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Director of the Office of Homeland Security Tom Ridge holds a press conference in the Dwight D. Eisenhower Office Building, 18 October 2001. White House photo by Tina Hager

The Military and the Media: For Better or for Worse

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From the Editor

The fight against terrorism is the focus of this issue of *Military Review*. Our country's long-term campaign is well underway. The President of the United States, and now the Office of Homeland Security, is developing our national strategy, and the U.S. Army is a key member of the team that has taken the field to execute that strategy. Military professionals must learn all they can about the nature of terrorism, continue to sharpen responses to combat perpetrators, and do all that is possible to prevent future attacks against the United States.

What then are the terrorist threats arrayed against us? What are their capabilities and vulnerabilities? These questions are addressed in this issue. Graham Turbiville examines the Soviet Union's Cold War targeting methods against American warfighting in the continental United States to glean insights into how terrorist organizations might proceed in their efforts against us. Other authors look to how an understanding of both contemporary and historic perspectives on terrorism is fundamental to fighting this 21st-century foe. Lieutenant Colonel Andrew "Boomer" Smith analyzes how terrorists' modus operandi is changing and how governments should counteract the new terrorism. Tim Thomas writes an insightful piece on information terrorism and how terrorists exploit the civilized world to accomplish their goals. Les Grau explains how combat at high altitude differs from combat at lower elevations, and why it requires a different orientation and force structure. Vincent Foulk completes the section nicely with his contribution on how the Judge Advocate General Corps can help commanders understand the intricacies of Islamic law when conducting civil-military operations in Muslim countries.

A discussion of the war on terrorism is not complete without considering the news media and the effect they have on diplomacy, on military operations, and on national and international support of U.S. actions. Today, more than ever, the media play a crucial role in providing information. Media products serve as a window to the world, and the information they provide—accurate or inaccurate—greatly influences perceptions and actions. Lieutenant Colonel Kevin Lovejoy, Jason Holm, and Major Barry Venable describe the often-strained relationship between the military and the media. They recommend that we continue to build on mutual interests while recognizing respective differences. The key to successful media interaction is removing old apprehensions, stereotypes, and rules of engagement through robust training and preparation, and ensuring greater media access to our soldiers, leaders, and units.

The dastardly innovations in warfighting wrought by the al-Qaeda still reverberate across our great land. The actions of 11 September will likely continue to influence military thinking forevermore. Colonel Christopher Paparone and James Crupi argue that we recognize the reality of this change and that we should embrace a new paradigm for conducting military operations. Throughout this new war on terrorism, leadership remains a critically important element of our success on the battlefield. In the final piece in this issue, George Yeakey examines the situational leadership theory in light of recent Army doctrine.

As the United States continues its fight against terrorism, *Military Review* hopes to be a forum for reflection and analysis, and to stimulate a fruitful dialogue. We invite you to share your views, expertise, and experiences at this most critical juncture in the evolution of U.S. military thinking.





Prototypes for Targeting America: A Soviet Assessment Graham H. Turbiville, Jr.

N THE WAKE OF the 11 September 2001 terrorist attacks on the United States and the subsequent series of anthrax exposure incidents, U.S. attention to homeland security and force protection has taken on new urgency. The apparent depth of research, planning, and preparation underlying those attacks underscored anew the ways in which a state or nonstate adversary could measure and classify U.S. vulnerabilities and targeting options. But for decades another entity-the Soviet Union-carefully studied the U.S. homeland and its war-supporting resources from a targeting perspective. The H.G. Wells formulation in the War of the Worlds that "intellects, vast and cool and unsympathetic" watched our world as they "slowly and surely made their plans against us" would not have been too far removed from reality, at least in terms of Soviet thoroughness and a decided lack of sympathy.1 While the Soviets may now seem as remote a threat as Wells' martians, the methods the Soviet Union used and the information it collected may be instructive as the United States considers what new adversaries perceive and what attack options they could consider.

At the beginning of 1989, the profound changes that would shape the international security environment over the next decade were just beginning to take more solid form. The Soviet Union was in the process of withdrawing from its failed 9-year occupation of Afghanistan. At the same time, Soviet troop reductions in Eastern Europe and in the Soviet Union itself were gaining momentum, and fault lines within the Warsaw Pact became more visible. Armed clashes and violent dissent in some constituent republics around the Soviet periphery had moved from being a startling aberration to an enduring security concern for Soviet authorities. Senior members of the Soviet leadership indicated-and Soviet actions seemed to confirm-that every aspect of Soviet military affairs from tactical force strucSoviet intelligence personnel... had for years closely studied and systematized U.S. and allied newspapers, journals, and other materials to identify and understand the critical war-supporting assets upon which the United States relied for mobilization, deployment, and war sustainment. The resulting FORSCOM study was intended to illuminate how a potential adversary . . . could identify and use available information to plan for attacks on the CONUS mobilization base.

ture to basic planning assumptions about the nature of future war were shifting.

In turn, long-standing Western assumptions about Soviet military policy and capabilities were being challenged from every direction. While few Western analysts at the time thought Soviet goals had changed fundamentally, the posture of the Soviet Union's large, seemingly capable military institution was clearly going to be less overtly aggressive. Consequently, it appeared likely that U.S. and allied requirements for forward-deployed forces especially in Europe—could shrink substantially in the months and years ahead.

This would have been a positive development from many perspectives, but there was grave concern as well. With more forces stationed on U.S. territory, rapid force projection to distant theaters would become more critical. Force projection would depend even more than in the past on the effective performance of the Continental United States (CO-NUS) mobilization base. An adversary's successful attack on key CONUS war-supporting infrastructure could disrupt the timely preparation, deployment, and sustainment of military forces and materiel; endanger the achievement of U.S. strategic goals in remote conflict areas; and possibly damage public confidence and resolve. U.S. Forces Command (FORSCOM) undertook an extensive review of the implications of this changing environment for protecting the homeland. In July 1987, FORSCOM had been officially designated a specified command with a range of operational missions. It also was the Army component

The evolution, structure, roles, and missions of other organizations in sustaining the wartime continuity of government and services were discussed at length in Soviet military writings. The principal focus was on the Federal Emergency Management Agency, which attracted considerable Soviet interest since its formation in 1979. The role of CONUS military personnel and forces in civil defense and the relationships between military and civil defense entities also received attention.

of what was then the U.S. Atlantic Command. While command relationships, designations, missions, and roles have changed and evolved over the near decade and a half since then, the clarity of FORS-COM's view in the late 1980s seems particularly timely today.²

FORSCOM commander General Joseph T. Palastra, Jr. designated the land defense of CONUS (LDC) as a top priority. FORSCOM's complementary mission of providing military support for civil defense, central to homeland defense, was a priority as well.³ Brigadier General Glenn D. Walker, FORSCOM J2, and Colonel Robert F. Helms II, Chief, Joint Strategy and Concepts Office, looked at the threat definition and planning implications in early concept papers. Basically, FORSCOM saw a pressing need to accomplish the following:

Identify and quantify the capabilities of nations and nonstate actors to attack CONUS targets in different scenarios.

Identify possible targets that hostile forces could attack using a range of capabilities.

Develop estimates of the impact that target loss or damage would have on supporting the war-fighting commanders in chief.

Determine the total force requirements necessary to protect these potential targets, including civil authorities' ability to protect these targets from attack and the military forces necessary to augment civil authorities.⁴

To support this effort, FORSCOM began to examine how Soviet planners, using the open sources and direct observations available to the Soviet Union's intelligence staffs, studied the United States' critical infrastructure.⁵ While the Internet was still a relatively undeveloped source of useful data, Soviet intelligence personnel in the General Staff's Main Intelligence Directorate (GRU) had for years closely studied and systematized U.S. and allied newspapers, journals, and other materials to identify and understand the critical war-supporting assets upon which the United States relied for mobilization, deployment, and war sustainment. The resulting FORSCOM study was intended to illuminate how a potential adversary skilled in assessing military capabilities could identify and use available information to plan for attacks on the CONUS mobilization base. FORSCOM was concerned not only with the Soviet dimension but also with threats from any state or nonstate enemy. The study was based on previously restricted GRU publications, declassified Soviet instructional and concept papers, and other material. The basic findings, set out below, remain relevant as a model of how adversaries can access open sources and integrate acquired information on critical CONUS assets.

Soviet Planning Approaches

For many years, Soviet military writings addressed the CONUS role in global war as well as in regional conflicts.⁶ These assessments, based heavily on open materials and observations, served the Soviet General Staff and other planning bodies by:

Providing indications and warning intelligence through a continuous review and evaluation of Active and Reserve military forces in CONUS; civil defense preparations and procedures in all their dimensions; activity levels at ports, airfields, and other transportation centers; and activities in the defense industrial sector.⁷

Evaluating CONUS-based strategic strike forces, mobilization and reinforcement capabilities of general purpose forces, and overall war-supporting potential. These evaluations provided Soviet planners with critical input for formulating their own military readiness criteria, mobilization and reinforcement requirements, sustainability needs, and contingency planning.

Contributing to the development, refinement, and validation of Soviet targeting plans by identifying key CONUS-based forces and facilities, their roles and capabilities, their interaction, and their vulnerabilities.

Before focusing on Soviet appraisals of warsupporting infrastructure in CONUS, it is necessary to look more generally at how Soviet planners



Soviet military planners divided the world into land, aerospace, and sea areas called "theaters of military action" (TVDs). These delineated regions were further divided into continental and oceanic TVDs that encompassed friendly, enemy, neutral, and international areas in various combinations.... Military planning recognized continental TVDs and their coastal waters located near the Soviet Union... and overseas or remote continental TVDs at great distances from the Soviet Union. CONUS fell into this category.

study and assess military theaters and the target sets within them.

Soviet Theaters and CONUST argeting

In the late 1980s, Soviet military planners divided the world into land, aerospace, and sea areas called "theaters of military action" (TVDs).8 These delineated regions were further divided into continental and oceanic TVDs that encompassed friendly, enemy, neutral, and international areas in various combinations. They allowed the Soviet General Staff to assess a host of political, economic, geographic, and military factors associated with conduct of global and regional military operations by all services of the Soviet armed forces. Soviet military planning recognized continental TVDs and their coastal waters located near the Soviet Union; in European and Asian regions; oceanic TVDs such as the Atlantic and Pacific Oceans; and overseas or remote continental TVDs at great distances from the Soviet Union. CONUS fell into this category.

As noted, among the many reasons that the Soviets studied and evaluated TVDs was to help them develop individual targets and target complexes whose destruction or disruption would contribute to the successful prosecution of military operations. For all TVDs, Soviet planners classified targets based on their importance to overall strategic objectives; the threat these targets posed to the Soviet Union and its allies; the vulnerability of targets in terms of hardness and mobility; and the priority in which such targets should be attacked.⁹ Targets were grouped by category, the importance of which varied from one TVD to another, and by operational circumstances such as operations with or without the use of nuclear weapons. Among the five basic categories of enemy resources usually considered was one of growing importance: "war-supporting military-economic-political infrastructure."10

By the mid-1970s, Soviet planners were beginning to focus on future conflicts that could remain nonnuclear for a lengthening period of time. They had begun to formulate warfighting concepts designed to forestall US-NATO nuclear use and successfully achieve European theater objectives without either side employing nuclear weapons. In the Soviet view, the uncertainties associated with nuclear war and the enormous destruction likely to be inflicted on the Soviet Union, the territory of its allies, and deployed Soviet or Warsaw Pact military

Aiding dissident groups and assassinating key military or civilian officials were recognized as valuable tools with Soviet historical precedent. Additionally, a host of psychological and propaganda initiatives subsumed under the term "active measures" may have been employed to influence the perceptions of U.S. leadership, citizenry, and allies or neutrals in the North American TVD. Chemical and biological weapons and, according to some former Soviet spokesmen, manpack nuclear systems were all available in the Soviet inventory.

forces made the military utility of nuclear weapons problematic.¹¹ This concept was eventually embodied in the theater strategic operation (TSO), which was publicly announced in the early 1980s.¹² The goal would be to achieve theater objectives quickly without using nuclear weapons. Nevertheless, Soviet planners judged that the economic and mobilization potential of NATO nations—and especially reinforcements from CONUS—could prolong a future conflict and result in an unfavorable conclusion. Consequently, damage to the U.S. mobilization base became all the more attractive.

Soviet assessments of infrastructure and resources supporting sustained CONUS mobilization grew in importance in the 1980s, both in terms of the time available and the ways in which such mobilization could be disrupted. Soviet research into these matters became more evident in the late 1970s when the restricted GRU military journal, *Foreign Military Review*, became available in the West. Dealing exclusively with Soviet views of foreign military developments and capabilities, this monthly publication included detailed assessments of warsupporting infrastructure in all TVDs. In 1986, *Foreign Military Review* added a new section to the journal titled "Economics and Infrastructure," within which many such articles were grouped.¹³

CONUS War-Supporting Infrastructure

By the late 1980s, Soviet open writings were replete with assessments of CONUS war-supporting infrastructure and military and civil organizations that supported strategic deployment. These open writings constituted the most general kind of Soviet assessment; closed Soviet analyses addressed the same issues in more detailed, specific requirements. But the open assessments highlighted Soviet perceptions of how U.S. forces prepared for strategic deployment from CONUS; how they exercised; what they mobilized; what manpower and materiel became available; what resources transported and sustained deploying forces; and what military and civil organizations were involved in a direct or coordinating role. Indeed, Soviet writings could have been assembled to largely replicate the discussion of major FORSCOM missions addressed in contemporary Joint Command Readiness Program documents dealing with mobilization and deployment.

Soviet writings examined the overall structure of the U.S. Armed Forces in virtually every dimension, identifying the major military commands and organizations involved in putting U.S. forces on a wartime footing and the relationships between them.¹⁴ They described in detail the civil assets to be mobilized and the organizations and resources under military control that would be responsible for deploying military forces and materiel abroad.¹⁵ In addition to active duty military units of all services, the U.S. Army Reserve and Army National Guard components received particularly close attention, including their size, organization, training, mobilization, and missions.¹⁶ The Soviets judged that "the primary mission assigned to [U.S. Army] Reserve components during mobilizational deployment of ground forces is the preparation of reserve formations for movement to overseas TVDs and for their participation in ground operations in these theaters."17 Similarly, U.S. Air Force Reserves were "viewed as the basis of rapid Air Force mobilization during war preparations, of reinforcement of air groupings, and for the replacement of combat losses chiefly in the initial stage of fighting."¹⁸

The evolution, structure, roles, and missions of other organizations in sustaining the wartime continuity of government and services were discussed at length in Soviet military writings. The principal focus was on the Federal Emergency Management Agency, which attracted considerable Soviet interest since its formation in 1979. The role of CONUS military personnel and forces in civil defense and the relationships between military and civil defense entities also received attention.¹⁹

In addition to generating and deploying forces, CONUS was studied as the principal source of

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The Soviets evaluated and grouped various kinds of defense industrial facilities according to their products: shipbuilding; aviation; ballistic and cruise missile; armor; conventional munitions; chemical weapons; and nuclear munitions.

War-Supporting Infrastructure Identified by Soviet Planners During the 1980s

A typical example of the Soviets' interest in U.S. resources supporting mobilization, deployment, and war sustainment was their examination of maritime facilities. Soviet analysts noted that there are 10 naval bases; 11 basing points, less diversified naval bases; and 85 commercial ports out of 190 on U.S. territory, including Hawaii, available to support the Navy. Soviet sources note that for some bases and ports this includes reinforcing forward-deployed U.S. force groupings in transoceanic theaters of strategic military action. For example, Norfolk/Hampton Roads naval complex's role as a major departure port under the U.S. Atlantic Command for mobilized forces reinforcing Europe was well recognized and openly discussed. Specific naval bases and basing points along with the principal commercial ports addressed in Soviet sources follow:

The **Atlantic region** includes New London, Philadelphia, Norfolk, Little Creek, and Charleston Naval Bases; Boston, Newport, New York, Annapolis, King-Bay, Mayport, Key West, and New Orleans Naval Basing Points; and Staten Island, Pensacola, Pascagoula, Mobile, Gulfport, Violet, Lake Charles, Galveston, and Corpus Christi planned basing points. Soviet sources also include naval bases at Guantanamo Bay, Cuba, and Roosevelt Roads, Puerto Rico, in the North American theater of strategic military action. General purpose and specialized commercial ports are considered particularly important for loading troops, combat equipment, and supplies. Many are assessed as being equipped with special materials handling means and are served by road, rail, and pipeline. They are examined as complexes based on their various facilities and their output in terms of tons over time. The most important general-purpose ports, according to the Soviets, are New York, New Orleans, Philadelphia, Houston, Norfolk, Baltimore, Jacksonville, Boston, Savannah, Portland, Mobile, and Tampa. Specialized ports include Loop (sic), Beaumont, Baton Rouge, and Port Arthur. The most important container terminals and specialized mooring facilities for roll-on/roll-off vessels are located at commercial ports in New York, Baltimore, Charleston, New Orleans, Boston, Galveston, and Philadelphia.

The **Pacific region** includes Coronado, San Diego, San Francisco, Bangor, and Pearl Harbor Naval Bases; Long Beach, Bremerton, Kodiak (for coastal defense), Adak, and Midway (forward) Naval Basing Points; and Treasure Island and Everett planned basing points. The most important general-purpose commercial ports identified, based on these criteria, are Seattle, Tacoma, San Francisco, Oakland, Los Angeles, and Long Beach. Specialized ports include Valdez, El Segundo, and Barbers Point. Commercial ports with container and roll-on/roll-off moorings and facilities include Seattle, Oakland, Long Beach, Los Angeles, Portland, and San Francisco.

The **Great Lakes region** includes commercial ports at Chicago, Duluth-Superior, Detroit, Toledo, Cleveland, and Buffalo are considered general-purpose ports with military utility.

weapons, combat equipment, consumable supplies, and certain kinds of raw materials and energy sources, that is, petroleum products. This included materiel and resources stockpiled in CONUS as well as the capacity of U.S. economic enterprises to produce these items. Thus, Soviet sources evaluated and grouped various kinds of defense industrial facilities according to their products: shipbuilding;

Terrorists develop target lists that focus largely on panicking and disorganizing civilian populations, undermining national will, and mobilizing new recruits and supporters. The lists would be shaped by the weapons and access available to the terrorists; however, the logic by which such lists are compiled and the extensive public data upon which they can be based may be similar.

aviation; ballistic and cruise missile; armor; conventional munitions; chemical weapons; and nuclear munitions.

Collectively, these facilities appeared to the Soviets to constitute those military-economic enterprises that would have been most important in supporting military forces in a future war. Soviet military writings identified U.S. power-energy resources, especially strategic oil reserves, as potential military reserves. Soviet writings also identified some power stations that powered economic enterprises as targets as important as the enterprises themselves.²⁰

As the Soviets explicitly noted, the ability to move military and economic resources within a country and to TVDs was a critical war-supporting function. Consequently, the Soviets evaluated various aspects of U.S. transportation infrastructure with what seemed to be a major emphasis on ports and naval bases. This focus seemed to be in line with Soviet assessments of the relative roles air- and sealift would play in a future major war. U.S. strategic airlift loomed as a major consideration for Soviet planners in moving personnel and limited, high-priority reinforcement operations. Assessments of transportation facilities included ground transportation and a number of airfields, airbases, ports, naval bases, and shipping facilities identified in GRU military writings.21

Other military infrastructure elements the Soviets addressed included military-political-administrative control centers, and signal facilities and links, including ground-based radar stations at ballistic missile tracking posts; Strategic Air Command communications facilities; naval land-based communications facilities; and elements of the ground wave emergency network. Overall, a comprehensive list could be compiled based on Soviet open-source military literature alone.

Soviet military writings—both open source and restricted—indicated a sustained, comprehensive analysis of CONUS military and other war-supporting infrastructure according to carefully defined criteria. The Soviets organized this information systematically and considered it in the context of their warfighting concepts and plans. Soviet planners believed that they had an excellent understanding of U.S. capabilities, strengths, and vulnerabilities, and it appears they were correct.

Soviet options for attacking these targets in both massive and incremental ways ranged from strategic nuclear strikes-the least desirable option for reasons noted—to using special operations forces to attack CONUS targets. A wealth of historical and theoretical writings highlighted key transportation centers and nodes, power and energy targets, and signal communications links of various types as particularly desirable targets. Aiding dissident groups and assassinating key military or civilian officials were recognized as valuable tools with Soviet historical precedent. Additionally, a host of psychological and propaganda initiatives subsumed under the term "active measures" may have been employed to influence the perceptions of U.S. leadership, citizenry, and allies or neutrals in the North American TVD.²² Chemical and biological weapons and, according to some former Soviet spokesmen, manpack nuclear systems were all available in the Soviet inventory. While plans for attacking numerous CONUS assets and infrastructure had not become available in the West, target databases were clearly detailed and extensive.

The Soviet Union, of course, dissolved in 1992. Its main successor, Russia, has faced a continuing series of problems that shattered most of the old capabilities and warfighting paradigms. Russia today is in some respects, at least, a partner in addressing common security problems, but the kinds of data Soviet planners used many years ago to evaluate U.S. key infrastructure has proliferated manyfold. Internet resources alone can enable any state or nonstate entity to identify targets and provide an assessment of the impact their destruction or damage would have. This is not just in the warfighting framework used by planners in the Soviet Union, where Soviet research into the vulnerabilities of



The open assessments highlighted Soviet perceptions of how U.S. forces prepared for strategic deployment from CONUS; how they exercised; what they mobilized and moved; what manpower and materiel became available; what kinds of resources transported and sustained deploying forces; and what military and civil organizations were involved in a direct or coordinating role.

North American infrastructure supported a specific military strategy. The overall strategies of other state and nonstate adversaries—including current international terrorist networks like al-Qaeda—will be linked to specific goals and objectives.

Terrorists develop target lists, for example, that focus largely on panicking and disorganizing civilian populations, undermining national will, and mobilizing new recruits and supporters. The lists would be shaped by the weapons and access available to the terrorists; however, the logic by which such lists are compiled and the extensive public data upon which they can be based may be similar. In the information age, terrorist organizations do not require general staffs or extensive intelligence organizations to compile target lists and plans. The material is often readily and openly accessible-or with the ease of traveling worldwide—by observing targets covertly or overtly. This is all too apparent in the al-Qaeda manual Military Studies in the Jihad Against the Tyrants that sets out approaches and tradecraft associated with target definition and preparation.²³ The manual identifies, for example, the requirement to collect "information about strategic buildings, important establishments, and military bases," including "ministries such as those of Defense and Internal Security, airports, seaports, land border points, embassies, and radio and TV stations."²⁴ The process of studying and systematizing potential targets —based on our understanding of any adversaries' goals, the information available to them, and their past actions—may help to more clearly define specific targets and perceived vulnerabilities. In this respect, Soviet approaches to developing targets may be quite analogous.

The LDC concepts General Palastra and others articulated years ago and the subsequent attention homeland defense received in the 1990s have now been subsumed under the new relationships and structures for homeland security forming in the wake of the 11 September. Balancing the benefits of an open society with effective homeland security in the information age where easy global mobility and ready access to potentially destructive systems and technologies will clearly challenge U.S. national security planners and those charged with military force protection. In the meantime, the Soviet experience illustrates just how easily targets can be identified and studied. **MR**

NOTES

1. In fact, H.G. Wells' 1898 novel describing a martian invasion of Earth pur-portedly used European pre-World War I General Staffs as the model. General Staffs, as the martians, carefully studied potential adversaries' capabilities strengths, and weaknesses

 For a useful discussion of FORSCOM's missions and roles in the late 1980s, see General Joseph T. Palastra, Jr., "The FORSCOM Role in the Joint Arena," Military Review, March 1989, 2-9 Ibid.

 FORSCOM Chief of Staff Memorandum, "Providing Justification for Military Forces Dedicated to the Land Defense of CONUS," 24 January 1989, concept paper by Colonel Robert F. Helms II, unclassified.

5. FORSCOM tasked the U.S. Army Training and Doctrine Command's For-eign Military Studies Office (FMSO) to undertake the study. A parallel FMSO paper, "The Employment of Soviet Special Purpose Forces Against Infrastructure Targets: An Historical Perspective," examined how Soviet special operations forces had been used in past conflicts to attack enemy transportation and other infrastructure

6. There have been numerous opportunities to compare Soviet open-source writings with classified or restricted writings on the same military topics. Soviet open sources accurately address broad concepts and trends while their classified counterparts provide more detail, particularly at operational and strategic levels; include more material on sensitive planning considerations; and, if pertinent, include characteristics of weapon systems and equipment. New developments and concepts often were addressed specifically in open writings sometime after they were addressed in closed forums. Nevertheless, open sources frequently signaled new developments in Soviet military thought.

 Soviet planners termed this process "strategic intelligence" and include a spectrum of military, political, and economic indicators to be collected by various human and technical means. These are set out concisely by Soviet General Staff officer M.I. Cherednichenko under the entry "Strategicheskaia razvedka" ("Strate-gic Reconnaissance") in N.V. Ogarkov, Sovetskaia voennaia entsiklopediia (So-viet Military Encyclopedia, hereafter referred to as SVE, Vol. 7 (Moscow: Voenizdat, viet Military Encyclopedia, hereafter referred to as SVE, Vol. 7 (Moscow: Voenizdat, 1979). For a discussion of some of the military and military-economic aspects of war preparation that are still classified by the Soviets, see the chapters "Combat Readiness of the Armed Forces" and "Strategic Deployment of the Armed Forces" in Ghulem Dastagir Wardak, comp., and Graham Hall Turbiville, Jr., ed., The Voroshilov Lectures: Materials From the Soviet General Staff Academy, Vol. 1, Issues of Soviet Military Strategy (Washington, DC: National Defense University Press, 1989); S.A. Bartenev, Ekonomicheskoe protivoborstvo v voine (Economic Counteroffensive in War) (Moscow: Voenizdat, 1986). For one contemporary ac-count of Warsaw Pact intelligence-collection efforts against a number of Army, Naw, Air Force, and economic-industrial targets in CONUS. see Desmond Ball Navy, Air Force, and economic-industrial targets in CONUS, see Desmond Ball, "Soviet Signals Intelligence: Vehicular Systems and Operation," Intelligence and

National Security (December 1988), 5-27. 8. "Theater of military action" is one of several ways to translate the Russian teatr voennykh deistvii (TVD). These important military-geographic subdivisions were frequently rendered in Western assessments as theater of strategic military action (TSMA) or theater of military operation (TMO) and other formulations. How

action (1SWA) or theater or military operation (1WC) and other formulations. How-ever endered, they referred to the same Soviet concept. 9. An early informative Soviet discussion of this process is found in Kh. Dzhelaukhov, "The Infliction of Deep Strikes," *Voennaia mysl*", *Military Thought*, hereafter cited as *VM* (February 1966), Foreign Press Daily (FPD) 0763/67, 8 August 1967, reprinted in *Selected Readings From Military Thought, 1963-1973*, selected and compiled by Joseph D. Douglas, Jr. and Amoretta M. Hoeber, *Studies in Communist Affairs*, Vol. 5, Part 1 (Washington, DC: U.S. Government Printing Office (GPO), 1982), 106-115.

 Ibid. While target categories varied somewhat in Soviet writings, generally they included in addition to war-supporting infrastructure: strategic nuclear delivery means and associated command and control; operational and operational-tac tical nuclear delivery means such as aviation, missiles, and artillery; groupings of combined arms forces and associated support resources; and air defines forces and their support. The term "military infrastructure," *voennaia infrastruktura* in Russian, was specifically cited in Soviet sources as a foreign term. It was, however, used in Soviet military writings as a useful way to encompass the many kinds of Western military and civil facilities and transportation systems intended or designated for supporting military operations. See, for example, V. Elin and Iu. Korolev, "Infrastruktura NATO na Evropeiskikh TVD" ("NATO Infrastructure in the European TVDs") Zarubezhnoe voennoe obozrenie (Foreign Military Review, hereafter cited as ZVO, July 1988), 68-75.

 It was stressed, however, that Soviet forces must be prepared to deal with enemy nuclear attack and to launch their own strategic, operational, and tactical nuclear strikes at any time in the course of a NATO-Warsaw Pact conflict. 12. Even in the mid-1970s, the TSO concept had been substantially developed.

See "Strategic Operations in a Continental Theater of Strategic Military Action," in Ghulam D. Wardak and Graham H. Turbiville, Jr., Voroshilov Lectures: Ma-

terials From the Soviet General Staff Academy: Issues of Soviet Military Strat-egy (Washington, DC: GPO, July 1989), 257-313.

 Apparently recognizing the value of the journal as a whole to Western analysts, foreign subscriptions were canceled in 1986, although individual issues continued to move westward. Then-classified Soviet assessments indicated that the North American TVD included the contiguous 48 states; Alaska, including the Far Eastern TVD; Canada; Mexico; Central America down to Panama; the West Indies; Greenland; and Iceland, which was also included in the Northwestern TVD. Despite this vast region, "the importance of the North American TVD is determined by the fact that the most powerful imperialist country, the United States of America, is located there." Soviet evaluations of military-geographic features, military and economic potential, and targeting criteria became more frequent and detailed. Soviet planners specifically took stock of warfighting potential. This included judgments that "half of the industrial and 3⁄4 of the to-tal military output of the Capitalist world is produced in the United States and tal military output of the Capitalist world is produced in the United States and Canada" and that "the military and economic potential of the United States has decisive importance in the preparation and execution of war by the impe-rialist camp." Substantial attention was given to past and contemporary power projection capabilities of CONUS-based forces and to the CONUS role as a mobilization and reinforcement base for NATO. Exercises involving mobiliza-tion or deployment such as Nifty Nugget and Bright Star were carefully evaluated. In short, by the 1980s, the CONUS mobilization and reinforcement potential emerged as a far larger concern for Soviet planners than it had been in the cost. This encourse device inforcement was the substructure to the trained inforcement puter the substructure in the cost. This concern clearly influenced the Soviet study of military infrastructure in CONUS.

14. S. Semenov, "Tsentral'nye organy tyla sukhoputnykh voisk SShA" ("Central Rear Service Organs of the Ground Forces"), ZVO (December 1986), 19-23; Iu. Omichev, "Komitet nachal'nikov shtabov Vooruzhennykh Sil SShA" ("Joint Chiefs of Staff of the U. S. Armed Forces"), ZVO (September 1988), 12-16; Iu. Viktorov, "Vysshie organy upravleniia Vooruzhennymi Silami SShA" ("Higher Or-Viktion, Vysshie organy upravienia vooluziennymi sinam Soha (Highel Or-gans of Control of the Armed Forces of the USA), ZVO (September 1985), 7-14; Iu. Omichev, "Vooruzhennye Sily SShA" ("Armed Forces of the USA"), ZVO, Part 1 (January 1989), 7-10, and Part 2 (February 1989), 7-14; V. Vladomirov, "Orga-nization of Medical Support for the U. S. Army in the Theater of Operations," ZVO (November 1985), 18-23, as translated by the Joint Publications Research Ser-vice (JPRS), SOVIET UNION Report: Military Affairs—Foreign Military Review, DBC UMA oc 2002. JPRS-UMA-86-023.

 Two of the more recent articles addressing developments in strategic move-ment are lu. Omichev, "Armed Forces of the United States," 11-12; V. Grebeshkov, "Ob'edinennoe komandovanie strategicheskikh perebrosok vooruzhennykh sil SshA," ("Joint Command for Strategic Movement of the Armed Forces of the

 USA"), ZVO (July 1987), 11.
 USA"), ZVO (July 1987), 11.
 V. Grebeshkov, "Reservy Voenno-vozhdushnykh sil SSh4" ("Reserves of the Air Forces of the USA"), ZVO, Part 1 (June 1987), 31-36, and Part 2 (July 1987), 35-40; I. Aleksandrov, "Organizovannyi reserv sukhoputnykh voisk SSh4" ("Organizovannyi reservannyi reserv sukhoputnykh voisk SSh4" ("Organizovannyi reservannyi rese nized Reserve of the Ground Troops of the USA"), ZVO (February 1988), 21-27, E. Anatol'ev, "*Liudskie resursy SShA i ikh ispol'zovanie v voennykh tseliakh*" ("Man-power Resources of the USA and Their Employment for Military Aims), ZVO (April . 1988), 63-68,

1988), 63-68.
17. Aleksandrov, "Organized Reserve," 21.
18. Grebeshkov, "Air Force Reserves," Part 1, 31.
19. I. Mysiuk, "Vzgliady na grazhdanskuiu oborony v SShA" ("Views on Civil Defense in the USA"), ZVO (September 1988), 70-74; V. Goncharov, "Civil Defense and the U.S. Armed Forces," ZVO (May 1984), 20-21, as translated by the JPRS, SOVIET UNION Report: Military Affairs, U.R. Goncharov, "U.S. Civil Defense," ZVO (UNON Report: Military Affairs, JPRS ZVO (June 1983), as translated in SOVIET UNION Report: Military Affairs, JPRS No. 84623. 20. M. Shirokov, "The Question of Influences on the Military and Economic

Potentialof Warring States," VM (April 1968), FPD 0052/69, 27 May 1969, in Se-lected Readings, 210-11.

21. Soviet analysts have looked at various aspects of the local defense of air and maritime facilities as in "American Electronic Security Systems for U.S. Air Bases," ZVO (May 1983), 62-71, as translated in SOVIET UNION Report: Military Affairs, JPRS No. 84314; V. Mosalev, "U.S. Naval Base Security," ZVO (May 1980), 25-26, as translated in SOVIET UNION Report: Military Affairs, JPRS No. 76339.

 For a translated in SOVIE To Norv Reprotection. Imitiany Analais, Strong Norv Reprotection and Soviet Strategy (Washington, DC: Pergamon-Brassey's International Defense Publishers, 1984).
 See Military Studies in the Jihad Against the Tyrants in the "Declaration of Jihad Against the Country's Tyrants Military Series," a document entered in evidence at the trial for the African Embassy bombings, Southern District Court, New York City Attorney General's Office, circa early to mid-1990s, in translation from Arabic. The "Twelfth Lesson" dealing with espionage and information gathering is particularly applicable 24. Ibid., 47.

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Combating Terms of the second second

N 11 SEPTEMBER 2001, the United States was subjected to a complex, coordinated, devastating terrorist attack. In less than 2 hours, New York's World Trade Center and a portion of the Pentagon were destroyed, and four commercial airliners were lost with all passengers and crew.¹

The full national and international response to this attack continues to take shape. Assessing the attack's physical consequences in terms of damage and casualties will take years.² On the international front, the United States has declared war on terrorism, and President George W. Bush has clearly defined the national strategic objective as eliminating terrorist groups "with global reach."³ An antiterrorist coalition has commenced offensive operations against the perpetrators and their allies, and that coalition is sending a consistent message that the fight against terrorism will be long, costly, and difficult. While military action is under way abroad, the Bush administration has expanded the Cabinet to include a new portfolio for homeland security, and additional resources have been committed to improving security measures and intelligence capabilities that address terrorism. Other countries are also reassessing their arrangements for countering terrorism.⁴

This response suggests that Bush's mission to eradicate international terrorism will require a comprehensive set of countermeasures to address every aspect of that threat before, during, and after an attack. This article proposes a framework to evaluate the completeness of any strategy for combating generic terrorist attacks. The framework divides terrorists' offensive efforts and the counterterrorist response into preparatory, crisis, and consequence phases, each involving a particular set of terrorist activities that demand specific countermeasures.

Trends in Terrorism

Although the term "terrorist" dates from the late 18th century, terrorism has been used for thousands of years.⁵ For most of its history, until the late 1960s,

Civilian emergency services, such as fire brigades, ambulance services, and public health and law enforcement agencies, will assume their normal roles [during CBRNE attacks] but will often require a surge capacity to which military forces . . . may need to contribute. A smooth transition to large-scale consequence management operations will require frequent rehearsal in peacetime.

terrorism has been connected with insurgencies a nonruling group's attempt to influence or overthrow a ruling group within a country or region.⁶

From the late 1960s, terrorist activities began to spread beyond the immediate boundaries of countries or regions in conflict. The increased mobility that much of the world's population experienced after World War II was probably the major contributing factor to this trend. Aircraft hijackings, in particular, became a terrorist technique with great ability to globalize terrorism. During the first three decades of the global terrorist period, terrorist techniques tended to limit physical damage or casualties.⁷ Bombings—terrorists' historical technique of choice—tended to have limited effects because of the size of the devices that terrorists were able to assemble and transport.⁸ Similarly, attacks using small arms tended to produce too few casualties.

One dangerous terrorist tactic employed several times during the 1970s and early 1980s was the hostage-siege. The Black September attack on the 1972 Munich Olympics is a good example of this tactic. The tactic was also frequently associated with aircraft hijackings. The hostage-siege focused world attention on the crisis phase of a terrorist operation and demonstrated that terrorists appreciate the value of international media and information operations (IO) in furthering their causes. This link between terrorist aims and hostage-siege tactics was demonstrated by hijackings, which usually sought the release of political prisoners in exchange for hostages. Negotiation was sometimes a viable government option in resolving these crises because the terrorists' demands were affordable, however undesirable it may have been to concede to criminals. For most Western nations, the ultimate response to the hijacking threat was the development of sophisticated specialist capabilities for resolving hostage-siege crises by force. These were supported by passive methods such as inspecting

"Counterterrorism," as defined in U.S. doctrine, refers to offensive measures usually involving lethal force taken directly against terrorist operatives and their activities. The best example of this connotation of counterterrorism is the employment of special recovery tactics to resolve hostage-siege situations.

luggage at airports. By the late 1980s, this effort had largely blunted the hostage-siege threat.⁹

Beginning in the early 1980s and developing through the 1990s, a disturbing new trend emerged in the motivation of the most dangerous terrorist groups. This was a shift toward more purely religious bases for their causes, accompanied by a tendency to demonize or dehumanize groups or societies they opposed. These factors enabled terrorists to justify methods capable of generating much larger numbers of casualties.¹⁰ This was evident in the 1983 suicide truck-bomb attack on a U.S. Marine facility in Beirut, Lebanon, and in the 1984 bombing of the United Kingdom Conservative Party convention in Brighton, England. This trend gathered momentum during the 1990s.¹¹ Perhaps the most disturbing demonstration of mass destruction terrorism before 11 September was the Aum Shinrikyo (Aleph) sect's 1995 chemical nerve agent attack on the Tokyo subway system.

Another implication of the more religiously or ideologically based terrorist motivations of the 1990s was a trend toward a Huntingtonesque clash of civilizations approach; this trend was demonstrated by the jihadism of extremist Islamic groups such as Osama bin Laden's al-Qaeda network.¹² This may be a secondary reason for the demise of the hostage-siege tactic: terrorists' demands for civilizational change, such as "end global capitalism" or "terminate Western hegemony," cannot be physically granted or philosophically conceded by governments. Negotiation is therefore impossible.¹³

As with the hostage-siege phenomenon of the

1970s and 1980s, many countries have responded to the threat of mass destruction terrorism by developing dedicated capabilities to counter it. These include measures aimed at the crisis phase of a weapon of mass destruction or high-yield conventional explosive incident, as well as consequence management capabilities to mitigate the damage inflicted by a successful attack.¹⁴

CounteringTerrorism

International terrorism has been a source of concern to governments for more than 30 years. Over that period, governments have developed a range of responses or countermeasures that have evolved into a distinct body of theory. In some cases, this theory extends to specific operational capabilities. Before proceeding to an analysis of terrorist attacks, it is useful to define at least the key concepts underpinning this body of theory.

"Terrorism" is a loosely defined term that is generally associated with politically motivated violence inflicted by nonstate groups, with or without state sponsorship. Measures designed to deal with terrorism are conventionally parsed into several categories. In U.S. doctrine, these measures are grouped under the collective term "combating terrorism," Within the scope of combating terrorism, activities are further divided into two categories: counterterrorism and antiterrorism. Other countries recognize this general distinction although the terminology used to refer to each category sometimes differs.¹⁵

"Counterterrorism," as defined in U.S. doctrine, refers to offensive measures usually involving lethal force taken directly against terrorist operatives and their activities. The best example of this connotation of counterterrorism is the employment of special recovery tactics to resolve hostage-siege situations. Because of its association with elite law enforcement or military capabilities, counterterrorism has taken on a secretive and compartmentalized dimension that may ultimately hinder efforts to develop a comprehensive government response to terrorism.¹⁶

"Antiterrorism" refers to passive or defensive measures taken to thwart a terrorist attack. These measures are extremely diverse and include such activities as physical security measures, bomb search and render safe capabilities, facility access control, and blast-hardening of structures.

"Consequence management" is a term that emerged in U.S. terrorism jargon during the late 1990s and refers to all measures used to mitigate the effects of terrorist attacks, particularly attacks involving chemical, biological, radiological, nuclear, or high-yield explosives (CBRNE).¹⁷

Photo not available

One dangerous terrorist tactic employed... during the 1970s and early 1980s was the hostage-siege. The Black September attack on the 1972 Munich Olympics is a good example of this tactic. The tactic was also frequently associated with aircraft hijackings. The hostage-siege focused world attention on the crisis phase of a terrorist operation and demonstrated that terrorists appreciate the value of international media and information operations in furthering their causes.

The Shape of Terrorist Attacks

The events of 11 September suggest that the crisis phase of a terrorist attack is too fleeting to rely on crisis management capabilities alone. The 11 September crisis was over in 2 hours, during which U.S. crisis management options were limited to shooting down the airliners. Subsequent actions in New York, rural Pennsylvania, and at the Pentagon amounted to consequence management, while other national and international activities were devoted to preventing the next attack. If 11 September demonstrates a trend toward increasingly lethal terrorist tactics, there are significant implications for how nations address this threat. Two areas of special concern are:

The possibility that the destruction achieved on 11 September has recalibrated terrorist actions, opening the possibility that follow-on attacks will aim for similar casualty levels.

The likelihood of terrorists being prepared for and surviving a destructive coalition response to their actions. This suggests that a second terrorist strike will be planned and ready for execution at the most advantageous time—after an apparently conclusive government counterstrike.

If the world is on the brink of an era of mass destruction terrorism, the experience of the past decade suggests two apparently contradictory imperatives in combating that type of terrorism:

Forestall terrorist efforts before they coalesce into a crisis because once a crisis emerges, it may be impossible to avoid devastating consequences. This compels a need for proactive countermeasures to prevent terrorist attacks.

Anticipate that terrorists—an increasingly adaptive enemy—will defeat the United States' preventive measures at least part of the time.¹⁸ This makes it essential to maintain effective crisis and consequence management capabilities.

These conclusions suggest the need for a comprehensive suite of capabilities and efforts that can be brought to bear at any point in the evolution of an attack.

The 11 September attack illustrates that terrorist



Figure 1. Generic Terrorist Activities Time Line

A typical global terrorist attack consists of a years-long preparatory phase, a very brief crisis phase, and a long consequence phase. The same timeline could apply to a terrorist campaign in which a number of attacks are made using a range of tactics. In such a case, the crisis phase could be drawn out, with attacks and their consequences overlapping.

groups are developing novel and devastating methods. Lengthy preparatory phases have preceded several of the more devastating attacks of the past 10 years.¹⁹ During these phases, new capabilities were developed, operatives were recruited and trained, resources were positioned, and the attack was researched and planned.²⁰

In contrast to the preparatory phase, the terrorists' actions on 11 September coalesced into the crisis phase very quickly. Final deployment for and execution of the attack all took place within a few hours. As the events of that morning demonstrate, the U.S. government was unable to react in time to prevent the terrorists from pressing home attacks against their targets.²¹

Consequences were generated even before the last of the four aircraft had crashed. Recovery efforts at the World Trade Center site are predicted to continue for several months. Significantly, the 11 September attacks were essentially conventional explosive incidents that generated mostly prompt casualties.²² In a successful, large-scale CBRNE attack, a massive decontamination effort would be required, and delayed casualties would continue to present over a long period. A consequence management phase of two or more years is therefore realistic for a large-scale CBRNE incident.

This brief analysis suggests that a typical global terrorist attack consists of a years-long preparatory phase, a very brief crisis phase, and a long consequence phase. The same timeline could apply to a terrorist campaign in which a number of attacks are made using a range of tactics. In such a case, the crisis phase could be drawn out, with attacks and their consequences overlapping.

Using a generic model, the terrorists' activities throughout the evolution of their attack can be posted against the model. Represented graphically, their activities could look like Figure 1. If countermeasures are then arrayed against these terrorist activities, a comprehensive suite of measures and capabilities emerges as seen in Figure 2.

ComprehensiveCountermeasures

Using this model, it is possible to compare terrorist activities in each phase with corresponding government countermeasures to determine whether gaps exist in the counterterrorist strategy.

During the capability development or preparatory phase, terrorist activities will be low profile and often difficult to link with deliberate hostile intentions. Countermeasures during this phase will focus on intelligence gathering and surveillance aimed at detecting terrorist groups and determining their motivation and intent. These efforts may also

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Figure 2. Generic Terrorist Countermeasures

detect terrorist-related criminal activities such as drug trading. Intelligence gathering may eventually lead to preemptive strikes against concentrations of terrorist activity or capabilities although these opportunities could be rare.²³ Intelligence efforts may also detect emerging terrorist tactics or capabilities, enabling the anticipatory development of new crisis and consequence management capabilities.²⁴ Selectively using IO to allow terrorists to learn of defensive preparations, without compromising operational security, could also deter terrorist acts.

The above measures are largely reactive and, except for preemptive strikes, cede the initiative to the terrorist. There are, however, proactive countermeasures available to governments during the preparatory phase. These could fall into two classes: direct and indirect. Direct countermeasures would consist mainly of law enforcement and military activities, such as intelligence gathering, and when possible, strike operations using air power or special operations assets.

Indirect countermeasures would consist of programs aimed at addressing the antipathies that motivate terrorists' actions.²⁵ For example, humanitarian aid programs should be synchronized with other diplomatic and economic initiatives to deprive the terrorists of a recruiting base of aggrieved persons. These measures would operate through diplomatic or economic means but their ultimate purpose would be informational.

Indirect countermeasures seek to shape the strategic environment in which the terrorist war is fought, but these countermeasures are difficult to Countermeasures during [the preparatory] phase will focus on intelligence gathering and surveillance ... [which] may eventually lead to preemptive strikes.... [Such] measures are largely reactive and, except for preemptive strikes, cede the initiative to the terrorist. There are, however, proactive countermeasures available.... For example, humanitarian aid programs should be synchronized with other diplomatic and economic initiatives to deprive the terrorists of a recruiting base of aggrieved persons.

aim at specific terrorist activity and are long-term in nature. The countermeasures should be in place before the terrorists form their intent to attack and should continue throughout the crisis and consequence phases. This suggests that the model might be refined by depicting indirect countermeasures as a permanent feature of a counterterrorist campaign, active through all phases of a particular incident.

As indicated earlier, there may be limited opportunity to apply countermeasures during the crisis phase of an attack; the growing sophistication of the most dangerous terrorist groups and their increasing use of suicide tactics suggest that these opportunities are becoming increasingly rare. Nevertheless, crisis management capabilities are still necessary because they ease the transition to consequence management and bolster public confidence that the government is handling the crisis



Figure 3. Refined Generic Model

The direct countermeasures applied during the consequence phase suggest further refinement of the generic model by dividing the consequence phase into two subphases: detecting and apprehending the perpetrators, and deliberate responses such as military retribution and the judicial trial of any arrested terrorists. This branch of government activity during the consequence phase thus aligns with much activity during the preparatory phase, forming a cycle of countermeasures.

competently. If successfully applied, crisis management capabilities may also mitigate or even avert serious physical consequences. It may be possible to maintain crisis management capabilities, such as special recovery assets for hostage-siege situations, by adapting these from the specialist operations capabilities needed for strategic strikes. As in the preparatory phase, aggressive and well-coordinated IO will be essential to government success during an attack's crisis phase.

Historically, crisis management has emphasized traditional counterterrorist capabilities and extensive command and control arrangements reaching to the national political level. The CBRNE dimension demands an expanded range of response capabilities such as bomb search and render safe; chemical, biological, and radiological agent detection and identification; and casualty handling. These highly specialized and demanding fields are beyond the reach of local governments and highlight the need for a national capability.

During the consequence phase of an attack, terrorists' efforts will be devoted to exfiltrating survivors, strategic and tactical repositioning for followon operations, exploiting any informational advantage, and evaluating the operation. Government activities during the consequence phase will necessarily concentrate initially on relief and recovery efforts. During CBRNE attacks, the scale of casualties, damage, and disruption can be reduced by effective and timely consequence management. Civilian emergency services, such as fire brigades, ambulance services, and public health and law enforcement agencies, will assume their normal roles but will often require a surge capacity to which military forces or other resources may need to contribute. A smooth transition to large-scale consequence management operations will require frequent rehearsal in peacetime.

During consequence management, other government efforts will be devoted to direct countermeasures similar to those applied during the preparatory phase. These will include meeting law enforcement challenges, including investigating the attack and arresting or detaining suspects. The government will also mount military, diplomatic, economic, and judicial responses. Early intelligence efforts should be devoted to determining if the attack is part of a coordinated campaign, cueing preemptive strikes, or adopting additional protective measures. Analyzing terrorist tactics can help develop new protective and consequence management techniques to reduce vulnerability in the future.

The direct countermeasures applied during the consequence phase suggest further refinement of the generic model by dividing the consequence phase

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Figure 4. Terrorism Countermeasures by Government Level

into two subphases: detecting and apprehending the perpetrators, and deliberate responses such as military retribution and the judicial trial of any arrested terrorists. This branch of government activity during the consequence phase thus aligns with much activity during the preparatory phase, forming a cycle of countermeasures. IO must continue, aimed at restoring public morale and confidence and at mitigating any informational advantage the terrorists may have earned. If these refinements are incorporated into the model, the result could look like Figure 3.

PlanningaGovernmentResponse

The preceding analysis shows that an extensive range of countermeasures must be available if any country is to have a comprehensive answer to the threat of modern terrorism. The generic model proposed also has some value in mapping the source of these capabilities in a federal model of government as exists in the United States, Australia, and many other Western nations.

Federal states tend to divide the responsibility for providing government services among different levels of government. Typically, these are the federal, state or provincial, and local or municipal levels. Federal responsibilities emphasize matters that impinge on national prosperity and security such as economic, foreign, and defense policy. State and local governments usually handle matters that more directly affect individual health and well-being such as law enforcement, education, health, and emergency services. All levels of government, therefore, command resources and capabilities that are relevant to countering terrorism. If the sources of these caFederal resources apply across the entire attack timeline, while state and local resources apply more to the crisis and consequence phases. For at least part of the crisis and consequence phases, resources commanded by all three levels of government play a role.

pabilities are arrayed against our generic model, the result could look like Figure 4.

As this representation demonstrates, federal resources apply across the entire attack timeline, while state and local resources apply more to the crisis and consequence phases. For at least part of the crisis and consequence phases, resources commanded by all three levels of government play a role. This suggests that during these phases, there may be duplicated efforts and, perhaps more dangerously, jurisdictional conflicts which could hinder the most efficient and harmonious application of resources.²⁶ The exigencies of a war on terrorism may justify the abrogation of certain state and local government jurisdictions in favor of more efficient federal management. Significantly, traditional military forces are limited in their application right across the model.

Waging war on terrorism poses significant challenges for governments. Perhaps the greatest challenge lies in the range and complexity of countermeasures that must be developed and implemented to execute a truly comprehensive strategy. Successfully executing such a strategy will require a degree of coordination and planning that has heretofore eluded most Western nations, especially those that

Indirect countermeasures . . . are difficult to aim at specific terrorist activity and are long-term in nature. [They] should be in place before the terrorists form their intent to attack and should continue throughout the crisis and consequence phases.... indirect countermeasures [may be considered] a permanent feature of a counterterrorist campaign, active through all phases of a particular incident.

have a federal government system. The high level of management needed for efficient and robust

1. "Timeline: Chronology of Events," 11 September 2001, <http://www.msnbc

"Timeline: Chronology of Events," 11 September 2001, <http://www.msnbc. com/news/631782.asp>.
 Norma Cohen, "Debate on Future of WTC Site," *Financial Times*, (20 September 2001). <http://specials.ft.com/aoa/FT3F7IUWURC.html>.
 President George W. Bush's address to the combined Houses of the U.S. Congress, 20 September 2001.
 For example, Australia has declared that it will double its conventional counterterrorist capabilities and will reestablish special capabilities generated for the Sydney 2000 games. The Honorable Peter Reith, Member of Parliament, Minister for Defence Media Release, 2 October 2001.
 Although the intent and methods of terrorism can be perceived in the activities of the Hebrew zealots of Roman times, the term itself is traceable in English to *Irots in the Context of the French Revolution's Reign of Terror, Oxford English Dictionary*. A link between anarchism and terrorism had been firmly establishe got *Terrorism and the International Political System* (London: St. Martin's Press, 1995), 3.
 Note that the term's origin in the French Revolution deviates from this gen

The Age of Terrorism and the International Political System (London: St. Martin's Press, 1995), 3.
Note that the term's origin in the French Revolution deviates from this general rule; in this case, terror was inflicted by a new revolutionary government, and other examples of government-inflicted terror campaigns can be found. The definition of terrorism has generated its own extensive literature, and it is not this author's intention to discuss or define the term further. See Guelke, 1-7; and Bard E. O'Neill, Insurgency and Terrorism: Inside Modern Revolutionary Warfare (New York: Brassey's, 1990), 13.
For example, only 20 percent of terrorist actions during the 1980s killed any-one, but those that did, killed more people as time passed. See Bruce Hoffman, Terrorist Targeting: Tactics, Trends and Potentialities (Santa Monica, CA: Rand, 1992), 3.
Burt for all their bombings, terrorists thus far have seldom used explosives in ways calculated to kill great numbers of any civilian population." Brian M. Jenkins, "International Terrorism: Tends and Potentialities" in Alan D. Buckley and Daniel D. Olson, International Terrorism: Current Research and Future Directions (New Jersey: Avery, 1980), 105. Bombings constituted 50 percent of terrorist acks between 1968 and 1992, a trend that has continued to the present day. See Hoffman, 2. Note that aircraft bombings, such as that at Lockerbie in 1988, provide some notable exceptions to this trend.
Hijackings generated most hostage-siege situations and constituted 33 percent of international terrorist incidents by the late 1960s. This had declined to 4 percent by the 1980s. This decline is largely lattibuted to security improvements and establishing dedicated crisis management capabilities. Sue Hoffman, 13.
Bruce Hoffman, Responding to Terrorism Across the Technological Spectrum (Carlisle Barracks, PA: U.S. Army War College, Strategic Studies Institute, 194), 5.

994), 5. 11. Although the Brighton attack caused relatively few casualties, the sophisti cated long-delay, structural attack device used was clearly intended to kill a large number of people.

 Huntington foretells that "The fault lines between civilizations will be the battle Huntington toretells that "The fault lines between civilizations will be the battle lines of the future" and identifies the Islamic and Western Christian as two of the modern civilizations between which those fault lines will appear. Samuel P. Hun-tington, "The Clash of Civilizations?" Foreign Affairs (Summer 1993), 22.
 See the discussion on negotiation in Hugh Smith, "International Terrorism: A Political Analysis" in The Year Book of World Affairs 1977 (London: Steven & Sons, 1977), 142-46.
 In the United States, consequence management measures are being developed under the foderally mandated hung Lugar Domenic Deprecision

developed under the federally mandated Nunn-Lugar-Domenic Domestic Preparedness Program. See "Defense Against Weapons of Mass Destruction Act," in the National Defense Authorization Act for Fiscal Year 1997 (Wash-ington, DC: U.S. Government Printing Office [GPO], 23 September 1996), Title

countermeasures may necessitate a centralized approach to planning and execution. This may, in turn, necessitate that some intrastate jurisdictions sacrifice their traditional autonomy.

This article proposes a model for mapping elements of terrorist threats and corresponding countermeasures to gauge the comprehensiveness of any putative strategy for combating terrorism. Like the Cold War that preceded it, the impending war on terrorism promises to be a long one that will provide ample opportunity to test the validity of this model or any other construct that seeks to organize governments' efforts in the emerging international security environment. MR

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XIV of Public Law 104-201.

XIV of Public Law 104-201.
15. For example, the Australian government's National Anti-Terrorist Plan is, in U.S. terminology, a counterterrorist crisis management contingency plan, http://www.sac-pav.gov.au/pscc/natp.html, accessed November 2001.
16. For an insight into the world of elite counterterrorism, see Neil C. Livingstone, *The Cult of Counterterrorism* (Lexington, MA: Lexington Books, 1990).
17. In the United States, the Nunn-Lugar-Domenici Domestic Preparedness Program is aimed at developing a national consequence management capability for CBRNE attacks. See Title XIV, Public Law 104-201.
18. For an example of this capacity, see Bruce Hoffman's explanation of the Provisional Irish Republican Army's development of counter-countermeasures for British countermeasures in Northern Ireland in Hoffman, *Responding to Terrorism Across the Technological Spectrum*, 14-16.
19. For example, the Aleph (formerly Aum Shinrikyo) sect's 1995 sarin gas attack on the Tokyo subway system began with research into producing chemical

19. For example, the Aleph (tormeny Auth Shininky) sets 1995 sain gas at-tack on the Tokyo subway system began with research into producing chemical and biological agents in 1992. *Global Proliferation of Weapons of Mass Destruc-tion: A Case Study on the Aum Shinrikyo*, Staff Statement by the Senate Gov-ernment Affairs Permanent Subcommittee on Investigations, 31 October 1995, at http://www.fas.org/irp/congress/1995_rpt/aum/part04.htm, accessed November 2001 200

2001. The 1998 bombings of the U.S. Embassies in East Africa provide a useful example of this type of long-term planning. See Judy Aita, "Bombing Trial Witness Describes Nairobi Surveillance Mission" *Middle East News Online*, 23 February 2014. https://www.com/useful_acadu/acadu 2001, at <http://www.middleeastwire.com/unitedstates/stories/20010223_meno

2001, at http://www.middleeastwire.com/unitedstates/stories/20010223_meno.shtml, accessed November 2001.
21. Another prompt U.S. government response was diverting all inbound international flights and grounding all civil aviation within the continental United States. Civil aviation remained heavily restricted while airport security procedures were enhanced. While sensible measures, these significantly affected U.S. business and Americans' way of life, magnifying the effect of the initial terrorist strikes. An interesting sequel is the nationwide grounding of Greyhound bus services after a nonterrorist attack on a driver.
22. This observation does not dismiss the postraumatic stress disorder casulates that will certainly emerge nor the rescue workers who may subsequently emerge nor the rescue workers who may subsequently emerge nort the rescue workers.

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24. The CBRNE response capabilities being developed in the United States under the Nunn-Lugar-Domenici Domestic Preparedness Program are an example

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Legal Perspectives for Civil-Military Operations in Islamic Nations

Lieutenant Colonel Vincent Foulk, U.S. Army Reserve

HE EVENTS OF 11 September 2001 brought forth the possibilities of U.S. forces being deployed as peacekeepers and nationbuilders in Muslim nations. As such, the military will be a major contributor to civil law and order. Previous operations in Haiti, Somalia, and the Balkans have shown that military officers providing assistance to civil authorities should understand the legal underpinnings of civil and criminal law to operate effectively. Where this understanding is available, military and civil authorities have made considerable strides in establishing civil normalcy. Where this understanding is not available, there has been resistance from local and international civilian authorities. Most personnel that civil-military operators are likely to support would certainly come from a nation with an Islamic legal tradition.

While working within an Islamic nation, civilmilitary operators must keep in mind the tension between secular nationalism and Islamic religious principles. Unlike many other religions familiar to American non-Muslims, Islam inserts itself into the body politic far more aggressively than other religions.¹ To misunderstand both points of view is to risk losing credibility and alienating the very people the mission depends on to succeed. It is important to remember that among some Muslims, westernization and globalization are threats. Some secular nationalist and Islamic adherents are likely to oppose government programs that advance these ends, resulting in a rallying point for both points of view.² Most Western military operators easily grasp the concepts of secular nationalism, but the Islamic facet is often completely misunderstood.

The first concept U.S. forces must abandon when dealing with any dimension of an Islamic legal system is the concept of separation of church and state. Islam has long traditions of involving religion with Unlike many other religions familiar to American non-Muslims, Islam inserts itself into the body politic far more aggressively than other religions. To misunderstand both points of view is to risk losing credibility and alienating the very people the mission depends on to succeed. . . . Among some Muslims, westernization and globalization are threats. Some secular nationalist and Islamic adherents are likely to oppose government programs that advance these ends, resulting in a rallying point for both points of view.

law. Approaching any aspect of the legal system without first understanding Islamic principles is likely to result in misunderstandings and misinterpretations. For non-Muslims, another difficult concept to grasp is that Muslims and non-Muslims are not held to the same standard under Islamic law.³ This difference remains an aspect of law in many Islamic states and results in different laws and punishments for different religious groups.

American lawyers, as well as others charged to keep the peace and regulate behavior, are accustomed to a system with a foundation of constitutional statutes that reflect political will, regulations that reflect public policy, and precedentsetting court rulings. All these tools balance basic rights with political expediency. Grasping these concepts is essential to work within the American legal system.

Islamic legal systems rest on the Koran and the rights endowed by the Creator. The right to govern people in any Islamic state comes from God, as do all individual rights. A government is obliged to follow the law of God in defending those individual rights and obligations.⁴ Islamic law or government is not likely to accept the principle of democracy of the people. The question of whether democracy is even compatible with Islam is debated among many Islamic commentaries.⁵ The concept that authority to make laws and regulations comes from God, not the governed, poses an obvious problem

The question of whether democracy is even compatible with Islam is debated among many Islamic commentaries.... Some Islamic scholars have made distinctions between fundamental sovereignty, in which God grants and protects fundamental freedoms, that are unchanging and popular sovereignty, which deals with expedient policy and is thus subordinate to fundamental sovereignty. This results in an analysis that is foreign to Americans first look at the religious law and obligations, and then to any national constitution.

for democratic governments. Some Islamic scholars have made distinctions between fundamental sovereignty, in which God grants and protects fundamental freedoms, that are unchanging and popular sovereignty, which deals with expedient policy and is thus subordinate to fundamental sovereignty.⁶ This results in an analysis that is foreign to Americans—first look at the religious law and obligations, and then to any national constitution. To understand government and law in any Islamic regime, it is as important to first understand the Koran just as it is important in the United States to understand the Constitution.⁷

Most Islamic states use a parliamentary code to establish specific laws, and all Islamic states use a system of religious law known as Shari'a, which is similar to the West's common law. In its purest form, Shari'a regulates every form of public and private life; however, its influence varies among Islamic societies. Mazalim courts, or grievance courts, that follow the statutory laws created by parliaments are similar to European civil courts; even so, these courts still follow Islamic principles. Often, a parliamentary court hears criminal and business law cases while a religious court guided by Shari'a hears family law cases. In the case of Islamic states, even parliamentary laws and courts interpreting those laws must formulate and interpret the law according to sound Islamic principles.

Whether arguing in court or advising on social policy, civil-military operators must keep in mind the hierarchy of sources for Islamic law. From highest to lowest, these sources of law are the Koran, the Sunna, the Ijma, the Qiyas, then all other sources of wisdom.⁸ The Koran, which was written by the Prophet, is the highest source and overrules all other sources. Any effort to contradict this source is certain to be rejected. The Sunna consists of the teachings of the Prophet Muhammad not explicitly found in the Koran and overrules all but that found in the Koran.

Muslims do not see their faith as one of evolution but a constant truth. Still, new issues emerge in a changing world. To address these issues, a council of clerics reaches a consensus, which becomes part of the Ijma. Just as in the common law, there are prior rulings by prior councils that can be persuasive from one case to another. These are called Qiyas. Finally, all other sources of wisdom can be used to argue or persuade. These range from declarations of rights from other cultures to religious teachings of the earlier and lesser prophets. Non-Muslims often mistakenly begin arguments using the lowest level of precedence to support their positions. Such arguments should be made to either support an argument of a higher source or to show that the higher level did not argue the issue; therefore, the traditional Islamic interpretation does not apply.9

Another important distinction that causes misunderstandings is in applying criminal law. Americans are comfortable with the distinction between misdemeanors and felonies. Islamic law also distinguishes between greater and lesser crimes. Some Western legal scholars even draw parallels between Islamic and Western distinctions in crimes; however, this simplistic view can be perplexing when watching Islamic courts apply their distinctions. Islamic crimes are divided into three classes: Hudoud, Ta'zir, and Qisas. The better classification can be described as crimes against God, society, and individuals respectively.

Hudoud crimes are crimes identified in the Koran. Some commentaries have equated them to felonies, but that label would mislead most Americans. There are seven crimes: murder, apostasy, theft, adultery, false accusation of adultery, robbery, and alcohol consumption. For the first four of these crimes, the Koran specifies punishment, and a clerical judge has no discretion in that punishment. The

last three mentioned do not have specific punishments.¹⁰ Several liberal Islamic countries, however, do not treat apostasy or drinking beer or wine as Koranic offenses. Punishments can range from death to corporal. An aspect that escapes Western understanding is that the Koran requires specific evidence to prove these crimes. Only a confession or testimony by two witnesses-four in the case of adultery-can support a conviction. Less proof, however, can still result in a conviction as a Ta'zir crime.

Ta'zir crimes are those offenses that are not described in the Koran but are deemed necessary to a working society. In these crimes, judges have nearly complete discretion over punishment unless limited by parliamentary law. Although Ta'zir crimes are often punished only by admonition on first offenses, it would be a mistake to refer to them as being similar to misdemeanors. Espionage or similar crimes against the state are classified as Ta'zir and can carry the death penalty.

Qisas are crimes that are mentioned either in the Koran or Ta'zir. They are crimes in which victims have some say in the punishment and have the right to recover damages. Damages paid to victims or their families are referred to as Diya. Crimes of this sort are usually limited to those causing physical harm but can include crimes of negligence. In a traditional court system, the victim's family can demand that similar bodily offenses be inflicted on the defendant or the family can grant forgiveness.

Any military officer supporting civil authorities in a traditional Islamic nation must fully understand these concepts to have credibility and to avoid imposing views the local populace might perceive as

Islam has long traditions of involving religion with law. Approaching any aspect of the legal system without first understanding Islamic principles is likely to result in misunderstandings and misinterpretations. For non-Muslims, another difficult concept to grasp is that Muslims and non-Muslims are not held to the same standard under Islamic law.

unacceptable. In planning operations to support civil authorities, the following actions should be employed: civil-military personnel should be familiar with the legal underpinnings of civil authority in the host Islamic nation; a civil affairs specialist familiar with legal issues and Islamic law should be deployed to work with other civil-military operators and with the local justice system to assist judge advocate generals and maneuver commanders with liaison; and matters concerning assistance in developing local responses for civil authorities should be framed within the Islamic principals likely to be accepted by Islamic clerics and government officials. MR

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1. Colonel Syed Tahir Hussain Mashhadi, "Political Philosophy of Islam," Globe Cakistan: February-March 1999). This is possible because Islam is not only a religion but also a four-fold phenomenon. It is a strong monotheistic faith. It is a state based on the Holy Koran, and it is a way of life, with every activity down to the smallest detail regulated by Koranic prescriptions. Thus, Islam is a complete integra-tion of religion, a political system, a way of life, and an interpretation of history. 2. Ali A. Mazrui, "Sharia Nigeria: Between Democracy and Globalization,"

Muslim Democrat (November 2001). Because globalization is a special scale of Westernization, it has triggered many identity crises from Uzbekistan to Somalia and from Afghanistan to Northern Nigeria. Fragile ethnic identities and endangered cultures are forced into new forms of resistance. Resisting Westernization becomes indistinguishable from resisting globalization. 3. Professor Tamara Sonn, "Elements of Government in Classical Islam," *Mus*-

Professor Tamara Sonn, "Elements of Government in Classical Islam," Mus-lim Democrat (November 2001). Those who followed Islamic law were considered Muslim, while Jews and Christians were not only allowed but also expected to follow their own law if it did not contradict Islamic law.
 Allamah Abu al-'A'la Mawdudi, "Human Rights in Islam," al Tawhid Journal, Vol. IV, No. 3, Rajab-Ramadhan, 1407.
 Ki R. Abootalebi, "Islam, Islamists, and Democracy," Middle East Review of International Affairs Journal (March 1999). Some, like Abul A'la Mawdudi, Funder of the Jamaet Iclemi in Idea have acrued that if democracy is composed

founder of the Jamaat-Islami in India, have argued that if democracy is conceived as a limited form of popular sovereignty, restricted and directed by God's law, there is no incompatibility with Islam, but Mawdudi concluded that Islam is the very antithesis of secular Western democracy based solely on the sovereignty of the

people. On the other hand, Sayyid Qutb, a leading traditionalist theoretician of the Muslim Brotherhood, executed by the Egyptian government in 1966, objected to the idea of popular sovereignty altogether. Qutb believed that "the Islamic state must be based on the Koranic principle of consultation, or *shuriah* [on the inter-

must be based on the Koranic principle of consultation, or *shuriah* [on the inter-pretation of Shari'a], and that the Islamic law, or Shari'a, is so complete a legal and moral system that no further legislation is possible or necessary. 6. Dr. Raja Bahlul, "Divine Sovereignty vs. Popular Sovereignty," Bir Zeit Uni-versity, unpublished paper for the First Annual Conference, Center for the Study of Islam and Democracy, Georgetown University, Washington DC, 30 April 2000. 7. Riffat Hassan, "Religious Human Rights and the Quran," *Emory International Law Review* (Spring 1996). This does not mean that similar issues of human rights cannot be raised and intelligently argued in an Islamic setting. Also see Donna E. Arzt, Religious Human Rights in Muslim States of the Middle East and North Africa," *Emory International Law Review* (Spring 1996), online at <www.law.emory. edu/EILR/volumes/spring96/arzt.html>.

edu/ELR/volumes/spring96/art.html>.
8. M. Fathi Osman, "Sovereignty of God or Sovereignty of the People," Mus-lim Democrat (February 2000).

 An-Nisa 3:58, Quran. One important tip in dealing in an Islamic government context is that simple fairness is always a good position in which to start. Islam is very sensitive to equity and fairness. "Surely, Allah commands you to fulfill trust obligations toward those entitled to them and that when you judge between, judge with fairness."

10. Frank Schmalleger, Criminal Justice Today (Englewood Cliffs, NJ: Prentice Hall, 1993), 603

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Ground Combat at High Altitude

Lieutenant Colonel Lester W. Grau, U.S. Army, Retired, and Lieutenant Colonel Hernán Vázquez, Argentine Army

A general who allows himself to be decisively defeated in an extended mountain position deserves to be court-martialed. —Carl von Clausewitz¹

IGH MOUNTAIN terrain is often inaccessible, uninhabitable or of no apparent value, yet peoples and states still fight to possess it. Long, bloody wars have been fought, and are being fought, for mountain real estate located between 10,000 and 23,000 feet [3050 and 7015 meters]. Over the past fifty years, high-altitude combat has raged in Africa, Asia, and South America. The Chinese invaded Tibet in 1953 and fought a subsequent guerrilla war there until 1974. From 1953 to 1958, British troops fought Mau-Mau separatists in the Aberdares Mountains of Kenya. In 1962, China and India battled in the Himalayan Mountains bordering Bhutan and Tibet. Soviets fought Afghan Mujahideen in the towering Hindu Kush Mountains from 1979 to 1989. The Peruvian government hunted the Sendero Luminoso guerrillas in the Andes Mountains throughout the 1980s. India and Pakistan have continually battled for possession of the Siachen Glacier since April 1984 and fight sporadically over disputed Kashmir as they have since 1948. Today, Colombia's government troops are fighting the Revolutionary Armed Forces of Colombia (FARC), and the National Liberation Army (ELN) guerrillas high in the Andes, and Russian soldiers are fighting Chechen separatists high in the Caucasus Mountains.

The U.S. Army has no experience fighting in truly high mountains and its mountain warfare manuals deal primarily with low and medium mountains and stress the use of helicopter aviation to conduct that combat. However, helicopters cannot haul normal loads over 13,000 feet [3965 meters] since their rotors lack thick enough air to "bite" into, and high altitude weather conditions will frequently shut down flying for days. High-altitude combat differs from medium- and low-mountain altitude combat and requires a different orientation and force structure. Other armies have experience in truly high mountains and can provide valuable guidance and expertise. The U.S. Army needs to know how to conduct high-altitude mountain warfare, develop the tactics, techniques, and procedures to do so, and share the experience of other armies to understand and prepare for possible high-altitude conflicts.

TheEnvironment

Mountains are generally classified as low (600 to 1500 meters), medium (from 1500 to 3500 meters) and high-altitude mountains (above 3600 meters). The world's highest mountains are not in the United States, Europe, or Korea—where the U.S. Army is accustomed to working. The Himalayan Mountain chains of Asia stretches 1,500 miles and contains 9 of the world's 10 highest peaks. The Hindu Kush/ Karakoram mountain chain of Asia stretches well over 500 miles with its highest peak at 28,250 feet [8,616 meters]. The South American Andes stretches over 5,000 miles and rise above 22,000 feet [6,710 meters] at many points. The Caucasus Mountains, which divide Europe and Asia, run some 700 miles with many peaks over 15,000 feet [4572 meters]. The Himalayan Mount Everest towers at 29,028 feet [8,853.5 meters] whereas the highest point in the United States, Mount McKinley in Alaska, is 20,320 feet [6,197.6 meters]. The highest point in the Colorado Rockies is Mount Elbert at 14,433 feet [4,402.1 meters]. The highest point in the European Alps is Mont Blanc at 15,771 feet $[4,810.2 \text{ meters}]^2$

Although high mountains occupy a good portion of the earth's surface, man is not naturally designed to live and work at these high altitudes. When a person travels to an altitude of 8,000 to10,000 feet [2440 to 3050 meters] or higher, the atmospheric changes in pressure and available oxygen cause physiological changes, which attempt to ensure that the body gets enough oxygen.³ These physiological changes are pronounced among mountain people who have lived in cold, high altitudes for generations. Compared to lowlanders, their bodies are short, squat, stocky, and barrel-chested, and their hands and feet are stubby. Their hearts are bigger and slower beating and their capillaries are wider. Their bodies contain 20 percent more red blood cells than lowlanders' do and these red blood cells are larger. The alveoli in their lungs are more open for oxygen absorption. Many develop a fatty epithelial pouch around the eyes to counteract cataract and snow blindness.⁴ Populations at high altitude often use narcotics, such as coca or hashish, to help manage the pain and stress of high altitude.

High altitudes are characterized by extreme cold, strong winds, thin air, intense solar and ultraviolet radiation, deep snow, raging thunderstorms and blizzards, and heavy fog and rapidly changing weather, including severe storms which can cut off outside contact for a week or longer. Avalanches and rockslides are not uncommon. Although jungle or forest may hug the mountain base, trees do not grow past 10,000 to 11,500 feet [3,000 to 3,500 meters], depending on the latitude.

Physical conditions at high altitude are often more dangerous than enemy fire. Superficial bullet and shrapnel wounds can quickly turn fatal at altitude. Movement in the high mountains often results in broken bones, severe lacerations, contusions, and internal injuries caused by falls and falling rock. Frostbite and hypothermia are a constant danger. Acute mountain sickness, high altitude pulmonary edema, and cerebral edema are frequently fatal consequences of working at high altitude. Mental and physical abilities decrease at high altitude and high altitude also induces personality disorders. Sudden weight loss is often a problem. The rarefied atmosphere permits increased ultraviolet ray exposure, which creates problems with sunburn and snow blindness. High altitude shelter heating is often by unvented kerosene stoves, which means that personnel breathe air, which is thick with soot.⁵

Equipment will not function, or functions marginally, at high altitudes. On the average, vehicles lose 20 to 25 percent of their rated carrying capability and use up to 75 percent more fuel.⁶ Military generators and vehicles are often diesel-powered, but standard diesel engines lose efficiency at 10,000 feet

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[3050 meters] and eventually stop functioning altogether because of insufficient oxygen. Artillery firing tables are wildly inaccurate as the changed environment allows rounds to fly much farther. Lubricants freeze; altitude and weather limit helicopters; and additional animal or gasoline-fueled overland transport adds to the physical demands and logistic requirements of this environment.

Getting There is Half the Fun

At high altitude, personnel have difficulty breathing because of decreased atmospheric pressure and subsequent rarified oxygen. Soldiers selected for high-altitude duty should be screened for their ability to function in this environment. Soldiers should be in excellent physical condition and have sound hearts and lungs. Short, wiry soldiers are preferred to tall, muscular soldiers. Selected soldiers should have above-average intelligence to allow them to more-readily adapt to the trying terrain. Personnel who have had radial keratotomy corrective eye surgery should not go to high altitudes because

Type of	Low and Medium High Mountains Mountains				One Day of Poot		
March	Up to 3000 meters On foot Mounted		From 3000 to 4000 meters		From 4000 to 5000 meters On foot Mounted		One Day of Rest After Marching
Normal, not affecting					On foot		
combat power	8	10	6	8	4	6	6 hours
Affecting combat power	10	12	8	10	6	8	3 days
Considerably affecting	12	14	10	12	8	10	1 day
combat power	Hours Marching Per Day						

Chart 1: Average movement rates at altitude for trained, acclimated personnel and animals

Source: ROP-00-06, Conducción de la Brigada de Montaña (Mountain Brigade Field Manual) (Buenos Aires, Argentina: Government Printing Office, 1998), Annex 15, 279.



Defending at altitude is difficult because of limited troops and material. When defending along a border, a battalion holds an extended frontage (7,000 to 8,000 yards) while a company holds 1,500 yards, so there is little depth, or large gaps, in the defense. Further, the complete battalion is seldom on line simultaneously. Often, a platoon holds a company position since the rest of the company is being held in reserve at lower elevations where the deterioration of the body is not as rapid.

their vision may permanently cloud.

All personnel should undergo an acclimatization program to accustom them to their new environment and to improve their respiratory and cardiovascular systems. A physically fit soldier can adapt to the cold in about 3 weeks.⁷ The body normally adapts to a higher altitude in about 2 week's time. During the acclimatization phase, the body accumulates additional red blood cells which help transport needed oxygen.⁸ The Pakistani army acclimates their personnel over 7 weeks. They begin with a 3-week stay at 10,000 feet [3050 meters] where personnel acclimate to the cold while they undergo daily physical conditioning and learn mountaineering, rock climbing, rappelling, and mountain survival. During the final 4 weeks, soldiers learn advanced mountaineering techniques, trek to 14,000 feet [4270 meters] and return; trek to 17,000 feet [5185 meters] and return; and finally trek to 19,135 feet [5836 meters].⁹

Despite all training and efforts, acclimatization is not possible at heights over 18,000 feet [5418 meters], so exposure at these heights must be limited and closely supervised. Personnel at high altitudes need to be rotated out every 10 to 14 days. The Indian army acclimates its personnel over a 14day schedule with increases in altitude at 6 days, 4 days and then another 4 days. The Indian army characteristically conducts its acclimatization by having the battalion hike from its road head to the staging area. All experienced armies agree that high-altitude acclimatization cannot be achieved in less than 10 days. An acclimated soldier is still not an experienced mountaineer. Experience counts and is not gained in 2 months of training. Some armies, such as Italy's, believe that 10 years is not too long to produce a truly capable, experienced mountain warrior.

Nothing is fast in high-altitude combat. Logistics support is key and the location of logistics dumps determines operational axes. The distance between the road head—the furthest point that supplies can be moved by truck—and the forward posts determines how many troops can actually man the forward posts. Forward posts can be a 3 to 14 day foot march from the road head. The farther the forward post is from the road head, the greater the number of troops necessary to support it. Base camps are usually built around road heads. Supplies and men travel forward from the base camps through intermittent staging posts to the forward posts. Helicopters, porters, or mules are used to move supplies from the road head. Despite attempted technology fixes, the mule is the most efficient way of moving material in the high mountains. Mules require care, attention, and training. Armies with experience in high mountains maintain trained mules and muleteers. Even mules cannot reach the higher elevations, and porters must haul the supplies forward.

Movement is calculated in time rather than distance at high altitude. Figure 1 shows average movement rates of trained, acclimated personnel and pack animals in the mountains.

The terrain slope as well as physical conditioning and altitude acclimatization of the troops determines the distance that can be covered. Figure 2 gives a rough average for determining distances over time using conditioned, acclimated troops.

Moving in the high mountains can be perilous. Weather can rapidly change and columns can become lost in blizzards or fog. Trail markers can quickly disappear under falling snow. Snow bridges can collapse and swallow climbers into deep crevasses. Entire patrols have disappeared without a trace while moving to the Siachen Glacier.

Line-of-sight communications is excellent in the mountains but difficult to achieve because of high peaks. Therefore, communications sites are carefully selected and often become key terrain. Very-high frequency radios with automatic frequency hopping, encryption, and burst transmission capabilities work best. Normal batteries quickly lose power in the cold, so lithium batteries should be the normal issue.¹⁰ Frequently, mountain tops become part of the national communications infrastructure because they are crowded with military, national, and commercial radio and television sites and telephone relay towers. These vital areas need to be protected, and military platoons often garrison such communications sites against guerrilla attacks.



Soldiers selected for high-altitude duty should be screened for their ability to function in this environment. Soldiers should be in excellent physical condition and have sound hearts and lungs. Short, wiry soldiers are preferred to tall, muscular soldiers.... All personnel should undergo an acclimatization program to accustom them to their new environment and to improve their respiratory and cardiovascular systems. A physically fit soldier can adapt to the cold in about 3 weeks.

CombatatAltitude

There are two primary scenarios for combat at altitude. First, two states dispute the boundary between their countries and maintain forces supporting a

Slope	Slope		Low and Medium Mountains		igh ntains	Observations
Grade		On foot	Mounted	On foot	Mounted	Observations
0% to 4%	Descent	4.0 Km/hr	8.0 Km/hr	4.0 Km/hr	7.0 Km/hr	Mounted troops travel walk speed
	Ascent	4.0 Km/hr	8.0 Km/hr	3.7 Km/hr	7.0 Km/hr	
5% to 9%	Descent	4.0 Km/hr	8.0 Km/hr	4.0 Km/hr	7.0 Km/hr	
570 10 970	Ascent	3.7 Km/hr	7.3 Km/hr	3.0 Km/hr	6.5 Km/hr	

Chart 2: March distances over time in the mountains

Source: Conducción de la Brigada de Montaña, Annex 13, 271. Conditions for the march: day, good weather conditions, on a trail or road in good condition, firm ground, troops and packed animals trained and acclimatized.



20 percent of their body weight (150-300 pounds) for 15 to 20 miles per day in mountains. Smaller mules in other locales will carry less. The maximum carrying weight for an Argentine mule is between 200 and 250 pounds. However, this is for low- and medium-altitude mountains. At high altitude, the maximum carrying weight drops below 200 pounds.

rough line of demarcation along the disputed zone (Kashmir and Siachen Glacier between India and Pakistan, and the Kameng Frontier Division between India and China). In this scenario, opposing forces hold linear defenses along the line of demarcation, regardless of altitude, and conduct a fairly positional fight.

Second, a light infantry force of guerrillas, smugglers, bandits, or forces from a neighboring state transverses the mountainous region to establish base camps in the mountains from which they patrol, launch raids, or maintain smuggling routes. This has been the pattern for a number of high-altitude disputes such as the Mau Mau uprising, Soviet-Afghan war, Sendero Luminoso in Peru, Russo-Chechen wars, and Colombian efforts against the FARC and ELN. In this scenario, the fighting does not automatically gravitate to a border zone, but usually stays below the tree line.

At altitude, the first enemy is the environment. The second enemy is the human foe. At altitude, high ground is not always key terrain. Frequently, key terrain is related to mobility—passes, main supply routes, road heads, and intermittent staging posts. Light infantry and artillery are the primary combat forces. Offensive actions in the mountains include infiltration, ambush, raids, patrolling, shelling attacks, limited air assault, and limited offensives. Pursuit is seldom possible. Envelopment is the most common maneuver and the frontal attack is the least desired option. Defensive actions include counterinfiltration, ambush, patrolling, and positional defense. Relief in place is routine small-unit action.

Offensive actions should focus on interdicting logistics by blocking passes, denying use of supply and transit routes, capturing base camps and intermittent staging posts, and destroying transport.¹¹ Force oriented offensive actions, such as interdicting patrols or raiding artillery positions, make great headlines and can boost morale, but they seldom have the long-term effect as actions against logistics. Offensive actions are small-unit actions, since only small units can be supported at altitude and frequently the terrain is so restricted that too many soldiers would hamper the effort. Movement is by small groups moving at a walk to avoid sweating because sweat freezes quickly leading to frostbite. Objectives are close at hand so the attackers will not be exhausted before they arrive and will not be caught in the open by rapidly changing weather. Assembly areas may be nonexistent and the attackers will have to move directly from forward positions. The attack may have to go in waves if suppressive fire is inadequate or the enemy is conducting a reverse-slope defense. The offensive plan must be clear, as most mountain maps are problematic. Maneuver is dictated by terrain and the reserve is committed early since movement is slow and mutual support is very difficult to achieve. Maneuver is slow and limited in distance. A maneuver force can range from one or two men to a full battalion if weather and the enemy situation permits.

Defending at altitude is difficult because of limited troops and material. When defending along a border, a battalion holds an extended frontage (7,000 to 8,000 yards) while a company holds 1,500 yards, so there is little depth, or large gaps, in the defense.¹² Further, the complete battalion is seldom on line simultaneously. Often, a platoon holds a company position since the rest of the company is being held in reserve at lower elevations where the deterioration of the body is not as rapid. The platoon is rotated every 10 to 14 days. The entire company must still be rotated to lower elevations to recoup every 3 to 4 months. This means that the long, linear defense is actually a string of strong points built around a machine gun. Reverse slope defense, with forward slope observation posts is preferred, since the defensive positions often lack overhead cover and are susceptible to artillery airburst.

A great deal of daily effort is required to keep snow from completely filling the defensive positions and hiding the trails. Permanent shelter, such as portable fiberglass huts, are essential at the defensive positions.¹³ Fortifying defensive positions is difficult since this usually requires the delivery of heavy materials such as cement, sand, water, and roofing timbers. Sensors are a welcome addition to the defense in those areas where they will not be rapidly covered by snow. Defensive positions should be designed and stocked to hold out independently for days since relief in the mountains is problematic due to weather. Conversely, when the enemy is a guerrilla force, the defensive position is a perimeter defense from which patrols, ambushes, and raids are launched.

Mountain patrolling is a common feature of the offense and defense. Small patrols are at risk, so platoon-sized patrols are common. Single patrols are

Communications sites are carefully selected and often become key terrain. Veryhigh frequency radios with automatic frequency hopping, encryption, and burst transmission capabilities work best. Normal batteries quickly lose power in the cold, so lithium batteries should be the normal issue. Frequently, mountain tops become part of the national communications infrastructure because they are crowded with military, national, and commercial radio and television sites and telephone relay towers.

useless, so multiple patrols are normal. Local guides or scouts are an essential part of each patrol. Detailed planning is an essential part of the patrol plan and includes a reaction force or reserve. The meeting battle is normal combat at altitude resulting from probing actions by opposing patrols.

Raids are a common offensive and defensive tactic. They are designed to seize a point, exploit success, and then withdraw. Raids are a temporary measure to capture personnel and equipment, destroy installations, bait traps to draw enemy reaction, and attack morale. Since there is no intention of holding the objective for a length of time, the logistics burden is less onerous than a deliberate attack. Successful mountain raids normally incorporate an assault force, a fire support group, and a security element.¹⁴

		Light Vehicles (Gasoline)		Trucks 3 to 5 Tons			
Low		Type of Slope	Average Load	Loaded	Unloaded		Observations Good engine
Mountains		3 to 5%	16	25	20		performance
Mountains		6 to 8%	17	30	25		_
Medium	Up to	3 to 5%	17	30	25		
Mountains ³⁰⁰⁰ meters		6 to 8%	18	32	27		With good roads
High	3000 to 4000	3 to 5%	18	32	27		Head winds increase
Mountains	meters	6 to 8%	20	35	30		consumption by 10%
	Above 4000	3 to 5%	20	35	30		
	4000 meters		25	38	33		

Chart 3: Consumption of fuel in liters per 100 kilometers

Source: Conducción de la Brigada de Montaña, Annex 16, 281.

There are two primary scenarios for combat at altitude. First, two states dispute the boundary between their countries and maintain forces supporting a rough line of demarcation along the disputed zone.... Second, a light infantry force of guerrillas, smugglers, bandits, or forces from a neighboring state transverses the mountainous region to establish base camps in the mountains from which they patrol, launch raids, or maintain smuggling routes.

Fire Support at Altitude

Mountains restrict effective bombing and strafing by jet aircraft. It is difficult for them to pick out targets that are camouflaged or concealed by natural cover. Weather, deep shadows, and the environment also restrict pilots' vision. There are few approach routes and most of those are along valleys, which are covered by air defense and infantry forces using massed fire. Climate and terrain restrict jet aircraft from diving freely or flying low enough to engage targets effectively. Still, camouflage discipline, controlled movement, and layered air defense are essential to prevent savaging by highperformance aircraft.¹⁵ Helicopter gunships are more of a danger to ground forces, but eventually altitude limits their effectiveness. Lightweight helicopters can serve effectively as artillery spotters. All aviation is subject to the vagaries of weather at high elevation, which is powerful, constantly changing, and often shuts down flying. Dense fog, high winds, and blizzards are common and whiteouts are a constant threat to pilots.

Artillery remains the round-the-clock fire support system. However, artillery is often constrained during high-altitude combat. Sharp bends, high gradients, and the general condition of mountain roads restrict the movement of artillery, towed guns in particular. There are a limited number of gun positions, so artillery batteries are seldom deployed intact. One- and two-gun or rocket launcher positions are common. Consequently, the number of alternate firing positions is also restricted and these positions tend to become permanent. Guns should be moved at night for protection against enemy aircraft and artillery. However, night movement of guns in mountainous terrain is risky and accident-prone. Artillery positions should be constructed so that gun crews can defend them against ground attack. Firing positions should be on reverse slopes and as close to the crest as possible—considering crest clearance and flash-cover. Individual guns should be sited in terrain folds and other places where they are naturally concealed.¹⁶ Artillery plays a major role in logistics interdiction, counterbattery and shelling front-line units. Artillery can create havoc with a forward defense by targeting living accommodations and using airbursts against troops in the open.¹⁷ Mortars are frequently more effective than guns or howitzers. They are easier to shift around, can better engage reverse slopes and can be moved closer to the forward posts.

Transport frequently determines the location of artillery and mortars and the supporting range of artillery. Artillery cannot be readily moved where there are not roads. Artillery firing points are usually located where ammunition can be delivered in valleys, villages, and near road heads.

Chart 4: Weight and transport requirements for a 171-man light infantry company

Rations	1,620 kilos	Assault & field rations			
Ammunition	1,021 kilos	One basic load-circumstances may require carrying more			
Water (drinking and cooking) 2,262 kilos		2,565 liters			
Total weight (for company)	4,903 kilos	Not counting food, water, ammo, and packs carried by soldiers			
Mules (to haul weight) 61 mules		Small mules haul 80 kilos; Big mules up to 150 kilos			
Mules (to haul crew-served weapons)	20 mules	Machine guns and mortars			
Mules (to haul fodder, grain, salt and water for mules) 151 mules		5,620 kilos of fodder, 4,060 kilos of grain, 348 kilos of salt, and 18,416 kilos of water			

Source: Major Valero, Training exercise material, Army of Argentina.

Logistics Support

High-altitude logistics are key since the terrain and unique environment hamper delivery to the forward troops. Logistics always drives the battle, but in high-altitude combat, this is especially so. Without good highways or railroads, dump sites cannot be readily moved, it takes an inordinate amount of time to shift troops from one sector to another, and logistics demands are considerably higher than in other types of light infantry combat. Trucks, helicopters, mechanical mules, and snowmobiles are key to mountain logistics, but above 13,000 feet, the logistics effort shifts to the backs of mules and porters. Naturally, this is the point where the logistics delivery system snarls since porters and mules have distinct limitations and there are never enough of them.

Trucks are important to logistics support and gasoline-powered trucks are clearly preferred over diesel. As the truck ascends the mountain, the amount of oxygen available is reduced and the engine efficiency drops off. Cross-country and climbing capability decline as fuel usage soars. Diesel engines may need to be fitted with turbochargers and gasoline engines may need their carburetors adjusted. Figure 3 shows the average increase in fuel consumption at altitude.

Helicopter-based logistics are the preferred mode in mountain warfare, but the mountains are not the optimum helicopter environment. Air density decreases with altitude and mountain winds and updrafts are unpredictable and dangerous. Proper landing zones are difficult to find and, if close to the enemy, probably under enemy mortar and smallarms coverage. Helicopters must follow the terrain features of the mountains adding predictability to their approaches and increasing the risk to the crew. Fog, sudden storms, icing, and variable winds can quickly shut down helicopter support. Mountain terrain interferes with air-to-ground communications and with air-to-air communications. Planning for helicopter support in the mountains requires detailed planning, first-rate liaison, and a habitual association between the helicopter and ground unit encompassing training and social events. Flying in the Gasoline-powered trucks are clearly preferred over diesel. As the truck ascends the mountain, the amount of oxygen available is reduced and the engine efficiency drops off.... On the average, vehicles lose 20 to 25 percent of their rated carrying capability and use up to 75 percent more fuel....[They] eventually stop functioning altogether because of insufficient oxygen. Artillery firing tables are wildly inaccurate as the changed environment allows rounds to fly much farther.

mountains is so different that the armies of India, Pakistan, Columbia, Argentina, and Switzerland have special mountain flight courses for their helicopter crews.

AStepBackinTime

High mountains are countertechnology. Mules are a good option for high-altitude logistics. They can use very narrow trails, can carry more than a human porter, and tire less over long distance. American mules can carry up to 20 percent of their body weight (150-300 pounds) for 15 to 20 miles per day in mountains.¹⁸ Smaller mules in other locales will carry less. The maximum carrying weight for an Argentine mule is between 200 and 250 pounds. However, this is for low- and medium-altitude mountains. At high altitude, the maximum carrying weight drops below 200 pounds. Organized mule cargo units, rather than ad hoc teams led by local teamsters, are the preferred option, but local mules are always preferred over deployed mules.

Mules were part of the U.S. Army during World War II in Burma and Italy and were a critical element of the Mujahideen supply effort in the Soviet-Afghan war. They remain part of the force structure of many contemporary forces with high-altitude mountain troops. Other armies contract mule transport through local teamsters. Yet mules have their limitations. If the snow is too deep, they simply refuse to move.

Personnel		Low and Medium Mountains		gh ntains	
		Up to 3000 meters	3000 to 4000 meters	Above 4000 meters	
	Porter	20 Kg	20 Kg	15 Kg or less	
Man on foot	Combat Soldier	15 Kg	10 to 12 Kg	8 to 12 Kg or less	
Man with skis	Porter	20 Kg	12 to 15 Kg	12 Kg or less	
man man shis	Combat Soldier	12 Kg	12 Kg	10 Kg or less	

Chart 5: Cargo capabilities of porters in mountainous terrain

Source: Conducción de la Brigada de Montaña, Annex 17, page 283.

American mules require 10 pounds of grain and 14 pounds of hay per day, which also becomes part of the logistics load.¹⁹ The smaller mules of Argentina require eight pounds of grain and eight pounds

All aviation is subject to the vagaries of weather at high elevation, which is powerful, constantly changing, and often shuts down flying....Artillery remains the round-the-clock fire support system. However, artillery is often constrained during high-altitude combat. Sharp bends, high gradients, and the general condition of mountain roads restrict the movement of artillery, towed guns in particular. There are a limited number of gun positions, so artillery batteries are seldom deployed intact.

of hay per day. Mules consume 25 to 30 liters of water a day and up to 50 liters in desert country. They also require a daily ounce of salt. Like humans, mules require time to acclimate to altitude. Muleteers and mules require about a month's training to get them ready to work above 3,000 meters. Like humans, mules tire easily above 4,000 meters and need to be rested frequently. Mules also have to be trained not to fear the noise of firearms and explosives so that they do not run off during a march.²⁰

Mules are subject to colic, heat exhaustion, injuries, and wounds. Most injuries and wounds result from poorly adjusted saddles, pack frames and harnesses. Stones, rocks, and debris on the trail can also wound a mule's hoof. Local mules are more immune to disease at altitude than humans and all mules have a keen sense of self-preservation that keeps them alive in mountain storms.²¹ Mules require a great deal of daily care and training. Muleteers, farriers, blacksmiths, and large animal veterinarians, who have been absent from many armies for decades, are essential for mule-borne logistics. Mules need new shoes every 30 days and there are special mule shoes for snow and ice. Figure 4 shows the supply and transport estimate for a 171-man light infantry company planning a mountain march, attack and defense lasting for a total of 6 days. Since much of the material will be kept in dumps and moved in stages, the commander has managed to keep his transport requirements in hand.

Porters should be hired from the local populace since they are acclimated to the elevation and are accustomed to moving around the mountains safely. Locals used to carrying loads have developed endurance and are accustomed to breathing thin air. Although a porter cannot carry as much as a mule, they can move in places where mules cannot. However, porters will probably be reluctant to work too far away from their homes and villages. There is always a security consideration when using local porters. Figure 5 shows porter-carrying capabilities.

During the Peru-Ecuador border conflict for the Condor Cordillera in 1994, the Peruvian army relied on porters exclusively for resupply. Although the fight was in medium-altitude mountains, not over 2500 meters, the forward logistics support was restricted to porters because the steep mountains were covered with thick jungle, had few trails, and the Peruvian army lacked trained mules and muleteers. The Peruvian army moved its supplies from one small village to the next, using local villagers as porters to carry the supplies eventually to the fighting up on the Condor Cordillera.

Front-line combatants need daily supplies of ammunition, food, water, and heat for survival. Figure 6 shows daily consumption rates of water and wood fuel.

In the mountains, a battalion task force tries to carry and stockpile enough supplies to operate for 1 to 2 weeks. This requires expending time and energy to establish supply dumps along the main supply route. Naturally, the shorter the supply route, the easier it is to protect. If roads, tracks, and trails are under enemy control, the unit might be restricted to helicopter supply and its inherent problems in the

		,	Water	Wood			
	Man Ani				Cooking	Heati	ng
Low and Medium Mountains	<i>Drinking</i> 1.5 to 2 Liters	Cooking 5 Liters	Summer 15 Liters	<i>Winter</i> 10 Liters	Uncovered 1 kg per man	Tent/shelter 1 kg per man	^{Open} 1 kg per man
High Mountains	2 to 2.5 Liters	8 Liters	15 Liters	10 Liters	1 kg per man	Every 6 hours	Every 2 hours for fire

Chart 6: Consumption of water and wood

Source: Conducción de la Brigada de Montaña, Annex 18.

mountains. Logistics support at higher altitudes during winter may become impossible causing opposing forces to withdraw.

Medical evacuation at altitude is frequently difficult. Weather or weight limitations may prevent a helicopter from flying to a patient. Often, patients must be carried on stretchers to lower elevations where the helicopters can reach. Soviet experience in the mountains of Afghanistan proved that 13 to 15 men might be involved in carrying one patient. Exertion at altitude is difficult and the stretcher party has to provide its own security as well.²² Patients cannot be effectively treated at altitude, but have to be evacuated to lower altitudes to survive.²³

The Eternal Mountains

Mountain terrain is difficult, movement is slow and the hazards to health and physical well being are significant and constant. Combat at high altitude is a historical constant and a contemporary fact. It cannot always be avoided. Training for mountain combat is not simply light infantry training. Special training and acclimatization is necessary.

Leadership is particularly important in mountain combat. The harsh living conditions, physical deterioration, and psychological depression inherent in mountain combat require skilled leaders. Armies with regimental systems and years-long association find it easier to cope with the leadership challenges of mountain combat. Combat is primarily small unit, placing a great deal of responsibility on platoon and squad leaders.

Fire support is difficult. Artillery firing tables are inaccurate and artillery is hard to move on mountain roads. Transporting guns by helicopter is recommended where possible. Moving guns and ammunition takes an unusual amount of time. Helicopter gunships provide excellent support at lower altitudes. Mortars are excellent for hitting reverse slope positions, but have limited range.

Logistics are a primary concern in mountain combat with transport to altitude requiring special effort. Sustained combat requires an inordinate logistics effort. Small-unit actions, where units do not remain for extended periods of time, do not impose the same logistics burden.

Although the U.S. Army has not fought at truly high altitude, this may not always be the case. High mountains occupy much of the world's surface and they are not immune to the world's conflicts. Other nations have successfully fought at altitudes above 10,000 feet. Should the U.S. Army find itself committed at these altitudes, the experiences of other nations are invaluable. Preparation for such an eventuality should begin well before crisis dictates deployment. MR

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Information-Age "De-Terror-ence"

Lieutenant Colonel Timothy L. Thomas, U.S. Army, Retired

HE 11 SEPTEMBER 2001 attack on America radically changed the way nations and international organizations think about terrorism. For example, President George W. Bush stated that the United States would begin a long war against terrorism, and Secretary of Defense Donald H. Rumsfeld received extra budget concessions for the counterterrorism fight. For the first time in history NATO implemented Article 5 of the 1949 Washington Treaty, which recognizes that an attack against one NATO member should be considered an attack against all members. This lifted the political constraints normally associated with using the military to fight terrorism. As the investigation unfolded, the power of information-age tools, such as the Internet, as a terrorist planning and execution asset was exposed.

The information revolution's promise of globalization and its implicit lower communication costs and integrated economies has other, more sinister, uses when placed in terrorists' hands. This article defines terrorism in the information age and examines how information enables terrorists to further their goals. Recommendations are also offered as a "de-terror-ence" policy to fight this new threat.¹

Information Terrorism

Traditionally, terrorism focuses on using violence—threats or outright acts—to cause fear or alarm, usually for some political goal. Terrorists exploit the formal structure of the civilized world to accomplish these goals. Among other things this exploitation includes a nation-states' legal and intelligence constraints to act; its objectivity in news telecasts; and its infrastructure and operating principles. Nearly everything in the nation-state is open for its citizens to examine and use, and hence the terrorist as well. The terrorist can live in almost total anonymity until an act of violence or crime is perpetrated. He usually trains on the very systems he will use in an attack. This enConcern over easy access to imagery for target planning was demonstrated immediately after 11 September as several websites removed photos and data that suddenly appeared too sensitive. On 18 October, the Pentagon purchased all rights to pictures of Afghanistan taken by Space Imaging Incorporated's IKONOS satellite, which can discern space objects as small as 1 square meter on the ground.

ables the weak to confront and combat the strong.

A terrorist lives in the opposite world, one of near total secrecy. Usually only sketchy information is available about a terrorist's operating principles and infrastructure, if they are known at all, and the terrorist has no constraints on collecting intelligence or conducting illegal activities. Terrorists are criminals who can use indiscriminate force against populations. They realize that police or military responses may be limited because of civil liberty and security concerns. Terrorists have access to everything the average citizen does and thus are leeches who live off others to support their anger. Their methods may be deemed asymmetric because their system of operation and that of the civilized world are not comparable. Destroying the World Trade Center with a flying fuel cell, terrorizing America with anthraxlaced mail, planning to exploit the trucking industry and crop dusters to transport or spread biological or chemical agents, and killing the leader of the Northern Alliance in Afghanistan with an explosive device hidden in a camera during an interview are good examples of asymmetric tools available to terrorists.

The Federal Bureau of Investigation (FBI) defines terrorism as "the unlawful use of force or violence against persons or property to intimidate or coerce a government, the civilian population, or any seg-

ments thereof, in furtherance of political or social objectives."² In the information age, terrorism has expanded its scope and has found a ready ally in instruments such as the Internet to facilitate these efforts. Some have even coined the process of exploiting the Internet for terrorist purposes as "information terrorism," defining it as the nexus between criminal information system fraud or abuse and the physical violence of terrorism; and intentionally abusing a digital information system, network, or component toward an end that supports or facilitates a terrorist campaign or action.³ Computer attacks are the most often cited example of "the use of force or violence" in the information age because everyone is familiar with these attacks. FBI special agent Mark Pollitt defines cyberterrorism as "the premeditated, politically motivated attack against information, computer systems, computer programs, and data which results in violence against noncombatant targets by subnational groups or clandestine agents."4 Cyberterrorism uses soft violence, which is as much psychological as it is actual, to achieve its goals. Other methods of altering data can also be considered as information terrorism, such as interfering with onboard global positioning systems and causing two airliners to collide

The Internet and "Netwar"

Perhaps a more appropriate rendering for terrorism today is simply "terrorism in the information age" instead of information terrorism. For example, with regard to the Internet, a terrorist attempts to succeed by using the Internet's open promise of an integrated and cooperative world to discredit governments, degrade user confidence, and corrupt or disrupt key systems by inserting data errors or by causing intermittent shutdowns. In many cases, this produces fear or alarm and thus is a modern-day supplement to traditional terrorism. There are nine likely ways in which a terrorist group can use the Internet:

Sensitive target data. The Internet can be used to gather detailed information on targets. If a terrorist can capture sensitive data on a target as important as a pipeline or electric power grid, he can then manipulate or blackmail businesses or governments. Concern over easy access to imagery for target planning was demonstrated immediately after 11 September as several websites removed photos and data that suddenly appeared too sensitive. On 18 October, the Pentagon purchased all rights to pictures of Afghanistan taken by Space Imaging Incorporated's IKONOS satellite, which can discern space objects as small as 1 square meter on the ground.⁵

Financial support. The Internet can be used to gather money to support a cause and to manipulate stock options that benefit terrorists through a terrorist attack. One of the websites dedicated to the Chechen Republic's cause in its breakaway fight against Russia, directs readers to a bank and provides the account number in which to send money

The Internet can be used to initiate psychological terrorism. The psychological aspect of the Internet is often overlooked. Not only can it cause panic due to its seeming credibility, but it also can be used for deception or disruption.... Unwitting accomplices, such as hackers, can be used as surrogates without ever understanding the end result of their actions.

to support the Chechen effort. An investigation is underway to see if there were stock deals made by the al-Qaeda network in the days preceding 11 September.

Disparate group connections. The Internet can be used to connect disparate groups. A religious sect from any country or region, or people backing a particular cause can now stay in touch. These websites provide instructions on when and where to meet or on types of protests or issues to study. That is, the Internet has a synergistic effect on such groups' activities.

Extortion. The Internet can be used to attack individuals, groups, or companies, such as financial institutions, or to directly lobby decisionmakers. Extortionists use the Internet to extort money from financial institutions in exchange for freedom from cyberattacks and loss of credibility.

Publicity. The Internet has huge publicity potential, and it is often used for publicity. It can instantly address a worldwide audience or individuals. Osama bin Laden's use of television and the Internet to spread his message to kill all Americans after the start of the coalition bombing on Afghanistan is a good example. The United States immediately requested that bin Laden receive no further publicity. Terrorist groups place media access at the top of their strategic priority lists when addressing their causes.

Global freedom. Thanks to the Internet, no longer is terrorism contained to the state in which one hides. Electrons do not have to show passports.⁶ Instead, the base for terrorist operations is usually not even located in the target country anymore.

Psychological effects. The Internet can be used to initiate psychological terrorism. The psychological

aspect of the Internet is often overlooked. Not only can it cause panic due to its seeming credibility, but it also can be used for deception or disruption.

Deception. The Internet has changed the terrorist communications network from one with strong central control to one with no clear center of control because of its networked nature. Unwitting

"Netwar" appears to be an updated version of the old communist cell organization, a complex network in and of itself, which used dead drops and cutouts to deliver messages and conduct operations.... "Swarming" [is defined] as a structured, coordinated, strategic way to strike from all directions at a particular point or points by means with sustainable pulsing of force or fire. In reality, swarming is not much different from the old concept of massing.

accomplices, such as hackers, can be used as surrogates without ever understanding the end result of their actions.

Covert operations. The Internet can be used to send messages surreptitiously, much like the invisible inks that al-Qaeda promotes as a lowtech alternative to communications in cyberspace. For example, reports indicate that Egyptian computer experts working in Afghanistan devised a communications network to enable extremists to exchange information via the World Wide Web without fear of being caught posting messages on e-mail and electronic bulletin boards.⁷ It is to this latter category that attention is now focused in light of the purported use of steganography and encryption on the Internet by bin Laden's al-Qaeda terrorist group.

Short message service (SMS) text is a cryptic text. An example would be STR AT 8 . . . TD, which could mean "strike at 8 today." The message in cryptic form can be sent from one cellphone to another via an SMS center. India's *Hindustan Times* reported in November on credible reports linking the use of SMS techniques to al-Qaeda and other terrorists groups.⁸ SMS works by transmitting signals from a cellphone to the cellular operator's automatic SMS center. The center dials the SMS's destination number and puts the message in the queue. This technique may force governments to monitor SMS centers.

One author notes that, "if there is one thing the FBI hates more than Osama bin Laden, it is when bin Laden starts using the Internet."⁹ He accuses bin Laden of hiding maps and photos of targets and of posting instructions on sports chat rooms, porno-

graphic bulletin boards, and other websites. This practice is known as steganography, embedding secret messages in other messages to prevent observers from suspecting anything unusual. Messages can be hidden in audio, video, or still image files, with information stored in the least significant bits of a digitized file.

The FBI and terrorism authorities in the United States believe that bin Laden's network has used steganography in the past. So far, authorities have not said whether the terrorists who planned and carried out the events of 11 September used the technique. A few days before the attack, a team at the University of Michigan used a series of computers to search for images that might contain terrorist plans but found none. Instead, some FBI investigators have traced hundreds of e-mail communications associated with the World Trade Center bombers that were sent from libraries or personal computers. They were written in English or Arabic and did not use encryption; they could simply be read openly.¹⁰ Perhaps bin Laden's group was onto the fact that the FBI was watching for such hidden messages, so they used open lines to send messages, hoping these lines would not be so closely examined.

Encryption, on the other hand, relies on ciphers and codes to scramble messages. In a recent USA Today article, the author cites an unnamed U.S. official's claim that encryption has become "the everyday tool of Muslim extremists in Afghanistan, Albania, Britain, Kashmir, Kosovo, and other places, and that bin Laden and other Muslim extremists are teaching it in their camps in Afghanistan and Sudan."11 In his testimony before Congress, former FBI director William Freeh complained about encryption but not steganography. Former Attorney General Janet Reno reportedly told a presidential panel on terrorism in 2000 that extremist groups are encrypting both e-mail and voice messages. An Israeli, Reuven Paz of the Institute for Counter-Terrorism, believes all terrorist groups are using the Internet to spread their messages. Most problematic for law enforcement authorities is that the Internet has 28 billion images and 2 billion websites.

Networks in general have received as much attention as the Internet in the past few years. Authors David Ronfeldt and John Arquilla introduced the term "netwar" several years ago. It refers to "an emerging mode of conflict at societal levels, short of traditional military warfare, in which the protagonists use network forms of organization and related doctrines, strategies, and technologies attuned to the information age."¹² Netwar, then, appears to be an updated version of the old communist cell organi-
A notional example of steganography on a photo from the celebrations in Washington, DC, after the Gulf War. While this scenario is notional, the "hidden" message is an actual excerpt from Osama bin Laden's first fatwa, or religious edict, instructing Muslims to kill Americans including civilians—anywhere in the world where they can be found.

تواترت عليها الشيوافد واطبق عليها النصفون ونمن نذكرها ليتذكر من يتذكر، وليهاله من هلك عن بيئة، ويحيا من هيا عن بيئة وهي:

اولا: منذ مسا يربو عن مسبع سنّين وامريكا تمثل اراضي الاسلام في اقدس بقاعها، جزيرة العرب، وتنهب خيراتها، وتعلي على مكامها وثلل اهلها، وترعب جيرانها، وتجعل من قواعدها في الجزيرة رأس جرية تقبائل بها شعبوب الاسلام الجاورة،

واذا كـــان في للـاضي من جـــادل في مـقــيقـة هذا الاهـتــلال فـقد اطمِق علي



Al-Qaeda [is accused] of hiding maps and photos of targets and of posting instructions on sports chat rooms, pornographic bulletin boards, and other websites. This practice is known as steganography, embedding secret messages in other messages to prevent observers from suspecting anything unusual. Messages can be hidden in audio, video, or still image files, with information stored in the least significant bits of a digitized file.

zation, a complex network in and of itself, which used dead drops and cutouts to deliver messages and conduct operations. In general, it was the more centralized predecessor of the netwar that Ronfeldt and Arquilla described. These networks offer not only the benefits of integration but also several risks and dangers including threats to freedom and privacy, new methods of surveillance, and several vulnerabilities to our national security infrastructure. More important, netwar empowers nonstate actors to organize into multiorganizational networks, offering the have nots a chance to work on a similar plane with the haves.¹³

Another excellent point Ronfeldt and Arquilla make is that a network's strength depends on five levels of functioning: organizational (design), narrative (story telling), doctrinal (strategies and methods), technological (information systems), and social (personal ties).¹⁴ It appears that the al-Qaeda network functioned on all of these levels while planning and executing the attacks on 11 September. The network also makes the group appear leader-

less and thus makes it harder to find those responsible. This is why the FBI has had such a difficult time tracking the killers and affixing blame on those responsible.

Ronfeldt and Arquilla appear overly reliant, however, on their description of "swarming" to explain what must be done to counteract terrorist netwar activities. In fact, they ignore their own advice. The authors define swarming as a structured, coordinated, strategic way to strike from all directions at a particular point or points by means with sustainable pulsing of force or fire.¹⁵ In reality, swarming is not much different from the old concept of massing. In fact, in one of their examples, the authors cite critical mass strategies employed by a group of protestors. Even more important, the authors' reliance on swarming ignores their doctrinal functional level that recommends strategies and methods. Swarming is the only one offered when a myriad of other options should be considered. Theories such as China's 36 stratagems of war, and U.S. and Russian principles of war are only a few of

and the de Gaulle Roosevelt,

Diagonal chemical streaks were applied by *Abwehr* (German army intelligence) censors to detect secret inks on this 1943 envelope mailed from liberated Morocco to the International Red Cross in Geneva, Switzerland. German and French censor tapes were used to reseal this envelope after its multiple examinations and the football-shaped French censor's handstamp was applied at Rabat, Morocco.

In addition to high-tech means of secret communication, al-Qaeda also promotes low-tech methods such as using secret inks. Lesson 13 in the al-Qaeda manual *Military Studies in the Jihad Against the Tyrants* opens with a brief history and goes on to discuss types, methods of production and exposure, application techniques, and additional considerations.

Excerpts: "The history of invisible writing is somewhat old; spys used various types of invisible ink during World War I, and after the war many improvements were made. . . . There are two types of invisible inks, organic and chemical compounds. Examples [of organic solutions] include: milk, vinegar, apple juice, lemon, and urine. They are easily exposed by simply heating them [with an iron, candle, or light bulb] and are used frequently. . . . It is possible to use aluminum chloride (neshader [PH] salt) to write letters. To expose the writing, use the previous method. It is possible to dissolve an aspirin tablet (except for children's aspirin) in alcohol to expose the writing....

The Internet can be used to send messages surreptitiously, much like the invisible inks that al-Qaeda promotes as a low-tech alternative to communications in cyberspace. For example, reports indicate that Egyptian computer experts working in Afghanistan devised a communications network to enable extremists to exchange information via the World Wide Web without fear of being caught posting messages on e-mail and electronic bulletin boards.

those available. The latter would offer much more food for thought, such as blockade, deception, and reconnaissance, than simple swarming. Networks are not defeated by "keeping them on the run," as the authors conclude, but by conducting precision strikes on functioning nodes. The Chinese, for example, would recommend using acupuncture war, that is, strikes against selected nodes to paralyze an enemy. If effective enough, a massed blow may never be needed.

Deterror-ence Suggestions

What can be done to thwart terrorists' use of Internet and Netwar techniques? Dr. John Chipman notes that "let us hope it [referring to yesterday's sense of emotional solidarity and today's shared political burden in the fight against terrorism] is handled with economic finesse, political savvy, military firmness and moral resolve in careful balance."¹⁶ Chipman makes several excellent points that offer an initial look at a de-terror-ence plan:

A diplomatic effort is needed to convince states supporting terrorism to desist from such activities or face the consequences, such as the Taliban is experiencing now.

Commercial sanctions could be imposed on such states that "sup with the devil."

The fight against terrorism must be combined with non- and counter-proliferation strategic campaigns, to keep sensitive weapons out of the hands of such groups. This will immediately bring to the table the debate over the role of export controls and direct action instead of arms control instruments, as some prefer.

Major terrorist groups must be targeted, not just local groups.

Creative approaches to information sharing must be developed, paying particular attention to countries outside of the Group of Eight—the United States, the United Kingdom, France, Italy, Japan, Russia, Canada, and Germany—NATO, and the European Union. This includes sharing intelligence for the protection of critical infrastructure.

Challenges to civil liberties should be expected since heretofore restricted investigative tools associated with the Internet are required.

Homeland defense commands will assert new authority over the de-terror-ence quest.

Regional groups, such as NATO, must consider eliminating out-of-area distinctions since cyberattacks can come from anywhere.

The world's leading banks must maintain coordinated action to shore up confidence and stabilize nervous markets. One cannot fight terrorism if one's house is crumbling.

Muslim elements must help organize the current coalition's political elements, while the United States and Europe must expect to provide unprecedented economic, physical, and technical assistance. More parts of the developing world must be brought into the modern and post modern world.¹⁷

All nations at the international level need to cooperate with mutual legal assistance treaties, extradition, intelligence sharing, and uniform computer crime laws so investigation and prosecution can cross international borders. The UN General Assembly adopted resolution 53/70 in December 1998, which invites members to exchange views on information security issues and ways to fight information terrorism and crime.¹⁸ Such de-terror-ence steps must continue to be explored at a much greater pace. Terrorists exploit the civilized world's objectivity and openness to support their causes. In the past, terrorist actions were more difficult to organize and execute because of issues such as distance and coordination. Today, those issues and a host of others have been eased, if not eradicated by informationage tools such as the Internet. The result is the emergence of a new, networked terrorist who can coordinate doctrine, narrative, organization, and loyalty often in plain view through the benefit of technol-

The Internet can be used to gather money to support a cause and to manipulate stock options that benefit terrorists through a terrorist attack.... An investigation is underway to see if there were stock deals made by the al-Qaeda network in the days preceding 11 September.

ogy in the form of steganography and encryption. This has made terrorist attacks more efficient and timely, and more difficult for law enforcement officials to recognize and expose.

These issues have motivated governments in only a few months to redirect attention and money to counter terrorism. The recent creation of a homeland defense czar in the United States, and recent legislation to allow law enforcement officials to more quickly move against and seize suspected terrorists are but two of the most apparent manifestations of this process. On the international arena, partnerships formed very quickly to fight the new threat, with Russian-U.S. cooperation to resolve basing issues in Central Asia being the best example.

While terrorism in the information age is far from being resolved, it is encouraging to witness the rapid development of methods and procedures to counter it. This effort must be further developed and refined over the coming months as many de-terror-ence options need to be discussed. On the other hand, it is important to watch the pulse of public opinion in the coming months. Cooperation and compromise among all leaders may hold the key to whether the fight against terrorism is successful. MR

NOTES

- This is the author's term, used here only to highlight the need for a plan devoted to deter a terrorist act.
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Janusian Thinking and Acting

Colonel Christopher R. Paparone, U.S. Army, and James A. Crupi

The authors maintain that the current U.S. approach to military operations—strategic, operational, and tactical—is too linear for today's contemporary operating environment. They argue that future warfighters must move beyond linear thought and action to a realm of thinking and acting that recognizes and accepts paired yet opposite ideas and actions: "Look before you leap" and at the same time understand that "he who hesitates is lost."

... for understanding proverbs and parables, the sayings and riddles of the wise.

-Proverbs 1:6

HINGS DO NOT LINE UP like before. Traditionally, a nation-state attacks another with military force, and the response is rather predictable. Today, the qualities of nation-states are no longer required to initiate attacks; attacks may not even have traditional military qualities; and prediction is just not as calculable as before. Some military theorists have dubbed these new conditions "asymmetric warfare," giving the impression that postmodern conflict is all about one-upmanship associated with hitting the enemy's vulnerability with a different scale of means.¹ Some postulate that the problem of asymmetric conflict is at the strategic level. The underlying assumption of modern military thinking and acting is that we can address asymmetric problems with hierarchically directed linear thinking, as strategic, operational, and tactical levels of war represent. The argument is that the strategic, operational, and tactical paradigm exists because it enables the military to adapt through echelonment. The danger is that structure ends up driving response instead of needed capabilities and values driving organizational response. While the concept of asymmetry has been presented often in professional literature, it remains ill-understood from the strategy::operations::tactics paradigm because this paradigm considers that we need better, not necessarily different, thinking and acting.

A Better Way of Thinking

What we really need is an alternative paradigm that gives us a new and better way of thinking and acting. The new approach should provide a range of insights that enable commanders to instantly conceptualize a pattern of multidimensional possibilities that lead to breakthrough concepts and values because the traditional strategic linear way of thinking and acting is inadequate, given the nature of the postmodern era. The preferred new paradigm must have several characteristics that set it apart from the strategic paradigm:

It must have a fractal quality that allows us to take simultaneous full-spectrum looks at human information processing, the sine qua non of thinking and acting.

It should not reject traditional levels of analysis such as strategy, operations, and tactics but should relegate them to secondary concepts.

It must emphasize concepts such as simultaneity of paradoxes (complex reasoning), compreWhile the concept of asymmetry has been presented often in professional literature, it remains ill-understood from the strategy::operations::tactics paradigm because this paradigm considers that we need better, not necessarily different, thinking and acting.... What we really need is an alternative paradigm that gives us a new and better way of thinking and acting.... The preferred paradigm is Janusian.

hending activities in multiple time orientations (polychronicity), and embracing environmental complexity (unpredictability) as a normal condition.²

The preferred paradigm is Janusian, named after the Roman god Janus who looked four ways simultaneously.³ The Janusian paradigm cannot be explained as a logical result of the post-Cold War world because it is not really new. As the quote at the beginning of this article reveals, this wisdom has probably existed for thousands of years and requires reawakening.

Military leaders tend to look for doctrinal answers, but the solution this article proposes is not a prescription for what to do; rather, it is a description of how to think. Some may argue that increasing the speed of linear decisionmaking will address the chaotic nature of unfolding events, but that is not the case. The overarching issue of the post-modern predicament is fundamentally metaphysical: how do humans process information? Linearly focused (schismogenic) thinking and acting-the methods of the current strategic paradigmexplains and rejects alternative hypotheses purposefully and sequentially.4 In other words, linear thinking and acting disallow the existence of contradiction. The proposed alternative Janusian thinking suggests that information processing is paradoxical, considers multiple time orientations, and is nonlinear. The Janusian theory of thinking and acting presents a dynamic and revealing interpretation of how people think and act—the way we actually think as humans involves continuous tolerance for paradox. Instead of ruling out alternative hypotheses, Janusian thinking calls on us to embrace contradictions as naturally occurring phenomena. When we create insights for thinking and acting from the Janusian framework, we achieve remarkable explanatory power over the nature of human information processing.



a. The basic Janusian four-square. The arrows represent the continuous, unrelenting struggle to balance paradoxical forces.
 b. Metaphysical orientations. A. Existentialism—theory that knowledge is a human phenomenon; therefore, it cannot be described by science or idealism; B. Idealism—theory that knowledge comes from the mind or spirit; C. Rationalism—theory that knowledge comes from deductive reasoning; D. Empiricism—the theory that knowledge originates with experience.

c. Jungian psychology orientations. A. Intuition-feeling—positive, affirming idealists with warm, personable style; B. Intuition-thinking—planners and researchers; C. Sensing-perceiving—pragmatists who find practical solutions, especially during crises; D. Sensing-judging—administrators of bureaucratic systems requiring precision.

d. Political science orientations. A. Equity—redistribution of value; B. Liberty–autonomous freedom; C. Efficiency—most output for the input; D. Security—protection.

Figure 1. Janusian Orientations

Linearly focused (schismogenic) thinking and acting—the methods of the current strategic paradigm—explains and rejects alternative hypotheses purposefully and sequentially. In other words, linear thinking and acting disallow the existence of contradiction. The proposed alternative Janusian thinking suggests that information processing is paradoxical, considers multiple time orientations, and is nonlinear.

Janusian theory goes beyond rational thinking. Janusian theory makes it possible to make sense of the postmodern world in an almost circular, interconnected, interdependent way and, as a result, represents a more accurate understanding of the nature of complex human information processing.⁵

The authors' prototype of the Janusian framework is depicted in Figure 1. The basic Janusian model for thinking and acting is arranged in a foursquare—A, B, C, and D—the arrows depicting struggles for dominance in one or more quadrants. It provides a complex, four-way, interdependent, interactive model for thinking and acting that goes beyond the traditional linear processing associated with strategy, operations, and tactics and helps us understand what we could not decipher or comprehend.

The Janusian framework provides the remarkable insight that the basic pattern of thinking and acting is fractal. In other words, conceptual patterns repeat endlessly, regardless of the field of study or social science we are interested in. This fractal quality is remarkable because it provides symmetry of scale that is self-similar, meaning one can zoom in on any part of the patterns repeatedly, and the patterns spiritual meaning—to the individual psyche. Janusian theory reveals in time and space the paradoxical ways that humans process information from the macro- explanations of mankind's spiritual being and self-awareness down through microexplanations associated with entire societies, governments, institutions, organizations, and individuals. Remarkably, most approaches to studying many intellectual disciplines, such as metaphysics, philosophy, sociology, anthropology, economics, psychology, and political science, follow the same Janusian pattern.

For example, Figure 1 shows what happens in the political science four-square if we go too little or too far in any one direction. We may end up with pure socialism, with public apathy and chaotic governance; anarchism, with public belligerence and chaotic governance; uncontrolled capitalism, with public hostility and rigid, one-sided governance; or narcissistic bureaucracy, with the rigid means of government justifying the indifferent ends. This typology also describes the aesthetic beauty of the roughly corresponding American system of checks and balances on power: a two-party system with strong states' rights; a malleable representative

would still look the same. Even old proverbs take on new meaning: one can "look before you leap" and at the same time understand that "he who hesitates is lost." Janusian theory suggests both principles can be followed simultaneously.

Janusian theory proposes that, to some degree, people as individuals or as groups can process contradictory information collectively in all quadrants simultaneously. With the A-B-C-D four-square framework, we can trace patterns from the highest level of processing—

Existentialism	Idealism
Environmental Conditions:	Environmental Conditions:
Placid-clustered	Turbulent–mutual
Type A conflict:	Type B conflict:
LIHUC	HIHUC
(low-intensity, high-uncertainty)	(high-intensity, high-uncertainty)
Coping:	Coping:
Tactics-strategy	Shared values
Environmental Conditions: Placid-random	Environmental Conditions:
Type D conflict:	Type C conflict:
LILUC	HILUC
(low-intensity, low-uncertainty)	(high-intensity, low-uncertainty)
<i>Coping:</i>	Coping:
Do the best you can	Tactical-operational-strategic
Empiricism	Rationalism
Figure 2 Emery-Trist Fi	vironmental Conditions



Congress; strong judicial law and order; and the executive branch hierarchy.

Understanding 11 September

Recent terrorist attacks on the United States moved the domestic policy pattern sharply from the A::B horizontal axis of the Janusian foursquare model—the domination of equity and liberty valuesto the C::D axis, with the growing trade-offs with efficiency and security. This pattern repeats itself from the federal level to the local level of govern-

JANUSIAN THINKING

The New York fire and police departments responded to the World Trade Center disaster armed with their honed skills and rehearsed actions and swift trust in each other. To many observers, this response is seemingly a throwback to a prenation-state way of thinking and acting.

Photo not available

ment and reflects a merging of foreign and domestic policy patterns in the United States, a merger that is distinctly Janusian. For example, Janusian thinking and acting tells us that it is important in the current conflict that we understand that in defending the values that are being attacked, we do not destroy them in the name of fighting the enemy.

Postmodern Conflict and the Military

In 1965, Fred E. Emery and Eric L. Trist produced a seminal work describing "the causal texture of organizational environments."6 These descriptions are based on the degree of turbulence (placid, disturbed, and turbulent) and on the degree of interconnectedness present in the organization (random, clustered, reactive, and mutual). They organized these conditions into four environmental conditions as shown in Figure 2: placid-clustered, turbulent-mutual, disturbed-reactive, and placid-random.⁷ Emery and Trist suggest there are corresponding coping mechanisms for each texture of the environment. The Janusian four-square model applies to studying postmodern conflict. It offers substantial insight into the war on terrorism. The authors propose that these conditions correspond to four types of conflict that also yield distinctive coping mechanisms. The Janusian paradigm corresponds remarkably well with Emery and Trist's model.

It is important to Janusian thinking and acting to remember that the four environments depicted in Figure 2 have always existed simultaneously. Strategy, operations, and tactics are relevant only in addressing type C conflict in its ideal form. Type C conflict does not occur in isolation from the other types of conflict but in combination with them; hence, the strategic::operational::tactical thinking and acting are insufficient. Relying on strategy, operations, and tactics as patterned responses to conflict alone produces structural inertia. Unfortunately, the administrative/institutional/departmental Army and not the field Army is often the source of undesirable structural inertia.

The structural inertia that afflicts large organizations impedes their learning from small and dispersed operations. The Vietnam war and Operation Desert Storm were large-scale, shared experiences. In contrast, El Salvador, Panama, Haiti, Somalia, Bosnia, and Kosovo are dispersed and diverse experiences. Large-scale administrative structures like the U.S. Army Training and Doctrine Command Kelatively autonomous and covert special forces teams or individuals sometimes make assessments and act without anything more than the strongly held values of their profession and country. U.S. Army Rangers displayed this idealistic thinking and acting when rescuing their fellow soldiers in Somalia in 1993.

(TRADOC) cannot translate such experiences into force structure very well. When TRADOC tries to synthesize lessons learned, it tends to miss the essence and differences of each operation; hence, the value of change is diluted. Postmodern conflict should not only be examined through the constrained lens of strategic direction, campaigns, and tactics but also on a larger pattern of information processing—a Janusian way of thinking and acting.

To embrace the Janusian paradigm, we must transcend old ways of thinking and acting. For the military, a transformation in thinking and acting must accompany the Army's effort to transform its current organizational structure and equipment. In other words, military leaders must understand the fractal aspects of examining the approach to thinking about how and why permanent organizations are structured as well as understand how to apply fractal notions to task-organized echelons. The flexibility we achieve through task organizing must become common within the units themselves. Units must become more self-organizing. Figure 3 depicts Janusian decisionmaking and describes how decisions are made within each type of conflict. In reality, these four ideal types do not occur in isolation. The Janusian framework permits all four to occur simultaneously.

Low-intensity, high-uncertainty conflict (LIHUC) (type A conflict). Tactics are insufficient, and strategy becomes important because survival becomes the dominant motivator. Strategy's purpose is to find the optimal location of safety in the environment.

High-intensity, high-uncertainty conflict (**HIHUC**) (**type B conflict**). The turbulent field and the effects of unpredictable mutual causality shown in quadrant B are the dominant conflict types we are faced with today. In turbulent fields, boundary protection (strategy), linked tactics (operations), and order (tactics) no longer suffice. Events are so mutually causal that there is no longer a distinction between what was once considered tactical and that

Conflict Type	LIHUC (Type A)	HIHUC (Type B)	HILUC (Type C)	LILUC (Type D)
Analogy	Monroe Doctrine (1840s) New Frontier (1960s)	Asymmetric Warfare	World War II Desert Storm	Cold War (1950s)
Military Instruments	Coast Guard Special Forces	Naval Forces Semiautonomous SOF-Style Teams	Conventional Forces	"Missileer" Air Force "Boomer" Navy "Administratively Readied" Army
Planņing Style	Commitment Planning Real-Time Response Discretion bounded by broad policy	Orientation Planning Discretion bounded by trust, and a common appreciation	Contingency Planning Discretion bounded by law of war, geography, and policy end states	Standing Operating Procedure Discretion bounded by response plans and readiness standards
Method	Strategy and Tactics	Transcendental Value Systems	Operations, Tactics, and Strategy	Tactics (Tactics are Strategic)
Command & Control	Dispersed Guided by Strategy	Dispersed	Centralized and Delegated	Centralized Hierarchical
Federal Oganizational Response	Federal Emergency Management Agency Embassy Country Teams	Homeland Security Office? Revised Unified Command Plan?	Warfighting CINCs	NORAD US Strategic Command

This figure describes how decisions are made within each type of conflict. In reality, these four ideal types of conflict do not occur apart from one another. The Janusian framework permits all four to occur simultaneously in remarkable patterns. The authors maintain that HIHUC [type B) dominates the pattern of the present war on terrorism.

These planning styles are roughly based in one author's earlier work. See Colonel Christopher R. Paparone, "US Army Decisionmaking: Past, Present and Future," *Military Review* (July-August 2001), 45-53.
 For an explanation of trust, see Christopher R. Paparone, "The Nature of Trust In and Between Organizations: What the U.S. Army Professional Needs to Know," unpublished.

Figure 3. Comparison Chart for Janusian Conflict Types

The basic Janusian model for thinking and acting is arranged in a four-square—A, B, C, and D—the arrows depicting the struggles for dominance in one or more quadrants. It provides a complex, four-way, interdependent, interactive model for thinking and acting that goes beyond the traditional linear processing associated with strategy, operations, and tactics and helps us understand what we could not decipher or comprehend.

which has strategic significance. Today, the United States is deeply enmeshed in global and regional activities. Consequences that flow from activities in such an environment are highly uncertain and interconnected so that exclusively relying on the hierarchy of strategy, operations, and tactics becomes problematic because of the need to adjust rapidly to change.

High-intensity, low-uncertainty conflict (**HILUC**) (type C conflict). Coping requires an operational level of response because tactics and strategy are no longer sufficient. We see others emerge and occupy a similar status in our environmental domain. This type of environment dominated world conflict in the 20th century.

Low-intensity, low-uncertainty conflict (**LILUC**) (type D conflict). Here, "there is no distinction between tactics and strategy," and the optimal strategy is just the simple tactic of attempting to do one's best to react in real time.⁸

At best, only partial stability of the environment can be achieved because strategic, operational, and tactical processes neither influence events rapidly enough nor are they flexible enough for the random nature of type B conflict. In B::D patterns of conflict, stability can only be achieved through shared values because strategy, operations, and tactics cannot direct obligatory responses rapidly enough. Responses must come from a diffuse and flexible capability, which is the result of dispersed thinking and acting, based on appreciating the emerging situation and executing decisions based on a common set of values as well as habitual or professional action such as well-rehearsed standing operating procedures.

For example, relatively autonomous and covert special forces teams or individuals sometimes make assessments and act without anything more than the strongly held values of their profession and country. U.S. Army Rangers displayed this idealistic thinking and acting when rescuing their fellow soldiers in Somalia in 1993.⁹ Strategy, operations, and tactics were so compressed that they were relegated to secondary criteria for decisionmaking. In this situation, Rangers displayed an on-the-ground example of nonhierarchical thinking and acting that went beyond strategy, operations, and tactics. Vietnam, on the other hand, provided numerous instances of what happens when strongly held but unacceptable values lead soldiers to act dishonorably. The actions at My Lai occurred during operations that had little to do with strategy or tactics.¹⁰ The leader's challenge becomes how to shape an appropriate value system that leads soldiers to do the right thing. A list of formal organizational values—something that the Army has recently developed and disseminated—is arguably insufficient.¹¹

Shared values stir otherwise self-interested actors into collective thinking and acting. The intuitive "reasonable man" view of humankind assumes dominance over the value-maximizing "rational man" concept. These autonomous social forces outweigh formal rules and structure, and free us to think in new configurations—Janusian patterns. In postmodern military vernacular, Janusian patterns are portrayed as asymmetric warfare.

Military leaders and followers must embrace a quadrant B spiritual perspective with the Janusian paradigm, although this spiritual perspective seems counterintuitive. Leaders can no longer rely on the dominant framework of processing information predominantly through the metaphysical interpretations of existentialism and rationality. Instead, leaders use the coping mechanism of shared values and specific routine actions to understand surprise or the enemy's intent.

The difference we must perceive in our present condition is that, in light of the human processing the type B pattern of conflict requires, idealism must dominate Janusian thinking and acting. In the current conflict, we must understand not only where the enemy is located physically but also where he is morally—what drove him to accept a certain set of moral values that put him there in the first place. Osama bin Laden did not have to invest in expensive Tomahawk missiles; instead, he invested in fanatical Islamic religious fervor.

In the B::D pattern of conflict, we must provide at least secondary, but not necessarily less important, emphasis on the reactive coping mechanism of doing the best we can. The tendency is to act according to prescribed protocols. For example, the New York fire and police departments responded to the World Trade Center disaster armed with their honed skills and rehearsed actions and swift trust in each other. To many observers, this response is seemingly a throwback to a prenation-state way of New forms of organizing, such as the highly flexible network organizations, require a new power structure, something that the military culture may find inconceivable: rank and hierarchical positional authority would have to give way to expert power and lateral forms of leadership.

thinking and acting. Nevertheless, that dimension of the Janusian paradigm now takes an important secondary role in the B::D pattern of conflict. The rational and existential roles—the A::C pattern of conflict—are diminished to tertiary ways of processing information. In other words, the B::D pattern requires the simultaneous, instinctive actions of the highly trained tribal warrior and the cleverness of the 21st-century soldier-entrepreneur.

In short, the Janusian framework requires formulating new and complex recipes for thinking and acting in multiple patterns rather than embracing a singular one. Instead of using a linear thinking model to decide between competing values, the trick is to find a positive zone among them by using a nonlinear thinking model. All patterns in various mixtures are important to give relevance to the simultaneity of opposites, multiple time orientations, complex spatial relationships, and degrees of interconnected cause and effect.

Equally important in Janusian theory is understanding the patterns of the past, present, and future, appreciating multiple activities with multiple temporal orientations such as present to future, past to present, and present to past. It requires embracing, at the same time, all four environmental and conflict types that have occurred, are occurring, or will occur. Janusian thinking is not only about framing human information processing paradoxically but also temporally. In short, understanding events occurring in space and time must always be considered in the context of patterned rather than linear relationships. It is this embrace of patterned thought that will distinguish those who can truly think and act beyond strategy and those who simply apply strategic notions to operations and tactical situations.

The art of war becomes the art of thinking in time and space, visualizing the Janusian four-square as dynamic spatial patterns moving through time. This may explain why, like an amnesiac, the United States has awakened in the middle of a war, only to find out it has been going on for years. This may also explain the spiritual clashes that soldiers feel as they transition from an operational environment back to the administrative Army—the value system associated with the different Janusian patterns has shifted dramatically.

Implications for Military Leaders

Thinking and acting in opposites; embracing a unity of opposites.¹² Karl E. Weick explains that "People try to fit novel interpretations and actions



Figure 4.

In today's conflict, terrorists control the environment, a B quadrant activity, yet the United States has been responding bureaucratically, a type D response. Forming the Homeland Security Office, tightening airport and airplane security, and screening mail are all bureaucratic responses to the type B environment.

Photo not available

David Bohrer

into what they've known all along. And when something doesn't fit with the past, it's often discarded or misread."¹³ The emerging dominance of idealism in the postmodern era requires that our military leaders embrace new types of thinking and acting that affect postmodern living. These new types of thinking and acting exist simultaneously and with varying intensities and ambiguities as shown in Figure 4. When military leaders consciously adopt the Janusian paradigm as an intellectual framework, they add tremendous value and balance to their understanding of strategy, operation, and tactics. Military leaders must be able to link and integrate military, political, social, and psychological thought processes into a coherent approach to thinking about warfare and military operations in a complex world; otherwise, they might get locked into a linear mode of thought that not only limits their options but also leads them onto the wrong conflict path.

A greater emphasis on nonroutine, appreciative inquiry—appreciative intelligence that considers multiple and different patterned sensemaking across multiple time orientations. How we work will also be affected, requiring multiple and simultaneous responses. In a B::D pattern of conflict, how we work will require an expanded reverence for philosophical interests such as clashes of the spiritual sensing of reality or value-to-value relationships. Weick further explains that "[Leadership] problems persist because [leaders] continue to believe that there are such things as unilateral causation, independent and dependent variables, origins, and terminations. . . . Those assertions are wrong because each of them demonstrably also operates in the opposite direction: productivity affects leadership style, children socialize parents, responses affect stimuli, means affect ends, actions affect desires. In every one of these examples, causation is circular, not linear."¹⁴ Leaders must look at today's conflict in terms of global sensemaking and realize adversaries use values to motivate a different kind of soldier and to shape the battlefield.

In today's conflict, terrorists control the environment, a B quadrant activity, yet the United States has been responding bureaucratically, a type D response. Forming the Homeland Security Office, tightening airport and airplane security, and screening mail are all bureaucratic responses to the type B environment. To be successful in this war, the United States must create an environment that is The Janusian framework requires formulating new and complex recipes for thinking and acting in multiple patterns rather than embracing a singular one. Instead of using a linear thinking model to decide between competing values, the trick is to find a positive zone among them by using a nonlinear thinking model.

more turbulent and uncertain for the terrorist than the one they create for us. The United States must seize the initiative in the B quadrant while sustaining the others. It must embrace dispersed, decentralized control and self-designing or self-managing capabilities that current systems do not promote or even allow to the needed degree. Many commanders want to develop practical doctrinal prescriptions because they embrace the rational actor model. They should move away from such absolute linear thinking. The United States cannot afford to play a linear, tactical game of localized checkers while its adversaries play a patterned, global game of threedimensional chess—one that uses a variety of moves employing different capabilities that can be sacrificed as long as the objective is achieved.

Developing hyperadaptive organization structures that emphasize teams that can anticipate and respond under HIHUC conditions. Nonroutine, appreciative inquiry shapes the need to self-organize nontraditional intelligent organizations that consider multiple and different patterned meanings. Organizing requires emphasis on building teams, not monolithic, hierarchical units. In practical terms, this means organizing the military as an integral part of larger government capabilities based on multiple continua of adaptations needed for infinite configurations of conflict. There is a big difference between fighting a conflict by using current organizational capabilities and fighting a conflict by organizing around required capabilities. For example, in a future cold war with China, are we driven to forward deploy forces because forwarddeployed forces are the capability we have, or do we adapt military, information, and economic capabilities to disrupt China's self-governance fundamentally so that putting troops on the ground is not the only solution available? In other words, while the military may be comfortable using traditional definitions of chaotic and complex situations, the real issue is whether the military will end up fighting with an erroneous conception of the pattern of conflict they are really in—they are fighting the wrong war.

The politico-hierarchical structure, or "polyarchy," of our current politico-military system is inadequate for type B conflict.¹⁵ New forms of organizing, such as the highly flexible network organizations, require a new power structure, something that the military culture may find inconceivable: rank and hierarchical positional authority would have to give way to expert power and lateral forms of leadership. Instead of addressing levels of leadership—clearly a linear way of responding the military must address patterned archetypes of the environment that require leadership effectiveness. Traditional top-down leadership can no longer be the only consideration for military management. Rather, the emerging pattern of conflict is best met with nontraditional, ad hoc, flexible ways of organizing—with members who are continuously selfdesigning capabilities based on their unyielding shared values and mutual understanding of what is happening in the environment.

We see this being played out politically while a coalition of multicultural nation-states and beliefs is being mobilized. This kind of adaptive organizing encourages innovative social and technical designs that are nonhierarchical and nonrational-in a phrase, ad hoc. Hierarchically, flatter organizations call for diffuse and laterally oriented organizational effectiveness. Perhaps the special operations forces models become more attractive. Thinking and acting without orders must be acknowledged as sometimes appropriate in a government and with our citizenry. Field Marshal William Slim came to the same conclusion when he wrote of his leadership complexity during World War II: "The acting without orders, in anticipation of orders, or without waiting for approval, yet always within the overall [values], must become second nature in any form or warfare where formations do not fight closely en cadre, and must go sown to the smallest units. It requires in the higher command a corresponding flexibility of mind, confidence in its subordinates, and the power to make its [values] clear right through the force."¹⁶

Developing laterally oriented Janusian leaders. Today's environment will require developing and training confident, self-aware Janusian military and political leaders who are comfortable with lateral contribution regardless of the contributor's rank or position. The Janusian paradigm requires a fundamental shift from the hierarchical "strategic, organizational, and direct leadership" espoused by current Army doctrine.¹⁷ The new leadership paradigm is all about role complexity. Those who sense and feel shifting organization and environmental patterns and adapt accordingly lead the most effective organizations. Janusian leadership transcends the need for hierarchical leadership because Janusian leaders focus on serving and developing high-performance teams. The short names for these simultaneous roles are shown in Figure 4: the motivator, leading commitment; the vision-setter, leading into an uncertain future; the taskmaster, leading against identifiable challenges; and the analyzer, leading compliance.18

Embracing the notion that values associated with quadrant B and the values of habit associated with quadrant D must become a key source of thinking and acting and not just historic tactical-operationalstrategic linear ways of thinking. Military leaders should not throw away their learning and styles associated with quadrants A and C-they are still important and must exist simultaneously. However, our military theories and institutionalized thinking processes are still dominated by a paradigm of linear thinking; hence, the questions of strategy, operations, and tactics still dominate our models for reasoning and responding. Unfortunately, our military teaching and training institutions are reluctant to make the intellectual pedagogical leap to include a more nonlinear, flexible way of theorizing and taking action-the Janusian approach to processing information.

We must embrace paradox, polychronicity, and unpredictability through a new but ancient paradigm. We must work together while working apart. We must individually interpret the environment while maintaining others' visions of it. We must compete while cooperating. We must obey orders, rules, and doctrine while simultaneously thinking and acting to defy them. We must know ourselves inwardly while understanding ourselves from the outside. We must decide by not deciding. We must trust while distrusting. We must lead by following. These new riddles and new wisdom are just some examples of Janusian thinking and acting that the military must adopt if it is to effectively transform itself into a 21st-century force. MR

 See the July-August 2001 edition of *Military Review*.
 The authors use the following definition of paradox: "contradictory yet interrelated elements . . . that seem logical in isolation but absurd and irrational when appearing simultaneously." See Marianne W. Lewis, "Exploring Paradox: Toward a More Comprehensive Guide," *Academy of Management Review*, Vol. 25, No. 4, 760-76.

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4. Much of the discussion in this article or Janusian thinking and acting is based on the "competing values framework" borrowed from organizational theory. For a detailed explanation of transcendental thinking and its importance in organizational transformation, see Robert E. Quinn and Michael R. McGrath, The Transformation of organizational Cultures: A Competing Values Perspective," P.J. Frost, L.F. Moore, M.L. Louis, C.C. Lundberg, and J. Martin, eds., Organizational Culture: Beverly Hills, CA: Sage, 1985), 315-34.
5. For a psychoanalytic view of Janusian thinking, see Albert Rothenberg, The Emerging Goddess: The Creative Process in Art, Science and Other Fields (Chicago, IL: University of Chicago, 1979), 55, 66, and 69. Rothenberg's definition of Janusian thinking is: "conceiving two or more opposite or antithetical ideas, images or concepts simultaneously". It is highly related to his concept of homospatial thinking—associated with transformational thinking — that "consists of actively conceiving two or more discrete entities occupying the same space, a conception leading to the articulation of new identities."

tion leading to the articulation of new identities."
6. Fred E. Emery and Eric L. Trist, "The Causal Texture of Organizational Environments," in Fred E. Emery, ed., *Systems Thinking* (Middlesex, England: Penguin, 1965), 241-57.

7. These are not in order of complexity but in order of the A-B-C-D four-square discussed at the beginning of this article. D-A-C-B would be the order in terms of environmental complexity.

8. Emery and Trist, 246.

See the account in Mark Bowden, Black Hawk Down: A Story of Modern Warfare (New York: Atlantic Monthly Press, 1999).
 Tim Larimer, "Echoes of My Lai," *Time* (Asia Edition), (16 March 1998) accessed on 26 October 2001 at http://www.time.com/time/magazine/1998/int/980316/vietnam.html.

980316/vietnam.html>.
11. For example, see one of the author's previous commentaries on Army Values in Christopher R. Paparone, "Soldiers: The First Level of War," Army Logistician (March-April 2001), 43.
12. Ludwig von Bertalanffy, General System Theory: Foundations, Development, and Applications (2d Ed.), (New York: George Braziller, 1969), 248. Bertalanffy states: "Hence, ultimate reality is a unity of opposites; any statement holds from a certain viewpoint only, has only relative validity, and must be supplemented by antithetic statements from opposite points of view."
13. Karl E. Weick, The Social Psychology of Organizing (New York: McGraw-Hill, 1979), 376.
14. Ibid., 86.
15. For example, see Robert A. Dabi. Polyarchy: Participation & Opposition (New York: McGraw-Hill), 1979.

14. Ibid., 80. 15. For example, see Robert A. Dahl, *Polyarchy: Participation & Opposition* (New Haven, CT: Yale University, 1971, 7). Interestingly, Dahl used a similar four-square typology in describing his continua of governments. We would classify them as A. Inclusive hegemonies, B. polyarchies, C. competitive hegemonies, and D. closed

A. Inclusive hegemonies, B. polyachies, C. competitive hegemonies, and D. closed hegemonies. 16. Field Marshal Viscount Slim, *Defeat Into Victory: Battaling Japan in Burma and India, 1942-1945* (New York, NY: David Company, 1961), 451. 17. Department of the Army Field Manual 22-100, *Army Leadership: Be, Know, Do* (Washington, DC: U.S. Government Printing Office, 1999); and Roderick R. Magee ed., *Strategic Leadership Primer* (Carlisle, PA: U.S. Army War College, 1998). The actual Army product is a pytamidal view of leadership; literally, just look at the graphic of the model. The roots of the model are based squarely on the stratified systems theory (SST). From SST came the Army leadership product is a pytamidal view of today. In SST, indirect (strategic) leaders occupy vantage points near the boundaries of the upper organizational hierarchy. For more explanation, see T.O. Jacobs and E. Jaques, "Military Executive Leadership," in K.E. Clark and M.B. Clark, eds., *Measures of Leadership* (West Orange, NJ: Leadership Library of America, 1990). 1990)

For an example of a behavioral complexity model of leadership, see Stuart L. Hart and Robert E. Quinn, "Roles Executives Play: CEOs, Behavioral Complex-ity, and Firm Performance," *Human Relations* (Vol. 46, No. 5, 1993), 543-74.

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NOTES

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Improving Media Relations Lieutenant Colonel James Kevin Lovejoy, U.S. Army

UNIOR MILITARY personnel do not have faith and confidence in their leaders. First Lieutenant Kelly Flinn is court-martialed for adultery. The military's homosexuality policy denies people the right to serve honorably in the military. Drill instructors sexually assault recruits in basic training at Aberdeen Proving Ground, Maryland. Major General (MG) David R. Hale's retirement and Sergeant Major of the Army Gene McKinney's courtmartial reveal a double standard between officer and enlisted misconduct. Senior military officials fail to accurately advise Congress on the overall state of readiness in the military.

The military has had its fair share of time in the media spotlight in recent years, some of it good, some of it bad. There are two types of bad news. The military or someone in the military did a bad thing; even worse, news is reported out of context and fails to give a complete account of the truth. There is little the military can do to prevent bad news. When the military or someone in the military does a bad thing, the American people have a right to know. It is the media's duty to report on the military, and the military should not stand in the way. But there is something that can be done to prevent news from being reported out of context.

Unfortunately, the military traditionally tries to set the record straight after the fact. This is much like trying to stuff the genie back in the bottle—it just cannot be done. Once bad news hits the front page, no matter how hard the military tries, its corrective efforts never seem to make it beyond page seven or eight. Fortunately, however, the armed services appear to be learning from past experiences. They have discovered that the traditional "right to remain silent" approach to the media does not work. Out of this historically stoic stance, the need, in fact the urgency, to tell the military's story to the general public is clear. There are essentially two ways to tell Characterizing the media as a center of gravity in SASO is most troubling because they are supplied not by fuel and ammunition but by controversy and disruption. Tragedy and conflict make headlines, not the routine and mundane. Unfortunately, the SASO objective is achieving stability and returning to normalcy—the very essence of everything the media abhors.

the military's story: indirectly, through the media; and directly to the public via press conferences, press releases, and public appearances.

Understanding the Media Interest

If the military is to engage the media, it must first understand the media's broad general interests but, more important, their specific interest in a particular event. This should be treated no differently from any other military operation that we study to understand the opposition through intelligence gathering. If the Army spent a fraction of its time and resources understanding the media, it would be much better prepared for engagement. Essential to understanding the media is not so much what they cover as why. To the extent the military understands why the media covers a particular story, it will be better prepared to ensure the story is put in the proper context the first time.

Flinn's court-martial provides a perfect example of how the military fails to recognize the media's interest in a story and, therefore, fails to take the steps necessary to ensure the media and general public understand the full story the first time. News of Flinn's situation in remote Minot, North Dakota, drew the national media's attention during spring 1997.¹ The media initially portrayed her as a victim of a brutal military justice system that was prosecuting her for the heinous crime of adultery. The U.S. Air Force initially downplayed the incident and declined to engage the media. It was not until months later that Air Force Chief of Staff General Ronald R. Fogleman finally explained to congressional representatives that the crux of the case

The Executive Issues Team, composed of several functional experts, enhances the Air Force's image by anticipating issues and events that may spark public, media, or political interest. The team . . . develops timely and forthright messages for senior leaders, recommends necessary and appropriate communication strategies, prepares specific spokespersons to deliver an Air Force message effectively.

against Flinn was not adultery. She had disobeyed a lawful order and lied to a superior officer. Only then did the media and the general public begin to understand the true nature of the case and a little something about military culture and discipline. Unfortunately, Fogleman's response was too little, too late, and the Air Force's reputation took a significant hit, not to mention that Flinn was able to leave the service under far more favorable terms than was otherwise expected.

Press coverage of the military's gender-integrated training and homosexual policies provides additional examples of the media's misperception of the military and its role in a democratic society. The media's stance on both issues usually arises from its viewing the military as a social experiment in which all members are supposedly treated alike and receive equal opportunities.²

Media coverage emphasizes that current policy on these two issues denies many young men and women the opportunity to serve their country. While this is certainly one perspective, it is not the only one, nor is it the most relevant military perspective. Do not focus on how the military's policies on homosexuality and gender-integrated training impact the military as a social experiment. Rather, focus on how these policies affect military readiness, which policies best support fighting and winning the nation's wars, and which policies best protect and preserve national interests. By shaping and framing the issue, the military will appear more favorable and relevant to the general public. To do so, however, the military must be willing to engage the media.

EngagementStrategies

Can the military combat the media's reluctance to acknowledge, understand, or appreciate the military's perspective on a news event? If the story involves an intentionally negative story, the military's only recourse is to react after the story becomes public. But the response should be swift and aggressive, such as the action taken by former Commandant of the U.S. Marine Corps General Charles C. Krulak when the Marines received bad press concerning the blood wings incident. Krulak wrote a letter to the editor of the New York Times espousing the Marine Corps' position on the matter. The letter was printed in the next edition. While a bit unorthodox, Krulak's prompt, direct response to the public garnered much praise from the media and the public, who were now better informed on the issue. Krulak's prompt response to an incomplete media story demonstrates that the military need not sit back and be pummeled by public opinion. Military commanders at all levels should consider using this tactic to respond to erroneous militaryrelated stories.

Far more frequent, yet often as damaging, are the unintentionally negative stories. These are usually the result of media ignorance, disinterest, or simple laziness. The explosion of media outlets and inexperienced journalists are major causes of negligent reporting. Mushrooming media competition has spawned lower professionalism among reporters and news people. Unlike the medical and legal professions, there are no professional credentials in the media industry—anyone can pick up a pen, a keyboard, or a camera and become a reporter. There are no tests, standards, or licensing requirements.³ The Internet also presents expanding opportunities for novice media personnel to reach mass audiences.

Accompanying the explosion of media personnel is minimal military experience or knowledge among news reporters. Very few media organizations still dedicate reporters to the military beat. We are experiencing the advent of parachute journalism—the practice of dropping into a trouble spot whoever happens to be in the newsroom with directions to provide an immediate story regardless of his or her background or experience.⁴ The advent of soundbite journalism, 30-second news stories, and twocolumn newspaper stories also contributes to the lack of context and background of news reporting. All these factors lead to the inevitable conclusion that the military must do all it can to engage, educate, and ultimately influence the media to ensure the media reports the story in proper context.



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Military-Media Education

Recognizing the military's limited ability to educate the media, military professionals must first educate themselves to understand their own strengths and weaknesses before facing the enemy. The military's more apparent weaknesses include its members' negative attitude toward the media; risk aversion resulting from a zero-defects mentality; and a significant lack of media engagement doctrine, planning, training, and resources. The military's strengths include high-quality personnel, its existing public affairs, public interest, and most important, public respect.⁵

Combating media hostility. The military's first educational objective should be to reverse the hostile attitude many military members have toward the media.⁶ Military personnel must understand and accept the media's role. The media will continue to

write stories about the military regardless of how deep it tries to bury its head in the sand.

Risk aversion and zero defects—"Three things can happen when you pass the football, and two of them are bad."7 Senior Army leaders have not been as willing as Krulak to engage the media. Their reluctance appears to be a byproduct of the zerodefects mentality plaguing today's Army. Real or imagined, this perception exists among the Army's ranks and seriously inhibits initiative and risk-taking. Engaging the media no doubt involves both risk and initiative. Former 1st Brigade, 1st Armored Division Commander Colonel Gregory Fontenot's experience on the eve of his deployment to Bosnia clearly bears this out. In Bosnia, the Army reverted to its traditional practice of embedded reporters assigned to a particular unit for certain periods of time. The Army hoped that by spending time with one unit, a reporter would get to know the troops and understand the mission, thereby enabling him or her to add context to a story. Reporters were given full

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access to troops within their assigned units and were permitted to report anything they heard unless told it was off the record.⁸

Shortly before deploying to Bosnia, reporter Tom Ricks of the *Wall Street Journal* wrote a story on a meeting he attended in which Fontenot expressed his doubt that U.S. troops would stay only 12 months, as President William J. Clinton stated, and warned some of his African-American troops to be careful around Croats, whom Fontenot described as "racists."⁹ Within hours after being reported, Fontenot received heavy criticism from senior Clinton administration officials and ultimately received a letter of reprimand. Fontenot took a risk. He engaged the press and, in the eyes of many, lost.¹⁰

Fontenot is not the only military officer whose career was adversely affected by media engagement. Air Force MG Harold Campbell characterized Clinton as a "dope-smoking, skirt-chasing, draftdodging" commander in chief, and Admiral Richard Macke commented that the sailors who raped an Okinawan girl should have sought sex from a prostitute instead—both ended up resigning their commissions within days of their public gaffes.¹¹ These and other unreported experiences have undoubtedly had a chilling effect on the willingness of military personnel to engage the media candidly. Until the zero-defects mentality disappears, any efforts to encourage U.S. Army soldiers to engage the media will be severely constrained.

Change starts at the top. This new attitude must start at the senior-leader level. Senior military leaders must not only engage the media themselves but should also encourage their subordinates to do so. The Marine Corps probably does this better than its sister services. During Operations Desert Shield and Desert Storm, the Marine Corps had the reputation of being the most candid service.¹² It also agreed to engage the cast and crew of *60 Minutes* to discuss the Aviano, Italy, cable car incident. The Marine Corps realized the best thing to do was to minimize damage. Nevertheless, knowing *60 Minutes* was going to produce the story with or without its involvement, the Marine Corps chose to engage the media on a controversial story. By accepting a likely tactical loss, the Marine Corps gained the strategic advantage of doing what was within its power to make the story as accurate and as relevant as possible.

Senior Air Force leaders have also taken the initiative on media engagement by developing an Executive Issues Team, Secretary of the Air Force, Office of Public Affairs, Washington, DC. The team, composed of several functional experts, enhances the Air Force's image by anticipating issues and events that may spark public, media, or political interest. The team identifies significant issues and events, develops timely and forthright messages for senior leaders, recommends necessary and appropriate communication strategies, prepares specific spokespersons to deliver an Air Force message effectively, and outlines recurring Air Force theme messages.

Training and resources. While attitude adjustment must start at the top, it must work its way down the chain of command to individual leaders and soldiers. These are the military personnel the media want to talk to, not the local public affairs officer. The best stories are those that come straight from the source—the commander, soldier, sailor, airman, or marine on the ground. The military can adjust attitudes best through compulsory media training for all its members.

The Marine Corps' media training program starts with second lieutenants and continues throughout their military careers. The training includes small-group discussions with real reporters, mock interviews, press conferences, and other media events.¹³ Peacetime training is the linchpin to real world success.

The Army and Air Force have taken steps to revise their public affairs doctrine and training initiatives. U.S. Army Field Manual (FM) 46-1, *Public Affairs Operations*, and FM 100-23, *Peace Operations*, both devote considerable attention to the importance of media awareness during stability and support operations (SASO). FM 46-1 reinforces the principle of allowing media access to all units, subject to force protection and personal privacy needs. FM 100-23 acknowledges that "every soldier is a spokesperson." The manual also encourages com-



During the Grenada invasion, the Reagan administration, perhaps still suspicious of the media after Vietnam, severely limited media access to the battlefield. Vice Admiral Metcalf suggested that the media's perceived tendency to portray casualties and mission difficulties to generate criticism at home might lead field commanders to think more about public relations than about military operations. Another Vietnam-era veteran, retired MG John E. Murray, observed, "engaging the press while engaging the enemy is taking on one adversary too many."

manders to be more proactive in helping news media representatives understand the Army's role in peace operations and to produce stories that foster the public's confidence.¹⁴

The Army is also developing media awareness training resources. Both the Joint Readiness Training Center (JRTC), Fort Polk, Louisiana, and the Combat Maneuver Training Center (CMTC), Hohenfels, Germany, now train soldiers to react to reporters and to conduct press conferences. Training is tailored to the specific mission of the rotating unit; however, the new JRTC and CMTC training programs are not enough. The Army must expand these programs by including media awareness training during advanced individual training, basic and advanced noncommissioned officer courses and officer courses.

Media interest in military justice. The media's frenzied interest in the courts-martial of Hale, Flinn, and McKinney prompted military judge advocates to devote much time and thought to the military justice-media relationship. In 1999, the Army Judge

Advocate General's School hosted a joint services symposium to train senior judge advocates to better manage the complex issues that arise when the media cover a court-martial.¹⁵ Attendees received instruction on the Privacy Act and the Freedom of Information Act, and the rules of professional conduct for attorneys. Attendees developed a media plan for high-profile courts-martial that addressed appropriate themes for educating the media on military justice procedures, identifying spokespersons, and handling media overflow. The Army and Air Force together published detailed judge advocate and public affairs media planning annexes and sample question-and-answer documents addressing issues that media representatives covering high-profile courts-martial frequently ask.

UnlawfulCommandInfluence andMediaEngagement

The fact that commanders, not attorneys, control our military justice system creates unique challenges for media relations during a court-martial. The primary concern is unlawful command influence military justice's mortal enemy. Laws prohibiting unlawful command influence require senior commanders to guard against both the reality and perception of influencing the decisions and conduct of

Recognizing the military's limited ability to educate the media, military professionals must first educate themselves to understand their own strengths and weaknesses before facing the enemy... The military's first educational objective should be to reverse the hostile attitude many military members have toward the media.

subordinate commanders, witnesses, judges, or court members during a court-martial. Inappropriate remarks by members of the chain of command may jeopardize a successful prosecution. Consequently, judge advocates often advise senior commanders the very people the media want to hear from—not to comment on a pending case. The Air Force's silence during the early stages of Flinn's courtmartial and, to a certain extent, the Navy's silence about the Tailhook convention in 1991 were due, in part, to concerns about command influence.¹⁶

While silence may preempt allegations of unlawful command influence at trial, it may also abrogate a commander's responsibility to provide effective leadership at a time it is often most needed. Commanders and their judge advocates must be wary of unlawful command influence, but they should not lose sight of a bigger issue-their services' reputation. While the Air Force and Navy may have avoided unlawful command influence by not publicly discussing incidents when first reported, their services' public image suffered. The Air Force and Navy also missed two major educational opportunities through their approach to these cases: first, educating commanders to make public comments without exercising unlawful command influence, and second, educating the public about why discipline, integrity, and esprit de corps are so vital to the military.

Other training and educational resources. The military need not devote excessive resources to impact military-media relations. Two relatively inexpensive means of improving media understanding are dedicated subject matter experts and background papers. In several courts-martial, the military used designated military subject matter experts to assist the media. A judge advocate not involved in the case worked with media representatives to help them understand how the military justice system works and how it differs from the civilian criminal justice system. He also answered questions during the trial. Similar experts could be used for other military news events. For example, engineer officers can provide background on environmental stories, or armor officers can provide background on tank modernization plans.

The services can also provide fact sheets or information papers to the media as background on particular issues. This is common practice among Army and Air Force judge advocates and public affairs officers. Also useful are brief explanations of why the military's uniqueness warrants different judicial procedures and standards. While information sheets are not feasible for every news story, there are countless other military news events that occur frequently enough to justify the effort. For example, a paper explaining the military procurement system for new weapon systems or using existing country or regional background briefs can be useful to reporters covering overseas deployments.

Media planning. During the 1983 Grenada invasion, the Reagan administration, perhaps still suspicious of the media after Vietnam, severely limited media access to the battlefield. U.S. Navy Vice Admiral Joseph Metcalf suggested that the media's perceived tendency to portray casualties and mission difficulties to generate criticism at home might lead field commanders to think more about public relations than about military operations.¹⁷ Another Vietnam-era veteran, retired MG John E. Murray, observed, "engaging the press while engaging the enemy is taking on one adversary too many."¹⁸

Fortunately, the military services have learned the fallacy of avoiding the media and recognize the need for commanders to consider the media's impact on an operation. This discovery coincides with a 1984 study that recommends that public affairs planning be integrated into operational planning.¹⁹ The services have finally acknowledged that the media will continue to cover, and sometimes influence, military operations. There should be little doubt that the media can influence military operations or at least the political leadership's decisions regarding military operations. The image of thousands of starving Somali clearly influenced the military's initial

MILITARY-MEDIA



Unlike historical high-intensity conflicts on a linear battlefield, the military no longer enjoys a near-monopoly of the battlefield and real-time information. The relatively low intensity of many current conflicts poses little risk to media personnel traveling to and around an area of operations using commercial transportation.

decision to deploy to Somalia. Likewise, the image on national television of Somali dragging American soldiers' dead bodies influenced the United States to end that deployment.

Concerns about adverse public reaction to American casualties in the Balkans also significantly affected U.S. force protection posture in that region. Finally, it is difficult to believe that the same concern over seeing casualties on the 6 o'clock news did not affect NATO's decision to use air power in lieu of ground troops in Kosovo. General Colin Powell best sums up the reality of media influence on military operations: "Will the public and press reaction most likely be positive?"²⁰ If media consideration has matured into a principle of war, the military would be foolish to disregard such issues during planning.²¹ To do otherwise dooms the military to its traditional position of reacting to the media rather than trying to influence it. Fortunately, we are beginning to put thought into action. Before the U.S. Army 1st Armored Division deployed to Bosnia, MG William Nash planned how he would use the media strategically. His plan included three objectives: to gain and maintain the American public's support, to influence the warring factions to comply with the Dayton Accords, and to make the soldiers feel good about their work.²² To facilitate more consistent media operational planning, public affairs officers should be assigned to planning staffs to provide additional media insights beyond those of the traditional warfighters involved in the planning process.

While we must acknowledge the media's potential influence, the military must nevertheless guard

Two relatively inexpensive means of improving media understanding are dedicated subject matter experts and background papers. In several courts-martial, the military used designated military subject matter experts to assist the media. A judge advocate not involved in the case worked with media representatives to help them understand how the military justice system works and how it differs from the civilian criminal justice system.

against letting excessive concern over public reaction and media coverage of an event drive the train. If committing troops to a troubled region is in the United States' best interests but counter to public opinion or if a commander's decision to court-martial a soldier is necessary for good order and discipline but certain to draw public criticism, the Army cannot let such concerns stand in the way of doing what is right and necessary. The services must strike a balance between the past practice of ignoring the media and the growing tendency to be consumed by it.

Distinction between media reaction and public opinion. There is an important distinction between media reaction and public opinion. Concern over public opinion is legitimate because the services are responsible to the American people; however, concern over media reaction is questionable. The services like to think that what the press thinks does not matter. Perhaps this thinking stems from a reluctance to acknowledge the media's power to shape public opinion. Few want to confer such power and influence to the media. We want to believe that the public forms its opinion from facts. Sadly, that is not the case.

This does not mean we have to surrender public opinion to the influence of the press. The military can influence the general public through direct and indirect channels. The indirect channel is through efforts to influence how the media reports a story to the public. This is a difficult but worthwhile process. The direct route is to go straight to the public, bypassing reporters. The Department of Defense did this quite successfully during Operations Desert Shield and Desert Storm. Secretary of Defense Richard B. Cheney, General Norman Schwarzkopf, and Powell held regular press conferences. Even President George H. Bush stood before the American people to ask for their support for his decision to deploy troops to the Gulf.23 Cheney later explained: "I felt it was important to manage the information flow-not to distort it, but to make certain that we got a lot of information out there so that people knew what we were doing [and] why we were doing it. ... I did not have a lot of confidence that I could leave that to the press."²⁴ Fortunately, the military has smart people to execute this mission and an extensive public affairs organization that provides the framework for a coordinated effort.

The Cost of Status Quo

The services might jeopardize their own operations security if they do nothing to educate and engage the media. The services do not distrust the media's ability to keep secrets but, rather, fear the media might inadvertently disclose sensitive information.²⁵ The risk of unintentional disclosure increases when inexperienced reporters cover the military and military operations. The media's thirst for exclusive stories exacerbates the problem. Pursuing such stories tempts some reporters to intentionally disclose sensitive or classified information. The military cannot ignore the fact that the media has no counterpart to the military ethos of duty, honor, country; nor does it share the commander's ultimate responsibility for life and death. Consequently, the lives of soldiers, sailors, airmen, and marines may depend on teaching the media about operations security.

More difficult to specify are the stakes in a peacetime garrison environment. Military life demands strict discipline, absolute integrity, esprit de corps, selfless service, a formal rank structure, and physical and moral courage. The value of these is readily apparent during war; however, during peacetime, people outside the military often criticize these same attributes. The same media members who agree that different rules, principles, and expectations apply during combat are the first to question them during peacetime. Apparently, the media and the public think the services should do things differently during combat than during peacetime. The problem is a failure to understand the age-old maxim that warriors must train and live as they will fight. War has been described as hell. It is not an endeavor a nation enters into casually. It requires individuals who can live up to the principles described earlier. Unfortunately, most of these principles and values are not natural attributes. They are skills and beliefs that require inculcation through intense training. They cannot be turned on and off or bought on the Internet. This is why fighting men and women must train and live by them during peacetime—because they will fight by them during war.

Essentially, the stake in peacetime is readiness to fight and win the nation's wars or to protect its interests in operations short of war. Consequently, the military must educate the media about what readiness requires forces to do and why. Until the media understands why the military requires certain standards and behavior, they will continue to write stories that misinterpret, misconstrue, or miss the point entirely. The education process can be as simple as long discussions in a tent with a reporter, one-page fact sheets on the Uniform Code of Military Justice, or information papers explaining the military ethos. It could be something more sophisticated like television commercials or radio spots.²⁶ Be it simple or sophisticated, the services must attempt to explain military culture to the media and the public.

The Changing Media and Military Missions

The future poses additional challenges for military-media relations. Cell phones, the Internet, satellite communications, and other technologies provide multiple means for reporters to deliver stories from remote locations without military review. The media's self-sufficient reporting capabilities, coupled with the sharp increase in media inexperience with military operations, could be a recipe for disaster. More media sources mean greater competition for an exclusive story. Consequently, inexperienced reporters with immediate, direct access to the public are pressured to provide immediate, realtime news with little opportunity to reflect on its potential impact on national interest.²⁷ Finally, the reality of 24-hour news reporting enables media organizations to transmit information early enough to influence the military-diplomatic decisionmaking process.²⁸ Consequently, the military must guard against letting the media influence this process.

The evolution of military operations also presents challenges for future media relations. Unlike histori-

cal high-intensity conflicts on a linear battlefield, the military no longer enjoys a near-monopoly of the battlefield and real-time information.²⁹ The relatively low intensity of many current conflicts poses little risk to media personnel traveling to and around an area of operations using commercial transportation. The military does not control the U.S. sector in Kosovo the way it did Normandy Beachhead. Consequently, the media no longer depends exclusively on the military for access or information in places like East Timor or Somalia.

Complicating the situation is the political controversy over U.S. involvement in many of these conflicts. Initial media interest focuses on whether the

While we must acknowledge the media's potential influence, the military must nevertheless guard against letting excess concern over public reaction and media coverage of an event drive the train... The services must strike a balance between the past practice of ignoring the media and the growing tendency to be consumed by it.

United States or its armed services should be involved. Therefore, the first media engagement in SASO must address the propriety or legitimacy of military involvement, and military and political leaders must be prepared to explain the decision to use military forces.

An even greater media challenge in SASO is how they measure success. There is rarely an army to defeat or territory to recapture. Success is rarely a battle won or lost but an imprecise diplomatic, military, economic end state. Compared to traditional warfare, these amorphous measures of success are much more susceptible to media interpretation, so much so that some have described the media itself as a center of gravity.³⁰ To conduct successful SASO, the services must win over the media. This includes the international media. Perhaps of greatest importance is the local media because they tell the story to the local public.

Characterizing the media as a center of gravity in SASO is most troubling because they are supplied not by fuel and ammunition but by controversy and disruption.³¹ Tragedy and conflict make headlines, not the routine and mundane. Unfortunately, the SASO objective is achieving stability and returning to normalcy—the very essence of everything the The same media members who agree that different rules, principles, and expectations apply during combat are the first to question them during peacetime. Apparently, the media and the public think the services should do things differently during combat than during peacetime. The problem is a failure to understand the age-old maxim that warriors must train and live as they will fight.

media abhors.³² It will take a massive educational effort to convince the media to shift its SASO fo-

cus from conflict and strife to restoring or maintaining the status quo. It will take an equally massive effort to train the military how to engage the media in this war to influence public opinion in SASO.

The media are unlikely to change their military coverage unless convinced to do otherwise. It is up to the military to initiate this transformation, but until the military understands its own media-related strengths and weaknesses, any efforts to convince the media to change their military approach are doomed to fail. Rather than continue to criticize and blame the media, the military must first get its house in order. Only then can the long process of engaging and educating the media begin. **MR**

NOTES

 No doubt the fact that the Flinn family hired a public affairs professional to promote the story helped this story achieve national notoriety. Nancy Ethiel, ed., *The Military and the Media: Facing the Future*, the Cantigny Conference Series (Robert R. McCormick Foundation, 1998), 56.

2. Frank Aukofer and William P. Lawrence, *The Odd Couple* (Freedom Forum First Amendment Center, 1995), 5.

 Charles C. Moskos and Thomas Ricks, Reporting War When There Is No War: The Media and the Military in Peace and Humanitarian Operations, Cantigny Conference Series Special Report (Robert R. McCormick Foundation, 1996), 44.

 Jacqueline Sharkey, "When Pictures Drive Foreign Policy," American Journalism Review (December 1993).

 Public opinion surveys consistently reveal that the military is the most highly respected institution in America. See *The American Enterprise* (July/August 1999), 90. The press, on the other hand, routinely ranks near the bottom on the same polls.

6. Aukofer and Lawrence, 146, quoting Colonel Frederick C. Peck, Deputy Director of Public Affairs, U.S. Marine Corps.

 Quote from Woody Hayes, former head football coach at Ohio State University. Hayes' Buckeye teams were famous for their reluctance to throw a forward pass, choosing instead to rely on the less risky strategy of "three yards and a cloud of dust."

8. Ethiel.

9. Moskos and Ricks, 24.

10. As a direct result of Fontenot's experience, the media rules in Bosnia changed so that nothing could be quoted in the media unless the reporter asked permission from the person speaking. This became known as the "Ricks Rule." Aukofer and Lawrence.

11. Moskos and Ricks, 33

12. Aukofer and Lawrence, 100, quoting veteran reporter Peter Braestrup: "There were some negative stories written about the Marines before the ground war, but [General] Boomer had enough confidence in his troops, and in himself, and everybody else, to shrug off negative stories."

13. Ibid., 146-47.

14. U.S. Army Field Manual (FM) 46-1, *Public Affairs Operations* (Washington, DC: US Government Printing Office [GPO], 30 May 1997); FM 100-23, *Peace Operations* (Washington, DC: GPO, December 1994), 48.

15. The inaugural Joint Service High-Profile Case Management Course was conducted in May 1999. More than 75 senior judge advocates from all services and the Department of Defense attended.

16. Ethiel, 18

17. Peter Braestrup, *Battle Lines: Report of the Task Force on the Military and the Media*, a Twentieth Century Fund Report (Washington, DC: Priority Press Publications, May 1985) 133.

18. Ibid.

19. Ibid., 123-25. On 4 November 1983, following complaints that the military deliberately excluded the media from covering the first 48 hours of the 1983 Grenada invasion, General John W. Vessey appointed retired Major General Winant Sidle to head the Chairman of the Joint Chiefs of Staff Panel on Military-Media Relations. Sidel, six other military officers, and seven former reporters or news executives comprised the panel. Based on interviews with 19 media personnel and 3 public affairs representatives, the commission filed a report with several recommendations to improve military-media relations.

 Lieutenant Colonel Marc D. Felman, U.S. Air Force, "The Military/Media Clash and the New Principle of War: Media Spin" (thesis, Maxwell Air Force Base, AL: Air University Press, June 1993), 16.

21. Ibid., 1. U.S. Air Force Manual 1-1, Basic Aerospace Doctrine of the United States Air Force, vol. 2 (Washington, DC: GPO, March 1992), 10-13. Air Force doctrine states there are nine principles of war a commander must consider: objective, offensive, mass, economy of force, maneuver, unity of command, security, surprise, and simplicity. The author defines a principle of war as "an essential consideration that interacts with many time-tested truths a prudent commander must consider before conducting combat operations."

22. Ethiel, 82-83.

- 23. Felman, 22.
- 24. Aukofer and Lawrence, 13. 25. Ibid., 25.

26. Former Secretary of Defense William Cohen began to pursue such efforts by traveling to Hollywood to solicit support for military recruiting. Ironically, the media headlines, rather than focus on Cohen's attempt to improve recruiting and retention, highlighted the controversy surrounding his stay in a \$2500-a-night hotel. 27. Braestrup, 138.

28. Ibid., 46. 29. Moskos and Ricks, 45.

30 Ibid 44-45

 Although animosity has always existed toward the media, we have never approached it in the traditional manner in which we approach the Soviet Union or Iraq, in the sense of developing training, doctrine, and strategy.
 Ibid., 45.

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^{27.} Braestru 28. Ibid., 46.

Get Over It! Repairing the Military's Adversarial Relationship with the Press

DESPITE TECHNOLOGICAL advances in both warfare and media communications since World War II, the military-media relationship has shown marked regression. A news-minded public has demanded a competitive, fast food-style, 24hour media that provides instantaneous updates. Yet, even as the media has evolved, the military's reaction to the press refuses to rise above a pouting post-Vietnam adversarial relationship.

There is no doubt that the media can enhance military efforts. Few argue that the military does not need public understanding, support, and funding. And most can recite the constitutional need for a press free to report on those with guns. Yet, current military leaders who were in diapers during the Vietnam war still act like temperamental poster children for uninformed antimedia sentiment. Their angst is fueled by hearsay, moldy facts, and stories handed down from generation to generation. Bluntly, the military has missed the boat and continues to miss opportunities to use the media to shape positive public support for the military.

The Military-Media Continuum

American military history illustrates the collapse of the military-media relationship. The Revolutionary War first displayed the American public's odd relationship with the military—odd because the public was the military. The Continental Army's challenge was to raise public support and solidify public opinion. The infant press helped General George Washington forge the public's will to win and establish a people's army by distributing pamphlets and exposing truths about British rule.

By World War I, technology had expanded coverage, increasing pressure on journalists. As the Professional journalists descended into Southeast Asia to give the American public first-hand views of the horrors of war. These journalists were met with excessive classification and contradictory reports from the "five o'clock follies." From the vantage point of its living room, the American public was instantly aware that their sons were dying at an alarming rate and that previously heroic notions of warfare did not apply.

United States mobilized for war, the Committee on Public Information was formed to sell the war to end all wars and to maintain public support. Effectively, this was a form of censorship that successfully maintained public support for the war. Parents sent their sons to the good fight and were rewarded with sanitized clips of U.S. successes.

World War II's total mobilization began with strict censorship laws in place. Military public affairs pundits responded to radio's addition to the expanding news-reporting media by mandating a growth of propaganda. The Office of War Information was formed to inform the American people about the war. It made early use of journalists embedded within ground units. News reports from these journalists were often subject to heavy censorship, but they were successful in maintaining American public support for the war effort.

The Korean conflict served as "a transition period when reporters still had fairly good access to combat troops, with some limited censorship as the conflict progressed."¹ This censorship was created by the military in response to the media's criticism of UN commanders and is alleged to have caused the media's hypercoverage of President Harry S. Truman's firing of General Douglas MacArthur.

The views expressed in this article are those of the author and do not necessarily reflect the position of the Department of the Army, the Department of Defense, or any other government office or agency.—Editor

If Korea was a sporadic skirmish between the media and the military, Vietnam was full-scale warfare. Unprecedented amounts of professional journalists descended on Southeast Asia to give the American public first-hand views of the horrors of

Operations Desert Shield and Desert Storm presented new challenges.... Each armed service differed greatly in accepting embedded media. The U.S. Marine Corps cared for and fed the media, thereby garnering air time not available to other services. The other services realized afterward that their inattention ... resulted in virtually no public visibility for their units.

war. These journalists were met with excessive classification and contradictory reports from the "five o'clock follies." From the vantage point of its living room, the American public was instantly aware that their sons were dying at an alarming rate and that previously heroic notions of warfare did not apply. As public support for the war waned, the military turned its anger toward the agency that had exposed its flaws—the press.

Operation Urgent Fury, the 1983 invasion of Grenada, marked the United States' triumphant return to victorious warfare; however, the 600 journalists who flocked to Barbados to cover the invasion were stranded there for the operation's duration. Only 15 journalists received a tour of Grenada's airfield, but they refused to share their material. A U.S. victory went largely unreported. In response, the media, citing the American people's right to know and frustrated at its inability to provide continuous coverage, protested loudly about the military's gross oversight. Missing the battle meant missing the war.²

In response to the media's outrage, the Sidle Panel was formed to address the question of the public's right to know versus operations security. This bipartisan panel, chaired by retired Major General Winant Sidle, was charged to determine the best method for providing media coverage of a military operation without compromising security. The panel established the National Media Pool to limit or control the number of correspondents who could be equipped and transported via military assets during a military operation. Furthermore, the panel recommended that "Planning should provide for the largest press pool that is practical and minimize the length of time the pool will be necessary before 'full coverage' is feasible."³

Operation Just Cause in Panama during 1989 marked the National Media Pool's first operational deployment. Unfortunately, poor planning prevented the media from witnessing any operations. The media were notified late, deployed late, and upon arrival, were detained at Howard Air Force Base, Panama. After being sequestered and sketchily informed by military channels, these late arrivals could only watch as reporters already on the ground in Panama covered the fighting.⁴

Mistakes in Panama led to the Hoffman Report, which required ground commanders not only to address the media pool but also to support it. Chairman of the Joint Chiefs of Staff General Colin L. Powell sent a message to major military commanders to stress the importance of incorporating news media coverage into military operations: "Commanders are reminded that the media aspects of military operations are important . . . and warrant your personal attention. Media coverage and pool support requirements must be planned simultaneously with operational plans and should address all aspects of operational activity, including direct combat, medical, prisoner-of-war, refugee, equipment repair, refueling and rearming, civic action, and stabilization activities. Public affairs annexes should receive command attention when formulating and reviewing all such plans."5

Despite the Hoffman Report's recommendations, Operations Desert Shield and Desert Storm presented new challenges. Although cooperation between the Pentagon and the press made media coverage the most comprehensive to date, lingering mistrust denied the press full access, denied the public proper information, and denied the military proper credit for its successes. Each armed service differed greatly in accepting embedded media. The U.S. Marine Corps cared for and fed the media, thereby garnering air time not available to other services. The other services realized afterward that their inattention to accommodating the media resulted in virtually no public visibility for their units.⁶

Despite harmony between the military and media during operations in Somalia and Haiti, Operation Allied Force revealed a continued division. Kosovo had tighter news restrictions than ever, so tight that for the first few weeks the size and scope of the air campaign was misrepresented as a massive air attack. Unfortunately for the military planners who assumed Serbs would cower in the face of NATO aggression, Slobodan Milosevic failed to back down. What was presented as overwhelming force directed against fielded Serb forces turned out



U.S. Marine Corps

It was obvious to the press [in Vietnam] that there was a vast difference between what the Americans in the field were saying and the artificial optimism the ranking Americans in Saigon were reporting. There were only two explanations for this disparity—neither flattering. Either the heads in Saigon were so out of touch with the soldiers in the field that they truly did not know the extent of the damage, or they knew the battlefield situation and misreported it to the American people.

to be modest bombing against Serb antiaircraft sites, and NATO's effort appeared inept. To compound the publicity nightmare, Milosevic's spokesmen used the press to expose NATO's mistakes and collateral damage, in some cases depicting the Serbs as victims of oppression.

The clampdown was so great that the "sterile war," fought by nameless, out-of-sight pilots, led to the American public's apparent lack of engagement in the war effort.⁷ This assessment comes from the same military that still mourns the loss of public support in Vietnam. Perhaps, the *National Journal's* James Kitfield is right when he later wondered, "If, as has been said, the first casualty of any war is truth, the first casualty of a war in the Information Age may prove to be the trust that sustains the relationship between those who fight America's wars and those who report on wars."⁸

The First Amendment versus Operations Security

In the battle over media freedom, military requests to protect operations security are inevitably met with the press' counterarguments of trampling first amendment liberties. The actual truth is undoubtedly somewhere in the middle. It is difficult to comprehend a press that actually wants to put America's sons and daughters in harm's way; likewise, it is implausible to suggest that the military advocates suspending the U.S. Constitution. Yet, the media does sometimes push operations security too close to the edge, and the same military cross-culture that supports the constitutional right to bear arms is fairly willing to deny rightful media access.

So in remote cases in which the media violate operations security, how are they to be handled? In his article, "The Challenge of Media Scrutiny," David Wolynski writes, "The First Amendment states, 'Congress shall make no law . . . abridging the freedom of speech or of the press.' Some in the press take this to mean that the media has a right to print whatever it wants, whenever it wants. On the other hand, most experienced journalists understand the need for operational security. And we in the military must understand that even though we have the right to refuse to answer certain questions, the media still has the right to ask them. For those journalists who do not abide by the operations security rules, we have the right—and the responsibilityto complain quickly to their editors and never to provide information to the offending reporters."9

This implies that the military should handle each reporter as an individual rather than as part of a greater problem. Implausible? No more than asking the media to separate the military from William

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Calley; Tailhook; Aberdeen Proving Ground, Maryland; and the gay bashing at Fort Campbell, Kentucky. If the media is without trust, filled with liberal hacks of questionable patriotism, then why is the military not described as murderous, adulterous, rapist, and gay bashing?

Those who would not allow the media to cover military operations fail to realize that the military would not want it any other way. The first amendment protects us from ourselves. It recognizes the need for an independent media, even an imperfect media. Someone has to watch the guys with the weapons, those with fingers in the till, and those who make rules for the rest of us.¹⁰

In his essay "Stop Whining," General Walter Boomer, commander of I Marine Expeditionary Force (MEF) during Desert Storm, agrees: "This is a democracy, and a free press is the fundamental underpinning of everything that we stand for, fight for, and believe in. Now, it doesn't make any difference then whether you like the media or you don't like the media, they're here to stay. It is healthy for the American military to be exposed through the media to the public. After all, they pay our salaries. The American people need to know what happens in war. Perhaps if more people understood the horror, we would be less inclined to go to war."¹¹

RemnantsFromVietnam

Although many grow weary of discussing the Vietnam-era military-media tango, it remains the crux of the dispute and warrants examination. Specifically, the subject matter is so toxic and the differences so great that the resentment has outlived the players. Current military leaders were not filling sandbags in Da Nang during the conflict; they

were filling diapers in Kansas City. Yet, the military's hatred for the media has been passed down like crew drills—as if despising the media is an obligation rather than a choice.

Writer Joe Galloway stated: "A generation of officers emerged from that searing, bitter, orphaned war looking for someone to blame for the failures manifest in our nation's defeat. By placing full blame and responsibility on the press they could avoid delving deeper, peeling to the underlying layers of the onion and exposing the more important failures of political leadership at home and military leadership right down the chain of command."¹² A defeated journalist teaching at the U.S. Army War College echoed the sentiment, remarking, "A generation of soldiers will go to their graves hating all journalists for the reporting of some."¹³

The fact is that leadership was misrepresenting and misreporting what was happening in Vietnam. It was obvious to the press early on that there was a vast difference between what the Americans in the field were saying and the artificial optimism the ranking Americans in Saigon were reporting. There were only two explanations for this disparity—neither flattering. Either the heads in Saigon were so out of touch with the soldiers in the field that they truly did not know the extent of the damage, or they knew the battlefield situation and misreported it to the American people.

Henry Gole writes: "Happy news was reported, and unhappy news was suppressed. The American public had every reason to believe that all was going well in 1968 when the bottom seemed to fall out. Both the press and the American people were shocked at the intensity and duration of enemy activity. . . . Leadership, not the media, had failed to prepare the nation.¹⁴

So the press began reporting what it saw rather than what it was told. The press described the resolve of the enemy and the anguish and suffering of our own troops in victory and defeat. Journalists told stories of conscripted soldiers dying in a faraway land for ideals they could not hope to understand. Once the folks back home began reading and watching these reports, support for the war began to wane. And the military never forgave the press.

Nancy Ethiel of the McCormick Tribune Foundation said, "Trust is just one of those issues that lingers from Vietnam—a lot of Vietnam-vintage officers had heartburn over the television coverage of that war. My feelings are that the politicians who send you in and the public who support a war have to know the true cost of war. Trying to sanitize it, like we did in Desert Storm—where there were to be no bodies, no blood—is a false picture of conflict and does not serve the military well."¹⁵



Most of the military's public wounds have been self-inflicted.... The Air Force's mishandling of the Flinn case shows what happens when the press and public are forced to fill in the blanks. The fact that this is even referred to as the "Kelly Flinn adultery case" is evidence that the Air Force story was not told in time.... It became a case about adultery rather than one about lying under oath and about why certain behavior is prejudicial to good order. The media heard and told this story because it was the only story available.

Mediaasa Partner

In reality, the media in Vietnam was a partner of the fighting man. If America's sons and daughters were dying in a foreign land, their families had a right to know if their deaths were justified. If, after evaluating the facts the press presented, public support for the war disappeared, then the media was an effective tool in the democratic process.

Many of these reporters had a personal stake in the men they watched and reported on. Although the military leadership called the press the enemy, the better reporters were actually wading through rice paddies with the soldiers on the ground. The war's leadership, not the media or the ground soldier, was operating out of air-conditioned offices. The reporters who had taken the time to embed themselves with units often better grasped the war's human elements than did the practitioners of public policy. Galloway explains, "There, at the cutting edge of the war, you find yourself welcomed and needed welcomed by the soldier as a token that someone in the outside world cares about him and how he lives and dies."16 Yet, by continuing to believe that the press was the enemy in Vietnam rather than the vehicle that got them out of a bad war, today's soldiers are being victimized in absentia by the lies General William C. Westmoreland and U.S. President Lyndon B. Johnson perpetuated 35 years ago.

Missed Opportunities

By continuing to label the press as the enemy, the military is getting an enemy. Unfortunately, an enemy press will not be very forgiving when the chips are down. An organization as large as the U.S. military is certain to reflect a cross-section of all aspects of the population it draws from—both good and bad. So there are bound to be situations in which bad elements in the military do the wrong thing, and some of those things warrant public scrutiny—just as if the wrongdoer were a banker, schoolteacher, or congressman.

Rather than embrace diversity and allow an occasional negative story to accentuate the many positive stories in comparison, the military's response has often been to circle the wagons. Most of the military's public wounds have been self-inflicted. Look no further than the public response to the Tailhook, Aberdeen, and Kelly Flinn scandals. In Tailhook, the Navy assumed an ostrich stance, guessing the scandal would evaporate while its head was in the sand. The Navy guessed wrong, and Tailhook is now synonymous with officer misconduct. Because the Navy minimized the situation, the media dictated the pace and extent of the story.

Conversely, the way the Army handled drill sergeants' sexual abuse of female trainees at Aberdeen Proving Ground is textbook media relations. The



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media could not release the bombshell because the Army had already scooped them. The Army seized the initiative and "went ugly early," and it was rewarded with a much more forgiving public with a much shorter memory. The Air Force's mishandling of the Flinn case shows what happens when the press and public are forced to fill in the blanks. The fact that this is even referred to as the "Kelly Flinn adultery case" is evidence that the Air Force story was not told in time. Tony Capaccio explains that "covering the story was made all the more difficult because the Air Force wasn't saying much."¹⁷ In fact, critics say the Air Force bears a great deal of responsibility for some of the flaws. Time and time again, according to reporters, top officials refused to talk about the case.

The result was that the public heard Flinn's attorneys and public relations machine turn her case into a story about a woman who made a mistake and was now being victimized by the Air Force. It became a case about adultery rather than one about lying under oath and about why certain behavior is prejudicial to good order. The media heard and told this story because it was the only story available.

Perhaps the biggest mistake the Pentagon made was not its inability to make the occasional negative story go away but its inability to sell its multitude of positive actions. Grenada? No one saw it. Just Cause? No one saw it either. Haiti? No one cared. Somalia? Certainly no one cared outside of Fayetteville, North Carolina, until dead U.S. soldiers were dragged through the streets of Mogadishu.

"When I look back at the military-media experience in the Gulf War, it is with sadness for lost opportunities on both sides of the equation," Galloway explains. "Because of poor planning, paranoia and over-control, the details of a great victory of American arms were virtually lost to history.... The only thing the Pentagon had to hide in the Gulf was the finest military force this country has ever put into the field, and it did that very efficiently."¹⁸

Conversely, Boomer used the media much differently during Operation Desert Storm. He gave the press access to his troops and embraced the media. Boomer allowed the press to eat, sleep, and ride with his troops. The result was perhaps an overrepresentation of I MEF's exploits in Desert Storm media coverage. "Now, there's a caveat here," Boomer explains. "If you're going to do that, you better have faith in your troops. If you don't trust them, you can't turn the media loose. But I would submit that if you don't have faith and don't trust them, you're not a very good leader and you shouldn't be there either."¹⁹

Boomer's remarks support the U.S. Marine Corps philosophy that every Marine is a public affairs officer. Every rifleman is a spokesperson for the Marine Corps, and the corps gives its Marines the freedom to talk to the media. This is possible because Marine Corps leaders are confident that, given the opportunity, Marines will say the right thing, and the corps will look good. This is not some artificial, coerced sentiment; they just know that while Marines may not always be happy about their current situation, they will always portray pride at being Marines. The result is continuous positive coverage for the Marine Corps.

The Next Step

How is this military-media conflict resolved? Boomer complains that we have already spent too much time on the topic, and both sides should quit whining. Unfortunately, as events in Kosovo show, the relationship is not repaired. The result is limited coverage of what the military does well and limited public understanding of what the military is doing at all. Thus, it still needs to be discussed.

The differences between journalists and soldiers are marked. One exudes a liberal questioning of authority and the other a conservative blind faith. Perhaps, in first understanding these differences, the necessity for both is obvious.

"It is time to stop trying to resolve the perceived problem of military-media antagonism and recognize that this relationship is natural," explains Willey.²⁰ Learning to nurture mutual differences enables building on similarities and mutual interests, and recognizing differences can create a trust and confidence between the two that will result in fairer media coverage of the military and greater media access. Willey continues, "The key to success in this relationship is understanding the other side and being willing to endure a few frustrations and setbacks along the way. Equally important is the realization that the natural tensions between military and media will always exist. The best approach is to

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educate each side, as much as possible, on the peculiarities of the other's culture."21

As the Tailhook and Flinn situations show, it is essential that the military abandon its self-protective, reclusive nature when responding to the press. In the absence of response, the American public will fill in the blanks, often not to the armed services' favor. Former New York Times journalist Richard Halloran explains, "If military officers refuse to respond to the press, they are in effect abandoning the field to critics of the armed forces. That would serve neither the nation nor the military services."²²

Embedding is humanizes both the journalist responsible for informing the public and the soldier tasked with protecting the people. In addition to providing realistic coverage of history unfolding, it ensures that the media are not operating independently on the battlefield. Most important, embedding provides an empathetic forum for a journalistic profession with far too few former soldiers and a profession of arms with too few former journalists.

Everyone agrees that the military and the media have made mistakes. It is time to get over it and accept the fact that, as Boomer states, "hate 'em or love 'em, the media is here to stay."²³ MR

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The Army and the Media

Major Barry E. Venable, U.S. Army

I have made arrangements for the correspondents to take to the field . . . and *I* have suggested that they should wear a white uniform to indicate the purity of their character.¹

—Union General Irvin McDowell

HROUGHOUT AMERICAN history, the esteem that Army leaders have held for the media has changed little. Just a few years ago, McDowell's remarks would have been considered popular and applicable, particularly in the post-Vietnam era. It seems, however, that attitudes are changing. At a 1997 conference of senior military leaders and members of the media, conferees agreed that relations between the military and the media were "perhaps the best ever."² Although certain areas of tension and misunderstanding remain, consideration, facilitation, and cooperation characterize the current state of the military-media relationship. In recent military operations, the military has accommodated the media in a manner unprecedented since the Vietnam war. The operations in Somalia, Haiti, and Bosnia provide ample evidence that the military, in stark contrast to earlier operations such as Grenada and Panama, recognizes the value of allowing the media to cover military operations.

The picture is not entirely rosy, however. A 1995 study of the military-media relationship conducted by Frank Aukofer, Milwaukee Journal Sentinel, and Vice Admiral (Retired) William P. Lawrence showed sharp differences between the two institutions. The source of the disagreement appeared to be the "Post-Vietnam Blame the Media Syndrome."³ In the Aukofer-Lawrence study, more than 64 percent of military officers agreed with the statement, "News media coverage of the events in Vietnam harmed the war effort."⁴ This great divide between the two institutions continues to plague their relationship today. It is not the continuing angst over the Vietnam war's outcome that affects the militarymedia relationship today but, rather, its derivative effect: an ingrained cultural mistrust of the media

The DOD Principles for News Media Coverage ... solidified three concepts: that open and independent reporting was the standard for combat coverage for the future, that pools were to be an exception rather than the rule, and that voluntary compliance with security guidelines was a condition of access to U.S. military forces. ... Of particular note is the recent addition of two very important concepts of which Army leaders need to be aware: security at the source and embedding.

throughout generations of military leaders. To dispel this mistrust, Army leaders must understand the historical and philosophical bases of the militarymedia relationship.

Fewer than 30 reporters accompanied the entire invasion force to Normandy, France, on 6 June 1944. In contrast, more than 500 journalists appeared within hours to cover combat operations in Grenada in 1983 and Panama in 1989. At the beginning of Operation Desert Storm in 1991, more than 1,600 news media and support personnel were present, and some 1,500 reported on hurricane relief operations in Florida in 1992. Reporters provided live television and radio coverage of the night amphibious landing that marked the beginning of Operation Restore Hope in Somalia in 1992 and the end of the UN operation during Operation United Shield in 1995. More than 1,700 media representatives covered the initial phases of peacekeeping operations in the American sector of Bosnia in 1996.5

During World War II, cooperation and commitment to a common cause characterized the relationship between the media and the military. John Steinbeck, a war correspondent of the time, put this characterization into plain words when he said, "We were all part of the war effort. We went along with it, and not only that, we abetted it."⁶ The War Department based the World War II military-media paradigm on censoring and strictly controlling correspondents. American military correspondents overseas were not allowed in war theaters unless they were accredited. Accreditation was granted only to correspondents who agreed to submit copy to military censors. For a major assignment, a group of correspondents would be selected beforehand with the condition that they shared their stories with colleagues. The success of these arrangements, at least in the eyes of the military, set the standard by which the military would judge all subsequent military-media relations.⁷

At the beginning of the Korean war, there was no censorship, only a voluntary code of war reporting whose goal was preserving military secrecy. Six months into the war, in December 1951, full military censorship was imposed. A month later, the military received full jurisdiction over correspondents. Reporters not adhering to censorship rules could be punished by having their privileges suspended or even court-martialed for violating any of a long list of instructions.⁸

The Vietnam war was a watershed event in the history of military-media relations. Indeed, its aftermath set the conditions for today's debates. Vietnam was the first major war in modern history to be fought without some form of censorship.⁹ Instead, reporters accepted voluntary security ground rules. Unlike past wars where the military strictly controlled access to the battlefield, Vietnam was fully accessible to most correspondents. The enduring legacy of media coverage of this war is the charge that the media lost the war by its negative reporting. Whether true or not, this "post-Vietnam blame the media" legacy effectively built the stone wall that was erected between the two institutions.

The invasion of Grenada in October 1983 is another military-media relationship landmark because it resulted in many efforts at military-media cooperation. For the first 2 days of the operation, the U.S. government decided to bar the news media from the island. On the third day, only one 15-person press pool, out of approximately 600 reporters at Barbados, was allowed on the island. The media strongly protested this blackout. In response, the Secretary of Defense promulgated and released the Principles of Information on 1 December 1983. which states, in part: "It is the policy of the Department of Defense to make available timely and accurate information so that the public, Congress, and members representing the press, radio, and television may assess and understand the facts about national security and defense strategy. Requests for information from organizations and private citizens will be answered responsively and as rapidly as possible."10

The media's furor forced the military to examine how military crises and wars would be reported. Then Chairman of the Joint Chiefs of Staff General John W. Vessey, Jr. created a panel of experts from both the military and the media to examine the Grenada operation and recommend how to address

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future problems. He directed the panel to answer, "how do we conduct military operations in a manner that safeguards the lives of our military and protects the security of the operation while keeping the American public informed through the media?"¹¹ Retired Army Major General Winant Sidle was selected to head this project. Sidle formed the Military-Media Relations Panel, more commonly known as the Sidle Panel, to address the question. The panel's answer laid the foundation of how the media reports military operations as we know it today.

The Military-Media Relations Panel was comprised of various media representatives and public affairs personnel from the Office of the Assistant Secretary of Defense (Public Affairs) and operations spokespersons from the Joint Chiefs of Staff and each of the armed services. The commission met for a weeklong conference that included both media and military presentations in an open session and panel deliberations in a closed session. At the conference's conclusion, the Sidle Panel presented eight recommendations and a Statement of Principle to govern military-media relations. The Statement of Principle provided a more detailed account of the basis of the military-media relationship than had been previously expressed in the Department of Defense Principles of Information: "The American people must be informed about the United States' military operations, and this information must be provided through both the news media and the government. Therefore, the panel believes it is essential that the U.S. news media cover U.S. military operations to the maximum degree possible consistent with mission security and the safety of U.S. forces."12

Among the panel's eight recommendations was introducing a standing media pool—the DOD

National Media Pool (NMP)—and voluntary media compliance with ground rules versus submission to censorship. The recommendations also pointed out the importance of incorporating public affairs considerations in operational planning. Interestingly,

Among the [Sidle] panel's eight recommendations was introducing a standing media pool—the DOD National Media Pool and voluntary media compliance with ground rules versus submission to censorship.... The eight Sidle Panel recommendations established the basic paradigm for covering future military operations.

the final recommendation encouraged both the military and the media to improve their understanding of each other.

The eight Sidle Panel recommendations established the basic paradigm for covering future military operations. A scant 6 years later, this paradigm was tested in the December 1989 invasion of Panama. Journalist Steve Katz reported, "This was the Pentagon's first test of the military's ability to adopt the recommendations of the Sidle Panel. It flunked the test."¹³

On the evening before the invasion, then Secretary of Defense Dick Cheney and Assistant Secretary of Defense (Public Affairs) Pete Williams deliberately called out the DOD NMP so late that journalists missed the first hours of the attack.¹⁴ While the military bore the brunt of this criticism, many believed that it was the political climate at the time that was really to blame. During the week before the invasion, President George H. Bush and Vice President Dan Quayle both told Cheney they doubted that the pool could maintain operations security but were leaving final decisions about the pool up to him.¹⁵ Without a doubt, this put Cheney in somewhat of an awkward situation. Many media members chose to believe that Cheney was solely responsible for the latest debacle.

Once again, the handling of the media during the invasion and its associated outrage forced the military to reexamine its media practices during crises. Just days after this latest fiasco with the media, Williams asked Mr. Fred Hoffman, a former *Associated Press* reporter and DOD official, to research the facts surrounding the DOD NMP deployment to Panama.¹⁶ Hoffman agreed and produced what is now known as the Hoffman Report.¹⁷ It provides a comprehensive list of events that led to the mishandling of the media.

Hoffman spoke with planners and public affairs personnel at every level at the Pentagon and the U.S. Southern Command, the unified command responsible for the operations in Panama. Hoffman learned that while the Joint Staff issued instructions to incorporate public affairs planning with operational planning, this did not occur. Hoffman also found that an excessive concern for secrecy prevented DOD's media pool from reporting the critical opening battles.¹⁸ An excessive concern for secrecy had been a major criticism from the media following the invasion of Grenada. Even so, the White House and the Pentagon's civilian leadership decided not to inform the media of the operation.

In his report, Hoffman made 17 recommendations that affirmed the DOD NMP system and suggested numerous ways to improve it. The recommendations also heightened the intensity and interest with which military planners incorporated public affairs planning into operations planning. To emphasize this point, General Colin Powell, then Chairman of the Joint Chiefs of Staff, sent a message to the major military commanders in which he reminded them of the importance of planning and support for news media coverage of military operations. It read in part, "Commanders are reminded that the media aspects of military operations are important . . . and warrant your personal attention. . . . Media coverage and pool support requirements must be planned simultaneously with operational plans and should address all aspects of operational activity, including direct combat, medical, prisoner-of-war, refugee, equipment repair, refueling and rearming, civic action, and stabilization activities. Public affairs annexes should receive command attention when formulating and reviewing all such plans."19

This directive helped greatly to change attitudes about the media and to convince senior leaders that public affairs planning was an important part of operational planning, not just the public affairs officers' responsibility.²⁰ As the events that led to the Persian Gulf war began to unfold in 1990, no one in the U.S. military or media had thought about covering the type of war that was to evolve.²¹ The Persian Gulf war would set a precedent for how wars would be waged and reported. It also provided an awesome display of technology-based precision warfare and lethality that television viewers around the world could see instantly. Just before the ground war, more than 1.000 reporters wanted to cover the action, quite a change from the 27 reporters who went ashore at Normandy.²²

Essentially, the military's procedures to facilitate gulf war coverage were modifications of those developed for Panama. All reporters had to process



As leaders, we will fail miserably in this challenge if we do not seize every opportunity to communicate with the American public. Mistrust of the media is akin to mistrust of the American public. Media coverage of military operations has a direct effect on public opinion and will continue to influence wars and conflicts at all levels.

through and be accredited by the U.S. Central Command (CENTCOM) Joint Information Bureau (JIB), which controlled all press activities. Journalists who wanted access to military units were assigned to pools, usually five-person groups, with escort officers. At any one time, there might be 25 pools somewhere in the field, with the remaining 1,000 or so journalists "mostly stranded in luxury hotels."²³

Operation Desert Shield media personnel followed ground rules and guidelines remarkably similar to the Sidle Panel's recommendations. However, after citing an excessive number of correspondents, host nation restrictions, and exceedingly dangerous conditions, CENTCOM issued new instructions that required public affairs officers to review all dispatches before release to ensure compliance with security guidelines.²⁴ The decision to publish was left up to reporters' news organizations under both the voluntary compliance and prior review guidelines. During Operation Desert Storm, 1,351 print pool reports were filed, but DOD only received 5 for review. Four were cleared for publication. The reporter's editor in chief agreed the fifth story violated security ground rules and should be changed.²⁵

After the war, news organization leaders once again strongly criticized the military's handling of the media and complained of the military's lingering attitudes toward the media. News organizations once more felt their coverage of the gulf war was not as good as it could have been.²⁶ Although the military practiced overt censorship to some degree, the media claimed the military exercised covert censorship by controlling access to units, a practice far more damaging. These attitudes led the news organizations and the Pentagon to work together to produce the DOD Principles for News Media Coverage of DOD Operations.

This agreement stated that during conflict, the military services would follow the new principles to improve combat news coverage. While this document highlighted concepts and procedures that had been in other DOD documents for years, it emphasized to military commanders the importance of their personal involvement in planning for news coverage of combat operations. Furthermore, it solidified three concepts: that open and independent reporting was the standard for combat coverage for the future, that pools were to be an exception rather than the rule, and that voluntary compliance with security guidelines was a condition of access to U.S. military forces. These principles form the bedrock that governs the current military-media relationship.

Almost as soon as these new guidelines were signed into policy, they were put to the test. Operation Uphold Democracy in Haiti showed that there could be common ground and accommodation between the media and the military in covering U.S. Armed Forces in conflict. One of the many lessons learned during Uphold Democracy was how to strike a balance between operations security and the public's right to know.²⁷ Unique to the Haiti operation was the concept of embedding or merging the media into operational units before the invasion began.

As planning began, the operation's commander noticed that missing from the planning groups were

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reporters who would cover the final planning and initial assault.²⁸ The U.S. Atlantic Command requested that the DOD media pool be allowed to accompany the assault troops. In addition to being given access to the fighting units, the media pool members were thoroughly briefed on the plans for the invasion. As events turned out, the forced entry into Haiti did not take place because of the accords arrived at between U.S. President Jimmy Carter and General Raoul Cedras. Nonetheless, the idea of media inclusion was validated at all DOD levels. Merging reporters into tactical units gave them a frontline seat as the remaining phases of the operation unfolded.²⁹ Although many reporters were thoroughly briefed on the operational plan before operations began, there were no leaks.³⁰

The evolution of official policy on media coverage of military operations has mirrored the militarymedia relationship itself. Of particular note is the recent addition of two very important concepts of which Army leaders need to be aware: security at the source and embedding. Security at the source means military personnel being interviewed must ensure that they do not reveal classified information. Embedding means treating members of the news media as members of units and allowing them to accompany the units on missions.³¹

Since the end of the Vietnam war, the military has made significant strides in reducing friction with the media. It is worth noting, however, that the evolution of military-media policy was hampered by the "post-Vietnam blame the media" attitude many military leaders demonstrated. This attitude fostered mistrust, which unfortunately many Army leaders still harbor. Of course, a certain degree of skepticism is both expected and healthy, especially in the planning arena, because of the sensitivity of classified information. The military's perspective is that any measure designed to protect the lives of military personnel is justified. On the other hand, the media's perspective is that too much information is classified or restricted. The media further suspect that restrictions simply cover up misdeeds.³²

From World War II to the present, several trends have emerged within the military-media relationship. These include an increased diversity of military operations, the increased operations tempo of the armed services, the increased number of media outlets and personnel covering military operations, advances in journalistic technology, and increased media competition. The sum of all these trends, multiplied by the fact that "few stories compare with that of military forces in action," equates to a major change in the military-media operating environment.³³ The significance of this change requires Army leaders to become more accepting than ever before of the role the media play in American society.

When considering the ongoing debate with the media, Army leaders often do not account for a third important participant in the debate—the American public. It is the Army's relationship with the American public that provides the philosophical basis of our relationship with the media. Army leaders who ignore this relationship, and the roles played within it, are simply shirking their duty.

The U.S. political system's philosophy as described in the Constitution is that sovereignty ultimately resides with the citizenry. The military's authority to operate flows from and is limited by the trust that people have for the military. Hence, Army leaders are ultimately accountable to the American public for their actions. The public reserves the right to inspect what the military is doing and to decide whether it is getting the job done. The media, as provided for by the first amendment, assist the public in developing those judgments.³⁴ One can certainly argue as to the relative efficiency and honesty with which the media perform this role. One must keep in mind a fundamental observation of the American press as Alexis de Tocqueville articulated in Democracy in America: "I love it more from considering the evils it prevents than on account of the good it does."³⁵ In the Army, however, there is little latitude within which to criticize the media's performance, nor should significant effort be expended to control or manipulate it. Indeed, the military's role in overwatching the media is limited to preserving operations security and attempting to accurately portray events to the public.

In *On War*, Carl von Clausewitz identifies a holy trinity of the people, the military, and the govern-

ment without whose support the effective conduct of war was not possible. Clausewitz argued that the active support of each segment was critical to success.³⁶ In American society, the media plays a unique and important role by serving as the critical information link among the three elements. The effective conduct of military operations demands that we communicate with the people; therefore, Army leaders must engage the media.

Ultimately, the Army's role is to fight and win to preserve American society. America's moral courage will be measured by the moral courage the Army demonstrates on the battlefield. The Army's value to the nation, then, is displaying the moral character to do the right thing. In a sense, the Army's role is to reflect the enduring values of loyalty, duty, respect, selfless service, honor, integrity, and personal courage. As leaders, we will fail miserably in this challenge if we do not seize every opportunity to communicate with the American public. Mistrust of the media is akin to mistrust of the American public. Media coverage of military operations has a direct effect on public opinion and will continue to influence wars and conflicts at all levels.

The net effect of media coverage of military operations is best summed up in a passage written by Edwin Godkin during the Crimean War: "I cannot help thinking that the appearance of the special cor-

Army leaders often do not account for a third important participant in the debate the American public. It is the Army's relationship with the American public that provides the philosophical basis of our relationship with the media. Army leaders who ignore this relationship, and the roles played within it, are simply shirking their duty.

respondent in the Crimea . . . led to a real awakening of the official mind. It brought home to the War Office the fact that the public had something to say about the conduct of wars and that they were not the concern exclusively of sovereigns and statesmen."37

Then, as now, reporting military operations significantly affects the operation by submitting the military immediately to the public's scrutiny. The media allow the nation to account for its military activities and help create a conduit for a collective conscience. It is to that conscience that military leaders owe their primary allegiance. Most of the military's communication with the public is channeled through the media. Military leaders must accept the reality that dealing with the media is part of their past, present, and future. As Walter Cronkite is so fond of saying, "That's the way it is!" MR

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This article examines the effect of the recently updated U.S. Army Field Manual 22-100, Army Leadership, on situational leadership theory. It reviews the development of adaptive leadership models and theory and considers how refinements in situational leadership theory might affect combat leaders in today's contemporary operating environment.

A DAPTIVE LEADERSHIP in today's Army is increasingly important with technological changes and the force-structure downsizing that all military services are experiencing. Adaptive leadership is necessary in today's complex and ambiguous military environment. Technology and the availability and flow of information contribute to a very fluid operational situation.¹ US Army Field Manual (FM) 22-100, *Army Leadership*, has added transactional and transformational leadership styles of directing, participating, and delegating.² These styles add to the leader's arsenal of leadership styles that can be used to shape behavior, emotions, and the organizational climate.

FM 22-100 stresses that leaders must be able to adjust their leadership style to the situation as well as to the people being led. Leaders are not limited to one style in a given situation and, with the nature of the battlefield today and tomorrow, being able to adapt appropriate styles will influence soldiers' success. Techniques from different styles are used to motivate people and accomplish the mission. A leader's judgment, intelligence, cultural awareness, and self-control "play major roles in helping you choose the proper style and the appropriate techniques for the task at hand."³

The Army has pursued the idea of adaptive leadership since the formation of the Continental Army. Because organization, control, discipline, and teamwork were lacking, General George Washington sought the aid of Baron Frederich von Steuben, a former Prussian staff officer of Frederick the Great, to write drill movements and regulations to instill discipline in "an Army of several thousand halfstarved, wretched men in rags."4 From the beginning of U.S. military psychology almost 100 years ago, there has been a preoccupation with predicting effective military behavior, particularly in leaders. Most of the early military classification and qualification tests sought to predict behavior under the common assumption that certain ideal behavior would inevitably lead to highly desirable performance as a leader.5

Military leaders must make use of the studies and histories of military units and figures, and not repeat mistakes of the past.⁶ Leaders should learn from the past and focus on issues that concern soldiers simultaneously with mission accomplishment. Leadership effectiveness cannot be overemphasized in leader development and training, especially leader effectiveness in combat. Military leadership studies must focus on military leadership instead of management. Behaviors of corporate managerial leaders do not correlate directly to the behaviors of military leaders although the correlation has been assumed in military leader development programs. Modern military training for combat leaders tends to stress the managerial functions of the officer and his abilities to manage materiel and personnel. This managerial training generally receives greater emphasis than tactics.⁷

Military leaders are different from leaders in other types of organizations because they are appointed and not emergent.8 The military leader's authority to lead derives from the Constitution. If he cannot pull his followers by force of character, he can push them by force of law. Military leadership is essentially autocratic and operates in a wheel rather than an all-channel communication net. The flow of communication, or essential information, is between the leader and his subordinates rather than among all the members of his group. The wheel net, though no doubt gratifying to autocratic leaders, produces more errors, slower solutions, and reduced gratification to the group than does the more democratic all-channel net. Effective leaders are able to adjust communication flow by adapting situationally appropriate leadership styles.

In light of these considerations, military leadership has been effective. The military leader, like any other leader, has two roles: the task specialist and the social specialist. His primary concern is to achieve the group's goal of defeating an enemy in combat. For such a role, being likable is a less-important trait than being more active, more intelligent, or better informed than his followers. As a social specialist, a leader's main function is preserving good personal relations within the group, maintaining morale, and keeping the group intact. In a military environment, the functions of a successful social specialist prevent mutiny and reduce such symptoms of low morale such as absenteeism, desertion, malingering, and crime. The social function achieves cohesion as a team or unit. The ideal military leader combines excellence as a task specialist with an equal flair for social or heroic leadership.

Predictors of successful combat leadership include having first-level leadership experience, time in the unit, unit relationships, job knowledge, and the concomitant security of knowing the right thing to do. All these lead to the confidence required to perform well under threatening conditions.⁹ Social support is more important for successful and effective leadership at lower levels than at higher ones. The characteristics that earmark the effective combat leader may not be the same as those that identify the appointed leader.¹⁰

Military leadership studies must focus on military leadership instead of management. Behaviors of corporate managerial leaders do not correlate directly to the behaviors of military leaders although the correlation has been assumed in military leader development programs.

T.O. Jacobs contends that battlefield leaders must know the dynamics of Army rules to meet challenges and produce untried solutions. The leader must continuously seek alternatives to apply to new situations. Leaders at lower levels must have more initiative and foresight and decreased sensitivity to rank differences. This shifts the leader's focus from who is right to what is right, an adaptive view that relies on information to meet technical challenges. Leaders all levels must possess higher technical competence and have the ability to apply that expertise while maintaining cohesive units.¹¹

Because of stress in the military environment, leaders must generate high unit cohesion before hostilities begin. Leaders must be able to operate autonomously, building respect and values for maintaining the purpose and will of their units in combat. They need greater flexibility and adaptability to deal with surprise. Units must be able to operate expediently to meet the challenge of unanticipated events. Flexibility must be a unit norm and an individual characteristic. Also, units must have the opportunity to train in unfamiliar situations, to learn from mistakes, and to learn the process of thorough thinking so that the initial shock of combat stress does not cause cognitive freezing.

Leaders must have the capacity to create a climate for more junior leaders that permits rational risktaking. The climate must foster training, coaching, and developing subordinate leaders.¹² The increasing level of sophistication in military hardware, tactics, and techniques require the military leader to empower the subordinate to take on more complex tasks with fewer resources.¹³ The leader must be aware of power and politics, which previously have been a prerequisite for only the most senior leaders.¹⁴

Early opportunities for varied responsibilities support leader development in the Army, and the Army does this better than any other institution, especially among junior and noncommissioned officers (NCOs). However, the private sector left the Army behind in the use of developmental feedback from peers and subordinates.¹⁵

To improve leadership, one must define an effective leader. An effective leader should be someone who exercises transactional leadership and puts leadership theory into practice. There must be a focus on selecting programs that identify personal leadership traits related to leader effectiveness.

Leaders can improve by combining conceptual training, developmental feedback, an environment for continuous learning, a performance appraisal system that attends to both development and selection, and a system of promoting leaders based on more than written reports. This combination has proven effective in the private sector but is deficient in developing military leaders in the field.

To improve leadership, one must define an effective leader. An effective leader should be someone who exercises transactional leadership and puts leadership theory into practice.¹⁶ There must be a focus on selecting programs that identify personal leadership traits related to leader effectiveness. The concept of leadership that most consistently matches the military ideal seems to emphasize transformational leadership training.

The common themes of military leadership training are a focus on contingency leadership principles, followership that precedes leadership activities, leadership experiences combined with feedback, and formal classroom training designed to provide the theoretical basis for leadership experiences. A variety of empirical studies have demonstrated that transformational leadership augments or supplements transactional leadership, and training in that area would be a beneficial addition to leadership training programs.¹⁷

Personal traits, attitudes, values, and past experience influence leadership style and performance. Situational factors and the ability and motivation of one's followers also influence leadership style and performance. A leader must correctly assess situational factors and adapt the most appropriate and effective leadership style for that situation. A leader must also augment transactional leadership behavior with transformational behavior to impact his followers significantly.¹⁸

James Hunt and John Blair describe in their heuristic model the elements that impact today's military leaders.¹⁹ As shown in Figure 1, the model is designed to promote understanding of the key leadership characteristics on the future battlefield and the magnitude of their implications for soldiers, commanders, and for the Army as an organization. The model includes environmental and organizational factors (macrocontingency factors); those situational factors specific to a unit, task and individual (microcontingency factors); and a range of individual and unit effectiveness outcomes. The model recognizes the situational variables impacting leaders and their effect on the battlefield.

Situational Leadership Theory

Paul Hersey and Kenneth H. Blanchard's Situational Leadership Theory (SLT) has been used by the military services for years in leader training and development.²⁰ It includes dynamics of the heuristic model and addresses the needs of military leaders.²¹ SLT emphasizes the combination of task and social specialist, and active situational leadership versus management.²² SLT also addresses leadership style and performance issues.²³

All military services have based the tenets of leadership on the SLT leadership model.²⁴ During the 1970s and 1980s, the Army used SLT and the leadership effectiveness and adaptability description instruments as leader development tools for organizational effectiveness staff officers. The U.S. Air Force uses the model in most of its leadership training for officers and NCOs.

Although Hersey and Blanchard's SLT and Hunt and Blair's heuristic model have utility in leadership training, David D. Van Fleet and Gary Yukl warn, "great care should be taken when attempting to generalize any leadership theory developed for business organizations or military. To be useful within military organizations, a leadership theory must have been demonstrated to fit those organizations."²⁵ The same holds true about generalizing



Figure 1. Heuristic Model of Leadership (Hunt and Blair, 1985)

across military organizations, such as drill and nondrill situations and combat and noncombat situations, as well as combat and administrative or support units. Other caveats include the distinction among sea, land, and air services, and unit size or organizational level. Four military studies-two combat and two noncombat settings-using a taxonomy of 23 leadership behaviors, revealed that "it was evident that the relative importance of different leader behaviors depended to a great extent on the nature of the situation."²⁶ The 1990 FM 22-100 contained the principles of SLT and the situational factors of the leader, the led, the situation, and communication which indicates the appropriateness of the military setting for testing SLT and its inclusion as a model in leadership training.27

SLT was derived from the Life Cycle Theory of Leadership to develop a conceptual framework to pinpoint key situational variables. It uses as its basic data a leader's daily perception and observation of his environment rather than research data. The theory was designed for the practitioner's use.

In SLT, leader/follower relationships are not necessarily hierarchical.

Any reference to leader or follower implies potential leader and potential follower. The concepts are intended to apply regardless of attempts to influence a subordinate's behavior, the boss, an associate, a friend, or relative.

Current SLT defines maturity as the capacity to set high but attainable goals (achievement motivation), willingness and ability to take responsibility, and education and experience of the individual or a group. These variables of maturity relate only to a specific task to be performed.²⁸ People are more or less mature in relation to a specific task, function, or objective that a leader wants to accomplish. Individuals in the group are not necessarily at the same maturity level. The differences between education and experience are minimal, with education being learned in a formal classroom and experience learned on the job.

Responsibility has dual factors of willingness and ability. There are four combinations of these two factors: individuals who are neither willing nor able



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to take responsibility; individuals who are willing but not able to take responsibility; individuals who are able but not willing to take responsibility; and those who are both willing and able to take responsibility. The highest maturity level is the last combination. In terms of task-relevant maturity, Hersey and Blanchard emphasize job maturity as the ability and technical knowledge to do the task and psychological maturity as self-confidence and selfrespect. The theory "focuses on the appropriateness or effectiveness of leadership styles according to the task-relevant maturity of the followers."²⁹ Hersey and Blanchard illustrate this cycle with a bell-shaped curve going through the four leadership quadrants of the effectiveness dimension of the tridimensional leader effectiveness model.

The situational leadership model rests on two concepts: one, that leader effectiveness results from using a behavioral style that is appropriate to the demands of the environment; and two, that leader effectiveness depends on learning to diagnose that



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environment.³⁰ Diagnosing the environment is the first of the three competencies of leadership.³² Adapting to the environment with the appropriate leadership style and communicating that style to subordinates are the other two leader competencies.

Environmental variables, except job demands, have two major components: style and expectations. Style is defined as consistent behavior the leader uses when working with and through other people, as perceived by those people. Expectations are defined as the perceptions of appropriate behavior for one's own role or the roles of others within the organization. Expectations define what individuals in organizations should do in various circumstances and how they think others—supervisors, peers, and followers—should act in their positions.³²

Appropriate leadership style is determined by the leader's assessment of an individual's maturity level relative to the task at hand. Once the leader identifies the maturity level, he can identify the appropriate leadership style (the curve determines the appropriate leadership style). Fundamental to the theory is the leader's ability to adjust his style to meet the maturity of the followers. The indication that the leader is using the appropriate style will be performance or results.

A major criticism of SLT has been its definition of maturity.³³ In more recent SLT models, follower maturity is replaced with follower readiness. Like maturity, readiness is defined as the "extent to which a follower demonstrates the ability and willingness to accomplish a specific task."³⁴ Other than the change in terminology, the components of readiness and maturity are basically the same.

In the 1996 edition of *Management of Organizational Behavior: Utilizing Human Resources*, the continuum of follower readiness is expanded to include behavioral indicators of the four readiness levels.³⁵ This is yet another tool to assess the ability and competence, or motivation, of followers and offers the leader clues to diagnose the situation correctly.

The expanded situational leadership model in Figure 2 shows the relationship of leader behavior or style to subordinate readiness. The model also offers pertinent definitions.³⁶ In practical applications of the model, a leader's number one error is incorrectly diagnosing a person who is inse-

cure or apprehensive as being unmotivated.³⁷ Willingness is the combination of confidence, commitment, and motivation. Ability is the knowledge, experience, and demonstrated skill that the follower brings to the task and is based on an actual display of ability. Leaders should not select a leadership style by assuming what the followers should know.

In situational leadership, the follower determines the appropriate leader behavior. Situational leadership attempts to "improve the odds that managers will be able to become effective and successful leaders."³⁸ A leader's effectiveness depends on the person's or group's readiness level. In the expanded situational leadership model, the leader diagnoses the level of readiness, adapts the appropriate highprobability leadership style, and communicates the style to influence behavior effectively. The leader helps the follower grow in readiness by adjusting leadership behavior through the four styles along the leadership curve. The leader accomplishes this evidence of SLT's effectiveness.³⁹ The results of that research support the utility of the managerial development theory in Gumpert and Hambleton's research. Managers trained in SLT do better under conditions of change than managers who are not.

Hersey, Blanchard, and Johnson write that the basic principles of the model have not changed since the theory's inception in the 1960s, and there is even greater emphasis recently on the task or the activity the leader is attempting to impact.⁴⁰ SLT is not as much about leadership as about meeting follower needs. This task-specific focus of the model is the primary reason that the followers' maturity gives way to task the followers' readiness.

Although the model is still evolving and Hersey and Blanchard continue to collaborate on refining SLT, they went their separate ways in 1979. Hersey still calls his model SLT, using the concepts and descriptors discussed here. Blanchard and his associates call their version of the model SLTII, and they focus more on developing groups and teams.

growth in readiness by reinforcing successive approximations of the desired behavior. The style is appropriate only as far as the followers are productive. Change may occur in the maturity level of the follower, new technology may be introduced in the organization, or a structural change may occur requiring the leader to move backward on the curve to provide the appropriate level of support and direction.

The leader makes several decisions in determining the appropriate leadership style. The first is the objective and the individual or group activities that the leader wants to influence. The next is determining the group's readiness level, followed by determining the appropriate leadership style. The leader then assesses results and reassesses the accomplishment of objectives and determines if further leadership is indicated. If there is a gap between expected performance and actual performance, then additional leadership interventions are in order and the cycle is repeated. Tasks, readiness, and results are dynamic, and leadership is a full-time job.

Various groups and organizations have used SLT for more than 25 years. More than one million leaders receive SLT training annually. Hersey, Blanchard, and Johnson use the research of R.A. Gumpert and R.K. Hambleton as



Follower Readiness

High	Moderate		Low
R4	R3	R2	R1
Able and Willing	Able but Unwilling	Unable but Willing	Unable and Unwilling
(Confident)	(Insecure)	(Confident)	(Insecure)
FOLLOWER		LEADER	
DIRECTED		DIRECTED	

Figure 2. Expanded Situational Leadership Model (Hersey, Blanchard, and Johnson, 1996)

All military services have based the tenets of leadership on the SLT leadership model. During the 1970s and 1980s, the Army used SLT and the leadership effectiveness and adaptability description instruments as leader-development tools for organizational effective staff officers. The U.S. Air Force uses the model in most of its leadership training for officers and NCOs.

Maturity and readiness in SLTII are labeled development (D1, D2, D3, and D4). Those stages of development are orientation, dissatisfaction, resolution, and production. Individual growth goes from the enthusiastic beginner, to the disillusioned learner, to the capable but cautious performer, and finally to the self-directed achiever. Leadership styles, which move the followers from the stages of developing to developed, are directing (S1); coaching (S2); supporting (S3); and delegating (S4). The principles of SLT are otherwise used the same in SLTII.⁴¹

Military Applications

Hersey and Blanchard's 1969 theory is practical and easy to understand, but its widespread use calls for in-depth empirical testing to determine its validity as a tool for leaders to impact an organization and people in the organization. The theory's principles have been studied in various organizations, from corporations to schools to churches, but there is little literature on military use. Using a military sample to test the theory would extend the body of knowledge on SLT and leadership research in general and test the model using a different organization.⁴²

In a recent study conducted in a U.S. Army National Guard air assault battalion, the premises of the theory were supported although statistical support of the model's primary assertions were not supported.43 The study tested Hersey and Blanchard's 1996 SLT in a military population using the instruments developed for the theory. This study is significant because it uses the military environment to test SLT by using a research design that incorporates leadership effectiveness and adaptability descriptions (LEAD) and readiness scale instruments originally developed for SLT. The design uses the leader style/subordinate maturity match, outcome measures of performance, satisfaction with supervision, and job satisfaction. The military environment provides a clear delineation of relationships between subordinate and superior relationships where the superior is responsible for developing subordinate's maturity. The study uses a 360-degree evaluation of the perceptions of leader effectiveness and provides an organizational leadership effectiveness average or composite that is correlated with the outcome measures.

Feedback on the leader's effectiveness is provided with self, peer, and subordinate as well as superior evaluations. The military services use this type of feedback for leader training in academic settings but not in the field or fleet.

In a study at the U.S. Naval Academy, anonymous feedback provided to upperclassmen resulted in lower discrepancies between self-ratings and subordinate ratings of transformational leadership and has improved subsequent leader performance.⁴⁴ Leadership performance is improved through education and experience. Feedback from followers, peers, and superiors is important to improve leadership performance.⁴⁵

Leadership effectiveness and its impact on unit morale and cohesion are assessed in this study as an outcome measure using a job description index (JDI) and an organizational climate survey. The Army does not routinely use climate surveys, although it frequently collects data on equipment and financial readiness. The absence of a parallel reporting emphasis on the state of the human element relegates that aspect of combat readiness to a secondary position.⁴⁶

The data shows that the outcome measures employed indicate that the leadership is performing effectively and that satisfaction with supervision, the job, and the organization is high. Leaders considering the readiness or maturity level of subordinates are employing the appropriate leadership style. These trends seem to support SLT, but statistical tests indicate otherwise. Given leadership effectiveness in this situation, the leaders are unable to adjust their styles to developmentally improve the readiness of the unit. The predominant leadership style in the organization is style 2 (sell). The adaptability score indicates adaptability of leaders to use situationally appropriate leadership styles. The adaptability score in this example shows that leaders in this organization do not vary their style appropriately to the readiness levels of the follower.

Readiness scores indicate a relatively high readiness among respondents. The score is above the level of R3, defined as a level where subordinates are able to complete the tasks but are not willing. Although the best leader style in this situation is S3 (participate), the probability of success using style S2 (sell) is high while success with S4 (delegate) is



To develop subordinates to become effective leaders and operate as cohesive teams, leaders must be adaptable in their own leadership styles to move toward participative leadership, then empower the subordinate through delegation of authority. The ability to recognize the importance of the leader being active in developing the subordinates to an R4 state, where empowerment is practical, is the utility of the situational leadership model.

not as high.⁴⁷ The probability of success using S2 with R3 in this example may explain the positive results of outcome measures.

Performance scores indicate a high level of performance corresponding to the high level of subordinate readiness. The job in general (JIG) and the JDI, also employed in this study, indicate high job satisfaction and satisfaction with leaders. The organizational climate survey and the strength management and attrition model also indicate high-profile averages in areas of leadership, to include NCO and officer leadership, accessibility to leaders, and unit cohesiveness. Time in the organization, in the same military occupational specialty, and with the same supervisor contributed to readiness levels and high scores on satisfaction scales. Respondents were mature and well educated. Matching subordinate's leadership style with the readiness level the results in greater leader effectiveness, with a subsequent increase in the outcome measures of performance and satisfaction.

Correlations and statistical analyses show support for SLT's interaction between style and readiness match, and performance but not with results of the JDI or JIG. The findings of this study verify what C.F. Fernandez and Robert P. Vecchio concluded in their research on SLT.⁴⁸ The statistical techniques used offer little supporting evidence for situational leadership even using LEAD and the readiness scales designed for situational leadership.

Implications for Leadership Training

FM 22-100 states that "effective leaders are flexible enough to adjust their leadership style and techniques to the people they lead. Some subordinates respond best to coaxing, suggestions, or gentle prodding; others need, and even want at times, the verbal equivalent of a kick in the pants."⁴⁹ Where leaders use style S2 (sell), subordinates are involved in decisionmaking to the extent that they provide information about the decision. The decision is still the leader's; however, even subordinates' limited involvement in decisionmaking gives them some ownership in the decision, raising their level of commitment to it. The S2 style is appropriate for moderately competent subordinates who support organizational goals. In this example, the respondents'

The SLT model does a good job highlighting the appropriate leadership style based on follower maturity but does not adequately address... the level at which leadership is exercised;... combat demands; staff versus operational leadership; or differing styles appropriate to service, joint, or combined leadership.

readiness level is R3 where subordinates are able but not willing. They have the knowledge and ability to do the task but are reluctant to complete it on their own, and feedback in task performance is solicited.⁵⁰ When the leadership style is nearly optimal, given subordinates' readiness, a key is how much better the overall outcome measures would fare if the leader had greater flexibility to change his style as the situation allows. The change from a more directive style to one where the subordinates are self-sufficient is the basis of Army leadership in developing subordinates. FM 22-100 states that "in order to get their best performance, you must figure out what your subordinates need and what they are able to do-even when they don't know themselves."51 The manual goes on to say that "competent leaders mix elements of all these styles to match to the place, task and people involved. ... If you can use only one leadership style, you're inflexible and will have difficulty operating in situations where that style doesn't fit."52

Although the data in this research does not support the precepts of SLT, the outcomes of performance and satisfaction, given the readiness level of R3, indicate effectiveness of the leader in a static style readiness even though adaptability is low. B.R. Cook finds that U.S. Air Force officers agree that they have one leadership style and are overly reliant on that style.⁵³ That style is also predominantly S2. The U.S. Air Force uses SLT extensively in its leadership training and has most adequately investigated the model's shortcomings. A 1994 review of SLT by the Air University Leadership and Management Program Advisory Group found that, while the general feeling is that the model is useful, there are some significant limitations. The SLT model does a good job highlighting the appropriate leadership style based on follower maturity but does not adequately address other military considerations. These include the level at which leadership is exercised; different styles that may be required because of combat demands; staff versus operational leadership; or differing styles appropriate to service, joint, or combined leadership.

Leaders may not recognize situations where different leadership styles are more appropriate or may not have the skills necessary to apply the appropriate behaviors where delegation or a more directive style is more effective. The key factor underlying SLT is the ability of the leader to adjust styles to meet the subordinates' maturity demands. Whether or not the leader is using the appropriate styles should be seen in the unit's outcomes.⁵⁴

FM 22-100 incorporates transformational and transactional leadership styles in addition to the three styles-directing, participating, and delegating-in the older version.⁵⁵ The transformational leadership style focuses on inspiration and change and allows the leader to take advantage of the skills and knowledge of experienced subordinates. This style is appropriate for the R3 and R4 readiness levels where subordinates are the most ready. The transactional style focuses on rewards and punishments. The leader only evokes short-term commitment from subordinates. This style is not developmental, discourages the subordinates from risk-taking or innovation, and is only marginally appropriate for the R1 readiness level. FM 22-100 advocates combining the two styles or using techniques from the two styles to fit the situation. The intent of combining styles is the same as a leader's flexibility in using the appropriate style of leadership.⁵⁶

Several studies have emphasized the training value of SLT. In the military environment, the ultimate goal of effective leadership is to accomplish the mission. Subordinate leaders gain experience, knowledge, and skills to be accountable for their actions as senior leaders delegate to them the authority to influence. The leader's effectiveness based on outcomes similar to this study can assess the training value of SLT, particularly the effectiveness dimension where leaders recognize the appropriate leader style to use in different situations.

At one time, Army recruiters filled manpower needs by focusing on high school students who dreamed of military service and a free college education. The Army's operational tempo has increased to the point that the Army is not meeting its manpower needs, and it cannot fill short-term needs fast enough by waiting for high school seniors to graduate. Newly recruited soldiers are being trained and assigned to operational units within months. With soldiers deployed to 65 different countries, the challenge of being ready to handle these immense, continuous worldwide deployments to meet operational and strategic needs is an Army leadership priority. The military is portrayed as overworked, underpaid, and underresourced. Reports have suggested flaws in the Army's leadership as the cause. Leaderdevelopment programs—or the lack thereof—and promotion systems are not up to the task of getting the right people in the right jobs with the momentum to effect change.⁵⁷ The propensity for military service among young people has dropped, so recruiters pitch enticements that include sizable bonuses to attract young men and women.

Following the recruiting challenge comes the retention challenge. Deployment burnout, doing more with less, and the new Army culture's lack of support for family togetherness has soldiers leaving the Army. With a strong economy, soldiers who leave the service are not afraid of being jobless, and a new Army program guarantees positions in major corporations for recruits who complete their enlistments. Retention is a morale and cohesion issue, both of which are outcomes of effective leadership.⁵⁸

Former U.S. Army Chief of Staff General Dennis J. Reimer stated that "with the current leadership doctrine and the tradition of leaders who truly care about soldiers, these challenges can turn into tomorrow's opportunities."59 Leadership is an essential element of combat power and cannot be left to chance. Leader development must be carefully planned and executed just like any other operation. Lieutenant Colonel Donald M. Craig describes a leader development model consisting of three pillars: institutional training and education where skills are acquired as well as knowledge to perform duty position requirements; operational assignments to refine the leaders' skills, broadening his knowledge and shaping behavior and skills; and self-development, where leaders grow from learning, experience, and personal study.⁶⁰ This model is an amplified version of Department of the Army Pamphlet 350-58, Leader Development for America's Army.⁶¹

Important in this leader development process is feedback from peers, subordinates, and supervisors as well as continuous self-assessment. The thorough study of other leaders provides leaders a perspective to analyze effectiveness and to take what works and incorporate it into their own self-development process. Critical leader development includes a thorough understanding of subordinates' strengths, weaknesses, and professional goals. The leader must be aware of his subordinates' readiness.

Colonel Maureen Leboeuf includes empowerment along with formal schooling and leadership training in her leader development philosophy.⁶² Empowerment is one of the hardest tasks for leaders to master because it means delegating authority. Delegation encourages leadership growth within the organization. Leaders developing leaders has

Environmental variables . . . have two major components: style and expectations. Style is defined as consistent behavior that the leader uses when working with and through other people, as perceived by those people. Expectations are defined as the perceptions of appropriate behavior for one's own role or the roles of others within the organization.

always been the Army's leader development philosophy, the basics of which are learned in one-onone situations or in small groups or teams. The critical leadership task in combat becomes motivating soldiers. Motivation includes morale factors, the key to which is unit cohesion. The Army does not stress the linkage among leadership, morale, and combat motivation.

Some of this morale building in a combat environment is done through communication: informing soldiers during combat of the actual situation to alleviate fear caused by the unknown.⁶³ Hersey and Blanchard's 1988 SLT includes leaders using the appropriate leadership style relative to subordinates' readiness.⁶⁴ That style gradually moves to less task and less relationship behaviors as the subordinate is more willing and able to complete the task. SLT stresses communicating that leadership style to the subordinate.

To develop subordinates to become effective leaders and operate as cohesive teams, leaders must be adaptable in their own leadership styles to move toward participative leadership, then empower the subordinate through delegation of authority. The ability to recognize the importance of the leader being active in developing the subordinates to an R4 state, where empowerment is practical, is the utility of the situational leadership model.⁶⁵

Adding transactional and transformational leadership to directing, participating, and delegating leadership clarifies SLT in Army leadership. Transformational leadership is the long-term state of leadership in Army units where the S4-R4 style/readiness match exists.

Transactional leadership is used only short-term in situations where there is no time to react to other than directive leadership. Examples of these situations include safety and underfire issues.

Choosing to use directive leadership or delegation involves more situational factors than the readiness of the subordinates. The appropriate style changes as the leadership environment changes. Combat requires more unified and more autocratic leadership. The interaction between commanders and subordinate leaders is verbal and informal. On the other hand, the staff leader's style is bureaucratic and participative, and the interaction between staff members is written and formal. The level and type of the organization also affect style.

Hersey, Blanchard, and Johnson incorporate SLT in crisis leadership situations such as combat, staff operations management, transformational leadership, and performance management.⁶⁶ They treat these all as situations where the style of leadership is adapted appropriately for optimal effectiveness. These authors advocate that the limitations of the model brought out by the military services are situational opportunities to apply their theory.

Situational leadership is a popular and widely used model that emphasizes using more than one leadership style, particularly in developing subordinates in the military. It assumes that as subordinates gain training, experience, and guidance, they will be better prepared to accomplish the goals of the organization with less leader influence. Eventually, the subordinate will be the leader. It is a complex model with complex variables. Leadership and leader styles are concepts that defy definition. Follower readiness is a multifaceted dimension that is difficult to measure. The situational leadership model continues to be used in the military services as a training vehicle in virtually all formal leadership training programs.⁶⁷ MR

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MRInsights

Urban Warfare: U.S. Forces in Future Conflicts Captain Steven E. Alexander, U.S. Army

The U.S. Army's transformation has been predicated on the assumption that the preponderance of future strategic, operational, and tactical missions, whether offensive, defensive, or stability and support operations, will be conducted in urban environments. The assumption is based on the shift, over the past several decades, of populations worldwide into urban areas. Most stability and support operations in urban areas are necessary because of conflicts that arise from the suffering that occurs in the world's densely populated cities.

There is little disagreement about the need to conduct stability and support operations in urban areas; however, is the validity of the assumption that operations will be conducted primarily in urban areas the same when it comes to offensive and defensive operations? If so, should there be an attempt to engage an enemy on predominately urban terrain?

Defense in Urban Terrain

U.S. Army and joint doctrine espouses victory through decisive offensive operations. Can an armed conflict be won through decisive offensive action focused in an urban area? History indicates that the answer is no. Because of its highly restrictive nature, urban terrain is best suited to the defender.

World War II. During World War II, the German High Command fell victim to the belief that the German army could win a decisive victory in an urban setting on the Eastern Front. The Germans had won several victories within Soviet cities, such as Smolensk and Kiev, before being defeated in Leningrad and Stalingrad in 1943.¹ The victories at Smolensk and Kiev had been tactical, however.

At Leningrad and Stalingrad, the

Germans sought strategic decisions on the ground outside the cities where the terrain best suited German capabilities.² The defenders had opted not to—or simply were unable to—seek a strategic decision any place within the Soviet Union. Arguably, once the Germans decided to make the urban areas decisive, the Soviets were able to grasp the initiative. By attempting to seek a strategic-level decision by attacking both major cities, the Germans ended up losing on all levels—strategic, operational, and tactical.

The Germans committed the better part of two well-trained, wellequipped, experienced armies—the 6th and the 4th Panzer—at Stalingrad.³ Despite having a less trained, less technologically advanced force, the Russians halted the attack decisively.

The German advantage in armor and air combat power and technology, primarily in communications, was mitigated within the urban battle space of Stalingrad and Leningrad. The Germans could no longer use the tactics that had so well suited their organization. They lost even more advantage once German Mark III/IV tanks and Stuka ground attack aircraft were tasked to execute offensive tactics in highly restrictive terrain—functions for which they were not designed.

The Russians were able to use the terrain to level the playing field. They had unsuccessfully defended against German armor formations on open plains, but within cities Russian infantry was able to close with German armor. This negated any advantage the Germans enjoyed in firepower and maneuver. In the 1943 pursuit following the encirclement of the 6th Army in Stalingrad, the Russians forced their own strategic-level decision through a counteroffensive

but not within the restricted nature of either city.⁴

Vietnam. Another example of failed offensive action on the strategic level is the Tet Offensive during the Vietnam War. The North Vietnamese Army (NVA) succeeded strategically by seizing key areas in several cities throughout South Vietnam, then by defending them against combined U.S. and South Vietnamese assaults. While the NVA lost the battles on tactical and operational levels through the offense, they were successful strategically through the defense, despite their intent to end the war that year through the use of offensive actions during Tet.5 The NVA did not win by attacking but by defending and creating mass civilian and military casualties.

U.S. Armed Forces lost because they were forced to attack and remove the defenders from highly restrictive terrain within cities such as Hue. Eventually, U.S. forces won the tactical fight, but only after exposing the U.S. population to the war's brutality, in part because the media can more readily report from urban areas. Tet became a turning point, and seven long years later, U.S. Armed Forces ceded the South after the NVA unleashed a conventional attack to settle the conflict.⁶

Defense in Future Wars

That the U.S. military will face similar problems and results with respect to casualties and collateral damage in future offensive actions in urban areas is safe to assume. No modern force has achieved strategic-level victory through an offensive campaign waged in an urban environment. The simple fact is that doctrine based on offensive action loses tempo in severely restricted terrain. Any technological advantage an armed force might have is mitigated in similarly restricted terrain. Synchronization and coordination, critical to the combined arms operations necessary to success in any conflict, are difficult to maintain once forces are engaged in combat within urban areas. So, why is the U.S. military preparing to deploy to and execute its offensively weighted doctrine in terrain that is notoriously evil to the attacker?

Casualties. If the U.S. military is involved in a major conflict that features urban combat as an everyday occurrence, it is sorely ill prepared. Historic casualty rates indicate that to attack and seize a defended city with a population of 500,000 would take at least 10 divisions-roughly 200,000 soldiers. After Stalingrad, the 6th Army had committed over 300,000 combat troops to action within the city.7 To enter such a conflict, current U.S. forces would need to drastically increase force structure and training. Training-up would mean a late entry into the area of operations, thereby defeating the purpose of maintaining an early entry force, or the force would suffer even greater casualties caused by committing an under-trained, undermanned force to the conflict.

Collateral damage. Collateral damage characteristic of high-intensity urban combat will leave modern cities in need of massive amounts of repair. As in the past, the United States would feel compelled to fund repairs. Should the U.S. military avoid seeking a strategic decision through offensive action in urban terrain? Does the U.S. military still lack the will to make the human commitment to such an attack? At the tactical and, in some cases, operational levels. U.S. forces can achieve success in urban attacks while still maintaining acceptable loss of life and materiel.

Winning Urban Conflicts

So how do U.S. Armed Forces win a conflict that features urban combat? One solution is to focus efforts on getting the enemy to fight on U.S. terms on the terrain of choice. At the strategic level, this could involve technologies and actions that would drive enemy forces from the urban area in question. **Controlling the city.** By dominating a city strategically, U.S. forces might be able to force an enemy to capitulate or force him to enter terrain where he can be annihilated. Domination would involve isolating the city and controlling major city works such as electricity, water, food sources, commerce, and religious gatherings. Forces can influence these things from a distance or through the limited tactical employment of troops. Control of a city does not necessarily mean its complete seizure and occupation.

Because U.S. strategic objectives are not planned for city areas does not necessarily mean some forces will not be deployed within it. Operational- and tactical-level objectives within the city will be necessary.

Electricity and water can be manipulated from afar, but safe commerce and religious gathering places are difficult to influence without the physical presence of someone holding a weapon. Therefore, U.S. military leaders must be prepared to commit forces at focused tacticaland operational-level objectives while remaining free from wholesale commitment to engagements within cities.

U.S. Armed Forces must be able to enter an urban area rapidly, arrive at the objective, and accomplish the mission without attempting to control the entire area. The objective would not be strategic but be focused on control of the city to force the enemy away from his urban base of operations.

Controlling the people. City populaces can be influenced to help force an enemy from an urban area. One of the reasons the threat will seek refuge in a city is to influence the population and to solicit support. If that assistance is not forthcoming, the enemy has little reason to remain within the city. U.S. Armed Forces alone might be able to encourage local citizens to resist the enemy. Diplomatic and high-level human-intelligence efforts are needed to garner the support of influential groups within a large city.

Strategic urban attack is complex and requires complex strategic courses of action that are deliberate yet flexible and that involve all assets to successfully conduct such an attack. Only in this manner can U.S. Armed Forces hope to force a determined enemy out of the security of restricted terrain.

Controlling the terrain. Tacticallevel urban operations should focus on controlling key terrain within the city in order to become the defender. This, coupled with strategic-level domination of the city, would force the enemy to engage in a costly offensive operation. This would make the enemy appear to be the aggressor and the cause of damage to the city's infrastructure. U.S. forces would gain the initiative through the tactical, defensive employment of troops within the city and would maintain that initiative with offensive strategic actions taken external to the city. To survive, the enemy would have to leave the city to seek refuge. Once in the open, a strategic mobile force could confront the enemy on the terrain of its choosing.

Operational-level forces must act as the link between the tactical initiative gained within the city and the maintenance of that initiative at the strategic level. Operational headquarters' primary role would be assisting in the coordination between strategic- and tactical-level headquarters.

Simultaneous actions focused at key points within the city, with the control of electricity and transportation, is an example of an operationallevel sequence that could lead to a strategic-level decision. Some operational-level actions would be within the city; others would be external to it. In either case, U.S. forces must avoid a strategic-level commitment until they had successfully forced the enemy from the safety of the city's restrictive terrain.

Transformation of Forces

The transformation of U.S. forces must take into account equipment and organizational changes as well as changes in accomplishing strategic goals within urban terrain. The Germans were excellent tacticians; their force structure was the personification of their tenets of mobile offensive warfare at all levels. But, as they approached the gates of Stalingrad, they did not perceive the mismatch of strategic goals with their army's tactics and organization.

U.S. Armed Forces might soon encounter a conflict within a large metropolitan area. U.S. military leaders must ensure that tactics, techniques, procedures, and force structure for dealing with such an inevitability are adequate to meet the challenge. MR

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North Africa: The Alhucemas Bay Landings Major Kevin D. Stringer, U.S. Army Reserve

Spain's defeat by the United States in 1898 during the Spanish-American War highlighted the deplorable state of Spain's armed forces. The army's bloated, oftenincompetent officer corps oversaw a mass of poorly trained, fed, and equipped conscripts. With the loss of its colonial empire in the Americas and Asia, Spain could only seek military glory in the Moroccan territories of Ceuta and Melilla.¹

There is little doubt that the uncompromising determination of the Spanish military to use the 1909 Moroccan war to revive its flagging reputation effectively forced the Spanish government to underwrite a long, costly military involvement in North Africa. But the army's turnaround was a gradual process. Intermittent conflict with various Moroccan tribal groups persisted for more than a decade. Over this period, the Spanish army introduced many innovations, and it evolved into a fully professional force instead of the conscript army that had performed so imperfectly in Cuba in 1898.

Innovations were primarily of an organizational nature. Two professional forces were created: the regulares, Moorish volunteer troops led by a group of up-and-coming Spanish officers, and the Spanish Foreign Legion—the shock troops for what remained of the Spanish empire.²

Despite its improvement, in July 1921, the Spanish army suffered a humiliating rout at Annual, Morocco, at the hands of Abd el-Krim, leader of the Rif tribesmen. Spanish commander General Manuel Fernández Silvestre, underestimating his opponent's strength, spread his troops across a series of mutually unsupportable posts as he approached Krim's stronghold. Silvestre, directly responsible for the loss of 8,000 Spanish soldiers, committed suicide.

The timely arrival of Spanish reinforcements during the rout prevented the loss of the Melilla enclave and the port itself. During the next few years, the Spanish slowly, but with difficulty, reconquered the lost territory.

The Bay Operation

In April 1925, Krim's forces overran a number of French forts, threatening the city of Fez. The French sent General Henri Pétain to Morocco to meet with Spanish military dictator Primo de Rivera. Together, they finalized the plans for a combined operation against the Riffians.³ They agreed to a strategic pincer plan where the French would contribute 160,000 men to attack northward by land toward the Riffian capital and stronghold of Ajdir. Spain would contribute 75,000 men, with approximately 18,000 landing at Alhucemas Bay and 57,000 attacking from Spain's Melilla enclave.⁴ Alhucemas Bay was chosen because of its proximity to Krim's stronghold and to the Rif heartland from which he drew his strength.

As the targeted date in September 1925 approached, the three branches of the Spanish military made preparations. The land forces would be composed of two brigades, one sailing from Ceuta, the other from Melilla. The elite Spanish Foreign Legion would hit the beach first, with five battalions split between the two brigades. The Spanish navy would depart from Cartegena, Spain, and the entire Spanish air force would be distributed between the airdromes of Ceuta and Melilla. The French fleet would sail from Oran and join the Melilla convoy.⁵

The operation demonstrated the factors essential for successful amphibious landings:

Deception as to the intended landing area.

Reconnaissance of the landing areas by air.

Use of air power to provide support for the landing waves of infantry.

Synchronized naval support from a combined fleet.

Use of top-notch infantry forces in the lead assault waves when establishing a beachhead.

Deception. To mislead the Riffians as to the intended landing area, two Spanish Foreign Legion battalions made demonstration-landing attempts at several locations while the combined fleets bombarded coastal targets to give credence to the deception plan. Abd el-Krim expected the landings to take place at Alhucemas Bay and arrayed his defenses accordingly, but Spanish troops landed west of the bay in a

poorly defended area. During World War II, a similar situation would confront the German army. Would the Allies land at Pas de Calais or Normandy?

Air reconnaissance. The overall commander of the Spanish operation, General José Sanjurjo Sacanell, reconnoitered the western part of the bay by air to gain an overview of Riffian fortifications. In 1925, using airplanes for military purposes was still gaining acceptance in some European countries. Aerial reconnaissance became the norm during World War II.

Air power. At 0600 on 8 September 1925, the invasion began with a naval and aerial bombardment of the beaches at La Cebadila and Ixdain. Both the navy and air force were critical to the success of the landing infantry. The Spanish air force supported the landings by providing reconnaissance, artillery spotting, bombardment, and strafing runs, flying 1,462 flight hours and dropping 330,000 pounds of bombs.⁶

Naval support. The coast was subjected to intense naval gunfire from the Franco-Hispano squadron of 38 Spanish ships and 8 French ships. Considering that this operation occurred in 1925 and was led by a traditionally weak military power, the amount of joint firepower used and the coordination it required is impressive.

Top-notch infantry. The Spanish Foreign Legion, the country's most highly qualified infantry soldiers, assaulted the beach to gain and maintain the beachhead. At 1140, the first battalion headed toward the beach, where legionnaires jumped out of their landing boats and waded ashore. By sundown, the Legion had secured a high point near Ixdain beach. By then, 8,000 men and three batteries had been put ashore.

After the Legion repelled a determined Riffian counterattack on 11-12 September, the beachhead was secured.⁷ The fight toward Ajdir could begin. The use of the Spanish Foreign Legion, Spain's crack troops for the spearhead, foreshadowed U.S. use of Ranger companies and Marines for amphibious assaults during World War II. The clear lesson is that securing the beachhead and critical points that dominate the landing site must be entrusted to elite troops capable of successfully accomplishing such missions.

Victory for Spain

Alhucemas Bay was a great victory for Spain—the only definitive one it was to achieve during the Rif War.⁸ There may be several reasons why this operation has been overlooked in the study of combined operations and amphibious landings:

As a European nation, Spain was a weak military power throughout the early part of the 20th century.

Spain's army contributed little to new military doctrine and technology during World War I.

As World War II approached, German and Soviet military developments overshadowed those of Spain.

During the Spanish Civil War (1936-1939), Germany and Russia used Spain as a testing ground for the new tactics and equipment they were

developing.

Spain did not participate actively in World War II.

The amphibious French and Spanish operation at Alhucemas Bay provides military historians and students of joint and combined operations with a seminal case with which to preview World War II's larger amphibious operations. Many of the essential factors for success in morestudied amphibious battles of World War II were first used at Alhucemas Bay. MR

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Poisoned Clouds Over Deadly Streets: Grozny, December 1999-January 2000 Adam Geibel®

Military operations in urban terrain (MOUT) are nasty enough without adding chemical or toxic weapons to the mix. However, desperate defenders will often use whatever assets are available, particularly when the fight is driven by passionate ideology as during the Third Battle of Grozny, Chechnya, from December 1999 to January 2000.

The original Russian plan for the siege of Grozny was for troops to stop at the Terek River to create a cordon sanitaire. The plan evaporated before the siege began. Grozny's defenders created the mother of all command detonated mines when they rigged chemicalfilled cisterns, barrels, and bottles to use as remote-controlled land mines along likely avenues of approach, under bridges, on traffic signals, above highways, and on trees.

On 25 October 1999, the pro-Mujahidin Kavkaz-Tsentr web site reported that Russian strikes against nuclear waste dumps, chemical installations, and other sites could lead to an environmental catastrophe in the entire Caucasus-Caspian-Black Sea region.¹ The same day, ITAR-TASS reported that reconnaissance units observed Chechen fighters building unusual works in Grozny along routes that Federal (Russian) forces would most likely take on the attack. The report said, "Trenches are being dug alongside bridges, and barrels filled with an unknown liquid are being placed on roadsides. Interestingly, those carrying out these works are observing all safety precautions and wearing protective suits and gas masks."² The Russians concluded that the *boyeviki*—the term used for nominally Wahhabite Islamic fighters—had placed the chemical-filled containers along the most likely avenues of advance for later detonation by remote control.

Simultaneously, Federal Security Service (FSB) spokesman Aleksandr Zhdanovich noted that Chechen fighters might deliberately destroy petrochemical plants or supplies in Grozny in order "to devastate the environment."³ ORT, the Russian Public Television Station, and Novosti, the Russian Information Agency, also reported Moscow's claim that the Chechens were planning to use mustard gas.⁴

In early November, ITAR-TASS quoted Alexander Kharchenko, a top Russian defense ministry official, who denied the presence in the North Caucasus of any Russian ammunition filled with toxic agents.5 A flood of reports followed, establishing the extent of the expected Mujahidin chemical fougasses defenses. According to Russian reports on 4 November 1999, Mujahidin wearing protective clothing were seen removing containers of radioactive waste from special deep wells on the grounds of Grozny's "Red Hammer" factory.6 Deputy chief of staff General Valeri Manilov claimed that from 15 to 17 November, boyeviki in Grozny's Zavodskoi district were busy mining several underground cisterns that contained chlorine, ammonia, and oil byproducts.7 Later, Russian military sources stated that on 28 November, the Chechens were building a multiline defense around Grozny and Argun, digging fortifications, and burying barrels that contained chemicals and flammable substances.⁴

At 0045, 6 December 1999, witnesses reported seeing "a strange yellow smog" after something exploded in two areas of Grozny.⁹ The Chechens claimed that the Russians had shelled the Oktiabrskij and Avturchanovskij wards and that the rounds had been filled with an unknown chemical substance.¹⁰ The first casualties were 47-year-old Marat Irischanov and his 15-year-old daughter Zina. By 0600, 31 people had died and more than 200 had been injured. Reported symptoms included blisters on the skin, slowed reactions, and confusion.

On 7 December, the Chechens claimed that the Russian ultimatum to Grozny was really to allow Federal forces the chance to start a chemical-weapons offensive against Mujahidin positions. This information allegedly came from a Russian special forces soldier captured in the town of Urus-Martan. The soldier said there were two Russian special chemical warfare units deployed around Grozny awaiting orders from Moscow to begin using chemical weapons.¹¹

On 10 December, Russia's military again accused the Mujahidin of blowing up oil products or chemicals in Grozny while rejecting allegations it had used chemical weapons itself. Chief of staff of Russian forces in Chechnya Alexander Baranov said that "at around 1215 in Grozny, in the area of Khankala, there was an explosion.... We believe it was prepared from supplies of oil products, chlorine, or ammonia.... We believe that the aim of this act by the bandits was first and foremost to blame the Federal forces for using weapons of mass destruction and poisons."12 The Russian military believed the Mujahidin had timed the 10 December blast to coincide with the Helsinki Summit so they could charge the Russian military with using weapons of mass destruction or toxic materials.

Accusations and Denials

Baranov noted that the cloud from the blast went up 200 to 300 meters in the air then drifted in the direction of the "safe corridor" left open in the Staropromyslovsky district for Grozny's refugees. The Russian press mentioned that ammonia is heavier than air and might therefore seep into the cellars where civilians were taking refuge. Baranov also noted that military forces had been given the task of providing "whatever assistance they can, primarily medical assistance, to anyone who may have been poisoned."¹³ He predicted that the cloud would dissipate within two or three hours and the danger would disappear.

Responding to *Krasnaya Zvezda* Correspondent Oleg Falichev's question as to whether the Russians would respond in kind to the Mujahidin's use of chemical weapons, medical service Major General Nikifor Vasilyev, chief of the Russian Federal Ministry of Defense Radiological, Chemical, and Bacteriological Defense (RKhBZ) Troops Radiation, Chemical, and Biological Safety Directorate, replied, "No, it doesn't mean that. Under no circumstances will Federal troops do that. We will not resort to that under any conditions whatsoever."¹⁴ In answer to a similar question at a 15 November press conference, Vasilyev said, "The very thought that Russian troops may use chemical weapons is absurd."15

When asked if the Mujahidin could have chemical warfare supplies, Vasilyev said that there were none in their hands nor were there any-in the traditional sensewithin Chechen territory. However, he did not rule out the possibility that "foreign extremist groups" could have delivered chemical-warfare supplies. However, Vasilyev believed there were about 160 tons of ammonia and 60 tons of chlorine in 11 plants throughout Chechnya and that the Mujahidin's possession of protective gear, including gas masks, indicated that they planned to use toxins.

Precaution and Protection

Conversely, with the beginning of hostilities in the North Caucasian region, the protection of Russia's 40,000 tons of chemical weapons stored in seven arsenals had been increased to limit the possibility of any falling into Mujahidin hands. In contrast to earlier Russian concerns, Vasilyev was skeptical about the possibility that Mujahidin fighters would or could create radioactive contamination zones in Chechnya. He noted that a site 30 kilometers northeast of Grozny where radioactive wastes were buried was the most dangerous from the viewpoint of radiation; however, there had been no hostilities in the area, and the territory was guarded by interior troops.

Several Federal army units had been equipped with gas masks and protective clothing for the assault on Grozny, which began in earnest in mid-December. However, rather than driving into kill zones as Federal forces did during the First Battle of Grozny (December 1994-April 1995), the Russians cautiously probed for Mujahadin positions. On finding them, air and artillery support was called in to eliminate the problem. A Russian defense ministry spokesman admitted the push was hampered by fierce defensive fire and minefields, both conventional and chemical.

On 23 December, General Mumadi Saydayev, head of the Mujahidin's operational defense headquarters, reported that Russian chemical defense troops were concentrating on the outskirts of the capital and that a large quantity of chemical weapons had recently been moved to the city.¹⁶ Whether this was a legitimate report, a misidentification of a Russian flame-thrower unit, or the establishment of "plausible deniability" for blowing chemical fougasses is unknown. Saydayev claimed that the Russians had already used toxic substances in the Dzhokhar district, killing more than 60 civilians and wounding around 200 more.

Russian experts said that a container filled with chlorine exploded right after midday on 29 December in a northeast district of Grozny. A thick cloud of white gas spread over the entire city. Colonel Yevgeny Kukarin, leading a mechanized infantry unit, received a radio report that a cloud of gas was drifting toward his unit. Kukarin ordered a chemical alert, figuring that the boyeviki might have been trying to break out, and ordered the tactical operations center to determine the wind speed and direction. When the weather unit did not respond, Kukarin's men launched a flare with which to determine the wind's direction. British journalist Marcus Warren, of the *Electronic Telegraph*, witnessed the event.¹⁷ The suspicious cloud drifted over Mujahidin lines and dissipated. No cases of poisoning were reported later that day.

The next day, the Chechens claimed that the Russians had used napalm and chemical weapons in their onslaught in southern Chechnya. Colonel General Stanislav Petrov, head of the Russian Chemical, Radiation, and Biological Defense Force, countered that the "rebels are acting without restraint, which puts the lives of the civilians still in the town under threat.... The Russian servicemen have all the necessary means for individual defense."¹⁸

On the morning of 31 December, Russian units reported that after a Chechen mortar attack (of two shells) a chemical cloud "smelling of ether" covered their positions in the Khankala suburb. Federal troops donned protective gear again, but as with the attack on 29 December, Russian forces reported no casualties. Russian Lieutenant General Vladimir Bulgakov, speaking from within Grozny, sternly warned the fighters against resorting to the use of chemical weapons.

Accusations Resume

The Russians and the Mujahidin also traded accusations of chemicalweapons use on 2 January 2000. Russian regional headquarters warned that the Mujahidin had set off several chlorine/ammonia mines overnight on 1 January near Russian positions in the east but that the wind had blown the green cloud over the city's center. The troops were equipped for chemical attacks.

The Chechens specifically cited Russian strikes in the Staropromyslovsky district and Khankala, with both chemical-filled artillery shells and aircraft bombs. They asserted that Russian allegations of the use of chemical fougasses by the Mujahidin were designed to lull the public so the Russians could massively retaliate with chemical weapons against the Chechens.

Both sides noted the danger to the thousands of civilians trapped in central Grozny. On 5 January the Chechen leader Aslan Maskhadov called for a three-day cease-fire throughout Chechnya from 9 through 11 January.¹⁹ A Chechen representative in Georgia sent Maskhadovi's appeal to Russian leaders. Maskhadov said the cease-fire was needed because of the critical level of chemical contamination in Grozny from the Russian air bombardment of the chemical plant and the use of chemical weapons by Russian forces.

Colonel General Gennady Troshev, who had been commanding

Russian operations in eastern Chechnya, told the press on 7 January that the order to suspend the Grozny offensive had been motivated by the need to protect civilians from toxic chemicals being used by the Mujahidin to slow the Russian advance.20 Troshev was replaced that same day by his deputy, General Sergei Makarov. ITAR-TASS added that Russian attacks would continue on other parts of the city where civilians would not be in danger.²¹ British Broadcasting Corporation (BBC) correspondent Rob Parsons pointed out that another explanation could be that deteriorating weather conditions were making impossible the effective use of Russian air power and artillery.22

Weapons Build-up

The Russian Ministry for Emergency Situations sent a unique "chemical-control complex" developed by Russian researchers to Grozny. An 11 January press release promised the system would be in Chechnya by 1 February.²³ The complex was made available for delivery to the North Caucasus by the Moscow Department for Civil Defense and Emergency Situation, with final testing and personnel train-up conducted in Noginsk near Moscow.

Developed by the Moscow Research Institute of Precision Instrument-building, the complex was first demonstrated at the Rescue Systems '97 Exhibition in Moscow. The light detection and ranging (LIDAR) mobile measuring complex, mounted on a ZIL-131 truck, can conduct around-the-clock detection of airborne toxic agents, including chlorine and ammonia. LIDAR, a remote-sensing method, uses laser light pulses in a manner similar to how radar uses radio pulses. Images, with their ranges from the observer, can be obtained.

Mobile LIDAR systems (MLS), based on Differential Absorption LIDAR (DIAL), are powerful tools that can provide 3-dimensional mapping of pollutant concentrations, estimate toxic-compound emissions, detect individual sources of atmospheric pollution, and measure pollutants at relatively high altitudes over soil levels. One on-board subsystem, with an attached laboratory, can locate a pollution source, predict the movement of toxic clouds, and make recommendations on how the population should be defended. On 21 January, Chief of the Russian Emergencies Ministry's Chechen Radiation, Chemical, and Bacteriological Protection service, Colonel Vladimir Denisov, told ITAR-TASS that nearby chlorine mines posed no threat to Russian troops.²⁴ He believed, however, that civilians near the site who had no time to take adequate measures were in danger. Eleven more chlorine tanks were discovered in Grozny's Zavodskoi district on 22 March.

The Russian Emergencies Ministry participated in defuzing explosive devices and clearing Chechnya from chemically dangerous objects. By the end of December 2000. 57 containers of chlorine and ammonia had been rendered harmless. Roughly one-third of these containers had to be defuzed because the Mujahidin had rigged them for detonation. Ministry services also cleaned up the sites of three chemical blasts, which they blamed on the Mujahidin.

The chemical fougasses also became a losing battle for Moscow in the information war. The deluge of reports in the Western press about Russian use of chemical weapons was followed by threats of European Union (EU) sanctions and the withdrawal of Council of Europe status. Major General Boris Alekseyev, chief of the Russian Armed Forces Information Center's ecological safety department, argued that Russia did not use chemical weapons and that such accusations were nothing but rebel propaganda. Whether or not Russian forces used chemical weapons is moot since the perception that they did has remained.

The threat of toxic-weapons use continued to hang over Grozny. On 15 August, FSB counterintelligence officers claimed to have an audio recording of a conversation between Mujahidin field commander Brigadier General Rizvan Chitigov and "Khizir Alkhazourov," allegedly one of the Mujahidin's envoys abroad. Chitigov asked Alkhazourov, who was in the United Arab Emirates, to prepare a manual for making toxic

substances using materials at hand so that later those substances could be used against the Russian army. The Mujahidin wanted something to "smear on bullets and fragments" so that the probability of killing Russians would increase with even a grazing hit.25 The Russians supposedly raided one of Chitigov's caches and found a handbook for "chemical terrorists" that specified in detail how to make five types of toxic substances for mass application. These were primarily tactile in natureshort-lived contact poisons and coatings for grenades.

Ironically, it was Chitigov who was allegedly responsible for rigging Grozny's chemical fougasses. Chitigov had once lived in the United States and had participated in the infamous 1995 raid on Budennovsk. This seems to have been the basis for FSB spokesman Zdanovich's April 2001 accusation that Chitigov was an agent for the Central Intelligence Agency.

Chitigov, also known as "Suraka," was one of "Khattab's" trusted men. His group, which mustered from 50 to 500 Mujahidins, specialized in laying mines in Chechnya, Ingushetiya, and Osetiya. They cooperated with groups under Maskhadov, Khattab, warlord Shamil Basayev, and Chechen General Magomed Khambiyev. The Russians also think that Suraka attempted to bring shipments of remote detonators from Georgia into Chechnya.

Magomadov Abubakar, who was a member of the rebel Chechen parliament and chairman of the defense and security committee, claimed that the "Chechen state had never had chemical weapons on its territory and that only Russians have always had them and used them against civilians in Chechnya, violating international conventions."26 He specifically mentioned Russian use of chemical weapons in Grozny, and that Russian, Ukrainian, and Armenian civilians suffered.

Implications for the U.S.

For U.S. and allied commanders, a scenario such as was played out in Chechnya provides a lesson and a warning for the future. U.S. and allied forces must support aggressive strategic and tactical nuclear, biological, and chemical reconnaissance. Effective reconnaissance must be backed by decontamination teams, and nongovernmental operations must be prepared to deal with civilian refugees caught in any chemical discharges. Everyone must work with public affairs officers to maintain transparency and to ensure that all pertinent information reaches those who will be affected. MR

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MR From My Bookshelf

Crisis in Global Security: The Middle East

Lieutenant Youssef Aboul-Enein, U.S. Navy

Many books have been written within the last few years warning of impending crises in global security in the Middle East. The following books are ones I find to be especially interesting in light of current events.

REAPING THE WHIRLWIND: The Taliban Movement in Afghanistan, Michael Griffin, Pluto Books, Sterling, VA, 2001, 283 pages, \$27.50. In this book, Michael Griffin details the evolution of the Taliban, who practice a brand of Diobandi-Wahabi Islam foreign to most Muslims. Griffin spent time in Afghanistan as a consultant for UNICEF and is a well-traveled freelance writer.

The first mention of the word *talib* in the vocabulary of the Mujahidin surfaced during the Soviet-Afghanistan War. Of the dozen factions fighting the Soviets, a few actively solicited the aid of the talib—students of Islamic schools based in Pakistan and southern Afghanistan. The talibs, soon to be known as the Taliban, were a breed apart from the rest of the fighters because the talibs saw the battle as being a "holy war."

The war offered fighters a chance for revenge and, through plundering and looting, a way to feed their families. Some Mujahidin joined the fight then returned to their homes; others fought for profit. The talibs fought and were willing to die for their fellow Afghans and were not averse to losing their own lives in order to kill as many Soviets as they could or to change the course of battle. The most widely recognized equivalent to the talibs' attitudes can be found in the actions of the Japanese kamikaze during World War II. In 1989, the Soviets withdrew from Afghanistan, and the majority of talibs returned to their schools.

The Taliban whirlwind began as a result of the nation's lawlessness and the continuous squabbles between Tajiks, Pushtuns, Shites, Uzbeks, and others vying for control. Many commanders whose troops pillaged cities and raped villagers were cornered by the Taliban and hanged or decapitated.

Griffin gives an excellent description of Taliban tactics, comparing them to those of Ahmed Shah Masood, former leader of the Northern Alliance, and Gilbuddin Hekmetyar, leader of the Islamic Party. The Taliban, which was a rapid-deployment force, used pickup trucks, cellular phones, and wireless radios to coordinate ground attacks. The belief that they were on a moral crusade against Muslims who had gone astray made them able to subdue most of Afghanistan by 1996.

Griffin describes what was then known about the Taliban's global network, including its contacts with Osama Bin Laden and the Al Qaeda organization as well as contacts with the governments of Pakistan, Sudan, Saudi Arabia, and the United Arab Emirates.

SADDAM HUSSEIN: The Politics of Revenge, Saïd K. Aburish, Bloomsbury Publishing, London, 2001, 406 pages, \$13.95. The crisis in Afghanistan, which led to the Taliban's rise, was only one flashpoint in the Middle East. Saïd Aburish is one of a pantheon of modern Arab writers, such as Fouad Ajami and Edward Saïd, who live and publish in the West but who bring an Arab perspective to the problems and issues of the modern Middle East. Whereas Ajami and Saïd are academics and more scholarly in their outlook, Aburish is earthy in his descriptions and looks into a regime's anatomy, including

its leadership and its peoples.

In Saddam Hussein: The Politics of Revenge, Aburish tells of Hussein's humble beginnings in the small village of Awja, his fatherless childhood, and his rough life with a stepfather (known as Hassan the Liar) he still refuses to acknowledge.

The chief influences during Hussein's childhood and teenage years were his mother and his uncle Khairullah Tulfah. Tulfah, an Iraqi army officer who introduced Hussein to the evils of colonialism in Iraq, was imprisoned by the British for his activism against the English-backed monarchy of King Feisal I.

Aburish eloquently brings to life the violent means by which Iraqis have fomented revolutions and crushed dissent. This is a subject of poetry, jokes, and criticism among Arabs, and Hussein used the subject as a way to propagate an air of toughness. The Baath (renaissance) Party, which Muslim Salah Bitar and Christian Michel Aflaq originally established, became a vehicle for Hussein. He became an enforcer for the party, and like Joseph Stalin, who fascinated Hussein, he left the intellectuals behind and climbed the ladder of Iraq politics, using a combination of intimidation, fear, nepotism, and outright murder.

In 1958, Feisal's monarchy came to a bloody end, and General Adel Karim Kasim took power. A year later, Hussein participated in a failed attempt on Kasim's life. Hussein was exiled to Egypt, where he became enamored of President Gamal abd-al-Nasser, who espoused Arab nationalism. Hussein was also instrumental in organizing Baath cells at the University of Cairo.

In 1963, General Abdel-Rahman Arif overthrew Kasim, and the Baaths were back in power. But, trouble was brewing in Baghdad as communists and Baaths fought for control of Iraq. By 1968, Arif's vice president, General Hassan al-Bakr, a relative of Hussein, took power. Hussein was put into control of the internal security apparatus, and within a decade, he had created a police state within Iraq that was so oppressive that it has often received criticism from moderate Arab states.

When Hussein became president of Iraq, he slowly undermined the Shiite majority to attain power for the Baath Party, giving top leadership positions to relatives and close associates. The book's final chapters detail events that led to the Iran-Iraq and Persian Gulf wars.

Aburish's book is an excellent, balanced biography that cuts through the myths to explore Hussein's complex Machiavellian world. Another Aburish biography I recommend is *Arafat: From Defender to Dictator* (St. Martin's Press, New York, 1998). Together, these books provide an understanding of the events that have occurred during the past two decades.

THE GREATEST THREAT: Irag, Weapons of Mass Destruction, and the Crisis of Global Security, Richard Butler, PublicAffairs, New York, 2000, 262 pages, \$26.00. Richard Butler led the United Nations Special Commission (UNSCOM), formed in the mid-1990s, whose mission was to oversee the inspection program designed to ensure the disarmament or destruction of Iraq's weapons of mass destruction (WMD). Butler's book is a lesson in the delicate art of negotiating with members of Iraq President Saddam Hussein's inner circle to effect an agreement about disarmament between Iraq and Western powers.

Iraq Foreign Minister Tariq Aziz occupies center stage. Butler describes Aziz's endless monologues, irrational temper, and outright deception in his accountability to the United Nations. When Butler became the leader of the commission, the outgoing UNSCOM leader, Rolf Ekeus, remarked that he had found "Iraqi leaders to be a gang of despicable liars and cheats." Butler echoes Ekeus's words when he describes physical threats from a regime that operates with no rule of law.

The many attempts at Iraqi deceit forced UNSCOM to act as detectives; witnesses described Iragis running out of buildings carrying armloads of incriminating documents as UNSCOM inspectors approached. In another instance, Butler's team discovered Agent VX, a deadly toxin, in fragments of destroyed missiles. After first denying its manufacture, the Iraqis eventually admitted to having made 200 liters of the deadly substance. Further probing by UN-SCOM showed that the Iraqis had actually manufactured 3.9 metric tons of the agent.

Butler does not have kind words to say about the U.N. either. In particular, he has harsh words for Security Council members from China, France, and Russia, who tried to dismantle the weapons-inspection program. Butler feels that these nations merely wished to open markets because of Hussein's ambition to possess weapons of mass destruction. Possessing chemical, biological, and nuclear weapons would enhance Hussein's image as a defender of Arab pride and causes. Butler met senior Iraqi army officers who were callous about using such agents during the Iran-Iraq War. They blatantly told him: "When you have an insect problem, you use insecticide."

UNSCOM was dismantled when the U.N. Monitoring, Verification, and Inspection Commission (UN-MOVIC) was created. Aaccording to Butler, UNMOVIC is composed mostly of diplomats and has few technical experts. The U.N. Secretary General and the Security Council directly control UNMOVIC; therefore, UNMOVIC has less autonomy than did UNSCOM.

Other recent books about Hussein's incessant drive to possess weapons of mass destruction are *Brighter Than the Baghdad Sun* by Shyam Bhatia and Daniel McGrory (Regnery Publishers, Washington, D.C., 2000) and Saddam's Bombmaker: The Terrifying Story of the *Iraqi Nuclear and Biological Weapons Agenda* (see below) co-authored by Khidhir Hamza and Jeff Stein. Hamza defected from Iraq after 20 years of helping develop Iraq's atomic weapons program. These books demonstrate that the current regime in Iraq has no intention of complying with U.N. demands and has actually succeeded in circumventing and watering down U.N. resolutions to disarm.

SADDAM'S BOMBMAKER: The Terrifying Inside Story of the Iraqi Nuclear and Biological Weapons Agenda, Khidhir Hamza with Jeff Stein, Scribner, New York, 2000, 352 pages, \$14.00. In 1994, Khidhir Hamza was smuggled out of Iraq by a Kurd. He sought refuge with the Iraqi opposition based in that region. Ahmad al-Chalabi, head of the Iraqi National Congress, put Hamza in touch with U.S. intelligence experts to whom he revealed Iraq's intricate plans for constructing a nuclear bomb.

Hamza's book offers valuable insight into Saddam Hussein's cravings to possess nuclear capabilities. Hussein, whose push to gain a nuclear weapon was driven initially by the Iran-Iraq War and his desire for an equalizer by which to deal with Iranian human-wave attacks, has spent large amounts of money on this long-term project. His desire evolved into an obsession to acquire weapons of mass destruction, possession of which would allow him to usurp the mantle of Arab national causes from moderate states like Egypt and to counter the Israelis.

Hamza's highly narrative style focuses mainly on his relationship with Hussein's inner circle, the Ministry of Industry and Military Industrialization, and key figures within the Iraqi WMD program. He takes readers into an erratic world where Hussein controls scientists and advisers using the carrot-and-stick approach. Hamza also gives glimpses of clandestine operations designed to lure Baghdad into pursuing behindclosed-doors bargaining for fissile material. Such tactics often led the Iragis to invest in useless projects. Hamza also witnessed the Israeli attack on the Osirak Nuclear Plant in 1981, and he discusses the partial destruction of Iraq's WMD program during Operation Desert Storm.

Hamza allows us to sit in on the meeting where the chief of the Iraqi air force criticized General Hussein Kamil, Saddam's son-in-law. The chief said that Kamil was risking pilots' lives by equipping them with bombs that did not explode. The chief's reward was a torture cell for daring to criticize one of Hussein's relatives. There is also the tragic story of an Iraqi junior officer who calmly argued the tactical prudence of cutting the Iranian line and flanking the infantry versus conducting a disastrous head-on assault. His reward was a bullet fired by Hussein within the command and control tent.

Saddam's Bombmaker should be required reading for anyone interested in the Middle East, but all the books reviewed in this article will prove valuable to anyone who wants to know more about the seminal events that led to the recent attacks on America. *MR*

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^MRBOOK Reviews

CLOSER THAN BROTHERS: Manhood at the Philippine Military Academy, Alfred W. McCoy, Yale University Press, New Haven, CT, 2000, 416 pages, \$40.00.

In *Closer Than Brothers*, Alfred W. McCoy presents a prosopography of two Philippine Military Academy (PMA) classes: 1940, its first; and 1971, its most controversial. Both classes faced similar political decisions that they collectively and individually handled in markedly different ways. McCoy asks these questions:

How is an officer corps socialized?

What factors promote the socialization's collapse?

Why did these two groups of young men, who graduated from the same school under similar curricula, turn out so differently?

Of course, McCoy realizes that the simple answer to all the questions is that internal and external factors unique to each class determine different outcomes. Each class might be subjected to rigorous drill, discipline, and indoctrination, but its mix of personalities and values, influenced by society's political values and the ruling government's political agenda, make it unique.

The class of 1940 came of age during the Philippines' colonial era (1898-1935). The U.S. Army encouraged the Commonwealth government to create an officer corps in its own image—one that was professional but apolitical. From 1945 through the 1970s, the United States regarded the Philippines as a showcase for democracy and discouraged professional officers' political ambitions.

In the 1970s, however, the United States increased support to Ferdinand Marcos' constitutional coup with the attendant politicization of the officer corps. In the 1980s, the United States turned against the Marcos government and supported Corazon Aquino, which contributed to the rash of unsuccessful coups led by the class of 1971.

McCoy also concentrates on other variables, including the differing images of masculinity the two classes carried with them and the corrosive effects of politicization on military socialization and professionalism. He also grapples with problems inherent in comparative studies. Although certain external features are comparable, individuals cannot be easily separated from their own contemporary cultural contexts. Does this mean comparative historical works are futile? McCoy would vigorously deny this; although there are similarities, they can cloak profound differences

McCoy's interesting, thought-provoking issues include the causes of coups d'etat, military socialization, and how torture affects its practitioners. The group biographies are also fascinating. McCoy highlights successes and failures as well as the ways in which cultural change affects institutions.

Lewis Bernstein, Historian, Huntsville, Alabama

THE BLOODY FOREST: Battle for Hüertgen, September 1944-January 1945, Gerald Astor, Presidio Press, Novato, CA, 2000, 393 pages, \$29.95.

The Battle for Hüertgen Forest a costly, ill-advised battle—provides a strong argument against attrition warfare. The battle had no apparent designated operational or sound tactical objectives. U.S. Army General Dwight D. Eisenhower advocated a broad-front approach. Most senior leaders felt that the war would be over by Christmas if they were to conduct a continuous push through this inhospitable terrain. However, their desire for an early end to the war did not justify the callous destruction of soldiers and fighting units.

In *The Bloody Forest*, Gerald Astor presents oral histories of soldiers and leaders from squad, company, and regimental levels that expose the horrors of war and the utter lack of clear objectives and missions associated with the battle. He particularly wants to place blame on 12th Army Group Commander General Omar Bradley and 1st Army Commander General Courtney Hodges, among others.

Astor repeatedly accentuates senior leaders' inability to conduct reconnaissance of the battle area or even to gain a sense of what soldiers and junior leaders were up against. Entire units were reporting extremely high causality rates, yet corps and higher headquarters dismissed these reports. The question one asks is, why?

The soldiers' oral histories provide extraordinary insight into the suffering and ingenuity of U.S. soldiers. The high rate of leaders killed, wounded, or missing in action was a clear indicator that something was amiss. The increased cases of battle fatigue and self-inflicted wounds were also indicators that something was not right. As professionals, we can draw numerous inferences from these oral histories and this is what is truly gained from this book.

> LTC Billy J. Hadfield, USA, Beavercreek, Ohio

THE AFRICAN AMERICAN EN-COUNTER WITH JAPAN AND CHINA: Black Internationalism in Asia, 1895-1945, Marc S. Gallicchio, The University of North Carolina Press, Chapel Hill, 2000, 262 pages, \$45.00.

The African American Encounter with Japan and China details the ups and downs of black internationalists' efforts to find a leader of a dark-race internationalism to counter whiterace imperialism. The book highlights this little-known race-based philosophy with the other serious black alternative to American nationalism; that is, class-based socialism and communism.

For too long, until the excesses of World War II shocked it into disrepute, race seemed a legitimate defining category; both blacks and whites assumed that race mattered. Black internationalists believed that the oppressed throughout the world shared a common interest, that the dark races could ameliorate domestic conditions by easing white colonialism. When Japan defeated a white power in the Russo-Japanese War, African Americans tried to adopt Japan as the leader of the dark and oppressed, who would lead them into a new world of equality and respect by the white oppressors.

Japan was not an easy model. Aggressively imperialist against other dark-skinned people, Japan allied itself with European supremacists, who then became the enemy. World War II and the Double-V campaign emphasized nationalism against Japan. Blacks turned to China when the Chinese managed despite all logic to hold off the Japanese invaders, but the Chinese were nationalists first, not internationalists. African American relationships with Japan and China proved one-sided. India provided a more practical, nonviolent, passive model for resistance to colonialism, because there was no significant Indian racism.

Black internationalism, as black socialism, was a movement of only a vocal and influential minority within the black community. Mainstream African Americans sought more to prove themselves worthy of justice at home. As others have noted, especially Gerald Astor in *The Right to Fight: A History of African Americans in the Military* (Presidio Press, Novato, CA, 1998), African Americans have historically demanded the right to serve in America's wars.

It is easy to forget how far blacks have come. It is also easy to take for granted the strides made since World War II. Long forgotten is the harsh fact that logic should have led blacks to turn away from America; it is incredible that they did not. This book is a good reminder that there is nothing inevitable in history that gave us the world we live in and nothing inevitable that says it will stay this way or improve.

John Barnhill, Yukon, Oklahoma

SWORD OF THE BORDER, John D. Morris, Kent State University Press, Kent, OH, 2000, 348 pages, \$35.00.

The War of 1812 merits a footnote in most history texts, and where generals are noted, acknowledgement is limited usually to Andrew Jackson or Winfield Scott. A long-neglected hero of the war, Major General Jacob Brown, has recently been remembered with a full-scale biography. John D. Morris' *Sword of the Border* restores Brown and the Niagara Campaign he commanded to their proper place in history.

Brown, a wealthy landowner from upstate New York, served in the New York militia at the start of the war. His leadership on the Northern Border led to a defensive victory at Sacketts Harbor, and he was commissioned a brigadier general in the regular Army. While commanding the Left Division, Brown was handicapped by poor communications, limited naval support, and ineffective leadership from the War Department.

Morris disputes one of the longstanding myths of the War of 1812 about Scott's Camp of Instruction, which was said to have been directly responsible for the victories at Chippawa and Lundy's Lane. Morris argues that most of Scott's men were nowhere near the camps of instruction. He rightly places Brown back in command at these battles and shows how Brown's decisionmaking process led to victory.

After the war, Brown was retained as one of the remaining major generals, commanding the North, while Andrew Jackson commanded the South. It was not until 1821, after yet another reorganization, that Brown, as the highest ranking officer in the Army, assumed the duties of commanding general, which he held until his death in 1828.

Morris rightly rescues Brown from the obscurity in which he has languished, but more emphasis on the post-war years would have enhanced the book.

LTC James J. Dunphy, USAR, Fairfax, Virginia

THE TAO OF PEACE: Lessons from Ancient China on the Dynamics of Conflict, Wang Chen, Ralph D. Sawyer, ed., Shambhala Publications, Boston, MA, 2000, 220 pages, \$22.50.

The Tao of Peace: Lessons from China on the Dynamics of Conflict, edited by Ralph D. Sawyer, is a three-tiered study of the Taoist classic, *Tao Te Ching*, written by Wang Chen in the 9th century. During this period in Chinese history, military command was given to civil servants. To be promoted, applicants took grueling government exams. Thus, Wang Chen was primarily a bureaucrat—an extremely esteemed position. His military lessons were often byproducts of the larger message of how to govern.

Written between the 6th and 4th centuries B.C., *Tao Te Ching* is a short work of less than 5,000 words.

Chen's disgust at warfare's carnage inspired him to search for answers on the nature of conflict. However, he did not turn to the prevailing doctrine of Confucianism for enlightenment. He sought "a method to end warfare and coerce peace amid a world of selfish interests and conflicting desires," which is the basic tenet of Taoism.

Unlike Sun Tzu's *The Art of War* (James Avell Claude, ed., Delacorte Press, NY, 1989), *Tao Te Ching* is not about how to fight; it is a prescription for how the "sage" leader should govern. Although Chen does not provide as many military lessons as Sun Tzu provides, his philosophy is an excellent source of insight into the Eastern military thought process.

LCDR David D. Clement, Jr., USN, Fairfax, Virginia

UNDER THE SOUTHERN CROSS: Soldier Life with Gordon Bradwell and the Army of Northern Virginia, Pharris DeLoach Johnson, ed., Mercer University Press, Macon, GA, 1999, 271 pages, \$32.95.

THIS CRUEL WAR: The Civil War Letters of Grant and Malinda Taylor, Ann K. Blomquist and Robert A. Taylor, eds., Mercer University Press, Macon, GA, 2000, 348 pages, \$32.95.

Under the Southern Cross is a compilation of Private Gordon Bradwell's recollections of the Civil War, which he wrote more than 40 years afterward for *Confederate Veteran Magazine*. *This Cruel War* is a collection of the wartime letters written by Grant Taylor and his wife Malinda. Together, these books provide insight into the thoughts, motivations, and range of emotions that affected the daily lives of private soldiers during the Civil War.

Bradwell and Taylor were the sons of small slaveholders, but neither owned slaves. Both were infantry privates who were still in the service at the end of the war, although Taylor was absent without leave (AWOL) and making his way back to his unit when the war ended. Both were deeply religious.

The men had striking differences, however. Bradwell volunteered for the 31st Georgia Infantry at the start of the war. Taylor waited until the passage of the Confederate conscription act in 1862 to enlist in the 40th Alabama Infantry. Bradwell was a veteran of the more prestigious and generally more successful Army of Northern Virginia (ANV). Taylor served in the west, among the garrison of Mobile, the surrendered garrison of Vicksburg, and the troubled Army of Tennessee. Perhaps more significant was that Bradwell was a single man. Taylor left a wife and children in Alabama, so Bradwell was a much more willing soldier than was Taylor, who twice went AWOL.

Bradwell enlisted enthusiastically in 1861 and participated in most of the ANV's major battles. Writing 40 years or more after the end of the war. Bradwell heaped abuse on the memory of President Abraham Lincoln because of his conduct and that of Federal officers during the war. Bradwell's ruminations must be taken with some caution, however, because he was under the influence of the glorification of the Lost Cause. However, it cannot be denied that Bradwell served the Confederacy with devotion, courage, and constancy.

What emerges from these books is an unvarnished picture of the life of Confederate infantrymen. If Bradwell's articles come across as idealized, he can be forgiven for his lack of objectivity; he was an old veteran reminiscing. If Taylor's letters are the unpolished laments of an unwilling soldier, they are thoroughly authentic. I recommend both books to voracious readers of Civil War historiography.

> MAJ D. Jonathan White, USA, Smithfield, Virginia

EARLY CAROLINGIAN WAR-FARE: Prelude to Empire, Bernard S. Bachrach, University of Pennsylvania Press, Philadelphia, 2000, 413 pages, \$55.00.

In *Early Carolingian Warfare*, which is part of a series on the Middle Ages, Bernard S. Bachrach examines 8th-century European military thinking that preceded Charlemagne's misnamed "Holy Roman Empire." When visualizing medieval armies, many people envision a howling mob of farmers charging mindlessly at another howling mob of farmers; Bachrach details the organization behind the image.

Religion was used as ideology; that is, their motivation for war was

not to gain land but to promote their religious beliefs—a practice so successful it continues today. Therefore motivation was an important part of military operations. Aside from the explanation of medieval military organization, this book demonstrates that war is a constant—only technology changes.

> K.L. Jamison, Attorney at Law, Gladstone, Missouri

MORALS UNDER THE GUN: The Cardinal Virtues, Military Ethics, and American Society, James H. Toner, University Press of Kentucky, Lexington, 2000, 256 pages, \$29.95.

Events of the recent past remind us that personal and professional ethics must concern every soldier, especially those entrusted with leadership responsibilities. The Army has always taught ethics, but has been unable to make people ethical. Is there a standard that transcends all times and cultures? If so, which one? Or, are standards personal, cultural, or time-bound?

In *Morals under the Gun*, James Toner examines these issues, addresses the place of ethics in the military and the challenge to ethics in U.S. society, and proposes a solution. Toner, a professor at the Air War College and a former Army officer, approaches ethics from a traditional Roman Catholic perspective, proposing a virtue ethic to redress the weakness he sees in current values training.

To reach Toner's argument, the reader must get past the first chapter. I recommend skipping it entirely. Written from the perspective of moral relativism, the chapter is a deliberate provocation. Only in the next chapter does Toner admit this, then introduces his own approach.

All ethics derive from transcendental moral norms. This means ethics is about applying absolutes to individual or cultural situations. To prevent his ethical position from being dismissed as religious and thus irrelevant to secular society and inappropriate for teaching in the military, Toner argues from natural law and suggests that the classic virtues of wisdom, justice, courage, and temperance are foundational to character development and value systems. Divorced from virtues, values have been used to support all sorts of agendas, although Toner argues values divorced from virtues are not values at all. Toner's appeal to natural law appropriates virtue's strengths but does not address objections raised against it as a source for ethics.

Toner advocates virtue ethics because it emphasizes "being" over "doing." Who we are determines how we will act, so the surest way to alter conduct is to transform the individual. This is easier said than done, and Toner recognizes this. He suggests an eight-step program to improve the military's ethical climate. These suggestions are attractive, but most can only be implemented by senior officers.

Officers lacking a virtuous character will be military failures because they will be human failures, says Toner. He insists personal and professional ethics are linked, so personal and professional behavior must be consistent, especially for leaders. Toner does distinguish between momentary and habitual ethical failures, however, and reinforces his argument with case studies in contemporary military ethics.

Toner's religious stance is obvi-

ous, but by offering a classical virtue ethics argument, he ensures his argument does not depend on it. He avoids the weaknesses of traditional virtue ethics while retaining its strengths. He has not done as well in justifying his appeal to natural law, however.

This is a thoughtful, competent work, but it is not the best book available on military ethics. However, the endnotes and bibliography are excellent resources for further study.

CH (COL) Douglas McCready, ARNG, Roslyn, Pennsylvania

MR Letters

No Objective Assessment

Although no journal owes a book a favorable review, it does have an obligation to offer an objective assessment. In his review of my book, *Men* of Secession and Civil War (Scholarly Resources Books, Wilmington, DE, 2000), Major D. Jonathan White describes my claims about the secessionists' motives and methods as being "admirably" laid out. If he meant that statement, he must surely accept at least two things: where the responsibility for secession lies and the nature of the irresponsible distortions used to promote it.

Unwilling to acknowledge that Southern radicalism played the major role in secession, White tries to establish a sort of moral equivalence between the "extremists" of the North and South to whom he attributes equal responsibility for disunion. In that light, White charges that, except for John Brown, I ignored the secessionists' Northern "counterparts."

Did White miss my description of the abolitionists, who for the most part were pacifists; Salmon Chase; and the ideology of the Republican Party? For that matter, does he not know that secessionists described U.S. President Abraham Lincoln—the subject of a chapter in my book—as a dangerous radical? Nor would they trust the Pro-Southern Stephen Douglas, another of my book's principal subjects. If, Brown excepted, Northern politicians sound too moderate for White's taste, perhaps his problem is the North's relative lack of influential men who were hot to destroy the Union or wage violent war on slavery.

Because I do not equally apportion responsibility for a national calamity, White accuses me of writing from a "Northern perspective" and waffles by slamming my work as "somewhat scholarly but partisan." Presenting reasoned conclusions that differ from his opinions is not alone evidence of bias.

Apparently eager to justify secession, White ignores the book's attention to the Southerners who resisted secession; Lincoln's moderation; the Deep South's unwillingness to consider compromise; the Montgomery Convention's assault on state's rights and representative government; and the unelected Confederate government's eagerness to initiate war and expand the Confederacy by attacking Fort Sumter. Which of us, do you suppose, is biased or writing from a "perspective"?

> James L. Abrahamson, *Pittsboro, North Carolina*

White's Rebuttal

It is not my intention to turn the letters to the editor page of *Military Review* into a forum on the causes and effects of the American Civil War. James L. Abrahamson's rather emotional comments of my review of his book demand clarification.

In my review I did not say that Southern radicals bore no blame for causing the secession crisis. Clearly they did. I said that Abrahamson under-represents the impact of Northern radicalism. Northern radicals in the late 1850s and early 1860s were increasingly willing to violate clear provisions of the U.S. Constitution in their efforts to abolish slavery. This manifested itself in the so-called personal liberty laws, which, while morally sound to modern sensibilities, were intended to violate Article IV, Section 2, of the Constitution.

Southerners were troubled by Northern support and funding of John Brown's raid on Harper's Ferry. Following the raid, some Northern states officials refused to comply with Article IV, Section 2, on rendition of fugitives from justice and to extradite those implicated in the conspiracy. This indicated official Northern states post facto endorsement of Brown's actions. Public approval of Brown's actions and outrage at his execution, which prominent Northern citizens voiced, presented an image of a North united in using any means to abolish slavery, including the most indiscriminate and violent.

Northern insistence that slaveholders be excluded from territories was contrary to the Southern view on the limited powers of the Federal government. With the exception of Brown's raid, Abrahamson omits or gives these constitutional issues slight notice.

I believe most Southerners shared Robert Barnwell Rhett's view that

constitutions exist, in part, to protect the rights of the minority. The cumulative effect of Northern violations of the Constitution caused Southerners to conclude that constitutional protections of minority rights would not be respected under the Northern majority. This fear would seem especially likely once Northerners controlled the White House, both houses of Congress, and eventually, the U.S Supreme Court. Given the potential horrendous impact of how Northern antislavery could manifest itself (that is, a successful slave revolt on a scale and ferocity of Haiti in 1802), secession should not have been a surprising response.

Two other observations are of note. Strict compliance with the provisions of the Constitution—even the distasteful portions—is the duty of those who take the oath to support and defend it. From 1859 to 1861, radicals on both sides failed to do this. Also, strict compliance with the provisions of the Constitution might have moderated the passions of the day and given statesmen another opportunity to resolve the crisis without violence.



I stand by my assessment that *Men* of Secession and Civil War is an admirable exposition of one side of the crisis. Abrahamson seems to have lost sight of the fact that, while slavery was unequivocally wrong, not all antislavery actions were good.

Major D. Jonathan White, USA, Waynesboro, Virginia

Editor's note: In Major Tom James's November-December 2001 article "The Transformation of U.S. Air Power," the second and third sentences of paragraph 3 on page 70 should read, "Thompson explores a less normative vein than does Lambeth, concentrating *more on facts than conjecture.* The final chapter, which correlates with Air Force operations in the 1990s, suggests some lessons for the aspiring military strategist."

Paragraph 9, page 70, should read, "Lambeth and Thompson can easily be described as *being* members of, *or being closely associated with*, the Air Force establishment. To their credit, both quite openly and actively solicit review and input from interservice and political experts. In an effort to ensure his book provides a fair, accurate depiction of his subject, Lambeth *put* his work *through* an especially grueling, pre-publication shakedown. *Unfortunately, the* effort was less than successful."

The beginning of paragraph 5, page 71, should read, "His assertion that air and space assets 'continue to be viewed as support for surface forces' establishes his own straw man *accusation*, with merit, to counter the purported argument that the Air Force cannot guarantee success in all military situations as an independent force."

The first sentence of paragraph 10, page 71, should read, "Lambeth offers insight into the problems of labeling air power targets in classical strategic, *operational*, and tactical terms based on platforms and spatial relation in the area of operations instead of on their desired operational efforts."

The bio should read "Major *Tho*mas James is a corps planner, U.S. Army Space Operations Office, Fort Hood, Texas."

