

BOOK REVIEWS

ONE MAN'S OPINION

Clark, Wesley K. *Waging Modern War*. New York: Public Affairs, 2001. 479pp. \$30

This book is retired Army general Wesley Clark's anxiously awaited account of Nato's operations in Kosovo, dubbed ALLIED FORCE. As Clark was the Supreme Allied Commander, Europe (SACEUR) during Nato's first war, his account of this major operation is an important contribution to the historical record of events that led to what many consider a very controversial military endeavor.

Waging Modern War is divided into four parts. The first briefly addresses General Clark's career and his early reputation as a "fast-burner." It introduces Clark as the new Director for Strategic Plans and Policy (J-5) during the Bosnia-Herzegovina war and presents the same cast of characters that he would see again later in his career as SACEUR. The J-5 position allowed Clark to cut his diplomatic teeth while supporting Ambassador Richard C. Holbrooke's shuttle diplomacy, which eventually led to the Dayton accords. Most importantly, it was at this time that Clark began to gain his own insights into Yugoslav president Slobodan Milosevic and what made him tick. Though Clark discounts any patronage from his previous Arkansas connections with former President Bill Clinton, he

makes it quite clear that he was seldom the Army's favorite because of the many key positions he had held that helped position him for his selection to SACEUR. This section helps the reader to understand a bit about Clark's leadership style and attention to detail (less charitable people would label him a micromanager) and his view that the rest of the Army perceived him as an intellectual and not from the war-fighter mold. This is a key insight of a soldier never fully accepted by his own, and it establishes a thread woven through the remainder of the book.

The second section details the events and preparations that led up to Operation ALLIED FORCE. Clark lays out the planning challenges he encountered in an alliance that had been formed for an entirely different threat. At every turn he faced the need to compromise already accepted planning procedures. To complicate things, Clark discovered that his own national strategic-level leadership had little understanding of his dual-hatted role as Commander in Chief, U.S. European Command, *and* SACEUR, and of the political responsibilities attendant upon the latter position. This was further

complicated by the apparent lack of interest that was displayed by both the Joint Chiefs of Staff and the national command authorities in focusing upon the Kosovo situation.

The third part of the book, “The Air Campaign,” addresses the execution phase of ALLIED FORCE. Here Clark’s shortfalls in planning and his inability to forge a supportive relationship with the Joint Chiefs of Staff and the secretary of defense become apparent. Two days into the operation, Clark wrestled with the implications of having no defined end-state and the resulting fuzzy linkage between military and political objectives. Incredibly, he attempts to deflect criticism toward the political leadership for the fundamental flaws in the plan. The effects of this confused strategy vacuum lingered throughout the operation. In addition to the strategy challenges faced by Clark, the Washington leadership was not supportive—indeed, Clark depicts it as an impediment. His assessments of then Secretary of Defense William Cohen, Chairman of the Joint Chiefs of Staff General Hugh Shelton, and Army Chief of Staff General Dennis Reimer are damning. Clark is unambiguous that from his perspective, all three men contributed to a lack of national strategic coherence during the operation. This section ends by depicting a slippery slope toward an inevitable ground invasion of Kosovo—something that everyone wanted to avoid.

The final section of the book, “End-game,” details the sudden change in circumstances and Milosevic’s willingness to accept a deal. Clark outlines the time-sensitive and painstaking negotiations required to ensure an executable plan for the Nato peacekeeping force. He also addresses the now famous refusal of

his subordinate, Lieutenant General Sir Michael Jackson of the British army, to send forces into Pristina airfield to block the impending arrival of Russian forces. Clark concludes with an examination of his experience and its implications for future warfare.

This is a worthwhile book for those interested in the Kosovo conflict and how the Nato alliance works in practice. Subsequent memoirs from other key participants will add balance to this historical perspective. As for contributing to the body of knowledge on military theory, as the title implies, one must be less enthusiastic. Instead of presenting new theoretical constructs applicable to modern war, in reality the book displays the pitfalls faced by a joint-force commander and his national-level superiors when they disregard the fundamental tenets of operational art.

PATRICK C. SWEENEY
Colonel, U.S. Army
Naval War College



Watts, Barry D. *The Military Use of Space: A Diagnostic Assessment*. Washington, D.C.: Center for Strategic and Budgetary Assessments, 2001. 130pp.

Barry Watts, former director of the Northrop Grumman Analysis Center and now the director of the Office of the Secretary of Defense (OSD) Program Analysis and Evaluation, has written an assessment of military competition in near-earth space and how that competition may evolve over the next twenty-five years. Aside from the importance of its subject, this book is of particular interest because it explicitly attempts a “net assessment.” Watts worked for Andrew Marshall, director of the OSD Office of

Net Assessment (ONA) from its establishment in 1973. Marshall played a major role in, among other things, the conceptualization of the “revolution in military affairs” (RMA) and is currently playing a major role in the Bush administration’s defense review. Much of the work of ONA is highly classified, and it has been difficult to understand just what is involved in “net assessment.” Now we have an example. How does it look?

Watts observes that the United States is the preeminent user of space today and that the way it uses space has changed from the preconflict reconnaissance and warning of before, say, 1991 to enhancement of operations by traditional sea, air, and land forces since then. Watts argues that the U.S. primacy is unlikely to change, because the cost of moving mass into orbit is likely to remain high, and because much of the U.S. advantage originates in its organization and the tacit knowledge of its operators rather than the assets themselves. A key asymmetry between the United States and its potential adversaries is that America is inherently more dependent on space-based assets. Rather than repeat the U.S. effort, adversaries without the same budgetary and organizational constraints may be able to exploit commercial and dual-use technologies to meet their needs adequately and may attempt to reduce U.S. capabilities by attacking terrestrial downlinks rather than space-based assets. Thus Watts does not think it likely that overt military competition or conflict in space will happen over the next twenty-five years, to the extent that weaponization of space occurs, but he does believe it is inevitable over the long run, if more gradual than abrupt. That said, Watts does not expect that the military use of space for communications

and intelligence in 2025 will be essentially different from its use today.

Watts’s assessment, although nuanced, is sometimes confusing. One of the most puzzling issues is whether space is considered to be a military or economic center of gravity. Watts says that the survival of the United States does not depend on space-based assets. Yet he repeatedly observes that U.S. forces are increasingly dependent on satellites for communications and intelligence. What would happen if U.S. satellites were attacked? He discusses this only in terms of attacks on satellites in low earth orbits (LEO). Watts’s judgment that nonnuclear antisatellite (ASAT) attacks on individual satellites would be taken seriously by the U.S. leadership but might not lead to war seems plausible. In contrast, his argument that nuclear attacks on satellites in LEO would not have much military effect yet would be met with so strong a response that even pariahs would be deterred seems summary. Why would there be a strong response if space is not a center of gravity? Also, what happens if deterrence fails? As Marshall has said, “It is not a matter of deterring someone like us, but someone like him.”

The significance of the issue may be visible in a situation Watts does not consider—the effects of large-scale nonnuclear attacks on satellites in higher orbits. Given the interest in RMAs at Net Assessment, it is curious that he does not consider what might be a true RMA for the U.S. military, albeit one in reverse—a large-scale degradation of U.S. communications, reconnaissance, and Global Positioning System satellites. For example, while the cost of moving mass into geostationary transfer orbit may be expensive (according to Watts, moving 2,200 pounds to geostationary transfer orbit using a

Chinese Long March 2C costs twenty-five million dollars), middle tens to low hundreds of millions of dollars for an anti-satellite program may be an attractive price for a capability to attack the small number of high-value U.S. communications satellites in high orbits. A direct-ascent ASAT program might cost less.

Indeed, a country contemplating war with the United States might consider a billion dollars or so to degrade U.S. capability substantially by attacking thirty-five or forty American satellites money well spent. Hard, yes; guaranteed successful, no; but the severity of the outcome might be merely a function of money for an adversary and a serious problem for the United States if satellites move from being force multipliers to force divisors. In an explicit net assessment the issue of U.S. vulnerability and the capability of potential adversaries should be addressed more thoroughly before the wisdom of raining titanium rods from space is considered.

This book is recommended as an introduction to an important and insufficiently understood topic. It is also recommended as an example of net assessment, though, perhaps as intended, it is better at asking significant and useful questions and sensitizing readers to problems than at providing answers.

CARMEL DAVIS
University of Pennsylvania



Alexander, John B. *Future War: Non-Lethal Weapons in Twenty-first Century Warfare*. New York: St. Martin's Griffin, 1999. 255pp. \$14.95

The purpose of this book is to draw attention to the use of nonlethal weaponry in future warfare scenarios. The subject is

divided into three major sections that, respectively, discuss the rationale behind the use of nonlethal weaponry, provide an introduction to new technologies, and suggest scenarios of tactical and strategic uses. Throughout the book, Alexander focuses the reader's attention on some of the more critical issues of the appropriate use of nonlethal weaponry in the U.S. arsenal and, in so doing, demonstrates that new weaponry is needed to respond adequately to new and emerging types of conflict.

One of Alexander's fundamental assumptions is that "war has always represented the controlled application of force" and that nonlethal weaponry can be part of that controlled application of force consistent with military objectives. The questions are: How will new technologies be used to control the level, type, and effects of the force? How do these new technologies relate to changing military and political objectives? How can nonlethal weaponry best be applied when the objective is to limit force application in a variety of situations? These are not easy questions by any stretch of the imagination, but Alexander has had the temerity to put them forward for public scrutiny.

Alexander is no dilettante; his expertise in this area is recognized by the number of well-known serving military officers who have written short scenario-vignettes printed in the front of the book. Neither should it go unnoticed that Tom Clancy wrote the foreword and General John J. Sheehan wrote the introduction. Notably, Alexander chaired one of the first major conferences on nonlethal weaponry and participated in the landmark study by the Council on Foreign Relations on nonlethal weapons. He has experience as a military commander with the Green Berets in Vietnam, as Dade

County deputy sheriff, and as a consultant for the Los Alamos National Laboratory. This combination of technical expertise and real-world experience regarding the suitability and applicability of nonlethal weaponry has led to a thoughtful study that must be taken seriously.

Alexander's easy writing style belies the difficulty of the subject. The descriptions of techno-gadget weaponry may evoke ideas of science fiction or Nintendo, but they draw attention to the fact that what may not have been technologically possible in the recent past is now commonplace. The reader will be drawn to descriptions of electronic surveillance devices, new types of (and uses for) chemical agents, low-kinetic-impact weapons, acoustic devices, biological agents, and technologies appropriate for information warfare. The effect of these weapons on the human body and their use in conflict are of critical concern to all Americans, whether as "users," potential "targets," or as part of the policy community that writes the rules that enable or restrain the use of nonlethal weapons.

The author's use of fictional worst-case scenarios draws attention to the interface between weaponry, tactics and strategies, and appropriate rules of engagement. At first glance the vignettes seem a bit distracting, but they are admittedly an effective device for quick-pacing a difficult subject. They also tend to make a very sober analysis more palatable.

Military and intelligence experts will criticize the technological information as being "common knowledge." However, *Future War* was not meant to be a handbook for professional practitioners. Its importance lies in drawing public

attention to several dilemmas in U.S. security, both domestic and international. Instructors in professional military education should be discussing with military members not only the technology but the appropriate uses of nonlethal weaponry where military and law enforcement activities tend to overlap. Academicians and others who shape public opinion need to understand and discuss the dilemmas faced by military forces and law enforcement organizations. Finally, policy makers need to know the excruciatingly difficult decisions that must be made in the near future regarding the appropriate types and levels of force to be applied in a wide spectrum of missions.

The appendix alone is worth the price of this book. Alexander provides simple lists and diagrams of nonlethal weapons taxonomies, nonlethal antipersonnel and antimaterial weapons, target categories, specific uses of nonlethal weaponry, and programs supported by the joint nonlethal weapons directorate.

It is commonly assumed that the number and types of violent episodes around the world are increasing exponentially and that there is an increasing public awareness due to the growing visibility provided by the media. If these assumptions are true, any new type of control mechanism, whether lethal or nonlethal, will be subject to enhanced public scrutiny. The use of nonlethal weaponry in new forms of conflict needs to be discussed, debated, and understood by American citizens, whether in uniform or civilian. This book makes a significant contribution to that discourse.

PAULETTA OTIS
University of Southern Colorado



Gottschalk, Jack A., et al. *Jolly Roger with an Uzi: The Rise and Threat of Modern Piracy*. Annapolis, Md.: Naval Institute Press, 2000. 170pp. \$26.95

Jolly Roger with an Uzi is an easy, quick, and interesting read. Despite its relatively short length, it is a comprehensive examination of modern piracy. The authors' arguments and logic are strongly supported with facts and analysis, making their book a work of substance. Jack Gottschalk and Brian Flanagan, with Lawrence Kahn and David LaRochelle, do an excellent job of putting modern-day piracy into historical, legal, and economic perspectives.

They begin by looking at the evolution of piracy through the ages and the socioeconomic and political factors that have contributed and continue to contribute to its existence. In chapter 2 the authors lay out the legal considerations and framework for the differing thoughts on what constitutes piracy. Using the United Nations 1982 Law of the Sea Convention, the authors examine the international legal definition of piracy, as well as such criminal acts as larceny and robbery. The authors point out that piracy, by definition and by its very nature, has always been a crime for economic gain and, like other serious crime, often results in acts of violence.

One of the main points of this book is that regardless of legal definition, modern-day piracy has broadened its associated threats to include organized criminal activities, drug smuggling, potential environmental disaster, and common theft, as well as fraud. The heart of the authors' analysis is contained in a regional look at piracy over the last three decades. Focusing on Europe, the Americas, Africa, and Southeast Asia, Gottschalk and Flanagan bring

the reader up to date on modern piracy. The authors establish a clear picture of the extent and nature of contemporary piracy by summarizing reports by region and country. Building on these data, the authors discuss the economic factors that influence the actions of governments and the maritime industry to counter piracy. This analysis is based on an easy-to-follow logic that looks at piracy's impact on legitimate maritime trade from three points of view: those of merchants who use ocean transport, the shipping companies, and the insurance companies. The authors build a strong and credible case that, despite the significant increase in both frequency and violence, current economic losses due to piracy fail to outweigh the apparent costs of significantly lessening or stopping piracy, and so it continues. The authors conclude the issues and analysis portion of their book by discussing the potential for environmental disasters stemming from acts of piracy, and the differences between piracy and terrorism. In their "Solutions" chapter, the authors conduct a probing exploration of the challenges faced in putting an end to a criminal activity that has been around since the beginning of maritime trade. Their ultimate conclusion is that maritime trade, the target of piracy, is truly global and that therefore deterring or stopping piracy will require the cooperation of the international community of nations and the world's maritime industry.

The authors are to be commended. Collectively they have a wealth of professional expertise and experience in the maritime arena. Their treatment of "the rise and threat of modern piracy" provides an updated foundation from which to seek solutions to this growing problem of maritime security. Criminal and

international in nature, piracy, if left unchecked, will eventually provide the catalyst for future international crises and conflicts. This is a worthwhile read for anyone who is interested in or responsible for maritime security.

JAMES F. MURRAY
Captain, U.S. Coast Guard
Naval War College



Menon, Raja. *A Nuclear Strategy for India*. New Delhi: Sage, 2000. 316pp. \$45

Indian officers have written remarkably little about nuclear strategy in the more than quarter-century since India first demonstrated its ability to produce nuclear weapons. The cloak of secrecy that has traditionally surrounded India's nuclear program, New Delhi's declared policy of maintaining a nonweaponized nuclear stockpile, and a lack of interest in nuclear issues on the part of the Indian officer corps stifled discussion of nuclear issues. It is notable that the two most comprehensive accounts of India's nuclear and missile programs written to date—George Perkovich's *India's Nuclear Bomb* (Berkeley: Univ. of California Press, 1999) and Raj Chengappa's *Weapons of Peace* (New Delhi: HarperCollins India, 2000)—were written by an American scholar and an Indian journalist, respectively. India and Pakistan's 1998 nuclear weapon tests changed all that, bringing New Delhi's nuclear program into the open and triggering a new wave of thinking and writing about nuclear strategy. Raja Menon's *A Nuclear Strategy for India* represents one of the first serious attempts by an Indian officer to address the doctrinal and force posture issues arising from India's decision to go nuclear. The

author, a naval officer who retired in 1994 as Assistant Chief of the Indian Naval Staff for Operations, is well qualified to write on this subject.

Menon begins by reviewing the history of New Delhi's nuclear program and the development, such as it is, of Indian nuclear strategy. He is sharply critical of the Indian government and armed forces' traditional approach toward nuclear weapons. He argues that decisions on nuclear weapons have been fueled by a mixture of political rhetoric and organizational politics but have occurred in a strategic vacuum. The secrecy that has always surrounded the Indian nuclear weapon program has prevented a dialogue between the political leadership, the military, and defense scientists on strategy and force posture issues. He argues that rational analysis, not emotion, should guide Indian nuclear policy.

The remainder of the book offers just such an analysis. Menon begins by giving the reader a primer on nuclear strategy, one that borrows heavily from U.S. literature on nuclear deterrence of the 1970s and 1980s. One wonders just how applicable this literature was to the problems the United States faced during the Cold War, let alone those India may face in the twenty-first century. Clearly, Indian thinking about nuclear weapons is still in its infancy.

Menon's prescriptions for India make up the most interesting part of the book. While commentators in the United States have tended to focus on the Indo-Pakistani nuclear rivalry, the author makes it clear that it is China's nuclear and missile programs that drive New Delhi's force posture. He is particularly concerned that a modernized Chinese nuclear arsenal carried atop highly accurate missiles will render fixed targets in

India increasingly vulnerable. He therefore argues for a nuclear force that relies upon mobility to ensure its survivability.

The final section of Menon's book is a thorough discussion of the nuclear options open to India. He recommends that India adopt a rail-garrison, land-based missile force until it can shift to reliance upon ballistic missile-carrying submarines by 2020 (a date that seems extremely optimistic, given the troubled history of India's indigenous submarine programs). He also argues that India should field cruise missiles for both conventional and nuclear missions.

Menon is skeptical of the contention that nuclear weapons themselves offer an effective deterrent. He argues that a state's force posture and command and control arrangements are also important. Menon calls for extensive changes in Indian military decision making, suggesting arrangements that draw heavily upon those of the United States. He believes, for example, that India needs to adopt its own version of the national command authority and Joint Chiefs of Staff to command and control its nuclear forces. He also argues that India needs to codify its targeting policy in its own version of the Single Integrated Operational Plan.

A Nuclear Strategy for India is likely only the first of many efforts to think through the implications of India's decision to go nuclear. While but a first step, it provides the groundwork upon which others will doubtless build.

THOMAS G. MAHNKEN
Naval War College



Wickham, John A. *Korea on the Brink: From the "12/12 Incident" to the Kwangju Uprising, 1979–1980*. Washington, D.C.: National Defense Univ. Press, 1999. 240pp. \$20

For some reason, Korea is a major blind spot in U.S. thinking about world affairs. Public commemoration of the Korean War's fiftieth anniversary is almost nonexistent compared to the attention paid to the Second World War in the first half of the 1990s. Today, the Cold War lingers on in East Asia with the continuing division of the peninsula, which remains one of the locations in which the United States is most likely to go to war in the immediate future. Yet the American interaction with Korea is in many ways a success story in U.S. foreign policy, at least in the southern half of the country. The Republic of Korea has become an industrial, market-driven economy with a civilian-led democratic government that enjoys grassroots support among its citizenry. The road to this state, however, was fraught with extreme danger. From the mid-1960s until the early 1980s, there was a nearly continuous real possibility of war on the peninsula again. One of the periods of maximum danger was between 1979 and 1981, in the wake of the assassination of President Park Chung-hee and a military coup that toppled the civilian successor government.

General John A. Wickham was the commander of U.S. forces in Korea during this period, and this book is a memoir of his efforts to keep the United States and South Korea focused on their combat missions despite the turmoil of the time. Even though Wickham was a military commander, he could not turn a blind eye to politics. The South Korean army had become thoroughly politicized after

Park's eighteen-year reign. The late president had been a general who had come to power by a military coup. Many of his protégés worried about their futures after their mentor's death. There was also a good deal of concern and confusion about the North Korean role and its likely reaction to the assassination. Initially the South Korean military supported the constitutional process, but a number of junior generals with conservative social views and a strong distrust of civilian politicians decided to take control of the government two months after Park's death on 12 December (thus "12/12"). Wickham recommended a hands-off approach toward the coup. If it turned violent, or if there were a countercoup, there would be a good possibility that the North would intervene. The general knew this advice would not be popular back in Washington with President Jimmy Carter and his foreign policy team. "The U.S. government obviously was out of sorts over the '12/12 Incident.' It was a setback to the democratization process in the ROK [Republic of Korea] and a poor harbinger for the human rights goals that were central to President Carter's foreign policy."

Wickham's efforts were constantly focused on trying to keep the South Korean army "facing north"—that is, preparing to deal with the military threat of North Korea. This ever-present danger made the political maneuverings of coup and countercoup leaders all the more dangerous. The possibility that the North might attack in an effort to take advantage of the political weakness of the South was one that intelligence indicated was real. Indeed, the story Wickham tells evokes images of Saigon in the mid-1960s.

In Wickham's view, many of the generals he dealt with were politicians in uniform.

He was drawn into a number of political matters against his wishes; one of them almost destroyed his career. One of Wickham's themes is the influence the United States had in South Korea. The United States had reduced its ground force numbers in Korea during the administration of Richard Nixon, and the efforts of Carter to withdraw the troops entirely made many Koreans question the U.S. commitment. "The American mission was over a barrel, because our basic objective was to protect the ROK from invasion. That left us obliged to accept the realities of the Korean political apparatus, with all of its warts, and to work with it as best we could."

This memoir is rich with information. Although Wickham at times overstates the limits of U.S. influence, his basic point is correct: Koreans, not Americans, were going to decide the fate of Korea. It is also clear that cultural misperception complicated relations. General Chun Doo-hwan, the leader of the coup, failed to recognize that civil-military relations in the United States were different from those in Korea and therefore incorrectly assumed that Wickham played a role in formulation of policy.

Overall, the United States was fortunate to have as talented an individual as Wickham in place during this difficult time. Officers assigned to Korea or to any position abroad where they must deal with matters that involve factors that transcend those of an operational or tactical nature can profit from this book.

NICHOLAS EVAN SARANTAKES
Texas A&M University—Commerce



Hill, Richard. *Lewin of Greenwich: The Authorised Biography of Admiral of the Fleet Lord Lewin*. London: Cassell, 2000. 443pp. £25

Having served with Admiral of the Fleet Lord Lewin as a midshipman, Prince Philip, the duke of Edinburgh, notes in his foreword that in 1979 Lewin was the last Chief of Defence Staff in the United Kingdom to have served in the Second World War. It was serendipitous that this experience proved to be a force multiplier in his final challenge before retirement, as he masterminded the Falklands War alongside the prime minister, Margaret Thatcher. Conscious of the crucial importance of ensuring the coherence of what he called “politico-military issues,” or what we now call the maintenance of a policy-strategy match, Lewin knew that success depended upon being heard as the single military voice within the War Cabinet, and on his remaining at Thatcher’s side throughout.

Richard Hill’s carefully researched biography of Lewin paints the portrait of a man who, from a relatively humble background in the 1930s, achieved the highest military position in the British armed forces, beginning and ending his career with warfare, at different ends of the spectrum. Hill himself retired from the Royal Navy as a rear admiral, having worked for Lewin in a number of appointments. Near the end of Lewin’s life, Hill was asked by Lewin to write his biography. Consequently, Hill presents an extremely authoritative and sympathetic account of the great man’s life, spanning four decades of dramatic change in post-war history and relating Lewin’s part in the radical restructuring of the British armed forces, the legacy of which is very much in evidence today.

Predictably, Hill deals with Lewin’s appointments sequentially. In this way, the biography divides itself very clearly into two parts, reflecting the marked differences between service at the front line in an operational unit and the cut-and-thrust of the Ministry of Defence.

The first half moves swiftly through Lewin’s childhood before concentrating on his wartime experience, the highlight of which was his appointment in the Tribal-class destroyer HMS *Ashanti*, which played a crucial part in the North Russian convoys. *Ashanti* was then tasked to join Operation PEDESTAL in 1942, to convoy critical supplies to the besieged island of Malta; the advance of Erwin Rommel’s Afrika Korps on El Alamein had been largely a result of the Allies’ inability to use the forces based in Malta to cut German supply lines. The epic of PEDESTAL and the drama surrounding the torpedoed oil tanker *Ohio*, before it was towed into Valetta to the delight of the populace, is a tremendous story in itself. *Ashanti* rode shotgun on *Ohio* to Malta and then was dispatched to prepare for the next convoy to North Russia. As a sub-lieutenant, Lewin distinguished himself with great aplomb and finished the war having been mentioned in despatches three times and awarded the Distinguished Service Cross for “gallantry, skill and resolution . . . escorting an important convoy to North Russia in face of relentless attacks by enemy aircraft and submarines.” Postwar, his very swift promotion provided him with three commands, the last of which was the aircraft carrier HMS *Hermes*, aboard which he faced the challenges posed by the Aden crisis and the Six Day War of 1967.

In the second half of the biography, Hill’s emphasis moves from narrative to analysis. Lewin’s appointments in the Ministry

of Defence, dealing with issues at the strategic level, exposed him to the ill-defined world of negotiation and compromise and to the requirement to balance the myriad of interests between politics, the defence industry, the research lobby, academia, and the military itself. Here, Hill's greater depth and increased granularity of analysis provide a far better insight to the man, who wrestled with the introduction of Trident as Britain's strategic deterrent, and with the reorganization of the highest levels of defence to establish the primacy of the Chief of the Defence Staff over the service chiefs. Lewin's open mind, calm and modern style of leadership, and determination to deliver a viable and flexible defence for the United Kingdom of 2020 made him unique amongst his peers and still marks him out as an inspiration for all today. His vision of the establishment of a genuinely joint-service culture and of a balanced fleet that is fully interoperable with the Army and Royal Air Force and has a global reach, with a resulting capability to act as a force for good on the international stage, still exists today and continues to be refined in an uncertain world.

With the Quadrennial Defense Review in progress, the latter half of the biography will especially appeal to most of this journal's readership. It will be of real value to Naval War College students only a few years removed from their first assignment to the Department of Defense in Washington. Having gone myself straight from frigate command and the U.S. Naval War College to the Ministry of Defence for the first time—to face the Strategic Defence Review (our QDR)—I would have found Hill's insight into Lewin's match-winning formula an extremely useful preparation. Notwithstanding the time lapse and slight cultural

differences, the frenetic activity and the importance of networking skills and integrity are the same in the Ministry of Defence and the Department of Defense, and the wheels of progress still move quite slowly in both London and Washington.

TONY JOHNSTONE-BURT, OBE
Commodore, Royal Navy
Britannia Royal Naval College



Sandars, C. T. *America's Overseas Garrisons: The Leasehold Empire*. New York: Oxford Univ. Press, 2000. 345pp. \$65

Christopher Sandars, a career civil servant at the British Ministry of Defence, has written a concise and judicious account, based on published sources, of the unique global security system developed by the United States in the years after World War II. Convinced that this American system was neither a traditional empire nor an attempt to gain worldwide hegemony, he describes it as a "leasehold empire," a novel security system necessitated by America's anticolonial tradition and by the surge of postwar nationalism, in which the United States negotiated a series of base agreements with largely sovereign states. His study traces the development of this system and the enormous variety within it, ranging from colonial relationships with Guam, Hawaii, Panama, and the Philippines to basing rights by virtue of conquest in Germany, Italy, Japan, and South Korea, to the revival of wartime arrangements in Great Britain, and to the acquisition of heavily circumscribed rights in some Middle Eastern nations.

In dealing with these categories, Sandars provides a brief history of America's

political relationship with each nation, a detailed account of the bases acquired, a shrewd analysis of the various quarrels that emerged, and a careful description of the changes that occurred over the fifty years covered by this book. With some nations, such as Japan, the security relationship displayed a remarkable continuity, while in others, such as Panama and the Philippines, growing nationalist tensions forced the United States eventually to close its bases. America's relationships with Greece, Spain, and Turkey, new allies in the Mediterranean, were always filled with difficulties, while the United States was never able to obtain access to permanent bases in the Middle East. In this area of the world it had to rely on mobile forces and the repositioning of military equipment.

By the mid-1980s America's leasehold empire was under serious strain, beset by nationalist pressures and by what some scholars described as imperial overreach. Sandars believes that critics like Paul Kennedy overemphasized the gap between American resources and obligations, and failed to anticipate the end of the Cold War, the revival of the American economy in the 1990s, and the agility with which the United States adjusted to the new international environment and redefined its informal empire. Between 1989 and 1995 the number of U.S. troops permanently based overseas fell over 50 percent, from 510,000 to 238,000.

Sandars speculates that America's leasehold empire will last, on a reduced scale, far into the new century. "After a long period of mismatch," he writes, "the demands of the U.S. global security system and the resources to sustain it are now back in equilibrium." He is convinced that the benefits of this worldwide system of military bases far outweigh the costs,

and he praises the accomplishments of American foreign policy in the second half of the twentieth century. The United States, he concludes, "has emerged with credit and honor from this unique experiment of policing the world, not by imposing garrisons on occupied territory, but by agreement with her friends and allies."

CHARLES E. NEU
Brown University



Sarantakes, Nicholas Evan. *Keystone: The American Occupation of Okinawa and U.S.-Japanese Relations*. College Station: Texas A&M Univ. Press, 2000. 264pp. \$34.95

In the after-action report on the U.S. occupation of the Rhineland following World War I, Colonel I. L. Hunt wrote, "The history of the United States offers an uninterrupted series of wars, which demanded as their aftermath, the exercise by its officers of civil government functions." "Despite the[se] precedents," he lamented, "the lesson seemingly has not been learned." The military returned to this tradition of forgetting after World War II. Subsequent to that second global conflict, U.S. forces assumed responsibility for over two hundred million people in occupation zones in Asia and Europe at a cost of over a billion dollars a year, yet official military histories barely touch the topic. Texas A&M University professor Nicholas Evan Sarantakes steps in to fill part of the void with a thought-provoking case study of the American occupation of Okinawa from 1945 to the island's formal return to Japanese sovereignty in 1972. Sarantakes's thesis is that bureaucratic infighting shaped the course of the occupation as much as did national

security strategy and foreign policy. This finding parallels other research on U.S. postwar operations.

Sarantakes begins his narrative with the 1 April 1945 amphibious assaults launching Operation ICEBERG, an imperfect but ultimately successful campaign. This story has already been well told (particularly in George Feifer's *Tennozan: The Battle of Okinawa and the Atomic Bomb* [1992]), but Sarantakes's version is briskly written and engaging. His purpose in beginning with the fight for the island is to illustrate the interservice disagreements that marred operations—difficulties, he argues, that foreshadowed future problems.

The fundamental obstacle, Sarantakes finds, was that the United States lacked an overarching strategy for what to do with the islands. Normally, the military wanted to jettison occupation duties as quickly as possible; Okinawa was a rare exception. Both the Army and the Navy saw the island as a potential base from which to guard against a resurgent Japan or uncooperative Soviet Union. After a few typhoons demonstrated the vulnerability of harbor facilities, the Navy dropped its interest in Okinawa. The Army, however, saw utility in staging troops and bombers on the island and assumed overall control of the occupation. An Army commander was appointed high commissioner, making him the senior U.S. military, political, and diplomatic representative.

The dynamics driving the occupation of Okinawa bear striking resemblance to other major postwar peacekeeping and nation-building efforts, in Germany, Italy, Austria, Japan proper, and Korea. In the early years, 1945–48, high commissioners had a great deal of autonomy in shaping and implementing policies. At the same

time, they had scant resources for managing the occupations, with the result that their efforts to rebuild countries, institute the rule of law, and reconstruct civil societies were limited. In addition, commanders faced such challenges as monetary reform, black-market activity, crime by occupation troops and civilians, housing shortages, poor race relations, and forces ill prepared, inadequately trained, and ineptly organized for occupation duties.

As the Cold War heated up, the U.S. State Department took the lead in setting occupation policies. Most high commissioners became civilians; again Okinawa was a notable exception. The Department of State and the Pentagon were often at odds. The military wanted to hold forward bases like Okinawa, while the State Department lobbied to withdraw troops in order to build up good will with fledgling Cold War allies. The debate over Okinawa was a case in point. Sarantakes documents well the titanic 1961–64 struggle between the U.S. ambassador to Japan, Edwin Reischauer, and General Paul Caraway, U.S. Army, the commander of forces on the island.

The Cold War stimulated overseas investment in strategic areas and kept the troops in place. These commitments allowed for the eventual stability, security, and economic development that would have shortened the requirement for occupation in the first place. These bases did serve their intended purpose. Okinawa was a key support facility during the Korean and Vietnam Wars, and then the major staging base for Marine forces (a role that it continues to play).

The belated return of the island to Japan in 1972 concluded an arguably successful but, as Sarantakes demonstrates, troubled occupation. His research suggests

important lessons for the practitioners of military operations other than war. Effective peacekeeping and nation building are not cheap, easy, or brief, but their execution can be greatly facilitated by competent, cohesive, and effective interservice and interagency teams.

JAMES JAY CARAFANO
Executive Editor
Joint Force Quarterly



Paul, Septimus H. *Nuclear Rivals: Anglo-American Atomic Relations, 1941–1952*. Columbus: Ohio State Univ. Press, 2000. 266pp. \$42.50

With the collapse of Soviet power and the end of the Cold War, the paradigm that helped to explain that era shifted. Scholars seeking to understand better the period are now free to reassess that era, taking into account other variables in the power calculus with the same degree of attention previously concentrated upon the Soviet Union. To cite just one example of this paradigm shift, since the opening of recent British archives scholars have concluded that British foreign and defense policy had a much more decisive impact on the early Cold War than was apparent in earlier considerations. The new study by Septimus H. Paul is one such reassessment.

Paul is a professor of history at the College of Lake County in Grayslake, Illinois. His *Nuclear Rivals* is a meticulous examination of Anglo-American wartime collaboration in the development of the atomic bomb, followed by the decision of the United States after the war to deny Great Britain the fruits of that collaboration—the requisite technologies to build a British atomic bomb. To British eyes, this was a betrayal of solemn (if secret)

promises made by President Franklin Roosevelt to Prime Minister Winston Churchill during the war and of understandings between President Harry Truman and Prime Minister Clement Attlee afterward.

Part of the complexity of Anglo-American relations is to be explained by their multileveled nature. The alliance against Hitler during World War II forged a common front, which coexisted with substantive differences over grand strategy and the postwar political-economic settlement, particularly on questions relating to open markets and decolonization. The desire of the British to exercise joint partnership with the United States in the monopoly of the atomic bomb, and the American reluctance to do so, proved to be particularly divisive. These profound differences continued into the postwar world but were overshadowed by the American and British governments' perceived fear of the common threat from Soviet Russia. One of the truly valuable contributions of *Nuclear Rivals* is Paul's fidelity to this complexity and to the sources in relating the story of American collaboration and noncollaboration with Britain in atomic weapons development. Paul makes no attempt to sweeten or marginalize the differences between the two nations in this area; his approach is explicit, without attention to peripheral issues.

The major contribution of this book is its attention to what used to be called in the literature “the raw materials question.” This relates to the American attempt during World War II to secure a monopoly of the world's uranium supply. One complication for the Americans was that the source of the highest-quality uranium, absolutely indispensable for building an atomic bomb, was the then Belgian

Congo. Paul presents a compelling picture of Anglo-American maneuvering—on the American side, for an indefinite monopoly over the uranium output of the Shinkolobwe Mine; and on the British side, to secure first an allocation of uranium on a fifty-fifty basis with the United States, and then to trade off the British allocation in return for the technical details of the American atomic bomb. In this relationship, the British had rather decisive advantages, which they did not fail to exploit fully—a particularly close relationship with the Belgian government, and the fact that British investors owned 30 percent of the shares of Union Minière du Haut Katanga, which owned the Shinkolobwe Mine. Paul’s appreciation of this intimate relationship and its consequences for the United States is worth noting. Should Great Britain be so disposed, “it could and would secure a monopoly over the Belgian Congo raw materials. The United States would then be in a most disadvantageous position.” When the British in 1946 threatened to end the Combined Development Trust (CDT), the agency, established in 1944, responsible for joint acquisition and allocation of raw materials, the United States capitulated to British demands and agreed to a fifty-fifty allocation of uranium with Britain. This equitable allocation allowed Britain to amass a huge stockpile, without which it could never have detonated an atomic bomb in October 1952. By 1947 the United States was experiencing a severe shortage of uranium, which could be met only from supplies in the Congo and from that British stockpile. Tough negotiations secured Britain an exchange of atomic information in return for American access to all Congo allocations to be made in 1948–49 and, if needed, additional supplies from the British stockpile.

This arrangement was sanctified in a “modus vivendi” signed on 7 January 1948. The political counterpoint to this “agreement” could be found in the characterization by Edmund Gullion, a special assistant to Undersecretary of State Robert Lovett: Gullion had suggested calling this agreement a “modus vivendi,” since that was “a term most often used to describe the relations between adversaries driven by circumstances to get along together.”

The single area where I find myself in disagreement with Paul is his assertion that “American postwar atomic energy policy would be formulated, for the most part, not by the President but by this [government] bureaucracy.” This is a very wide generalization, not supported by the evidence. On the contrary, no president has abdicated his responsibility for the formulation of nuclear weapons policy to a bureaucracy, however talented. Paul himself makes this very point at the outset of his book, arguing that when Roosevelt and Churchill secretly negotiated the Hyde Park aide-memoire in September 1944, they agreed to continue postwar atomic cooperation. While that promise was disingenuous on Roosevelt’s part, the key point was that “the decision was made with no input from the President’s advisers.” President Truman’s action in signing the McMahon Act in August 1946 is perhaps the clearest indicator of his intent to oppose the sharing of America’s atomic secrets with *any* nation, Britain included. The McMahon Act prohibited transferring to any other nation the scientific and technological information necessary to manufacture an atomic bomb. The successful detonation of a British hydrogen bomb in May 1957 led President Dwight D. Eisenhower to overrule such advisers as the chairman of

the Atomic Energy Commission, Admiral Lewis Strauss, and to secure an amendment to the Atomic Energy Act of 1958. This amendment provided for a renewed bilateral exchange of nuclear weapons technologies with Great Britain. The extent to which presidential advisers got out in front of nuclear policy and played the role of staunch opponents of bilateral cooperation is well and properly documented in *Nuclear Rivals*. Indeed, the accurate portrayal of their roles in both the Roosevelt and Truman administrations, in war and peace, is a major asset of this book. Yet any implication of presidential abdication of the policy formulation role in this sphere is a misconception.

The caveat above notwithstanding, Septimus H. Paul has made a particularly valuable contribution to the literature. In his use of sources, Paul reveals a sophisticated understanding of the power calculus and refocuses our attention on some of the seminal issues and disagreements of the early Cold War period, with all their complexities. For just these reasons, *Nuclear Rivals* should be required reading not only for historians of this era but for all students of national security policy making.

MYRON A. GREENBERG
Defense Contract Management Agency/DCM Dayton



Daso, Dik Alan. *Hap Arnold and the Evolution of American Airpower*. Washington, D.C.: Smithsonian Institution Press, 2000. 233pp. \$23.95

Henry “Hap” Arnold was one of our great commanders. The only airman to hold five-star rank, he led the Army Air Forces through World War II with a strength, tenacity, and vision that was instrumental to victory, while at the same

time breaking his own health. Dik Daso, a former Air Force fighter pilot, Ph.D., and curator at the National Air and Space Museum, tells Arnold’s important story with unusual insight and verve.

Graduating from West Point in 1907, Arnold earnestly desired an assignment to the cavalry but instead was posted to the infantry. Despite exciting and formative experiences in the Philippines, he still hankered for the cavalry. Once again he was refused. He then transferred to the Signal Corps, and in 1911 he became one of our first military pilots. Fate. Over the next three decades he became widely recognized as an outstanding aviator (he won the coveted Mackay Trophy twice), commander, and staff officer. When Oscar Westover, chief of the Air Corps, was killed in a plane crash in September 1938, Arnold took his place and led the air arm for the next seven years. But the long hours and incredible pace he set for himself took their toll. He suffered severe heart attacks during the war, and another in 1950 took his life.

Other books have been written about Arnold, and his memoirs are packed with detail. Nonetheless, Daso was able to uncover family sources and documents not previously used that shed new light on Arnold the man, husband, and father. This approach makes for fascinating reading; it is always a comfort to know that great men are as human as ourselves.

Daso also highlights a unique aspect of Arnold’s life—his appreciation for the integral relationship between science, technology, and airpower. Early in his career Arnold recognized that a second-rate air force was worse than none at all. The path to aviation leadership was a strong research-and-development program and a commitment to progress. Arnold’s vision in this regard was extraordinary. He

consciously pursued contacts with leading scientists, industrialists, and engineers, planting in them ideas and urging them to move more quickly and boldly. He supported research into cruise and ballistic missiles, precision weapons, jet engines, and rockets. Daso highlights the special relationship between Arnold and the brilliant aeronautical scientist Theodore von Kármán, who in 1945 wrote the seminal *Toward New Horizons*, a detailed look at the future of air and space technology that would serve as the blueprint for Air Force research over the next two decades.

Daso points to Arnold's holistic approach to airpower as one of his great insights. Arnold understood that it took more than a collection of military airplanes to generate airpower. Needed also were a strong industrial base, robust research and development, a broad aviation infrastructure, a large pool of qualified personnel, and, perhaps most importantly, a clearly devised, coherent, and codified doctrine for the employment of those assets. Arnold, believing unshakably in the importance of strategic airpower, labored to ensure that America possessed all of these necessary factors.

One of the most interesting and insightful portions of this account is the epilogue, where Daso expands upon a letter that Arnold wrote shortly before his death regarding his views on leadership. The general noted several vital qualities: technical competence, hard work, vision, judgment, communication skills, a facility for human relations, and integrity. One could also add mental and physical courage. As he went higher in command and responsibility, Arnold was continuously faced with tough decisions. Having the courage to do the right thing regardless of the consequences and regardless of

the effect on friends and family is enormously difficult. This list of attributes, which Arnold displayed in abundance throughout his career, serves as the perfect summation for both the book and the man.

One might quibble with Daso over what he left out of this book. He spends almost no time discussing broad issues of strategy in World War II, targeting debates, interservice rivalries, or Arnold's relationships with his commanders. It is useful to recall here that Arnold's title was "commanding general" of the Army Air Forces; he was indeed that. He had far more control over his air forces and personnel than does a present-day chief of staff. An exploration of this aspect of Arnold's life would have been interesting.

Nonetheless, Daso's research is prodigious, the numerous illustrations are excellent, and his writing style is eminently pleasing. This is an excellent biography of a great commander; it should be read by airmen of all ranks, scholars, and other services' officers who wish to understand better the key influence in the development of the U.S. Air Force.

PHILLIP S. MEILINGER
Science Applications International Corporation
McLean, Va.



Sebag-Montefiore, Hugh. *Enigma: The Battle for the Code*. New York: John Wiley & Sons, 2001. 403pp. \$30

Hugh Sebag-Montefiore has given us a scholarly and thoroughly researched account of the code breaking that staved off unsustainable losses of merchant shipping and thereby led to victory in the Battle of the Atlantic. This book is particularly recommended to communications and communications security personnel.

Enigma may be scholarly, but it certainly is not dull. It is difficult to put aside and is, in the modern vernacular, “a good read.” The author traces the history of the Enigma machine from its beginnings in Belgium and Germany in 1931 to what the author titles the “Last Hiccough,” in June 1944. Most war college graduates consider themselves informed on the events of World War II, but few fully realize how crucial breaking the codes was to winning the war or appreciate the blood, sweat, guts, and luck that made it possible.

In 1931 Hans Schmidt, who has been called the “Enigma spy,” gave some Enigma manuals to the French. Two years prior, the German embassy in Warsaw asked Polish customs to return a box to Germany that had evidently been sent to Poland by mistake. A suspicious customs officer alerted the appropriate officials, and when the box was opened, an Enigma machine was found inside. Polish cipher authorities spent the weekend examining it before sending it back to Berlin, with no one German wiser. The Poles took advantage of their find and managed to break the code. With the beginning of the war and the subsequent fall of France, the Polish code breakers, who had fled to France, were in a precarious position. Their efforts to escape to England were frustrated by seemingly endless French bureaucratic roadblocks. Finally, some succeeded in crossing the English Channel and joined the British code breakers at Bletchley Park.

There are really two facets to this story: acquiring the material, and then developing the capability to use it. The credit for the first requirement belongs to the Royal Navy, and later to the U.S. Navy. Credit for the second goes to the code breakers themselves.

The film *U-571* is fictitious but draws upon the capture of *U-110* by HMS *Bulldog*. At its conclusion, full credit is given to *Bulldog* and other people and ships that captured Enigma machines, including Admiral Dan Gallery and the men of USS *Guadalcanal*'s hunter-killer group who captured *U-505* in June 1944. The author comments on Admiral Ernest King's severe displeasure at the salvage of the submarine; had word filtered back to Germany, the high command would have been certain that the Enigma secret was no longer safe. If there was a leak, however, evidently it was not acted upon. In addition to U-boats, German trawlers, weather ships, and supply ships were boarded and their code material taken to the Allied code breakers. Although the popular recent movie might be thought to be overdrawn, in fact the boarding officer and one enlisted man from HMS *Petard* went down with *U-559* after retrieving its code books.

The author points out that the German high command discounted any indication that its code might have been compromised. It did not indoctrinate submarine personnel sufficiently to ensure that Enigma material was safe from enemy hands. Weighting cipher books seems elementary. Still, none of us is blameless. Code books from American destroyers sunk in the Solomons washed ashore, much to everyone's embarrassment, but fortunately they were recovered by “the good guys.”

This book contains a considerable amount of technical information about the Enigma machine, how it was put together, and about the code books that made it work. Fortunately, most of this is contained in appendices, so the flow of the narrative is not disrupted. For the untutored, the technical data make clear

the enormous effort and highly talented people required to succeed in such difficult and frustrating work. Communications have come a long way since 1945, but a detailed description of Enigma of World War II may be useful to young security communications personnel of today. After all, if you want to know where you are going, you should know where you have been.

Hugh Sebag-Montefiore has done a real service to all navies by digging out this story and unfolding it so well. Had the code breakers not been successful, the world might look much different. At the least, some of us would not have survived, and our children and grandchildren would not have been born.

WILLIAM B. HAYLER
Captain, U.S. Navy, Retired