BOOK REVIEWS

A NEW DISORDER

Newhouse, John, ed. *Assessing the Threats.* Washington, D.C.: Center for Defense Information, 2002. 119pp. $20

It is no cliché to argue that the terrorist attack that befell the United States in September 2001 was a climacteric event, a watershed in the post–Cold War world. Henceforth, all analyses of American national security policy will demarcate events as having occurred either *before* or *after* the horrendous events of that day.

While some issues like national missile defense, nuclear proliferation, and terrorism predated "9/11," others arose out of the rubble of the World Trade Center and the Pentagon: the threat of sophisticated global terror networks dedicated to the perpetration of violence against the United States and its interests; the imminent danger of weapons of mass destruction (especially in the hands of rogue states or in those of international terrorists like al-Qa'ida); and the profound, ongoing debate among America's national security elites over the pursuit of a multilateralist foreign policy or one underwritten by unilateralism.

In *Assessing the Threats*, each of these issues is addressed with varying degrees of emphasis by a group of international scholars. The book was conceived as an effort to examine threats to security and stability cross-nationally. The quality of the research conducted by each of the contributors, and the timeliness of their inquiries make this work a valuable resource for readers of the *Naval War College Review.* John Newhouse is an experienced strategic policy analyst who is currently a senior fellow at the Center for Defense Information, under the auspices of which the present work was undertaken.

Newhouse plants himself firmly in the multilateralist camp, in an article with the same title as the book: "Nothing less than *sustained* multilateralism will enable major powers to neutralize the interactive problems of terrorism and weapons of mass destruction." In another salient observation, Newhouse contends that "Russia's warning system against submarine missile attack, designed around a new generation of satellites, is still inoperable." In this assertion, Newhouse has confirmed that Russia has no credible defense from fleet ballistic missile submarines of the Trident II type, armed with D-5 missiles.

Such asymmetries between the strategic and financial capabilities of the United

States and Russia are confirmed by Alexei Arbatov, the veteran Russian analyst of American institutions and foreign policy. In his "Russian Security and the Western Connection," Arbatov describes the destabilizing effect the American abrogation of the ABM Treaty would have upon Russia's conventional forces. They would be degraded to the point where they would be "hardly sufficient for even one local contingency and several peacekeeping operations." Like Newhouse, Arbatov is particularly critical of the present American foreign policy, arguing that the "quality and wisdom" of its design is no longer commensurate with the financial and military power of the United States.

Similarly, Ivan Safranchuk has presented an equally fascinating *tour d'horizon* in his analysis of "An Array of Threats to Russia." Safranchuk effectively entombs the Cold War with the argument that today Russia's primary strategic posture is defensive. This point is demonstrated by his assertion of Russian action. Surrounded by pariah regimes such as exist in Iraq and Iran and possessing the potential for deploying weapons of mass destruction, Russia, Safranchuk argues, now accepts penetration of its Central Asian and Caucasus borderlands by the United States. This is a theme worth exploring.

Thérèse Delpech's query with reference to "A Safe and Secure Europe?" echoes British foreign secretary Douglas Hurd's contrapuntal prediction of a decade ago of "a new disorder," against former President Bush's proclamation of a "New World Order." Delpech portrays the "9/11" attacks as events "which gave asymmetric warfare a horrific shape." In order to "tame" the current perceived U.S. penchant for a triumphalist unilateralism, Delpech would echo Aeschylus in *Prometheus Bound* and envelop or constrain Pax Americana with the bonds of multilateralism.

I was struck by the book's lack of a comprehensive introduction or concluding chapter to sum up and assess the future in a meaningful way. Instead, the reader is left with several conclusions, which detracts from a sense of cohesion about the book's contents. Nevertheless, each individual contribution has something of value to offer, and taken in that context, each is significant to our understanding of the power calculus at work today.

MYRON A. GREENBERG
Defense Contract Management Agency, Dayton

O'Hanlon, Michael E. *Defense Policy Choices for the Bush Administration.* Washington, D.C.: Brookings Institution Press, 2001. 244pp. $18.95

O'Hanlon presents his blueprint for how U.S. resources should be spent based on thorough strategic and military assessments. He recommends that the Bush administration set priorities and make the difficult choices. However, the terrorist attacks of "9/11" and the completion of the 2001 Quadrennial Defense Review (QDR) have changed fiscal conditions and defense strategy.

O'Hanlon is a senior fellow in foreign policy studies at the Brookings Institution. He is the author of numerous books and articles on U.S. defense strategy, with special emphasis on defense budgets and military technology. His

comprehensive analysis and extensive footnotes not only demonstrate his deep knowledge of the subject but also reinforce the complexity of strategic and force planning decisions.

The book addresses "two major theaters for war," defense strategy, military readiness and modernization, overseas troop commitments, homeland defense, national missile defense, offensive nuclear forces, and U.S. force planning implications if the United States assists Taiwan in defeating a hypothetical Chinese blockade. Each chapter describes and assesses the strategic environment, then offers comprehensive suggestions for modifying the 2001–2005 resource allocations.

A central theme throughout this work is that the defense budget is unlikely to make substantial gains and that the Bush administration must balance competing defense requirements. Even with the large plus-up in the fiscal year 2002 defense budget, the military is still fiscally constrained due to the demands of the "procurement holiday" (the period after the Reagan administration's massive military buildup in which adequate funds were not provided to modernize existing weapons—without the constant increase of new modern weapons, the need to replace old equipment is exacerbated) and the war on terrorism. Overall, O'Hanlon believes in buying more existing weapons than developing expensive next-generation weapons. The author states that the 1997 QDR's plan for modernization is excessive. Rather than rush to transform most weapons, O'Hanlon recommends taking a patient, balanced approach, such as buying less advanced hardware for the large, main weapon systems while "aggressively modernizing electronics, munitions, sensors, and communications systems," giving a higher priority to research and development and joint experimentation. For example, he recommends that the Navy cancel its variant of the Joint Strike Fighter, purchase the 1997 QDR-proposed quantity of F/A-18E/F Super Hornet, and procure additional F/A-18C/Ds to meet fighter aircraft force structure requirements. O'Hanlon estimates this mixture of planes would "save more than $5 billion over the next decade." Using the same philosophy, O'Hanlon suggests that the Air Force reduce the procurement quantity of Joint Strike Fighters from 1,700 to five hundred and purchase 1,200 more F-16 aircraft. The savings from these changes could fund new technologies to make the military more deployable and lighter, as well as "small numbers of next-generation major weaponry as 'silver bullet' forces."

In another chapter, O'Hanlon recommends reducing the operational tempo by dropping overseas troop commitments, stating that a service member is "away from home at least 15–20% of the time," due mostly to deployments and training. According to the author, 250,000 service members are either based or deployed overseas. O'Hanlon advocates maintaining a U.S. presence in regions with key strategic interests and scaling back in other regions. For example, the number of Marines on Okinawa should be reduced from eighteen thousand to approximately five thousand, because the deployment is "not militarily or strategically essential—and . . . is on balance harmful to the U.S.-Japanese alliance." As a substitute

for personnel, he recommends positioning additional equipment on the island in case of a regional crisis. Secondly, O'Hanlon proposes that the Navy take another look at its full-time presence in the Mediterranean. He believes that "NATO's southern flank and Israel's western flank no longer constitute strategic vulnerabilities in the post–Cold War era." If a threat no longer exists, eliminate carrier deployments that are carried out only to reassure allies and give "psychological comfort." Reducing unnecessary deployments, shifting bases closer to contested regions, and rotating crews to the ship instead of returning the ship to port will decrease the operational tempo of the sailors, eliminate the need for two carriers, and generate savings.

The recommendations made in this work in early 2001 could have given the Bush administration some policy options and provided alternatives for the 2001 QDR. However, many of O'Hanlon's arguments have been overtaken by world events. Nevertheless, O'Hanlon's exhaustive research and insightful analysis make this an interesting book for readers of strategy and force-planning decision making.

CYNTHIA PERROTTI
Lieutenant Colonel
Naval War College

Khalilzad, Zalmay, et al. *The United States and Asia: Toward a New U.S. Strategy and Force Posture.* Santa Monica, Calif.: RAND, 2001. 260pp. $20

The United States and Asia presents a cogent analysis of U.S. strategic planning in Asia, sweeping from Japan to Pakistan. The study's specific focus is development of policy options and recommendations, looking out at an approximate twenty-year horizon into the future, especially analyzing and noting implications for Air Force planning. A result of Project AIR FORCE'S work on future asian security, this book was prepared by a team of RAND specialists, with the help of senior U.S. Air Force leadership, and with editorial comment by U.S. foreign policy officials. It benefits from the strengths of the team approach without the flaws of design by committee. It succinctly presents the thoughts and findings of the research group in clear, thought-provoking prose and figures.

The brief introduction stresses the need to prevent latent rivalries in Asia from upsetting the twenty years of relative peace between 1980 and 2000. The challenge for the United States is to develop policies that will continue to promote a stable Asia compatible with U.S. interests—in short, to succeed in a quest for "dynamic peace."

The scene is set with a discussion of the range of international trends and problems in Asia, including possible Korean unification, the U.S.-Japan relationship, China's emerging profile, India's ambitions, Pakistan's difficulties, Russia's future, disputes in the South China Sea, stresses on Indonesia, and Vietnam's significance. Although necessarily a whirlwind tour and not for country specialists, these are short, basically fair synopses. Additionally, the book includes four longer appendices by area specialists that add considerable detail to the earlier descriptions of changing political-military environments in Northeast Asia, China, Southeast Asia, and South Asia.

Although the book discusses terrorism and Islamic fundamentalism, the events of the past year argue for more analysis of these topics in any strategic discussion, especially as they relate to South, Central, and Southeast Asia.

In the strategy section, key U.S. objectives in Asia are defined as continued economic, political, and military access, and the prevention of the rise of a regional power or coalition that would prevent access to the region. Discussed strategic options for achieving these objectives include strengthening U.S. hegemony, forming a "condominium" with one of Asia's major powers, acting as a "balance" in a multipolar regional power system, creating a comprehensive collective security system, and U.S. disengagement. Each approach discussed is discarded as either too expensive, too fraught with domestic problems, too subordinate, or too ineffectual historically. The study then recommends a strategic approach that is flexible and pragmatic, involving elements of most of these strategic options. Bilateral relationships should push toward multilateralization, creating a larger core partnership including the United States, Japan, South Korea, Australia, and perhaps Singapore, the Philippines, and Thailand. At the same time it advocates a balance-of-power strategy among the rising powers of China, India, and Russia that will prevent these states from either threatening each other or "bandwagoning" to undercut U.S. interests. It encourages promotion of a security dialog among all the states of Asia and encourages others to enter the U.S.-led multilateral framework. It suggests maintaining flexible relations with as many countries as possible to support the formation of ad hoc coalitions to deal with emerging regional problems. The study goes on to outline more than a dozen ways this strategy could be adapted to implement U.S. policies in Asia.

In the military section, observations are made about U.S. force structure in Asia, with some suggestions for reconfiguring military presence given anticipated changes in the Asian environment. The study predicts that North Korea may not require that all U.S. military forces leave South Korea if and when Korea unifies, so it suggests the option of maintaining one of the two main operating air bases in Korea. The study also recommends expanding base facilities on Guam. Beyond that, it recommends making arrangements to use existing bases in Asia, both U.S. and foreign, through diplomatic means. In this way, the United States would remain neither overcommitted nor undercommitted. This section is enhanced by the inclusion of a series of schematic maps and tables that identify and assess U.S. air bases in Asia. The maps are especially useful in assessing U.S. Air Force capabilities for crisis response in Korea, Taiwan, Southeast Asia, and South Asia. An important recommendation is made to improve the U.S. Unified Command Plan either by including Pakistan under the Pacific Command, as India is, or by establishing a coordinating committee for daily communication.

Concluding military recommendations are for buildup of Guam as a major hub for U.S. power projection in Asia, cooperation of the U.S. Air Force and the Navy to maximize joint leverage, and review of the Air Force future force structure, looking toward longer-range combat platforms, including heavy

bombers, arsenal planes, and long-range, high-speed strike craft.

Concluding strategic recommendations include maintaining open lines of communication with as many parties in Asia as possible, maintaining U.S. transparency so that U.S. objectives are clearly understood, and expanding the net of U.S. security partners.

This RAND outline of a comprehensive, realistic, flexible U.S. strategy in Asia, with appropriate military reconfiguration, is an important contribution to our search for continued stability in this part of the world.

GRANT F. RHODE
Brookline, Massachusetts

Pollack, Kenneth M. *The Threatening Storm: The Case for Invading Iraq.* New York: Random House, 2002. 384pp. $25.95

The United States and its allies once more stand on the brink of war with Iraq. What makes this war different, however, is that its primary goal is to replace the dictatorial regime of Saddam Hussein with a democratic form of government. In the opinion of the Bush administration, removal of Saddam and his weapons of mass destruction will bring stability to the Middle East and the world. While there is consensus to remove Saddam and destroy his weapons, there is disagreement among the experts as to how to accomplish it. Kenneth Pollack is a specialist on Iraq whose experience as an analyst for the Central Intelligence Agency and the National Security Council gives him a unique vantage point from which to comment on U.S. foreign policy in the Middle East. In *The Threatening Storm*, Pollack posits that a U.S.-led invasion of Iraq is the only logical means to end Saddam's regime. This argument results from a thorough discussion of the rise of the current regime and of Iraq's relationships with its neighbors and the West, followed by a painstaking analysis of the several options available.

In the case of Iraq, says Pollack, our vital national interest, as well as that of the entire world, clearly lies in the economic stability of the region based on ability to export crude oil without interference. Following the Gulf War of 1990–91, the United Nations implemented a number of measures to contain Iraqi ambitions. A short time later, teams of weapons experts entered the country to locate and destroy chemical and biological weapons stockpiles and production facilities. In 1998 Iraq threw out the inspection teams, and for the past four years, notes Pollack, the Iraqis have allegedly been reacquiring chemical and biological weapons and have reenergized their research programs to develop nuclear weapons. Some world leaders and strategists have proposed five options for dealing with what they claim is a clear and present danger to their vital national interest in the Persian Gulf. These options are containment, deterrence, covert action, the "Afghan" approach, and invasion.

Containment has been the policy since the end of the Gulf War. Originally, it had two key components: weapons inspections and economic sanctions. With the eviction of the weapons inspectors, economic sanctions became the sole functioning component of the policy. The oil-for-food program and smuggling, as well as reluctance on the part of some allies, notably France and

Russia, to abide by the terms of the United Nations resolutions have served to undermine the sanctions effort. Consequently, Saddam has been able to acquire continuing funding for his weapons of mass destruction programs. Pollack maintains, therefore, that neither reimplementation of sanctions nor unilateral imposition of sanctions by the United States will work, because they either do not have meaningful support from the international community or will place the United States in conflict with its allies. In addition, sanctions would not be the most effective way of quickly overthrowing Saddam's regime.

If the United States accepts the view that Iraq should occupy a lower priority in American policy, says Pollack, it must choose a policy of deterrence. Pollack explains that deterrence relies on the *threat* of American military action against Iraq to ensure regional stability, which assumes that the one deterred is concerned about the consequences of continuing to act uncooperatively. In Saddam's case, that is not a part of his psychological profile. Pollack, therefore, rules out deterrence as a viable option, because it would leave Saddam "free to acquire nuclear weapons" and would be a hope against the odds that American use of power would be sufficient to keep him in his pen. This scenario, says Pollack, is very risky and very dangerous.

The United States has tried covert actions before with little success. Covert actions, such as assassinations and coups, are extremely complicated operations, and the risk of failure is high. However, short of actually removing Saddam from power, covert actions can set the stage in terms of intelligence gathering, communications, and liaison work for a successful change in government. However, this approach, though useful, would also not meet the stated objective of quickly overthrowing Saddam's regime.

The fourth option, the "Afghan approach," limits the use of force to special operations troops and precision aerial bombing. In addition, there is the issue of using opposition forces to accomplish the overthrow and reestablishment of government. Unfortunately, Iraq's opposition forces are much weaker than, and not as well organized as, those in Afghanistan. This option too represents a lengthy engagement without guarantee of success.

Each of these four options has loopholes that could leave Saddam Hussein in power. Pollack believes that the only real solution is an invasion of Iraq by conventional ground and air forces.

Pollack argues his case well, going beyond the vituperative pronouncements of the administration to link operational objectives to national strategy, but he does not spend much time on the reconstruction of the country, which is, after all, the reason for invasion in the first place. He does make two noteworthy points, however: the removal of Saddam would allow for withdrawal of most of U.S. forces in the Persian Gulf region; and second, with its wealth in oil, Iraq can pay for its own reconstruction. Naturally, there are advantages and disadvantages to each option, and critics abound, but for Pollack the question is "not whether [we invade], but when."

Public opinion polls may show general support for a war in Iraq, but many people remain doubtful of the need for

war or for U.S. involvement. Though this book is out to sell a policy option, Pollack's detailed analyses provide readers with an excellent basis for understanding the situation in the Middle East.

PRESTON C. RODRIGUE
Lieutenant Colonel, U.S. Army

Cohen, Eliot A. *Supreme Command: Soldiers, Statesmen, and Leadership in Wartime.* New York: Free Press, 2002. 288pp. $25

This is an extraordinarily timely work, published when the United States may be about to conduct large-scale combat operations in the Middle East. It examines the relationship in a democracy between military and political leadership, "or more precisely, . . . the tension between two kinds of leadership, civil and military," especially in time of war.

Two themes run implicitly throughout the book. First, war is about more than purely military considerations (Clausewitzians, rejoice!), and consequently "war statesmanship . . . focuses at the apex of government an array of considerations and calculations that even those one rung down could not fully fathom." The resultant differing imperatives at each level explain much of the inherent tension between civilian and military leaders over strategy.

Second, the essence of successful wartime leadership depends crucially on the civilian leadership's receiving constant, reliable "truth" from its military commanders. The hierarchical military structure militates against delivery of harsh facts or unpleasant news; as per Winston Churchill, "the whole habit of mind of a military staff is based on subordination of opinion." Hence the importance of civilian leaders constantly asking questions, forcing military leaders to lay bare their assumptions and explain their reasoning, because nothing else will force the harsh but vital intellectual debate about whether military plans actually will achieve the desired strategic ends. Military expertise is not decisive here; as David Ben-Gurion noted, "In military matters, as in all other matters of substance, experts knowledgeable in technique don't decide, even though their advice and guidance is vital; rather an open mind and a common sense are essential. And these qualities are possessed—to a greater or lesser degree— by any normal man."

Citing Samuel Huntington's classic *The Soldier and the State*, Cohen describes the "normal" theory of civil-military relations, "which holds that the healthiest and most effective form of civilian control of the military is that which maximizes professionalism by isolating soldiers from politics, and giving them as free a hand as possible in military matters." This idea is widely and often unquestioningly accepted by serving military officers, reinforced by the apparent lessons of Vietnam, when such tenets were held to be violated, in contrast with the successes of DESERT STORM, when the military was ostensibly properly left alone to win the war. Indeed, for civilians to "ask too many questions (let alone give orders) about tactics, particular pieces of hardware, the design of a campaign, measures of success, or to press too closely for the promotion or dismissal of anything other than the most senior officers is meddling and interference, which is inappropriate and downright dangerous."

Cohen suggests that this is simply wrong. "The difficulty is that the great war statesmen do just those improper things—and, what is more, it is *because* they do so that they succeed." He tests his thesis using case studies of four great and successful war leaders—Abraham Lincoln, Georges Clemenceau, Churchill, and Ben-Gurion. Each man led a different kind of democracy under extraordinarily difficult circumstances, "meddled" greatly in military and strategic affairs, was subject to and driven by the normal pressures and constraints in his respective state, confronted great changes in the ways and means of conducting warfare, and had difficult relationships with his senior military leaders.

In none of these cases was there a fundamental doubt about the subordination of military leaders to civilian control. However, the acceptance of the legitimacy of that control coexisted, and still coexists, with "a deep undercurrent of mutual mistrust," based on major differences in outlook, experience, temperament, and culture. Such differences are exacerbated in wartime, because unlike other professions such as law and medicine, a military leader rarely has actual war-making experience at senior levels, so in a sense he is no less a "novice in making the great decisions of war" than his civilian counterparts. Thus, while "for a politician to dictate military action is almost always folly," as Churchill noted, "it is always right to probe." That is the common element in these cases—each leader insisted on close and frequent contact with his senior military officers, often to their discomfiture and resentment. Lincoln wrote probing letters to his generals and "exercised a constant oversight of the war effort from beginning to end." Clemenceau, to the dismay of the French high command, insisted on frequent firsthand visits to the front lines to observe the performance of senior military leaders and review the selection of generals down to division command. Churchill's queries and interventions were legion.

Cohen notes that the United States has, for the past four decades, essentially "waged war according to the 'normal' theory of civil-military relations," whereby politicians "refrain from engaging in the kind of active, harassing, interventionist probing of the military leaders about military matters" that characterized his four great leaders, contrary to the received (but wrong) wisdom in the U.S. military. In consequence, "loose assumptions, unasked questions, and thin analysis" led to catastrophic failure in Vietnam.

More recently, the Goldwater-Nichols Act, by making the chairman of the Joint Chiefs the president's chief military adviser, serves to separate further the civilian and military leadership realms. One of the baleful consequences of "letting the military do their jobs," essentially independently of the political leadership once the shooting started, was the premature end to DESERT STORM, in which the military was chiefly responsible for two critical decisions—General Colin Powell recommended an early end to the fighting, and General Norman Schwarzkopf made concessions at Safwan that allowed Saddam Hussein to survive internal revolts that might have ended his regime. Missing in both decisions was clear civilian control of events. There is little indication of civilian leadership asking the

necessary probing questions and providing key guidance.

These issues are especially salient now, as the United States contemplates undertaking military operations that would have profound strategic and political implications, and when indications of significant differences exist between civilian and military leaders concerning strategy and objectives, be it against terrorism or militant Islam.

Eliot Cohen is professor of strategic studies at the School of Advanced International Studies at Johns Hopkins University. A prolific author on strategy, he has served on the Office of the Secretary of Defense policy planning staff and is currently a member of the Defense Policy Board, advising the secretary of defense. *Supreme Command* is a must read for the highest civilian and military leadership and should also rank high on military professional reading lists.

JAN VAN TOL
Captain, U.S. Navy

Bacevich, Andrew J., and Eliot A. Cohen, eds. *War over Kosovo: Politics and Strategy in a Global Age.* New York: Columbia Univ. Press, 2001. 223pp. $22.50

During the 1999 Nato-U.S. war against Serbia over Kosovo, an unprecedented number of strategic and defense thinkers published their opinions on what became known as Operation ALLIED FORCE. Most thought and comment at the time was extremely critical of the Clinton administration's efforts to formulate and execute the operation. Critics bemoaned a warfighting policy that appeared pointed in the direction of a new Vietnam, focusing on gradual escalation of air strikes without the threat of ground forces. In the end, the Nato coalition forces appeared victorious but weighted with the indefinite mission of peacekeeping in that troubled and violent province. The leader of the Serbian effort, Slobodan Milosevic, ended up on trial for war crimes at the Hague. The leader of the Nato-U.S. armed forces, General Wesley Clarke, left his post shortly after the victory under circumstances that looked at the time like a relief for cause. In late summer 2002, Nato soldiers continued their frustrating mission of keeping ethnically divided Kosovars from killing each other—welcome to "Victory," post–Cold War style. While such behavior and commentary seem unusual, the real issue is this: does the 1999 Kosovo "war" provide a signpost for future conflicts in the early twenty-first century, or is that conflict an aberration best relegated to discussions among armchair warriors comfortably fortified with vintage brandy?

In their book *War over Kosovo*, Bacevich, Cohen, and their contributors make compelling arguments that the Kosovo War is a signpost, a cautionary tale of the extent and limits of post–Cold War superpower politics. Besides the articles by the editors, the contributions are by William Arkin, James Kurth, Anatol Lieven, Alberto Coll, and Michael Vickers.

Readers should note well that this is a book with an attitude. Its articles, uniformly excellent and insightful, accept, even embrace, controversy. Given the nature of the war, such a position for the book should seem normal.

William Arkin's lead article, summarizing the history of the conflict, should become the standard for historians and

strategists seeking to understand the war in some form less than book size. Arkin advises readers not to be deceived by appearances or Powerpoint briefings on just what decided victory for the Nato allies. The article certainly should replace the disingenuous official Kosovo report by the secretary of defense used in the curriculum of the Naval War College and other service schools.

However, the Arkin piece is only the appetizer. There is insufficient room to highlight all the fine articles in this review, but two struck this reviewer between the eyes. In the first, Anatol Lieven warns American "hawks" not to believe Kosovo is a model for future wars but that the conflict "will persuade . . . adversaries to confront the West indirectly, using nonstate actors." This was written before 11 September 2002. Lieven points out that the chaotic, decentralized, and violent nature of likely future conflict environments, including Afghanistan, can negate the high-technology advantages of the West, forcing the fighting down to earth on conditions more to the liking of the enemy. Reading Lieven, and then watching General Tommy Franks tell U.S. troops in Afghanistan that the war will be a long one, made this reviewer's hands cold and sweaty. In the second article, Andrew Bacevich conducts a revisionist tour de force describing the evolution of the Clausewitzian "remarkable trinity" as it applies to the United States, focusing especially on the latest changes effected by the Clinton administration and first demonstrated in Kosovo. At the risk of simplification, Bacevich would have the current trinity composed of a globally involved government able to use a professional, not conscript, armed force wherever it wants in face of an uninterested public—as long as the conflict is quick and bloodless. Whether or not one agrees with Bacevich's premise and findings, the power and flow of the author's conceptualization is truly impressive.

This is a necessary book for those who teach and practice national security. The writing and thinking are deep and compelling. One must congratulate the editors for their selections. One also must hope that defense decision makers, as well as students who will form the next generation of leadership, will read and pay serious attention to the works in this book.

JON CZARNECKI
Associate Professor of Joint Maritime Operations
Naval War College, Monterey Program

Locher, James R., III. *Victory on the Potomac.* College Station: Texas A&M Univ. Press, 2002. 507pp. $34.95

Jim Locher describes the history of the intense bureaucratic struggle to redesign relationships between the Joint Chiefs of Staff, chairman of the Joint Chiefs, secretary of defense, the president, and Congress. The prolonged struggle culminated in the Goldwater-Nichols Act of 1986. This document is thought by many to be the most sweeping military reform of the last forty years. Senators Barry Goldwater and Sam Nunn believed the system was broken and consequently was providing low-quality military advice to the secretary of defense. Others, particularly the service chiefs and the secretary of defense, strongly disagreed with this assessment. *Victory on the Potomac*

represents a dramatic, detailed, and sometimes entertaining description of the prolonged hardball political maneuvering and bureaucratic infighting between those for and those against reform. Locher colorfully describes the tactics and personalities of the key figures involved in the debate. He begins with the long and difficult history of efforts made during the Harry Truman and Dwight Eisenhower era to reform the Joint Chiefs of Staff and to strengthen the role of its chairman. Locher then focuses on Senator Goldwater, Senator Nunn, Representative Ike Skelton, Representative Bill Nichols, and key staffs' detailed strategy for reform. Their efforts led to bitter confrontations with senior military and civilian leaders who held the view that proposed legislation would cripple the Joint Chiefs of Staff's influence. Of particular interest is Secretary of the Navy John Lehman's total opposition to the legislative proposals and his tactics to outflank the legislators and, indeed, at times to outflank his own boss, Secretary of Defense Casper Weinberger. Locher also describes the particular difficulties for senior military officers favoring reform. Individuals like Admiral William J. Crowe, Jr., exhibited the utmost delicacy in balancing personal beliefs with the Pentagon's antireform stand.

Although the book emphasizes the Goldwater-Nichols struggle, it is a textbook on the complexities and strategies of bureaucratic politics fought for high stakes between the legislative and executive branches. Emotion, parochialism, and legitimate beliefs conflict and, at times, become highly personal. Students of government politics will find that the book adds generously to insights on the dynamics of gaining support for, or fighting against, significant legislative proposals. Readers with serious interest in national security policy formulation will benefit from the detailed examination of how arguments are developed, coalitions are constructed, and past history (such as Lebanon and Grenada) is marshaled to support either side of a debate. Those who favored reform will marvel at the persistence and political skill of the advocates. Those opposed will, no doubt, regard many of the described political tactics as unfair and perhaps unethical.

In an excellent epilogue, Locher reiterates the original purposes for the legislation and uses them to evaluate the present success of the Goldwater-Nichols Act provisions. His analysis has balance and notes that the behaviorial changes sought have not been fully realized, but he does conclude that the legislation "made significant and positive contributions in improving the quality of military advice." Locher observes that this judgment is shared by principal customers of the Joint Staff and by senior Joint Staff practitioners. Those who believe that significant improvement has resulted include former secretary of defense Dick Cheney, Colin Powell, and General John M. Shalikashvilli. In a separate book of his own, Admiral Crowe, the first chairman under Goldwater-Nichols, noted that the increased authority of the chairman was a significant benefit and not overly contested by the heads of service. Increasing the authority of the regional commanders was thought to add much to their capability for fulfilling warfighting roles. General Powell added that the Joint Staff had "improved so dramatically [that] it had become the premier military staff in the world."

The epilogue also examines disappointments, including the observation that "the Pentagon still lacks a vision of its needs for Joint officers and how to prepare and reward them."

Locher is a graduate of West Point and the Harvard Business School. He was a leading Goldwater-Nichols strategist on the staff of the Senate Committee on Armed Services. He is the authority on the detailed political pulls and tugs that brought Goldwater-Nichols into existence. While Locher strives for a balanced analysis, his commitment to the Joint Chiefs of Staff reform and his own key role in that process result in a more detailed examination of the proponents' view while giving less detail to the arguments of the opponents. Some of the opponents he classifies as excessively parochial, while others are characterized as ignoring obvious system flaws.

Goldwater-Nichols has had an unquestioned major effect on the Joint Staff process and on officer education. It is and will be for many years, the subject of intensive debate and analysis. Locher's book will be an important reference in this debate (and in turn, his article "Has It Worked? The Goldwater-Nichols Reorganization Act," in the Autumn 2001 issue of this journal, is a good introduction to it). I strongly recommend that anyone interested or involved in the national security process read this book. It describes democracy at work and just how hard that process can be.

WILLIAM TURCOTTE
Professor Emeritus
Naval War College

Shachtman, Tom. *Terrors and Marvels: How Science and Technology Changed the Character and Outcome of World War II.* New York: William Morrow, 2002. 360pp. $26.95

Tom Schachtman's brief history of the influence of science and technology on World War II needs less "gee whiz" and more John McPhee. As in the war itself, the author's strategic decisions are critical to the book's successes and failures.

The successes can be quickly acknowledged. The book is well written. Shachtman shows a good familiarity with the oral histories and memoirs of the most prominent scientists. He is interesting when identifying personalities and providing biographical material to enliven the narrative. He also correctly treats most of the significant scientific-technical developments of the war: the exploitation of the electromagnetic spectrum for command and control, navigation, and target acquisition; guidance systems for such ordnance as acoustic torpedoes and proximity-fused shells; nuclear weapons; signals intelligence; jet propulsion; and chemical and biological warfare.

Now I'll drop the other cyclotron. *Terrors and Marvels* does too little with too much, and it suffers from Shachtman's attempt to be international and chronological. Except for the fact that somehow the Allies "did better science" than the Axis (all those refugees from Nazism certainly helped), the author offers little explanation of how all these Allied wonder weapons, crypto dominance, and radar-sonar devices came about. If Shachtman had written separate chapters on his prize weapons, one would be far the wiser about the scientific and

political dimensions of technological innovation. He is blissfully ignorant of a decade of writing about the process of military-technical innovation in the twentieth century. The book has no compelling theme or interpretive core. Although this reviewer usually grimaces when graduate students invoke such deities as Thomas S. Kuhn and Michel Foucault, this book would have benefited from more theoretical structure.

Terrors and Marvels might also have profited from more attention to innovations that did not involve the gallant struggles of Nobel laureates in physics and chemistry to convince know-nothing politicians and generals to adopt their latest schemes to win the war. Storytelling conquers all. From the perspective of military logisticians and commanders, innovations in food processing, materials research, automotive engineering, computer technology, synthetics, and chemical explosives were war winners too. Schachtman gives them all short shrift. His discussion on preventive medicine and the treatment of combat trauma wounds is particularly limited, given the rich multivolume official histories of the U.S. armed forces medical establishments in World War II.

Part of Schachtman's difficulty is that he really does not know much about World War II, apparently alternating carelessly between the books of Martin Gilbert and Richard Overy—who, of course, are blameless for his series of gaffes. A few samples should suffice: Ishii Shiro's final rank was lieutenant general, not major (p. 318); Iwo Jima was prized as a fighter base and emergency landing site, not a B-29 base (p. 298); Japanese troops did not land on Bataan in December 1941, and they did not seize "American garrisons at Shanghai and Tientsin," since the 4th Marines and 15th Infantry had already departed (p. 166); the 17 August 1943 Eighth Air Force raid on "Schweinefurt" [*sic*] was made by 230 B-17s, not 376, and German flak accounted for only six bombers from the 1st Bombardment Wing, which lost thirty B-17s to German fighters. In fact, the entire first paragraph of chapter 7 is riddled with fiction. The sparse account of Allied military medicine ignores a central fact and accomplishment—wounded survival rates were important but not as important as the number of American wounded who returned to a duty status of some sort. The number of wounded combatants who lived to fight another day is dramatized in the story of Company E, 506th Parachute Infantry Regiment, immortalized in word and videotape by historian Stephen Ambrose. Another slip is Shachtman's sketchy account of the role of operations research and analysis mathematics; it ignores a massive literature on operations research in air warfare, logistics, and antisubmarine warfare—a literature that Shachtman apparently does not know.

In sum, a single volume on the influence of scientific and technological innovation on World War II would be welcome. *Terrors and Marvels* is not that book.

ALLAN R. MILLETT
Ohio State University

Norris, Robert S. *Racing for the Bomb: General Leslie Groves, the Manhattan Project's Indispensable Man.* South Royalton, Vt.: Steerforth Press, 2002. 722pp. $40

Today, when a major weapons system commonly takes decades or more to develop, it is hard to imagine that the greatest weapon system of them all, the Manhattan Project, took just three years from start to detonation over Japan. Those three years were the stuff of high technical and engineering drama: vast new industrial facilities were constructed in secret across the United States, two billion dollars were spent without congressional oversight, new scientific laboratories were secluded in the high desert, and a unique U.S. Army Air Forces B-29 unit was created. All this took place under the direct command of Major General Leslie Groves, U.S. Army Corps of Engineers, whose management style set a norm for large systems-development programs that persists today.

In the popular recollection of the Manhattan Project, the physicists Robert Oppenheimer, Enrico Fermi, Leo Szilard, Edward Teller, and the Los Alamos Laboratory dominate. They are attractive figures who have remained in the public eye. Yet Groves, never a popular or sympathetic personality, was the man who put it all together. As such, he is worthy of serious attention.

Robert Norris, research associate with the Natural Resources Defense Council and scholar of nuclear issues, has written a long-overdue biography of General Groves. While the central theme of this work is Groves's leadership of the Manhattan Project, Norris does a thorough job of integrating into the story his formative years, family, Army career prior to the project, and postwar role in establishing a national policy for atomic weapons.

The sheer audacity and scope of the Manhattan Project remain impressive today. Based on theory and some critical experiments at the University of Chicago in the late 1930s and bolstered by a letter from Albert Einstein to President Franklin Roosevelt, the United States in 1942 committed itself to building an atomic bomb.

Groves, who had had a distinguished career as an Army engineer and had been the overseer of the building of the Pentagon, was selected to head the Manhattan Project in August 1942. Within just a few months, Groves brought together some of the best engineering officers in the Army, initiated vast land acquisitions for several large industrial operations for the purpose of isotope separation, established the basic technical compartmentalization policies that shaped the entire project, and brought into the program a number of prominent industrial corporations to build and run the plants. As the project grew, Groves fought for and won the highest priority for critical materials within the government's wartime allocation scheme, cornered the world market for uranium ore, set up the Los Alamos Laboratory, and appointed Oppenheimer as director.

Groves was a technically shrewd and aggressive man with complete confidence in his own judgment and willingness to take enormous technical and industrial risks with untried processes. His most remarkable talent was the ability to oversee and pursue alternative technical development lines until one or another was proven successful. In two important cases he made such high-risk decisions—isotope separation and bomb design.

Separation of uranium isotopes on an industrial scale was a critical step in the bomb manufacture. At the time, there

seemed to be three competing methods: gaseous diffusion, thermal separation, and electromagnetic separation. Each method had its advocates and its virtues. None was proven. While the scientific community dithered over the best technical method, Groves charged in and, with real managerial brass, initiated simultaneous and parallel development of all three separation methods, making the largest bet on the gaseous-diffusion method at Oak Ridge.

As the engineering worked out, using the partially enriched product from the thermal and the electromagnetic separation processes as feedstock for gaseous diffusion gave accelerated results, and the enriched uranium was ready on time for the bomb.

Initially, there were two quite different design approaches to building the bomb. The most obvious was the gun assembly technique, in which two subcritical masses of enriched uranium were explosively driven and held together until nuclear fission began and was sustained. This design became the "Little Boy" bomb that was dropped on Hiroshima in the world's first atomic attack.

However, theory held that the use of plutonium would produce a far more efficient means of nuclear detonation. Plutonium is an artificial element, bred in a uranium-fueled reactor that is formed into a hollow sphere and implosively crushed with high explosives until a nuclear detonation occurs. This proved to be a demanding technical problem requiring massive industrial sites for plutonium production at Hanford, Washington, and nearly all the talent at Los Alamos to calculate and form the sphere and the surrounding high explosives.

Again, Groves made the call, and both avenues were followed, at great cost, until the TRINITY test at Alamogordo, New Mexico, proved the plutonium implosion, which was used in the "Fat Man" bomb dropped on Nagasaki.

Since Hiroshima and Nagasaki, historians have devoted nearly as much energy to debating who made the decision to use the bomb as was released in the atomic explosions. Norris goes into this in some detail, looking specifically at Groves's role in decision making. He concludes that, as is commonly the case with large weapons development projects in wartime, the momentum of the project drove the outcome. The bomb was ready, an invasion of Japan looked to be murderously costly, momentum carried the day, and the bomb was dropped on Japan.

Norris's book is a fine complement to Richard Rhodes's *The Making of the Atomic Bomb* (1986), in which Rhodes covers the physics of the bomb. Both books chronicle events that changed the world.

FRANK C. MAHNCKE
Joint Warfare Analysis Center

Wright, Patrick. *Tank: The Progress of a Monstrous War Machine.* New York: Viking Penguin, 2002. 499pp. $29.95

The tank constitutes perhaps the most readily identifiable symbol of land warfare. From its initial appearance during World War I to the final stage of the Gulf War, its considerable impact on the outcome of some of last century's most significant wars is not in doubt. Whether battles were fought on the plains of Eastern Europe or in the deserts

of the Middle East, the opponent that made better use of the tank generally emerged victorious. In the early twenty-first century, the tank remains the dominant instrument of land warfare. Indeed, the fact that the world's most powerful armies—including those of the United States, Germany, Israel, Russia, and China—continue to organize their ground forces around the tank strongly suggests that its preeminent position is unlikely to be challenged any time soon.

Not surprisingly, therefore, the tank has been the focus of a substantial amount of literature. Most studies of the tank fit into at least one of three basic categories: describing the tank's actual part in a particular war, analyzing its operational role in a particular army, or assessing the general theory behind armored warfare. Studies that address the tank's past across time and space—indeed, that go beyond the narrow confines of the battlefield itself—are rather rare. This paucity of studies is apparently what spurred Patrick Wright, a professor of modern cultural studies in Great Britain, to produce this accessible, if flawed, history of the tank in the twentieth century.

Wright adopts a chronological approach to his subject. He begins with the first tentative use of the tank by the British on the western front during the First World War. He reasonably implies that the tank had a certain shock value on the battlefield but that it did not contribute in any meaningful way to Germany's eventual defeat. The tank really came into its own during the interwar period. One of the best chapters in this book traces the evolving military philosophies of the major European armies during this era, especially the German and Russian preference for maneuver warfare, with the tank as a central component of the "combined arms" team. World War II, he agrees, demonstrated just how dominant the tank could be on the mechanized battlefield, most astonishingly in the hands of the Germans on both the Western and Eastern Fronts and, later, in the hands of the Soviets as they drove into Central Europe.

The tank continued to be a "winning weapon" in the postwar world too, as Wright acknowledges in his discussion of the Israeli experience with armored warfare in the Arab-Israeli wars from the 1956 Sinai campaign through the 1967 Six-Day War, to the 1973 Yom Kippur War. Among the most stimulating material in the book is Wright's description of Major General Israel Tal's philosophy of armored warfare, which resulted in the design and construction of the innovative Merkava tank. Tal, of course, is the Jewish state's most highly regarded armored warfare specialist. Wright also traces the tank's part in the Gulf War and muses about its potential utility in an age of "digital" combat. All in all, Wright manages to convey a sense of the tank's contribution to war in the twentieth century.

Yet this book still suffers from a curiously unbalanced presentation. While it is surely legitimate for the author to write a history of the tank that goes beyond its successes and failures on the battlefield—one that delves into the tank's broader cultural relevance—Wright appears to have forgotten that its primary influence has always been on the battlefield itself. Thus, on the one hand, undeniably major tank battles, like those that occurred at Kursk during the Second World War and in

the Sinai during the Yom Kippur War, are examined in a cursory fashion. On the other hand, undeniably minor episodes in the tank's past, like the defacement of a memorial to Soviet troops in postcommunist Czechoslovakia, are the recipients of lavish coverage (relatively speaking). Wright may favor cultural over military affairs, but this sort of bias should not serve as a license to present a skewed picture of history.

Furthermore, the author writes from a left-wing perspective, which he is honest enough to admit frankly. Such a perspective is not inherently objectionable; however, when it leads to dubious judgments about what to incorporate as part of the tank's history, it becomes a problem. Thus he includes a long digression that probes in excruciating detail J. F. C. Fuller's bizarre *Weltanschauung* and obnoxious racism. It would have been sufficient for Wright simply to mention in passing that, whatever Fuller's insights into armored warfare, he was also an unsavory character with extreme right-wing views. Likewise, Wright spends the better part of a chapter examining a storage contraption for homeless people that bears only a superficial resemblance to a tank. This specific detour seems intended to chide the United States for its treatment of the less fortunate rather than to illuminate the tank's cultural relevance. A historical treatise, to put it bluntly, should not be used as a vehicle for airing political views.

These criticisms should not be taken to mean that Wright's book is ultimately unrewarding. To the contrary, it can be consulted with profit by anyone who has an interest in the tank. The book is, after all, well written, well organized, and filled with fascinating tidbits of information. However, it must be approached with a degree of caution. It is not the judicious and dispassionate account that one would expect from a professional observer but instead a polemic against a weapon and the ends to which man has put it. The book should be read with that notion firmly in mind.

DAVID RODMAN
Dix Hills, New York