JFQ

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Focus on U.S. Southern Command

Force Transformation Today

Insights from Operation *Enduring Freedom*

Interagency Dialogue

A PROFESSIONAL MILITARY AND SECURITY JOURNAL

Departments

JFQ Forum

Special Feature

Commentary

Features

Interagency Dialogue

Recall

ABOUT THE COVERS

The cover shows USS *John L. Hall* approaching Bridge of the Americas, Exercise *Panamax 2004* (Fleet Combat Camera, Atlantic/Kevin R. Tidwell). The table of contents has USS *Missouri* and *Ohio* transiting Panama Canal, 1915 (Naval Historical Center). The back cover is the Total Force [from top to bottom]: Sailor at Abu Gharib (1st Marine Division Combat Camera/James J. Vooris); Pennsylvania Air National Guard Air Traffic Controller, Operation *Iraqi Freedom* (354th Communications Squadron/Joshua Strang); Soldier guarding Provincial Police Headquarters in Iraq (4th Combat Camera Squadron/Juan Valdes); Mississippi National Guardsman searches for insurgents in An Najaf (4th Combat Camera Squadron/Fransico V. Govea); Marine lookout near Abu Gharib (1st Marine Division Combat Camera/James J. Vooris); Air Force Reserve member in mass casualty Exercise *Life Saver* (U.S. Air Force/Matthew Hannen); Coastguardsman on maritime interdiction patrol (USCGC *Galveston Island*/Nathanael T. Miller); Navy Reserve weapons training (Fleet Imaging Command, Pacific/Charles E. Alvarado); Army Reserve Soldier speaking in Kirkuk, Iraq (Fleet Combat Camera, Atlantic/Jeremy L. Wood); and Air Force crew chief communicating with F–16 pilot (119th Fighter Wing/David L. Lipp).

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Editor-in-Chief **Stephen J. Flanagan, PhD**
Director, Institute for National Strategic Studies

Editor **Col Merrick E. Krause, USAF**
krausem@ndu.edu

Managing Editor **Col David H. Gurney, USMC (Ret.)**
gurneyd@ndu.edu

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Editor, *Joint Force Quarterly*
National Defense University Press
300 Fifth Avenue
Fort Lesley J. McNair
Washington, DC 20319-5066

Telephone: (202) 685-4220/DSN 325
FAX: (202) 685-4219/DSN 325
Email: JFQ1@ndu.edu
***JFQ* online: ndupress.ndu.edu**

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JFQ

The Chairman and Secretary of Defense meeting with Guatemalan Minister of Defense at the Pentagon

Fleet Combat Camera Group, Pacific (Chad J. McNeeley)

A Word from the Chairman

As I visit U.S. military personnel around the world, I feel a profound sense of gratitude for the extraordinary performance of our troops. Their hard work, perseverance, and courage—in the midst of difficult hardships—will ensure success in the war on terror. Today, our Service members seek to enhance the security of the people of Afghanistan and Iraq and to facilitate a path toward economic development and democratic reform. These efforts are of preeminent importance to the Nation and the world.

While operations in the U.S. Central Command area of responsibility are of great significance, we must remain vigilant of our key interests elsewhere on the globe. Latin America, for instance, has perhaps receded in the national consciousness in the wake of the 9/11 attacks, even though the region has grown steadily in its economic importance. This issue of *Joint Force Quarterly* examines topics of importance to the Western Hemisphere, providing an opportunity to assess our relations with Latin America. The issue also addresses Department of Defense (DOD) transformation.

In the early 1990s, Latin America was filled with optimism following the region's near–total return to democratic rule. Cuba remained as the lone totalitarian holdout. The Cold War that fueled and intensified many internal conflicts in the region was over. Insurgents in only Colombia and Peru refused to lay down their arms.

Optimism toward the future was in some instances short-lived; a number of governments fell short of fulfilling the expectations of their citizens. With this backdrop, dissatisfied voters throughout much of the region have progressively turned to leaders from the left of the political spectrum.

Despite changes in government, many nations in the Western Hemisphere, such as Brazil, Chile, and Uruguay, have sustained recent gains resulting from democratization and market economic reforms. Notwithstanding areas of disagreement, these and other countries in the region have continued their longstanding cooperation with the United States. As Secretary of State Condoleezza Rice has indicated, the United States now enjoys good relations with governments across the political spectrum in Latin America.

U.S. Soldier discussing security and safety with member of Salvadoran army, Operation *Iraqi Freedom*

Marine Corps (Michael J. O'Brien)

Security Issues

The Nation continues to have a robust security partnership with many countries in the U.S. Southern Command area of responsibility. El Salvador has been an exemplary member of the coalition in Iraq, and its soldiers have served with distinction and courage. The United States is steadfast in its support of the government and people of Colombia, as the South American nation continues a heroic struggle to defeat narco-terrorists and to establish the rule of law throughout its territory.

An area of great interest to all the Americas in regard to regional security cooperation is Haiti. Under Brazilian leadership, Argentina, Bolivia, Chile, Ecuador, Guatemala, Paraguay, Peru, Uruguay, and other nations in the hemisphere have military forces serving with the United Nations Stabilization Mission in Haiti. Their historic efforts, combined with the contributions of other international partners, played a key role in the successful Haitian presidential elections in February.

Economic Development

The United States has sought to cooperate with partners in Latin America on the economic front as well. The World Bank states that Latin America has led the way in the global trend to reduce protectionism. The U.S. Census Bureau indicates that last year the United States exported over $72 billion to the region (not including Mexico), up 21.7 percent in the last 5 years. Many countries in the region are experiencing strong economic growth, while others continue to face difficult challenges on the path toward development and prosperity.

The United States continues to champion free trade as the best way to usher in economic expansion. The Central America Free Trade Agreement–Dominican Republic, signed August 5, 2004, created the second largest free trade zone in Latin America. Moreover, in the last several months, the United States successfully concluded bilateral free trade negotiations with Colombia and Peru. The agreements come on the heels of a similar bilateral arrangement with Chile in 2003. Colombia is already a major market for U.S. agricultural goods, and efforts are under way to conclude a free trade agreement with Ecuador. Uruguay has expressed an interest in exploring trade negotiations as well.

In November 2005, President George W. Bush joined 33 other democratically elected leaders of the Western Hemisphere at the Fourth Summit of the Americas held in Argentina. The President called on other heads of state to join him in developing "Opportunity Zones" to generate jobs and pro-business attitudes in key areas of the hemisphere. The President also made available funds to launch the "Infrastructure Facility of the Americas" initiative to promote private infrastructure investment.

Political Dynamics

In contrast to the broad partnership we enjoy with many government leaders in Latin America, President Hugo Chavez in Venezuela has openly expressed hostility to U.S. influence in the region. President Chavez has developed close ties with Fidel Castro and has made overtures to Iran. His stated ideological affinity with narco-terrorists in neighboring Colombia has also been a source of concern.

A recent Department of State report indicates that, under President Chavez, Venezuela has experienced "politicization of the judiciary, restrictions on the media, and harassment of the political opposition."[1] The report concludes that "civil society and independent media are under siege, fundamental freedoms of expression, association, and assembly are undermined." These developments, combined with Venezuela's arms buildup and organization of civilian militias, place Venezuela out of step with Latin America's march toward the maturation of democratic

U.S. Ambassador to Brazil briefs Secretary of Defense on Amazon Surveillance System used to monitor environmental problems and drug trafficking

1st Combat Camera Squadron (Cherie A. Thurlby)

institutions, economic development, and hemispheric cooperation.

The future of U.S. relations with the recently elected government of President Evo Morales in Bolivia is the source of much speculation, both in the international press and in foreign policy circles. President Morales attained prominence in Bolivia by advocating the interests of coca farmers and indigenous communities. As Secretary Rice has stated, our relations with Bolivia will develop as a result of the policies of the new Bolivian government. Clearly, our hope and desire are to continue the longstanding friendship and cooperation between the United States and Bolivia.

The success of democratic rule, economic development, and the avoidance of armed conflict will continue to be high priorities for the United States in the region. We must work with partners in Latin America to deny sanctuary to terrorists, narcotraffickers, and other criminal elements. These worthy goals require an effective interagency effort to leverage all instruments of national power.

Transformation

Advancing a mindset that embraces interagency integration is a cornerstone of DOD transformation. Twenty years ago, serious institutional obstacles kept the Armed Forces from operating as a synchronized joint team. Today, in large measure due to the Goldwater-Nichols DOD Reorganization Act of 1986, America's military is truly a joint force, interoperable and moving toward interdependence. The post-9/11 world requires that we now find ways to forge a dynamic interagency team.

As the threats to our national interest evolve, so must the capabilities of the Armed Forces. The transformation process will ensure that we are ready to meet tomorrow's challenges.

Indeed, transformation involves more than just acquiring advanced technology. It will require that we rethink doctrine and operational concepts; adapt professional education and training; restructure organizations and business practices; improve personnel policies; and reform acquisition and budgeting processes.

Interagency collaboration is a theme throughout our National Security Strategy, Quadrennial Defense Review, National Defense Strategy, National Military Strategy, Joint Strategic Capabilities Plan, Security Cooperation Guidance, and Unified Command Plan. While there is broad recognition of the importance of forging a true interagency partnership, we must continue the difficult work of making it a reality.

The creation of the National Counterterrorism Center is a tremendous step forward in interagency collaboration for the war of terror, and DOD is a strong supporter of this newly formed center. We can and must do more to enhance interagency effectiveness.

Success in the war on terror is beyond attainment by military and law enforcement means alone. We must work with other countries to address conditions that allow terrorist ideology to take hold. Hope is the most potent antidote for the hate, intolerance, and cruelty of our enemy. By championing the core values of our great republic, we can help bring the light of hope to the darkest corners of the world. Today, the brave men and women of the Armed Forces, combined with our interagency and international partners, are doing just that.

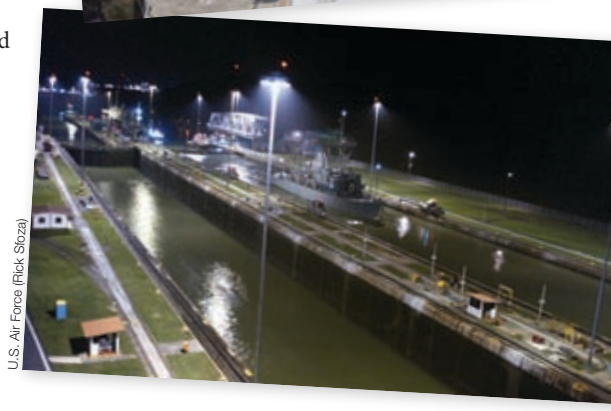
I am both honored and humbled to serve as Chairman during this challenging period in the Nation's history. Among the close-knit U.S. military communities around the world, these are times of sacrifice, difficult separations, and painful loss. But there can be no question that we will prevail and that a better future lies within our grasp. We have every reason to be proud of the service and accomplishments of the U.S. military. **JFQ**

PETER PACE
General, United States Marine Corps
Chairman,
Joint Chiefs of Staff


125th Fighter Wing (Shelley Gill)


U.S. Air Force (D. Myles Cullen)


Fleet Combat Camera Group, Atlantic (David P. Coleman)


U.S. Air Force (Rick Sforza)

Captions from above (left to right)

Airman briefing liaison officers from Argentina, Colombia, Ecuador, and Uruguay on the F–15 at Jacksonville, Florida

The Chairman talking to Pakistani general while visiting Muzaffarabad Airport in Pakistan

U.S. Army MP talking with UN security forces at Camp Unity in Gonaives, Haiti, Exercise *New Horizons*

USS *Devastator* passes through the Miraflores Locks on the Pacific side of the Panama Canal, Exercise *Panamax '05*

NOTE

[1] See U.S. Department of State, Bureau of Democracy, Human Rights, and Labor, Country Reports on Human Rights Practices 2005, "Venezuela," available at <www.state.gov/g/drl/rls/hrrpt/2005/61745.htm>.

From the Editor

Corporal Samuel Toloza stood surrounded by armed, fanatic Iraqi militants. Sam was one of only 4 men from his battalion still standing; a friend lay dead at his feet, and 12 others were wounded. Ammunition spent, no relief inbound, Sam saw Muqtada al-Sadr's gunmen—modern headhunters shooting without regard for the innocents they purposely thrust into the melee—closing in.

In that moment of truth, Corporal Toloza was a man of action: He flipped open his knife and rushed a cluster of 10 Iraqi gunmen, killing at least 1 and forcing the others to flee. Later, Sam said, "I thought, 'This is the end.' But, at the same time, I asked the Lord to protect and save me. . . . My immediate reaction was that I had to defend my friend, and the only thing I had in my hands was a knife." Corporal Toloza's actions were widely reported, and he became a national hero. Secretary Rumsfeld pinned medals on the corporal and his comrades in a special ceremony, thanking them on behalf of the U.S. Armed Forces and all Americans.

CPL Toloza displays knife used to fight Iraqi gunmen after his unit ran out of ammunition

AP/Wide World Photo (Sarah Das)

When I first heard about the corporal's heroism, like most of us who have fought and grappled, who have been both targets and shooters, I saw the battle through his eyes. This was an all-American, apple-pie, war hero story. Yet in this case, Sam was not a stereotypical high school football star who went home to Kansas with a shiny medal and a duffle bag of dirty clothes. Corporal Toloza was from the Cuscatlan Battalion, part of the Salvadoran mission to Iraq, an important part of the international coalition often overlooked by the press. His friend who died by gunshot was Private Natividad Mendez, also from El Salvador.

Toloza's story demonstrates that individual acts of honor and integrity can have strategic effects. With Salvadoran spirit and years of American training and support, a corporal's bravery became a symbol of national pride and metaphor for a strategic alliance between nations. This is a far cry from the obsolete perception of the embattled Cold War El Salvador of two decades ago. Corporal Toloza's tale shows how professionalism and pride, loyalty and integrity, are desirable personal as well as national character traits. America's allies, after years of joint training, exercises, and military education, make sacrifices and are heroes, virtually indistinguishable from their U.S. counterparts.

This issue of *Joint Force Quarterly* brings the focus on military and security issues back from Southwest Asia, with research essays by authors who examine security challenges and opportunities closer to home. The Forum spotlight lands on U.S. Southern Command and the nations south of America's border, which are so important to its defense and prosperity.

Also closer to home and affecting future American military and U.S. policy abroad is the Department of Defense's Office of Force Transformation, which *JFQ* examines in a Special Feature. Since the passing of Admiral Arthur Cebrowski—Director of the DOD Office of Force Transformation, network-centric warfare advocate, and military transformation evangelist—some inside the Beltway have questioned the focus of military transformation. *JFQ* raised this question in an interview with the office's acting director, Terry Pudas, who offers insight into the current vision of transformation. In this feature, readers also will find unusual articles examining some current "transformational" programs.

JFQ is pleased to offer a greater number of articles than usual in this issue, adding a better mix of tight analyses to the traditional in-depth examinations of security issues. We do this while improving upon the high-quality writing and exceptional artistic presentation that long-time readers have come to expect. I particularly recommend a feature article by Colonel Mike Isherwood, USAF, recounting lessons from Operation *Enduring Freedom* that apply across the full spectrum of conflict. Colonel Isherwood delivered his article from Baghram, Afghanistan, just as this issue went to press. In the Commentary section, General Carlos Alberto Ospina, Chief of the Military Forces of Colombia, provides another unique international story with insights on an ally's complex security challenges. Also tied by a common thread of hemispheric alliances is our Interagency Dialogue, which includes an exclusive interview with Ambassador Carlos Pascual, who until recently was the State Department Coordinator, Office of Reconstruction and Stabilization.

Although the journal reflects the priorities of the Chairman of the Joint Chiefs of Staff, I assure you that you are not reading a company magazine. *Joint Force Quarterly* is a professional military and security studies journal, a vehicle for information-sharing and vigorous debate on the Nation's most important domestic and international security and policy issues. To promote this debate, we welcome your feedback. Please tell us what you find useful. Better yet, send us a well-written policy analysis or strategic research essay. New readers will find that *JFQ* is a unique print and online publication that promotes communication and information-sharing among a network of colleagues that crosses Service, agency, and international stovepipes. No similar journal exists, and we hope you find *JFQ* stimulating, timely, and provocative. We look forward to serving you. **JFQ**

Colonel Merrick E. Krause, USAF
Director, National Defense University Press
Editor, *Joint Force Quarterly*
Krausem@ndu.edu
JFQ1@ndu.edu

JFQ Dialogue

Open Letter to *JFQ* Readers

Joint Force Quarterly receives and greatly benefits from a large volume of unsolicited manuscripts on a broad range of national security topics. Moreover, authors submit relevant articles to the journal well in advance of these topics' debut or recognition by the wider defense community. Even when manuscripts focus on technical or specialized aspects of security research, *JFQ* can usually find a way to incorporate the work and sometimes refers an author's study to outside institutes and centers, such as the Center for Technology and National Security Policy. The editors not only desire that authors and research groups continue submitting the array of articles and thoughtful critiques unfettered but also would like to solicit manuscripts on specific subject areas in concert with future thematic focus.

The following are areas of interest to which *JFQ* expects to return frequently, with no submission deadline:

- adaptive planning and execution
- coalition operations
- employing the economic instrument of power
- future of naval power
- humanitarian assistance and disaster relief
- industry collaboration for national security
- integrated operations subsets (new partners, interoperability, and transformational approaches)
- joint air and space power
- just war theory
- maneuver warfare
- proliferation and weapons of mass destruction
- prosecuting the war on terror within sovereign countries
- military and diplomatic history

The following topics are tied to submission deadlines for specific upcoming issues:

September 1, 2006 (Issue 44, 1st quarter 2007):
Lessons from the War on Terror (the "Long War")
U.S. Joint Forces Command

December 1, 2006 (Issue 45, 2d quarter 2007):
U.S. European Command
(including security issues in Africa)
International Relations and Coalition Operations

March 1, 2007 (Issue 46, 3d quarter 2007):
Intelligence and Technology
U.S. Strategic Command

June 1, 2007 (Issue 47, 4th quarter 2007):
U.S. Pacific Command
U.S. Transportation Command

JFQ readers are commonly subject matter experts who can take an issue or debate to the next level of application or utility. Quality manuscripts harbor the potential to save money and lives. When framing your argument, please focus on the *So what?* question. That is, how does your research, experience, or critical analysis improve the understanding or performance of the reader? Speak to implications from the operational to strategic level of influence and tailor the message for an interagency readership without using acronyms or jargon. Also, write prose, not terse bullets. Even the most prosaic doctrinal debate can be interesting if presented with care! Visit ndupress.ndu.edu to view our NDU Press Submission Guidelines. Share your professional insights and improve national security.

Colonel David H. Gurney, USMC (Ret.)
Managing Editor, *Joint Force Quarterly*
Gurneyd@ndu.edu

Letters to the Editor

To the Editor—Professor Milan Vego's article, "Effects-Based Operations: A Critique," unleashed a scathing attack on effects-based operations (Issue 41, 2d quarter 2006). Professor Vego is both a colleague of mine at the U.S. Naval War College and one of the greatest living experts on operational art; many of his criticisms do expose critical weaknesses in effects-based operations (EBO) as it is currently conceived, and we should do well to take them seriously. At the same time, his article significantly misrepresents several key aspects of EBO—particularly in asserting its incompatibility with operational art and the enduring principles of war.

Granted, some EBO advocates—in their enthusiasm for the more accurate modeling of complex phenomena that a systems approach enables—seem to disregard the centuries of accumulated knowledge of how battlefield systems (under any other name) actually operate. Dr. Vego's critique astutely skewers a few more egregious examples that seem to violate enduring truths learned from countless battles throughout the ages.

On the other hand, what EBO proposes—analyzing skillfully the interdependencies underlying an opponent's military power and dismantling the sources of that power by eliminating critical strengths and exploiting critical vulnerabilities—also has been at the heart of warfare for centuries. In fact, this description sounds surprisingly similar to good operational art. This is a critical point: As Ralph Peters (another outspoken EBO critic) notes, the concepts and theories underlying EBO are not new. Yet history shows that they are not always the abject failures that Peters depicts; the difference is their application in accordance with—rather than in ignorance or defiance of—the enduring principles of war and precepts of operational art. What EBO adds is guidance for applying these concepts to facilitate military victory by incorporating critical supporting nonmilitary system components into our concept of the operational environment.

We must resist the urge to condemn EBO for its current roughness or for the occasionally conflicting visions among its proponents. No successful combat doctrine has ever emerged coherent and flawless from the outset: "first drafts" tend to be "80 percent solutions" (consider German armored doctrine in the interwar years) that appear ill defined and improbable to the masters of the old ways. Only after a few iterations of executing operations, analyzing the results, and adjusting as necessary do they emerge as the blitzkrieg of World War II (much less the AirLand Battle doctrine of the 1980s). The rise of carrier warfare from its early days as "heresy" among the "battleship admirals" offers another powerful example of this evolution.

The added emphasis EBO gives to ensuring that results (effects) produce the desired impact—facilitating accomplishment of the designated objective at each level of war—potentially offers another crucial benefit. As Professor Vego notes, nothing in traditional operational art prevents an emphasis on results. In the heat of battle, however, leaders too often lose sight of this and assume that accomplishment of their assigned objectives (perhaps up to and including the strategic level) has in fact attained the goals for which higher authorities set them out. Provided that EBO does not become an excuse (as Professor Vego aptly cautions) for abandoning the rigorous pursuit and application of operational art, this explicit focus on effects may provide an additional safeguard against the very fog and friction about which he is concerned.

Professor Vego's critique also takes serious issue with the achievability of the kind of metrics foreseen in the effects-based assessment process; this is an area of particular interest in my research as well. My work, however, has concluded that while validly and usefully assessing some types of effects is going to be exceptionally difficult, this is different from saying it is impossible. We have a long history of overcoming such difficulties, and I have explored some possible ways forward elsewhere. One could even say that operational art itself—and the themes and principles taught in the U.S. Naval War College's Strategy and Policy course and others like it—is just such a means for coping with the uncertainty of war, recognizing that our business will never be reduced to the predictability of science yet that we can and must use our growing scientific acumen to provide insights and processes through which the operational artist's judgment is applied.

EBO has value if and only if it is applied in accordance with war's fundamental nature and the precepts of operational art (to include recognizing that if we are at war, that will always involve killing people and breaking things). Moreover, it will take time and effort, and a generous dose of experience, before a valid and unambiguous EBO doctrine sits on our shelf. The staunchest opponents of effects-based thinking would have us throw the baby (EBO) out with the bathwater just as we are starting to get it clean. Some of its more wild-eyed advocates would have us throw out the washbasin (operational art and the principles of war) instead. Both extremes are folly. I urge the great minds on both sides to suspend their disbelief and focus on ensuring that our evolving effects-based doctrine incorporates and builds upon sound operational art as its foundation—and that operational art does not become an excuse for ceasing to adapt.

—James B. Ellsworth, PhD
Professor, U.S. Naval War College

To The Editor—Christopher L. Naler's article, "Are We Ready for an Interagency Combatant Command?" (Issue 41, 2d Quarter 2006), was interesting not only for the accuracy of the analysis that correctly identifies a problem but also for the proposed solution. This solution, unfortunately, is on the wrong track.

As Colonel Naler points out, the conditions of the current environment cry out for a qualitatively higher degree of interagency coordination, if not integration. The traditional elements of national power—diplomatic, information, military, and economic (DIME)—need to be more effectively fused and managed. Even though this observation has become conventional wisdom, it remains pertinent given that implementation of a solution has not matched understanding of the challenge.

But the author's proposal to solve the problem by turning it over to a military organization—a combatant command—merely exacerbates the problem itself. The military tool is only one of the instruments of national power—and, in many respects, the most limited, except in terms of resources. Money and manpower are not solutions but applications. Why should we, then, consider handing overall direction of the whole governmental enterprise to the most limited of the players? Should we not instead follow the logic of operational integration of DIME and more sensibly place it in the hands of civilian managers with a broader perspective and a political mandate?

A review of the history of how we got to where we are organizationally in the foreign affairs and security arenas helps to understand the problem. The collapse of the Soviet Union ushered in a new and challenging national security and foreign policy environment. Even though some traditional concerns remain, such as the spread of weapons of mass destruction, they compete for attention with a growing list of transnational and nontraditional concerns, such as terrorism.

The U.S. Government, organizationally and bureaucratically, remains organized to fight the Cold War. In the 1980s, however, one significant change was made in the military component of the national security structure. The Goldwater-Nichols DOD Reorganization Act of 1986 rationalized the military command structure by concentrating operational authority in the regional combatant commands and providing a direct chain of command relationship with the President. This reform has proved to be remarkably effective with respect to military operations. But the ongoing situation in Iraq should make it abundantly clear that the military instrument has serious limitations in dealing with situations only partially military in character. This is not a criticism, merely an observation about the inherent limitations of any instrumentality.

All of the studies of 9/11 make it clear that lack of effective coordination continues to be prevalent throughout the U.S. Government. Unity of effort is crucial for successful interagency operations, just as jointness is crucial for successful military operations. But unity of effort and jointness are not the same thing. What may work organizationally in the comparatively restricted area of military operations still pales as a recommendation when compared with the complexity of considerations faced by the total Government.

Piecemeal reform is less attractive and, truthfully, not always productive. Nevertheless, a reform in the operational area involving the combatant commands might be worthwhile considering, as Colonel Naler suggests, but not by attempting to cram the whole Government into a uniform. Instead, perhaps, we should consider whether they should remain purely military commands at all.

Yes, let us integrate the instruments of national power, but let us do so under the direction of appropriate leadership, which logically must be civilian in character and political in authority.

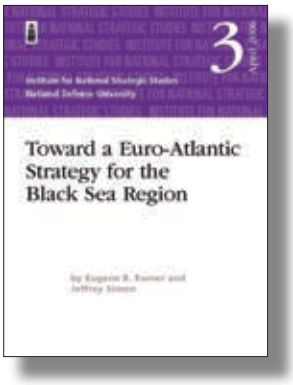
—Ambassador Edward Marks
Former Department of State Representative
USPACOM/JIACG

—William J. Olson, PhD
Professor, Near East and South Asia Center
National Defense University

NDU Press

New Titles from NDU Press...

Institute for National Strategic Studies Occasional Paper 3
Toward a Euro-Atlantic Strategy for the Black Sea Region



The Black Sea region is increasing in importance as an energy supply conduit and a barrier against transnational threats. However, as Eugene Rumer and Jeffrey Simon point out, some littoral state agendas conflict with NATO member interests. The authors argue that the Alliance could engage these states by identifying common security concerns and ideas for cooperative activities, including better integration of Partnership for Peace and European Union programs.

Institute for National Strategic Studies Occasional Paper 4
China Goes Global

Phillip C. Saunders notes that economic imperatives and strategic challenges are driving China to expand its international activities into different regions of the world. His study examines the rationale, drivers, and extent of this phenomenon, and assesses the implications for the United States.

Center for the Study of Weapons of Mass Destruction Occasional Paper 4
Defining "Weapons of Mass Destruction"

In this extensively researched study, W. Seth Carus summarizes how the term *weapons of mass destruction* has been used differently in disarmament talks, U.S. security policy, Soviet and Russian military doctrine, and American political discourse. He assesses the key policy issues associated with alternative definitions, and proposes a definition appropriate for the Department of Defense.

Institute for National Strategic Studies CD-ROM
China/Northeast Asia Collection

Collected on this CD are 28 complete NDU Press publications—many out of print—on China and other key countries in the Northeast Asia region. For example, it includes *Chinese Views of Future Warfare*, *Beijing's 21st–Century Search for Oil*, *Korea on the Brink*, and *Japan's Constitution and Defense Policy.*

Strategic Forum 219
Restructuring Special Operations Forces for Emerging Threats

David Tucker and Christopher J. Lamb make a case for restructuring U.S. special operations forces to improve their strategic capability to defeat current and emerging global threats.

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The Warrior Preparation Center
Training Transformation Defined

The airpower training exercise *Red Flag* at Nellis Air Force Base, Nevada, enabled generations of Airmen to be battle tested prior to combat. While stationed with U.S. Air Forces in Europe (USAFE), Colonel Richard "Moody" Suter, USAF, the key officer responsible for founding *Red Flag*, established the Warrior Preparation Center (WPC) at Einsiedlerhof Air Station, Germany. The center, which began in 1983 as a computer simulation center, focused initially on air defense and electronic warfare. A year later, the Army joined the simulation effort based on shared concerns over air defense and other joint issues, with the Navy following by assigning personnel from 1996 to 2005. Today, the WPC is a joint Service wargaming facility led by the U.S. Army Europe (USAREUR) Commanding General and the USAFE Commander and tasked to provide realistic environments for senior commanders to train their battlestaffs using computer-assisted simulations for joint forces, multinational headquarters, and Service components.

Presaging the Goldwater-Nichols Department of Defense Reorganization Act of 1986, the WPC established a joint organization by 1984. The center has operated continuously since then under memoranda of agreement signed by USAFE and USAREUR leaders. This relationship has allowed the center to capitalize more effectively and efficiently on joint training synergy at the operational level by being able to manage resources to the benefit of the U.S. European Command (USEUCOM), North Atlantic Treaty Organization (NATO), coalition partners, and USAFE and USAREUR.

The WPC has been recognized as a leader in technical and operational innovation since its inception. In the early 1980s, its pioneers used the research, evaluation, and systems analysis model the Navy formed in 1982 to develop air warfare simulation (AWSIM) for training Air Force and NATO senior commanders and their battlestaffs in the execution of wartime general defense plans that emphasized joint and conventional operations. By 1988, AWSIM was implemented as a training and education model by the WPC. Today, it is the core model of the Air and Space Constructive Environment Suite used worldwide to train senior battle commanders and their staffs within the Air Force and across the Department of Defense (DOD). It provides the opportunity to train for joint and combined prosecution of war using interactive computer simulations that replicate a realistic battlespace, incorporating various audiences through worldwide distribution. In 1989, the WPC pioneered distributed wargaming in the first NATO-wide computer-assisted exercise for Allied Command Europe. Global distributed wargaming became a reality in 1992, when the WPC began a partnership with the Korean Battle Simulations Center to assist in conducting the annual exercise *Ulchi Focus Lens* for the Korean theater.

Between 1992 and 1999, the center made a rapid switch from facilitating Cold War needs to exercises that prepared joint task force (JTF) commanders, joint force air component commanders (JFACCs), and their staffs for missions ranging from contingency to humanitarian operations. Beginning in 1992, in conjunction with USEUCOM, USAFE implemented JTF and JFACC battle staff training to give real-world contingency commanders and staffs a hands-on understanding of what to do in future conflicts. The *Trailblazer* and *Union Flash* exercises were instrumental in preparing the Third and Sixteenth Air Force commanders and staffs for the missions they were assigned during the 1990s and at the turn of the century in areas such as the Balkans, Africa, and Southwest Asia. Additionally, the WPC blazed new trails in 1995 by providing a real-world mission rehearsal for the Commander, Allied Forces Southern Europe, and his staff for their deployment to Bosnia, a NATO first.

This type of innovative exercise execution and transformation in the 1990s prepared the center to execute USAFE's rehearsal for air operations in the Balkans and V Corps' rehearsal for Task Force Hawk in 1999. Moreover, in April 1999, with conflict ongoing in the Balkans, the center hosted Joint Task Force Shining Hope, the headquarters responsible for humanitarian assistance operations in the region. In November of that year, during the air war over Serbia, the center provided analysts who worked around the clock at the Air Operations Center in Ramstein, Germany, assessing the impact of operations. WPC programmers built a database to record, track, and validate mission reports and provided the primary and most credible source for battle damage assessments. Its information was also crucial in pinpointing unexploded ordnance after the war, allowing a quicker return to normalcy.

A Shift in Focus

The WPC continued its pioneering ways by hosting a senior commander's seminar in January 2000, so the USEUCOM combatant commander could refine the planning for future operations in the Balkans. This ongoing relationship of supporting USEUCOM training and events, coupled with the WPC's frequent support of NATO throughout its 22-year history, reveals an organization that actively seeks opportunities to contribute to the warfighter.

The last few years have seen a shift of focus to the war on terror. In 2003, the WPC planned and conducted the exercises *Danger Focus II* and *Freedom Resolve*, the mission rehearsals for preparing the 1st Infantry Division, 1st Cavalry Division, and III Corps to support Operation *Iraqi Freedom*. During *Iraqi Freedom*, the WPC supported the Air Force A9 (Mission Rehearsal and Analysis) role. The center's work with the A9 in providing red-team events, operational analysis, and capturing lessons learned with remediation provided key support to U.S. Central Command. Following the practice of taking on nontraditional missions, the WPC work in red-teaming also contributed to security for the NATO Summit

in Prague in 2002, as well as supporting Presidential visits to Europe.

The Warrior Preparation Center has changed from a Cold War, garrison-based posture to an organization in transition that exemplifies the DOD training transformation. The center was recently named by USEUCOM as the Joint National Training Capability Center of Excellence for Europe, taking on the tasks of fielding and integrating new battlestaff training techniques and technologies. Additionally, it was named the USAFE Distributed Mission Operations (DMO) center of excellence and charged with planning for and building a DMO command and control capability. The goal of the WPC for both programs is to prepare and conduct command and staff training within the live, virtual, and constructive (LVC) training domains. Traditionally, units have had to train individually at echelon, with higher and lower units acting as response cells. Today, linked multiechelon training with the LVC domains is possible through robust distributed networks, allowing units to train at home stations or at expeditionary locations.

Suter's legacy means much more than innovation. At the end of the day, the WPC exists so Soldiers, Sailors, Airmen, and Marines can train together at the operational level of war. It also exists so they can blend their doctrine and tactics in the art of decisionmaking to command and control troops in contact. Moreover, it is at this operational level, which by definition is joint, that we either plan and fight as a team or approach the battlefield in an unsynergistic, disconnected path. Further, WPC exists so the Nation and coalition partners can avoid unnecessary loss in places like Kasserine Pass in North Africa in 1943, or those during Operation *Anaconda* in Afghanistan. It exists so that effective air-ground teams can take the fight to the enemy with swift victory in places such as the breakout of St. Lo in World War II or on the road to Baghdad in *Iraqi Freedom*.

The Warrior Preparation Center allows commanders and their staffs to work out the decisionmaking process, refine it, and prepare for the known or suspected, but more importantly to approach the battlespace with confidence in their ability to handle the fog and friction of real war. The bottom line for the WPC is to prepare commanders to get the job done with less blood and treasure. As the global security environment continues to transform, Moody Suter's Warrior Preparation Center will remain an innovator, dedicated to excellence in training, and living up to its motto, *Prepare to Win*. The WPC standard is that no one can do more, and no one should expect less. **JFQ**

Foundation Announces Establishment of the Colin L. Powell Chair at NDU

The National Defense University Foundation (NDUF) recently announced the establishment of the Colin L. Powell Chair for National Security Leadership, Character, and Ethics at the National Defense University.

The Chair is named for Colin L. Powell, former Chairman of the Joint Chiefs of Staff and Secretary of State. General Powell's extraordinary life of military, government, and private service to his nation exemplifies the ideals the Chair is established to uphold. General Powell is a graduate of the National War College and a recipient of the NDUF American Patriot Award.

"At the initiative of Nash Broaddus, Chairman Emeritus of the NDU Foundation, and as a direct result of his generosity, we are pleased to be able to establish such a fundamentally important program for the National Defense University," said NDUF President, General Charles D. Link, USAF (Ret.). "Nash Broaddus, founder of Prodesco, Inc., in 1975, served as a Naval officer in two wars (World War II and the Korean War). During World War II, he earned the distinction of being the youngest Destroyer Escort Commander in the U.S. Navy. In 1993, he received the Department of Defense Medal for Distinguished Public Service. He is a patriot and a tremendous supporter of the National Defense University.

"Mr. Broaddus and the other members of the Board of Directors are especially pleased that General Richard B. Myers, USAF (Ret), 15th Chairman of the Joint Chiefs of Staff, will be the first incumbent of the Powell Chair," according to General Link.

A native of Kansas City, Missouri, General Myers entered the Air Force in 1965 through the Reserve Officer Training Corps program. His career includes operational command and leadership positions in a variety of Air Force and joint assignments. General Myers became the 15th Chairman of the Joint Chiefs of Staff on October 1, 2001, and he retired on September 30, 2005.

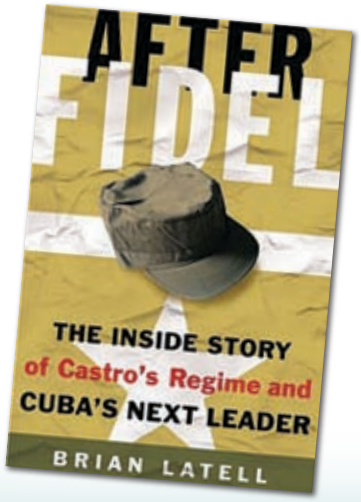
General Powell conveyed his approval, "General Myers is a distinguished leader and patriot. I am very pleased that he will be bringing his talents and experience to inaugurate this new chair. I also express my appreciation to Mr. Nash Broaddus for his generosity in creating this new opportunity for learning at the National Defense University."

Reaction from members of Congress was equally positive: Congressman Ike Skelton, a strong advocate of professional military education, stated, "General Myers has served our country with uncommon distinction and integrity, applying common sense to the challenges of his position as Chairman. . . . He has also provided stellar stewardship of joint professional military education and sound and thoughtful advice to me and my colleagues."

The Chairman of the House Armed Services Committee, Duncan Hunter, added, "I have personally witnessed General Myers in the middle of the arena that we call Washington, DC, under enormous political pressure that attends most major security decisions. Never was a national leader more courageous. General Myers exemplifies integrity and loyalty to his oath of services that will be well reflected in his new role molding American military leaders." **JFQ**

Book Reviews

Although terrorism and transnational threats from distant lands have absorbed much U.S. attention and resources of late, the Forum articles in this issue of *Joint Force Quarterly* remind us that our own hemisphere—particularly the southern part—remains relevant in the global security context. Both readings offer conjecture about the future of Latin America—one focusing on a single country, the other on the entire region.



After Fidel: The Inside Story of Castro's Regime and Cuba's Next Leader

by Brian Latell
New York: Palgrave Macmillan, 2005
273 pp. $24.95
ISBN 1–4039–6943–4

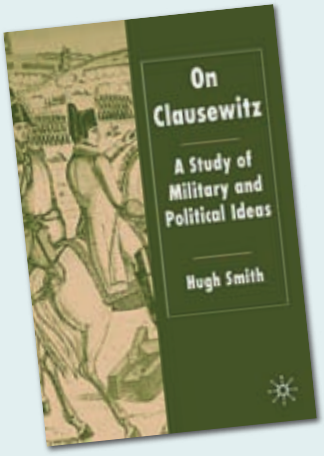
Post-Castro Cuba is the Latin American elephant in the U.S. living room, a beast that probably will have to be acknowledged sooner rather than later since the 79-year-old Fidel has shown increasing signs of mortality in the past few years. Latell, a senior associate at the Center for Strategic and International Studies, started his long career as a Cuba watcher in 1964, when he became a political and leadership analyst at the Central Intelligence Agency. At the time, remote leadership analysis was a well-regarded analytical tool, and Fidel Castro was the world leader who most needed such scrutiny. Latell combines the intelligence culled from those years of study with information from secondary sources to produce character studies of Fidel and his designated successor, his brother Raul. Latell uses his assessments of Raul both as an individual and in the context of his relationship with Fidel to project what kind of country Raul's Cuba will be—and, more importantly, how that country might interact with the United States. The potential scenario of Raul dying before Fidel does is briefly discussed as well.

"The Americas in the 21st Century: The Challenge of Governance and Security"

Security Issues in the Western Hemisphere conference series
February 1–3, 2006, Miami, FL

The U.S. Army War College, in conjunction with Florida International University and U.S. Southern Command, held the ninth annual conference dealing with security and defense matters in the Western Hemisphere. This year's session attracted 150 military, governmental, and academic attendees who participated in panel discussions on interdependence and global security, the need for good governance, linking security and development, public security, and the information threat. The participants' conclusion—that the Western Hemisphere security situation is "extremely volatile and dangerous" and that the challenges of good governance and security need to be addressed lest the issue resolve itself in ways not to our liking—should give pause to security decisionmakers. A detailed conference report is available at www.StrategicStudiesInstitute.army.mil>.

L. Yambrick



On Clausewitz: A Study of Military and Political Ideas

by Hugh Smith
New York: Palgrave Macmillan, 2005
272 pp. $29.95
ISBN 1–4039–3586–6

Book Review by
BARRY WATTS

Hugh Smith's *On Clausewitz* repackages *On War,* by Carl von Clausewitz, for the general reader while striving to do the least violence to the understanding of war that Clausewitz achieved in his final years. Given the difficulties Clausewitz's unfinished manuscript have presented to generations of readers since his widow published *On War* in the early 1830s, Smith's endeavor is laudable.

Smith, however, does not intend *On Clausewitz* to replace *On War*. Because the "lucidity of Clausewitz's mind can only be appreciated at first hand," and because Clausewitz intended his opus to stimulate readers to reach their own judgments about the problems war presents, Smith rightly insists that there is no substitute for reading Clausewitz directly (p. xi).

What Smith offers, then, is a fairly comprehensive companion volume to *On War*. In 23 short, readable chapters, he summarizes what scholars and military men have thought about such things as Clausewitz's life and personality, warfare during his era, *On War*'s intellectual and political context, Clausewitz's approach to war's theory and practice, and his relevance (or the lack thereof) to warfare in later times down to the present. The result is a generally reliable supplement for any reader, whether tackling Clausewitz's unfinished manuscript for the first time or revisiting it for the twentieth. Having scrutinized sympathetic interpretations of Clausewitz by scholars such as Peter Paret, Michael Howard, Bernard Brodie, Michael Handel, and Chris Bassford, as well as critics of *On War*, from B. H. Liddell Hart to Martin van Creveld and John Keegan, little escapes Smith's mention. His volume may therefore become a standard reference for students of Clausewitz.

Nevertheless, reluctance to depart even slightly from Clausewitz's understanding of land warfare at the time of his death is both Smith's greatest virtue and weakness. On the one hand, the theorist was a soldier from the age of 12 until his death at 51 in 1831; by the time he was 35, he had fought in 5 land campaigns against France; and from 1790 to 1820, continental Europe witnessed some 713 battles (p. 27). On the other hand, *On War* contains virtually no mention of war at sea during this period, or of technology's potential to transform war's conduct even if its underlying nature remains unchanged. Following Clausewitz, Smith presents war fundamentally as armies fighting armies (p. 264). In doing so, he is true to the text of *On War*, but his exegesis also devalues seapower (even in Clausewitz's day) and gives short shrift to truly revolutionary developments in the means of warfare after 1820 (for example, machineguns, mechanization, airpower, and both thermonuclear and nonnuclear precision weapons).

Clausewitz, though not Smith, can be forgiven for neglecting the technological dimension. During Clausewitz's time, technological changes in the means of war were modest compared to those of the 20th century. As for seapower, Clausewitz was a soldier, not a sailor. Still, neglect of the sea was a major oversight. Britain's

Barry Watts is a Senior Fellow at the Center for Strategic and Budgetary Assessments and author of *Clausewitzian Friction and Future War.*

attainment of naval dominance in European waters during Clausewitz's lifetime was the culmination of "the largest, longest, most complex, and expensive project ever undertaken by the British state and society" (N.A.M. Rodger, *The Command of the Ocean: A Naval History of Britain, 1649–1815*, W.W. Norton, 2005, p. lxv). And while many 20th-century historians, even in Britain, have downplayed the significance of Admiral Nelson's triumph at Trafalgar in October 1805, his victory ensured Britain's survival in a war "which no other nation survived unscathed," left Napoleon in a strategic box from which he futilely struggled to escape for the rest of his reign, and guaranteed Britain's economic prosperity (Rodger, p. 543).

Smith's dogged adherence to Clausewitz's understanding of war as fundamentally armies fighting armies has other consequences for appreciating *On War*'s relevance to modern conflict. The most serious is Smith's treatment of the Prussian's unified concept of a general friction. While the author acknowledges Clausewitz's view that general friction constitutes the "only concept that more or less corresponds to the factors that distinguish real war from war on paper" (Carl von Clausewitz, *On War*, edited and translated by Michael Howard and Peter Paret, Princeton University Press, 1976, p. 119), he clings to the traditional reading that separates chance from general friction rather than seeing chance as merely one of friction's sources. Smith's "trinity of trinities" diagram (p. 121) documents his refusal to push Clausewitz's unfinished text beyond where the Prussian left matters in 1831.

In discussing another source of general friction—intelligence—Clausewitz observed that the "difficulty of *accurate recognition* constitutes one of the most serious sources of friction in war" (Howard and Paret, p. 117). The modern term for what Clausewitz was talking about is *situation awareness*, which, for commanders and combatants, necessarily includes their belief systems and experience. Consequently, the social phenomenon of war becomes nonergodic in Douglass North's sense that future states (or outcomes) cannot be confidently predicted based on averages calculated from past states (Douglass C. North, *Understanding the Process of Economic Change*, Princeton University Press, 2005, pp. 19, 49–50, 167). The upshot is friction with a vengeance, but Smith's insistence on halting interpretation of *On War* at Clausewitz's untimely death ignores such important insights. **JFQ**

Resisting Rebellion: The History and Politics of Counterinsurgency

by Anthony James Joes

Lexington: University Press of Kentucky, 2004
351 pp $35.00
ISBN 0–8131–2339–9

Book Review by
TODD M. MANYX

During the 20th century, the United States developed the largest and most powerful military the world has known by capitalizing on its abundant natural resources and its geographic isolation, which protected against a direct assault on the homeland. The forces it fielded for both World Wars, the Korean War, and Operation *Desert Storm* supported and reinforced a strategic philosophy based on massing troops and equipment so they could conduct direct, violent assaults against massed armies. However, operations since the September 11 attacks have revealed weaknesses, not necessarily in military strength, but rather in the strategic vision for conducting counterinsurgency operations; lessons learned in years past were not retained.

Anthony Joes' *Resisting Rebellion* is a fresh look at the well-worn topic of how to fight an insurgency. As the United States continues its counterinsurgent efforts in Afghanistan and Iraq, frequent comparisons are made to Vietnam, where the Armed Forces faced a similar situation. Joes makes an intriguing contribution by approaching the topic from the perspective of developing and executing an effective counterinsurgent strategy—which could prevent these ongoing operations from turning into Vietnam-style defeats.

The central concept of *Resisting Rebellion*, rooted in Clausewitz, is that civilians are the center of gravity and that "guerrilla insurgency is quintessentially a *political* phenomenon, and that therefore any effective response to it must be primarily political as well" (p. 7). The author then states that the ultimate goal of "any intelligent counterinsurgency policy . . . is *peace*" (p. 8).

Key to Joes' thesis is a belief that nations generally have difficulty developing counterinsurgent strategies because the academic community tends to ignore the study of warfare, and most governments that have faced an insurgency have failed to capture their "lessons learned" on how to cope with insurrections, thus requiring "relearning old lessons." Joes' efforts to bridge these two points provide the book's overall structure.

The first step in Joes' analysis is a broad discussion of guerrilla tactics and strategies and the identification of insurgency-generating circumstances. Guerrilla tactics generally focus on the need to wear down the larger force in the long term and are predicated on a mixture of surprise, mobility, intelligence, morale, infrastructure, leadership, outside assistance, and a secure base. Likewise, insurgency-generating circumstances usually include at least one of the following: foreign occupation, defeat in war, religious rebellion, resistance to a murderous regime, a tradition of civil conflict, the desire of would-be or former elites to gain power, and closing off any peaceful avenue to change through rigged or cancelled elections.

The second step is the detailed study of the political and military elements of a counterinsurgency strategy, including in-depth examples of counterinsurgent efforts that succeeded when these elements were addressed and failed when they were ignored. The key strategic political elements include providing a peaceful path to change, committing sufficient resources, and isolating the conflict area. The central elements of military efforts at the operational/tactical level include displaying rectitude, emphasizing intelligence, dividing insurgent leaders from their followers, offering amnesty, removing firearms from disturbed areas, disrupting insurgent food supplies, and maintaining constant pressure on the enemy.

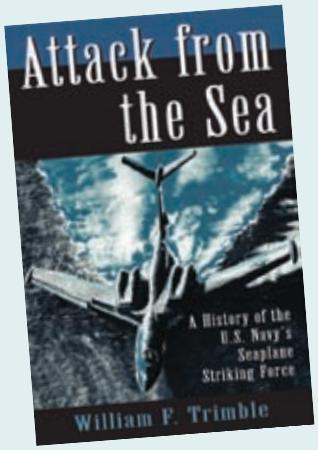
The multiple detailed examples Joes uses are a central strength. They run the gamut from the 18th throughout the 21st centuries and include Napoleon's problems in Spain, the Boer War, the Philippines Huk Rebellion, Latin America, and the many insurgencies with declining colonial empires in Africa and Asia following World War II.

Thoroughly researched and annotated, *Resisting Rebellion* is an intelligently written and easily readable work that is likely to become a standard text on counterinsurgency. It would also be a valuable addition to anyone's self-directed professional military education and should be studied by all policymakers, military officers, and senior noncommissioned officers. In addition, the first two chapters, dealing with guerrilla strategy and motivations, and the final chapter, concerned with the elements of a successful counterinsurgency, should be required reading for all servicemembers who expect to operate in either Iraq or Afghanistan.

The well-read student of insurgency is likely to view *Resisting Rebellion* as a 21st-century validation of the Marine Corps' *Small Wars Manual*. Originally published nearly 80 years ago, the manual was the Corps' effort to capture the lessons learned from its experiences in the Huk Rebellion and Central American banana wars, and its sections relating to politics and tactics remain valid. However, Joes examines the problem of counterinsurgency from a broader perspective and with a more focused academic process.

According to Joes, it has been said that "guerrilla warfare is what regular armies always have most to dread" (p. 1). Perhaps the lessons this book offers can help vanquish that dread, and a counterinsurgency doctrine that encompasses and balances both the political and military perspectives can be developed. **JFQ**

Captain Todd M. Manyx, USMC, is an Intelligence Officer with over 20 years experience, most recently with a deployment to Al Anbar province in Iraq.



Attack from the Sea: A History of the U.S. Navy's Seaplane Striking Force

by William F. Trimble
Annapolis, MD:
Naval Institute Press, 2005
196 pp. $29.95
ISBN: 1–5911–4878–2

Book Review by
MARTIN J. SULLIVAN

After World War II, Government leaders believed they had the answers to a series of questions important to developing a national security strategy: where the next war would be fought, who the next adversary would be, and what missions and capabilities would best serve the Nation. As Trimble shows in this meticulously researched book, however, the future was no more foreseeable at that time than it is today. Trimble's work follows the Navy's search for a role in nuclear weapons delivery missions in the postwar years and provides a sobering glimpse of the limitations of organizations and technology in a rapidly changing strategic environment.

Trimble recounts the Navy's failed attempts through the 1950s to form a seaplane striking force (SSF) to compete with Air Force strategic bombers. Nearly every untoward event described in *Attack from the Sea*—poorly developed service operational concepts, contractors' hastily submitted and unworkable engineering proposals, Service leaders' and program managers' strongly worded statements supporting those concepts and proposals—eerily parallels the modern Navy's search for meaning and methods. This book reinforces George Santayana's axiom that those who cannot remember the past are condemned to repeat it.

A philosophical touchstone shared by naval leaders (as true today as it was 60 years ago) is the notion that the ability of maritime forces to remain dispersed yet to quickly consolidate their striking power affords the Nation a potent deterrent force. Through the 1930s, the Navy strove to increase the mobility and flexibility of its forces while extending their effective combat reach. Initially, in the interwar period, seaplanes were seen as a solution to the Navy's need to gather intelligence while providing surveillance and reconnaissance services well beyond the range of aircraft organic to the nascent carrier airgroups.

Many Navy leaders—most notably, future Fleet Admiral Ernest King—believed these so-called flying boats could also act as "mobile units, available to the Fleet as powerful striking forces in addition to their traditional scouting mission." In technological and operational terms, carriers were still in their infancy. The tonnage limits imposed by the Washington Naval Treaty and by congressionally enforced budget authority also constrained the Navy. Compared to carrier aircraft, seaplanes in the early 1930s had superb endurance and could haul heavy ordnance such as bombs and torpedoes—the exact capabilities staff officers and fleet operators believed they needed to protect U.S. forces as they advanced to meet the Japanese fleet.

Trimble portrays the goal-driven sense of purpose of Navy leaders and the frustrating constraints and limitations of the "Treaty Navy" in which they worked. King wanted to develop the long-range seaplane into a "powerful offensive weapon capable of being concentrated at any desired point on very short notice," but he could neither win over less visionary but more practical officers assigned to review requirements nor balance his demands against the resources and technology available. Members of the General Board, the rough equivalent of today's Program Assessment and Evaluation offices, did not share King's estimation of the usefulness of seaplanes apart from traditional reconnaissance.

By the mid-1930s, Chief of Naval Operations Admiral William H. Standley and the General Board questioned King's assertion that the flying boats would undergo "unlimited development." As Trimble recounts, advances in seaplane performance did not develop as expected over the decade. Additionally, in arguments echoing those against today's seabasing concepts, board representatives believed advanced "afloat bases" would be so vulnerable to attack that shore- and carrier-based aircraft would be required to protect the anchorages. Finally, the Bureau of Aeronautics' operational concepts for employment of the seaplanes, the manpower and training necessary to operate them, and the supporting logistic requirements exhibited a stovepiped perspective and called for unrealistic numbers of seaplanes and tenders. As the decade ended, and war in the Pacific loomed, the rapid technological change in the range, ordnance carrying capability, and maneuverability of carrier aircraft made further investments in seaplane strike forces a low priority. Ultimately, the Navy entered the war using the obsolescent PBY Catalina flying boat as a patrol aircraft, expecting to employ the platforms as attack forces as a last resort. The patrol squadrons made some contributions to the war effort, but only in those arenas where the paucity of threatening Japanese fighters and enemy antiaircraft weapons offset the Catalina's lack of speed and maneuverability.

Despite the outstanding wartime performance of the Navy's carriers and submarines, the Service underwent a postwar institutional and intellectual crisis. Professionals and defense strategists believed atomic bombs and long-range, land-based bombers were the transformational weapons of the day and the tools in the U.S. arsenal most likely to be used. Opportunities for nuclear retaliation against the Soviet Union drove emerging military strategy, doctrine, and materiel acquisition programs. As Trimble shows with the Navy, from the late 1940s through the 1950s, initiating Service acquisition programs specifically for developing capabilities to deliver nuclear weapons was seen as proof, through twisted logic, of strategic relevance. The author describes the Navy's almost desperate efforts to quickly achieve nuclear delivery capability despite daunting technological hurdles. For example, officers considered modifying land-based patrol aircraft (P2Vs) to carry atomic bombs and planned to station the aircraft at advanced bases near major ports worldwide. When an aircraft carrier came into port, the P2Vs would be lifted aboard the ship, "and after completing their missions, they were to find bases ashore at which to land, or somehow ditch close enough to the task force for the crews to be rescued."

The Navy sought a vision that could reassure its leadership of the institution's relevance and act as a bulwark against political, strategic, and budgetary buffeting. Finally, in what could be called a "back to the future" episode, leaders endorsed efforts to establish a sea-based striking force they believed could give the Navy advantages of mobility and strategic surprise, as well as dispersion and concealment, all considered vital in the context of survival for retaliatory nuclear strikes. Trimble describes each of the aircraft and some of the highly modified seaplane tenders proposed for the revived SSF, but he focuses on the centerpiece of the Navy's efforts: Martin Aircraft Company's development program to make a seaplane, the P6M SeaMaster, a viable competitor for long-range strategic missions.

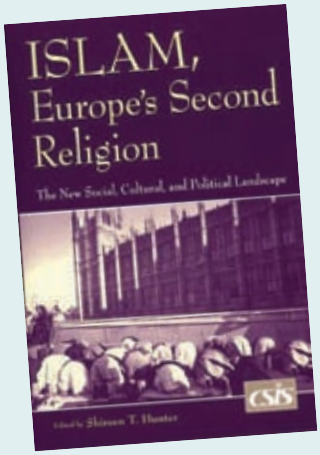
In 1952, the SeaMaster was envisioned as a large turbojet-powered seaplane, capable of flying at high subsonic speeds during low-level ingress to a target while carrying nuclear weapons, conventional bombs, or mines programmed for release by an integrated autopilot/weapons delivery system. The program was a disaster waiting to happen. In page after page describing programmatic and budgetary woes, Trimble documents the Navy's and Martin's poor technological research, incorrect engineering data, difficulties in controlling aircraft weight growth, material failures, and lack of effective program management. Additional aerodynamic and propulsion deficiencies revealed during the flying portion of the test program exacerbated all these issues. Despite the problems, Trimble reports that "enthusiasm for the capabilities of the SeaMaster as a nuclear delivery platform and for the SSF as a mobile striking force seemed to have no bounds." During a test flight on December 7, 1955, the aircraft suddenly pitched down, overstressing the airframe and causing it to break apart in flight. It

Colonel Martin J. Sullivan, USMC (Ret.), is a Senior Director for Defense Policy in the Center for Adaptive Strategies and Threats at Hicks and Associates.

took another such catastrophe and crash to finally end the SeaMaster saga, but not before millions more dollars were wasted on a program that never should have gone past the drawing board. Trimble summarizes the failures of the SeaMaster and its SSF cohorts:

The SSF fell far short of what it proponents advocated, due in part to technological and managerial shortcomings and in part to strategic, operational, and economic realities. . . . Advocates of the concept did themselves no favors either by consistently underestimating its costs and the time needed for development. . . . Planners and strategists would do well to take the lessons of the SSF to heart before forging ahead with costly technologies based on preconceived expectations that they will . . . bring about a revolution in the way wars are fought and won (pp. 140, 142).

As a former test pilot who watched the A–12, P–7, and EA–6B Advanced Capability programs be cancelled and who recently worked in the Marine Corps' Aviation Programs and Weapons System Branch as the MV–22 and Joint Strike Fighter were under constant review, this reviewer found portions of this book painful to read. Even with today's computer-aided design and analysis technologies, and despite the best hopes and intentions of platform advocates, machine and human errors still create problems. I can only imagine what present-day major program managers and service acquisition executives would think if they were to read *Attack from the Sea*. In truth, Santayana's condemnation might be avoided by reading Trimble's work. **JFQ**



Islam, Europe's Second Religion: The New Social, Cultural, and Political Landscape

Edited by Shireen T. Hunter
New York: Praeger, 2002
312 pp. $28.95
ISBN 0–2759–7609–2

Book Review by
TARA A. LEWELING

Explosions tore through London subways in June 2005, killing 52 and injuring 700; 4 months later, riots broke out in immigrant-dominated areas around Paris and beyond. According to the British Broadcasting Company, young Muslim Britons planted the bombs in the London underground. The riots in France were prompted by the accidental electrocution of two Muslim youths who, according to community leaders, were being chased by French police at the time of their deaths, a charge denied by local officials. Regardless of whether gendarmerie were involved, the outcome was clear: nearly 3 weeks of rioting, 9,000 cars set ablaze, and 3,000 arrests. Yet many U.S. military personnel in U.S. European Command (USEUCOM) and North Atlantic Treaty Organization (NATO) positions lacked a context for understanding these violent events, particularly in terms of how Muslim communities within Western European countries interact with their governments.

Islam, Europe's Second Religion helps to address this shortfall. Shireen Hunter's edited collection of essays by scholars on the demographics, structure, organization, and mobilization of Muslims in Europe highlights commonalities and differences of the Islamic experience among Western European nations. The first part of the volume focuses on Islam within the context of state boundaries, while the second part explores transnational issues related to Muslims in Europe, such as the generation gap among first- and second-generation immigrants and the relationship of European Muslims to European Union foreign policy. Each country-specific section offers the basic demographics and ethnic heritage of Muslims in each country, as well as aggregate information about the civic organizations, such as mosques and Islamic charities, associated with the Muslim faith in Western Europe. Attempts at pan-ethnic organizing, particularly through umbrella organizations, are also discussed. The second part of Hunter's volume examines transnational cultural trends related to Islam, such as how European-based Islamic scholars are changing global interpretations of Islam, as well as how issues such as racism and marginalization are affecting second-generation Muslim immigrants in Western European countries.

This volume offers a contemporary view, in aggregate terms, of the Muslim experience in Western Europe. While some of the data (such as specific demographic details) is outdated, those looking for such critical information as the history of contemporary Islamic immigration to Europe and the interaction of Islamic organizations with state institutions will be well served by this collection. For military personnel serving in USEUCOM and NATO or with NATO officers in coalition environments, the volume offers particular insight into a growing influence on the foreign policy of NATO members. Personnel focused on long-term force planning will benefit from the key insight that the demographic composition of many NATO member states is rapidly changing. Those focused on shorter-term, current-year force execution will enhance their understanding of the intricate social forces affecting the domestic governance of NATO nations. Moreover, Hunter's volume points out that individual member states are responding differently to the challenge of integrating disparate ethnic communities into their social fabrics; it is possible that these differences will affect future foreign and military policies of NATO nations. As a result, close reading of *Islam, Europe's Second Religion* offers U.S. military personnel a chance to better understand and appreciate not only the social dynamics affecting some of the United States' key partners in the global war on terror, but also unique national aspects of these social dynamics.

The Paris riots probably were not related to any specific terrorist plot, and much remains unknown about the London bombings. Nonetheless, members of al Qaeda and other Islamic-oriented terrorist networks clearly have leveraged established Muslim communities in Europe and elsewhere for logistical support. In most cases, members of these communities have been unwitting enablers of terrorist actions. While other works, such as Marc Sageman's *Understanding Terrorist Networks*, provide insight into how the intersection of global jihadist ideology and small group dynamics can coalesce into al Qaeda recruits, Hunter's volume explains the environment in which such intersections are possible. As such, the book is an important source for those trying to understand the dynamic, sometimes contentious, nature of Islam and Islamic organizations within Western Europe, and for those seeking insight into a larger context of Islamic community in which al Qaeda recruitment and organizing in Europe play only a minuscule part.

Implications for counterterrorism aside, *Islam, Europe's Second Religion*, is a good read for anyone wanting to be better informed on the Islamic experience in Western Europe from a macroscopic perspective. For those specifically seeking to understand some of the social factors related to the London bombings and Paris riots, Hunter and her colleagues provide a critical context through data-driven analysis, enabling U.S. military personnel to check personal conjecture against empirically based findings. **JFQ**

Major Tara A. Leweling, USAF, is pursuing a PhD in Information Sciences at the Naval Postgraduate School.

National Defense University Foundation

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Congratulations to the authors of the winning essays in the 2006 Chairman of the Joint Chiefs of Staff Strategic Essay Contest and to all the entrants and judges who participated in the 25th anniversary of this annual event. Look for the winning essays in *Joint Force Quarterly*, issue 43, 4th quarter 2006 in early October.

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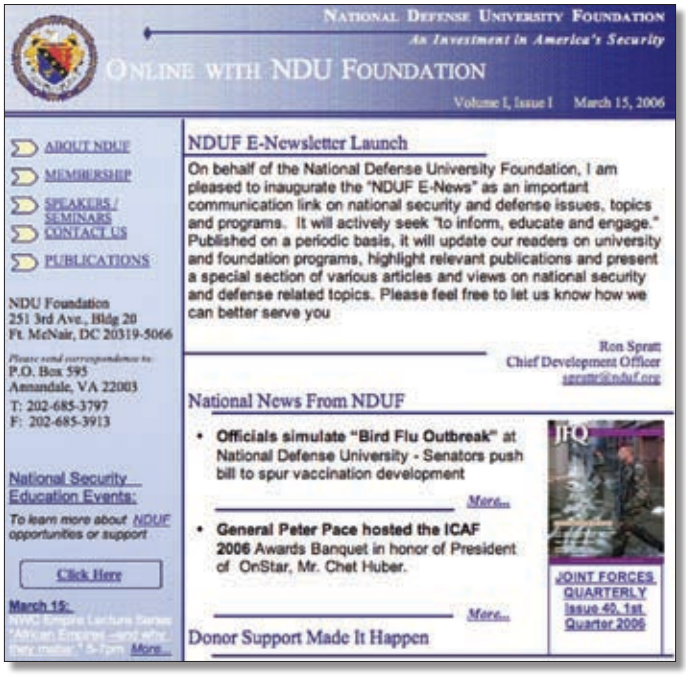

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Correction: The lead photograph of armored vehicles in the Joseph J. Collins' article "Planning Lessons from Afghanistan and Iraq" (issue 41, 2d quarter 2006) on page 10 is not of Bradley fighting vehicles, but rather M113A–3 armored personnel carriers. We appreciate the e-mails and phone calls from our readers. **The Editor**

Focus on U.S. Southern Command

Executive Summary

It is often said that America's heart lies in Europe and its wallet in the Pacific Rim, but demonstrably, both interests are migrating much closer to home. The United States, for instance, imports more oil from the Caribbean and Latin America than it does from the Middle East. Forty percent of our foreign trade lies within this hemisphere, and two-thirds of the cargo transiting the Panama Canal is heading toward or leaving from U.S. ports. Fully one-quarter of the world's fresh water runoff lies within the U.S. Southern Command (USSOUTHCOM) area of responsibility, and an equal percentage of our pharmaceuticals find their origin in the Amazon. An estimated 40 million Hispanics reside in the United States (in addition to the 4 million in Puerto Rico) and represent the largest and fastest-growing minority population.

The policies and practices that USSOUTHCOM observes in its theater security cooperation with the 32 nations within its area of responsibility remain heavily influenced by the European conquest of the New World. Experts cite postcolonial Hispanic culture, the legacies of friction with a youthful, expansionist U.S. democracy, and the more recent exploitation of large ungoverned areas and porous borders by transnational criminal organizations fueled by U.S. demand for illegal narcotics. Unlike any other regional combatant command, every member of USSOUTHCOM traveling abroad, and every host nation or organization with which they officially interact, is vetted for human rights training and compliance to prevent repetition of past errors and to promote better interaction.

With fewer apportioned forces and a smaller budget than other regional combatant commands, USSOUTHCOM has a great appreciation for the importance of interagency partnership and innovative security cooperation practices. In this issue, *Joint Force Quarterly* seeks to underline some notable achievements and failures that may benefit security professionals facing related challenges in other areas of responsibility.

Our first Forum article, "The Americas in the 21st Century: The Challenge of Governance and Security," is an intriguing introduction to the current challenges facing the USSOUTHCOM commander. The candid assessment by General John Craddock and Major Barbara Fick of security cooperation between the United States and its southern neighbors leads to an argument for change. The authors observe that the United States and its partner nations in the Caribbean and Latin America are at a crossroads where they must depart from the comfortable and familiar approaches to mutual security issues to reach the next level of collective performance. They then make a case for links between effective national security and healthy democracies, and, like General Pace, they emphasize that integrated elements of national power are crucial in this effort. (See also General Carlos Alberto Ospina's complementary observations of mutual challenges from a Colombian perspective in the Commentary section of this issue.)

In the second article, "Limits of Influence: Creating Security Forces in Latin America," Dr. Richard Millett addresses crucial lessons that the U.S. Armed Forces have learned in Latin America and the Caribbean in order to develop host-nation military and civilian security forces. The implications for U.S. Central Command are obvious, if not optimistic (more than once, the United States has found itself obligated to return and confront the same forces that it has painstakingly trained). Inculcating martial competence, teamwork, and supporting institutions is very different from exporting values regarding moral authority and faith in the rule of law. Dr. Millett outlines seven germane lessons that provide insights to similar missions elsewhere. He also emphasizes that there are "substantial limits" on U.S. ability to influence the values requisite to achieve the long-term democratic goals so often sought.

Our third Forum feature, "A Prescription for Protecting the Southern Approach," addresses the requirement for the same quality of early warning and defense-in-depth to the south as the United States enjoys from the other three points of the compass. In this optimistic treatment of a long-standing challenge, Colonel John Cope promotes a new multilateral apparatus to monitor mutual security issues in the Caribbean basin, while avoiding traditional barriers to close cooperation. He asserts that Mexico's defense relationship with the United States is tentative by design, as our southern neighbor professes to have no enemies. How, then, can Mexico be inspired

to participate in a multilateral relationship when it perceives no threat? Colonel Cope offers three near-term actions tailored to improve prospects for more effective collaboration and promotes Mexican leadership of an organization with precisely this mandate.

In "The State Partnership Program: Vision to Reality," Major Pablo Pagan describes a very successful theater security cooperation initiative that few people know much about. When most think about U.S. bilateral engagement with foreign nations, they envision relationships between governments at the national level. In the United States, however, some of the most effective cooperation occurs at the state and local levels, and this kind of cooperation is in great demand throughout the hemisphere. The ability of the National Guard, for example, to work directly with host nations and local U.S. civil institutions, such as schools, businesses, and infrastructure support organizations, is increasingly valuable. While more than one-third of the State Partnership Program countries lie within the USSOUTHCOM area of responsibility, this flexible program is a powerful tool returning dividends globally.

The fifth Forum offering, "JIATF–South: Blueprint for Success," is an excellent overview of U.S. Southern Command's model for effective combined, interagency operations: Joint Interagency Task Force–South. The author, Lieutenant Richard Yeatman, shows how this true interagency command has achieved a mature collaboration of diverse military and civilian, foreign and domestic agencies that has made great strides in interdicting narcoterrorist logistics.

The final article in the Forum is entitled "JTF–Bravo and Disaster Relief." In it, Colonels Edmund Woolfolk and James Marshall trace the origins of Joint Task Force–Bravo to its present role as U.S. Southern Command's most forward-deployed joint force capable of rapidly addressing natural disasters and manmade crises, such as noncombatant evacuations. Indeed, all regional combatant commands organize differently to address their prioritized mission challenges within unique geographic and cultural environments. JTF–Bravo is very much a "contextual command" in this vein, and its regional engagement and life-saving accomplishments have generated tremendous goodwill for over two decades.

Lessons learned in the USSOUTHCOM area of responsibility are instructive for all combatant commands, and *JFQ* is dedicated to supporting this exchange of ideas. As is the case in other parts of the world, the better we explain U.S. policies and viewpoints to the people of Latin America and the Caribbean, the more fruitful our common security objectives will become. The success of democratic rule, economic development, and the avoidance of armed conflict will continue to be high priorities for the United States in the hemisphere. Together with our neighbors, we can deny sanctuary to terrorists, narcotraffickers, and other criminal elements. These worthy goals require an effective interagency effort to leverage all instruments of U.S. national power. Only a synchronized interagency collaboration will ensure success. **JFQ**

D.H. Gurney

The Americas in the 21st Century

The Challenge of Governance and Security

1st Combat Camera Squadron (James Bowman)

Secretary of Defense Rumsfeld speaking to GEN Craddock, USA, Commander USSOUTHCOM, en route to Central American Ministers Conference on Security

By JOHN CRADDOCK *and* BARBARA R. FICK

The challenge of governance and security for the Americas in the 21st century has become a timely topic for U.S. and regional government officials. We need to maintain an open dialogue about future directions and how we maximize national and international resources both as nations and as a region—how we can work as a multinational community to best provide for our citizens.

A Strategic Inflection Point

A night satellite image of Latin America and the Caribbean reveals some fascinating characteristics that affect governance and security. The lights reflect urbanization, commerce, and development. While one may wonder about the role of the armed forces in an urban environment that is generally the province of law enforcement, there is a clear need to focus on the security imperatives of the darker areas.

Does the night image give us any indication of ungoverned spaces within both the darkest and brightest points? Should security forces have an even greater role in those areas where other government presence may be reduced? Is the protection of the environment and natural resources a subset of enforcing national sovereignty?

In the dark waters surrounding the Americas in this satellite image, you can also see tracks of vessels. The majority of those tracks represent fishing boats and commercial shipping, but some of the maritime movement there indicates the illicit trafficking of weapons, drugs, and people.

General John Craddock, USA, is Commander, U.S. Southern Command. Major Barbara R. Fick, USA, is Army Special Assistant to the Commander, USSOUTHCOM.

How do we sort out the illicit trafficking from the legitimate traffic? How do we inspect vessels for contraband without interrupting the flow of time-critical commerce? And how do naval forces protect human life on the high seas, all the while exercising the right of self-defense?

The answers to these questions will depend on those who have authority over national security, as well as the public will, of each sovereign nation. There are no quick or easy solutions, but it is clear that how we address these issues will directly affect the security of all our citizens. The U.S. Southern Command, and arguably the U.S. Government, is at a strategic inflection point. By that term, I mean a concept coined by Andrew Grove, former CEO of Intel Corporation. Grove has defined *strategic inflection points* as "points in the life of every industry where you must change dramatically to reach new levels of performance. If you miss these points, you will decline."[1] These are points in time when the environment changes so dramatically that reliance on the skills, behaviors, and practices that made us successful in one paradigm is no longer enough.

To continue to thrive, we must be willing to radically change our competencies and approach. To remain committed to the old way of doing business means potential underperformance and perhaps failure. This notion applies to our approaches to better governance and security and possibly to recent developments in regional cooperation.

What has changed in the region over the past few decades? What constitutes radical change? Do our current approaches meet the needs of our citizens in the areas of freedom, economic well-being, safety, and security?

According to a recent survey regarding public views on democracy in Latin American and Caribbean countries, 9 of 18 publics favor democracy over alternatives, but most rate their current democracies as generally inadequate. Public preference for democracy ranks highest in Uruguay, Venezuela, and Costa Rica, with increases over the past 4 years in Chile and El Salvador, and decreases in Peru, Guatemala, Honduras, and the Dominican Republic.[2]

One of two key factors influencing public opinion of democracy is economic performance. A United Nations (UN) survey in 2003 revealed that a majority of Latin Americans would prefer a dictator to a democratically elected leader if that change would provide economic benefits.

We have seen an economic recovery across the region in recent years. In 2004, the average growth in gross domestic product (GDP) was 5.5 percent, and in 2005 it was 4.3 percent. Estimated growth for 2006 is 4.1 percent. Argentina, Chile, Panama, Peru, the Dominican Republic, Uruguay, and Venezuela all registered strong GDP growth for 2005.

While poverty figures have declined slightly, the benefits of growth are still not felt throughout society, with 41 percent of the population living below the poverty line, and 17 percent living in extreme poverty.[3] By 2000, Chile had already achieved the UN Millennium Declaration goal of reducing extreme poverty to half the levels posted in 1990. By 2004, only Brazil, Ecuador, Panama, and Uruguay had met expected progress toward that goal. On the other hand, Argentina and Venezuela had higher levels of extreme poverty than they did in 1990.[4]

Latin America is the least equitable region in the world for income distribution. Poor distribution prevents a society's resources from being allocated to those who would derive the greatest benefit. It also undermines development and hinders progress toward reducing poverty.[5]

Inequitable wealth distribution is a phenomenon we have all recognized. Unanswered grievances and unfulfilled promises to the marginalized segment of the population continue to cause deep-rooted dissatisfaction with democracy as a process and as an institution. In many parts of the region, distrust and loss of faith in failed institutions have also fueled the emergence of anti-globalization and anti–free trade elements that incite violence against their own governments and people.

If the gulf between rich and poor is indeed part of the environment that places institutions at a strategic inflection point, what must we change to better meet the needs of our citizens? This question has to do with the second key factor influencing public opinion on democracy. The answer lies in the government's performance, or its ability to ensure the freedom, economic well-being, safety, security, and human rights of its citizens—in a word, governance.

A report from the Inter-American Development Bank suggests that making and implementing policy rather than the substance of the policy may determine the effectiveness of governments. This study found that countries that scored well on how policies are made and carried out are those where life is improving. Chile tops the list, and El Salvador is also highly ranked. Argentina and Venezuela do not fare so well.[6]

In recent years, World Bank analysts have devised a metric to rate the institutional performance of democracies around the world. The trends captured in this study from 1996 to 2004 show those countries that score highest in governance.[7] Chile, Uruguay, Brazil, and Panama have also shown the greatest progress toward reducing poverty. In addition, those are the countries where the publics show the greatest satisfaction with and preference for democracy.

U.S. Air Force doctor preparing to treat villagers near Quito, Ecuador

U.S. Army South (Kaye Richey)

A Look at the Facts

Public opinion on democracy, economic performance, poverty reduction and inequality, and governance will reveal an initial pattern. Chile, which has the same governance rating as the United States, demonstrates strong economic performance, has exceeded expectations for poverty reduction, and has raised the public preference for democracy in the years since its transition.

Uruguay's public opinion on democracy is the highest in the Southern Cone. The country has registered solid GDP growth, met poverty reduction goals, and has one of the highest governance scores in the region. Additionally, its income distribution is the most equitable.[8]

These are just a few factors that demonstrate the correlation between good governance and a better life for citizens. But how does that relate to defense and security? Any analysis of governance looks at dimensions of public security and national defense or sovereignty. World Bank research on governance takes an integrated approach and looks at six interrelated dimensions, two of which relate directly to security and sovereignty: political stability and absence of violence, meaning the absence of terrorism and violent threats to or changes in government; and the rule of law or the quality of the law enforcement contract, meaning the state of the police and courts, as well as the likelihood that citizens will be confronted by crime and violence.

Other dimensions in the study look at political, civil, and human rights, the quality of public service delivery, and the control of corruption, all of which have relevance for public safety, public security, and national sovereignty.

From a military perspective, we should focus on how the security and sovereignty dimension of governance contributes to economic development, poverty alleviation, and strengthened democracies. Today, Latin America and the Caribbean basin face a wide array of threats that are supremely difficult to tackle. We have recognized that today's globalization has not only allowed commerce to cross borders rapidly and easily, but also allows for the movement of threats to the people of this hemisphere. These include transnational terrorism, narcoterrorism, logistic support and fundraising for Islamic radical groups, illicit trafficking, mass migration, forgery and money laundering, kidnapping, violent demonstrations, crime and urban gangs, and natural disasters.

The common thread running through these threats is that they cannot be defeated by traditional military means. Every facet of the national power of each of our countries will be required to deter or eradicate them.

Two cases in point are Guatemala and its effort to bring security and governance to a specific region, and Colombia, where the effort has been broadly directed at the national level. These two examples illustrate the relationship between security and governance and the need to integrate all elements of national power for better governance.

Satellite image of fires in Laguna del Tigre National Park in Guatemala

NASA Aqua Satellite

An Interagency Task Force

The first example is Guatemala, where we recently visited the Laguna del Tigre National Park area in the Petén region along the border with México. This protected national park is largely unpopulated and, because it is a natural reserve without human infrastructure, it has come to constitute an ungoverned space. The lack of government presence has made this border region an ideal trans-shipment point for drug and other illicit traffickers moving their contraband north, almost always through Mexico.

If you fly over this region, an incredible number of clandestine airstrips are visible all the way to the horizon. What we saw there was startling: planes using these airstrips to offload drugs and other cargo for ground transport across the Mexican border. Often detected by the Guatemalan Air Force or, forced to land in the dark, smugglers crash-land, offload their cargo, and burn the plane before fleeing in waiting vehicles.

The drug trade is so lucrative that airplanes, some large enough for 45 passengers, become disposable. Eight to ten planes that had been intentionally crashed and burnt by drug traffickers to avoid the confiscation of their cargo were observed in an area the size of a couple of football fields.

The effects of this illicit presence and activity in the Laguna del Tigre Park reach far beyond the sale and use of drugs in the United States, and increasingly within source and transit zone countries. These activities have damaged significant national resources, sabotaged economic development, and undermined rule of law, bringing corruption, violence, and crime to the region.

Airstrips are created by burning forests and underbrush. This often leads to uncontrolled forest fires in the park, damaging huge tracts of land and natural habitat. Squatter communities have invaded protected park lands populated by those who could not find legal jobs in their own towns or by the families of drug traffickers. Entire communities have developed to support the illicit trafficking industry, providing security to traffickers and for the airstrips and transporting drug cargo over land or by river.

Within these communities, there is no government presence or rule of law. Instead, there are criminal groups and gangs, poaching of protected wildlife, kidnapping, and trafficking in arms, humans, and most commonly drugs. Illegal armed groups exercise effective control of the population through intimidation and, in many respects, have become the de facto rule of law.

The area of Laguna del Tigre, in the Petén department, includes Tikal and other archeological sites that are primary tourist attractions for the country. The criminal activity and violence engendered by the illicit trafficking elements, so close to the Tikal site, also threaten to undermine tourism throughout the Petén. Guatemala's income from tourism is over $770 million annually, but the potential to expand this resource and extend economic and social development has been held hostage by the lack of security.

In November 2005, the Guatemalan government directed its armed forces to

Conference of American Armies in Buenos Aires

U.S. Army South (Kaye Richey)

stand up an interagency task force in the Laguna del Tigre Park. This unit, led by the best of Guatemala's security forces, supports an interagency mission including the national civilian police, national air sovereignty council, the immigration and justice departments, and other government agencies and nongovernmental organizations. Its mission has been to counter the illicit activity in the Petén department. It has only been in existence a short time but has achieved great success in complete integration, coordination, and information flow across departments and agencies. It is the first government presence in this remote region, establishing law and order and gaining the confidence of the local population (not all of whom are any longer directly linked to the traffickers), reducing illegal arms possession, and destroying clandestine airstrips. Most importantly, this interagency force has denied illegal elements access to this area, as there have been no known drug trafficking aircraft in the Petén for over 60 days (December 5, 2005 to February 2, 2006).

Clearly, illicit trafficking in the Petén and its effects, along with the achievements of the Guatemalan government through the efforts of this task force, demonstrate the linkage between governance and security. Their interagency approach is the first step toward integration of security with other components of good governance. This task force represents a possible model to build upon. Its successes merit our admiration and support.

Protecting Citizens' Rights

Our second example of governance and security involves Colombia. In 2003, President Alvaro Uribe announced Colombia's *Democratic Security and Defense Policy*. This was an integrated approach involving all instruments of national power and all elements of the government, from the national to the local level. The goal of this national strategy, which frames Colombia's internal security efforts, is to protect the rights of citizens by strengthening the rule of law and the authority of democratic institutions.

A study of the components of this strategy reveals that it addresses good governance, recognizing that military or police action alone cannot ensure the security, safety, and well-being of Colombia's citizens. Just 3 years after the implementation of the *Democratic Security and Defense Policy*, Colombia has achieved successes on the battlefield and brought a security presence to all municipalities, thus paving the way for additional government initiatives to bring social services and infrastructure to these regions.

Key highways beyond Bogotá's city limits have been secured. For the first time in many years, Colombians can travel on the roads from Bogotá to other cities and regions. This has reactivated domestic tourism, internal circulation of capital, and commerce.

An example of Colombia's civil-military approach is the creation of the Center for Coordination of Integrated Action, a cabinet-level interagency center directed by the president to establish governance in conflicted areas by developing economic and social programs, thereby complementing the democratic security and defense policy.

The key function of this interagency body is to extend government presence and hence governance over national territory by planning and executing community development in the areas of security, health, documentation, food distribution, education, justice, infrastructure development, and job creation. This program is executed at the national, departmental, and local levels of government. It transitions the short-term security gains and successes into long-term belief in, and support for, good governance.

The examples of Guatemala and Colombia and other countries demonstrate the innovation required to adequately address the new security environment. They represent potential approaches to governance that merit further exploration and increased support.

Profound choices lie before us in today's world. We are at a strategic inflection point and must work together to determine how we can best provide for the needs of our citizens. This may involve breaking old defense and security paradigms and developing and implementing new integrated approaches—always a challenge. **JFQ**

NOTES

[1] Andrew Grove, *Only the Paranoid Survive: How to Exploit the Crisis Points That Challenge Every Company and Career* (New York: Currency Doubleday, 1996).

[2] Latinobarómetro, "The Latinobarómetro poll: Democracy's low-level equilibrium," August 12, 2004, available at <www.economist.com/world/la/displayStory.cfm?story_id=3084404>.

[3] UN Economic Commission for Latin America and the Caribbean, *Social Panorama of Latin America, 2005*, November 2005, available at <www.eclac.cl/index1.html>.

[4] UN Economic Commission for Latin America and the Caribbean, *The Millennium Development Goals: A Latin American and Caribbean Perspective*, June 2005, available at <www.eclac.cl/index1.html>.

[5] *Social Panorama of Latin America, 2005*.

[6] Inter-American Development Bank, *The Politics of Policies: Economic and Social Progress in Latin America, 2006 Report,* available at <www.iadb.org/res/ipes/2006/index.cfm?language=english>.

[7] Daniel Kaufmann, Aart Kraay, and Massimo Mastruzzi, *Governance Matters IV: Governance Indicators for 1996–2004*, available at <http://www.worldbank.org/wbi/governance/pubs/govmatters4.html>.

[8] *Social Panorama of Latin America, 2005*.

Limits of Influence

Creating Security Forces in Latin America

By RICHARD L. MILLETT

U.S. Army South (Kaye Richey)

Dominican special forces receive marksmanship training, Exercise *Tradewinds '04*

From 1898 to 1934, the United States created, trained, and equipped small military/constabulary forces for five Latin American countries: Cuba, Panama, Haiti, the Dominican Republic, and Nicaragua. Each force was expected to provide virtually all aspects of the nation's security, was designed to be apolitical, and was meant to reduce both direct costs and opportunities for corruption. It was further hoped, if not expected, that these forces would provide the stability needed to avoid future U.S. armed interventions.[1]

The forces thus created, far from becoming supporters of democratic stability, spawned predatory dictatorships. The United States thus found itself intervening again—twice with military force in Haiti and once in the Dominican Republic, as well as one major and several minor interventions in Panama, several limited interventions in Cuba (plus the indirect efforts of the Bay of Pigs operation), and indirectly in Nicaragua via the Contra project. In all but the Dominican Republic, the created forces were destroyed, by Marxist revolutionaries in Cuba and Nicaragua and by U.S. military intervention in Haiti and Panama. The force's survival in the Dominican Republic may be due to American intervention there in 1965. In Panama, and to an extent in Haiti, the United States found itself once again helping create new security forces from the wreckage of previous institutions.

Today, Washington is attempting to create indigenous security forces in Iraq and Afghanistan. Again, the old forces were dismantled by U.S. military intervention, creating a security vacuum and contributing to a climate of lawlessness. Standing up the new forces has been much more difficult and time-consuming than anticipated, and results have been mixed at best. Under such circumstances, revisiting the experiences in the Caribbean Basin offers insights into the pitfalls and prospects of such efforts.

The sorry history of these earlier attempts illustrates the problems of combining police and military functions, the obstacles to reshaping another nation's political and social environment, the dilemma of making policies sustainable and consistent, and the limits on exporting both doctrine and values. In sum, these are classic illustrations of the limits of influence.

Lessons on Limits

Before beginning this analysis, it should be noted that while the created forces rarely moderated and frequently exacerbated the political/social/economic problems of these weak states, they were by no means the only source of such problems. Like Iraq and Afghanistan, these countries lacked a real heritage of democratic rule, and civil society was feeble and deeply divided. Replacing military governments with civilian dictatorships, such as that of the Duvaliers in Haiti or with Marxist authoritarians such as Fidel Castro in Cuba and the Sandinistas in Nicaragua, did nothing to provide either security or freedom. Establishing functioning democratic structures requires more than good intentions, better trained militaries, and new constitutions.

Lesson One. Technology transfers but values do not. It is easier to teach someone how to fire a weapon than when to fire it. U.S. efforts were relatively successful in modernizing forces, as well as in increasing both their combat and internal security capacities. But efforts to implant political-military doctrines were generally futile. Armies quickly adapted the new training and technology to domestic norms and values. Authoritarian systems became more efficient and often more repressive, not more democratic.

Lesson Two. Using the military in the role of police is always a bad idea, although

Richard L. Millett is a specialist on the role of the United States in the Caribbean Basin. He retired as a Professor of History and head of Latin American Studies at Southern Illinois University, and is co-editor of *Beyond Praetorianism* and *The Restless Caribbean: Changing Patterns of International Relations.*

Soldiers of 1st Caribbean Battalion conducting riot control training in Dominican Republic

U.S. Army South (Kaye Richey)

Iraqi police officer from public order brigade patrolling in Baghdad

55th Signal Company (Teddy Wade)

sometimes it may be an even worse idea *not* to. In creating these forces, it was thought that placing police under central control, incorporating them into the military, would serve numerous purposes: reduce expenses, give the military a continuing and credible mission, curb political manipulation, and reduce corruption. But what it did, in fact, was to centralize authority further, eliminating local controls over, or ties with, police forces. Indeed, in some cases, individuals were deliberately assigned to areas where they had no local ties to prevent any sympathy with the population. In other cases, local leaders formed their own paramilitary forces outside official state control. With military and police officers graduating from the same institutions and belonging to a united officer corps, it was common to assign those of less ability (and perhaps fewer moral scruples) to police duty, further undermining police functions. Order took precedence over justice, control was more important than free speech or a free press, and protecting privilege—not individual rights—was the priority.

Lesson Three. Efforts to change a society by altering one institution never produce the desired effect and inevitably bring undesired effects. Trying to change police and other internal security forces without dealing with the massive problems of the broader administration of justice, such as legal systems, courts, and traditional caste and class impunity, only exacerbates existing problems. When there is no effective rule of law, the police do not function in a democratic manner. When a society is dominated by family, class, and caste divisions, the security forces incorporate and maintain these divisions.

Lesson Four. Language skills (or the lack thereof) and racial/ethnic prejudices on the part of the occupying power have a major impact. Knowing both the denotations and the connotations of a language is vital. Moreover, in Latin America, knowing that "loyalty and subservience to the state" is very different than loyalty and subservience to the government or the people is extremely important. The Latin tradition is that of the *conquistadores*, not the U.S. militia tradition. Loyalty is given to one's immediate commander and then to the institution, not to the government or constitution at large. Keys to knowing both the possibilities and limits of influence

when a society is dominated by family, class, and caste divisions, the security forces incorporate and maintain these divisions

include understanding the lack of words for *compromise* or *accountability*; understanding the meaning of addressing a superior as *mi coronel*; knowing why, in Spanish, instead of being disappointed one is deceived or betrayed; and understanding such concepts as *personalismo* (loyalty to individuals rather than institutions). Furthermore, words for such concepts as rule of law are largely absent in Arabic and in the various languages of Afghanistan.

Racial prejudice was both common and generally accepted in the United States in the first third of the 20th century, which had a strong impact in places such as Haiti. It produced paternalism, which is a willingness to set much lower standards for and accept poor conduct by nationals of all ranks. The ultimate example was the court martial by the Marines of a Dominican lieutenant, Rafael Trujillo, who was accused of multiple counts of rape and extortion. Despite overwhelming evidence against him, not only was he acquitted, but also the case had no impact on his military career.[2] As a result, when the United States withdrew forces, Trujillo rapidly took over the army and eventually the nation, becoming one of the most brutal and corrupt dictators in Latin American history.

Lesson Five. Influence rarely survives withdrawal. Power and culture overcome ideology, and once foreign trainers lose direct authority, they lose much of their influence. In the past, to exercise authority effectively usually meant operating as a *caudillo*, a *cacique*, or a traditional *jefe* (boss or chief). But once the trainer was no longer in that position, the authority passed to his national successor, who was a product of the traditional, not the imported, culture.

Short-term adaptations to create an effective force often undermine long-range policy goals concerning the nature and political orientation of the institution. The officers assigned to creating these forces often understood this and at times attempted to communicate it to Washington, but without success.[3]

Lesson Six. Secondary issues in the creation and training process often become major issues once command is transferred to national authorities. Intelligence is a key example. Under American control, intelligence operated largely as a tactical military tool. Focus was on the issues of collection and evaluation more than utilization. When American forces withdrew, the newly created militaries retained control over all domestic and foreign intelligence and used it to protect the military institution and perpetuate governments in power. Internal dissent rather than foreign threats became the primary focus. Leaving behind a structure where all intelligence, both foreign and domestic, was administered by the military inevitably made intelligence an instrument of political control and repression.

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American officers assigned to these missions, through no fault of their own, were rarely prepared for the cultural and political obstacles they encountered. Language skills were often neglected, selection was based more on institutional values than capability for the mission, and technical skills were generally placed above human skills. As a result, those involved frequently wished to finish tasks as quickly as possible to return to something they saw as more important. What is remarkable is how well most officers and enlisted personnel functioned while assigned to these missions. They often developed a strong rapport with the nationals they were training and leading and, while in command, kept abuses of power under relative control. But they were unable to leave behind any structure that would curb these tendencies once they departed.

Finally, communications between those making policies in Washington and those trying to carry them out in the field were poor. Directives arrived quickly and forcefully, while reactions, if transmitted at all, were delayed, rerouted, criticized, and ignored. Those doing the training quickly learned that questioning means and resources, much less objectives, could be career-threatening. Under such circumstances, "not on my watch" became an operative slogan, along with preparing excuses for ultimate failure, such as "to really do the job would require our presence here for at least two generations."

There are substantial limits on influence when trying to develop a military force in another culture. The more ambitious the goals of such a project—the more radical the transformation envisioned—the more likely it is not only that the effort will fail, but also that the ultimate results will be diametrically opposed to those originally sought. Sustainability of effort and resources can never be assumed, common language does not necessarily signify common values, and ability to transmit technical knowledge does not equate with ability to instill values. Training can provide needed skills that serve both host country and American national interests. It can produce ties and relationships that may prove of future benefit. Moreover, it can create a core within the U.S. Armed Forces that understands the military culture and problems of another society. But it cannot transform a society according to preconceived blueprints. Refusal to understand and accept the limits of influence only ensures that the final result of creating military and police institutions in another culture will deviate from the original goals envisioned for such forces. **JFQ**

NOTES

[1] For a history of the Cuban military, see Rafael Fermoselle, *The Evolution of the Cuban Military, 1492–1986* (Miami: Ediciones Universal, 1987). For Panama, see Carlos Guevara Mann, *Panamanian Militarism: A Historical Interpretation* (Athens: Ohio University Center for International Studies, 1996). For Haiti, see Hans Schmidt, *The United States Occupation of Haiti, 1915–1934* (New Brunswick, NJ: Rutgers University Press, 1971). For the Dominican Republic, see Bruce J. Calder, *The Impact of Intervention: The Dominican Republic During the U.S. Occupation of 1916–1924* (Austin: University of Texas Press, 1984). For Nicaragua, see Richard L. Millett, *Guardians of the Dynasty: A History of the U.S. Created* Guardia Nacional de Nicaragua *and the Somoza Family* (Maryknoll, NY: Orbis Books, 1977).

[2] Richard L. Millett and Marvin Soloman, "The Court Martial of Lieutenant Rafael L. Trujillo," *Revista/Review Interamericana* 2, no. 3 (Fall 1972), 396–404.

[3] For a Marine officer's appreciation of the situation, see H.C. Reisinger, "La Palabra del Gringo: Leadership in the Nicaraguan National Guard," *U.S. Naval Institute Proceedings* 61 (February 1935), 215–221.

4th Combat Camera Squadron (Rick Sforza)

Merchant ships pass through Miraflores Locks, Panama Canal

A Prescription for Protecting the Southern Approach

By JOHN A. COPE

Protecting the United States from attack is a core mission of the Department of Defense (DOD). Historically, the Armed Forces provided a shield against conventional threats at sea and through an integrated air defense system developed during the Cold War. As the events of September 11, 2001, demonstrated, however, the Nation must confront nonstate adversaries who target the United States and its interests at home and abroad.

The 2005 *Strategy for Homeland Defense and Civil Support* directs an active, layered defense that seamlessly integrates military capabilities within the United States, in the geographic approaches to its territory, in the forward regions of the world, and through space and cyberspace. In other words, it is *defense-in-depth*.[1]

The challenge of asymmetrical threats led DOD to create U.S. Northern Command (USNORTHCOM) in 2002 to protect the homeland. Charged with coordinating security cooperation with Canada and Mexico, this command must detect potential threats, dissuade adversaries, and defeat direct attacks.[2] Furthermore, USNORTHCOM supports civil authorities within the continental United States, Alaska, and U.S. territorial waters. The command plays a leading role in improving threat awareness and guarding the geographic approaches to protect the Nation at a safe distance.[3] To the north, east, and west, the framework for a coordinated defense of land, sea, and air domains with Canada is highly developed. To the south, however, DOD faces formidable hurdles to organizing a layered defense.

Planning for a coordinated defense to the south often defies conventional strategic thinking. Although all states there, with the possible exception of Cuba, are trying to stamp out the triple menace of drugs, corruption, and violence, which also threatens the United States, there are serious resource scarcities, and most security problems require multilateral responses.

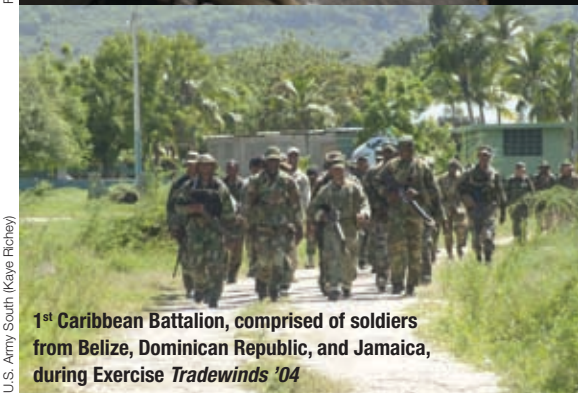
Mexico is the key nation in the southern sector. Its full cooperation is vital but doubtful. While collaborating successfully on many law enforcement and security issues, the country is reluctant to integrate into a defense arrangement. The weight of history with Washington and an inward-looking concept of national security preclude close cooperation. The United States cannot protect its southern approach alone, however, and Mexico must somehow play a role. This article offers a different organizing construct based on integrated cooperation with and among nations in the Caribbean Basin and Mexico and finds positive consequences for U.S. thinking about the region.

Geographic Approaches

To the east and west out to 500 nautical miles in a predominantly maritime domain, the Navy and Coast Guard are refining and expanding capabilities for early-warning, air-sea-subsurface coordination and interception at a safe distance. Defense of the northern approach builds on a mature security relationship with Canada and exploits its depth of

Fleet Combat Camera Group, Atlantic (Erin D. Reeds)

U.S. Coastguardsmen arrive at U.S. Naval Station Guantanamo Bay



U.S. Army South (Kaye Richey)

1st Caribbean Battalion, comprised of soldiers from Belize, Dominican Republic, and Jamaica, during Exercise *Tradewinds '04*

Colonel John A. Cope, USA (Ret.), is a Senior Research Fellow in the Institute for National Strategic Studies at the National Defense University.

at least 2,000 miles. The well-established North American Aerospace Defense Command (NORAD), collocated with USNORTHCOM, coordinates airspace warning and response while a new Bi-National Planning Group, which may be integrated into NORAD, guides preparations for contiguous land and maritime domains. The Canadian government recently formed a single operational military headquarters, Canada Command, to manage its armed forces' response to domestic emergencies and crises and to expedite defense collaboration with the United States.

Strategic cooperation on these three approaches benefits from several factors. The high comfort level found in U.S.-Canadian relations is most important. Both nations appreciate the global terrorist threat. Both have strong traditions of national and integrated defense planning and binational cooperation, although actual executive decisionmaking has never been tested by crisis. With common North Atlantic Treaty Organization experience, army and navy forces operate together with relative ease. Finally, both countries benefit from spatial depth in these approaches, which provides early warning and response time far from the U.S. and Canadian homelands.

The southern geographic approach to a distance roughly equal to the depth of Canada encompasses Mexico, the Caribbean archipelago, the mainland in Central America, and northern South America. This is a zone marked today by relatively weak democratic governance; violent crime; public forces unable to police their sovereign territory fully, resulting in porous borders, coastlines, and ungoverned spaces; and serious transnational problems (such as smuggling, weather, and environment) that threaten these countries as well as the United States. There are two main land, sea, and air corridors that originate in northern South America and run northwest to the United States.

The eastern corridor, primarily maritime and air, centers on the Caribbean archipelago and includes Cuba and the Bahamas. Its western counterpart, which also has a significant maritime dimension, links land and air routes across the Central American isthmus and into Mexico. Nations in both corridors face violent urban youth gangs and well-established, thriving criminal networks that traffic and smuggle commodities north and south. The most successful networks have handled narcotics for years, annually moving between 250 and 300 metric tons of cocaine north. A new problem is the potential collaboration among gangs, criminal networks, and terrorist organizations with global reach.

the United States cannot protect its southern approach alone, and Mexico must somehow play a role

Relations with Mexico

The United States and Mexico differ in many ways but have a land and sea frontier of over 2,000 miles. Mexico has come to know American military and economic power over the past 200 years, which it remembers with a national museum dedicated to foreign armed interventions. To borrow from William Faulkner, the past isn't dead in Mexico; it isn't even past.[4] Americans, on the other hand, until recently barely looked south and then focused on either a shared borderland or famous tourist sites, not on the country itself. Since 9/11, understanding and finding ways to work with Mexico, with its complexities and contradictions, have become matters of national security.

The regional trend toward political and economic convergence in the early 1990s, epitomized by the North American Free Trade Agreement, ended a long period of inertia and distrust and called for forced serious bilateral contact. The defense relationship that emerged is nonstandard and minimalist for the United States, characterized by few military-to-military contacts and low levels of military sales and assistance.[5] As a country that professes to have no enemies and adheres to a policy of nonintervention, Mexico shuns strategic alliances and internalizes the role of its military. There is an emphasis on civic action in the countryside, security of vital installations such as sea and air ports, disaster relief, and some law enforcement and antidrug operations. The country's longstanding sensitivities about sovereignty, respect, and the appearance of subordination can be seen with every thorny issue involving North Americans.

Over the last 10 years, both Mexico City and Washington have worked to overcome suspicions and to become open, pragmatic partners in security relations. At the national level, Mexican and U.S. law enforcement, immigration, and other agencies collaborate regularly in border administration, intelligence, and information-sharing on transnational crime networks and terrorism. In an unprecedented show of support in September 2005, the Mexican army and navy unexpectedly provided immediate assistance to victims of Hurricane Katrina.

Defense-to-defense contact, however, has progressed slowly, consistent with the Mexican government's policy goals and legal constraints. Organizational asymmetries in these relations often complicate cooperation. Three examples are instructive:

- Unlike DOD, Mexico's military is organized into two departments under the leadership of two cabinet-rank uniformed officers: the Secretary of National Defense, who is responsible for the army and air force, and the

Mexican marines and U.S. Sailors remove Hurricane Katrina debris in Mississippi

U.S. Navy (Chris Gethings)

Secretary of the Navy. The senior position, the Secretary of National Defense, is the counterpart not only of the U.S. Secretary of Defense but also the Chairman of the Joint Chiefs of Staff and the Secretaries and Chiefs of Staff of the Army and the Air Force.

- The Secretariat of National Defense engages the Office of the Secretary of Defense and the Joint Staff. There is no natural entry point into Mexico's defense establishment for a U.S. combatant command. Decisionmaking on military policy and operations is closed and controlled from Mexico City.
- The United States and Mexico do not share a common threat perception to national security. Washington concentrates on external adversaries, particularly terrorists. International criminal networks are a secondary concern. Mexico does not feel threatened in the same way; its focus is on dangers and challenges inside the country, such as domestic crime, drug and arms trafficking, and natural disasters. International terrorist activity is a secondary concern. This divergence of priorities also exists in Central American and Caribbean countries.

Complicating bilateral defense relations is Mexico's stereotype as "anti–national security." The government has not adapted the nationalistic tendencies that once served the country well to today's geopolitical and economic realities. Politicians are struggling to develop a framework for identifying and addressing the nation's security concerns. Many considerations are in opposition, such as traditional isolation versus cooperative efforts to secure its southern approach; the primacy of policy principles (sovereignty and nonintervention) over national interests; and safety of migrants before the concerns of international security cooperation.

There are two competing schools of thought on defense. The passive, standard approach advocates remaining isolated, doing what is politically acceptable to appease Washington, and acting as a "doorstep defense" of the border. The active approach argues that Mexico should think and act innovatively in expanding its security agenda, cooperating with neighbors, and improving the military's capacity to protect the approaches to the country.[6] Perhaps the next government will be less stereotypical.

The weight of history, nationalism, and concerns about subordination makes bilateral defense cooperation with Mexico, comparable to Canadian standards, difficult to envision. Good faith that the Mexican government will come around on defense arrangements misses the reality that, as Alan Riding noted, "underlying tensions [with the United States] are kept alive by Mexico's expectation that it will be treated unfairly. Its worst fears are confirmed with sufficient regularity for relations to remain clouded with suspicion and distrust."[7] Domestic calls in the United States to "fix the broken border," the rise of Minutemen organizations in several states, the Secure Border Initiative, and, most recently, passage in the House of Representative of the Sensenbrenner Bill, making illegal immigration a criminal offense, reinforce Mexico's fear that it will be subordinated in defense relations.[8]

The Challenge

While today's defense relationship with Mexico is friendly, correct, and developing, protection of the southern approach to U.S. territory cannot be anchored on one country, particularly one that is reluctant to engage as a partner in defense against terrorists. Is there another organizing construct, unique to the southern flank, that includes Mexico and can accomplish the mission? Embedded in this question are three issues that bear directly on how the United States might answer the challenge: the definition of the *southern approach*, differences in threat perceptions, and the condition of defense and police cooperation within the zone.

Southern Approach. To improve early warning of threats and maximize space and time considerations at least equivalent to the distances in the other three approaches (up to 2,000 miles), the design of this defense-in-depth must encompass the Caribbean Sea and its border areas, including Mexico, the Central American and Caribbean nations, Colombia, and Venezuela. It is important that this sector be viewed as a geostrategic whole rather than a collection of bilateral relationships. A holistic view draws attention to important considerations, such as lines of communication used by criminal networks, geography's influence on sea and air control, and the nature of political relationships. This view also facilitates the integration of operations by the Coast Guard and other U.S. agencies. This definition of the southern approach reflects the legacy of Admiral Alfred Thayer Mahan and his emphasis on the zone's role in securing U.S. interests and the "Battle of the Caribbean" in World War II, which were buried by the Cold War's East-West mindset. For over 50 years, the Defense Department has divided operational responsibility for this geographic zone between at least two combatant commands.[9]

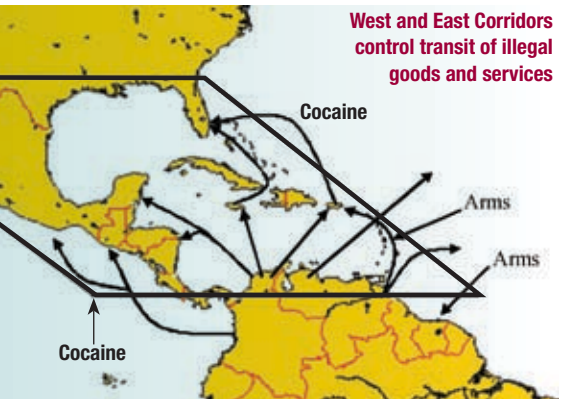
Threat Perceptions. Since 9/11, Washington has tried to achieve a common threat picture in the region based on international terrorism. While neighbors are willing to share terrorist-related information and adopt new transportation security procedures, they have resisted adopting the U.S. perspective. Their immediate concerns include persistent domestic violence and activities of criminal networks, particularly in Mexico. This impasse can be overcome by accepting and acting on the correlation between the two threat perceptions. Proceeds from transnational crime are known to support terrorist organizations, and their members exploit the lines of flow used by traffickers. If countries in the zone improve public safety and the capacity to control, diminish, and, ideally, end the scourge of trafficking and smuggling networks, U.S. vulnerability to terrorists eager to take advantage of ungoverned space and local instability decreases. This avenue to the United States becomes unreliable and hard to use. Protecting the southern approach against terrorists is predicated on greater attention to the fight against drug trafficking and other forms of transnational crime.

Defense and Police Cooperation. Central American and Caribbean nations are taking hold of their security challenges and increasing their cooperation. Military rivalries between and among neighbors are largely over, even though a few border disputes remain unresolved. Subregional political and economic linkages under the Central American Free Trade Agreement, the Caribbean Community, and Mexico's Plan Puebla-Panama (to develop economic infrastructure along the isthmus) have forced civilian and military leaders to recognize that countries cannot answer today's challenges alone. Neighbors have to strengthen their ability to work together in multiple areas. Mechanisms for military cooperation, such as the Conference of Central American Armed Forces (CFAC) and the Eastern Caribbean Regional Security System (RSS), link some countries in subregions, but not all. An association of Caribbean chiefs of police performs a similar role. Mexico and Guatemala have signed several accords that promote border integration. The Departments of Defense and Homeland Security play a low-key role in nurturing home-grown efforts to address

disaster response, peacekeeping, and other security challenges, as well as in encouraging the expansion of interstate cooperation within and outside subregions. While much remains to be done to protect Central American and Caribbean nations, the steady growth of their security cooperation is creating building blocks in the defense of the southern approach to U.S. territory.

A Prescription

An American "Maginot Line" spanning the southern frontier may be attractive to some, but it is simply not an option. Early warning and defense must commence at a safe distance from the homeland. The United States cannot conduct such a defense alone, although it has tried in the past. Thus far, defense-to-defense relations have focused only on Mexico, which, to avoid U.S. domination, has rejected integration into U.S. Northern Command's and NORAD's operational structure and planning regime. To ensure a strong defense and to involve Mexico, DOD should visualize the mission differently.



First, though, we must be clear as to why the United States wants to engage Mexico. There are two primary reasons. The first deals with coordinating response preparations for shared disasters (consequence management) in the general area of the U.S.-Mexico border. This concern involves a separate set of actors and considerations, which has its own dynamic. Mexican military support after Hurricane Katrina is a building block. The second reason is protection of the southern approach.

Instead of trying to integrate Mexico into the U.S. scheme, the alternative concept sees the United States working with neighboring states to address shared concerns. In this concept, Washington encourages and participates in the development of a Caribbean Basin Security Partnership. This provides the legal basis for a separate and "locally owned" land, maritime, and air surveillance and response system covering both geographic corridors and the Caribbean Sea. A notional "Mexico–Caribbean Basin Surveillance System," based in and led by Mexico and staffed by the military, police, and intelligence officers from participating countries, would collaborate closely with NORAD as an equal command and with other U.S. information-oriented entities.

This organizing construct brings together four elements not currently in DOD thinking about protecting the southern geographic approach to the homeland:

- The United States must comprehend its vulnerability in terms of a united geopolitical zone that encompasses the Caribbean Sea and its border areas rather than focusing on Mexico.
- There must be recognition of the direct correlation between countering entrenched and vibrant trafficking and smuggling networks and other forms of transnational crime and countering terrorists in organizing the defense of this sector. The center of gravity will remain drugs from Colombia.
- Central American and Caribbean confidence-building initiatives must be used as conceptual building blocks that foster bilateral and multilateral military and police cooperation. Neighbors have made considerable progress in the area of disaster preparedness. DOD also has sponsored programs that have reinforced the mindset and ability to cooperate regionally.
- It must be appreciated that states in the circum-Caribbean would prefer an active, layered defense of their geographic approaches over today's "doorstep" thinking. Mexico's geographic approaches, for instance, are particularly vulnerable. This strategic concept never developed because neighbors were not trusted. A zero-sum competitive mindset made defense-in-depth unimaginable. Secondarily, nations lacked sufficient military resources. This mindset is fading. Today, it is possible to envision a series of interdependent homeland (*la patria*) defenses in the eastern and western corridors.

The mission of the proposed Mexico–Caribbean Basin Surveillance System is to assist member states in two ways: exercising control over their maritime and air domains and coordinating interdictions of illicit goods, services, and people transiting north or south. Governments are responsible for what occurs in their territory, including control of the land domain. The combined headquarters, located in Mexico, would have planning and operational functions. Planning would encompass assessing the cohesion and interoperability of national civil and military radar surveillance systems, recommending ways to tighten seams and fill gaps in maritime and air coverage to improve integration, standardizing procedures across the zone, and making interstate coordination more efficient and effective. The operational function would rapidly assess and share information and orchestrate, as required, the response of one or more countries, perhaps through the CFAC and RSS. The headquarters also works closely with agencies in Colombia and the United States, including NORAD, the Joint Interagency Task Force–South in Key West, and the Coast Guard.

Consequences

The above prescription offers a realistic and timely concept for protecting the southern approach to U.S. territory, but the concept will take time to expound to neighbors and stand up. The trends toward increased Central American military and Caribbean police cooperation and successful CFAC efforts to organize a Central American disaster response capability, with U.S. support, are encouraging steps in this direction. Preparations for the 2007 World Cricket Cup, which will be held in seven Caribbean countries, offer an excellent opportunity to introduce infrastructure and cooperative procedures for the future. The U.S. Government already has assisted with funding for computers that can link with the International Criminal Police Organization and national police intelligence agencies. Both Central American and Caribbean security collaborations have been home grown, and the low-key and focused U.S. approach to assisting them has been effective.

The Department of Defense recognizes that implementation of its global strategy will need time and funding to transform thinking, introduce new technologies, and train and equip forces. It projects a 10-year timeframe and devotes a section of the document to improving "international partnership capacity and defense-to-defense relations." The prescription is in line with the DOD position that "homeland defense will be substantially strengthened through the cooperation and assistance of allies. In turn, our allies can better protect their homelands if we help

U.S. Navy security detachment transiting Panama Canal

Fleet Combat Camera Group, Pacific (David A. Levy)

them build capacity for homeland defense and civil support."[10]

DOD could take three actions in the near term to help create the necessary atmosphere to move the prescription forward:

Relations with Mexico. DOD placed Mexico in USNORTHCOM's area of responsibility for good reasons. In particular, this placement facilitates planning for consequence management along the U.S.-Mexico border. Supporting efforts to work with countries in the area of Mexico, the Caribbean archipelago, the mainland in Central America, and northern South America, however, is the purview of U.S. Southern Command, which is precluded from direct engagement with Mexico. A better arrangement would be the original approach of keeping Mexico unassigned, making it the responsibility of the Joint Staff. That would please both Mexico's secretary of national defense and secretary of the navy since they see the Joint Staff as their preferred interlocutor. The Joint Staff, with Mexico's understanding, would work through either combatant command as required.

Airspace Management. The Air Force recently initiated a program to create an integrated air defense system throughout Latin America, similar to the program started in Eastern Europe after the Cold War. The goals are to modernize airspace management and improve safety through a continuous air picture, updated with real-time flight track and flight plan data using civil and military resources, and to increase regional cooperation and interoperability. If given a higher priority and dedicated resources, this timely initiative could make a significant contribution to the creation of the Mexico–Caribbean Basin Surveillance System.

Secure Communication. An important element in furthering bilateral and multilateral security cooperation is interoperable means for protected communication. A major step in this direction is U.S. Southern Command's multinational information-sharing systems. In particular, the Cooperating Nation Information Exchange System uses computers on a protected network to enable two-way exchange on sea and air radar tracks between selected operations centers and the Joint Interagency Task Force–South. The Mexican navy already participates in this counterdrug-related system.

The lament is often heard that the United States does not have a security strategy for Latin America and the Caribbean. Just as frequently, neighbors in those regions complain that Americans do not consider their security concerns. The prescription presented here does both but in an unconventional way, recognizing that interdependence already exists between the United States, Mexico, and the other countries in the zone. The central idea is that a Mexico reluctant to embrace U.S.-Canadian security arrangements is a weak part of a layered defense of the U.S. southern flank. However, a Mexico that has a leading role in its *own* layered defense, in collaboration with Latin American and Caribbean states facing similar challenges, can be a strong force in executing a defense-in-depth. The right collaboration can be a powerful tool in achieving optimal solutions. To the extent that the concept of a Mexico–Caribbean Basin Surveillance System can be created over time, the United States will be increasingly safe. Americans will not be secure until their southern neighbors are secure. **JFQ**

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NOTES

[1] Full capacity to implement the strategy is to be developed over a 10-year period.

[2] The strategy says that, even though DOD is concerned with homeland defense, the primary mission of the Department of Homeland Security is to prevent terrorist attacks within the United States and that the Attorney General and the Department of Justice lead the Nation's law enforcement effort to detect, prevent, and investigate terrorist activity within the country.

[3] In geographic scope, the continental United States has 5,525 miles of land border with Canada and 1,989 miles with Mexico. The maritime frontier includes roughly 95,000 miles of shoreline. As an example of the volume of commerce that transits the approaches, on the order of 7,500 foreign ships enter U.S. ports every year to off-load approximately 6 million truck-size cargo containers onto U.S. docks. See U.S. Coast Guard, *Maritime Strategy for Homeland Security* (Washington, DC: U.S. Coast Guard, December 2002), 7, 19.

[4] Tim Weiner, "Mexico City Journal: Of Gringos and Old Grudges: This Land Is Their Land," *The New York Times*, January 9, 2004.

[5] Of Mexico's military services, the navy (*Marina*) is the most active, working primarily with the U.S. Coast Guard to block narcotics and other smuggling activities. It has purchased numerous U.S. excess defense articles. *Marina* has contact with the Joint Interagency Task Force–South in Key West on narcotics issues and with USNORTHCOM.

[6] Raúl Benítez-Manuat, *Mexico and the New Challenges of Hemispheric Security* (Washington, DC: Woodrow Wilson International Center for Scholars, 2004); Oscar Rocha, "Mexico-U.S. Defense Relations," address delivered to "The Caribbean Sea and Its Border Areas in U.S. Homeland Defense," a workshop at the Institute for National Strategic Studies, National Defense University, Washington, DC, August 16, 2005.

[7] Alan Riding, *Distant Neighbors: A Portrait of the Mexicans* (New York: Knopf, 1985), 317.

[8] As an example, in late 2005, the United States halted military assistance, such as counterterrorism equipment and training, because of a dispute over whether U.S. citizens should be exempted from prosecution by the International Criminal Court. To evade sanctions under U.S. law, countries have the option of signing an immunity agreement to shield Americans from the court's jurisdiction. Mexico has no plans to do this.

[9] During the Cold War, responsibility for the Caribbean Sea and its border areas was divided between U.S. Atlantic Command and U.S. Southern Command. Mexico was one of three unassigned countries (with Canada and the Soviet Union) and the responsibility of the Joint Staff. For a different set of strategic reasons, the zone now is divided between U.S. Southern Command and U.S. Northern Command.

[10] Department of Defense, *Strategy for Homeland Defense and Civil Support* (Washington, DC, June 2005), 33–34.

The State Partnership Program
Vision to Reality

By PABLO PAGAN

Major Pablo Pagan, AGR, is a member of the Puerto Rican Army National Guard and is the State Partnership Program Coordinator for U.S. Southern Command.

In October 2005, forces from U.S. Southern Command (USSOUTHCOM) traveled to Guatemala City, Guatemala, to support local authorities inspecting damage from Hurricane Stan. The command deployed a 58-person disaster response team and 8 helicopters to the Central American nation as part of relief efforts. Among this team, and among those back in the United States facilitating the recovery assistance programs, were troops whose professional skills and long affiliation with Guatemala's military, civilian, and business leadership proved invaluable in helping the disaster-stricken region. They were members of the Arkansas National Guard helping their colleagues under the auspices of an international security cooperation effort known as the State Partnership Program (SPP).

U.S. Army medics arriving in San Isidro, El Salvador, Exercise *New Horizons* 2005

1st Combat Camera Squadron (John M. Foster)

Bridge to Guatemala City after Hurricane Stan, October 2005

Fleet Combat Camera, Atlantic (Robert McPill)

perhaps the most flexible instrument in the command's security cooperation tool chest is the National Guard's State Partnership Program

Unlike other combatant commands, USSOUTHCOM is not currently engaged in combat operations. Its daily threats and challenges, however, are no less significant to the security of the Nation or its allies. These issues, and the approaches to solving them, can be more subtle and complex than combat, and they must be confronted in an atmosphere often marred by poverty, inequality, and corruption.

With only 0.4 percent of the defense budget, USSOUTHCOM must use its limited resources creatively to accomplish its mission of conducting military operations and promoting security cooperation to support U.S. strategic objectives in Latin America and the Caribbean. Its tools are primarily those of engagement. As a vehicle that allows for military-to-military, military-to-civilian, and civilian-to-civilian interface, perhaps the most flexible instrument in the command's security cooperation tool chest is the National Guard's SPP.

Area of Responsibility

U.S. Southern Command is the unified command responsible for all U.S. military activities on the land mass of Latin America south of Mexico; the waters adjacent to Central and South America; the Caribbean Sea, with its 13 island nations and European and U.S. territories; the Gulf of Mexico; and a portion of the Atlantic Ocean. Its area of responsibility (AOR) encompasses 32 countries (19 in Central and South America and 13 in the Caribbean) and covers 14.5 million square miles. The region represents about one-sixth of the land mass assigned to regional unified commands.

Although many nations in the AOR experienced violent internal conflict and high levels of human rights abuse in the second half of the last century, since the 1990s, all but one have adopted democratic forms of government and are working to strengthen democratic institutions, civil society, and political parties.

Nonetheless, their military and security forces face grave challenges to their ability to protect citizens from street crime, gangs, international terrorism, transnational crime, attacks by illegal armed groups, and other forms of violence, while continuing to respect and protect the civil liberties and basic freedoms on which their democracies are based. Military forces, in particular, are increasingly called on by civilian governments to perform nontraditional missions, such as supporting police and other security forces in law enforcement missions, disaster relief, humanitarian assistance, counterdrug and counterterrorism missions, environmental protection, and peacekeeping and peace support missions, all of which bring the military into close contact with civilian populations.

Command Vision and Theater Security Cooperation Strategy

The USSOUTHCOM vision is to be the recognized partner of choice and center of excellence for regional security affairs within a hemisphere of escalating importance by supporting defense of the homeland and achieving regional partnerships that:

- promote democratic values and principles
- respect human rights
- secure territories and defend borders
- ensure regional and hemispheric security
- deter, dissuade, and defeat transnational threats to regional stability.

Meeting this vision requires that the command work with the U.S. Ambassadors and their country teams in the area in support of their individual country plans. The command depends on strong relationships with the country teams to integrate interagency objectives into its operations.

The command's theater strategy—derived directly from the President's national security strategy—is based on promoting regional security and stability among partner democracies. The command supports U.S. interests in four principal ways:

- building regional cooperative security
- developing military roles and missions for the 21st century
- supporting the national counterdrug strategy
- restructuring USSOUTHCOM for the future.

Besides the ever-present resource challenge, meeting the vision requires that efforts have appropriate breadth and continuity, traditionally weak points in a military-oriented approach. In the former case, uniformed military personnel may lack access (by law, custom, or opportunity) to law enforcement, civil government, or private sector contacts, limiting the scope of their activities. Regarding continuity, the typical 3-year tour of duty for regular military personnel assigned to a combatant command or shorter terms characteristic of downrange assignments are limiting factors.

Breadth, Continuity, and the National Guard

One way to address the breadth and continuity issues leverages the unique civil-military status of the National Guard. Alone among Total Force components, the Guard has the flexibility to engage partner nations on a military-to-military, military-to-civilian, and civilian-to-civilian basis. While enjoying

this unparalleled access to key sectors of partner nations, Guard members also demonstrate the professionalism and cost-effectiveness of the Total Force concept and the Reserve components, share experiences and skills gained through their civilian professions, and build personal and professional links among all participants.

The effectiveness and professional links of these personnel are magnified by the continuity and predictability inherent in the National Guard. Not bound to the typical 24- to 36-month tour, Guard personnel may remain in a position significantly longer. Even if key individuals are reassigned, they typically remain within the same state organization and are a source of institutional memory.

The State Partnership Program

The United States has faced similar challenges before. Following the disestablishment of the Soviet Union and the collapse of the Warsaw Pact, America was eager to engage the militaries of Central and Eastern Europe in cooperative efforts to confront the emerging threats and opportunities of the post–Cold War world. However, it required supreme delicacy to not upset fragile democracies or send a provocative signal to the new Russian Federation.

The State Partnership Program advances national security policy through constructive military associations with countries in a nonconfrontational setting. Within the context of these relationships, a range of military, civil-military, and civil activities are conducted in support of mutual national interests. The partner nation has access to the National Guard's military capabilities and other government and civil institutions such as business organizations, fire and police departments, and universities. SPP is fully integrated into the Theater Security Cooperation (TSC) strategy, and its activities support TSC objectives and priorities and thus national policies and interests.

As a tool for security cooperation, SPP builds military-to-military relationships, helps develop partner nation security force capabilities and professionalism, promotes the exchange of information, and affords U.S. forces opportunities to train with potential coalition partners in peacetime and contingency environments. Each program is tailored to meet the needs of the host country as well as U.S. strategic goals and interests. Through these activities, the SPP illustrates the value of military subordination to civilian authority, assists in the development of democratic institutions, fosters open market economies to bring stability, and projects U.S. humanitarian values.

the partner nation has access to the National Guard's military capabilities and other government and civil institutions

Since 1994, the SPP has grown from a regional initiative to a global presence. There are currently 50 partnerships worldwide and 17 SPP pairings within the USSOUTHCOM area of responsibility (see table). Florida is paired with both Guyana and Venezuela; however, no events have been executed in Venezuela in the last 2 years due to the current political situation there.

State	Partner Nation
Arkansas	Guatemala
Connecticut	Uruguay
Delaware	Trinidad and Tobago
District of Columbia	Jamaica
Florida	Guyana, Venezuela
Kentucky	Ecuador
Louisiana	Belize
New Hampshire	El Salvador
Massachusetts	Paraguay
Mississippi	Bolivia
Missouri	Panama
Puerto Rico	Dominican Republic, Honduras
Rhode Island	Bahamas
West Virginia	Peru
Wisconsin	Nicaragua

SPP Activities

The Arkansas-Guatemala Success. In the aftermath of Hurricane Stan in October 2005, Soldiers of the Arkansas National Guard helped conduct a week-long assessment of Guatemala's hardest-hit regions to address critical short-term relief and long-term recovery. But cooperation had been building since 2002, when the Arkansas-Guatemala SPP relationship began. Following an initial exchange of visits, the partners launched a series of joint projects emphasizing humanitarian assistance and disaster relief. Guatemalan military and civilian personnel shared experiences and techniques with their National Guard counterparts, the Arkansas Department of Emergency Management, the State Police, and other law enforcement and public service agencies. When disaster struck, the knowledge and relationships were in place.

Pre-Stan instances of cooperation between Guatemalans and Arkansans paying off include an elementary school, built in 2004 in part by Arkansas Guard troops, which provided civil engineering training for the Americans and a needed facility for over 140 students. The school was equipped with the help of the North Little Rock Chamber of Commerce. A Guatemalan highway safety initiative modeled after an Arkansas program is already helping motorists. Civilian efforts are multiplying as well. Heifer International, an Arkansas-based global nonprofit organization promoting self-sustaining efforts to ease hunger and poverty, is working with Guatemalan farmers on agricultural and economic development projects.

Mississippi and Bolivian Civil Defense. Since 1999, Bolivia and Mississippi have worked together to hone emergency response skills. When Hurricane Katrina struck the U.S. Gulf Coast, the Mississippi National Guard was called on to put those skills to practice. Their colleagues from the Bolivian Civil Defense Agency, armed with hard-earned experience from dealing with their country's torrential rainy seasons, traveled to Mississippi to offer support and further cement their relationship.

Wisconsin Support to Nicaraguan Police and Firefighters. When Milwaukee found itself with a surplus bomb squad emergency response vehicle, the SPP facilitated its use. The Wisconsin National Guard coordinated its donation and delivery to the Nicaraguan Police Anti-Terrorist Unit, where it will provide a much-needed capability. Links between public service agencies provided several fire trucks and ambulances now used by the Managua Fire Department. Other cooperative efforts cover areas such as humanitarian demining, emergency management, airport security, and urban search and rescue.

Louisiana-Belize Emergency Response and Search/Rescue Activities. Louisiana's SPP was established in 1996 with two partner nations,

Belize and Uzbekistan. The Louisiana Army and Air Guard have executed over 100 SPP events since then. As with many SPP relationships, there is great mutual interest in emergency management, and state authorities have forged strong links with the Belize National Emergency Management Organization and associated local public safety organizations.

During 2003, Louisiana hosted the International Workshop for Emergency Response, a joint, multilateral planning and response gathering that used demonstrations and hands-on exercises to show how local and state agencies react to industrial disasters. Besides their Belize Defence Force and Uzbek counterparts, the workshop was attended by representatives from Afghanistan, Kazakhstan, Kyrgyzstan, Pakistan, Tajikistan, Uzbekistan, and several West Indies nations.

The Louisiana-Belize program has also focused on search/rescue and law enforcement professional development. Subject matter expert exchanges have paid great dividends to both sides. In one exchange, a search/rescue exercise in Belize yielded a bonus when the mock mission led to salvaging a potentially repairable aircraft.

New Hampshire and El Salvador. Shortly after New Hampshire and El Salvador began their SPP relationship, two powerful earthquakes struck the Central American nation. Over 100 people were killed, and 1.3 million were displaced or left homeless—approximately 300,000 more than the population of New Hampshire. The skill and professionalism of the Salvadoran military saved the day and left an indelible impression on their U.S. colleagues. Their deft command and control sped vital aid where it was most needed and helped save lives. Today, New Hampshire and El Salvador average five major SPP events annually, with emphasis on not only military topics but also business development and academic exchanges.

Missouri-Panama. Missouri's relationship with Panama comfortably predates their 1996 entry into the SPP. Since 1935, when Southeast Missouri State University adopted Panama as a sister state, the Missouri public university system has been linked to Panamanian counterparts. While the formal military relations are somewhat more recent, they are certainly significant.

Beginning in 1985, Exercise *Blazing Trails*, an engineer readiness drill, saw 9,500 troops constructing or repairing 42 kilometers of road over a 6-month period. Since then, Missouri Guard members have participated in constructing or repairing over 200 kilometers of roads, 7 bridges, 27 schools, and 14 clinics in addition to drilling 13 wells.

GEN Peter A. Schoomaker, USA, speaks to Conference of American Armies in Buenos Aires

U.S. Army South (Kaye Richey)

Today, the bonds between Missouri and Panama reach far beyond those initial military links. On a recent trip to Panama City, Lieutenant Governor Peter Kinder led a 16-person delegation to assess and expand the pair's health, agriculture, economic, public safety, and higher education ties.

subject matter expert exchanges have paid great dividends to both sides

The Road Ahead

As the above examples illustrate, SPP activities focus the attention and resources of a very small part of the Department of Defense—a state National Guard—with a single country in support of shared U.S. and partner nation objectives. This concentrated focus allows for the development of long-term institutional relationships, lasting personal relationships, and a mechanism to catalyze a broad and expanding base of support from outside the Defense Department—in particular, state/local governments and private industry.

The criteria for a successful SPP partnership are few. First, shared U.S. and partner nation objectives must be identified and programs tailored to address them. Second, both the partner nation and U.S. state must be committed to a long-term relationship. Third, the association must incorporate nonmilitary actors at every level. Finally, activities must require minimal resources beyond those the participants would devote to the effort acting independently.

In the war on terror, the United States has been forced to adapt to meet the new and unique demands posed by a nontraditional, amorphous enemy. The world situation has driven us toward cooperating with other nations at an unprecedented level and utilizing all instruments of national power. Successful cooperation is built on a foundation of mutual understanding, trust, and respect. In this context, it is significant that the four Western Hemisphere countries that joined the U.S.-led coalition in Operation *Iraqi Freedom*—the Dominican Republic, El Salvador, Honduras, and Nicaragua—are SPP participants.

Besides the challenges posed by the war on terror, the nations of the hemisphere face a range of concerns—including transnational crime, internal threats to democracy and the rule of law, natural disasters, and mass migration—whose solutions lie outside the traditional boundaries of a purely military approach. To address these issues, USSOUTHCOM's ambitious vision and theater strategy need the backing of flexible and powerful tools. The State Partnership Program is one such tool. **JFQ**

JIATF–South

Blueprint for Success

By RICHARD M. YEATMAN

Over the last 17 years, the Joint Interagency Task Force–South (JIATF–S) has built an unparalleled network of law enforcement, intelligence, and military assets to focus on detecting the movements and shipments of narcoterrorist organizations. With this evolving structure, JIATF–S serves as a model for bringing the most effective assets to bear on complex national policy issues, whether it be illegal drugs, weapons proliferation, or international terrorism.

Fundamental to any task force is a clear mission statement. If the statement, and thus the mission itself, lacks specific goals, agencies may be reluctant to participate for fear they have little to gain. Therefore, JIATF–S must target specific missions and clearly define their objectives, to include detecting, monitoring, and targeting narcoterrorists and the drugs they profit from. Since law enforcement agencies have a vested interest in achieving these objectives, the application of an interagency partnership has been successful.

Integration Promotes Trust

JIATF–S serves as a model that other interagency organizations can tailor to their specific goals. For example, an interagency effort to track military equipment destined for terrorist organizations could include individuals from the Bureau of Alcohol, Tobacco, and Firearms, Department of Defense (DOD), Department of Homeland Security, and Federal Bureau of Investigation (FBI).

For task force participants to feel connected to results, they must be part of the command. Within the JIATF–S organizational structure, representatives from DOD, Homeland Security, and the Justice Department, along with U.S. Intelligence Community liaisons and international partners, work as one team. Interagency personnel are fully integrated within the command structure and serve in key leadership positions. This integration promotes trust and facilitates the sharing of law enforcement investigative information, which is critical for any intelligence-driven organization.

While traditional joint operations focus on efforts among the Army, Navy, Marines, and Air Force, JIATF–S has gone past these traditional boundaries, becoming a fully integrated interagency command.[1] Whereas most organizations count on liaison officers to represent them, JIATF–S takes this concept much further. The top command structure demonstrates total integration, with the Director being a Coast Guard rear admiral and the Vice Director coming from Customs and Border Protection (CBP). Integration also exists through the lower levels of the command: both the Directors for Intelligence and Operations are military officers, but their Deputies are from the Drug Enforcement Agency (DEA) and Customs and Border Protection. Intelligence analysts from the DEA, CBP, and FBI are located in the Joint Intelligence Operations Center to ensure that law enforcement agencies are involved in daily operations and that information is not stovepiped.

for task force participants to feel connected to results, they must be part of the command

On the operations watch floor, it is not uncommon to see a CBP agent serving as command duty officer, an Air Force captain as the intelligence watch officer, a Coast Guard operations specialist as the intelligence watch assistant, and a Navy lieutenant as the tactical action officer. This diversity of skills boosts the credibility of the organization. For instance, if DEA agents have concerns about sharing sensitive information with allied military partners, they have a certain level of confidence that the DEA Deputy Director for Intelligence will understand those concerns.

JIATF–S incorporates a wide range of governmental and international organizations in addition to those previously mentioned. The National Geospatial-Intelligence Agency (NGA), Defense Intelligence Agency (DIA), Central Intelligence Agency, and liaison officers from the United Kingdom, France, the Netherlands, Spain, and a host of Latin American countries all play an important role in intelligence, operations, and planning. They not only increase the task Force's access to information, but they also act as conduits between it and their respective nations' maritime and air assets. Under a single command, these entities produce a unity of effort that is one of the many reasons why JIATF–S continues to enjoy success. While all work toward the common goal of stopping illegal narcotics destined for global markets, the metrics for success differ greatly among the organizations that contribute to the task force.

The primary metric for DOD is the amount of drugs seized, while the law enforcement community closely follows the number of arrests and prosecutions. These different but complementary objectives could raise disputes in a traditional joint organization, but JIATF–S has overcome this issue by recognizing and facilitating the success of all relevant metrics. Such is the key to unity of effort within JIATF–S. Each member relies on the contribution of others. Without the aircraft provided by Customs and Border Protection or the ships and cutters provided by the Navy and the Coast Guard, the task force would be unable to conduct critical detection and monitoring operations necessary for interdictions

Lieutenant Richard M. Yeatman, USN, is an Instructor at the Navy and Marine Corps Intelligence Training Center.

only by working with each other can all parties meet their respective organizations' goals

and arrests. Equally important is the human intelligence information that allows JIATF–S to position its limited assets throughout its 42 million–square–mile joint operating area—5 times larger than the United States—to conduct interdictions. If the law enforcement community limits the flow of information to the interdiction assets, they will be unable to make arrests. If the interdiction assets refuse to react to law enforcement information, they will fail to make seizures. Only by working with each other can all parties meet their respective organizations' goals.

Diversity of experience can have its pitfalls, too, and overcoming them is not an overnight achievement. Productive interpersonal relationships are a major contributing factor to JIATF–S's ability to overcome many challenges. Sixteen years of continuous operations have allowed the task force to work through many of the issues that arise when numerous agencies and allies work together. This experience is crucial for those who wish to apply the JIATF–S concept of operations to other problem sets. Planners must have a realistic timetable in place and allow the system to develop.

The Basic Building Block

Joint and JIATF organizations should be aware of the task Force's process for targeting and interdicting highly mobile, constantly evolving targets. Within JIATF-S, the process relies on fused intelligence. The basic building block is information provided by either law enforcement agencies or tactical analysis teams who work within U.S. Embassies in-country. JIATF–S also assigns liaison officers to many law enforcement operations. All help to develop the finest interagency information in order to position the finite assets available to the task force. The information collected, processed, and disseminated acts as the initial cueing to the organization that a narcotics shipment will begin a transit to global markets. Law enforcement agency members pass this information to other members of JIATF–S, such as DIA or NGA, for further development.

Again, human intelligence serves as the basic building block for most information at JIATF–S. The vast majority is derived from law enforcement sources. Analysts add other sources of intelligence to build analyses and greater depth. Once individuals analyze and fuse the information, they pass it over to operators, who apportion assets to the threat. On any given day, the JIATF–S intelligence directorate presents more intelligence-derived targets than the operations arm has assets to prosecute. Therefore, it is critical to sift through the myriad of targets and present those that have the greatest probability of ending in a seizure. Adjustments are made to this method of targeting 24 hours a day, 365 days a year.

Recent operational examples highlight the process. British law enforcement authorities, in one case, developed a confidential informant whose information and subsequent wiretaps led to the realization that an impending narcotics operation was occurring. This shipment was en route from the eastern Caribbean for distribution to European markets. On receipt of this intelligence, JIATF–S detected and tracked the movement of the suspect vessel across the Atlantic via electronic intelligence. Meanwhile, the French navy liaison officer assigned to the task force coordinated affairs from the watch floor. British human intelligence had led to surveillance and tracking by JIATF–S to an intercept of more than two metric tons of cocaine by French operational forces near the Cape Verde Islands.

A second example also began with human intelligence. Developed information suggested an impending drug flight from Colombia to northern Central America or southern Mexico. Alerted Colombian radar operators detected a suspect air target, which led to an intercept by Colombian air forces. As the suspect target was already deep in international air space, the visual identification, tail number, and locating information were passed to JIATF–S, which subsequently reacquired the air target with over-the-horizon radar. The track of the suspect air target was passed to the operation centers of cooperating nations. Simultaneously, flight clearances for cross-border penetrations and end-game responses were coordinated. In this case, U.S. CBP and Belizean aircraft launched. More notably, U.S. military helicopters from Joint Task Force–Bravo transported a combined Guatemalan and DEA tactical response team to the observed landing area where arrests and drug seizures were made— inside Guatemala on a target that launched in Colombia and passed through Belize.

Since JIATF–S is a DOD command, it cannot conduct law enforcement operations. Detected and monitored targets are handed off to partner nation authorities or to U.S. law enforcement entities, typically the U.S. Coast Guard at sea, for endgame arrests, seizures, and evidence collection. In many organizations, this process would cause a loss of continuity, impacting operations. However, because JIATF–S works so closely with U.S. law enforcement agencies and international partners, the handoff happens with little or no disruption.

Arrests, not drugs on the table, are what continue the vital flow of human intelligence information. Therefore, by helping law enforcement meet their metrics, JIATF–S also benefits. Arrests and prosecutions often open new sources of information that allow interdiction of more narcotics, thus enabling JIATF–S to meet its own metrics for success. Future joint operations should arrange the same type of interagency continuum to promote success and allow growth and adaptation to a constantly changing environment.

The JIATF–S model expands joint operations into combined and interagency operations to accomplish common goals. If organizations want to engage highly mobile threats against both homeland defense and homeland security targets, they must go beyond purely joint operations and adopt this successful model. **JFQ**

British human intelligence led to surveillance and tracking by JIATF–S to an intercept of cocaine by French operational forces near the Cape Verde Islands

NOTES

[1] See Christopher L. Naler, "Are We Ready for an Interagency Combatant Command?" *Joint Force Quarterly* 41 (April 2006), 26–31.

Transporting medical supplies to readiness exercise in Comayagua, Honduras

U.S. Army South (Miguel A. Negron)

JTF–Bravo and Disaster Relief

Soldier discusses medical issues with Guatemalans after Hurricane Stan

Fleet Combat Camera, Atlantic (Robert McRill)

By EDMUND WOOLFOLK *and* JAMES MARSHALL

Colonel Edmund Woolfolk, USA, is Commander of Joint Task Force–Bravo. Lieutenant Colonel James Marshall, USA, is Deputy Director of Public Affairs for USSOUTHCOM.

Natural disasters can be difficult to forecast and vary greatly in magnitude. Central American hurricanes and tropical storms, however, can be all too predictable and devastating. The 2005 Atlantic hurricane season will forever be infamous for the ruin and fatalities it brought to the U.S. Gulf Coast, but it also wrought destruction and loss of life in several Central American countries, which sparked a coordinated U.S. Government relief effort. One of the most responsive elements came from the U.S. Southern Command (USSOUTHCOM) Joint Task Force (JTF)–Bravo, located at Soto Cano Air Base, Honduras. This joint task force's unique combination of mission, location, and means gives it a quick disaster relief response capability in this storm-stricken region.

Unique Capabilities

JTF–Bravo was established in August 1984 to exercise command and control of U.S. forces and exercises within the Republic of Honduras. As the political-military situation in Honduras and the region changed over the years, its mission transformed to include conducting humanitarian assistance and disaster relief, personnel recovery, counternarcotics and counterterrorism operations, and noncombatant evacuation. Located on an 8,000-foot, C–5–capable airfield, the JTF has Army and Air Force contingents, an Army General Support (composite) Aviation Battalion (1–228th AV), a medical element, and a joint security force for an assigned strength of over 550. It is also the most forward U.S. military presence within the USSOUTHCOM area of responsibility.

The Atlantic hurricane season runs from June through November, producing a range of tropical weather events from depressions, which deliver heavy rains, to increasingly dangerous tropical disturbances and hurricanes. Each season, Central America bears the fury of storms that kill and displace people and damage and destroy housing, buildings, and infrastructure. Hurricane Mitch left thousands dead and caused billions of dollars in damage in 1998. While Central American nations have done much to prepare, to include establishing emergency operations centers and stockpiling supplies, the immediate aftermath of a hurricane can paralyze even a robust relief network. In fall 2005, JTF–Bravo rapidly deployed skilled teams with helicopter support to provide emergency

relief in response to Hurricane Stan in Guatemala and Tropical Storms Beta and Gamma in Honduras. How the joint task force responded to Hurricane Stan became a model for dealing with the two tropical storms.

Hurricane Stan devastated an already saturated landscape in Guatemala. A mudslide buried Santiago Atitlan, a town in the west central region, which triggered the Guatemalan government's request for American assistance. The U.S. Embassy in Guatemala City and U.S. security assistance officer (SAO) in the country requested and coordinated JTF–Bravo's integration into the relief effort. They also worked with USSOUTHCOM leadership to ensure clear strategic guidance. An ambiguous situation on the ground made defining the problem the salient task. This undertaking was complicated by uncooperative weather and the challenges presented by combined

how the joint task force responded to Hurricane Stan became a model for dealing with the two tropical storms

and interagency operations. From the start, the aircrews of the 1–228th AV were able to overcome the daunting obstacles of weather and rugged terrain to save life and limb, then deliver first responders while assessing the damage from the rain, wind, and mudslides. This quickly transitioned to relieving suffering and allowed the JTF to take a more "second row" approach, applying its unique capabilities directly in areas where the host nation lacked assets.

Determining the most affected areas was the mission of the Guatemalan civilian lead agency, the National Coordinator for the Reduction of Disasters. JTF–Bravo embedded its civil affairs planners into the agency as advisers. Simply put, the joint task force looked at the requirements and the assets it had available and determined where its capabilities could be best applied.

The JTF–Bravo aircrews operated over great distances and at high altitudes to deliver emergency supplies to isolated highland communities that were cut off by mudslides and washed–out bridges. After delivering the *bomberos* (firefighters) and other first responders—the local heroes of the operation who began opening roads and repairing bridges—they then

Providing humanitarian relief after Hurricane Stan

Fleet Combat Camera, Atlantic (Robert McRill)

set up a forward staging base in Quetzaltengo to shorten the resupply legs and maximize the utility of its aviation assets. The airstrip there, a reliable road network, and a volunteer workforce enabled the rapid movement of relief supplies. As isolated communities were reconnected by roads, JTF–Bravo gradually scaled back its relief operations and focused on assessment and sustainment. This same model was applied in the joint task force's relief effort in Honduras following Tropical Storms Beta and Gamma. Taken together, these operations demonstrate the value of forward-deployed forces.

What Makes It Work

JTF–Bravo enjoys several attributes that make it a responsive disaster relief effort.

Regional Situational Awareness. Due to forward presence, aircrews routinely fly throughout the region, resulting in familiarity with areas that could be affected by severe weather and awareness of local air traffic control procedures.

Established Relationships. Another advantage of forward deployment is that leadership has solid working relationships with the U.S. Embassies in Honduras, Guatemala, Belize, El Salvador, Nicaragua, Costa Rica, and Panama, in addition to regional SAOs and partner nation military leaders and governmental organizations. This contributes to greatly improved communications during the early critical stages of a disaster relief operation. These relationships are sustained during the year through JTF–Bravo's support of numerous humanitarian assistance exercises, training events, and operations involving this same network of people.

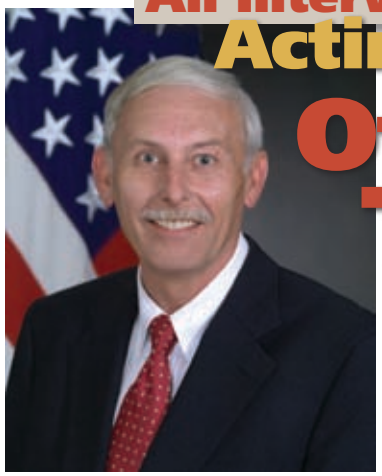
Unit Cohesion. JTF–Bravo is a ready-formed team that can capitalize on shared procedures and rehearsed plans in a way that an ad hoc joint task force could not, thus reducing response time to a minimum.

Language Proficiency. The JTF is able to leverage the Spanish bilingualism of many of its members. Having the inherent ability to speak in the native language of Central American partner nations makes communication more rapid and clear.

Supporting Infrastructure. Soto Cano Air Base maximizes all of the above strengths with its long runway, ramp space for pallet storage, limited warehouse space, and associated garrison support activities. This provides a useful forward staging base for disaster relief.

JTF–Bravo is a ready-formed team that can capitalize on shared procedures and rehearsed plans

Joint Task Force–Bravo's support of disaster relief operations demonstrates good will to partner nations and advances theater strategy and national security interests. The commander's ability to commit such a force for 72 hours without a deployment order has saved lives, relieved pain and suffering, and improved relations with our Latin American partners. While the reasons the JTF is successful are not new, they reinforce the benefits of forward–deployed forces and advanced preparation coupled with built-in knowledge of local languages and customs. **JFQ**



An Interview with Acting Director, DOD Office of Force Transformation

Terry J. Pudas

JFQ: *Could you define "big-T" transformation and explain the mission of the Office of Force Transformation?*

Acting Director Pudas: To begin, transformation is not a destination; it is a continuing process or a journey, and it's driven by the fact that when you're in a competition, whether it's in a global security context or an industry context, you're striving for creativity, innovation, and improvement. If not, then you find yourself as a strategic fixed target. The emphasis here is to create an organization that focuses on learning—that is, outlearning your competition and being able to turn that into action as a source of your competitive advantage.

Transformation is, first and foremost, about grand strategy. And we define strategy as selecting a competitive space and then facilitating the creation of the processes, the organizations, the capabilities, and forms of policies that influence the scope, pace, and intensity of the competition in that space. So it's very much about helping create the future that we would all like and trying to understand the emerging strategic context, the emerging threat context, acknowledging the opportunities, and combining those in ways that produce competitive advantage. It's similar to industry, which is not satisfied with chasing the emerging market because they want to *create* the next market. In a sense, that is the kind of thinking that we try to do in this office: to create some new logic for those people who actually own the decisions in building within the requirements process, the acquisition process, the personnel management process, and the budgetary planning processes. In essence, that's a huge focal point of this office: to be a catalyst, a focal point, in those kinds of efforts.

JFQ: *How has transformation changed from when Secretary Rumsfeld first established the office, when* network-centric warfare *and the* revolution in military affairs *were terms we were talking about so frequently?*

Pudas: It's changed significantly. If you go back to the beginning, when we first started talking about transformation as one of the key priorities, it was not well understood. If you ask senior leaders about transformation now, you'll get a whole different dialogue than you got 4 years ago. It is now better understood why we need to do this, and the effort is in implementing some of these new initiatives using some of the new logic and metrics that people have developed in the last 3 or 4 years. This whole notion, for example, of network-centric operations is no longer a debate. Debate is now focused on how we implement it, what is the best way to resource it, and what is the return on investment.

JFQ: *People are creatures of habit. How do you make their habit transformation?*

Pudas: One of the things the office has done is to try to focus on those levers that get at organizational culture. We assert or we advocate the view that education is a really big deal for our key players. We train for the known, and we educate for the unknown. So the emphasis begins to switch from training for things that we probably aren't going to do in the future to educating people on how to think about the environment they find themselves in.

> *transformation is, first and foremost, about grand strategy*

JFQ: *Certainly, the people at the pointy end of the spear have a great deal of incentive to innovate and to be ready for the next change in life. Nobody learns faster than someone who's being shot at.*

The keys to transformation—created by an MIT professor, Eric Beinhocker, and explained in a letter by Admiral [Arthur] Cebrowski on the Office of Force Transformation Web site[1]*—include focus on core missions; series of small, exploratory jumps; and placing a*

On March 3, 2006, Col David H. Gurney, USMC (Ret.), and Dr. Jeffrey D. Smotherman of *Joint Force Quarterly* interviewed the Acting Director of the Department of Defense Office of Force Transformation (OFT), Terry J. Pudas, at his office in Arlington, Virginia. For more information, see the OFT Web site at <www.oft.osd.mil>.

Precision airstrike on insurgent stronghold in Fallujah, Operation *Iraqi Freedom*

1st Marine Division Combat Camera (Thomas D. Hudzinski)

Soldier performs maintenance on Tactical Micro Air Vehicle, a UAV used as a scout

OFT Goals

- Make force transformation an integral element of DOD corporate and national defense strategy
- Change the force and its culture
- Implement network–centric warfare
- Get the decision rules and metrics right and cause them to be applied enterprise wide
- Discover, create, or cause to be created new military capabilities to broaden the capabilities base and to mitigate risk.

few big bets. Based on this, we'd like to ask a few questions concerning this post-QDR [Quadrennial Defense Review], ongoing war on terror strategic environment.

Regarding core missions, for example, the Air Force is planning to cut several thousand personnel to pay for current operations and future programs. Closing bases costs millions in the near term for long-term savings. And all four Services are flying or driving Cold War–era vehicles. How can modernization and transformation not be in conflict fiscally?

Pudas: We need to move the discussion away from those old metrics. The way we measure the size of the force is changing; we now want to look to the capability of the force. So if I just counted aircraft, or number of hulls, or number of divisions, or whatever the echelon is, it's probably the wrong metric. You could argue, for example, that the Air Force used to talk about 200 sorties per target in World War II, 50 sorties per target in Vietnam, 1 to 2 for *Desert Storm*, and now, by virtue of things like small-diameter bombs and precision, we now talk about number of targets per sortie. So, yes, we are using the same kinds of platforms, but they're much more capable, so it's hard to say, "We cut so many aircraft, we cut so many of this, so we've reduced the capability." Quantity has a quality all its own, but is there a new metric now by which we should measure the capability of the force as opposed to just the traditional way we used to look at it? I think so.

JFQ: *Could you discuss some of the small, exploratory jumps you're taking and the potential benefits to the Joint Force and to interoperability within the U.S. Government and between the U.S. Armed Forces and our allies in the war on terror?*

Pudas: I get that question a lot because there's concern that we're moving so fast, and our partners and allies have a difficult time keeping up with our rate of change. Each country has its own size defense budget, and the general feeling is that ours is so large that we can cover lots of bets. Of course, they're looking for where to place their bets and what the highest potential is. The answer I usually provide them is, first of all, you've got to pursue those things that make you competent in the information age. Those are things like networking the force, focusing on sensors—a lot of those issues that are dominated by information or sensor type of things become very important. Then you need to look at those things that make you relevant to the security environment. Everyone's force structure doesn't need to mirror-image everyone else's. We need to find the right basis for making common cause on different things. We happen to have a very capital-intensive force structure, while other countries have a more labor-intensive force structure. And those play together very well in many kinds of operations we're doing.

JFQ: *We talk about low-intensity conflict at one end and then full-scale war at the other end of the conflict spectrum. We know that the low-intensity conflicts happen with great frequency, and the high-intensity conflicts happen with less frequency. We have been organizing our force for the lower-intensity conflict, or I should say, we have been dealing with a lot of low-intensity conflict and natural disaster issues of late. But when we talk about the "long war," is the United States paying sufficient attention to the far more severe but less common high-intensity conflict, total war, as we focus on the lower–intensity end? We seem to be transforming in that direction with a great deal of focus on the Special Forces, for instance, and dealing with U.S. Northern Command issues such as Hurricane Katrina disaster relief, humanitarian assistance, and things of that nature. How are*

JFQ (Jeffrey D. Smotherman)

we preparing to fight in the upper end of the spectrum of war?

Pudas: One of the elements of transformation strategy deals specifically with that issue. An element of the strategy is to broaden the capabilities base across the Department in order to deal with a wide range of alternative futures—everything from the high end to the low end to humanitarian relief, all those things you just mentioned—to prevent strategic gaps through which an opponent could maneuver, essentially what happened on 9/11. So if a strategy such as this is implemented, then the capability cycle times must be accelerated as situations emerge and the future competitive environment becomes more certain.

So we can't have programs of record that are measured in decades; we have to have some agility in our capability cycle times. That's another way to deal with the issue you just mentioned: broaden the capabilities base so we can work across those four security challenges;[2] broaden the national security team to include not only DOD but also other agencies of the government plus our strategic partners and allies; build partnership capacity, which is one of the elements of the QDR; and work very hard on our processes to allow us to have some agility to move among those or to adjust or rebalance as the future becomes more certain or we can see more or understand more. That really moves us toward capabilities-based planning as opposed to threat-based planning.

JFQ: *When you think about force transformation and about how the United States is progressing in that endeavor, do you look at the way other armed forces are trying to anticipate requirements and transform themselves? Do we ever exchange views, or do we focus on the measures of merit that other organizations, other militaries, are using?*

Pudas: I would point to three or four countries that have really accelerated their efforts in thinking about transformation, in pursuing this information-age construct of network-centric operations. We can look to the United Kingdom and to Australia, who are very engaged in things like network-enabled capabilities, and that is to be expected because we operate with each other all the time and we're very close. We can also look to countries like Sweden, which has taken this whole network-centric business to a really high level.[3] Singapore is doing an enormous amount of work. They have something that's akin to a transformation office as well. And of course we've got the Allied Command Transformation, which is stood up, and this NATO Reaction Force.

JFQ: *Since the 1980s, the Armed Forces have shrunk about 40 percent, in weapons, systems, platforms, and people. Deployments have increased steadily throughout the 1990s until the current frantic operational pace, where almost one-third of the Army is deployed at any one time. Where do we find resources and time to transform when the Services are operating at such a high steady-state pace?*

Pudas: I talked before about how we measure the size and capability of the force, and that's one angle of it. Then we can also look at the tough decisions that have been made over the last several years in regard to creating maneuvering room for forces to transform to the kinds of things they want to do. Think about the debates over the DD–21, Crusader, and Comanche. Those were emotional and tough decisions. The main question was whether there was still a market for those capabilities. The Crusader is a good example. Indeed, some very good stuff came out of that debate, but we had moved to a concept of operations where we could operate in a joint fashion with air-delivered ordnance, where we were networked with the units on the ground. In the end, why would we want to burden ourselves by lugging this thing [Crusader] around the battlefield in a logistics trailer that had been brought with it?

The way we manage risk in our large programs brings about that kind of dynamic. We manage risk with time, ordinarily, which in turn aggravates the other three portions of the risk equation: schedule, cost, and market. Unfortunately, programs drag out, schedules slip, costs increase—and when we finally get ready to field something, the world has changed, the concept of operations has changed, and the market for the product isn't there anymore. That's what I was talking about with being able to dramatically reduce the capability cycle times.

Transformation has been accelerated as a result of the war because we saw all these things that had changed: the strategic context had changed, the notion of American security being provided by two great oceans to the east and west and good neighbors to the north and south, and everything happened someplace else—that's changed dramatically. Areas where countries had previously enjoyed an enormous competitive advantage are now being competed with, and that's because information technology and computing power are essentially a free good around the world, which enables lots of stuff: bioengineering, nanotechnology, computer-assisted design, all of these things.

JFQ: *How are we using joint professional military education to transform the mindset and culture of the U.S. joint force community, our allies, and our industry partners?*

Pudas: Joint professional military education is something that came about as a result of our experience in Grenada, where we found it difficult to operate with other Services, and a great deal of attention was

paid to the lessons learned, why this was, how do we do this, and maybe we need to have different organizational constructs. Then, of course, there was the great revelation that part of the issue was dominated by culture. So with the assistance of Congress, we embarked on jointness, where the Services now have a mandated ratio of a different number of officers, and the curriculum is much broader rather than Service-centric, and to rise to senior levels, one needs to have a joint experience and serve with one another. After a generation, the Services now operate much more effectively. There's always some programmatic tension, but that's not necessarily unhealthy. I believe the Services spend between 10 and 15 percent of their human resources budget on education and training because it's so important.

Part of our initiative and our interest in culture brought us to the point where we found it useful to facilitate the creation of transformation chairs at all our academic institutions across the Department of Defense. I think we have 8 or 9 of 13 of them filled now. Stu Johnson is the transformation chair at National Defense University. And that's pretty exciting, but the real exciting part is that [these people] come together quarterly to collaborate and share, which is really very powerful because they're learning from one another. It's become an interesting forum. They've really taken on this notion of collaborating and sharing, which is a different vocabulary than we used to use: we used to use *deconflict* and *coordinate*. Those are industrial age terms, and we must move from that to focusing on collaborating and sharing, which is where the real power is.

JFQ: *Browsing many of your transformation briefings, we see Admiral Cebrowski and business academics quoted, but as frequently or even more frequently, we see Clausewitz, Machiavelli, and other classical strategists quoted in the same discussion. The Joint Staff and Service staffs are organized on lines created by Napoleon, not necessarily optimized for digital communications and reachback or the ability to strike anywhere on the surface of the Earth in a few hours. How do we reconcile transformation's tug forward with a legacy force and insufficient resources to modernize thoroughly?*

Pudas: Transformation should not be equated with plussing up the defense budget. Transformation should be associated with how we make choices, using a new logic, so it's not necessarily about spending more money. It's really about making better choices. With regard to how we're organized, you can already see that all of the Services have undergone some kind of transformation in the way they're organizing for deployment in a lot of cases. The Army has gone to what they call brigade combat teams: in a lot of ways, they're pre-organized for combat, which is a way to remove impediments to speed. The Navy has gone to the notion of expeditionary strike groups, which are flexible and agile and can be put together a number of different ways. The Air Force and Marine Corps as well are looking at those kinds of things. So we have this dynamic of blurring the lines between operations and logistics and intelligence by virtue of information age connectivity. One of the interesting observations is to look at what commanders now want to command. They now want to command bandwidths, which essentially used to be a back-office function. So now this kind of job has been moved to the front office, and we've developed all these corroborative tools for managing and monitoring bandwidth. That's a manifestation of the tensions on organizational constructs as we move further into this transformation business.

if you ask senior leaders about transformation now, you'll get a whole different dialogue than you got 4 years ago

JFQ: *What is the most interesting challenge on your agenda?*

Pudas: One of the big impediments facing the Department is interoperability. This comes under the heading of a strategic approach to cost to the Department. There are a number of things under that banner. One problem has to do with the way we buy things. We create a requirement, and then we write a contract. A team is put together, and a whole bunch of capabilities, modules, and applications, as well as hardware, is assembled. Then a large amount of money is spent to integrate all these things. But the problem lies in how to upgrade what we end up with. How do we take advantage of the technology cycle times where all the really exciting technological capabilities come in from? That's running on the order of 6 months to 3 years. So we need an architecture that allows us to take these new things and put them into our platforms without spending an enormous amount of money or taking things off line for a long time. That, of course, has become somewhat of a business model.

Another big issue that people are now paying attention to is this notion of our "addiction to oil." It's an enormous issue for the Department to look at. We aren't energy-sensitive; energy is cheap here, so that's an enormous challenge to deal with. In fact, we are cosponsoring an energy seminar series with Acquisition, Technology, and Logistics—the first one is at the end of March. Jim Woolsey is going to be the first speaker, and Congressman Roscoe Bartlett. He's going to try to draw some attention, create some learning, offer opportunities for people to come together and talk about this issue, and perhaps that might inform some broader elements of departmental energy strategy. There's lots of good things going on in different areas, but to try to make this mainstream, to try to make people more energy sensitive, is huge. It has a lot to do with cost, and it has a lot to do, in the end, with tactical agility. **JFQ**

NOTES

[1] See <www.oft.osd.mil/what_is_transformation.cfm>.

[2] The four security challenges are traditional, irregular, catastrophic, and disruptive. For a full discussion, see U.S. Army, *2004 Army Transformation Roadmap* (July 2004), available at <www.oft.osd.mil/library/library_files/document_386_ATR_2004_Final.pdf>.

[3] See Franklin D. Kramer and John C. Cittadino, *Sweden's Use of Commercial Information Technology for Military Applications*, Defense Horizons 50 (Washington, DC: National Defense University Press, October 2005).

U.S. Army Stryker brigade combat team patrolling Mosul, February 2006

1st Combat Camera Squadron (John M. Foster)

Secretary of Defense testifying before House Armed Services Committee

Fleet Combat Camera, Pacific (Chad J. McNeeley)

Implementing the Transformation Vision

By WALTER P. FAIRBANKS

In January 2001, newly elected President George W. Bush made transformation a pillar of national defense strategy and described a broad vision for the Armed Forces. By the time Secretary of Defense Donald Rumsfeld established the Office of Force Transformation (OFT) in the immediate aftermath of 9/11, the urgent need for transformation was widely understood within the Armed Forces and the defense community. In October 2001, Secretary Rumsfeld appointed the late Vice Admiral Arthur Cebrowski, recently retired from the Navy, the first Director of Force Transformation.[1]

In President Bush's second term, military transformation remains a vital component of U.S. defense strategy, and the President's vision is gradually being realized. Some foreign and domestic observers assume the transformation process is complete or nearing completion while critics argue that the dividends of transformation have been disappointing and lack real substance.

The current state of defense transformation is somewhere between these two extremes. In the present dynamic security environment and amid rapid advances in technology, transformation should be viewed as a continuing process rather than a set of platforms or new organizations to be deployed by certain dates. The process is continuous in part because adversaries adapt as they identify U.S. vulnerabilities. On the whole, considerable progress has been made since 2001.

What Is Transformation?

In the Secretary's *Transformation Planning Guidance*, transformation is described as "a process that shapes the changing nature of military competition and cooperation through new concepts, capabilities, people, and organizations that exploit our Nation's advantages and protect against our asymmetric vulnerabilities to sustain our strategic

Walter P. Fairbanks is the Assistant Director, Office of Force Transformation.

position, which helps underpin peace and stability in the world."

There are, of course, other ideas about what defense transformation is or should be, but the main objectives of the Department of Defense (DOD) transformation process are clear: support the U.S. defense strategy, and sustain and enhance the Nation's competitive advantage in warfare. To achieve these objectives, transformation advocates aim to anticipate and create the future rather than react to a future that adversaries seek to impose. While the coevolution of military concepts, processes, organizations, and technology is not entirely new, the current DOD approach to transformation recognizes that a profound change in one of these areas can trigger a change in the others, creating both new competencies and new competitions (see figure 1).

Implementing the process of transformation involves changing human behavior and creating a culture of innovation within DOD. Leaders at all levels—particularly senior leaders—must encourage innovation and reward those responsible for transformational developments in leadership, tactics, operations, strategy, concept development, experimentation, training, doctrine, organization, personnel management, education, business process, science, and technology. No system or capability, no matter how technologically advanced, is transformational until Service members learn to use it in ways that affect operating concepts, organizations, and processes. As Secretary Rumsfeld said in his fiscal year 2006 budget testimony before Congress, "Perhaps most important, more important than any particular line item or program, is that the culture of the Department and uniformed military is changing from one of risk avoidance to a climate that rewards achievement and innovation."[2]

Managing Transformation

The management of the DOD transformation process is decentralized by design. At the highest level, the President, Secretary of Defense, and Chairman of the Joint Chiefs of Staff guide and direct defense transformation. In managing the process, the Secretary and Chairman are assisted by the Office of the Secretary of Defense (OSD), Joint Staff, Services, defense agencies, and combatant commands. Within OSD, the Director of Force Transformation is charged with advising the Secretary on all defense transformation matters and serving as the advocate and catalyst for transformation within the Department.

A frequent question is how much DOD spends on transformation. That is hard to say, because transformation is far more than a list of programs. The concepts, capabilities, and organizations developed through innovative ideas, experimentation, major training exercises, and assessment of lessons learned on the battlefields of Afghanistan and Iraq cannot be categorized under a transformation line item in the defense budget.

no system or capability is transformational until Service members learn to use it in ways that affect operating concepts, organizations, and processes

It is not enough to transform forces and develop new warfighting capabilities. We must also transform the defense business and planning processes. These are the means by which leaders exercise management control and guidance over the DOD activities. Capabilities-based planning is a new tool to aid in this correlation of means, ways, and ends.

Capabilities-Based Planning

Capabilities-based planning (CBP), a new and evolving approach, is one of DOD's most important transformational initiatives in responding to the changing security environment. It provides a means for reducing institutional risk while allowing the greatest flexibility for transforming the force. CBP helps leaders create strategies that impose the greatest costs on potential adversaries while lowering costs of acquiring new capabilities and reducing the risk of failure. It addresses four challenges to national security that describe how adversaries might fight: traditional, irregular, catastrophic, and disruptive.

Traditional challenges entail military competition through conventional military operations with legacy and advanced military capabilities (for example, conventional land, sea, and air forces, along with nuclear forces of established nuclear powers). *Irregular* challenges are those in which adversaries aim to erode American influence and power through unconventional or irregular methods of waging war (terrorism, insurgency, civil war, and "unrestricted warfare"). *Catastrophic* challenges are aimed at paralyzing American leadership and power by employing weapons of mass destruction (WMD) or WMD-like effects in surprise attacks on critical, symbolic, or other high-value targets (for example, homeland missile attacks, proliferation from state to nonstate actors, and devastating WMD attacks on allies). *Disruptive* challenges seek to usurp American power and influence by acquiring breakthrough capabilities that put U.S. security at

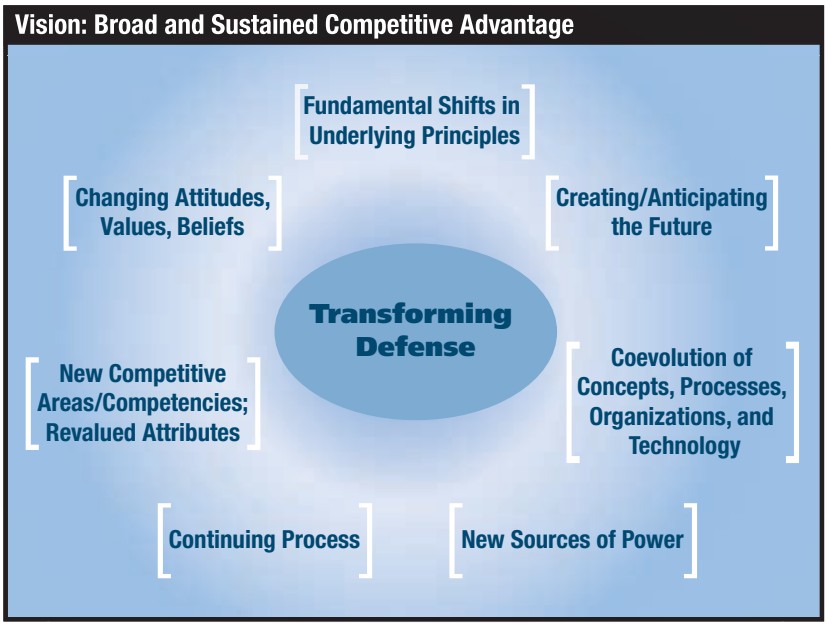


Figure 1

Lockheed Martin

F–35C Joint Strike Fighter

▲ *Download as wallpaper at ndupress.ndu.edu*

risk (sensors, information warfare, biological warfare, cyberwarfare, ultraminiaturization, space, and directed energy).

The CBP process, by establishing a new analytical basis for the development of future U.S. military capabilities, is already providing DOD decisionmakers and planners with powerful advantages. This kind of planning is more dynamic and flexible than the threat-based planning of the past and much broader in scope (see figure 2). It affords planners the ability to:

- link DOD resource allocation decisionmaking to the *National Defense Strategy*
- balance risk across the four security challenge areas
- identify joint capability gaps, redundancies, and opportunities
- facilitate capability portfolios that hedge against uncertainty and increase costs to adversaries while suppressing American costs.

In addition, CBP is more joint-oriented than its predecessor because it uses a common conceptual framework with common definitions and identifies broad security challenges to the Nation rather than to a particular Service.

CBP also takes into account that the budget is not limitless. DOD cannot afford excessively redundant capabilities for one part of the spectrum, leaving capability gaps elsewhere. This kind of planning more effectively supports the creation of military capabilities to address every part of the conflict spectrum by continually analyzing the extent and composition of that spectrum. It also compels the Services to weigh risks in a joint context, take stock of what capabilities each Service already has, and consider trade-offs between existing capabilities and risks. Through capabilities-based planning, the path toward improved jointness not only has been improved, but it also has made operating jointly a necessity. Finally, CBP results in more objective judgments of national security challenges by using intelligence assessments to inform the entire process in a joint context.

Strategic Transformation Appraisal

One DOD tool for tracking overall progress each year is the *Strategic Transformation Appraisal*. Preparing the appraisal and presenting it to the Secretary of Defense are important responsibilities of the Director of Force Transformation; the document assists the Secretary in evaluating progress across DOD in the implementation of transformation, both in direction and balance. In developing the appraisal, the OFT reviews the annual Service transformation roadmaps and the joint roadmap prepared by U.S. Joint Forces Command and assesses the direction of transformation. These roadmaps are compared with broad guidance contained in key DOD documents such as the *Quadrennial Defense Review Report*, *Transformation Planning Guidance*, and *Strategic Planning Guidance*.

The Office of Force Transformation employs three sets of qualitative metrics to analyze roadmaps. The first set, derived from the *National Defense Strategy*, reviews the four strategic challenges facing the United States (traditional, irregular, catastrophic, and disruptive) as the first step in a top-down CBP effort. The second set focuses on capabilities described in the four approved joint operating concepts (JOCs).[3] The joint interdependencies the Services have identified in their transformation roadmaps form the third set of qualitative metrics used in the analysis. The OFT analysis identifies capability gaps and shortfalls that have not been addressed in the transformation roadmaps and generates conclusions and recommendations concerning the state of transformation in DOD.

For example, the *2004 Strategic Transformation Appraisal* observes that the Army, as evidenced by its 2004 roadmap, is becoming more mobile and flexible in its operations and organization.[4] To take full advantage of this transformation, DOD must be able to move the Army's new brigade combat teams quickly across the noncontiguous battlespace. Yet OFT found no major joint effort in the roadmaps to develop new forms of battlefield mobility or reduce existing demands on air transport capabilities.

Another key area OFT did not see in the roadmaps was the camouflage, cover, and concealment of forces. Given the expected proliferation of inexpensive sensors and their ready availability to potential enemies, the advantage U.S. forces have long enjoyed in this area may erode significantly. To close this gap, DOD must find new capabilities to deny the use of sensors against its land- and sea-based surface forces.

A major conclusion of the *Strategic Transformation Appraisal* resulted from a

comparison of the capabilities required by two of the four JOCs (stability operations, homeland defense and support operations) with the Service and joint transformation roadmaps. This comparison revealed an unmet need for horizontal integration across Federal agency boundaries and vertical integration across Federal, state, and local governments and agencies. Just as the Services have moved from deconfliction to interoperability, and are now moving toward joint interdependence, the agencies of the executive branch need "interdependence with coherence." This will not be easy or quick, but it is essential to winning the war on terror.

the Office of Force Transformation analysis identifies capability gaps and shortfalls that have not been addressed in the transformation roadmaps

The *Strategic Transformation Appraisal* also identified a future need to match the strategic, operational, and tactical reach of U.S. forces with the ability to sustain them across great distances with materiel and intelligence. These are but a few of the insights provided by the most recent appraisal, an assessment that reveals gaps that might otherwise have been overlooked.

Strengthening the Transformation Process

Four key areas—new metrics, an integrated sensor strategy, battlespace mobility and operational maneuver, and a broader approach to national security—offer great potential for strengthening the ongoing implementation of the President's defense transformation vision and ensuring the competence and relevance our forces will need to meet future security challenges.

New Metrics. In both force building and force operations, new metrics are needed to assess military capabilities, but care must be taken in their selection and application. In transitioning from the industrial age to the information age, we have been using a set of "initial" metrics, suitable to the information age, as the basis for measuring and ultimately enhancing the *competence* of the Armed Forces—access, speed, maneuver, distribution, sensing, and networking. To ensure that forces are both competent and *relevant* as the transformation process continues, at least four additional overarching metrics are needed to assess future military capabilities and guarantee force relevancy (see figure 3).

Create and preserve options: In uncertain times, creating, analyzing, and testing options are essential to military operations and force-building activities such as training, developing new joint and Service organizations, and designing and procuring new equipment. Creating, analyzing, testing, and preserving options in these areas can complicate a potential enemy's decisionmaking processes, broaden the base of choices, and reduce risk. When U.S. forces are operating in the battlespace, the enemy is compelled to contend with multiple options, increasing his cognitive burden. In the procurement process, we should avoid practices that narrow options too early. A strong research and development program emphasizing basic research is one component of a strategy that increases the number and variety of ideas that may be applied to military operations and force-building activities.

Employ higher transaction rates: The transaction rate increases as the number of both actors and interactions with the competition and environment increases. The quality and quantity of these interactions will increase the likelihood of learning and success over time. The speed with which information is collected, communicated, processed, and acted on by U.S. forces powerfully accelerates the transaction rate. In turn, the ability to compete based on cycle time is a powerful advantage that reduces the time required to create or execute an option. The employment of higher transaction rates, assuming the quality of the transactions involved, can enable us to seize and hold the initiative in either force building or force operations. The high speed of joint and combined operations during *Iraqi Freedom* and the new transactional dynamics that enabled that speed, such as those made possible by network-enabled forces, completely outpaced the enemy's ability to respond, resulting in his rapid defeat during the major combat operations phase.

Achieve higher learning rates: Achieving high learning rates is important for preserving relevance in the information age and is closely coupled with high transaction rates. If the United States is to take full advantage of what the information age offers, fast institutional learning is critical, both in force building and force operations. The information age offers great opportunities to increase learning rates, but increased access to information is only part of the solution. To

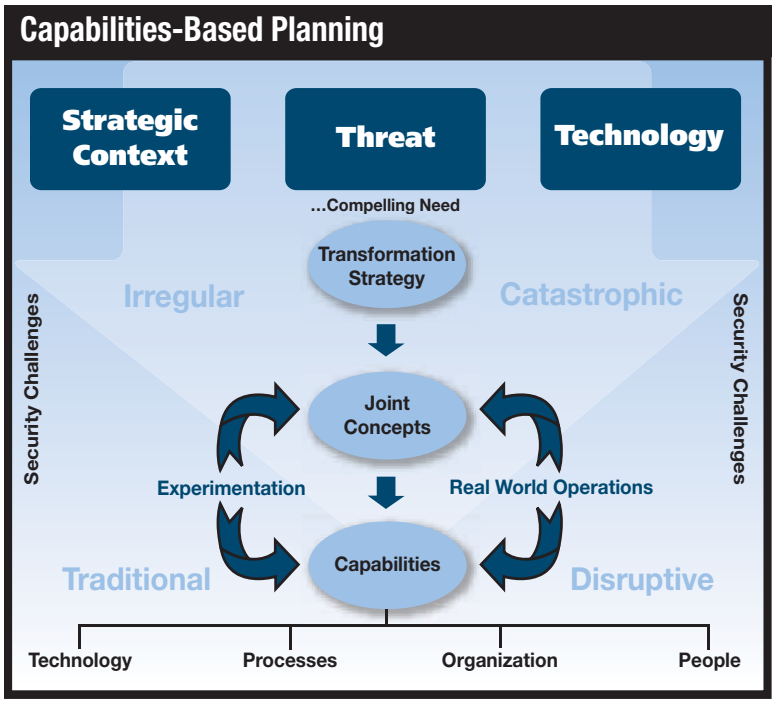


Figure 2

create an environment where high learning rates will flourish, robust experimentation and a culture of innovation must become commonplace. Once established, such an environment will pay dividends during exercises, where prototypes can be experimented with and technological possibilities exploited more rapidly. If forces can sustain a high rate of learning in combat, their ability to outfight the enemy increases.

Create overmatching complexity: Complexity involves the number, variety, and interaction patterns of entities within a system. The goal of U.S. forces is to present overmatching complexity, including at scale, to the enemy. Thus, if the enemy is using individuals and small units that employ guerrilla tactics, we must employ small, mobile, and flexible units to defeat them. One of the main objectives in designing the future force structure and conducting operational planning should be to complicate planning and actual operations for adversaries, giving our forces a powerful advantage. Creating complexity relative to the enemy is one of the key design principles emphasized in a recent OFT report to Congress presenting alternative future fleet architectures for the Navy.[5]

Integrated Sensor Strategy. The growing interoperability and interdependence of U.S. forces are important elements of DOD transformation. To this end, all elements of the joint force must be able to share the same understanding of the current tactical and operational situation simultaneously. This is accomplished, in part, through the continual updating, disseminating and tailoring of the common operational picture (COP). The interoperability of data-exchanging systems, particularly sensors, is essential to effective military operations, whether these systems are updating the COP or feeding information directly to weapons systems. Because of the rapidly increasing capabilities of sensors and their critical role in the conduct of military operations, an integrated sensor strategy is needed to guide sensor employment at the tactical, operational, and strategic levels.

Potential of integrated sensors: Today's sensors collect data concerning current enemy and friendly force dispositions and activities, as well as personnel, logistic, medical, and environmental data, all to create the information the warfighter needs. A wide range of sensors operating throughout the battlespace, when networked, properly tasked, and effectively integrated, can provide a vast amount of continuously updated information to the warfighter at the tactical and operational levels. The types of data that can be collected by sensors in the future will be limited by available technology, battlespace survivability, affordability, and the capability of individuals and military organizations to task and operate the sensors and use the information they collect.

to take full advantage of what the information age offers, fast institutional learning is critical, both in force building and force operations

Requirement for integrated sensor strategy: The increasing number of sensor suites operating in the battlespace and the growing demand for real-time sensor data underscore their importance to the warfighter. The integrated sensor strategy should address and resolve the tradeoffs stemming from tactical, operational, and strategic sensor interactions and interdependences. When fully developed and executed, an integrated sensor strategy will enable forces to operate more effectively in a networked environment.

Elements of an integrated sensor strategy: One of the first considerations in developing an integrated sensor strategy should be a careful examination of existing DOD strategies that can support or impact it in some way.[6] The strategy might also include an enterprise operating framework, an organizing principle for sensor integration and employment, an organizational construct that identifies responsibility for developing and implementing the strategy, a supporting architecture, and a methodology for conducting continuous sensor concept and technology pairing assessments through experimentation.

Information superiority: Information superiority is a key element for a force that substitutes the massing of effects for massing forces. To achieve the greatest effects, forces must be able to receive, react to, and even anticipate the need to move and engage based on queuing from persistent sensors that provide extensive coverage and relevant, accurate, and timely data. The availability of such information, coupled with increased mobility, will allow a small U.S. force to assume responsibility for a large geographical area.

Flexibility: Finally, an integrated sensor network should accommodate the "many-to-many" data exchanges required when operating within a network-centric environment. The "sensor web" of the National Aeronautics and Space Administration is an example of

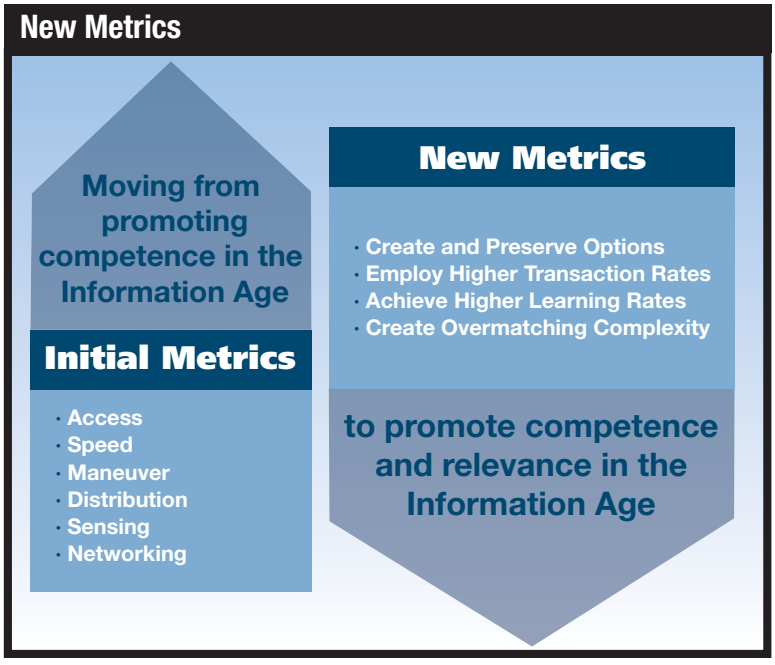


Figure 3

Ultra armored patrol vehicle prototype with ballistic and mine protection technologies

U.S. Navy (John F. Williams)

a sensor network that includes flexibility of deployment, low power consumption, and low cost. Overall, the sensor environment should eventually provide operators with a significant awareness of the battlespace and the ability to assess and monitor the military situation from the tactical to the strategic level, while maintaining the precise locations and operational status of units, weapons systems, and materiel. It will require connectivity, communications, and sustainment for these sensor grids to maximize benefits from the generated data. As this sensor integration strategy is created, it should be based on the central theme that every person, system, and platform is a potential sensor within the overall network.

Battlespace Mobility and Operational Maneuver. In the ongoing implementation of network-centric warfare, the Armed Forces have made great strides in developing shared awareness of American forces in the battlespace,[7] but there is a gap between the rapidly improving ability to maintain and share a common operational picture and the ability to act quickly and decisively on this information in the pursuit of tactical, operational, or strategic objectives. To realize the full potential of network-enabled capabilities and enhance power projection capabilities, U.S. forces must become more adaptive and agile than ever before. The ability of our forces to adapt to changing situations faster and more decisively than the enemy will require not only reliable and timely intelligence, shared awareness, and the close synchronization of fires with maneuver, but also enhanced battlespace mobility.

Relationship between networking and shared awareness: There is a direct correlation between a robustly networked force and the ability of all elements of the force to enjoy a high degree of shared situational awareness. As we have continued to build a collaborative network of networks within the joint force, we have seen increasing evidence of the power of this relationship on the battlefields of Afghanistan and Iraq, from the results of major joint and Service exercises, and in the findings of a series of case studies sponsored by the Office of Force Transformation on network-centric operations across a broad range of mission areas, including allied and coalition operations.

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Mobility: Integrated sensors, good intelligence, networking, and shared awareness alone cannot win battles or campaigns. They can enable the precise application of force and the conduct of effects-based operations, but U.S. forces will not be able to defeat a determined, well-trained enemy unless it possesses an overwhelmingly superior capability to apply force, especially ground maneuver elements and precision firepower, at precisely the right time and place to gain the desired effects. In other words, we must strive to improve the ability to conduct rapid, decisive maneuver at the tactical and operational levels. To do this, ground forces must be provided with an even greater mobility advantage over potential enemies.

Operational and tactical maneuver: Increasing the speed at which forces can be deployed at the strategic level is important, but ways also must be found to increase the speed of maneuver of ground forces at the tactical and operational levels of war once they arrive in the theater. If ground forces do not have a decisive edge in maneuver speed to complement advantages in observation, data distribution, analysis, and firepower, DOD may be forced to conduct attrition-style warfare, leveling the playing field for future adversaries. The creation of an operational and tactical maneuver force that can move rapidly by air offers one means of providing the desired speed advantage on future battlefields.

Broader Approach to National Security. To deal effectively with the four security challenges, especially the irregular, catastrophic, and disruptive challenges, the United States must adopt a broader approach to national security. For example, the necessity of civic assistance at home, as well as during and after major combat operations overseas, dictates a need for transformation in virtually every domain of national security, not only within the purely military province of the Department of Defense. The importance of civilian first responders in crises such as 9/11 and of nongovernmental organizations and private companies in rebuilding countries such as Afghanistan and Iraq demonstrates that DOD is only one component of national security. There are several ways to develop a broader approach.

Military power should be integrated with other elements of national power. At every level, DOD and the Armed Forces are increasingly coordinating with civilian organizations, including executive branch departments such as State, Homeland Security, Justice, Energy, and Transportation. Such collaboration must become institutionalized, and tools such as those presented through network-centric solutions must be distributed to other executive departments, states, and localities.

The establishment of a National Security University should be considered to matriculate selected mid- and senior-level officials from every relevant Federal and state agency. Together, the students would gain and nurture a holistic understanding of national security rather than a view that, historically, has focused on a military-centered national defense.

As the military continues to transform, the capabilities gap between it and many allied and coalition partners is widening. Some longtime allies, having operated closely with U.S. forces for many years, have received preferential treatment for the release of technology. Those with strong economies can afford the expenditures necessary to keep pace. However, some of both our newer and longtime North Atlantic Treaty Organization allies have relatively weak economies. We must work to close these gaps or create bridges to take maximum advantage of these allies' strengths.

To help fight the war on terror, the United States may decide to participate in combined military operations with nontraditional partners. In preparing for antiterrorism operations with the forces of these new strategic partners, the challenges grow exponentially in terms of technology release, equipment interoperability, and a common language for communication. Some level of intelligence–sharing, operational and tactical planning, and perhaps command post or field exercises will be essential to ensure adequate preparation.

A great deal has been accomplished over the past 4 years in regard to defense transformation, including the creation of a new strategic framework, a valuable transformation roadmap process, promising new concept and technology pairings, and the endowment of a generation of commissioned and noncommissioned officers with the education, training, and experience to understand, appreciate, and adopt these changes. Yet transformation is a continual process, and much remains to be accomplished. We should view this prospect as both necessary and exciting. Today's national security challenges demand nothing less than an uncompromising commitment to continue improving the DOD planning and budgeting process, the roadmap process, concept/technology pairings, and cooperation and coordination among defense components, Government agencies, and multinational partners. **JFQ**

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NOTES

[1] The ideas expressed in this article, especially in the section entitled "Strengthening the Transformation Process," were inspired by Admiral Cebrowski.

[2] Secretary of Defense Donald H. Rumsfeld, Fiscal Year 2006 Budget Testimony, March 2005, 18.

[3] There are four approved joint operating concepts: major combat operations, stability operations, strategic deterrence, and homeland defense and civil support (formerly homeland security).

[4] Due to the DOD focus on the 2005 Quadrennial Defense Review process last year, Service and joint transformation roadmaps were not submitted to the Office of Force Transformation (OFT) in 2005, nor did the OFT prepare a *2005 Strategic Transformation Appraisal* (STA) for the Secretary of Defense. Transformation roadmaps are being developed by the Services and Joint Forces Command this year, and OFT will prepare a 2006 STA for the Secretary.

[5] Office of the Secretary of Defense, Report for the Congressional Defense Committees, *Alternative Fleet Architecture Design,* Washington, DC, January 2005. In addition to the notion of creating overmatching complexity relative to the enemy, three other major design principles used in this Office of Force Transformation study were network-centric warfare, modularity, and smaller ships and improved payload fractions.

[6] Some of the relevant strategies include the DOD Net-Centric Data Strategy, Global Information Grid Enterprise Service Strategy, DOD/Intelligence Community Horizontal Integration Initiative, DOD Information Assurance Strategic Plan, DOD Logistics Strategy, and National Geospatial-Intelligence Agency Integration Strategy.

[7] For a description of the emerging theory of network-centric warfare, its central place in force transformation, and its ongoing implementation in DOD, see *The Implementation of Network-Centric Warfare* (Washington, DC: Office of Force Transformation, Office of the Secretary of Defense, January 5, 2005).

Disruptive Challenges and Accelerating Force Transformation

By TERRY J. PUDAS

The Department attempts to compete on the very best capabilities. I say let's compete on the basis of cost and cycle time. . . . Learning rate turns out to be a great competitive advantage and allows the Department to move forward. Information gets shared more broadly, as we compete on time, and performance will actually go up.

—Vice Admiral Arthur K. Cebrowski, USN

Aerospace Relay Mirror System undergoing tests at Kirtland Air Force Base

DOD

Broadening military capabilities—that is, improving and changing at faster rates than our potential competitors—is a key objective of U.S. defense strategy and the military transformation process. The ability to maintain a competitive advantage depends not only on the Nation's manpower, fiscal resources, industrial capacity, and technology prowess, but also on the ability to outthink and outlearn adversaries, thereby making it more difficult for them to design and build military capabilities that threaten the United States and its allies.

In information age operating environments, where rapid change and ambiguity are the norm, this competitive advantage often depends on the availability of multiple effective options.[1] If U.S. military forces can accelerate the rate of transformation to generate more actionable and effective options than potential opponents, narrow the range of potential successful actions that opponents believe are available to them, and maintain initiative by implementing effective options, then they will be able to impose overwhelming complexity on opposing decisionmakers.

While many Department of Defense (DOD) programs claim to be transformational, relatively few contribute to accelerating the transformation rate. The key to identifying programs and claims on resources that can accelerate the transformation rate and reduce or eliminate the threat of disruptive (and other) security challenges depends on a common set of new metrics, including *generating higher transaction rates* within and among U.S. forces, *achieving faster learning rates* by U.S. forces, *creating and preserving options* in military competitions, and *creating overmatching complexity* in relation to adversaries or would-be adversaries.

The Four Security Challenges

The conceptual core of U.S. defense strategy rests on the four security challenges described in the 2005 *National Defense Strategy* (NDS): traditional, irregular, catastrophic, and disruptive.[2] In turn, the NDS provided an essential strategic foundation for the conduct of the 2006 Quadrennial Defense Review (QDR). While acknowledging that U.S. military forces maintain significant advantages in

Terry J. Pudas is Acting Director of the Department of Defense Office of Force Transformation.

traditional forms of warfare, the NDS argues that our enemies are more likely to pose asymmetric threats—including irregular, catastrophic, and disruptive challenges—to the United States and its multinational partners in the years ahead (see figure 1).

To "operationalize the *National Defense Strategy* . . . senior civilian and military leaders [within DOD] identified four priority areas" as the focus of the QDR: "defeating terrorist networks; defending the homeland in depth; shaping the choices of countries at strategic crossroads; and preventing hostile states and nonstate actors from acquiring or using WMD [weapons of mass destruction]." Figure 2 illustrates the ongoing shift within DOD to the type of capabilities and forces needed to address irregular, catastrophic, and disruptive challenges, while maintaining those capabilities and forces required to deal with traditional challenges.[3]

The four security challenges are interrelated. Equally important, none of the four challenges is subordinate to, or a lesser included case of another. All have important claims on resources because it is their interaction that poses the greatest national security challenge to the United States. This is a significant change to longstanding U.S. planning assumptions regarding priorities, resource allocation, and military requirements.

The NDS and the *QDR Report* emphasize the goal of broadening U.S. military capabilities, underlining the need to develop ways of meeting both present and future dangers quickly. Transformation is a necessary component of dealing with each of the four challenges. It has been difficult, however, to reach a consensus within DOD regarding the rate of transformation needed to cope with each of these challenges. While the Secretary of Defense and other senior leaders have consistently sought to increase the rate of force transformation, some have expressed caution, arguing that we cannot afford to increase the rate of transformation too dramatically as we fight the war

Four Security Challenges

Traditional
challenges posed by states employing recognized military capabilities and forces in well understood forms of military competition and conflict.

Irregular
challenges from those seeking to erode American influence and power by employing unconventional or irregular methods.

Catastrophic
challenges from adversaries seeking to paralyze American leadership and power by employing WMD or WMD-like effects in surprise attacks on critical, symbolic, or other high-value targets.

Disruptive
challenges from adversaries who seek to develop and use breakthrough capabilities to negate current U.S. military advantages in key operational domains.

Figure 1

Project Sheriff is testing the integration of lethal and nonlethal systems mounted on the Army's Stryker wheeled fighting vehicle

DOD

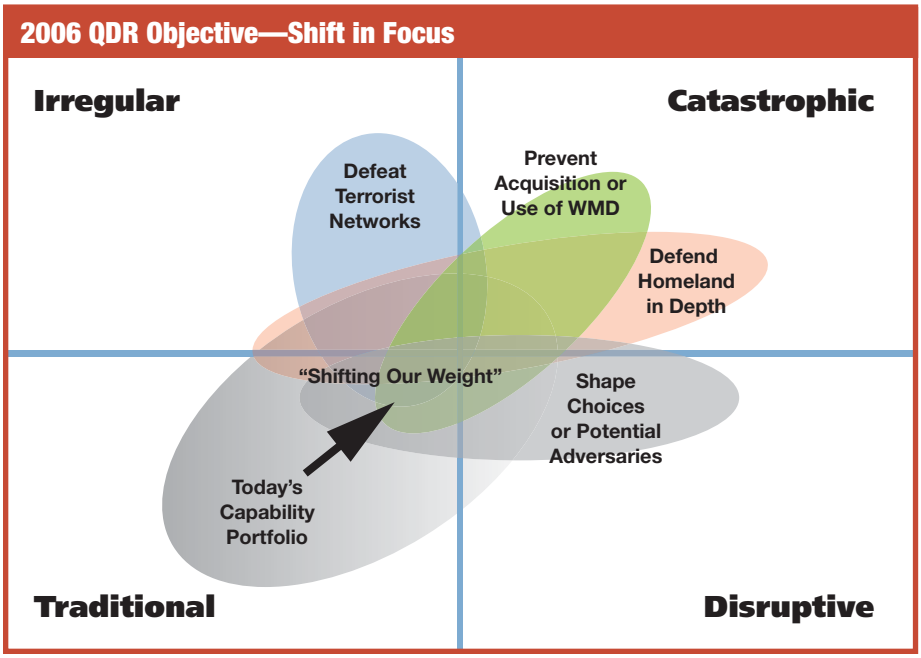


Figure 2

on terror and that the department might actually increase the risks to U.S. forces by going too fast. The current transformation rate represents a careful balance between benefit and risk in U.S. force planning.

Disruptive Challenges

Disruptive challenges refer to efforts by a military competitor—unanticipated by an adversary—to acquire breakthrough capabilities that could have potentially disastrous effects at the operational level of war when employed against the adversary.

These types of challenges against U.S. forces can occur on a traditional battlefield, during an insurgency, or when a terrorist group bent on attacking the U.S. homeland demonstrates that American forces cannot stop them before they launch an attack, counter the attack, or respond to it effectively. They normally originate from conscious competitive choice by an actual or potential military opponent. The architects of disruptive challenges seek to acquire the means of defeating our forces by neutralizing or avoiding U.S. military capabilities. Because the preponderance of American military strength is devoted to traditional categories of military power, disruptive challenges are unlikely to emerge from attempts to match or duplicate our strengths. They are, instead, far more likely to be asymmetric by design. Also, those who seek to build them are likely to do so covertly because blatant efforts to create disruptive challenges increase the chances that the United States will anticipate them and build appropriate countermeasures or even eliminate the capacity of the opponent to build such a challenge before he can use it. Therefore, disruptive challenges are not cost-free to those who try to develop them, for they must develop both the technology or technique and the means of employing them under a heavy veil of secrecy.

The U.S. military has not had any recent experience with disruptive challenges. Not surprisingly, compared to our efforts to prepare our forces to deal with the other three security challenges—traditional, irregular, and catastrophic—we have not given much thought to the nature of disruptive challenges and how our forces can best prepare for them, although this may be changing as evidenced by a recent Navy initiative.[4] Of course, U.S. military planners consider risks in operational planning, but largely in terms of what an opponent might do to try to prevent or slow the success of our planned operations.

Regardless of the scenario, our planners do not usually assume that our forces will be "swept off the battlefield" by an unanticipated disruptive challenge. On the other hand, most planners recognize the limits to our ability to forecast how well actual operations will conform to the plan and readily acknowledge that even the best operational plans are unlikely to remain intact after the opening shots have been fired in the battle or campaign. In other words, U.S. military planners address the possibility of the unanticipated during the execution of plans and take into account the likelihood that things will not go as we expect, but they do not typically plan for disruptive challenges.[5]

Recent DOD efforts to develop effective ways of countering disruptive challenges have focused on how to dissuade potential opponents from attempting to develop them. These efforts generally address two approaches for countering disruptive challenges: narrowing the range of unanticipated events by better intelligence and building U.S. forces with the versatility to overcome a disruptive challenge if and when they confront one.

The first approach seeks to improve our ability to anticipate efforts by adversaries to develop and field capabilities that could have disruptive effects of their own. The second emphasizes greater force flexibility to adjust and respond more quickly to surprise. Successful efforts in both areas can create powerful dissuasive pressure on potential opponents. For example, an opponent attempting to develop a disruptive challenge to U.S. military capabilities may abandon the effort altogether if he believes U.S. intelligence has uncovered his secret plans. Similarly, if an adversary believes the U.S. military is sufficiently robust to shrug off or absorb a defeat at the operational level, he may decide that the cost of building a disruptive challenge is too great in the face of potential returns.

Despite their obvious potential to be effective, these two methods may not be sufficient to dissuade all prospective opponents from trying to present viable disruptive challenges to U.S. military forces. The competition that generates interest in developing disruptive challenges also generates political interests and bureaucratic momentum that can negate the dissuasive effects of better U.S. intelligence and a more robust, flexible U.S. military force. Such challenges may be addressed by a third

the four security challenges all have important claims on resources because it is their interaction that poses the greatest national security challenge

approach, accelerating transformation, in combination with the other two.

Accelerating Transformation

Although less widely understood than the two approaches described before, accelerating the rate of U.S. military transformation offers a third dimension for countering future disruptive challenges. In a broad sense, accelerating transformation is relevant to coping with all four security challenges, and its importance as a DOD goal is widely recognized—though not fully accepted by all. The 2006 *QDR Report*, for example, "provides new direction for accelerating the transformation of the Department to focus more on the needs of Combatant Commanders and to develop portfolios of joint capabilities" to support their requirements.[6] In his initial guidance to the Joint Staff, General Peter Pace identified the need to "accelerate transformation" as one of his four "mutually supportive" priorities:

The goal of warfighting must be to produce a force capable of swiftly and decisively defeating any enemy. It is a prerequisite to winning the War on Terrorism and will significantly accelerate and be accelerated by transformation.[7]

Although accelerating the rate of transformation will help prepare our forces to be ready to dissuade, deter, and defeat all types of security challenges, it is logically tied most directly to meeting future disruptive challenges, where it forms the third focus of a strategic response. It has the potential to multiply the dissuasive effects of improved intelligence and enhanced force flexibility while adding a powerful additional element (see figure 3).

Accelerating the rate of transformation makes the U.S. military less of a fixed strategic target. Because disruptive challenges to U.S. military power emerge from efforts to target U.S. vulnerabilities or neutralize U.S. strengths, increasing the rate at which we reduce the former and enhance the latter will make it harder for a competitor to come up with an effective disruptive capability. By the time the adversary produces what he hopes will be a disruptive challenge, the target will have changed. Unless the competitor has accurately predicted where the U.S. military will be going by the time he has developed a disruptive capability, the U.S. vulnerability may have been eliminated or at least significantly reduced.

Countering Disruptive Challenges

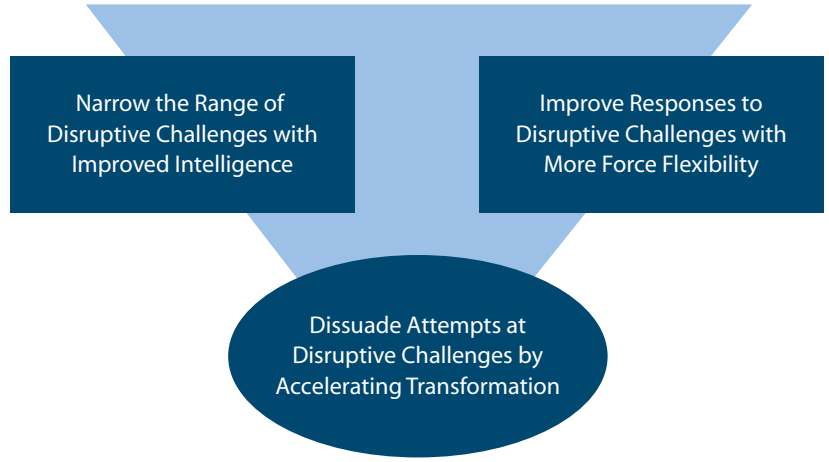


Figure 3

Broadening U.S. Military Capabilities

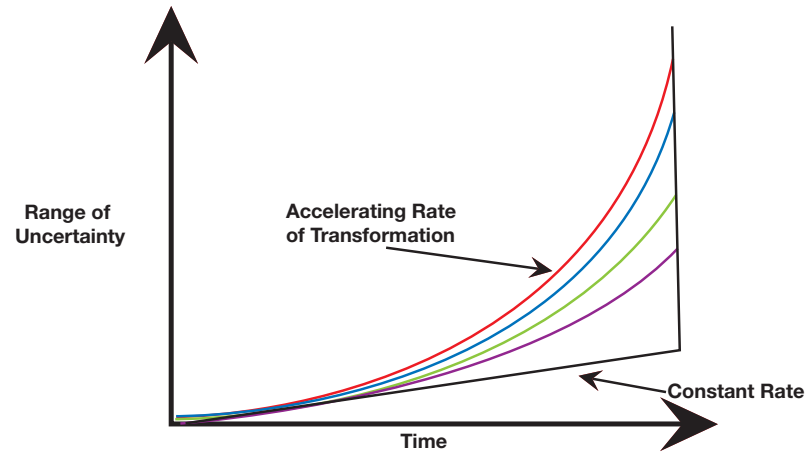


Figure 4

accelerating transformation is logically tied most directly to meeting disruptive challenges, where it forms the third focus of a strategic response

Broadening U.S. military capabilities—improving and changing at faster rates—also makes it more difficult for a competitor to devise something that will be disruptive to U.S. military power in the future because an increasing rate of transformation widens the range of potential future U.S. military capabilities (see figure 4). From the challenger's perspective, this expands the area of uncertainty he faces in his efforts to predict what will disrupt U.S. military forces in the future. Instead of a target that is predictable from straight-line projection, a competitor must hedge his bets as to what the U.S. military will be able to do in the future. He must devise optional development paths to counter the multiple possibilities that a faster U.S. military transformation process is capable of generating.

In sum, a faster rate of U.S. military transformation will make it harder for an opponent to devise disruptive challenges, which are likely to be more expensive to develop and more difficult to keep hidden. It reduces the competitor's confidence that what he hopes will disrupt U.S. military operations will actually work and increases the risk that the United States will discover his efforts to develop the disruptive capability. In a strategic sense, this shifts the complexity of the interaction between the United States and a competitor to the competitor. It lessens, but does not eliminate, the complexity that America faces in trying to discern what could be disruptive to its military capabilities and increases the complexity facing a competitor in trying to develop something that will disrupt U.S. capabilities by the time his planned disruptive challenge will be ready to use. The net effect of faster transformation multiplies the dissuasive pressure on the competitor.

some DOD activities impact multiple transformation programs and thus accelerate the rate of transformation in a nonlinear way

Deceptive Terms

Transformation and *transformation rate* are deceptively simple terms, but they must be used with care. Nearly all definitions of transformation found in dictionaries include the concept of change from one state or condition to another, but little more. The various meanings of transformation say nothing about the results of the change, whether it is for the better or the worse, or at what rate it occurs.

The ambiguity of the word *transformation* is almost certainly one of the reasons it replaced the earlier phrase, *revolution in military affairs* (RMA) in DOD. RMA connoted rapid, radical, and uncontrolled change—an uncomfortable notion for many military professionals. Because of its more limited and ambiguous implications, transformation had the consensus-building advantage of embracing a much wider range of programs, plans, and tools. Since there is virtually nothing inside the Department of Defense that is not changing (rate and direction aside), virtually every program can claim to be transformational. This is convenient when *transformational* is understood as a helpful or even necessary description in the continual competition between the Services and other DOD organizations for limited resources.

Over the past 5 years, Secretary Rumsfeld has articulated several significant refinements to the meaning of transformation as the term is used inside DOD. First is the notion that transformation must result in tangible improvements. Thus, military transformation refers to changes from a lower to a higher state of military quality, in which *quality* can refer to military effectiveness, capability, efficiency, or other concepts associated with improvement. Second is that transformation means "significant improvement" that occurs relatively rapidly. This highlights the distinction between modernization, involving incremental, linear change, and transformation, implying more radical, nonlinear change.

Transformation rate is the time it takes to change from one state or condition to another. The Secretary's qualitative description of "rapid, significant improvement" implies higher value to phenomena or activities that accelerate the rate of transformation. This distinction rests on the difference between claims of being "transformational" and claims of "accelerating the transformation rate." Both can increase the overall rate at which the U.S. military transforms, but they do so quite differently. Increases in transformation programs affect the rate of transformation in an additive way; in theory at

Arrow–2 antiballistic missile launches to intercept incoming target missile as part of a joint U.S.-Israel test program

DOD

▲ *Download as wallpaper at ndupress.ndu.edu.*

The Stiletto is being developed for the Navy

DOD

▲ *Download as wallpaper at ndupress.ndu.edu*

least, the more transformational programs there are, the faster the rate of transformation. But this describes a linear increase, a function of the sum of transformational programs.

Some DOD activities have the potential to impact multiple transformation programs and, in so doing, accelerate the rate of transformation in a nonlinear way. Spiral development, for example, can accelerate the introduction of a broad range of transformational programs to U.S. forces. It accelerates the rate of transformation because it is designed to reduce the time required to move new technology into an operational status and to ensure that the organization and structures that can best take advantage of it are in place when it arrives.

Similarly, concept development and experimentation can accelerate the transformation rate by identifying and exploring new ways of using emerging technology and combining new or existing technology with new concepts of operations. Discontinuous technology can produce "skip generation weapons" and other systems designed and procured specifically to stimulate faster transformation by demonstrating and forcing new operational approaches and capabilities.

Education, training, combat experience, and other activities involving DOD personnel can help change the culture within the department, moving it away from industrial age assumptions to the new assumptions and characteristics of the information age. The implementation of network-centric capabilities within U.S. forces and the adoption of network-centric operational concepts offer the potential to accelerate the rate of transformation and contribute to countering future disruptive challenges.

Achieving Higher Learning Rates

As mentioned previously, generating higher transaction rates and achieving faster learning rates are two of the four new metrics that ought to be used to assess future military capabilities and identify programs that are contributing (or can potentially contribute) to accelerating the rate of military transformation.[8] Together, they can help provide a foundation for accelerating transformation by creating and preserving viable options, which in turn can enable U.S. forces to impose overwhelming complexity on adversaries. By helping to accelerate the rate of military transformation, higher transaction and learning rates can help reduce or eliminate future disruptive challenges.

Transaction rate is the frequency of information exchanges among military actors. It is a function of the communications architecture that defines who receives and sends messages. The greater the number of nodes in the network, the higher the number of information exchanges, at least potentially. More precisely, the transaction rate is a function of the streams of information that flow through the structure, the information (the content) that is carried by those streams, and the effect the information has on the actions of the actors (human or machine) that result from the interactions. The number of nodes on a network does not provide as reliable an indicator of the power of the network as the number, frequency, and content of the transactions that occur among the nodes. Most importantly, the transactions affect the understanding and behavior of their participants—they generate learning.

The ability to generate a higher rate of effective transactions than the opponent contributes directly to a higher learning rate for U.S. forces. In turn, the attainment of higher learning rates will help U.S. forces obtain a crucial advantage in creating and preserving viable options with greater probabilities of success. For military forces, learning in the battlespace or during an exercise is not simply a matter of conforming to the orders of higher authority. It involves continually assessing

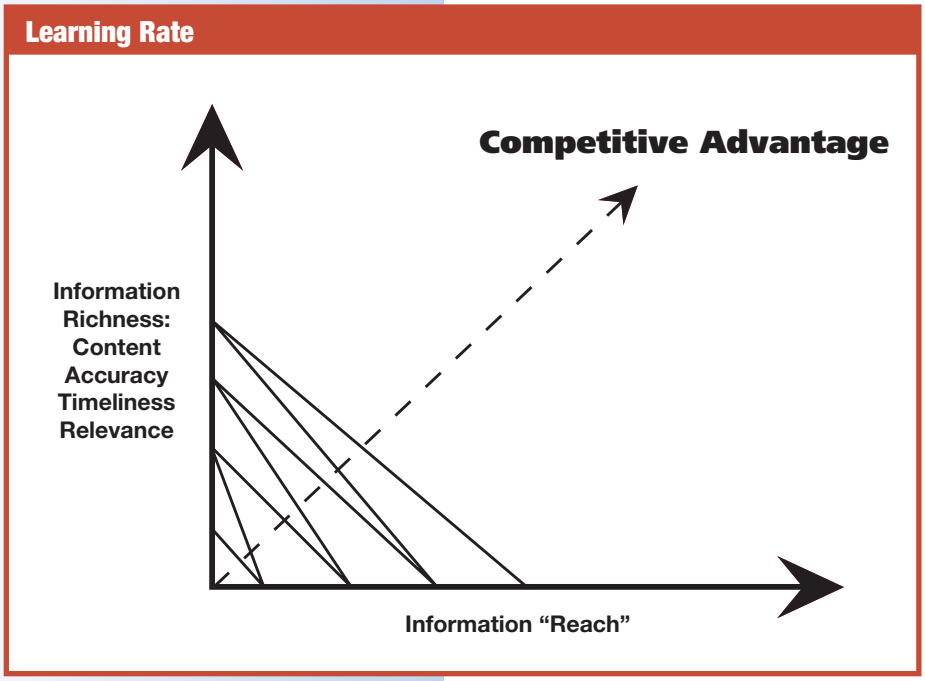


Figure 5

Office of Naval Research

orders in light of the current situation and providing feedback to those higher in the chain of command so that commanders or others in authority can alter their orders when the situation demands it or new opportunities are identified. This is the process that allows networked forces that maintain higher transaction and learning rates to adjust faster to rapidly changing combat situations.

The ultimate goal of a faster learning rate is a competitive advantage for U.S. forces. Attaining a high degree of information richness—including assessments of content, accuracy, timeliness, and relevance—will not alone assure a high learning rate. Instead, in order for learning rates to be increased, both information richness and information reach must be enhanced (see figure 5).

Increasing Learning Rates

The Office of Force Transformation (OFT) investigates and incubates emerging capabilities that have not been identified as requirements by the Services or combatant commands. Through these activities, OFT seeks to stimulate the changes needed to explore, develop, and experiment with concept-technology pairings. Furthermore, the office seeks to provide a positive path aimed at transforming the force through operational experimentation. While OFT is by no means the only DOD organization engaged in pairing concepts and technology to develop potentially transformational capabilities and conduct experiments with operational prototypes, some aspects of the OFT experience thus far may be instructive.

The OFT intent is to increase experimental transaction rates to generate higher learning rates. In turn, this learning should enable DOD to produce investment options that can help U.S. forces adapt to an uncertain future. An option-based hedging strategy can be achieved by increasing numbers and diversity, creating a force relevant at various scales, and overmatching our competitors through investment and engagement. This strategy is specifically designed to create a more tactically stable force that values speed of maneuver and modularity for rapid configuration. Such a force will be capable of adapting to dynamic conditions and prevailing against all types of security challenges, including disruptive challenges. It is also a force where tactical learning is highly prized.

Tactical learning serves as a hedge against an adversary's cost-imposing strategy, such as terror, by generating a better understanding of a chaotic world at the appropriate scale for resolution. Controlling local chaos cannot be achieved from strategic distance; it must be accomplished by recognizing what is occurring at the relevant scale by local knowledge and experience. Tactical learning from operational experimentation also provides a means for gaining experience in critical operational mission areas without having to predict future mission or engagement areas. By deliberately experiencing as many operational options within the tightest cycle times possible, OFT aims to generate the best opportunity for organizational learning.

OFT has undertaken a number of concept-technology pairing initiatives that have shown promise by generating higher transaction and learning rates. In this regard, two OFT initiatives—the Wolf PAC distributed naval operations experiment and Project Sheriff, centered on the Full-Spectrum Effects Platform (F–SEP)—are especially promising.[9]

The Wolf PAC distributed naval operations experiment includes the development of the Stiletto craft as an operational "surrogate."[10] Stiletto, a composite fiber, nonmechanical dynamic lift high-speed vessel, represents one of the many assets that could be used for distributed naval operations in the future. Purposely designed to facilitate the investigation of the underlying rules for success and survival in complex maritime environments such as littoral waters, Stiletto's specific char-

tactical learning serves as a hedge against an adversary's cost-imposing strategy, such as terror

acteristics incorporate modularity at multiple levels and use an "electronic keel" for rapid mission reconfiguration, which provides the necessary flexibility for special operations forces to deploy, modify, and tailor capabilities to deal with emerging challenges. In addition, the Wolf PAC initiative with Stiletto brings numerous options to the battlespace of the future, greatly increasing the complexity our adversaries will have to face.

Project Sheriff is another initiative that involves the application of the new metrics. It is focused on the critical urban environment where a unique concept/technology pairing has produced the F–SEP prototype. F–SEP is an integration of lethal and nonlethal systems, mounted on an Army Stryker wheeled fighting vehicle, which has the potential to provide Soldiers and Marines with a greatly expanded set of the options while simultaneously recapturing the time advantage. By applying rapid testing and experimentation techniques, Project Sheriff has helped accelerate the learning rate for this concept-technology pairing, allowing the exploration of even greater effectiveness in a more rapid fashion.

Although the U.S. military lacks recent experience in dealing with disruptive challenges in the battlespace, it appears quite possible, indeed likely, that we will face such challenges in the future, particularly if our adversaries decide that we are ill prepared to cope with them. Our intensified efforts to dissuade or counter disruptive challenges have relied on narrowing the range of unanticipated events that U.S. forces may face and building forces that are sufficiently robust and flexible to defeat disruptive challenges.

Accelerating the rate of transformation, moreover, dissuades disruptive challenges and shapes the choices of potential adversaries. In fact, it has the potential to multiply the dissuasive effects of improved intelligence and enhanced force flexibility. Ultimately, accelerating force transformation can make it far more difficult and expensive for adversaries even to develop effective disruptive challenges in the first place. **JFQ**

NOTES

[1] Arthur K. Cebrowski, "Transforming Transformation—Will It Change the Character of War?" unpublished paper (2004).

[2] DOD, *The National Defense Strategy of the United States of America*, March 2005, 2–3.

[3] DOD, *Quadrennial Defense Review (QDR) Report*, February 6, 2006, 19.

[4] Last year, the Chief of Naval Operations (CNO) established "Deep Red," an intelligence cell under the Director of Naval Intelligence (DNI), to provide a "devil's advocate" perspective to study "how adversaries might use available technologies in non-traditional ways, to disrupt operations." According to David Cattler, Deputy Assistant DNI for intelligence support and director of Deep Red, this organization was chartered in June 2005 by then Admiral Vern Clark "to inform the Navy on who its adversaries are, how they think, and how they might attack." Article by Geoff Fein in *Defense Daily*, January 20, 2006.

[5] The 2005 Summer Study Task Force on Transformation convened by the Defense Science Board identified the potential of disruptive challenges as "a special category of capability concern," recommending that the department improve its capacity to detect disruptive technologies that adversaries could use to negate critical U.S. military capabilities like precision attack, dominant battlespace awareness, and decision superiority. "While the Task Force found extensive (DOD) activity in the area of disruptive challenges, it did not find a comprehensive, coherent effort to identify and address these challenges." *Defense Science Board (DSB) Summer Study on Transformation: A Progress Assessment*, Volume I (February 2006), 23.

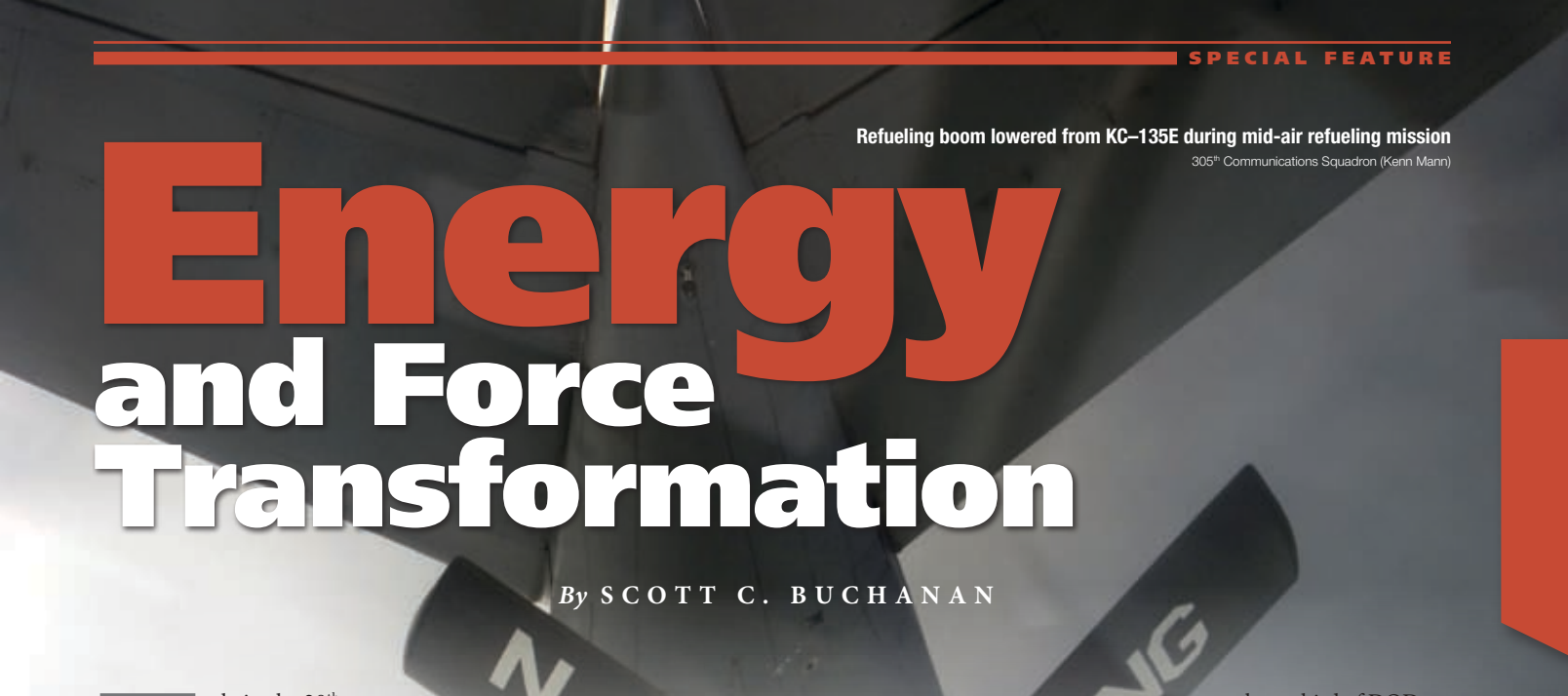
[6] DOD, *QDR Report*, February 6, 2006, 4.

[7] Peter Pace, *The 16th Chairman's Guidance to the Joint Staff—Shaping the Future*, October 2005. The other three top priorities of the Chairman are to "win the war on terrorism," "strengthen joint warfighting," and "improve the quality of life of our service members and our families."

[8] The other new metrics are "creating and preserving options" and "creating overmatching complexity."

[9] Two other promising initiatives involving operational experimentation include the Operationally Responsive Space business model, which includes the Tactical Satellite experiments and two redirected energy efforts, the Aerospace Relay Mirror System and the Tactical Relay Mirror System.

[10] The experimental Stiletto vessel was launched in December 2005 and revealed to the public for the first time in January 2006 at San Diego during the annual AFCEA West conference. Following U.S. Government acceptance in April 2006, the Office of Force Transformation began conducting a rigorous series of operational experiments that will define the broad range of utilities for a host of potential users.



Refueling boom lowered from KC–135E during mid-air refueling mission
305th Communications Squadron (Kenn Mann)

Energy and Force Transformation

By SCOTT C. BUCHANAN

Early in the 20th century, First Sea Lord Sir John Fisher implemented a radical transformation that both altered the British Navy's force structure and diversified its energy sources. Although military and strategic considerations loomed large in this transformation, the overriding driver was the problem of limited government finances.[1] Because oil was a more efficient form of energy than coal, the British admiralty judged that it could secure savings in its most critical problem area—manpower—by shifting from a coal-based to an oil-based energy infrastructure.

As the Royal Navy diversified its energy sources to include both coal and oil, its logistical infrastructure changed as well. Because Britain lacked domestic supplies of oil, some of the key issues that challenged this energy transformation were the diversification of suppliers, storage of the oil, and transport. Despite the peacetime innovations, the navy still found fuel consumption to be its greatest logistical challenge in World War I.[2]

The U.S. Department of Defense (DOD) can learn from the Royal Navy's pre–World War I energy transformation. Like the Royal Navy a century ago, DOD is faced with the problem of limited resources due in large part to our energy infrastructure. Fuel represents more than half of the DOD logistics tonnage and over 70 percent of the tonnage required to put the U.S. Army into position for battle.[3] The Navy uses millions of gallons of fuel every day to operate around the globe, and the Air Force, the largest daily DOD consumer of fuel, uses even more.[4]

The DOD energy burden is so significant that it may prevent the execution of new and still evolving operational concepts, which require the rapid and constant transport of resources without regard for the energy costs.[5] These energy burdens will increase as new operational concepts demand a lighter, more agile and dispersed force, with the attendant increase in logistical sustainment. As increasing portions of the budget are set aside for fuel purchases to account for the volatility in fuel prices, increased capability will need to be built into new platforms to mitigate likely impacts on force shape and composition. It is crucial, therefore, that DOD develops an energy strategy that reduces the energy burdens of our operational concepts.

Decoupling traditional energy sources from systems and platforms may radically alter both operational requirements and capabilities, as well as alter strategic realities. The use of technologies that no longer rely on the current energy infrastructure is the wave of the future. For instance, one estimate suggests that a third of DOD resources are focused on one small area of the world—the Middle East. The annual investment in securing this region currently exceeds $150 billion per year.[6] Reducing our dependency on oil should make these resources available for investment in future force and infrastructure needs.

Depending upon which view one chooses to accept, the global oil supply will either last no more than a few decades or will perhaps last a century. On one side of the debate, experts argue that because of the limited supply of oil, it will increase in expense as it depletes in availability or production (referred to as Hubbert's peak). Market analysts, on the other hand, argue that the market will force a correction of the oil demand, thereby stemming the flow of oil and prolonging the inevitable. Both arguments underscore that oil is an increasingly scarce commodity. Clayton Christensen has argued that "markets that don't exist can't be analyzed."[7] Until a market correction takes hold, or there is a global shift toward alternative sources of fuel, oil demand will continue and, perhaps increasingly, will influence the global security environment. DOD has the opportunity to take action to shape this future to our advantage.

High Demand and High Costs

The speed with which military forces have deployed and engaged has depended on the speed and adaptability of the logistics tail, which has adapted and evolved to provide the ever-increasing demand for fuel that our

Scott C. Buchanan is a Strategist in the Department of Defense Office of Force Transformation.

Filling fuel barrels at observation post in Iraq

U.S. Marine Corps (Tasha M. Fontaine)

newest platforms demand. Because of our tremendous logistics capability, the Armed Forces can be successfully deployed and employed anywhere in the world for both deterrence and combat operations. However, that capability comes at a high price: a tremendous energy demand.

The energy consumption rates of our forces in Iraq and Afghanistan, for instance, is four times what it was in World War II and twice that of Operations *Desert Shield* and *Desert Storm*.[8] The logistics tail now consists largely of the fuel required to execute and sustain operations:

- An Army heavy division may use 20 to 40 times the daily tons of fuel as it does ammunition—about 600,000 gallons per day.[9]
- Of the top 10 battlefield guzzlers, only 2 are combat vehicles—the Abrams tank and the Apache helicopter—ranked fifth and tenth, respectively. The other eight carry fuel and supplies.[10]
- Over half of the fuel transported to the battlefield is consumed by support vehicles, not vehicles engaged in frontline combat.[11]

Delivering fuel where and when it is needed is a significant and increasing burden on the Services. The logistics costs to deliver fuel include people, training, platforms (for example, oilers, trucks, and tanker aircraft), and other hardware and infrastructure. Those costs can be tens and sometimes hundreds of times the cost of the fuel itself, depending on how it is delivered. However, the exact costs are unknown because acquisition and operational decision processes neither fully quantify those costs nor consider alternatives to the "logistics systems" that platform acquisition and perhaps operational decisions will dictate.[12] It is likely that actual costs of delivering fuel for operations are dramatically higher than decisionmakers realize.

Until now, the methods for acquiring military platforms, both combat and support, and accounting for the costs of fuel to operate and sustain them have been sufficient. However, is the confluence of new and evolving operational concepts, high fuel costs, and fiscal constraints demanding a transformation in our view of energy? The available evidence suggests that it is.

New Technology Vectors

Historically, the Department of Defense has invested in transformational technologies—such as nuclear power, missile defense initiatives, and intercontinental ballistic missiles—with the potential to alter the strategic balance. DOD should do the same now to balance its scarce energy resources. New technologies to improve fuel efficiency (weight, drag, engine efficiency, system efficiency, and auxiliary power needs) and to develop alternative energy sources have the potential to transform the force, remove operational limits that are built into our plans, and provide the capabilities that forces need. The business case for investing in new technologies, however, is difficult to build because current costing methods do not make the actual end-to-end costs of fueling the force visible to decisionmakers.

In *Winning the Oil Endgame*, Amory Lovins identifies some key technology investments in various stages of development that could significantly improve military weapon system efficiency and operational performance.[13] Investing in these technologies gains energy efficiency and explores alternative fuels and energy sources. About $250 million (0.4 percent) of the DOD fiscal year 2006 research and development (R&D) budget can be tracked to energy-related projects to include:

- Army: Propulsion and Energetics Program, University Research Initiative Fuel Cell R&D, Advanced Propulsion Research, Combat Vehicle and Automotive Technology (includes numerous projects on fuel cells, lightweight materials, and reengineering of vehicles), and Services Combat Feeding Technology Demonstration
- Navy: Navy Energy Program, Mobility Fuels/Fuel Cells, Integrated Fuel Processor/Fuel Cell System, Solid Oxide Fuel Cell, Commercial Off-the-Shelf Carbon Filter Qualification, and Energy and Environment Technologies (fuel cell and methane hydrate technologies)
- Air Force: Integrated High Performance Turbine Engine Technology Program (to double the 1987 state-of-the-art turbine engine thrust-to-weight ratio) and Dual Use

Refueling tanker truck for forward operating bases in Iraq

U.S. Marine Corps (Brian A. Jaques)

Science and Technology (fuel efficiency is an explicit area of interest but is a small part of overall project)

■ DOD: Vehicle Fuel Cell Programs, Fuel Cell Locomotives (congressionally added programs), Advanced Power and Energy Program, Weapon and Energy Sciences (includes research on energy and fuel), Syntroleum Project (to convert natural gas into liquid fuels), and Hydrogen Fuel Cell Electric Hybrid Vehicle.

The actual level of DOD investment may be higher because research within other program elements may include platform-specific energy concerns. Nevertheless, even if the level is doubled or tripled, it would be a small investment compared to the investment in other strategic initiatives such as missile defense. More important, an investment in energy-efficiency R&D and, ultimately, oil independence may have a far greater impact on the strategic balance.

An inherent tension exists within the tiered-system approach that DOD takes to science and technology (S&T). On one hand, wide-ranging S&T investment provides a mechanism for discovering new knowledge and developing things that would not otherwise exist. On the other hand, most successfully fielded military S&T is directed toward operational and programmatic needs. While at least seven different fuel cell efforts are under way, the low level of investment in energy efficiency R&D may indicate that energy efficiency is not being pursued with urgency or an overarching strategic view toward transforming the way we plan, operate, and fight. The following areas may provide a basis for such an overarching DOD energy strategy.

USS *Blue Ridge* being refueled by USNS *Walter S. Diehl*

USS *Blue Ridge* (Marc Rockwell-Pate)

▲ *Download as wallpaper at ndupress.ndu.edu.*

an inherent tension exists within the tiered-system approach that DOD takes to science and technology

Invest Strategically in Energy Technology. By significantly increasing its R&D investments, DOD can improve the efficiency and capability of the current force. These investments will require the establishment of a strategic transformational mandate for significant near-term energy-efficiency improvements (such as retrofit of existing platforms that will be part of the force for several years), reduced logistics force requirements, and long-term military and national energy independence from foreign energy sources (including new efficient platforms powered by alternate energy sources). The technologies considered should be far-reaching, with the specific view of their potential both to provide the lethal force required in the execution of military operations and to provide that force more effectively and efficiently. In other words, although recent operations have demonstrated the usefulness of heavy forces, a smaller, more responsive, and more affordable force might better meet capability demands than a larger, slower force that is more expensive to operate.

Revisit an Energy Accounting Process. As noted in both a Defense Science Board study and *Winning the Oil Endgame*, providing fuel to military forces has many costs that are hidden from current planning, acquisition, and investment processes.[14] As a result, inefficient and capability-limiting practices have persisted. To rectify these shortfalls, these studies suggest that the Defense Department must transform its culture of treating energy as essentially a "free" good both in operational planning and in acquisition. Specifically, they recommend that DOD identify and fully consider all the costs associated with providing fuel to the force and use this information in modeling and wargaming. Practically speaking, this could mean that DOD would need to develop and implement tools to:

■ account for all energy-related costs (procurement and delivery)

■ analyze life-cycle costs with actual energy costs and make them explicit in acquisition and R&D investment decisions

■ model and wargame actual logistics requirements and limitations as part of the analysis to support operational planning.

In general, a DOD energy strategy could provide the incentive mechanisms for the Services to begin showing a return on investment within a given timeframe.

Embrace Energy Efficiency. The clear articulation of a policy for achieving energy efficiency as a primary aspect of executing a strategy might have substantial implications for military transformation. The rationale for such a policy might include:

■ Energy efficiency is paramount to develop a force that is expeditionary, agile, responsive, and sustainable.

■ Energy dependence must be reduced to shape the future security environment to our advantage.

■ Savings derived from energy efficiency are required to recapitalize and transform the force to have the future capabilities needed.

■ Limiting logistics support requirements enhances warfighting capability and reduces costs.

■ The Services, combatant commanders, research laboratories, and other major DOD organizations should be allowed to keep a

portion of the savings from innovative initiatives in material, procedures, and doctrine that significantly enhance energy efficiency.

- Enabling the rapid adaptation of new energy technologies to civilian use is required for the Nation's long-term physical and economic security.
- Energy efficiency will not adversely affect military capability.

Stimulate Private Industry. Beyond making DOD more efficient and capable of executing future operations, adapting new energy technologies for civilian use may have a larger strategic impact. The Defense Department can lead or stimulate the culture change—required at all levels of the Nation—to recognize the hidden costs of fuel oil and move strategically to less foreign energy dependence. Only then can the United States become better positioned economically and more secure in a future environment with less volatile energy supplies.

Partnering with industry will perhaps stimulate the development of effective energy technologies, develop expertise, and accelerate the acceptance of new technologies by the military and the public. Elements such as the Defense Advanced Research Projects Agency could begin this partnering effort by sponsoring a private-sector "prize program" to encourage new ideas and approaches and demonstrate DOD interest. Partnering would mitigate some industry risk and could potentially:

- accelerate engineering breakthroughs to adapt current technologies to military vehicles and other civilian uses
- lead to developing and proving the advanced manufacturing processes required for new energy technologies
- create procurement strategies that support new industry and manufacturing plants until private demand can sustain them
- stimulate interest and investment in energy efficiency
- make U.S. industries more competitive in the future oil-dependent energy environment.

55th Signal Company (Danielle Howard)

Military police fill HMMWV before patrol

A true energy strategy must result from careful, reasoned analysis. To this end, lively debate on this vital issue is urgently needed. Each proposed element of the framework should be examined and new directions or alternative elements of a strategic framework suggested.

adapting new energy technologies for civilian use may stimulate the culture change required to recognize the hidden costs of fuel oil

This much is clear: so long as DOD systems and associated logistics are wed to an oil infrastructure, meaningful advances in adaptability and agility and overall force transformation will likely be superficial at best. Moreover, the artificially low prices reported for the cost of fuel do not allow for market adjustments in response to the rising costs of oil. The consequence of this pricing approach is that investments in fuel efficiency appear too expensive in cost-benefit analyses and program tradeoff studies used to prioritize system acquisition decisions. However, investments in fuel efficiency actually create savings opportunities that enable investment in technologies. In turn, these new technologies will help maintain the U.S. military's capability advantage over potential adversaries.

As Britain's Royal Navy discovered more than a century ago, transformation relies on new and diverse sources of power. By divorcing DOD systems and infrastructures from oil, we can easily imagine new operational capabilities, an adaptive logistical system, and a radically altered strategic landscape. **JFQ**

NOTES

[1] Nicholas A. Lambert, *Sir John Fisher's Naval Revolution* (Columbia: University of South Carolina Press, 1999).

[2] Jon Tetsuro Sumida, "British Operational Logistics, 1914–1918," *The Journal of Military History* 57, no. 3 (July 1993), 447–480. Also see Erik J. Dahl, "Naval Innovation: From Oil to Coal," *Joint Force Quarterly* 27 (Winter 2000–2001), 50–56.

[3] Defense Science Board Task Force on Improving Fuel Efficiency of Weapons Platforms, *More Capable Warfighting Through Reduced Fuel Burden* (January 2001), 4, available at <www.acq.osd.mil/dsb/reports/fuel.pdf>.

[4] Ibid., 13.

[5] Ibid., 16.

[6] Michael T. Klare, *Blood and Oil* (New York: Owl Books, 2004), 10.

[7] Clayton M. Christensen, *The Innovator's Dilemma* (New York: Harper Business Essentials, 2003).

[8] Sohbet Karbuz, "The U.S. Military Oil Consumption," Energy Bulletin, available at <www.energybulletin.net/13199.html>.

[9] Defense Science Board, 13.

[10] Ibid., 42–44.

[11] Ibid., 19–20. Also see Amory B. Lovins et al., *Winning the Oil Endgame* (Snowmass, CO: Rocky Mountain Institute, 2004), 88.

[12] Ibid., 14.

[13] Lovins et al., 84–93.

[14] Defense Science Board, 15–16. Also see Lovins et al., 87.

Insights from Colombia's "Prolonged War"

By CARLOS ALBERTO OSPINA OVALLE

Photos courtesy of Colombian Army

Top to bottom: scenes from counterterrorist operation; General Ospina is shown the route of the operation; Colombian soldiers on patrol

Colombia is the second oldest democracy in the Western Hemisphere after the United States, but political violence has plagued its history since independence. The causes lie in the unique geography, demographics, and history of the nation.

Since the end of World War II, Colombian violence has been dominated by insurgencies. Though the insurgents have used terror, that has only been one of the tactics employed in pursuit of their larger aims.

Colombia faced fairly small insurgencies before the 1980s. At that point, unable to mobilize popular support, the insurgents began funding their revolutions through criminal enterprises such as drug trafficking, extortion, and kidnapping. These activities proved lucrative beyond all expectations. As a consequence, the insurgents began to ignore popular mobilization completely, relying increasingly on terror to force the people to obey their will.

The combination of these factors led one of the insurgent groups, the Revolutionary Armed Forces of Colombia (*Fuerzas Armadas Revolucionarias de Colombia*, or FARC), to develop a strategy to take power—with several distinct phases and a number of supporting tasks to be accomplished within each phase. The war grew worse year after year, despite increases in defense spending and growth of the public security forces. It was only after the military understood the insurgent strategy and designed its own strategy to defeat this plan that the war began to turn in the government's favor.

to counter insurgents, one must remember that they have doctrine

In the end, then, no matter what the enemy is called—*insurgent*, *terrorist*,

General Carlos Alberto Ospina Ovalle is the Commander of the Colombian Military Forces.

General Ospina observes a FARC camp captured by Colombian troops

Colombian Army

narcotrafficker, or *narcoterrorist*—successful counterinsurgency depends on a thorough understanding of the enemy and his real intentions. The government's response must be shaped by this understanding.

Early Lessons Learned

To counter insurgents, one must remember that they have doctrine. When captured, they have often been carrying the works of Mao Tse-Tung and Truong Chinh (the Vietnamese theorist of people's war) translated into Spanish.

These insurgents were Colombians, fellow citizens, a point that should never be forgotten in internal war. After their capture, they were induced to discuss the process by which they became insurgents. Several points emerged:

■ All internal wars have their deepest roots in grievances and aspirations that create a pool of individuals who can be recruited, after which the organization takes extraordinary measures to shape their worldview and keep them in the organization.

■ Thus, *leaders* of a subversive group are the most dangerous members. Followers may be dangerous tactically, but leaders read, find ideology, and come up with "big picture" solutions to the ills of society. They will then commit any crime tactically to gain their strategic end.

the Western concept of a continuum with "war" on one end and "other than war" on the other was irrelevant

■ Insurgents have organization, which helps them develop plans and approaches, much like the military. They have procedures and rules. They attend schools and strive to learn. They have a set of core beliefs, which one can combat once he understands them.

■ Combating insurgent beliefs is not simply a military task; it is a struggle for legitimacy. If all members of a society accept that the government is just, none will allow themselves to be won over by insurgents. So all elements of national power must be mobilized, and all parties must participate in the battle for the survival and prosperity of society.

Colombia's Internal War

There have been three main illegal armed actors in Colombia in recent history. FARC emerged by the mid-1980s as the primary threat to the state. Marxist-Leninist in its ideology, funded by criminal activity, and manned by combatants recruited from the margins of society, it has followed people's war doctrine for waging its struggle. The organization has a precise strategy for taking national power, which it follows to this day.

FARC's rival, the National Liberation Army (*Ejército de Liberación Nacional*, or ELN), also developed a strategy and was ascendant in the late 1980s and early 1990s, but it was never able to achieve the cohesion, power, and strength of FARC. Due to subsequent military losses and waning of political support, the power of ELN was much diminished.

On patrol with Colombian soldiers

Colombian Army

Finally, the vast areas of ungoverned territory in Colombia and the terror actions of FARC and ELN generated public mobilization against them in self-defense *autodefensas* (often called "paramilitaries" by the media, which is not the best translation). These groups gained power through an alliance with drug trafficking organizations that did not like being taxed by the guerrillas. By 1996, many of these organizations merged to form the United Autodefensas of Colombia (*Autodefensas Unidas de Colombia*, or AUC). These combined forces grew quickly, became as strong as FARC, and perpetrated a dirty war against the insurgents, fighting terror with terror.

In addition to these three main threats were a number of minor groups and the drug traffickers. The resources and ambition of the Medellin and Cali cartels made them national threats because they fielded armies of their own, carried out acts of terror and violence, and had varying relationships with FARC, ELN, and AUC. The threat these groups posed eclipsed that of the three enemies mentioned above through much of the 1980s until the death of Pablo Escobar and the arrest of the leadership of the Cali cartel in 1993.

Meanwhile, FARC had been steadily building its power. In 1996, things became critical as the organization transitioned from guerrilla war to mobile war—what the Vietnamese defined as *main force warfare*—while the Colombian army remained in a counterguerrilla posture. Mobile war employs large units to fight government forces but, unlike conventional war, does not seek to defend positions.

While the army had spread its forces to conduct saturation patrols to fight small bands, FARC now operated in large columns, complete with crew-served weapons and artillery (improvised gas tank mortars). Predictably, the result was a series of engagements in which FARC surrounded and annihilated isolated army units. It was only when the military recognized that FARC was employing mobile warfare techniques as practiced in Vietnam and El Salvador that measures were taken to stabilize the situation. Three important lessons emerged from these realizations:

- The Western concept of a continuum with "war" on one end and "other than war" on the other was irrelevant. The enemy did not conceptualize war that way. There was only war, with different combinations of the forms of struggle depending on the circumstances.
- Military forces had been so focused on the contingencies of the moment, especially the drug war and the actions of the *Movimiento de Abril 19* (M–19), that they failed to see the larger strategic picture. This left the military open to strategic surprise when main force units (guerrilla columns in battalion or larger strength) appeared, operating in combination with terror and guerrilla warfare, much as Western armies use combinations of regular operations and special operations.
- There was a disconnect between the political establishment and the military. The political establishment regarded the problem as solely one of violence: the insurgents were using violence, so the violence of the security forces had to be deployed against them. Moreover, the war was the problem of the military, not of the political establishment. There

was no concept of a multifaceted, integrated response by the state.

The learning curve was steep, and as the military was regaining its balance, it suffered a series of reverses, one of which can be compared to Custer's Last Stand at the Little Bighorn in circumstances and casualties. In March 1998, at El Billar in southern Caquetá, the FARC annihilated an elite army unit, the 52d Counterguerrilla Battalion of the army's 3d Mobile Brigade. By the time reinforcements could land on March 4, the battalion had been destroyed as an effective fighting force, with a loss of 107 of its 154 men.

Regaining Strategic Initiative

Ironically, it was when Andres Pastrana assumed office that regaining strategic initiative began. The irony lay in the fact that President Pastrana was elected on a peace platform. Recognizing that the conflict was political, he opened peace negotiations with FARC and attempted similar discussions with ELN to end the violence. This included ceding a demilitarized zone (DMZ) twice the size of El Salvador to FARC in which the negotiations could take place free of conflict.

At FARC's insistence, however, there was no cease-fire outside the DMZ. While Pastrana took on the political responsibility of negotiating peace with FARC, he left the conduct of the war outside the zone to the military. The negotiations were critical because they demonstrated conclusively that FARC was not really interested in ending the violence, but rather in using the peace process to advance its revolutionary agenda. This bad faith on the part of the rebels opened the door for a more aggressive approach, which, in turn, helped the military to regain the strategic initiative.

The success of this effort was due both to new leadership and a new method. The chain of command that was set in place in December 1998 remained throughout the Pastrana administration: General Fernando Tapias as joint force commander and General Jorge Mora as army commander. General Tapias was able to interact with the political establishment and represent military interests to the civilian leadership while General Mora was a good military leader, mobilizing the army to make the necessary internal reforms to regain the initiative.

In eastern and southern Colombia, IV Division faced FARC's strongest operational unit, called the Eastern Bloc, which had inflicted the worst defeats on the military, and it abutted the DMZ on two sides. FARC was using the DMZ to mass its main force units for new offensives.

Instead of negotiating peace, FARC launched five major offensives out of the DMZ, some even employing homemade but formidable armor. Assessing the success of IV Division against these attacks, the following factors are prominent:

- The division operated as a part of a reinvigorated and reorganized military. There was scarcely an element that was not reformed and improved, and the division worked closely with true professionals.
- The enemy's strengths and weaknesses were assessed correctly, but especially their strategy, operations, and tactics. That meant operations took place within a correct strategy.

FARC can no longer function in large units, so it must engage in operations similar to what the United States faces in Iraq

There was great pressure, especially from the American allies, to focus on narcotics as the center of gravity, but the real strategic center of gravity was *legitimacy*.

FARC had three operational centers of gravity: its units, territorial domination, and funding. The first is self-explanatory. The second resulted from the government's traditional neglect and abandonment of large rural swaths. The final one resulted from FARC's perversion of people's war. The organization had little popular support, so attacking its bases, mobility corridors, and units had the same impact as in major combat. Finally, FARC's domination of the narcotics industry was possible due to its control of large areas of rural space.

Thus, to elevate counternarcotics to the main strategic effort would have been a critical mistake—one that was never made. Despite this success story, however, neither the personnel nor the resources were available to provide security for the populace. A variety of techniques were used, such as offensives to clear out areas, then rotating units constantly in and out of the reclaimed locations, but these were poor substitutes for permanent, long-term presence. That had to wait for the next administration.

An Integrated National Approach

When Colombia's next president, Alvaro Uribe, took office, the missing pieces fell into place. Strategically, a national plan, "Democratic Security," was formulated, which made security of the individual the foundation. This plan involved all components of the state and used the public forces, under Plan Patriot (*Plan Patriota*), as the security element for a democratic society. Legitimacy was a given, but the population needed to be mobilized, and that was the central element of what took place operationally. The people were involved in better governance and in "neighborhood watch," and a portion of the annual draft was ultimately allocated to local forces.

A revived economy provided funding for additional strike and specialized units as well as a substantial increase in manpower (*Plan Choque*). Volunteer manpower was greatly augmented and became a third of total army strength (which now exceeds 200,000). The changes were relentless and extensive.

During this period, the public forces worked closely with civilian authorities in a national approach to national problems. Contrary to the inaccurate and vindictive criticisms leveled against the armed forces in some quarters, Colombia's military did not violate its oath to serve democracy during the era of military rule in Latin America.

It is noteworthy that there has been only one poll in recent years that has not identified the military as the most respected institution in the country, and the single exception placed it second. That says a great deal about its relationship with the Colombian people. Still

the military has worked hard to improve its already good record on human rights and its respect for international humanitarian law. At times the criticisms from international organizations are truly astonishing. Colombian military personnel are subject to law in much the same way as their U.S. counterparts, and this is critical in the war against bandits.

Shifting Ground

The military's goal during the Pastrana administration (1998–2002) was to regain the strategic initiative. It did so by attacking enemy strategy, operations, and tactics. The goal during the Uribe administration (2002–2006, with perhaps a second to follow) was to move to the strategic offensive by strengthening normal pacification activities throughout the country, using local forces and specialized units to reincorporate areas. In addition, the military employed joint task forces to attack FARC strategic base areas, as was done in Operations *Libertad 1* around Bogota and *Omega* in Caquetá, the latter designed to eliminate the "strategic rearguard" FARC used to launch its main forces.

The results so far are that FARC can no longer function in large units, so it must engage in operations similar to what the United States faces in Iraq. Improvised explosive devices are the major cause of casualties. While these devices kill and mutilate, the focus on them is evidence of FARC strategic and operational weakness.

Both ELN and AUC have been addressed principally through negotiations. Demobilization has its own difficulties and critics, but it is preferable to combat operations. Even some FARC units have begun to surrender, although the organization has resisted this trend and is determined to use terror and guerrilla warfare in an effort to repeat the cycle of past years.

Yet the ground has shifted beneath FARC's feet. Minefields and murder can disrupt life in local areas, but the relentless maturation of the democratic state makes the rebels' defeat inevitable if things continue as they are going. Mobilization of the eyes and ears of the neighborhood watch, linked to local forces, area domination forces, and strike forces, all within a grid of specialized forces and the actions of a democratic state, guarantees that FARC combatants will eventually be found and invited to return to their place within the state.

FARC's massive resources from the drug trade and increasing reliance on external bases slow progress in our campaign because they allow an insurgency to engage in antipopular conduct, to include use of terror, and not suffer the same consequences that would result if a mass base was essential. Hence, light should not be sought at the end of the tunnel too soon. Instead, Colombian metrics will be similar to U.S. metrics in the war on terror—measures of the perception that citizens are secure, the economy prospers, and society allows the fulfillment of individual desires.

In Colombia, every indicator that can be measured is proceeding in a positive direction, from the decline in murder and kidnapping rates, to the growth of the economy and freedom of movement. These factors can be quantified, but there is no way to tell when a magic line is crossed where one less murder suddenly makes all the difference in the way Colombians see their country. What is known is that the citizens will show their feelings through the ballot. That is why the military defends and serves a democratic state, and that is as it should ever be. **JFQ**

Understanding Full Spectrum Operations

Insights from Operation *Enduring Freedom*

Soldier patrolling in Ganjgal, Afghanistan

55th Signal Company (Harold Fields)

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By MICHAEL W. ISHERWOOD

An ancient Afghan proverb reflects the commitment and mindset of Afghans today: *Ba solha goftan dunya aram namaisha*—The world will not find rest by just saying "peace." As Afghans work to renew their nation, they understand that peace, stability, and an end to hostilities require more than just well-intentioned ideas; they take hard work. And they are making that commitment.

Afghans today are not alone. They are making this effort with the assistance of the Combined Joint Task Force–76 (CJTF–76) and the coalition. Soldiers, Sailors, Airmen, and Marines, together with a variety of Federal civilians and international partners, are working hand-in-hand with Afghan leaders and citizens to craft a better future. It is a story that is unfolding far from the headlines. In fact, the coalition effort is succeeding despite headlines that suggest the opposite.

As the Southern European Task Force (SETAF) took the leadership role in CJTF–76 in the spring of 2005, it adopted a mission calling for "full spectrum operations." In retrospect, this phrase has become somewhat of a cliché in most mission statements. The joint warfighters' experiences in Operation *Enduring Freedom* from spring 2005 to spring 2006, however, provide insight into the diverse and demanding elements that define the phrase *full spectrum operations* today.

SETAF undertook our mission in the midst of a process that began in November and December 2001, when the Taliban was ousted from power. Afghanistan made spectacular progress in 2002: The *Loya Jirga* elected a 2-year transitional government, the first Afghan National Army unit stood up, and the North Atlantic Treaty Organization began the International Security and Assistance Force (ISAF). In 2003, the Afghan National Army (ANA) conducted its first combat venture, and the first Provincial Reconstruction Team (PRT) began operations. Equally important, the United Nations Children's Fund reported that 6 million pupils returned to school. By 2004, ISAF expanded its mission into northern Afghanistan. The political process continued with the adoption of a new constitution, and the first presidential election was held.

Clearly, Afghanistan has momentum on a positive path, but it still faces a variety of challenges and threats. Opium production remains a problem. Farmers can make eight times more money raising poppies than wheat. Moreover, the infrastructure requires investment. Water, roads, and schools are among the elements in need. Good governance is

Colonel Michael W. Isherwood, USAF, is Deputy, Air Component Coordination Element , Combined Joint Task Force–76 (CJTF–76).

making progress in some provinces and halting progress in others. Tribal association competes with the authority of national political institutions in some areas, creating sources of conflict. Local and national security forces are growing but are not complete.

Hostile elements remain active and seek to exploit the fissures created by the drug economy, poor infrastructure, governance challenges, and tribal affiliations. These forces include a variety of insurgents, such as the *Hizb-I Islami Gulbuddin*, which often operates like both a crime family and an apostle of al Qaeda. Elements affiliated with al Qaeda are active in the countryside, and remnants of the Taliban are present. Further complicating this mixture is a conglomeration of warlords, whose allegiance is to themselves and their drive for power and resources.

Importance of Partnerships

This backdrop of progress and risk highlights the importance of the command's mission: to conduct full spectrum operations to defeat insurgent forces and to promote Afghan peace and prosperity.

the Medical Task Force works closely with the Minister for Public Health to operate 10 hospitals in southern and eastern Afghanistan

The Soldiers, Sailors, Marines, and Airmen of the Combined Joint Task Force–76 cannot win by themselves. The cornerstone to any success over the past year is captured in one word: *partnership*. The command partnered its capabilities and intentions with those of civilians from the interagency community, international partners, and Afghan national, provincial, and military leadership. Collectively, it created the conditions that allow Afghan institutions—political, security, economic, social, and religious—to be stronger and deny influence to hostile elements.

A starting point to understanding full spectrum operations is combat operations. SETAF's tenure built on the foundation of previous rotations, and CJTF–76 took the fight to the enemy to deny both sanctuary and operating room. The core of these forces used included three combat brigades, to include a special operations group. These combat elements conducted some 260 offensive operations in 2005 for missions such as search and cordon, attack-in-zone, and patrols, to name a few. They attacked in the summer, fall, and winter. The combined joint task force operated in times and locations where the enemy had never seen U.S. forces. Collectively, this not only maintained pressure on the foe, but denied him temporal sustainment and geographic refuge.

U.S. civil affairs officer and New Zealand soldier conduct veterinary civic assistance program in Dagar, Afghanistan

55th Signal Company (Michael Zuk)

These elements were enabled by key actors, such as an aviation task force with fixed- and rotary-wing combined forces land component assets. A joint logistics command provided critical support to the warfighters, and an engineering task force contributed key capabilities to defeating the insurgents and promoting prosperity.

While many of these forces were Soldiers, the entire joint team was engaged. A Marine battalion deployed along the eastern Afghan border as an integral part of Regional Command East. In the summer of 2005, Navy aviators replaced Marine aircrews flying daily EA–6B support to deny hostile forces the ability to exploit the electronic medium.

The combined forces air component also contributed combat and combat support forces. With a wing deployed inside the combined/joint operations area and at least four wings outside Afghanistan, Airmen provided a constant vertical vantage. A–10s, B–52s, British GR–7s, French Mirages, and other fighters provided responsive close air support. These aviators often employed weapons with friendly forces as close as 65 meters to the hostile fighters. Other coalition partners such as New Zealand, Norway, and Denmark played decisive roles as well. As impressive as these numbers might be, the CJTF commander focused on the quality and capabilities of the Afghan Forces, not merely the quantity.

The most important players were the Afghan forces themselves. In the spring of 2005, the ANA had 18 combat battalions. By the end of 2005, this number had grown to 40. These forces doubled their number of patrols by the end of the year.

A key to success, however, was the partnership initiated by CJTF–76 over the past year. The task force partnered with ANA and, occasionally, the National Police, so all operations were planned and executed with Afghan forces. They were an integral element of every operation. As a result, ANA patrols increased 40 percent in 2005. Partnership ensured that the new forces gained positive and experienced mentoring with coalition forces.

Provincial Reconstruction Teams

PRTs are the most salient example of effective partnership. These are joint civil-military units that strengthen the reach and enhance the legitimacy of the Afghan government at all levels into outlying regions. The

first team began in 2002 in Gardez, and 24 are now deployed throughout Afghanistan.

Typically, PRTs have 60 to 100 personnel and provide a mixture of military personnel for security and civil-military personnel for stability and infrastructure development. The teams have established relations with key national and provincial leaders, tribal and military officials, and religious groups, nongovernmental organizations, and UN officials. They have helped with voter registration and in disarmament of local militia groups, adjudicated differences and brokered agreements between factions, and assisted in developing and mentoring ANA and Afghan National Police. Equally important, they have prioritized reconstruction and development efforts. Being located in remote areas, they have reached areas the national government has yet to embrace.

There are many key contributors to the PRTs. The U.S. Agency for International Development (USAID) and its field program officers (FPOs) are one. The FPOs select projects and activities in consultation with the PRTs and local leaders. They use funding from their Quick Impact Program to facilitate a climate of freedom and economic activity in the provinces. Activities include construction of roads, bridges, water supplies, irrigation, government administrative buildings, schools, and clinics as well as micropower generation and gender training. As of September 2005, almost 200 projects had been completed, with 179 under construction and 115 in planning and design. USAID officials expect over 600 projects to be finished by the end of fiscal year 2006.

Another positive contributor to PRTs was the U.S. Department of Agriculture. As Afghanistan is an agrarian society, the department provided vital educational assistance to veterinary and agricultural colleges and assists with an Afghan Conservation Corps. Working more than 100 projects in 21 provinces, it also provided work for returning Afghans. The projects ranged from soil conservation and reforestation to food assistance and poultry farming initiatives.

Military personnel also perform vital development support. One salient, dual benefit is road construction. CJTF–76 teamed with nongovernmental organizations, USAID, and the government to prioritize and integrate this key infrastructure effort. Over the past year, more than 150 miles of finished roads have been built. For example, the Kandahar to Tarin Kowt road reduced travel time from 18 hours to 5. In addition, the CJTF used these opportunities to train ANA engineers and local Afghan subcontractors to plan and execute the project to a higher standard. Such endeavors not only extend the reach of local governments and security forces, but also promote economic development and trade. As a result a road built from Qalat to Shinkay, for example, the cost of flour dropped by 1,000 Afghani.

In addition, the CJTF–76 Medical Task Force works closely with the Minister for Public Health to enable 10 hospitals in southern and eastern Afghanistan. Moreover, allies contribute vital medical care. In northern Afghanistan, Jordan operates a hospital that conducts an average of 120 surgeries and treats 15,000 patients a month. In eastern Afghanistan, a Korean outpatient clinic treats 4,000 Afghans a month while an Egyptian hospital has 30 inpatient beds. The hospital allows for a wide range of dental and medical care that averages 50 surgeries and more than 3,000 patients a month. Finally, the CJTF surgeon partnered with the local hospitals in the vicinity of Bagram. Over time, the Afghan medical personnel gained enough expertise to allow some local Afghans to be transferred to nearby hospitals.

Has this level of effort—with the human resources, financial capital, and time—made a difference? The answer is clearly yes. The momentum has continued over the past year. At the national level, ISAF expanded into western Afghanistan and continues planning for the next stage. A second nationwide election resulted in 60 percent of eligible voters going to the polls, to include 41 percent of the women. The first parliament was seated in December. Some 4.2 million Afghans returned home.

Just as important are the positive trends at the local and village level. For example, the increase in ANA patrols this past year has a twofold impact: it extends the sovereign authority of the Afghan government into the previous sanctuaries of hostile forces, and it has probably helped bring an increase in reports of violence. The near doubling of the ANA and National Police presence means that a violent encounter is more likely to be reported and recorded.

At the same time, the insurgent forces show signs of being less capable. More indirect and suicide attacks have occurred, reflecting a more desperate and less capable adversary. Contacts with enemy forces tend to be more fleeting than a year ago. While we are cautious that such analysis might reflect seasonal trends, the overall direction is right as the number of fighters seeking reconciliation more than doubled between July and November 2005.

Local indicators also suggest that the reconstruction and development efforts are having an effect. One brigade commander said that when he arrived, villagers turned in one improvised explosive device a month. By the fall of 2005, they turned in an average of 13. While such a statistic reflects many variables, it indicates that the average Afghan is willing to risk the wrath of the hostile elements to create a more secure and positive future. It also demonstrates that even in the most dispersed and remote areas, Afghans recognize that they have a stake in this new order—a future where they can choose their economic livelihood, political options, and social and educational opportunities. Just 5 years ago, it was a future of their dreams. Today, it is within their grasp.

There will continue to be setbacks and disappointments in Afghanistan. The hostile elements lose a lot in any future where Afghans take charge of their own destiny. The momentum, however, is in the right direction. While military forces support this momentum, they alone cannot "win." America's Armed Forces, in cooperation with coalition partners, are creating conditions to allow the Afghan institutions (political, economic, judicial, educational, and so forth) to gain strength and eliminate the root causes of insurgency.

The country's potential today was made possible by executing full spectrum operations. Those planning combined and joint operations may add this term to their mission statements, but they must do so with the full appreciation of the dynamic, difficult, diverse, and richly rewarding challenge for which they are posturing themselves. Full spectrum operations require planners to envision how their combat activities will support nonlethal, humanitarian, and reconstructive efforts; understand how Soldiers, Sailors, Airmen, and Marines must integrate with interagency and international partners; and appreciate how to meld with the cultural norms and expectations of the society they are supporting. In this process, the local and national institutions of the nation we are helping will gain the strength and sovereignty to determine its future. **JFQ**

USSTRATCOM
A Command for the 21st Century

B–2 refueling from KC–135

U.S. Air Force (Val Gempis)

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By JAMES E. CARTWRIGHT

Addressing today's threats and security challenges and supporting deployed forces and allies require new approaches to integrate and synchronize action, empower subordinates, and increase operational speed. Willingness to change is no longer optional as U.S. Strategic Command (USSTRATCOM) rethinks its approach to the challenges it faces.

Redefining Global Deterrence

Marshall McLuhan said, "There is absolutely no inevitability as long as there is a willingness to contemplate what is happening."[1] For the Department of Defense, what is happening today requires us to adapt to confront a broad spectrum of threats from near-peer nation-states to small bands of radical extremists bent on inflicting catastrophic damage.

The changing global environment is illustrated in Thomas Friedman's *The World Is Flat*.[2] Friedman writes, for example, about big companies learning to flourish in the flat world by learning how to "act really small by enabling their customers to act really big." Referring to Starbucks Coffee, Friedman notes that 19,000 varieties of coffee can be made on the basis of menus posted at any Starbucks. To serve each customer would be not only impossible but also expensive, so the company created a platform that allows individuals to serve themselves "in their own way, at their own pace, in their own time, according to their own tastes."

To redefine global deterrence and confront today's threats, USSTRATCOM is similarly adapting by moving from a single integrated operating plan to an integrated portfolio of capabilities. The command supports its customers—geographic combatant commanders—through a collaborative, interdependent structure supporting real-time crisis action planning to develop tailored options against today's myriad threats.

The 2006 *Quadrennial Defense Review* (QDR) recognizes that the United States is engaged in a long war and that its enemies

General James E. Cartwright, USMC, is Commander, U.S. Strategic Command.

USSTRATCOM supports combatant commanders through real-time crisis action planning to develop tailored options

seek weapons of mass destruction and will likely attempt to use them against America and other nations. The QDR also recognizes the need to adjust the U.S. global military force posture by moving away from a static defense in obsolete Cold War garrisons. To support the QDR, U.S. Strategic Command is shifting its approach from:

- a focus on nation-state threats to decentralized networked threats from nonstate enemies
- "one size fits all" deterrence to regionally tailored deterrence
- a focus on kinetics to a focus on effects
- 20th-century individual processes to 21st-century network-enabled approaches
- vertical structures and processes to more adaptive horizontal integration.

Historically, the United States has achieved superiority on land, at sea, in the air, in space, and now in cyberspace, and the American people will not tolerate the loss of that superiority. National security also involves the military's partners, who work in the realm of diplomacy and international relations, the private sector, and academia. USSTRATCOM is accomplishing its global role by embracing the new QDR and reconsidering basic military concepts, the construct that supports those concepts, and the capabilities required—both kinetic and nonkinetic.

A New Strategic Command

Meeting new challenges and redefining national defense includes a constant process of rethinking global deterrence and America's global capabilities. No nation, including the United States, can afford to put large numbers of forces on every border of every adversary. Consequently, there is great value in the ability to reach the other side of the earth quickly to offset the requirement of placing large formations in those places where we face an evolving range of adversaries.

To meet new challenges, the President and Secretary of Defense have ordered the rebuilding of U.S. Strategic Command. After listening to a recent briefing on command missions, one visitor said that General Curtis LeMay had clearly left the building. Others have speculated on how fast General LeMay is spinning in his grave as he sees what has become of his old Strategic Air Command.

Those working in Omaha have a different view. If Curtis LeMay were to visit USSTRATCOM today he would ask, "What took you so long?" The general was an innovator who clearly understood the need to fight today's enemy, prepare for tomorrow's enemy, and relegate yesterday's enemy to the history books. While some may see the old Strategic Air Command as the end result of a process, it is clear that General LeMay viewed it as one step in an evolving world of military strategy, capability, and threat.

The Strategic Air Command was built to counter the monolithic Soviet threat. As the world changed during the immediate post–Cold War period, the first Strategic Command stood up to replace the Strategic Air Command but remained primarily focused on the former's legacy nuclear deterrence mission. After the terrorist attacks on the World Trade Center and the Pentagon in 2001, a new U.S. Strategic Command was established. In addition to legacy nuclear responsibilities, it was assigned seven distinct global missions for deterring the full range of threats the Nation faces today:

- Space Operations
- Information Operations
- Integrated Missile Defense
- Global Command and Control
- Intelligence, Surveillance, and Reconnaissance
- Space and Global Strike
- Strategic Deterrence.

In January 2005, the Secretary of Defense assigned USSTRATCOM as the lead combatant command for integration and synchronization of DOD-wide efforts in combating weapons of mass destruction.

To make these missions operational requires leveraging existing assets to bring resources and expertise to bear more quickly. That is why day-to-day planning and execution for the primary mission areas is done by joint functional component commands (JFCCs). The JFCC concept is simply an evolution of the joint force operating structure in use since the war in Vietnam, achieving unity of effort from land, maritime, and air forces.

JFCCs are composed of U.S. Strategic Command planners and operators taken from the headquarters staff and matched with centers of excellence for their complementary expertise and authorities. The result is a USSTRATCOM functional component commander who is dual-hatted as the head of the complementary agency.

Joint functional component commands leverage the expertise and

General James E. Cartwright, USMC, Commander, U.S. Strategic Command, talking with the commander of Space Forces of the Russian Federation

1st Combat Camera Squadron (Ken Bergmann)

operational capabilities in existing organizations to support all combatant commands with the equivalent of one-stop shopping for the effects required. Comparing USSTRATCOM to an orchestra, the headquarters acts as the conductor while JFCCs represent the string, brass, woodwind, and percussion sections. When combatant commanders come to the conductor or to any section, they access the entire symphony. USSTRATCOM not only will act much like an internet search engine but also will enable warfighters to leverage military authorities and make maximum use of all existing resources against an emerging threat. They open the door to the American arsenal—everything from influence on the low end to kinetic effects on the high end. Each JFCC brings unique capabilities to this evolving construct and the concept it supports.

Space Operations. With the merger of the former U.S. Strategic Command with U.S. Space Command in 2002, the new Strategic Command also directs the deliberate planning and execution of assigned space operations missions. A new Joint Space Operations Center (JSpOC) has been stood up, led by the same two-star general who commands 14th Air Force—the largest part of the USSTRATCOM space arm. Establishment of the Joint Space Operations Center and designation of a commander, Joint Space Operations, brings a truly joint perspective and capability to the space operations world. The JSpOC cuts across boundaries to direct all elements of DOD space capabilities, from daily space operations through space support to the regional combatant commands.

Information Operations. JFCC–Network Warfare facilitates cooperative engagement with other national entities in computer network defense and offensive information warfare as part of global information operations. It is collocated with the National Security Agency, and its commander is dual-hatted as the director of the agency.

In a related change, Joint Task Force Global Network Operations is collocated with the Defense Information Systems Agency, and the commander is dual-hatted as the agency's director. Integrating computer offense and defense has become necessary because the Global Information Grid is now essential to national security, reaching across every element of national power and channeling it for use by every commander from the farthest corner of the earth to the Rose Garden at the White House.

Cyber threats to computer networks are as real and significant as physical threats. Advanced computers, sophisticated software programs, and information technology are widespread and easily available.

Targets for attacks could include military, government, and commercial systems, all of which could pose a threat to security and economic prosperity. For USSTRATCOM, cyberspace is the place where a nonkinetic use of force can occur. The mainstream media have reported on terrorists using the Internet to recruit forces, raise funds, and spread false information. This terrorist use of the Internet to incite violence translates to physical threats against the United States and coalition forces.

The Armed Forces have developed capabilities to defend vital information infrastructure. America is globally linked today—socially, economically, and militarily—so efforts must continue to develop agreements, cooperative measures, and global partners to combat cybercrime and cyberterrorism. These agreements will facilitate extradition, develop a common definition for cyber offenses, and allow nations to assist each other with the enactment of laws that protect everyone.

SM–3 missile is launched during Missile Defense Agency and Japan Defense Agency cooperative flight test mission in the Pacific

U.S. Navy

joint functional component commands open the door to the American arsenal—everything from influence on the low end to kinetic effects

Integrated Missile Defense. JFCC–Integrated Missile Defense (IMD) is headquartered in Colorado Springs to take advantage of missile defense activities located there. The commander is dual-hatted as the commander of Army Space and Missile Defense Command. While the Missile Defense Agency is assigned to develop missile defense systems, JFCC–IMD offers the warfighter's focus to IMD development. Its responsibility is to make the system operationally responsive by planning, integrating, and coordinating

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36th Communications Squadron (Bennie J. Davis III)

B–1B, B–2, and B–52 bombers at Andersen Air Force Base, Guam

Briefing the commander of USSTRATCOM and the commander of Space Forces of the Russian Federation on the mission of the 14th Air Force

1st Combat Camera Squadron (Ken Bergmann)

global missile defense operations and support (land, sea, air, and space-based).

Global Command and Control. As the addition of newly assigned missions realigns responsibilities and authorities, decentralizes operational execution, and increases operational speed, the nature and role of command headquarters has changed to focus on command and control across mission areas and advocate capabilities needed to ensure national security. The nuclear deterrence mission remains a vital priority, and the commander of USSTRATCOM retains control of the nuclear deterrence task forces. The command has not wavered in its commitment to a strong, secure, and ready nuclear deterrent force.

The military conceptual structure called "The New Triad" has as its three points offensive capabilities, defensive capabilities, and the infrastructure necessary to supply the national arsenal with a precise and effective response to any threat. To produce effects within this triad, USSTRATCOM is rebuilding and restructuring the national command and control apparatus through a new system of geographically separated, interdependent command and control operation centers, meeting the imperative to pursue high capacity, Internet-like capability. It creates a reliable command and control network as it extends the Global Information Grid to deployed and mobile users worldwide. This is vital to maintaining our traditional global deterrence, as we move all mission operations at the speed of light through high-capacity, virtual collaborative networks.

Intelligence, Surveillance, and Reconnaissance. JFCC–ISR plans, integrates, and coordinates intelligence, surveillance, and reconnaissance (ISR) in support of strategic and global operations and strategic deterrence. That includes coordinating ISR capabilities in support of global strike, missile defense, and associated planning. JFCC–ISR is collocated with the Defense Intelligence Agency, and the commander of JFCC–ISR is dual-hatted as the agency director.

Intelligence, surveillance, and reconnaissance provide distinct nonkinetic deterrent effects. William E. Burrows has written extensively about the cause, effect, and legacy of reconnaissance and explains how space imagery can reduce genocide and other atrocities. This reduction comes when those who want to commit vile acts know that their deeds may be recorded by machines they cannot see but which can see them. Burrows contends, "The more such machines there are, the more difficult it will be to conceal foul play from public scrutiny."[3]

> *since terrorists do not distinguish between America's civilian and military establishments, the Nation must look at both military and civilian vulnerabilities*

Today's security environment requires coordinating all intelligence collection capabilities. The information collected must then be made available to a wide range of customers based on a secured "need to share" basis rather than the old "need to know" threshold.

Space and Global Strike. JFCC–Space and Global Strike (SGS) is responsible for integrating planning and command and control support for the rapid delivery of extended

range, precision effects in support of theater or national objectives. SGS mission responsibilities now require the capacity to reach rapidly and accurately *any* adversary with kinetic or nonkinetic effects. JFCC–SGS is led by the same three-star general who commands 8th Air Force, which is a large part of the USSTRATCOM "global strike" arm. SGS plans global strike activities and serves as lead integrator of joint effects across the range of USSTRATCOM capabilities. It also runs the Global Operations Center and serves as the commander's eyes and ears for situational awareness.

Strategic Deterrence. When USSTRATCOM was assigned to integrate and synchronize DOD efforts to combat weapons of mass destruction in 2005, it looked to the Defense Threat Reduction Agency as a partner to form the Strategic Center for Combating Weapons of Mass Destruction (SCC–WMD). The center is modeled on the other JFCCs but headed by a civilian director (in this case, dual-hatted as the agency director). The first priority is rapidly advocating development and implementation of capabilities to support interdicting and eliminating WMD and its related materials. Since terrorists do not distinguish between America's civilian and military establishments, the Nation must look at both military and civilian targets and vulnerabilities. SCC–WMD will share information, assess vulnerabilities, and develop deterrent, detection, and response capabilities. A team effort will be needed to meet challenges as complicated as international treaty interpretation and as basic as the safety of the Nation's food supply.

Retaining existing advantages in space and an edge in USSTRATCOM's other mission areas also requires advocating a more agile, safe, and responsive arsenal. Moreover, a strong industrial base is necessary to retain the technological capability demanded in the new security environment.

Today's conventional kinetic arsenal has carved a tremendous advantage for America in recent years by achieving unprecedented accuracy. During previous conflicts, it took multiple aircraft to destroy a single target. Today, one plane can hit multiple targets with precision weapons. A mission can be accomplished with a perfectly placed conventional bomb instead of an entire air strike by multiple aircraft.

Everyone—particularly adversaries—knows nuclear weapons are the deterrent of last resort, which is why it is not enough simply to maintain a credible nuclear arsenal. New options that do not cross the nuclear threshold are required. America's defense has relied on the intercontinental ballistic missile, both land- and sea-based, equipped with nuclear warheads that can make them less credible as a deterrent.

For credible deterrence, an adversary must believe a weapon will be used if the Nation is put at risk. Combining the range and speed of a ballistic missile with the enhanced accuracy of space-based GPS and a conventional warhead would mark a great stride toward improving deterrent capabilities. Rapidly placing the right effect precisely on target truly changes the dynamics of deterrence.

Culture Change

Changes in concept, construct, and capability will be successful only if military and government professionals can adapt to culture change. This will be more controversial than any other effort. Everyone claims to understand the need for change until the effect becomes personal.

For centuries, the military has been dealing with the command and control structure used by Napoleon. While it is a great system for refining information, it takes too long. If commanders wait for perfect information today, their responses could be irrelevant. Information must move at the speed of light, and USSTRATCOM has taken initial steps to create a system that invites participation based on value added, not rank held.

When the command first established its Strategic Knowledge Integration–Web network, contributing bloggers wore eagles and stars and entered the same information electronically only after it ran through the old time-consuming staffing procedure. However, continued encouragement has begun to yield useful, real-time messages—many from talented 19-year-olds who have been electronically sharing information all their lives.

How the efforts of U.S. Strategic Command will evolve remains a question, but there is no doubt that it must evolve. Future success will depend on breaking old molds, redefining old systems, and expanding available knowledge across the entire national security infrastructure to explore the full range of options needed to achieve reach, speed, and precision—both nuclear and conventional, kinetic and nonkinetic. **JFQ**

NOTES

[1] Marshall McLuhan, *Understanding Media: The Extensions of Man* (New York: McGraw Hill, 1968).

[2] Thomas L. Friedman, *The World Is Flat: A Brief History of the 21st Century* (New York: Farrar, Straus and Giroux, 2005).

[3] William E. Burrows, "Imaging Space Reconnaissance Operations During the Cold War: Cause, Effect, and Legacy," 1997, available at <http://webster.hibo.no/asf/Cold_War/report1/williame.html>.

Sea-based X-Band Radar departing Hawaii to Alaska for advanced ballistic missile detection

U.S. Navy (John T. Jackson)

JFQ (David H. Gurney)

An Interview with

Vice President and Director of Foreign Policy Studies of the Brookings Institution

Carlos Pascual

we are now recognizing that, in order to succeed on the ground, there is a need, as some have said, to win the peace

JFQ: *Why did the Department of State create the Office of the Coordinator for Reconstruction and Stabilization?*

Ambassador Carlos Pascual: The office came out of the recognition that the U.S. Government needs to have the capacity to deal with issues relating to conflict: preparing for it ahead of time and responding to it afterward. The United States has been involved in major conflicts around the world for decades, but we have never institutionalized the capacity to deal with them. We've built forces up, and we've surged in specific situations—but we haven't paid attention to lessons learned, and we haven't retained experienced personnel. After the major conflict issues are over, we stand down, and then we have to learn it all over again. Too often, we not only relearn the positive things, but we also repeat the mistakes. We haven't had the people prepared, trained, and exercised to be able to engage in these activities.

So the National Security Council (NSC)—at the principals committee level and particularly on the part of then-Secretary [Colin] Powell and Secretary [Donald] Rumsfeld—recognized that we needed to establish this kind of capability and institutionalize it in the State Department. This office had to be centrally tied with U.S. foreign policy objectives, but everyone involved also realized that it needed to be an interagency office that could draw on the capabilities across the civilian world and that has the capacity to work effectively with civilians and the military. So that really became the foundation for the NSC approving creation of this office in August 2004.

On March 2, 2006, Col David H. Gurney, USMC (Ret.), and Col Merrick E. Krause, USAF, of *Joint Force Quarterly* interviewed the Vice President and Director of Foreign Policy Studies of the Brookings Institution, Ambassador Carlos Pascual, at his office in Washington, DC. Ambassador Pascual previously served as Director of the Office of the Coordinator for Reconstruction and Stabilization in the Department of State, which was created in July 2004.

JFQ: *As coordinator, your mandate was to lead, coordinate, and institutionalize U.S. Government civilian capacity to prevent or prepare for postconflict situations. Have we made much progress toward this institutionalized response?*

AMB Pascual: We have made significant progress toward institutionalization. If we reflect back to where we were 18 months ago, we now have a Presidential directive that establishes the Secretary of State and the State Department as the coordinator for stabilization and reconstruction activities to bring together the entire interagency community. In the Department of Defense (DOD), there's a directive that explains how DOD will relate to that broader Presidential authority, and how its functions then can be integrated with the civilian world. USAID [U.S. Agency for International Development] has developed a "fragile state" strategy that becomes the foundation for how they're going to operate, and they have now an office of military operations that will coordinate with the military parts of our government.

We have been able to put together a draft planning framework which is under

the military has understood the importance of planning for a long time, but we haven't understood the importance of it in the civilian world

review and testing by both the civilian and military parts of our government. For the first time, we have a framework that allows us to look at stabilization and reconstruction and, within the military and civilian worlds, be able to have a common vocabulary about how to plan and talk about these issues. We are testing it now across the combatant commands and the civilian world on Sudan and Haiti.

I don't want to say that all of this works smoothly; we're learning, we're testing, and we're getting better. But we have the basic ideas on paper, we're actually working through them, and we're seeking to get resources for them. So, in comparison to where we were 18 months ago, we've come light years. In comparison to where we need to be, we're still years away from the goal that we should ultimately attain, but I think we're going in the right direction.

JFQ: *How has the role of the Department of Defense in postconflict resolution and reconstruction changed since the establishment of your office?*

AMB Pascual: What's changed most is the recognition that we have to have a comprehensive U.S. Government approach and that each individual agency has a role in that and has to build up its capabilities to undertake that role. We are still at an early stage in this, and in effect the individual agencies have been building up some capabilities, but we haven't been able to tie all of it together. That shouldn't be discouraging if we think back to the Goldwater-Nichols legislation creating jointness in the military. It was a good 15 years from the time of the passage of Goldwater-Nichols until the military started feeling like it was really getting jointness under its belt and understanding what it meant. And so we must have a similar expectation on these sets of issues. We're going to have a similar kind of growing process, but we have to keep that vision in mind of the overall U.S. Government strategy of individual agencies cooperating. And that's where the Department of Defense, I think, is seeing the biggest change.

In the past, DOD was handed this universe because it was *the* principal agency that had the funding and the operational capability to be involved on the ground. We are now recognizing that, in order to succeed on the ground, there is a need, as some have said, to win the peace. And to win the peace is not necessarily a military function but a function that requires all aspects of U.S. power, all aspects of U.S. capability, and in particular civilian capabilities. So what we're trying to do is build up that civilian component that can stand together with the military to be able to achieve an overall U.S. Government strategy in any postconflict situation.

JFQ: *Other than U.S. Southern Command, what other regional combatant commands have involved the Office of the Coordinator for Reconstruction and*

New Zealand soldier directing Afghans to U.S. Army doctors in Nayak

55th Signal Company (Michael Zuk)

Soldier distributes water in Gonaives, Haiti

U.S. Navy (Li Cohen)

Stabilization in their exercise programs? Have there been lessons learned from the interactions?

AMB Pascual: By far, the deepest relationship with any of the regional combatant commands has been with Southern Command. I think that one of the things that both military and civilians who have participated in exercises with Southern Command have learned is that the process of stabilization and reconstruction is *always* a lot more complex than we expect it to be. It's going to take more time, it's going to take more resources, and that needs to be integrated not only into the civilian planning process but also the military planning process. If you don't take into account the time required for stabilization and reconstruction, then you're going to have a chaotic situation.

We've had extraordinarily deep relationships with Joint Forces Command. Currently, Joint Forces Command and my former office are engaged in an exercise called *Multinational Experiment 4*, which involves a whole range of international partners to look at how we operate together on stabilization and reconstruction and how that gets linked up with military capabilities in a hypothetical situation in Afghanistan.

We've had contacts and good relations with European Command; we've been involved in some limited exercise activities with them, but this demonstrates one of the fundamental issues we've been facing in the civilian world: we have a limited number of personnel. Generally, we have not trained personnel in the past. In many cases, planning was anathema to a civilian mentality, particularly to the State Department. For many State Department officers, they grew up with a culture that planning was something that limited your options as opposed to helping you see the possibilities of how you might do things in the future.

we need to build up individuals who can deploy quickly, who are trained, and who can design, develop, and manage programs

JFQ: *I'd like to follow up concerning the Office of Stabilization and Reconstruction. It is very much an interagency organization. From the initial staffing to now, how has the office transformed? Have you changed the makeup of the office based on experience?*

AMB Pascual: Fortunately, it's grown because it started with only one person—that was me. It now has a staff of about 60 people. It is an interagency staff that has participation from various parts of the State Department and USAID; at times, the Department of the Treasury has provided personnel, as well as the Department of Justice and Department of Labor. In addition to that, there have been personnel from the Joint Staff, the Office of the Secretary of Defense, Joint Forces Command, and the

Central Intelligence Agency. Not only has that given us a team of people who have a wide set of skills and perspectives to the way that we plan and develop our capabilities, but it's also helped us to reach back more effectively to the range of agencies that need to participate in the process. And frankly, it's also helped us address basic cultural issues—sometimes even vocabulary, how we talk about similar kinds of topics.

As the office has evolved, it's developed into four organization blocks. There's a group that does early warning and conflict prevention, a second group that works on planning, a third group that works on technical lessons learned and technical capabilities, and a fourth group that works on resources and management. All of these teams need to work together effectively to be able to achieve the kinds of objectives that we might have in any given circumstance. So, for example, our conflict prevention team is working with our colleagues in regional bureaus on states of risk and instability and gaming through scenarios. They've brought in our technical staff and management staff to help them outline situations that might evolve on the ground and work through scenarios that could develop, and from that extract lessons that can be learned.

JFQ: *The State Department Web site says that your office has been working with the Western Hemisphere Affairs Bureau on Cuba to develop a framework for U.S. strategy following the conclusion of the Castro regime. Should similar strategies be developed by regional combatant commands for repressive or failing regimes elsewhere? And have you suggested or proposed collaboration ahead of combatant command requests?*

AMB Pascual: Fortunately, Cuba's a unique situation. There aren't too many countries throughout the world that are headed by dictators. We also know that Fidel is old and that at some point there will be a transition in Cuba. And so it only behooves us to look ahead to that and to begin planning how that transitional process is going to work. There are going to be complicated issues; there have been in every single transition that has occurred around the world. There are real opportunities as well: how to take advantage, for example, of the Cuban-American community in the United States. But all these things have to be thought through in advance so we can work in those environments in a way that is constructive and allows us to move forward in a concerted way as the U.S. Government, with a proper strategy to deal with a whole range of security and political and economic development issues that are going to confront us.

if we do not exercise a monopoly on force from the beginning of a military operation, it is a lot harder to get that monopoly when you get further down the road

We have not had the same kind of forward planning exercise in regard to other countries. We've dedicated most planning capability to current situations. In Haiti, for example, the Office of the Coordinator for Reconstruction and Stabilization is closely involved with the Western Hemisphere bureau to work through the whole range of election issues there in order to make the elections minimally acceptable.

JFQ: *What is the most important yet least understood capability or contribution that the Office of the Coordinator for Reconstruction and Stabilization affords national security?*

AMB Pascual: *Planning.* The military has understood the importance of planning for a long time, but we haven't understood the importance of it in the civilian world. The process of transition and transformation in any given country is extraordinarily complex. It's not just a question of postconflict operations, and indeed, one of the things that we've had an opportunity to discuss at great length with Joint Forces Command and with [Vice Chairman of the Joint Chiefs of Staff] Admiral Giambastiani is that we should remove the concept of *phase four* (that is, postconflict operations) from our vocabulary. If nothing else, we should begin thinking of phase four as a combination of many other phases. There is always a period of stabilization, of trying to provide order and address humanitarian needs. But it's only a temporary situation in which the outside community can come in and do something to a country for the people of that country. It's not sustainable to just stay in that mode.

In addition, we have to deal with unraveling some of the problems and issues of the past. We have to deal with creating the institutions for law and democracy and what that means for an economic system, a political system, a court system, a judicial system, the military, and we have to deal with building a civil society. It doesn't mean we have to get all those pieces perfect, but if we're not conscious of the fact that all of those pieces have to come together at a certain level, then we simply cannot succeed.

Planning enforces a discipline for us to go back and have a reality check. Once we look at the resources and the institutional capabilities at our disposal, do we really still believe that our goals can actually be achieved? And if we can't make that reality check and have the confidence that we have the resources and capabilities to achieve success, then we have to do one of two things: either we have to redefine the mission or we have to do something radical to increase the resources that are necessary to achieve success. But certainly, the last thing we should do is go into that mission without addressing those fundamental points because it means that we're setting ourselves up for failure.

JFQ: *We have had an ongoing debate about the best way to establish interagency integrated operations. Should we keep all of the agencies separate and try to orchestrate consensus or cooperation, or should we have an overarching combatant command? What is your view on the best way to bring the instruments of national power together to face challenges?*

AMB Pascual: There is a reason why we distinguish the civilian and military parts of our government. Both are important, and both need to work together and operate with one another. But it's necessary for us as civilians to have the military participating in civilian structures, so we can have a better understanding of how the military works to coordinate more effectively with it. But it is critical that we maintain a civilian character to the nature of our operations. Similarly, for the military, it is important to have civilian participation in military operations and to provide insight into how civilian parts of our government function and operate. But we have separate chains of command, and there are political and historical reasons why it's

important to keep those separate. With our presence overseas, there's an understanding that there is civilian control over the military. There are too many countries that would love to have authoritarian control imposed by the military as a mechanism for governance internally within their countries. And if their perception of the United States at a decentralized level is that we have combatant commands run by the military where the civilians are simply part of that, and that is their perception of U.S. Government reality, I think it would be counterproductive.

I am a great believer in joint operations. The critical function of the Joint Staff—which is *not* to emasculate the importance of the Army, the Navy, the Air Force, or the Marines—is to help the Services create the capability to be interoperable with one another so that within each of those Services, there are greater skill capabilities that can complement one another. It's the same thing with the civilian world: we have different agencies with different skills and capabilities. We've not always had the capability to integrate and work with each other in a unified strategy. What we should continue to aim toward is to build up those individual agency capabilities but at the same time make clear that it has to be done in an environment of post-jointness and joint operations, where different aspects of the civilian world are functioning much more effectively together, and that we have a joint strategy that actually fits together.

JFQ: *Can you speak to your office's partnership with nongovernmental organizations* [NGOs]*, private voluntary organizations* [PVOs]*, and industry?*

AMB Pascual: It's absolutely critical that these partnerships exist and that they be developed. If we think realistically, NGOs, PVOs, and private industry are generally the implementers of programs on the ground. We need to have two types of skills or response capabilities in order to be effective. We need to build up capabilities in the government: individuals who can deploy quickly, who are trained, and who can design, develop, and manage programs. And we need capabilities outside of government with NGOs, PVOs, the private sector, and the international community, who are the implementers of programs: the police, police trainers, rule of law experts, and economists.

In working with nongovernmental organizations, we have to be able to make them feel that their skills are being taken into account, that we're cataloguing them effectively, and that, over time, we would work with them to help them train and be able to establish a doctrine that allows them to work more effectively and to operate in the field.

JFQ: *Looking back on your term as coordinator and forward to emerging challenges on the national security horizon, what are the most important steps both DOD and State should take now in preparation?*

AMB Pascual: I would say three things: resources, continued work on planning and testing, and transitional security.

On resources, the people and funding that we have to support stabilization and reconstruction are still absolutely minuscule. This year, the administration requested $121.4 million to support stabi-

Haitian and U.S. officials opening school in Gonaives

Fleet Combat Camera, Atlantic (Shawn P. Eklund)

lization and reconstruction operations. $21 million of that was for personnel and operational costs and $100 million for a conflict response fund. The amount that will actually be available is about $16 million. In fiscal year 2007, the administration has requested about $20 million for operational costs and $75 million for a conflict response fund for building a civilian reserve corps. In my view, the levels that we should probably be talking about are on the order of $60 million for personnel and operational costs and for training and exercising, another $50 million or so to create a civilian reserve corps eventually, and another $200 million or so to have a conflict response fund. Relative to the overall defense budget, this is absolutely minuscule.

Relative to the foreign operations budget, it is a very significant debt, and it's difficult to break in. So I think it's going to be critical for DOD and the State Department to cooperate, to approach both defense and foreign operations appropriators to encourage them to hold joint hearings, and to recognize that we really want to make an investment in national security. We can't break ourselves into the traditional stovepipes of defense budgets and foreign affairs budgets. We need to look at what the resources are to be able to allow the United States to be effective overseas, to engage in effective military operations but also to win the peace.

On planning and testing, there's a lot we need to do to understand ourselves better on the part of the military and on the part of civilians. We've done a lot in developing the basic frameworks for operations, but we need to test and refine them to see what works and what doesn't. As the military has seen over time, the process of exercising has been an essential, critical tool that has been injected back into training programs and doctrine. We have to do that for stability operations. We simply haven't done it in the past, and we've never had the opportunities to do it in the past. Now we actually need to continue to create those opportunities and to feed that back into the training programs of DOD, the State Department, and USAID so that we build cadres of personnel who understand these issues, who are schooled in them throughout their career, and who are better able to practice them over time.

And the third area that is key is transitional security. Again, it's not a panacea for effective stability operations. But the reality is that when there's been a military engagement and there's a tremendous amount of insecurity on the ground, there is only one entity on the ground that is able to maintain stability and order—and that is the military. If we don't step up to that responsibility, we will end up in chaos. And unfortunately, what we've seen is that if we do not exercise a monopoly on force from the beginning of a military operation and in the immediate aftermath of that military operation, it is a lot harder to get that monopoly when you get further down the road.

JFQ: *Increasingly, our readership is interagency and international, not just military. Do you have some final message for the readership?*

AMB Pascual: There are three key things that I would stress, and it's not because they haven't been recognized and addressed, but because the challenges are so big. The first is to operate internationally. The United States or any other country in the world cannot in and of itself be the sole responder. It requires multiple capabilities in order to bring the necessary skills on the ground. If we understand the length of transition that is involved in winning the peace, we have to understand as well that we need multiple partners in that process, and that together, we need to be able to operate in a way that creates an environment that empowers local communities so they can take responsibility for their future.

Secondly, success means not what the U.S. Government does on the ground or any other foreign government does on the ground, but whether the capabilities are created on the part of the host government to take over the situation and maintain stability and peace and facilitate a transition in which there are checks and balances in that political society, where there is democracy and rule of law. And if we don't ask ourselves, even before an operation, how that transition can be made to local ownership and local capability, and if we don't have the capability to invest in that transition, we can't succeed. So we must always, always ask ourselves how to build up the local capability.

JFQ (David H. Gurney)

Finally, we need to keep working toward a national security budget. We need to have greater flexibility to address some of those critical budget factors that are involved in effective and successful transformation and winning the peace to be able to advance our national security interests in the most effective way. So all of us need to hold hands and engage in an educational process with the U.S. public, with our own administration and bureaucracies, and with Congress to help us all understand that we need greater flexibility in how we invest our resources to support the emergence of functional and viable states as a critical component of any kind of operation overseas in order to be able to achieve success and allow our military to come home without the prospect of having to return if there is a collapse. **JFQ**

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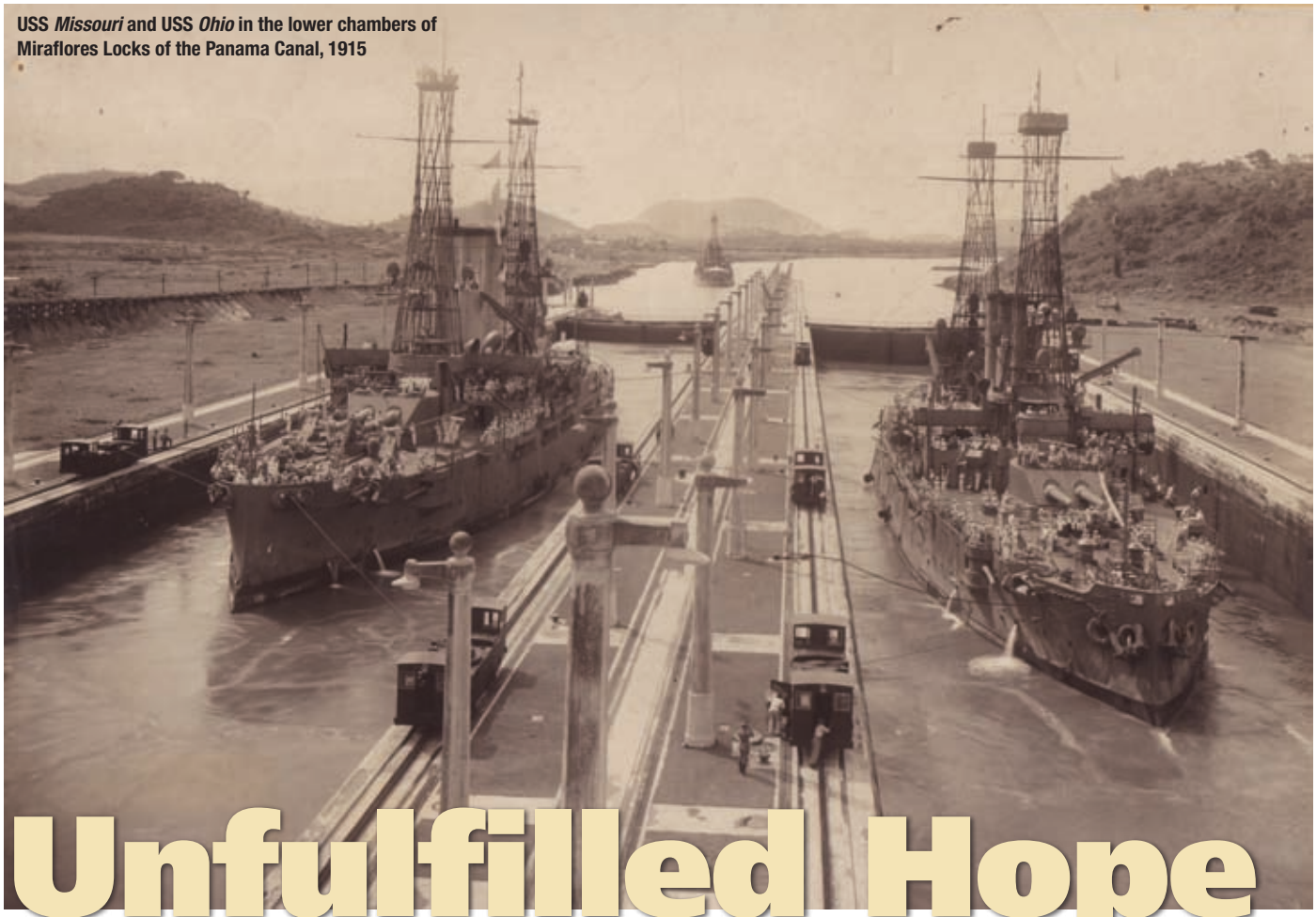

USS *Missouri* and USS *Ohio* in the lower chambers of Miraflores Locks of the Panama Canal, 1915

Naval Historical Center

Unfulfilled Hope
The Joint Board and the Panama Canal, 1903–1919

By JASON R. GODIN

"It is a fundamental principle," wrote Acting Secretary of the Navy Franklin Roosevelt to Secretary of State Robert Lansing on May 1, 1919, "that the foreign policy of our Government is in the hands of the State Department. . . . It is also an accepted fact that the foreign policy of a government depends for its acceptance by other nations upon the naval and military force that is behind it."[1] In an effort to add military muscle to civilian diplomacy, the future President submitted with his memorandum an organizational chart prepared by the Naval War College. Together, the documents outlined a new "joint plan making body" composed of representatives from the State Department, Army General Staff, and Navy General Board. In the end, however, the civilian Service secretaries never translated the interagency plan into institutional practice. The Secretary of State failed to acknowledge the memorandum, appearing never to have opened it.

Ironically, Secretary Lansing's inaction proved the culmination of an unfulfilled hope that was born over 15 years before. In an effort to avoid the inter-Service rivalry displayed at the Santiago campaign in Cuba during the 1898 Spanish-American War, Secretary of War Elihu Root and Secretary of the Navy William Moody created in July 1903 an inter-Service body called the *Joint Army and Navy Board* "for the purpose of conferring upon, discussing, and reaching common conclusions regarding all matters calling for the cooperation of the two Services."[2] More commonly called the *Joint Board*, its creation marked the first formal attempt to permanently institutionalize

Jason R. Godin teaches in the Department of History at Texas A&M University.


Members of Navy's General Board also served on Joint Army-Navy Board in early 1900s

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cooperation and coordination between American military Services.

While this institutional ancestor to the Joint Chiefs of Staff showed early promise as a war-planning agency responsive to immediate national security threats, in the end it failed to translate such rapid, integrated Service coordination into lasting practice. This characteristic was most apparent in the formulation of U.S. military strategy regarding the Panama Canal. Members of the Joint Board never developed long-term, unified military strategies for defending and managing the isthmian Canal. Prior to World War I, the admirals and generals who comprised the board additionally antagonized their civilian superiors through a unilateral decision to change its statutory authority and recommendations for a military-only Canal Zone government.

Toward a Canal and Regional Influence

Prior to the creation of the Joint Board, European powers such as Great Britain, France, and Germany jockeyed to secure construction rights to a short, safe water route between the Atlantic and Pacific Oceans. For its part, the United States continued to adhere to the 1823 Monroe Doctrine and secured a series of bilateral treaties beginning in the mid-19th century. Together, these diplomatic successes gained the United States a principal position in determining the fate of a Central American canal.

Like Washington's Caribbean policy in general, the Monroe Doctrine underpinned American diplomacy when it came to securing influence over a Central American canal. Beginning in 1823, U.S. diplomats viewed any European attempts to intervene in and control Latin American affairs in the Western Hemisphere as a threat to national security. Yet because the United States was a relatively weak military power, diplomacy served for the next 25 years as the only viable instrument for addressing security concerns in the Caribbean and Central America.

The first U.S. foreign policy advance toward securing a voice in the management of what became the Panama Canal occurred a quarter century after the Monroe Doctrine was adopted. Signed by the United States and Great Britain on April 19, 1850, the Clayton-Bulwer Treaty stipulated that neither nation would exclusively control any trans-oceanic canal built in the region. While no tangible gains were made, the treaty clearly marked a diplomatic victory for the United States.

the Monroe Doctrine underpinned American diplomacy when it came to securing influence over a Central American canal

Signing the agreement affirmed the Monroe Doctrine, an action that recognized the importance of the United States as a Western Hemisphere power. By signing the accord, Great Britain, at that point possessor of the most far-reaching maritime empire, assured that any future diplomatic considerations for a Latin American canal would include U.S. participation. The treaty provisions and the resulting diplomatic environment remained in effect for close to 50 years.

By the turn of the century, the diplomatic climate changed as the United States expanded its official position regarding possession of the isthmian passage. As the commercial and strategic value of a canal became clear, Washington demanded exclusive rights to owning and controlling any future waterway. In February 1900, Secretary of State John Hay approached British Foreign Minister Sir Julian Pauncefote with the first of two treaties outlining new stipulations regarding a canal. Known as the Hay-Pauncefote Treaty I, it allowed the United States exclusive jurisdiction over any future isthmian passage. While popularly supported in principle, the final treaty in fact met strong opposition in the Senate. The legislators refused to ratify the treaty because it did not contain provisions allowing the United States to fortify the canal. The Clayton-Bulwer Treaty restrictions and unwanted British involvement in construction remained.


Acting Secretary of the Navy Franklin D. Roosevelt

Naval Historical Center

Such diplomatic setbacks proved short lived. By November 1901, the United States and Great Britain returned to the negotiation table to discuss new terms. Struggling in South Africa with the Boer War and facing the prospect of a Russian advance into Asia, British diplomats gradually agreed to the proposals American diplomats had outlined in the first Hay-Pauncefote talks. The Hay-Pauncefote Treaty II nullified provisions of the longstanding Clayton-Bulwer Treaty, and guaranteed all canal protection and traffic rights to the

United States. A product of British diplomatic necessity, Hay-Pauncefote II represented "the conscious British recognition of the eventual United States supremacy in the Western Hemisphere."[3] By the end of 1901, Washington had achieved international recognition as the primary administrator of any Latin American isthmian passage.

With the issue of sole jurisdiction over administration settled, attention next turned to location. An 1899 Isthmian Canal Commission appointed by President William McKinley set the parameters of the discussion, deliberated between sites in Nicaragua and Panama, and recommended in its November 1901 final report that Nicaragua, rather than Panama, provided the best site. The commission concluded that while a Nicaraguan canal would cost more, Nicaragua had fewer entangling treaty stipulations with neighboring nations, and selecting it over Panama avoided diplomatic dealings with Colombia.

By early 1902, a sharp White House–Senate debate became part of the canal discussions. Beginning March 29 and continuing for 19 days, Senate Democrats pushed for a Nicaraguan route while President Theodore Roosevelt and his Senate Republican colleagues in the minority called for a Panamanian passageway. In the end, the Panama position prevailed, as evidence surfaced in June of recent heavy volcanic activity along the Nicaraguan route. Roosevelt signed the Spooner Act into law on June 28, 1902. The legislation authorized the President to spend $40 million to purchase the French property rights in the area, negotiate with Colombia, and build a canal in Panama.

Civil war in neighboring Colombia added urgency to the deliberations. Torn by internal strife, Bogotá found itself in a precarious bargaining position. Washington policymakers recognized the weakness and capitalized quickly on the opportunity. The Colombian government appealed on September 11, 1902, for U.S. officials to mediate a settlement of its civil war. Eight days later, the United States seized the Panama Railroad. The American-dominated talks culminated with the Hay-Herrán Treaty, signed January 22, 1903, and ratified by the Senate on March 17. The terms stipulated that Colombia authorize the French *Compagnie Nouvelle* to sell all rights and concessions to the United States. Bogotá also conceded to Washington exclusive construction and protection rights for a waterway along with a canal zone up to 15 miles wide. Hay-Herrán provisions additionally granted a 100-year lease, which could be renewed unilaterally by Washington. It also authorized the United States "in cases of unforeseen or imminent danger" to intervene unilaterally in Colombian affairs in the name of canal defense. Not surprisingly, the treaty incited vehement opposition among Colombian officials.

With title in hand, the United States sought to further strengthen its position in the region. On November 6, 1903, the U.S. Government recognized Panamanian independence, and 12 days later made the recognition official by signing the Hay-Bunau-Varilla Treaty. The accord also affirmed U.S. canal-building rights. Through skilled and opportunistic diplomacy, the United States now held a dominant position for controlling an isthmian waterway across Latin America.

Defending and Managing the Isthmian Passage

While American diplomats took comfort from their string of successes, military strategists acted with urgency. High-ranking Army and Navy officers on the Joint Board planned together for possible military contingencies in the region. Five weeks after signing the Hay-Bunau-Varilla Treaty, the Joint Board convened in Washington and recommended a military response should war erupt between Panama and Colombia. Writing to the Secretaries of War and the Navy, the board's presiding officer, Admiral George Dewey, advised that in the event of war the United States should occupy—by force if necessary—the railroad, the Canal, and the Yavisa mining storage facilities near the Panama-Colombia border. Dewey closed his reports by advising immediate occupation of the Yavisa facilities.

Hay-Herrán provisions authorized the United States to intervene unilaterally in Colombian affairs in the name of canal defense

Hostilities never materialized between the two Latin American countries in December 1903. However, in light of such military inaction abroad, the actions of American military planners illustrated much about the state of inter-Service relations in the early 20th century. The Dewey memoranda to the civilian Service secretaries demonstrated that, given a clear and immediate threat to national security, generals and admirals working together could find a military response predicated on an integrated force approach. Success in the Joint Board contingency plans outlined by Dewey required that land forces secure surrounding railways on shore while warships simultaneously controlled the Canal. Service parochialism gave way to cooperation when faced with a pressing threat abroad.

Joint Board minutes and records, however, revealed that short-term recommendations noted for their unified Service dimension never translated into standard operating procedure over time. Not until 6 months later did the first hint of any substantive war planning concerning Latin America appear again. Even then, contingency recommendations flowed from the individual Services. The inter-Service body returned to action when it advised during the second week of June 1904 that both the Army General Staff and Navy General Board begin study on how the United States could most effectively "intervene in the affairs of an independent country in the West Indies or on the mainland of Central or South America" should it become necessary under the terms of the Monroe Doctrine.[4]

For almost the next 2 years, the generals and admirals remained silent regarding the Panama Canal. Finally in April 1906, Dewey reported to Secretary of War William Taft and Secretary of the Navy Charles Bonaparte that the Joint Board resolved that both ends of the Canal should be fortified. As the passage neared completion, its defenses began to concern civilian policymakers and military strategists alike.

Yet how to protect the isthmian passage remained a relatively low-priority issue. A crushing Japanese naval victory over the Russians at Tsushima in 1905, combined with a 1906 San Francisco School Board referendum that segregated Chinese and Japanese students in public schools, strained U.S.-Japanese diplomatic relations to a point where many Americans leaders in 1907 perceived war as imminent. Dismissing Panamanian laborers on the Canal as ungrateful yet law-abiding locals who numbered fewer than 50,000, U.S. military leaders attached a greater strategic significance to the Japanese threat across the Pacific than to management issues in Panama.

The Joint Board finally returned to Canal defense in May 1910, when it considered and approved the seacoast armament recommendations as outlined by the Panama Fortification Board. Created in October 1909, the Fortification Board consisted of six Army officers and two Navy officers appointed by their respective Service Secretaries. Major General Leonard Wood, Army Chief of Staff, presided. In addition to Wood, all but one of the remaining military officers who served on the Fortification Board also served on the Joint Board.

Reporting their findings directly to Secretary of War Jacob Dickinson, the Army and Navy members of the Fortification Board found in April 1910 that both sides of the Canal contained strong geographical positions "for defense against land operations of an enemy force." The board recommended that the War Department garrison 12 coast artillery companies, 4 infantry regiments, 1 field artillery battalion, and a cavalry squadron for peacetime Canal Zone seacoast armament defenses, with wartime reinforcements dispatched according to enemy deployments. It estimated the peacetime cost of such a garrison at $14 million a year.[5]

Volatility to the South

Military leaders ultimately found that the combination of nature, expensive coastal fortifications, and Army troops constituted an incomplete defense against an invasion from the west. According to the Committee on Land Defenses, a subcommittee of the Panama Fortification Board, a large enemy force could land on either the Atlantic or Pacific side of the Canal Zone, but topographical conditions— heavy rainfall and jungle terrain—made operations after an amphibious landing on the Atlantic side "extremely unfavorable." Given the right conditions, however, the committee concluded that the area around the Pacific end could be penetrated and the opening of the Canal seized.

As the Fortification Board findings raised the issue of the vulnerability of the Panama Canal, U.S. decisionmakers made no effort to improve defenses for over 2 years. Since 1910, American Presidents and their policymakers instead concerned themselves increasingly with the political instability in Mexico. By June 1911, Francisco Madero, a rich landowner from northern Mexico, headed what became a national revolt and removed Porfirio Díaz from office. Madero, however, did not hold power for long. Within 6 months, one of his former generals, Victoriano Huerta, ousted him from office, then captured and assassinated him.

the officers attempted, without the knowledge of the civilian superiors they were to advise, to grant the board authority to act independently

At virtually the same time Huerta assumed power in Mexico, Woodrow Wilson entered the White House. Horrified by the Madero killing, Wilson refused to grant diplomatic recognition to the Huerta regime. Consequently, the United States ceased the shipment of military arms to Mexico. Yet as American businesses appealed for intervention, the clouds of war loomed. Facing such bloody revolution to the south, the Joint Board began immediate contingency planning for operations against Mexico in April 1912, again marginalizing the Panama Canal defense question.

Not until March 1913 did U.S. military leaders again raise the problem of defending the Canal. According to a report by the U.S. Army War College, the size of the garrison stationed in Panama should be determined by calculating the number of troops needed "to resist attack of a force which could be landed from a fleet such as one of the great powers might be expected to have at sea." Rather than finally seizing the initiative offered by the Army to increase and modernize Canal defenses, the generals and admirals of the Joint Board reacted to this report with relative indifference, suggesting blandly that it was "most desirable" to conduct joint Army-Navy maneuvers "in order that, if they exist, defects in the scheme of fortification and defense of the Isthmus may be rectified with the least delay."[6]

The Board Drops the Ball

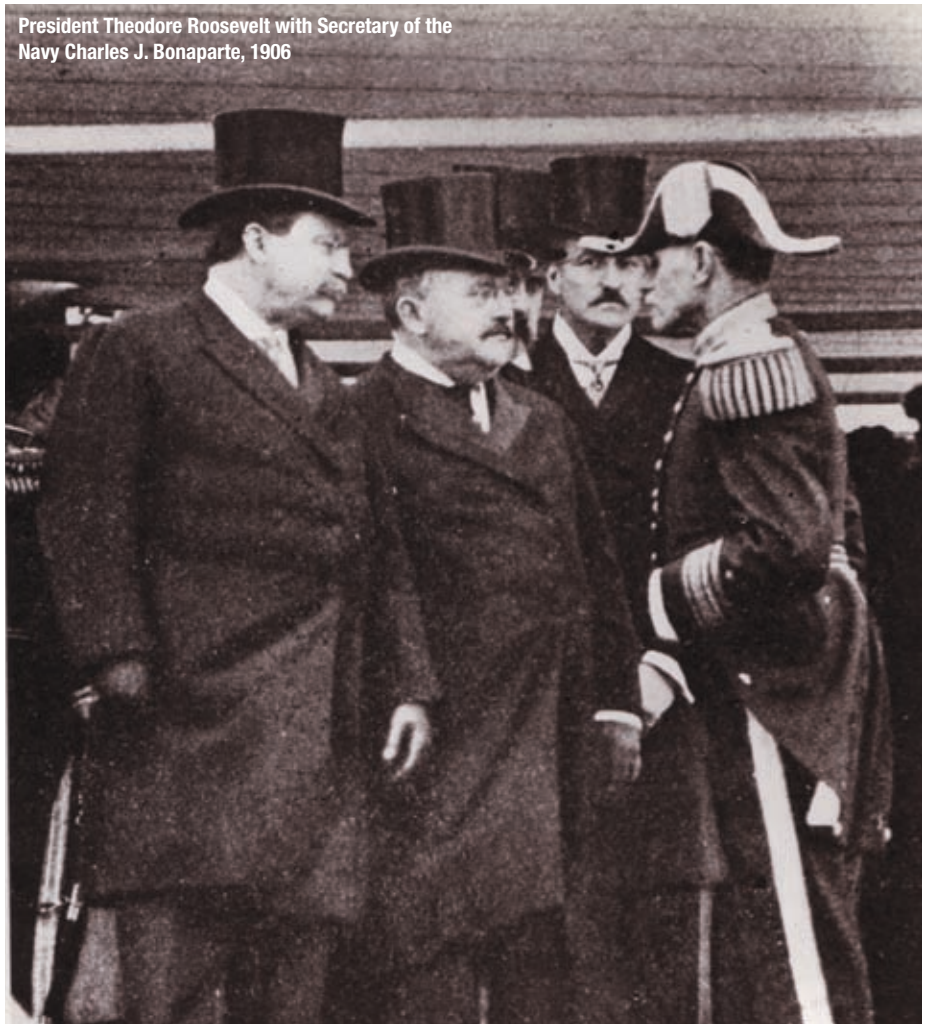
Two months later, the Joint Board explicitly identified Japan as the great power the U.S. Army War College referred to in veiled terms. The inter-Service consultative staff, however, again never suggested any substantive change to the defensive measures protecting the Canal. According to the May 5, 1913, meeting minutes, the generals and admirals referred to "the possibility of a Japanese attack on the Western termini of the Panama Canal, and possible means of meeting such an attack," but recommended no measures to meet such a threat.[7]

Ten days later, events occurred that assured the Joint Board never would completely resolve the issue. In response to a rising fear of a Japanese advance against the Philippines, the members unanimously recommended moving the cruisers USS *Saratoga*, *Cincinnati*, *Albany*, *Rainbow*, and *Helena* immediately from the Yangtze River in China. Besides suggesting the movement of ships, the generals and admirals decided the Joint Board had authority "to initiate, as well as to act on subjects referred to it."[8] Originally empowered to function solely as an advising body, the eight officers attempted, without the knowledge or consent of the civilian superiors they were to advise, to grant the board an unprecedented authority to act independently.

This unilateral change ultimately antagonized relations with two highly influential civilian policymakers. During the morning of May 17, 1913, Admiral Bradley Fiske, a vocal naval member of the Joint Board, appealed to Secretary of the Navy Josephus Daniels to follow the board's advice concerning the deployment of ships. Daniels rejected the military counsel. Shortly after Fiske's departure, according to the Navy Secretary, a reporter from a large newspaper entered his office and asked if he "had approved the action of the Joint Board of taking all ships on the Pacific Coast and sending [them] to Hawaii or Manila."[9]

Following the meeting, Daniels immediately went to the White House and informed President Wilson of the unforeseen developments pertaining to the Joint Board. Wilson responded by stating that the Joint Board "had no right to be trying to force a different course." The President concluded by warning that "if this should occur again, there will be no General or Joint Boards. They will be abolished."[10]

Wilson's anger never really subsided, and from that point on Joint Board influence in formulating military strategy declined significantly. Yet even after such a sharp rebuke from their Commander in Chief, the board members continued to deliberate on issues



President Theodore Roosevelt with Secretary of the Navy Charles J. Bonaparte, 1906

Naval Historical Center

relating to the Panama Canal. However, the character of their debate changed. In rare amended minutes, it is clear that the generals and admirals concerned themselves more with who should govern the Canal Zone than how it should be governed.

During the meeting of October 9, 1913, Admiral Dewey commented to the Joint Board that "war being imminent," insular possession governments "should be in the hands of the Army." Brigadier General William Crozier responded, "the President . . . goes farther, in that it is always to be under the Army." Captain H.S. Knapp, board recorder, noted that the subject was "discussed at length" until a "general consensus of opinion seemed to be that the government should always be a military one." The discussion ended with Dewey insisting simply that there be "no civilian control."[11]

The All-Military Option

During this time, the Navy General Board recommended that a single U.S. military Service administer all government matters within the Canal Zone. The governor would be an Army officer charged directly with command of troops and fortifications. The director of operations and maintenance of the Canal, the second-highest government official, would be a Navy officer responsible for all Navy-related personnel and materiel in the zone. Two assistants under the command of the director of operations and maintenance—an officer from either the Army Engineering Corps or Navy Civil Engineering Corps—would control the waterway and railway respectively. When Captain Knapp read the November 1, 1913, endorsement to the Joint Board as a whole, Admiral Dewey referred the matter to a subcommittee composed of Knapp and Brigadier General W.W. Wotherspoon.

This "all-military" option encountered strong civilian opposition. Colonel George Goethals, chairman of the Isthmian Canal Commission, informed the Joint Board that Congress believed commercial interests dictated the need for an isthmian canal long before any demands of military strategy. Senators and Representatives thus strongly resisted a purely military jurisdiction in the Canal Zone. Goethals stated that the commission believed the President should not be "limited in his selection to either of the military branches of the Service, but that he could select a civilian" to serve as chief administrator for the Canal Zone.[12]

Civil-military debate over managing the isthmian passage continued into the following year, but without the Joint Board. By January 1914, the board still could not reach a collective recommendation, and the promising Army-Navy consensus of 2 months earlier evaporated. The Wotherspoon-Knapp subcommittee had yet to submit its final report. Influential Army generals, recognizing the impotence of the Joint Board, began voicing their opinions outside the organization. The Army War College Division became one such forum for Army response. The Army agreed with the Navy insofar as Canal administration and operations were primarily military affairs that required military consideration alone. The president of the Army War College concluded that the Army Corps of Engineers should maintain and operate the Canal. Absent the governor, the next highest Army officer should assume the functions of the office. Under the Army plan, the Navy would be relegated to a supporting role.

Army leaders also refuted civilian criticisms by arguing that the Panama Canal embodied a military necessity as much as a maritime commerce highway. General Leonard Wood opined that the Canal "partakes of the character of a well-guarded and secure defile connecting our Atlantic seacoast and interests in the Caribbean Sea with our Pacific seacoast and possessions in the Pacific Ocean."[13] Defending and managing the whole commercial American empire required strongly protecting and militarily administering one of its most militarily vital parts—the isthmian pass.

While civilian policymakers and military strategists deliberated Canal Zone management, the shadow of war in Europe began to influence discussions. In June 1914, the Senate Foreign Relations Committee opened hearings on how the United States should react to the possibility of a German-run Nicaraguan canal. Although the hearings were not open to the public, national newspapers reported that Nicaraguan ambassador General Emiliano Chamorro testified that Germany was willing to pay more than $3 million for a canal route. On August 5, 1914, as World War I began in

Europe, U.S. and Nicaraguan diplomats signed the Bryan-Chamorro Treaty, wherein Nicaragua allowed the United States 99 years to establish a naval base on the Gulf of Fonseca, thus negating a rival waterway.

The last notable action involving the Joint Board concerned a Panama Canal Zone submarine base. In late July 1916, as war raged in Europe, Secretary Daniels informed the Joint Board that the Navy's General Board had recommended that a submarine base be stationed at the Atlantic side. The naval consultative body called for a primary submarine base with a 20-boat capacity at Coco Solo Point, and an auxiliary base with a 10-boat capacity on the Pacific side at Balboa Harbor. The Joint Board concurred, recognizing submarines as "an essential element of the defense of the Canal Zone, including the Canal itself." The generals and admirals together found submarines a necessary resource to counter possible amphibious assaults. By 1917, civilian policymakers heeded the military advice and constructed a peninsular submarine base at the recommended site.[14]

Contingency planning following the Hay-Bunau-Varilla Treaty suggested a highly responsive Joint Board, an inter-Service consultative body attuned to the environment facing American diplomats. With speed and efficiency, the generals and admirals provided their civilian superiors with an integrated force plan of action should war occur between Colombia and the newly independent Panama.

Yet in the end, such war planning initiative succumbed to periods of neglect. A dismal state of affairs followed, and such inattention ultimately proved symptomatic of the Joint Board's inability to translate short-term actions into long-term procedures. The board failed to agree on concrete plans on how to manage and defend the Canal Zone. As Secretaries of State John Clayton, John Hay, and William Jennings Bryan successfully garnered diplomatic rights for the United States to construct a waterway across Latin America, the generals and admirals fumbled the two most basic tasks assigned to them.

When it came to determining how best to defend the Canal, the board tabled discussion on the subject for 3 years. While understandable considering the potential for war across the Pacific with Japan in 1907, and continued instability immediately south in Mexico beginning in 1910, not until the spring of 1910 and the final report of the Panama Fortification Board manned by its own members did the Joint Board resume any serious discussion on Canal Zone defense. Even as the volatile diplomatic conditions calmed, the inter-Service consultative body never questioned the susceptibility of the natural and artificial defenses to foreign amphibious assault until two and a half years later. Fortunately, no enemy attacked the Panama Canal during World War I, and a Japanese challenge to U.S. interests in the eastern Pacific never escalated into a real threat.

The Joint Board failed equally when dealing with management of the Canal Zone. Its strict adherence to a military-only government antagonized Congress. Exacerbated by the board's attempt in 1913 to expand its statutory authority, civil-military antagonism reached the point that the U.S. Army War College president and Army Chief of Staff addressed civilian criticism by outside means. Such civil-military acrimony confirmed that in the early 20th century, the goal for the Joint Board to permanently institutionalize inter-Service cooperation and coordination remained an unfulfilled hope. **JFQ**

NOTES

[1] Memorandum, Franklin D. Roosevelt to the Secretary of State, May 1, 1919, cited in Ernest R. May, "The Development of Political-Military Consultation in the United States," *Political Science Quarterly* 70 (June 1955), 167.

[2] Navy Department General Order No. 136, July 18, 1903, Joint Board [hereafter JB] 301, Nonserial Documents, roll 2, M 1421, Records of the Joint Board, 1903–1947, National Archives Microfilm Publications, Washington, DC; Army Headquarters General Order No. 107, July 20, 1903, JB 301, Nonserial Documents, roll 2, M 1421, Records of the Joint Board, 1903–1947, National Archives Microfilm Publications, Washington, DC.

[3] J.A.S. Grenville, "Great Britain and the Isthmian Canal, 1898–1901," *American Historical Review* 61 (October 1955), 48.

[4] Meeting minutes, June 10, 1904, JB 301, roll 1, M 1421; memoranda, Dewey to the Secretaries of War and Navy, June 24, 1904, JB 325-16, roll 9, M 1421.

[5] Meeting minutes, April 25, 1910, and May 31, 1910, JB 301, Roll 1, M 1421; memorandum, Captain Stanley D. Embick to the Adjutant General, April 23, 1910, JB Panama Canal File, serial 73, roll 12, M 1421; "Report of the Panama Fortification Board," Captain Stanley D. Embick, August 12, 1910, JB Panama Canal File, serial 73, roll 12, M 1421.

[6] Memorandum, Brigadier General William Crozier to Major General Leonard Wood, March 25, 1913, JB Panama Canal File, roll 12, M 1421; memoranda, Dewey to SECWAR and SECNAV, May 6, 1913, JB Panama Canal File, serial 7, roll 12, M 1421.

[7] Meeting minutes, May 5, 1913, JB 301, roll 1, M 1421.

[8] Ibid.

[9] Diary entry, May 17, 1913, in *The Cabinet Diaries of Josephus Daniels, 1913–1921*, ed. E. David Cronin (Lincoln: University of Nebraska Press, 1963), 67–68.

[10] Ibid.

[11] Meeting minutes, October 9, 1913 (amended), roll 1, M 1421.

[12] Memorandum, George W. Goethals to Major General Leonard Wood, November 15, 1913, JB Panama Canal Files, serial 10, roll 1, M 1421.

[13] Memorandum, Major General Leonard Wood to the Secretary of War, January 17, 1914, JB Panama Canal File, serial 10, roll 12, M 1421.

[14] Memorandum, JB senior member to the Secretaries of War and the Navy, November 14, 1916, JB Panama Canal File, serial 47, roll 12, M 1421; Paolo E. Colletta and K. Jack Bauer, eds., *United States Navy and Marine Corps Bases, Overseas* (Westport, CT: Greenwood Press, 1985), 80.

C-Class submarines moored alongside USS *Charleston* in Panama Bay, 1916

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