserted that JIC was performing all the necessary intelligence functions for JCS. He warned that "it would be inadvisable for urgent information of an intelligence nature to be delayed by being passed through an additional agency." Responding to Leahy's concerns, King asserted that "there should be no delay whatever, but rather that a more valuable product should result." General Henry H. ("Hap") Arnold suggested that the subject deserved more study before approval; thus JCS directed the deputy chiefs of staff to review the issue further.

More bureaucratic delay and reorganization within G-2 and ONI eventually sealed the fate of JIA. In late March, the Army deputy chief of staff recommended against the G-2/ONI directive, proposing a vastly different structure based on joint regional intelligence organizations. The first such organization would control activities in the Western Hemisphere south of the United States with headquarters in Miami. G-2 concurred with the regional proposal but expressed doubts about whether this structure would work in combat theaters. ONI, on the other hand, refused to commit to the proposal until its internal reorganization was completed. The joint deputy chiefs advised JCS in May that the case was in the hands of the Navy and that action was suspended. Six more months of inactivity prompted the joint deputy chiefs to recommend that the proposal be removed from the JCS agenda and pursued as "practical."

Even approved initiatives reflected such ambivalence and constraints on joint organizations. For instance, the directive authorizing JICAs generated considerable disagreement between G–2 and ONI over both the breadth of their mission and the control of intelligence assets. The narrower G–2 interpretation won out. Nevertheless, JICAs were almost abolished shortly after standing up. They were operated on a trial basis for three months with a restriction "that no additional JICAs be established until those [in operation demonstrate] that the organization is sound;

that it can operate in harmony with the wishes of the theater commander, and that its product is commensurate with the cost in personnel and money."

Similar opposition arose at theater level. Despite strong support from the Marine Corps as well as Pacific Fleet for forming a joint intelligence center in Spring 1942, JICPOA did not become a reality for another 14 months. In response to CINCPAC, the vice chief of naval operations noted that after looking at inherent difficulties in directly initiating such a joint project, it was preferable to constitute the activity as primarily a naval center.

Why were the initiatives opposed? Several related explanations emerge. Foremost was the belief that joint organizations did not fully appreciate service-unique requirements. Consequently, they could not meet individual service needs or those of component commanders. Interservice as well as intraservice friction also undermined support. Despite many cooperative G-2/ONI projects during the war, each maintained its own separate intelligence structure and resisted any attempts to restrict its operations. Intraservice discord likewise made joint efforts more difficult to conduct. How could consensus be reached among the services when the Signal Corps and G-2 were battling over control of Ultra information within the War Department?

Joint intelligence also faced difficulties because it required new organizations, procedures, and thinking. Joint intelligence initiatives confronted bureaucratic inertia and a legacy that viewed intelligence as a service prerogative. Collecting, producing, and disseminating intelligence jointly forced officers trained by individual services to operate in very different ways. Moreover, without a strong proponent or institutional sponsor in the intelligence community, joint intelligence initiatives encountered an uphill battle.

Ironically, progress in joint initiatives undermined larger, more comprehensive efforts such as JIA. Opponents cited progress in operating JICAs and JIC in arguing against further measures. Similarly, wartime requirements were a dual-edged sword, spurring joint initiatives while warning against excessive tinkering in the face of the enemy.

Finally, the personalities, viewpoints, and intelligence requirements of theater commanders and their staffs were key to how joint intelligence was received. Unlike the Pacific Ocean Area, the South West Pacific Area (SWPA) never developed a joint intelligence organization. According to the after-action report, the reason was that the chief of staff failed to recognize its importance and G–2 lacked the power to accomplish it. One observer confirmed this situation, noting that efforts to

Joint Intelligence **Command Pacific** Ocean Area at Pearl Harbor.



Nimitz visiting fleet air photo squadron on Guam, May 1945.

> create a joint organization in SWPA were unlikely to succeed: "I am fully aware of the fact that politics and personalities make any such reorganization impossible."

> Ultimately the operational records of such activities were their best weapon in overcoming opposition and silencing criticism at national and theater level. JICA, JANIS, JEIA, and JICPOA were lauded for their efforts and products. The chief of staff, Pacific Ocean Areas, praised JANIS studies, indicating that they were indispensable references for the shore-based planner. Similarly, JICPOA earned high marks for designing and producing a target-area map acceptable to all ground, naval, and air forces. And JEIA success in cutting the dissemination time for important intelligence information from 60 days to 16 hours was much appreciated by military and civilian organizations and contributed considerably to advancing the electronics and counter-measures program.

> The process by which joint intelligence was produced also won praise because it yielded quality results with limited resources and disseminated it quickly and appropriately. In evaluating its own accomplishments, JICA concluded that the coordination effected by its theater JICAs in the collection of non-operational information

and intelligence eliminated much duplication and resulted in a much greater proportion of intelligence as distinguished from unevaluated information reaching Washington. The JICA report cited the agency's "joint character... for an economy of personnel and a reduction in unnecessary duplication." The JICPOA experience provided an even stronger endorsement of joint intelligence and the synergism of joint efforts. The end result was enhanced support to military commanders and policymakers.

War's End

The final months of the war and its aftermath are indicative of how far joint intelligence had progressed in four years. Yet this period also highlights the reservations some still held regarding joint operations. Encouraged by success during the war and praise in various after-action reports, several joint organizations continued after the cessation of hostilities. JIC continued to serve the Joint Staff and government policymakers, providing current intelligence and other support. In discussing its future after Japan's surrender, JIC



Powerful supporters of joint intelligence.

observed: "It is axiomatic that joint strategy and planning should be based upon joint intelligence [and]...this need is not limited to the period of hostilities." Similarly, JISPB remained operational, both completing JANIS on-going studies and beginning studies on potential operational areas. JEIA also continued operations; but its mission and authority were reduced when it became a subcommittee of the Joint Communications Board.

New joint intelligence efforts were even begun in the wake of Germany's defeat. The Joint Intelligence Objectives Agency (JIOA) was created

with Army and Navy intelligence organizations in place, some saw joint intelligence as expendable

in June 1945 to continue collection, processing, and dissemination of technical intelligence started earlier in the war. In addition, JIOA was tasked

with identifying and transporting German and Austrian scientists to the United States for interim and long range exploitation, efforts codenamed Project Paperclip.

But most joint intelligence activities were disbanded. Neither service approved a proposal to continue JICAs and JIARC. Consequently, JICAs in the Mediterranean, Africa-Middle East, India-Burma, and China theaters were deactivated between August and December 1945. JICPOA was likewise disbanded in October 1945 while JANAC continued in operation until 1947.

Several factors explain the short lifespan of joint intelligence. Most importantly, conditions changed. The end of the war greatly decreased

consumption at national and theater level. It also decreased the need for large volumes of intelligence and its rapid dissemination. Domestic political pressure to demobilize and cut military spending also spurred efforts to dissolve wartime overhead. With established Army and Navy intelligence organizations in place, some saw joint intelligence agencies as redundant and expendable. Opponents cited the increased coordination and additional bureaucratic layers required for joint operations as justification for dissolution. Many reservations about joint operations voiced early in the war remained and were strengthened by these arguments. In fact, as late as March 1945, joint intelligence was not being fully accepted. In discussing efforts to establish a joint air intelligence cell at the Advance Intelligence Center on Guam, an officer at JICPOA complained of "the heartbreaking road ahead," with many giving only "lip service" to the concept of joint intelligence, lamenting, "some days I feel we are making progress in that direction; some days I feel we are slipping backward." While JICPOA eventually created the air intelligence cell, its experience suggests that jointness was not universally accepted or appreciated. In fact, less than two months after Japan's surrender, Marshall was appealing yet again for a better intelligence system, advocating one with a joint agency as its centerpiece.

Lessons of the Past

Joint intelligence in World War II faced many of the same problems as today. The Persian Gulf War dramatically illustrated that conflicting battle damage assessments and inadequate or slow dissemination did not disappear with the defeat of Germany and Japan in 1945. The criticisms of intelligence voiced during and after Desert Storm by General Norman Schwarzkopf and others in many respects echoed King, Marshall, and Congress fifty years earlier. The problems of JICA in managing national and theater collection assets and responding to various RFIs in 1943 also have not diminished over time—nor have more efficient uses of resources or impediments to doing so. Many would agree that the claim by JISPB in 1945—that "few intelligence activities in Washington take the trouble to find out what other people are doing in their own lines" which caused "needless duplication of work and conflicting information"—is still an accurate criticism.

The solutions to many problems experienced during the war are also relevant. The creation of theater JICAs and the national level JIARC provide lessons that may assist the recently activated Defense HUMINT Service (DHS). Similarly, the successes as well as shortcomings of JICPOA offer valuable insights into refining theater-level JICs in combatant commands. The same is true of the

wartime experience of JISPB and the new Combined Intelligence Publishing Service in DOD.

Beyond these lessons, the experience of joint intelligence during World War II reveals that many of the same forces prevail today. The implications of intelligence requirements are foremost among them. Just as the shift from defensive to multiservice offensive operations drove the birth of joint intelligence in 1942–45, military, political, and fiscal realities in the post-Cold War period mandate a key role for joint intelligence. Increasingly, complex and varied operations other than war (OOTW) and organizations—including adaptive joint force packaging—demand that military and civilian as well as national and theater level intelligence assets work closely together.

Finally, the history of joint intelligence reveals many obstacles and sentiments that continue to impede joint intelligence initiatives and operations. Legitimate as well as exaggerated concerns over the ability of joint intelligence to adequately meet service and component needs first surfaced in World War II. So did parochial service interests that limited the authority of joint organizations, leading to loosely structured cooperation rather than required joint action. Current efforts to shield component intelligence assets and to ensure that joint doctrine is authoritative rather than directive suggest such sentiments have not disappeared. Today, as in 1942, both operators and intelligence officers must overcome such reservations. Given new and more complex missions, diminished resources, and the ever increasing importance of intelligence for smart weapons and future conflict, there is an even greater need to operate jointly.

The current atmosphere is conducive to jointness. Both the Goldwater-Nichols Act and the Defense Intelligence Reorganization Act continue to spark joint initiatives. Bureaucratic as well as congressional pressure to reorganize the intelligence community-symbolized by the Commission on the Roles and Capabilities of the U.S. Intelligence Community, efforts by the House Permanent Select Committee on Intelligence under "Intelligence Community 21st Century," and the decision to consolidate eight agencies into the National Imagery and Mapping Agency-auger well for joint operations. Technological developments—such as the joint deployable intelligence support system (JDISS) and joint worldwide intelligence communications system (JWICS)—and organizational changes facilitate joint operations. The creation of the National Military Joint Intelligence Center and strengthening the Military Intelligence Board should also help overcome resistance to joint intelligence operations.

Yet such optimism must be tempered. The joint environment may quickly become less hospitable as controversies over service roles and missions persist and related budget battles for limited resources intensify.

The relevance of studying joint intelligence operations is apparent. Even this brief look at the intelligence operations during World War II indicates that many lessons—paid for in blood and treasure—await rediscovery. History can assist the intelligence community in rapidly relearning these costly but valuable lessons, guiding its reorganization now as well as in the future.

NOTES

This article is based largely on materials in the National Archives, Naval Historical Center, U.S. Army Center of Military History, and Armed Forces Staff College. The bulk of formerly classified memoranda and reports cited are found in National Archives Record Groups (RG) 218 (CJCS Central Decimal File 1942-45), RG 319 (Army Staff, Records of Assistant Chief of Staff Intelligence), and RG 457 (National Security Agency). Other information was extracted from the Office of Naval Intelligence United States Naval Administration in World War II, guide no. 26a, vols. 1-4, July 10, 1946, Naval Historical Center; the Joint Intelligence Center Pacific Ocean Area (JICPOA) final report; U.S. Pacific Fleet and Pacific Ocean Areas, "Report of Intelligence Activities in the Pacific Ocean Areas," October 15, 1945, Armed Forces Staff College; and the General Headquarters Far East Command, Military Intelligence Section, General Staff, Operations of the Military Intelligence Section GHO, SWPA/FEC/SCAP, vol. 3, Intelligence Series (I), 1951, U.S. Army Center of Military History.

A variety of memoirs and secondary sources were also consulted. W.J. Holmes' firsthand account of the creation and operation of JICPOA, *Double-Edged Secrets: U.S. Naval Intelligence Operations in the Pacific during World War II* (Annapolis: Naval Institute Press, 1979), and Thomas F. Troy's comprehensive discussion of the birth of national intelligence, *Donovan and the CIA: A History of the Establishment of the Central Intelligence Agency* (Frederick, Md.: Aletheia Books, University Publications of America, Inc., 1981), proved to be most valuable.

Admiral Arleigh Albert Burke

(1901-1996)

Chief of Naval Operations

VITA

orn in Boulder, Colorado; graduated from Naval Academy (1923); USS Arizona (1923–28); USS Procyon (1928–29); postgraduate student, Naval Academy and University of Michigan (1929–31); naval gun factory, Washington Navy Yard (1931–32); USS Chester (1932–33); battle force camera party, U.S. Fleet (1933–35); Bureau of Ordnance (1935–37); USS Craven (1937–39); commanding

officer, USS Mugford (1939-40); naval gun factory (1940–43); commander, destroyer divisions forty-three, forty-four, twelve, and twenty-three (1943-44); chief of staff and aide, first carrier task force, Pacific (1944–45); research and development division, Navy Department (1945–46); chief of staff and aide, Atlantic Fleet (1946– 47); General Board, Navy Department (1947–48); commanding officer, USS Huntington (1948); office of the chief of naval operations (1948-50); chief of staff, Naval Forces, Far East; commander, cruiser division five; military armistice delegation, Korea (1951); director, strategic plans, office of the chief of naval operations (1951–54); commander, cruiser division six (1954–55); commander, destroyer force, Atlantic Fleet (1955); chief of naval operations (1955–61); died at Bethesda.



Portrait by Orlando Lagman.

We believe in *command*, not *staff*. We believe we have "real" things to do. The Navy believes in putting a man in a position with a job to do, and let him do it—give him hell if he does not perform—but to be a man in his own name. We decentralize and capitalize on the capabilities of our individual people rather than centralize and make automatons of them. This builds that essential pride of service and sense of accomplishment. If it results in a certain amount of cockiness, I am for it. But this is the direction in which we should move.

—Letter from Arleigh A. Burke to RADM Walter G. Schindler, May 14, 1958

Where are the Arleigh Burkes Today?

Arleigh Burke made a name for himself—"31-knot Burke"—as a hard-charging destroyer squadron commander in the Pacific theater during World War II. He went on to be the only chief of naval operations to serve three terms, and along the way he oversaw the construction of nuclear carriers, ballistic missile submarines, and highly mobile amphibious forces. But it was earlier, as a captain, that Burke showed his real mettle in a military culture quite different from today's.

In the aftermath of the war, senior military leaders vigorously debated our strategic posture. The Air Force, recently separated from the Army and with the support of President Truman, held that bombers had been the decisive factor in the war and would be the best force to win the peace.

The Navy had other ideas. The keel had just been laid for *USS United States*, the first so-called super carrier. The Navy thought that forward-deployed carrier battle groups were the best means of projecting American power. A spirited debate ensued over whether the Air Force with its doctrine of strategic bombing or the Navy with its carriers could do the job better.

"The Army Air Force is tired of being a subordinate outfit and is no longer going to be a subordinate outfit," declared Brigadier General Frank Armstrong in 1947. "It was a predominant force during the war. It is going to be a predominant force during the peace, and you may as well make up your minds, whether you like it or not, that we do not care whether you like it or not: The Army Air Force is going to run the show."

The Navy was no less gracious, calling Air Force doctrine on strategic bombing "childish" and labeling the B-36 a "billion dollar blunder." Helping to make the case was Burke, who headed the organizational research and policy division (OP-23) in the office of chief of naval operations. There he and his staff began to get the best of the Air Force with strategy papers that bolstered the argument for carrier forces. As a result, Burke's staff was put under veritable house arrest with the arrival of the inspector general and Marine security guards. But their views had the backing of senior admirals, many well-known, such as Ernest King and Chester Nimitz. This fracas almost cost Burke his career and was part of what became known as "the revolt of the admirals."

Not long after the revolt began, North Korean troops crossed the 38th parallel. U.S. forces then made their famous landing at Inchon, and the debate over the utility of carriers was put to rest. This brief account points out how the strategic issues facing the United States then were much the same as now, although the environment is totally different. In the late 1940s, the Armed Forces were largely unchallenged in a world that had just witnessed the end of a global conflict between the forces of good and evil. Then the Nation was

Mark Yost is an editorial page writer who covers defense issues for *The Wall Street Journal Europe*; he served in the Navy during the 1980s.

struggling to redefine its role—as well as that of its military—as the strategic landscape underwent a rapid transformation. While the budget deficit of that day, twice the gross domestic product, had been a small price to pay for defeating the Axis, it nonetheless resulted in a dramatic decline in defense spending and a struggle among the services over shrinking resources.

Today the strategic situation is much the same. The United States is largely unchallenged. In the aftermath of the Cold War the Nation is struggling to redefine its role as the only superpower and the role its military should play in the world. And today, a budget deficit nowhere near the size of the one following World War II is pressuring the services to do more with less.

But there is one significant difference between the post-World War II era in which Burke flourished and today: the absence of vigorous debate over national security and military strategy. Imagine an Air Force general speaking as candidly today as General Armstrong did in 1947. It is al-

most unheard of. Certainly policy and strategic issues are hotly contested behind closed doors at the Pentagon, and service staffs are fully aware of the stakes in current budgetary maneuvers. But the military no longer has intellectual debates

like those in the wake of World War II. Why?

Based on discussions with military leaders, service planners, defense analysts, and—most importantly—junior officers, a disturbing image emerges. There is no vigorous debate because the emphasis today is on jointness. Strategy has become so politicized that making a strong case for the capabilities of any one service—even when not openly pillorying the others—is taboo.

"I would seriously think twice about publishing an article in, say, *Proceedings* or another professional journal that didn't have a strong joint theme or made a strong case for the tactics and strategies of one service," said a Navy officer who asked not to be identified. "Even if I didn't attack another service, the clear rule is that if you're not advocating joint warfighting, you might as well not say anything. If you do, it's going to irreparably hurt or possibly end your career."

Why have the Armed Forces strayed from the open, vigorous debates of Burke's day to the stifling environment described above? John Lehman, the outspoken former Secretary of the Navy, suggests that the basic attitude of "go along to get along" is fostered in the minds of junior officers. "When a young officer comes out of OCS or one of the service academies, he quickly learns the rules of the game," Lehman says. "Don't rock the boat. Don't take a risk that may result in you getting a 'B' on your evals, and spend as much time in Washington as you can, preferably in a joint billet.... The net result of all this is that junior officers aren't learning to be warfighters anymore, they're learning to be staff fighters."

Tom Linn, a lieutenant colonel assigned to Headquarters, U.S. Marine Corps, and one of the few sources who would go on record, agrees with Lehman. "We're sending a terrible message to junior officers today. When I was a junior officer, you were encouraged to go out on a limb, think out of the box. As a young lieutenant you were supposed to make mistakes. And you were encouraged to learn from them. Today, everyone's so fearful of getting a 'B' on their evals that they don't take risks. I'm sorry to say that it has given us an officers corps that avoids risks, is self-centered and career oriented, and that possesses few independent thinking skills."



GEN John W. Vessey, Jr.

Senator John McCain, a Naval Academy graduate who comes from a distinguished line of sailors (to include a grandfather who served with Burke in the Pacific), concurs with Lehman that today's atmosphere inhibits junior officers but points out it is nothing new. "I'm sorry to say that this stifling of debate is heavily indoctrinated into the officer corps and has been for some time now. You can clearly see it from the Joint Chiefs and other senior Pentagon leaders right down through the ranks. The Joint Chiefs today, I hate to say it, are very dedicated, very hardworking, very unimaginative people. They've gotten where they are because they learned their lesson early on not to rock the boat and make waves for the administration."

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the capabilities of any one

A few maverick officers have succeeded through a combination of skill and outspokenness. But they are the exception. One is General John Vessey, USA, who served as the Chairman under President Reagan. Going into the 1980 presidential campaign, the White House put out the word that the Joint Chiefs and other senior officers were expected to publicly support Salt II. Under no circumstances would opposition to the agreement be

nearly every administration has tightened the grip on military leadership

tolerated. "One of the few holdouts was John Vessey, who was in Europe at the time," Lehman notes. "He knew Salt II was a bad treaty for us, and regardless of what the administration thought,

he wasn't going to support it. When Reagan came into office he reviewed everyone's record and saw that Vessey was one of the few who hadn't shilled for the Carter administration. That was enough for Reagan: he made Vessey the Chairman."

Mavericks have not fared so well of late. One is General Merrill McPeak, former chief of staff of the Air Force. After the "Bottom-Up Review" appeared, McPeak testified before Congress that the review was an "abstraction, the budget a reality." And on plans to cut forces, he indicated that they were "designed by someone who must be in a position of not having to take responsibility for the combat results." Later, as the Commission on the Roles and Missions of the Armed Forces deliberated, he publicly defended the Air Force doctrine on strategic bombing and virtual presence. "The Joint Chiefs are just caretakers," McPeak recently confided. "That's who they look for now. Just like the message that's sent to the junior officers. It's really very stifling and none of the services do too much innovative thinking today because of it. The Marines tend to think out of the box a little bit.... The others, especially the Army, are, well—unimaginative, to say the least."

If even senior officers fall victim to prevailing culture, what is the solution? Perhaps more importantly, where did the spirit of the revolt of the admirals end and one of near total compliance with civilian leadership pick up? Certainly the senior leadership of the Armed Forces must accept some blame. While military officers have always been aware of their constitutional obligation to defer to civilian control, they have an equal responsibility to safeguard the Nation. There must be ways of doing that without being insubordinate.

But in fairness, civilian leaders must also accept some of the blame. Like every bureaucrat who gets a taste for power, their penchant has been to consolidate it, often against the advice of experienced and knowledgeable senior military officers. But it is more than just bureaucrats in the Pentagon. Nearly every administration since Truman has tightened the grip on military leadership, which discourages debate. How did this situation arise? Some maintain that a relative attitude of complacency started when MacArthur was fired and others that it surfaced in Vietnam when senior officers fudged body counts to satisfy the objectives of decisionmakers. Observes C.W. Watson, a retired Army officer: "Unfortunately, somewhere along the way military officers have lost that tradition of resigning rather than carrying out orders that, while lawful, they fully know to be not in the best interest of our country and its defense."

"If we're going to change this culture, it really has to come from within the ranks," muses Tom Linn. "Senior officers who recognize the importance of innovative tactical and doctrinal thinking must encourage this in junior officers and, more importantly, protect them from those who might stifle them or sabotage their careers because of their outspoken views. That may lead to tensions among general officers, but it is a battle—possibly bloody—that must be waged to achieve the level of strategic and tactical thinking that helped to win the Cold War and made us the fighting force we are today."

Although this may sound like a call for another revolt of the admirals, the central question remains: Where are the Arleigh Burkes to lead an intellectual debate today?

JFQ

This essay is based on a series of interviews conducted by the author earlier this year.

Welcomes your letters and comments. Write or FAX your correspondence to (202) 685–4219/DSN 325–4219, or over the Internet to JFQ1@ndu.edu

Organization

PACIFIC JTF

U.S. Third Fleet—onboard USS Coronado and home-ported in San Diego—is undergoing a major transformation. It is no longer enough to train forces in isolation for exclusively naval missions or conduct business from a traditional flagship. Today, Third Fleet focuses on preparing its staff and assigned forces to carry out a full range of joint and combined operations.

Under the PACOM two-tiered command and control model (see "A Commander in Chief Looks at East Asia" in *JFQ*, Spring 95), three subordinate commanders were designated potential JTF commanders. But with a changing situation in the largest theater, it became clear that an added sea-based JTF commander was needed. Therefore in November 1994 CINCPAC designated the commander of Third Fleet as JTF commander for contingency operations in the Pacific.

With the support of the chief of naval operations and commander in chief of Pacific Fleet, the issue was how to bring Third Fleet up to this new task. CINCPAC specified that when certain OPLANs are activated. Third Fleet and USS Coronado will move forward to the mid and western Pacific. But USS Coronado is more than an amphibious ship turned flagship. The traditional role of a flagship was to provide fleet commanders with a suitable ship from which they and their staffs can conduct business. Today, the need for a flagship has been replaced by demands for a capable command and control platform. A ship required for joint operations must provide advanced levels of interoperability and connectivity. For a start, it must quarter 25-person deployable augmentation cells sent forward by CINCs to assist JTF commanders. Moreover, JTF spaces must be quickly configured to house JFACC activities including 15 contingency theater air control planning system work stations. A flexible situation room with a plans module and JTF battle watch station is also needed to allow commanders to bring their key staff members together to think and act as a unit.

Modification of *USS Coronado* will be completed in time for deployment to RIMPAC '96. Conducted every other year, this exercise takes training to a high level of combined interoperability with forces from up to five other nations. This year it will involve 48 ships, over 200 aircraft, and 20,000 personnel representing all

warfare specialties. Other exercises, such as PAC JTFEX, also provide a valuable framework for friendly cooperation and have stabilizing effects across the entire Pacific Basin. Where possible, combined forces are fully integrated into the PAC JFTEX lineup to provide additional training for all participants. Most recently, Canadian maritime forces and ships and a diesel submarine from the Chilean navy contributed to this training experience.

By Spring 1997 *USS Coronado* will be fully fitted-out with C⁴I systems and other facilities needed for deployment forward in the Pacific.

Doctrine

JOINT DOCTRINE WORKING PARTY

The 17th meeting of the Joint Doctrine Working Party (JDWP) was held on April 16 and 17, 1996, at the Joint Warfighting Center. Sponsored by the Joint Doctrine Division, Operational Plans and Interoperability Directorate (J-7), the meeting included representatives from service headquarters, combatant commands, Joint Staff, and doctrine development centers.

In opening remarks delivered on behalf of CJCS, the director of the Joint Staff conveyed satisfaction with the accelerated pace of joint doctrinal development without any sacrifice in quality. He also spoke about the next level of jointness and its three pillars: the linkage of joint doctrine to joint training and planning, the linkage of service doctrine and joint doctrine, and the incorporation of lessons learned from exercises and ongoing operations—as well as the assessment of approved and emerging doctrine.

In addition to a number of new joint doctrine proposals which were briefed at the meeting, the following projects were approved:

- Joint Pub 3–13, *Joint Doctrine for Information Warfare*
- Joint Pub 2–01.3, *Joint Intelligence Preparation of the Battlespace*
- Joint Pub 4–01.8, Joint Reception, Staging, Onward Movement, and Integration (JRSOI)
- Joint Pub 4–01.5, Reserve Component Call-up (RCC)
- Joint Pub 1–06, Financial Management for Joint Operations.

Other significant decisions made by JDWP include:

- inclusion of third party logistics
- rules of engagement (ROE) development guidance
- joint doctrine for risk management in joint operations
- a definition and discussion of commanders' critical information requirements (CCIR)
- a revision of Joint Pub 3–55.1, *Joint Tactics, Techniques, and Procedures (JTTP) for Unmanned Aerial Vehicles*, to be staffed prior to reformatting
- a title change of Joint Pub 1–0, Doctrine for Personnel and Administrative Support to Joint Operations to Doctrine for Personnel Support to Joint Operations

Moreover, JDWP agreed to assess Joint Pub 3–05.3, Joint Special Operations Operational Procedures; Joint Pub 3–05.5, Joint Special Operations Targeting and Mission Planning Procedures; Joint Pub 3–07.4, Joint Counterdrug Operations; Joint Pub 3–56.1, Command and Control of Joint Air Operations; Joint Pub 3–58, Doctrine for Joint Operational Deception; Joint Pub 4–01.3, Joint Tactics, Techniques, and Procedures (JTTP) for Joint Movement Control.

Joint Doctrine on the World Wide Web

In an effort to enchance awareness of and increase access to joint doctrine, a World Wide Web site has been established at http://www.dtic.mil/doctrine. For more information, contact the Joint Doctrine Division (J-7), Joint Staff, at (703) 614-6469 / DSN 224-6469.



Of special interest were two information briefs:

- "Joint Doctrine and the Internet" all unclassified joint doctrine pubs are now available on the internet via the World Wide Web (see the display advertisement on the facing page).
- "Writing for Joint Force Quarterly"—the JFQ Forum in the Winter 1996–97 issue of the journal will contain contributions on joint doctrine by combatant commanders and service chiefs.

The next meeting is scheduled for Autumn 1996 at the Joint Warfighting Center.

JOINT PUBS UPDATE

The following joint publications have recently been approved:

- Joint Pub 3–50.2, *Doctrine for Joint Combat Search and Rescue*, consolidates joint and service doctrine into a single-source of guidance and procedures for timely, measured responses for combat search and rescue (January 26, 1996).
- Joint Pub 3–13.1, *Joint Doctrine for Command and Control Warfare*, is focused—but is not intended to provide comprehensive doctrine—on command and control warfare in support of the broader concept of information warfare (February 7, 1996).
- Joint Pub 3–12.1, *Joint Theater Nuclear Operations*, contains guidance for nonstrategic nuclear force employment (February 9, 1996).
- Joint Pub 3–12.3, Nuclear Weapons Employment Data, volume 2, includes technical procedures and unclassified weapons effects data on nonstrategic nuclear weapons employment (February 14, 1996).
- Joint Pub 3–01.5, *Joint Theater Missile Defense*, furnishes doctrine to counter theater missile threats, with particular emphasis on the growing threat from developing nations—and the U.S. ability to protect vital national interests against such threats (February 22, 1996).

Education

NEW PME POLICY

The Chairman has approved a new professional military education (PME) policy document, *Officer Professional Military Education Policy* (OPMEP), to coordinate career JPME for officers. OPMEP is the latest in a series of policy documents. The impact of the Goldwater-Nichols legislation on JPME was reinforced in hearings held by the Panel on Military Education of the House Armed Services Committee between 1987 and 1989. In response, the Joint Staff, services, and

National Defense University (NDU) developed the Military Education Policy Document (MEPD) in 1990. That document, and a 1993 revision, specified educational requirements for joint specialty officer (JSO) nomination.

Unlike previous policy, OPMEP does not focus exclusively on educational requirements for JSOs. OPMEP calls for JPME from the precommissioning level (in service academies, ROTC, and OCS/ OTS) to the NDU Capstone Course for new general and flag officers. Extending JPME to the precommissioning and primary levels was a key suggestion in the CJCS JPME Panel Report (see letter from Brig Gen Baker in JFQ, Summer 95). It is arguably the most significant education policy change contained in OPMEP. Moreover, the Office of the Secretary of Defense, Joint Staff, and services fully agreed on the need for a "cradle-tograve" career approach to JPME.

JPME, like service PME, is a sequential and progressive system where each education level builds on knowledge gotten from the previous level. At the precommissioning level, students gain a basic awareness of joint matters. This knowledge is expanded to issues of force application and integration on the tactical, operational, and strategic levels in later primary, intermediate, and senior PME, respectively, while Capstone examines key aspects of warfighting and strategy integration.

OPMEP capitalizes on this structure and has substantially more emphasis on joint doctrine, multinational operations, technology, systems integration, and innovative thinking for winning war in future battlespace. Moreover, these areas and the changing nature of warfare have been captured in the new Joint Vision 2010 which OPMEP fully supports.

Over the next several years, JPME efforts will continue to tackle the changing demands of joint warfare. Updated policy will address how new, high-leverage concepts such as C4ISR and information warfare compete with more traditional military operations within curricula. Education technology—computer based, interactive, deskside instruction; teleseminars; advanced wargaming and simulation; increased access to research databases—will be exploited to bring enhanced JPME to wider audiences on a timely basis. Enlisted JPME policy will also become a reality in the future. Joint curricular development will provide service schools and colleges at every level with professional course material tailored to their missions and requirements.

PME HISTORY

The U.S. Air Force Academy will host a military history symposium entitled "Rites of Passage: Educating and Training Junior Officers in the Twentieth Century" on November 20–22, 1996. For further information, contact: Major Kern, HQ USAFA/DFH, 2354 Fairchild Drive (Suite 6F37), USAF Academy, Colorado 80840–6246; telephone: (719) 472–4727/FAX: (719) 472–2970; or via Internet: kerntt.scs@usafa.af.mil.

Don't Forget . . .

THE SECOND ANNUAL

Joint Force Quarterly ESSAY CONTEST ON THE

Revolution in Military Affairs

All entries must be postmarked no later than

August 31, 1996.

See page 8 for details.

MORAL OBLIGATION VERSUS "BEEPER ETHICS"

A Review Essay by WILLIAM G. O'NEILL

Foundations of Moral Obligation: The Stockdale Course

by Joseph Gerard Brennan Novato, California: Presidio Press, 1994. 269 pp. \$14.95 [ISBN 0-89141-528-9]

True Faith and Allegiance: The Burden of Military Ethics

by James H. Toner Lexington: University Press of Kentucky, 1995. 202 pp. \$25.00 [ISBN 0-8131-1881-6]

wo recent books on military ethics **I** approach their theme from the standpoint of providing both students of ethics and members of the Armed Forces with a broader context of intellectual tradition, social mores, and educated values. Foundations of Moral Obligation: The Stockdale Course by Joseph Gerard Brennan, emeritus professor of philosophy at Barnard College, consists of lectures presented at the Naval War College. True Faith and Allegiance: The Burden of Military Ethics by James H. Toner, who teaches at the Air War College, provides the views of a political theorist on the special situation of soldiers, sailors, marines, and airmen as servicemembers and as citizens of a wider society. While neither volume is a detailed ethics text nor an investigation of a category of particular problems in military ethics, both instruct the inquirer into military ethics and offer means of revalidating one's ethical moorings.

Cynicism about the incompatibility of a particular walk of life or profession with ethics is hard to ward off. Military ethics faces a similar challenge. At the outset it must be understood that military ethics or other special ethics does not stand in isolation from the rest of philosophy and is not fundamentally *sui generis*. Even moral philosophy itself does not stand in isolation from the rest of philosophy nor from the lofty concerns which preoccupy moral theologians.

William G. O'Neill teaches philosophy and is former department chair at Iona College.

Conscience for an individual soldier is a dimension of mind and heart and cannot by nature be a dedicated instrument of duty or professional motives. Conscience is inherently a judgment not only about a given action or policy, but also about what kind of person one intends to be, about the quality of character one actually intends to possess. Ethics in the last analysis serve that choice of character and, at their best, reinforce it in outstanding and difficult cases as well as amidst what may be the everyday welter of conflicting demands.

Although neither book represents a course in specific applied ethics, Toner offers some brief illustrative cases; and while neither author details the intricacies of particularly pressing ethical problems, Toner's general theme is the question of the sometimes conflicting loyalties of the conscientious warrior and conscientious citizen. But an important factor is that both books provide an important corrective to a growing trend in works on ethics to circumscribe the discussion of ethics to the management of conduct or to the establishment of conventional rules within a profession or sector in terms of which its members can agree to interpret ethical questions.

This bias threatens to make right and wrong, good and evil, and values themselves simply artifacts of a proprietary internal debate in varied professions or fields of endeavor. In the military, the trend could be exemplified by setting values in light of the debate over the proximate causes of a war or conduct of a campaign. The problem might be seen in a crude analogy: in order to be a good driver a mastery of traffic ordinances—such as speed limits, turning on red, etc.—is not adequate if one does not know the route to a destination. For philosophers, who since the fourth century B.C. have taken the dominant role in the ethical education of society from the poets and dramatists, questions of ultimate ends or ultimate meaning cannot be evaded

Both Brennan and Toner address ethical education as an undertaking of great importance. Education in ethics, of course, is crucial wherever teaching takes place. Any form of education communicates values for learners to either accept or react against. Ethical education of members of the Armed Forces is an especially important concern in our society.

Such education is a matter of moral meaning. Meaning is profoundly linked with context. Not only is it impossible to find such meaning solely through specialized courses in ethics—outside the

general context of moral thought—but it cannot be adequately approached beyond broader contexts of the nature of reality, the good, and truth and knowledge. This also includes large segments of intellectual tradition. Without such well-rooted orientation, moral or ethical education may dwell primarily on the failings and evils of contemporary society. That may create an attitude that over time becomes an antithesis to secular ideas and practice; in effect, a self-endowed sense of purity amid decline.

Footfalls of History

Foundations of Moral Obligation is a survey of moral philosophy inspired by the ordeal of Admiral James Stockdale as a POW in Vietnam. Later, when president of the Naval War College, Stockdale collaborated with Brennan in developing a course based on that experience. The book's chapters are lessons, lectures, and major themes from the course. Of special note is the manner in which biographical details are woven into the presentations. Intellectual history and philosophical theories are seen as derived from and inspired by the lives and times of great persons.

Initially, historical examples are given to show the profound effect of prison isolation on individuals. In these situations, those capable of profound reflection decide on fundamental options for living. A transformation of soul can emerge providing ultimate meaning for one's future. The conviction that it is better to suffer evil than to commit it becomes essential. Brennan begins by exploring the resolution that can emerge to forsake dark ignorance, as in the example of Plato's cave.

Basic to the background of a moral education is the question: what does one say or think about evil? Brennan then poses the timeless problem of how to understand the existence of an all-knowing, all-powerful, all-gracious God as creator and Father of a world awash in hideous evils, including deliberate moral depravity—which frequently victimizes the most innocent and helpless of mankind. One confronts a decision between the gnostic view that there is a dualism of good and evil powers governing reality, or the Augustinian view that evil is not a positive force but rather an absence of or distance from the moral order and the goodness of God. Ultimately the answer to this problem is seen to lie in significant measure in the extirpating of self as primary in the world and in seeing the interrelatedness of all of our sufferings.

What does one say or think of love? This is another fundamental question in

the background of moral thought. Is love to be *eros*, an attraction to beauty in the classical Greek sense, or is it to be *agape*, the selfless love of Christ in his sufferings and teachings? There is both a difference and a tension between these two aspects and ultimately, in the richness of medieval theology, religious traditions are shown to have presented the more powerful selfless love as the driving force of the universe.

Happiness is next explored as the end for which everything else is sought or done. Aristotle's formal teleological view is explored as the basis for his doctrine of virtue and character formation. Character is a key to happiness, through both the moral and intellectual virtues. Thus understood it is the development of the soul, the full realization of a human. This profound sense of fulfillment is not mere self-actualization or feeling good about oneself, but the actualization of the fullness of human nature. Both practical wisdom and intellect are introduced as the faculty of human moral knowing and development. Virtue in this way is personal and also social.

Moving to the philosophy of lmmanuel Kant, Brennan explores the crucial concept of duty. Kant, a man of the Enlightenment, saw freedom as the essence of the moral self. Therefore duty for its own sake, rather than simply for the results achieved, is what is morally meaningful. Acts of moral worth are the acts of a rational being with a motive of duty. Moral decisions are made, moral acts are done, not because it is good policy but simply because it is right. Moral worth arises directly from the will seeking good. Ethics is sovereign and self-justifying because it is not an aspect of psychology or sociology. Ultimately, ethical decisions are made on categorically universal principles such that one never makes an exception for oneself nor for the case at hand and never treats oneself or another person purely as a means instead of an end.

The principles of utilitarianism follow through a critique of the life of John Stuart Mill. Brennan is remarkably effective in presenting utilitarianism in regard to issues that matter the most. He offers a refreshingly humane and well-drawn view of this strain of philosophy which stresses Mill's focus on the social wellbeing of all. In addition to analyzing the concepts of pleasure and pain, benefit and harm, he emphasizes the central importance of freedom and liberty and the great worth, value, and beauty of the common good.



Subsequent chapters in the course explore special dimensions of philosophical insight into key issues relevant to a moral orientation. The existentialism of Jean Paul Sartre and Albert Camus with its emphasis on individualism and freedom are examined. Sartre proclaims the fundamental irrationality of moral choices because such choices are those for which no true determining right reason can be provided. There are—in the case of the rugged and free individual no excuses or extenuating circumstances. The most important thing is, as in Stockdale's imprisonment, what a man has done with what was done to him. Like Camus' absurd man, one "fights back" and in some sense succeeds by cramming as much living as possible into whatever life one has.

Leninism and Soviet thought are explored in their materialistic and dialectical foundations and their strictly protective anti-relativism. Evolutionary theory is also seen to provide insights of a foundational nature, coming from Charles Darwin, Pierre Teilhard de Chardin, the Leakeys, etc. One's stance on evolution depends upon an ultimate belief either that all is the result of mindless chance in a complicated physical set of systems, or that all is a process of directed teleological change. Finally, the life and work of Ludwig Wittgenstein are reviewed by focusing on the crucial silence underlying aspects of the intellectual roots of making choices. Whereof one cannot speak one must keep silent. Some things, in effect, cannot be said but only shown.

As these lectures unfold there are points where Brennan's explanations (but not Stockdale's inspiring ideas) are too tangential for an introduction to moral philosophy. But Brennan's style is replete with anecdotes as well as literary, scientific, and historical allusions. Therefore some philosophical extravagance is excusable. Also, one might regard the course as a scattered version of an introduction to moral philosophy rather than a closely ordered system. But his generally historical order is still a palpable structure overall. The cumulative effect, in any case, is a number of memorable high points. They inspire reflection and give a sense of the depth to the study of ethics, especially for those beginning a study of moral philosophy.

General and Specific

True Faith and Allegiance aims to link an understanding of the military profession with the general field of ethics. Toner proceeds from his conviction that soldiers can be moral and therefore must be moral. Hence, he seeks to present foundational ideas and a sourcebook on military ethics. His approach is to chart a course between two popularly if carelessly subscribed extreme notions: that the military is not and cannot be ethical by the very nature of its activity and commitment, and that anything the military may do is always ethical because all is fair in war. Toner sees his work as a corrective to the skeptical aspect of modern ethical texts which, in addition to their

confusing language, fail to instill a sense that there is such a thing as moral turpitude to be strictly avoided.

Military ethics rests upon a triad: evil indeed exists and should be resisted by force; there are such things as human duty, obligation, and responsibility; and appreciation of virtue is vitally important and must be inculcated by both word and deed. Summarily, military ethics is the study of what is honorable and what is shameful conduct in military service. To undertake such a study one must attack the moral nihilism seen throughout society and adhere to examples of good individuals who stand out. It is the clarion call of a crusade.

In the opening chapter Toner outlines his approach to ethical study: ethics is a standard of right and wrong conduct focusing on our behavior as well as that of others. Ethics is not only descriptive but prescriptive and so is not relativistic. He iterates a theme which is repeated later that contemporary American society fails in many areas of values and accomplishment: mores, art, education, popular culture, film, et al. However there are sources of ethics which can be tapped in studying what is right and wrong for the military: customs, rules, goals or outcomes (teleological sources), and circumstances (situationism). The development of character involves the struggle to do what should be done. The reader is to conclude that truly right-thinking people will do better at ethical understanding and character development than will society at large.

In the discussion of military subordination to constitutional sovereignty, the soldier is seen as accepting responsibility for the safety of the body politic whereas the rest of society generally does not. The distinct and unique task of the military involves being trained to kill for a committed cause. This is correlated to the requirement of being prepared to die for that same cause. Hence, the safety of the lives of one's troops or one's own life is not a first priority in war. While this has not been strictly observed in some cases, it remains a sacred measure of loyalty in the military.

This is a fidelity beset by certain dilemmas. It involves obeying constitutional precepts. But whose interpretation? Generally one is responsible to a higher authority, though not always. Conscience dictates and duty demands that wrong orders, either illegal or clearly immoral, should not be followed. *Respondeat superior* is not an absolutely universal principle. Some things are too shameful for debate and should not be done

under a guise of obedience. Loyalty to the Nation is crucial, but not to an individual concept of national interest. Loyalty depends on a well formed conscience, not upon strength of will or conviction alone.

Military Education

In this discussion, the distinction is made between professional military education (PME), which is focused on values and deals with people, and military training, which is about skills and concerned with things. But training must never be divorced from education on values. There is an obligation for the Armed Forces to provide rigorous training to the level of true competence—not only in warfighting but, especially for officers, in judgment and intellectual acuity.

PME, as distinct from training, appropriately involves fidelity to purpose as its principal orientation to values. This speaks to the tension between obeying legal orders without hesitation but not obeying illegal ones. Toner examines ten cases, eight recorded instances and two fictional. They deal with conflicts centering on mistreatment of prisoners and killing prisoners or hostages, atrocities in war, and hazards to military trainees or troops in actual combat. The cases all question whether to follow or not to follow orders.

The general schema is to see responsibility or loyalty arranged hierarchically: first, loyalty to principles; second, loyalty to purpose (the mission, rationale, or objective); and third, loyalty to persons, individuals, groups, or masses. In this context one must realize that persons are often the substance of the principle which governs or the purpose at hand. Clarity remains important.

Cautions are sounded about extremes in military culture, the evils of egoism-personal and professional-and the entrepreneurial ethic. Moreover, six tests of right and wrong are proposed: shame, community, legal, situation, consequences, and God. These tests proposed by Toner, however, usually are seen as elements of reflection, the moment of ethical deliberation before the fact of decision. They raise red flags prior to a decision rather than acting as a litmus for rightness or wrongness, honor or shame. The text concludes with useful recommendations on teaching ethics in the military.

Codes of Ethics

The primary challenge to contemporary ethics in America is said to be an excessive desire for status and wealth. One is encouraged to deduce that opposing cupidity succeeds programmatically in the world and gives the military an ethical edge. In any case, the current state of values in this country reveals the need for the traditional cardinal virtues of prudence, temperance, fortitude, and justice. This is important because much evil is actually within the individual's disposition, not just in the external world of actions. Society is morally autistic, and its values are massively at variance with those required by military culture, an account that makes soldiers appear somewhat messianic.

In applying the thesis of faith and allegiance to issues affecting the military, Toner provides an ethical analysis of certain key questions. Should women serve in combat? The answer is yes, but not in the infantry or on submarines. Should homosexuals serve in the military? The answer is no to flagrant homosexuals because the military exists in a society which generally disapproves of homosexuality as a way of life. About fraternization, warnings are given in terms of general ethics and special military aspects. About resignation, the judgment is that it should be exercised rarely and with careful consideration.

Military education is a general theme in both books under review. Ethics and morality are always essentially about the good life, and they prompt us to contemplate on what the good life is. Such reflection is important for the things which one fights to defend anyway. Moral education or values education is not simply inculcation nor is it some sort of psychology of values. At its best and when most fitting, it is a rational foundation provided through an exploration and critique of values in the context of a philosophical course.

The Reactive School

Ethics is always about truth at the level of the meaning of life. To propose, as is the vogue, that one can approach ethics simply as a dimension of management, as setting out the rules while claiming little more than that certain things work well in getting the job done without ignominy or complication, is insufficient. When examining any profession or field of endeavor we can learn an important point: if its ethics are simply about that activity, then it is not an autonomous study or concern and it makes

the sense of right and wrong an internal element or creature of that group and enterprise. Ethics of "[fill in the blank]" is a factitious conception. The study or discipline of such an ethics, among other difficulties, would tend to develop largely in response to the characteristics of emerging conflicts and have priorities determined by the typical malefactor or violator. Ethics, to be rational, must be in a significant degree autonomously grounded.

Deficiencies in education on moral values leave us open to networks of rationalizations on conscience. Some of the most bothersome of these come from the teleopathic (excessively devoted to a cause or purpose) bent of mind which inclines people to extremes in pursuit of corporate goals or profits by any promising strategy. Personally, teleopathy—as expounded by Kenneth Goodpaster—becomes excessive devotion to career, to advancement through gradations of goals during a professional life. For the sake of corporate goals or career, no amount of overtime, supererogation, or neglect of personal concerns or duties can be thought to be utterly blameworthy. Being a team player or getting ahead overrides all.

Loyalties can have bad as well as good properties. They can be mature as well as immature in focus and degree of dedication. In ethical reasoning such failings can lead to rigorous or quasi-legalistic elaboration of technicalities and rules divorced from fuller human reality and substituted in place of a well-grounded ethics and morality. Just as ethics cannot be ultimately subordinated to any other system or purpose neither can ethical or moral education be a subordinate part of some system of courses. Often moral theory is relegated to one or two chapters in a book on the ethics of "[fill in the blank]."

Beeper Ethics

The phenomenon sometimes called "beeper ethics" (a term introduced by Arthur L. Caplan) is a manifestation of another systematic difficulty. To illustrate this point, think of ethicists jumping into the midst of conflicts or doubt. Ethicists on the staffs of hospitals and mental institutions frequently find the on-thespot aspect of decisions taxing. Medical professionals often regard analytical approaches and reflective considerations to be impractical and unhelpful. Policies with the most impact on actual ethical performance in such situations are frequently handed down as decisions by

medical committees or senior practitioners and deal with procedures for emergencies, triage, referral to courts, termination of treatment, etc.

In the business world, even where codes of ethics are enshrined and ethicists are engaged through the medium of a vice president for corporate ethics and values, major policies with some of the greatest ethical impact on employees or customers are often decided directly by the most senior managers and top level executives. Such decisions usually involve personnel administration as well as customer relations and advertizing. Decisions on downsizing, plant closures, and technological change also arise under special circumstances. Operative values too frequently flow directly from the highly situated principle of maximizing

Some of the most useful contributions of ethicists in the professional or business world are likely to be in advancing national policies and legislation which incorporate an ethical orientation at a general level and focus on the common good and overall quality of life. Questions of ethics or morality at base have to do with wisdom and virtue and are not only concerned with the best way of doing something but with what is worth doing. When wisdom and virtuous principle are well understood, our most important and efficacious institutions and activities can be related to these.

A person needs to be "about something" at his or her core and feel deeply why some things are worthwhile and others are worth everything. Whether a person resolves this well or poorly, rightly or wrongly, the effort is crucial to being fully human. It is especially important in the case of members of the Armed Forces as well as others for whom honor is quintessential. Conscience, duty, orders, leadership, professionalism, loyalty, courage, and judgment—and their evil opposite qualities—all derive from the inner development of a person. This progress may be advanced in silence and solitude, through reflection, or amidst a profusion of difficult, even stressful activities.

The works reviewed provide important foundational material for ethical education. People of honor will search for outstanding persons as models. They will seek principles as ideals for forming conscience and understanding their personal dedication to duty and the need to do the right thing. In the course of ethical education it is of utmost importance that a dialogue continues among special ethicists, philosophers generally, and intellec-

tuals more generally. Toner's work seeks to foster values by a rigorous education. He warns soldiers that even great professional competency without education in values can lead to a My Lai massacre.

This concern is, of course, estimable. Training and technical skills do demand education in values at a foundational level. But it is the particular intentionality that needs careful consideration. Toner's education in values is a determined course toward getting students to believe those specific things which he feels they must. This set of beliefs is auditioned for us in his jeremiad descrying the squalid state of common American values and, to a degree, our culture.

Because ethical education must be profoundly based on a commitment to values, so must values be intellectually grounded in some ultimate conviction about a worldview, a profound sense of the meaning of life and human consciousness and knowledge. Values are not to be engineered to fit an agenda established at the level of these values themselves. We cannot assume the bases of values at the start of education in values. Toner has designated training as appropriate to skills and education as appropriate to values. But without the initial intellectual exploration as a propaedeutic, the result would be "values training."

Values are most appropriate when they appeal to our reason as the bases of our will and emotion. Insight into truth and meaning are integral to a commitment to values, for well-founded dedication and allegiance. The depth and breadth of Brennan's intellectual offerings, as well as Stockdale's reflection on his detention and conversion, provide both excellent conceptual underpinnings and substantial motivation for values education. The search for meaning at depth characterizes their approach. One should start here before exploring faith and allegiance. JFQ

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A JUBILEE FOR AIRMEN

A Book Review by THOMAS A. KEANEY

Air Power: A Centennial Appraisal

by Tony Mason London: Brassey's, 1994. 320 pp. £30.00 [ISBN 1–85753–069–1]

As the surge of publications and events commemorating the anniversary of World War II subsides, two dates in aviation history are prompting their own retrospectives: the 50th birthday of the U.S. Air Force in 1997 and the 100th anniversary of the first flight by the Wright Brothers in 2003.

Tony Mason, a retired air vice marshal of the Royal Air Force and the author of a number of books on airpower, describes the history of military airpower from 1893 to 1993 in *Air Power, A Centennial Appraisal*. Anniversaries aside, this volume comes at an important moment for a U.S. audience, particularly considering the debate over the strategic role of airpower and what components of it are needed in force structure of the future.

Despite the success of airpower in the Gulf War, the subsequent drawdown of U.S. forces presents some unanswered questions. Did Desert Storm show airpower at its maximum potential or is it at the dawn of a revolution in military technology in which it will become even more dominant? Do more recent military operations in Somalia and Bosnia reveal a more realistic picture of what is ahead? Will U.S. preeminence in the air face future challenges and what form will they take? Mason provides context for examining these questions. He singles out the United States as having "differential" airpower-a capacity well beyond any combination of other countries—and draws important lessons about our past and indicates where we should be going.

Mason dates airpower from a lecture given in 1893 by Major J.D. Fullerton of the British army to military engineers meeting in Chicago. He prophesied that aeronautics would bring "as great a revolution in the art of war as the discovery of gunpowder," that "future wars may well start with a great air battle," and that "command of the air would be an

Thomas A. Keaney teaches military strategy and operations at the National War College.

essential prerequisite for all land and air warfare." These remarks, made ten years before the Wright Brothers flew, embody a recurring theme of airpower's first century: the "promise" of airpower technology, given well in advance of actual achievement. Mason also cites it as a caution for the future. His ability to draw on such themes and to synthesize aircraft and doctrinal development makes this a truly superior study.

Not solely a history of airpower nor speculation on the future, Centennial Appraisal shows Mason equally at home dealing with both. His coverage of aviation history is skewed to the latter half of the century and deals with aspects of airpower not normally emphasized. The half century of airpower through World War II occupies less than a quarter of the book. More recent conflicts such as operations over Bosnia and in the Arab-Israeli wars and the Gulf War (as seen from both the Iraqi and coalition perspectives) receive more analysis. No doubt reflecting his interests, Mason devotes more attention to the role of airpower in NATO and Warsaw Pact strategies than to the Korean and Vietnam Wars combined. Throughout, his analysis is incisive and well argued. Only one section needs a qualifier, a chapter on airpower and arms control. The focus is limited to negotiations on the Conventional Forces in Europe (CFE) Treaty and aircraft-counting rules for it. There exists no more lucid discussion of the treaty, but its application to airpower in general and to arms control is minimal.

Particularly timely is the chapter on peacekeeping operations. Mason writes about ongoing operations in Bosnia (using mainly 1993 and 1994 newspaper accounts as sources) and attempts to reach conclusions on the relative advantages and disadvantages of airpower in that environment. His examination of issues, such as the effectiveness of offensive airpower in those circumstances and the role of airlift, provides an excellent starting point for debate. Even after two further years of experience in the Balkans, his observations have not been overtaken by events.

But in arriving at his conclusions, Mason runs into a common dilemma: limited scope. He interprets peacekeeping as involving humanitarian assistance, protection, self-defense, and peace-enforcement (not further defined). His task is thus to look for commonality in events ranging from the Gulf War to Somalia. Only recently has literature on peace operations (and military doctrine in particular) begun to delineate this field.

Readers looking for indications of the revolution in military affairs will find Mason careful in his judgments and perhaps somewhat of a traditionalist. He calls for even more emphasis on the electronic warfare environment and extols the value of satellites as well as unmanned vehicles (but sees a continued dependence on manned aircraft). His faith in technology is tempered by his look at other periods in this century, comparing the dominance of the F-117 in the Gulf with the fleeting dominance of the German Gotha bomber in 1917 and the British *Mosquito* during the latter stages of World War II.

If there is a revolution, Mason finds it in the preeminence of U.S. "differential airpower" that is derived from superiority in four areas: an aerospace industrial base, a capacity for research and development, the ability and inclination of a government to allocate resources for an air force, and the size and quality of that force. He cites the United States as the only nation that can meet all the criteria and claim overwhelming preeminence. Such superiority is more vital and long lasting to Mason than any technological advantage. But no preeminence goes unchallenged, and he sees Russia as the most likely U.S. competitor. Mason devotes an entire chapter to reconstitution of the Russian aircraft industrial base and reorganization of its air force. In China he detects potential for regional dominance but not the capability to close the airpower differential with the United States.

The particular strength of this book is Mason's comprehension of the necessary elements of airpower. Beyond numbers, he understands the nature of factors ranging from personnel policies to the need for well-developed aerial refueling. Using the history of airpower he concludes that its proponents must stop relying on the promise of things to come and stand or fall "like any other military power, by its relevance to, and ability to secure, political objectives at a cost acceptable to the government of the day."

The insight and solid analysis found in this book make it an important contribution to any discussion on the future of airpower in the United States or elsewhere. An unabashed advocate himself, Mason succeeds in portraying airpower in a national context, urging his readers to get beyond either zealotry for airpower or the residual parochialism in armies and navies against its independence.

OF CABALS AND COMPLOTS

A Book Review by JAMES L. ZACKRISON

The Plot to Annihilate the Armed Forces and the Nations of Ibero-America

Washington: Executive Intelligence Review News Service, Inc., 1994. 391 pp. \$15.00 [ISBN 0-943235-11-1]

It is easy to dismiss the theme of this book as yet another odd conspiracy theory. After all, the blurb on the back cover tells us that the introduction is by "U.S. economist and former political prisoner" Lyndon H. LaRouche. I would suspect this publication has not sold well in the United States: a search of a library network showed only three holdings of the title in the country. Yet it has sold thousands of copies in Latin America, and the Mexican military printed a special edition of more than 500 copies. It is reportedly on the required reading list at several regional military academies and staff colleges. Students of Latin American affairs will ignore this book to their own detriment. But if it is only a LaRouche conspiracy, why is it attracting attention among Latin American readers?

The answer is in its alternative definition of terms used in works on civil-military relations. If one accepts this ersatz jargon, most of the book makes sense. For instance, there is a lot of discussion in the United States over the proper roles and missions of the armed forces of Latin America. There are specialists and policy wonks who think that the money spent on the militaries in the region would be better applied to other government functions. There are those who think that there is no credible regional threat to the sovereignty of the nations in the hemisphere, so their armed forces should be dismantled. There are academics mentioned throughout this book who meet regularly and present papers on such topics. But it stretches credulity to accept that these facts combine to form a conspiracy.

James L. Zackrison is an analyst with the Office of Naval Intelligence and currently a visiting fellow at the National Defense University.

The opening section of *The Plot* spells out its underlying hypothesis in detail. Essentially there are two conflicting axiomatic social systems. One, based on paganism, posits that man is an animal, or is barely lifted above animals, or perhaps is even a superior animal or "something of that sort." Man can, through some kind of special magic, rise above depravity to become a demigod. The second system, based on the Bible, envisions man as created in the image of God, by "virtue of a creative potentiality which corresponds to God as the Creator of the Universe." Life under the latter system is considered sacred by virtue of the individual being created in the image of God. These systems of society are at odds with one another, and have been since the beginning of recorded history, or as Mr. LaRouche eloquently puts it, "since the role of Solon of Athens in kicking out the usurers and establishing a republic based on law at Athens, which is the real beginning of European civilization."

Without the hyperbole this makes sense. The problem with the book appears quickly, however. A connection is made early on between the militaries of Latin America as defenders of Christian ideals, in that their armies conquered an empire to spread and glorify God and have since been defending Christianity and the Christian states to which they belong. It follows that anyone who opposes the military opposes God and is therefore a pagan—to be subdued at all cost.

The "grand conspiracy" starts here. According to this volume, the elimination of national military institutions is only the latest step in a long effort by the British Empire to bring Spain and her former colonies in Latin America under total Anglo-American rule. "With few exceptions, that strategic objective has dominated United States policy toward Ibero-America since the turn of the century, when Anglo-American empire interests seized firm control over U.S. institutions in the government of that evil Mason and admirer of the Confederate cause in the U.S. Civil War, Teddy Roosevelt." The American Freemasonic movement, the Scottish Rite of Freemasonry, and corrupt Catholics in the United States become the agents of British imperialism. This oligarchy uses all its powers to destroy the sovereign nation-states of the region and their institutions, in particular the armed forces who defend that sovereignty. Why? Because the "oligarchy has classified people of Mediterranean, black, and Oriental and so forth origins as being qualified to be helots—as being an animal species on

the lower level of society than the 'Elect'." Moreover, their object is to eliminate technological progress and the pursuit of science and reason, abolish selfgovernment, and retain their numbers at desired levels.

And this is where things get complicated. The mechanism for imposing such a viewpoint is the new world order espoused by former President George Bush which is a project to eliminate the armed forces as institutions in Latin America as revealed in a book entitled *The Military and Democracy: The Future of Civil-Military Relations in Latin America*, edited by Louis Goodman. The agents of this plot range from the International Monetary Fund to left-wing French intellectuals.

The Plot finds a test case in the invasion of Panama, already occupied by U.S. forces and using the U.S. dollar as its currency. The first step taken by Washington after the invasion was to disband the Panamanian military and create a police force. The second case is El Salvador, where the United States had been secretly negotiating with the Farabundo Marti National Liberation Front (FMLN). In 1990, according to the authors, General George Joulwan, commander in chief of U.S. Southern Command, ordered a negotiated settlement. FMLN was to infiltrate the government and the armed forces were to be reduced, all in the name of democratizing the Americas. As a result of these two test cases, two military institutions in the region were decreased to negligent threat levels.

While this book rehearses some useful data, it is all manipulated to support the tangled web of conspiracy outlined above and loses credibility. The assumption that the United States, acting at the behest of British imperialism, plots to undermine and destroy the armed forces of the region through nongovernmental organizations, academic symposia, and obscure or nonexistent agents is of course patently absurd. If the U.S. military was plotting to annihilate counterpart militaries in Latin America, it would use its own assets instead of LaRouche's bizarre register of academics, diplomats, and the rest of his cast of characters. While those people no doubt have influence, they certainly do not enjoy as much as The Plot ascribes to them.

The balance of this book is devoted to case studies and an "interview" with LaRouche. While there are numerous examples of the twisted logic which is utilized to weave this conspiracy, a look at only a few demonstrates the alternative

reality at work here. In discussing counterdrug efforts as a mission for the military, the term "eradication" is used to indicate the elimination of the illegal drug trade. When the proceedings of a conference published in the United States claim that eradication is not working and that the effort should be reoriented toward interdiction, the authors present this decision as approval of an acceptable level of drug use, thus reducing the overall effort to stop the trade. To everyone else, however, "eradication" is the buzzword for uprooting illegally planted coca or marijuana plants.

Another example that should give Latin American specialists some pause is the definition of geopolitics found in the preface: "[it] arises from the conception that it is nature as such, with its effects upon man, which determines behavior, and thus determines interests accordingly." That is social Darwinism and not geopolitics. Geopolitics is the effect of geography on the nation-state.

For analytical purposes, a critical distinction is contained in the statement that there is "no moral difference between the oligarchy of Britain and the United States—essentially the Scottish Rite-related Freemasonic oligarchy—and Bolshevism. There never was." Although that claim is true, it is also irrelevant. Capitalism and Bolshevism are not concerned with morality, rather they are philosophical arguments for the ownership of property. Even stretching the point to include two different systems yields the same conclusion: neither is about morality. But the authors of *The* Plot use an illogical and irrelevant connection between two opposing systems to form a key element in their conspiracy theory. Adding the appropriate perspective to that connection removes a basic building block from the theory, thus negating the reasoning of their evidence.

The authors of this book compiled all the right data and then applied it to a single argument. Their logic, however, involves the assumption of a causal relationship between the intent of events and people involved. That assumption is unquestionably false. Nonetheless, the book currently is commanding a growing following within the militaries of Latin America. Thus it should be studied as an insight into one of the influences on members of the armed forces within our hemisphere.

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