

<http://www.airpower.au.af.mil>

**Disclaimer**  
 The conclusions and opinions expressed in this document are those of the author cultivated in the freedom of expression, academic environment of Air University. They do not reflect the official position of the U.S. Government, Department of Defense, the United States Air Force or the Air University.

**Let Us Know What You Think!  
 Leave Comment!**

## Interested in Reviewing a Book?



### **Three Cups of Tea: One Man's Mission to Promote Peace . . . One School at a Time**

by Greg Mortenson and David Oliver Relin.  
 Viking (published by the Penguin Group)  
 (<http://us.penguinroup.com/>), 375 Hudson Street, New York, New York 10014, 2006, 352 pages, \$25.95 (hardcover), ISBN 9780670034826; 2007, 368 pages, \$16.00 (softcover), ISBN 9780143038252.

As Gen Stanley McChrystal traveled from Kabul, Afghanistan, to Washington, DC, on 23 June 2010, he e-mailed a message to Greg Mortenson: “[I] will move through this and if I’m not involved in the years ahead, will take tremendous comfort in knowing people like you are helping Afghans build a future.” The note arrived in Mortenson’s in-box at approximately 0100 eastern standard time. Nine hours later in the Oval Office, President Obama accepted General McChrystal’s resignation. The president had no disagreements with either McChrystal’s policy or his conduct of the war in Afghanistan, declaring that “we are in full agreement about our strategy” (Elisabeth Bumiller, “Unlikely Tutor Giving Military Afghan Advice,” *New York Times*, 17 July 2010; and “Obama Relieves McChrystal over Critical Remarks, Names Petraeus as Replacement,” *FOXNews.com*, 23 June 2010).

McChrystal’s note, a reply to an e-mail of support from Mortenson, reflected a growing bond between the latter and senior military leaders. Increasingly, they had sought his insight into and advice on the tribal cultures of rural, mountainous Pakistan and Afghanistan to help adjust their counterinsurgency theories to the realities on the ground.

In *Three Cups of Tea*, Mortenson relates the story of his unlikely transformation from moun-

taineer to cofounder and executive director of the Central Asia Institute (CAI) and adviser to senior military leaders. That transformation began in 1993 after his failed attempt to climb K2—a peak in northeastern Pakistan and, at 28,267 feet, the world’s second highest mountain and the most difficult to climb. During the descent, he became separated from his group, suffered from exposure, and stumbled into the Balti village of Korphe. The family of Haji Ali, the village’s chief elder, nursed him back to health. Appreciating what the villagers had done for him and recognizing the value they placed on education, he promised to build a school for their 84 children.

A man of modest means who supported his mountain climbing habit with his income as an emergency room nurse, Mortenson had to find sponsors who could finance the school in Korphe. He met Jean Hoerni, a Silicon Valley pioneer, who donated the \$12,000 Mortenson needed for the project. Construction of the school, which involved working with the village’s elders and using local labor, did so much to create beneficial relationships and develop his reputation that elders in nearby villages asked Mortenson to help build schools in their communities as well. Despite Mortenson’s desire to help, lack of resources presented a problem. Hoerni, who was dying from leukemia, helped solve it by cofounding the CAI with Mortenson and endowing it with enough money to build additional schools in rural Pakistan and Afghanistan.

Since then, the scale of Mortenson’s and the CAI’s efforts has increased exponentially. In Pakistan and Afghanistan, the institute has funded and organized the building of over 144 schools by local villagers in coordination with their elders. It underwrites those schools and their approximately 1,200 teachers, who have educated more than 64,000 students (including 52,000 girls). Additionally, the CAI has helped with women’s education, public health, and conservation projects. By making a difference in the quality of life in that region, both the institute and Mortenson have earned the respect of the villagers. Consequently, Mortenson and his CAI team were able to set up more than 35 meetings throughout Afghanistan between village elders and General McChrystal and his senior staff.

*Three Cups of Tea* offers the reader an enjoyable nonfiction adventure story of a respectable hero operating in a culture very different from his own—one located in a beautiful, exciting, and physically challenging part of the world.

Mortenson's story alone, which includes accounts of his dealing with kidnapping, death threats, and fatwas issued by village mullahs, is worth the read. But this book offers so much more—specifically, insight into the culture of the people who inhabit the mountainous areas along the border of Pakistan and Afghanistan. It illuminates their customs, the principles they value and respect, and their visions of a desirable future. The reader is exposed to the lessons that Mortenson learned as he muddled through his first years in the region, driven by a sense of purpose to keep his promise to build a school in Korphe. Indeed, the book's title derives from one of those lessons: "Haji Ali taught me the most important lesson I've learned in my life . . . to share three cups of tea, to slow down and make building relationships as important as building projects" (p. 150). Other lessons included how to dress, wash, worship, eat, and negotiate without being offensive. He learned the importance of and the power associated with the types of people found in most communities—from family members, clerics, and tribal leaders to military commanders and warlords. The larger and more important lessons Mortenson communicates are his thoughts about building relationships and empowering communities, as well as his realization that education and literacy offer the most effective and enduring way for promoting peace and stability—particularly for women.

*Three Cups of Tea* begins Mortenson's adventures in Pakistan, and his follow-on book *Stones into Schools* (Viking, 2009) continues the story as Mortenson and Sarfraz Khan (one of his most valued associates) expand their school-building efforts into Afghanistan. Mortenson, the CAI staffs in Afghanistan and Pakistan, and CAI fundraisers in Montana are making a significant difference in the region's quality of life and its advance toward long-term peace and stability. Recognizing those accomplishments, General McChrystal, NATO's most senior military commander, took time to write Mortenson an encouraging note on his last day of command. Adm Mike Mullen, chairman of the Joint Chiefs of Staff, attended the opening of one of Mortenson's schools in a remote village in Afghanistan's Hindu Kush mountain system and voiced a similar thought: "What Greg understands better than most—and what he practices more than anyone else I know—is the simple truth that all of us are better off when all of us have the opportunity to learn, especially our children. By helping them learn and grow, he's shaping the very future of a

region and giving hope to an entire generation" ("Stones into Schools," Central Asia Institute, 2009, <http://www.stonesintoschools.com>).

**Col Larry Carter, USAF, Retired**

*Air Force Research Institute  
Maxwell AFB, Alabama*

**The Architecture of Leadership** by Donald T.

Phillips and Adm James M. Loy, USCG, Retired. Naval Institute Press (<http://www.usni.org/naivalinstitutepress/index.asp>), 291 Wood Road, Annapolis, Maryland 21402, 2008, 96 pages, \$16.95 (softcover), ISBN 978-1-59114-474-8.

Preparation equals performance. Those three words form the basis of *The Architecture of Leadership* and provide the reader with a primer on how to become a better leader. A quick read, this book uses the basic tenets of architecture to describe how leadership can be built from the ground up, much like building a house. The authors begin with a foundation based on character and values that leaders tend to display. They then move to laying down a floor, highlighting a drive to achieve while tempering that drive with a capacity to care. The framework of their house is built from a series of innate traits exhibited by those who tend to take on the leadership mantle. Filling in this framework is a list of acquired skills necessary in completing the "house." Covering this framework is the ceiling of opportunity—the architecture of the house is of no value unless the leader has the opportunity to tie everything together. Finally, the author's research culminates with the roof of the house, signifying performance, bringing all the components together and succeeding where others may have failed.

Although this sounds like it could be a rather dry read, the authors do an excellent job of weaving throughout the book historical examples of past great leaders who have exemplified a particular trait or ability. All of the chapters include interesting and enjoyable highlights in the form of quotations attributed to those leaders, each of which has relevance to its own chapter and connects to the others. One of my favorites is from Adm Grace Hopper: "You manage things, you lead people." How many people reading this review have felt they were subject to just the opposite kind of leader? The book culminates in a story about the US Coast Guard's response to Hurricane Katrina and the ways that response

demonstrated successful application of the myriad facets comprising leadership found in *The Architecture of Leadership*.

Donald T. Phillips and Adm James M. Loy are both eminently qualified to speak on the topic of leadership. Phillips has published numerous books on leadership, perhaps best known for *Lincoln on Leadership: Executive Strategies for Tough Times* (Warner Books, 1992), a staple of professional military education for years. Admiral Loy has practical experience as a leader, having served more than 45 years in federal service and reaching the pinnacle of his military service as commandant of the Coast Guard. He also served as deputy secretary for the Department of Homeland Security and has spoken extensively about leadership.

Well laid out, the book follows a logical sequence that anyone can relate to: the building of a house. The chapters walk readers rapidly through the book, and it is over before they even realize it. One can almost describe the book as a checklist of those traits that a leader can work on to help create a recipe for success. The examples relate well to the topic at hand and offer the reader a glimpse into past decisions made by other great leaders worthy of emulation. Straightforward and effective in scope and applicability, *The Architecture of Leadership* has great relevance to leaders from all sectors of society, not just the military. Another must-have for any library, it provides a solid foundation for effective leadership that public, private, and nonprofit leaders will benefit from enormously.

**Maj Michael A. Marsicek, USAF**  
*Hill AFB, Utah*

**Al Qaeda in Its Own Words** edited by Gilles Kepel and Jean-Pierre Milelli. Translated by Pascale Ghazaleh. Belknap Press of Harvard University Press (<http://www.hup.harvard.edu>), 79 Garden Street, Cambridge, Massachusetts 02138, 2008, 384 pages, \$27.95 (hardcover); 2009, 384 pages, \$17.95 (softcover), ISBN 978-0-674-02804-3.

*Al Qaeda in Its Own Words* is a skillfully written, easily digestible combination of history, analysis, and review of the correspondence of some of the most well-known, influential actors in the al-Qaeda organization. Unlike Sayyid Qutb, these actors are not the “fathers” of radical

Islamic movements, but they remain tactically, operationally, and strategically relevant. Kepel and Milelli present the contributions of scholars and professors from the Institute for Political Studies in Paris, whose expertise ranges over Islamism, contemporary Islam, Arabic, and political movements in Saudi Arabia, and who offer summaries of the lives, noteworthy events, and significant writings of Osama bin Laden, Abdallah Azzam, Ayman al-Zawahiri, and Abu Musab al-Zarqawi.

Milelli emphasizes the importance of this knowledge since their ideology lives on, even after death, and is frequently used by other radical jihadi organizations. In many cases, the world is simplified into one fight against terrorism, and people have failed to truly understand what resonates with and motivates the al-Qaeda organization. The images, media blips, and excerpts from writings serve as a good exhibition, but a more comprehensive understanding of the influential actors and their written works “allows its readers to enter into a way of thinking, to get to the very heart of a specific worldview” (p. 4).

Described as the most well-known al-Qaeda member, Osama bin Laden actually possesses little theoretical depth. Contributor Omar Saghi objectively details events in bin Laden’s life and provides the reader a cognitive “map” to follow bin Laden’s movements through physical space, his social awareness, and his interactions with other influential actors such as Abdallah Azzam and Ayman al-Zawahiri. Readers are exposed to eight different writings (e.g., the “Declaration of Jihad against the Americans Occupying the Land of the Two Holy Sanctuaries” and “Message to the American People”), some of them excerpts, detailing bin Laden’s ideas and positions. More importantly, examining these writings fosters understanding about what the intended audiences of the world are reading and how that may affect their decision to join, or not join, radical organizations.

Abdallah Azzam, probably the least well known actor, is considered the theoretician of contemporary, worldwide jihad. Thomas Hegghammer extensively recounts Azzam’s history, showing that although Azzam was not the first person to use jihad as a form of political change, he justified it politically and described his vision for implementation. Azzam advocated conflict against the occupiers but did not urge violence against the “far enemy” in their territories. In many instances, his viewpoints differed from those of other radical ideologues. Hegghammer includes

five excerpts (of over 100 books, articles, and conferences) from Azzam's thoughts.

Considered the main "thinker" of al-Qaeda, Ayman al-Zawahiri forms the link between Azzam's ideology and its current implementation, including the movement towards more martyrdom operations. Stéphane Lacroix guides us through al-Zawahiri's life, revealing the people, places, and events that influenced his ideological position. The book offers four excerpts from al-Zawahiri's writings, including the denunciation of the Muslim Brotherhood (in "Bitter Harvest") and a piece laying the foundation for jihad according to his interpretation ("Knights under the Prophet's Banner").

*Al Qaeda in Its Own Words* ends with a discussion of Abu Musab al-Zarqawi, included here not because of his inspirational contributions to radical Islamic movements but because of his practice of targeting Shiites as the main route to creating mayhem in Iraq. Jean-Pierre Milelli takes the reader through a brief history of al-Zarqawi but focuses mainly on his interactions with members of al-Qaeda and his position on how to pursue jihad in Iraq. The book's sole excerpt from al-Zarqawi's correspondence ("Letter to Bin Laden and Zawahiri") illuminates his identification of the Shiites (or, as he calls them, the heretics) as the real "near enemy" to fight. After explaining his reasoning and intentions, al-Zarqawi asks for approval from bin Laden even though he makes clear that he will proceed as planned, regardless. This stance highlights the real relationship between al-Qaeda and al-Zarqawi.

The editors have included extensive notes, background information, and points of clarification for each section. Though not essential to understanding the book, this material provides excellent supporting information for the reader not well versed in Islam, Islamic radicalism, the Quran, and other related fields.

Reading this book will not create a better leader, better bomb dropper, or more technically competent Airman, but it does offer a glimpse into the minds, experiences, and thought processes of the enemy. By understanding him better, one can take more appropriate actions (or refrain from certain other actions) to counter that enemy. I recommend *Al Qaeda in Its Own Words* to anyone who really wishes to understand whom we are fighting and the ideology for which they are fighting.

**Maj Stephane L. Wolfgeher, USAF**  
*Monterey, California*

### **Off I Went into the Wild Blue Yonder** by

John James Knudsen. Pelican Publishing (<http://www.pelicanpub.com>), 1000 Burmaster Street, Gretna, Louisiana 70053-2246, 2007, 304 pages, \$19.96 (hardcover), ISBN 978-1-58980-494-4.

As with many memoirs, *Off I Went* has a number of historical errors. It also contains more editorial faults than it should. The book has nothing to do with air combat. It is full of examples of poor flying-training methods. Nevertheless, readers of *Air and Space Power Journal* might find it worthwhile reading. John Knudsen has an engaging writing style, and his story is entertaining, so one might read it for recreation. Beyond that, the book may also prove useful in expanding the reader's knowledge of the history of the Air Force, notwithstanding its factual defects (which say something about the roots of our culture, for it appears that Knudsen writes what is in his memory). The image he has about the history of World War II is fairly common among veterans, and its divergence from the facts is instructive in itself. He makes no bones about many of his (typical) pilot's prejudices of the day, and that teaches us something about what we used to be and how far we have come. His descriptions of the indiscipline of the wartime, stateside Air Corps in the air and on the ground are appalling to the modern reader, but they have the ring of truth. (The service had become the US Army Air Forces before Knudsen entered, but the term *Air Corps* continued to be used many years afterwards. Technically, an Air Corps existed on paper until shortly after the war.)

John James Knudsen was born in 1922 and lived to 2008—and thus witnessed the Great Depression, World War II, and the entire history of the Air Force. Brought up in Great Falls, Montana, by a father who had emigrated from Denmark and a mother from Ireland, he possessed a largely rural, Catholic value system. Clearly, he was a hardworking, intelligent lad who earned much of his way through Woodbury College in Los Angeles by laboring in the Lockheed plant. He graduated with a bachelor's degree in commercial art shortly after Pearl Harbor and entered the Air Corps in 1943. He never got out of the continental United States during the war, spending most of his time as an instructor pilot although he was trained in the B-17 and B-24 toward the end of the war. He was on track for B-29 training when Hiroshima occurred, and he left the service a few months later. Thereafter,

he spent his life as an editorial cartoonist in California, married in 1947, and helped raise eight children. Though he was never in combat, it is clear enough that his short time in the Army Air Forces was a major influence on his life.

*Off I Went* vividly depicts the helter-skelter character of the training and equipping of the greatest air force in history. The harsh conditions under which Airmen lived and worked stand in stark contrast to those we have enjoyed since the end of the Korean War. Shaky technology and weak maintenance added to the fear that was a constant companion for all flyers. Knudsen relates a string of horror stories about flying challenges that do much to explain why the accident rate of his day was an order of magnitude higher than it has been since, say, 1960. He makes no secret of his contempt for nonflying officers. The weakness of wartime junior leadership and the general indiscipline among Airmen do much to demonstrate the great exodus of the most experienced flyers after Hiroshima and the need to rebuild the new US Air Force almost from the ground up. That the survivors of the Great Depression were able nevertheless to generate the endurance, courage, and skill to achieve a remarkable victory confirms the greatness of that generation. It also teaches the importance of maintaining a technological, industrial, and professional military base in peacetime against an unpredictable future.

I recommend that *Off I Went* occupy a fairly high place on the aspiring warrior-scholar's reading list for the entertainment, lessons on changing military culture, and warnings it provides. Even its factual errors and prejudices have educational value for the modern reader: memoirs are not history, but perception often can have a greater effect on outcomes than reality itself. It takes a long time for realistic history to develop; even then, it is never complete. Meanwhile, we behave according to our perception of reality rather than reality itself.

**Dr. David R. Mets**  
Niceville, Florida

**Climatic Cataclysm: The Foreign Policy and National Security Implications of Climate Change** edited by Kurt M. Campbell. Brookings Institution Press (<http://www.brookings.edu/press/>), 1775 Massachusetts Avenue

NW, Washington, DC 20036, 2008, 237 pages, \$29.95 (hardcover), ISBN 978-0-8157-1332-6.

The release of Vice Pres. Al Gore's documentary film *An Inconvenient Truth* sparked renewed interest in the national security implications of global climate change. In 2007 a report by the Center for Naval Analysis concluded that climate change is a serious threat to national security. In June 2008, a national intelligence assessment noted that climate change has the potential to indirectly, yet seriously, affect the national security of the United States. *Climatic Cataclysm*, an anthology edited by Kurt M. Campbell, adds to this chorus of concern. Seven of the 12 contributors to the book hail from the Center for New American Security or the Center for American Progress. Two others served in the Clinton administration.

The analysis of Dr. Campbell and company depends upon the validity of existing climate models. Dr. Jay Gulledge, a senior scientist for the Pew Center on Global Climate Change, provides the scientific foundation for three climate-change scenarios: expected, severe, and catastrophic. He uses climate models to project temperature increases and then extracts the relevant environmental effects from a report issued by the Intergovernmental Panel on Climate Change. The other authors then apply their expertise in national security to create plausible geopolitical scenarios. Dr. Gulledge carefully points out that these scenarios are not predictions of the future but projections that "[describe] an outcome that is deemed plausible, often subjectively, in the context of current uncertainties" (p. 51). The authors do not associate likelihood with any scenario, yet they describe the first one as *expected*.

In scenario one, by 2040, global average temperature rises 1.3° C above 1990 levels, and global mean sea level rises by 0.75 foot. The authors describe a domino effect whereby water shortages lead to food shortages, which cause conflict over these resources, which results in migrations and new conflict in adjoining regions. The developing world is at the greatest risk, but wealthy nations are not immune. The authors call on the United Nations, European Union, and United States to prepare to respond to the expected humanitarian crises. Furthermore, unrest in the developing world leads to disruptions in oil production that put upward pressure on energy prices. Russia, an exporter of energy and one of the few nations that stands to gain in this

scenario, will likely see increased crop production from warmer temperatures in higher latitudes. Of greatest concern is the authors' belief that this scenario "is . . . to a large extent inevitable" (p. 97).

Scenarios two and three arbitrarily double scenario one's average temperature rise to 2.6° C in 2040 (scenario two) and 5.6° C in 2100 (scenario three). The associated rises in sea level are 1.7 feet and 6.6 feet, respectively. The authors consider this increase plausible because existing models do not include feedback mechanisms, such as the release of greenhouse gases from melting permafrost.

The author of scenario two waxes Malthusian in concluding that reduction of the human population is an inevitable consequence of severe climate change. War and disease cause vulnerable populations to die off. Worse still, a nuclear exchange could decimate the human race. As an alternative, he suggests that states may establish reproductive restrictions to control population growth—a morally repugnant prospect to those who value reproductive freedom, but attitudes may be different in 2040.

Scenario three paints an even worse picture. Large democracies such as India collapse. China's gains over the last century are completely reversed. Los Angeles, New York, Houston, and other US coastal cities become uninhabitable after 2040. The developed world, entirely preoccupied with its own survival, becomes isolationist. Genocide reigns unchecked in Africa. Still, scarcity eventually returns the earth into balance but at an extremely high price.

Although the authors' analysis focuses on the effects rather than the causes of climate change, the solutions they offer focus entirely on prevention. R. James Woolsey, former director of the CIA, proposes the most interesting solutions from a military perspective. During a fictional dialogue between John Muir, founder of the national parks system and first president of the Sierra Club, and Gen George S. Patton, the two agree on nine policy options that have the dual effect of reducing CO<sub>2</sub> emissions as well as vulnerability to malignant threats. Providing tax incentives for plug-in hybrid electric vehicles, for example, serves to reduce both greenhouse-gas emissions and dependence on foreign oil. Promoting micropower generation by means of wind turbines and solar panels decreases emissions and diversifies power production, making energy infrastructure more resilient to attack.

The fictional Patton and Muir disagree about the production of coal-to-liquids (CTL) fuel, Muir disliking it because it emits CO<sub>2</sub> but Patton liking it because it undermines oil. The United States has an abundance of coal, and CTL fuel is one of the few alternatives to petroleum that can power aircraft. As the leading US government consumer of oil, the Air Force has expressed interest in procuring half of its fuel from synthetic sources by 2016. Although the proposal is not economical when oil trades below \$60 a barrel, there is strategic value in having alternatives to foreign oil.

The strength of *Climatic Cataclysm* lies in the authors' sound geopolitical analysis of the impact of potential climate change. However, they offer little in terms of analyzing the cause. Although climate scientists deem the scenarios plausible, they suggest no way of evaluating their likelihood, which makes weighing the merits of policies such as the Air Force's CTL plan difficult. Do the possible long-term consequences of global climate change outweigh the clear near-term benefits of reducing dependence on foreign oil? *Climatic Cataclysm* has no answer. However, the authors do provide an imaginative and worthwhile examination of what could become the greatest threat to our nation's security.

**Maj Thomas G. Aranda, USAF**

*The Pentagon  
Washington, DC*

**The Candy Bombers: The Untold Story of the Berlin Airlift and America's Finest Hour**

by Andrei Cherny. G. P. Putnam's Sons (<http://us.penguin.com/static/pages/publishers/adult/putnam.html>), 375 Hudson Street, New York, New York 10014, 2008, 640 pages, \$29.95 (hardcover), ISBN 978-0-399-15496-6; 2009, 640 pages, \$18.00 (softcover), ISBN 9780425227718.

An excellent history, Andrei Cherny's *The Candy Bombers* addresses the role of airpower in defeating an enemy's ideas. The book describes global issues associated with the conflict between the United States and the Soviet Union, with Berlin stuck in the middle; military preparedness; decision making and politics; and the lives of key players in the airlift as well as their influence on the outcome. Portraying how "smart power" can lead to victory over a competing set of ideas, Cherny recounts the new US Air Force's

and its leaders' first victory of the Cold War. Such advocates of smart power as Joseph S. Nye and Richard Armitage would likely approve of this book because of the author's ability to demonstrate an effective combination of hard and soft power (i.e., smart power).

A former White House speechwriter and editor of the quarterly journal *Democracy*, the author clearly believes that the United States can use generosity and moral superiority to defeat threats to its security. Alluding in the introduction to the atrocities committed during the terrorist attacks of 11 September 2001 and Soviet brutality during the initial push into Berlin following the fall of the Nazi regime, he establishes parallels in terms of foreseeing possible victory in the "long war." By emphasizing freedom and democracy as the strongest weapons brought to the fight by the United States, Cherny advocates the use of smart power.

*The Candy Bombers* captures the political intrigue surrounding a presidential election during a time of international crisis. The campaigns of Pres. Harry Truman, Gov. Thomas Dewey, and Vice Pres. Henry Wallace in the presidential election of 1948 illustrate how politicization of international affairs and domestic use of the threat of war can sway voter support. The account of decision making during the election campaign offers excellent insight into civil-military relations and US history.

Readers learn how direct action of the commander on the ground overcomes Washington's lack of political unity regarding Soviet expansion into Berlin. Both Gen Lucius Clay, military governor of Germany, and Col Frank Howley, commander of the military government in divided Berlin, arrived with animosity for the Germans but quickly realized how loyalty to the population and the city of West Berlin confirmed Western resolve against Soviet expansionism. To the point of nearly sacrificing his career, Clay repeatedly stands up to Washington decision makers to prevent the United States from abandoning Berlin and thus avoid armed conflict with the Soviet Union.

Cherny notes Washington's desire to return to its smaller, pre-World War II military posture as well as the rapid demobilization of the military following the war, captured through comparisons of Soviet and Western ground forces and the inability to field significant numbers of airlift aircraft. Clearly the US Air Force saw its air mobility role undermined at this point. As an assistant secretary of the Air Force declared to Washing-

ton decision makers, the "Air Force was firmly convinced that the air operation is doomed to failure" (p. 290).

The author also addresses challenges to operational leadership, reflected in his depiction of General Clay as the middleman between Washington and Moscow and the organizational efforts of Maj Gen William Tunner. Readers discover Clay's desire to be a combat commander during the hot conflict in Europe, his development as a trusted leader who rises to the challenge of irregular war, and his incredible success during the airlift. The description of Clay's return to the United States demonstrates the author's belief that the general personified all of the heroes of the airlift.

Another hero, General Tunner had an amazing ability to convert a "temporary measure to furnish some extra food and supplies" (p. 263) into a precise, efficient, record-setting, long-term effort. Tunner's work also captures the frequent disconnect between functioning as a leader who deals with technological and organizational issues while simultaneously seeing to his Airmen's morale and well-being.

The title of the book calls to mind the nickname of Col Gail Halvorsen, who, during Operation Little Vittles, dropped candy to Berlin's isolated children, thus establishing perhaps the most well known image of the airlift. Indeed, his efforts became a symbol of one man's efforts to change the world. If none of the geopolitical or national political issues presented in *The Candy Bombers* appeal to a student of airpower history, then the Halvorsen story alone makes it a worthwhile read. However, in the process of relating how air mobility and the new US Air Force contributed to the first face-off of the Cold War, Cherny succeeds in demonstrating the importance of using smart power to address our current national challenges.

**Lt Col Tom Cooper, USAF**  
*Scott AFB, Illinois*

**Circling the Earth: United States Plans for a Postwar Overseas Military Base System, 1942-1948** by Elliott V. Converse III. Air University Press (<http://aupress.maxwell.af.mil>), 155 N. Twining Street, Maxwell AFB, Alabama 36112-6026, 2005, 265 pages, \$22.00 (soft-cover), ISBN 1-58566-141-4. Available free

from <http://www.au.af.mil/au/aul/aupress/Books/Converse/converse.pdf>.

*Circling the Earth* is a comprehensive narrative and analysis of the post-World War II base-planning efforts that began in 1942. Although this topic may sound dry and uninteresting, Elliott Converse has written an excellent study for people who follow defense bureaucracies and analyze how they operate as they attempt to balance the competing priorities, conflicting objectives, demands, and personal peccadilloes of those they serve. Most planners working in the Pentagon recognize themselves in the author's description of attempts to match broad policy and grand strategy to well-designed plans.

The study provides an interesting mirror to recent base-planning efforts. Like most weapon systems, bases require extensive resources prior to their introduction, as well as during construction and operations. As in the post-Cold War era, planners in the 1940s assumed that the defense budget would see dramatic cuts after the end of World War II. The lessons presented here are helpful to any student of the military establishment who attempts to reconcile strategy with limited resources.

Converse's extensive use of primary sources makes this analysis exceptionally plausible and authentic. Most of them come from the archives of the Joint Chiefs of Staff (JCS) and the personal papers, memoranda, and memoirs of individuals who took part in or oversaw the planning effort.

The development and formulation of US base planning were part of a larger effort to define the role of the United States and its military in a postwar era. The author traces the evolution of policy from a regional to a global security outlook as it became clear that observed threats would not come from several different, historically hostile countries, but from a more monolithic and powerful Soviet Union. This fact changed the perceived role of US military forces from part of an international police force, responsible for keeping the peace in internationally designated zones, to a force that would have to remain strong to defend the United States as well as parts of Europe and Asia. The role of the military base shifted from a means of promoting peace and commerce to an outpost for conducting aerial attacks against an aggressive Soviet Union. Additionally, the geographic focus shifted from Asia to Europe and the Middle East, due to security issues and economic interests. The

technological limitations of Air Force bombers led to the need for bases despite previous analysis to the contrary. This debate was heavily influenced by the increasingly aggressive insistence by the Army Air Forces (AAF), precursor of the US Air Force, that airpower would prove decisive in future conflicts.

All of the major military bureaucracies, including the Army, Navy, Department of War, AAF, Department of State, and Civil Aeronautics Board, were involved in strategy formulation and the conflict over resources. Converse describes in some detail the interplay among the JCS, AAF, and Navy, and how interservice rivalry over future roles and budgets affected strategy development and base locations.

Of special interest is the description of civil-military relations and their evolution from the beginning of the war to the reorganization of the US security establishment in 1947. The direct access to Pres. Franklin D. Roosevelt enjoyed by the JCS created many problems for the civilian secretaries of war and the Navy, as they attempted to put their own imprints on policy. After Roosevelt's death, the author describes how the civilian secretaries began to interpose themselves, together with the various organizational and bureaucratic mechanisms they established, into the base-planning process. The transition from the elevated status the military occupied during the war to the relegation expected at war's end acted as a substantive driver for much of the sparring that occurred during the planning process.

*Circling the Earth* has some shortcomings. For example, it includes extensive discussion about the economic and commercial aspects of basing that were an important factor in base requirements and location. President Roosevelt pushed the base-planning effort early and hard, convinced that civil aviation would become an important driver of postwar economic success, and that the United States would compete with its allies to secure commercial routes and refueling points. However, the book gives no indication that other commercial aspects may have played a role in base planning, especially for the Navy. Furthermore, it fails to address the potential of merchant shipping as an economic motivator, leaving the reader to wonder whether this omission stems from the lack of discussion about the importance of port access and seaborne trade routes, or whether the subject remains an unexplored part of the historical record that the author chose not to pursue.

Readers would definitely benefit from the inclusion of organization charts describing the structure of the Department of War, Department of the Navy, and JCS, as well as their connections to the executive branch. In addition, maps featuring the proposed base locations and demarcation lines, as described in the text, would have been helpful in visualizing changes that took place from 1942 to 1948.

Moreover, most planners like to see how their superiors receive their efforts and how well their plan worked. *Circling the Earth* describes only the planning efforts—not the execution of strategy or actual placement of bases. Although the author may have used this approach to limit the scope of his topic, a short summary of the plans' execution could have provided perspective on whether the United States actually implemented what the JCS and services had developed, and would have offered valuable lessons to modern-day planners. Finally, readers find little detail on actual negotiations by the State Department that took place to secure bases or base rights or on how that department addressed the unwillingness of other countries to host US bases.

**CAPT Paul Younes, USNR**  
NR C2F Expanded Missions Unit  
Newport, Rhode Island

### **The Adaptive Optics Revolution: A History**

by Robert W. Duffner. University of New Mexico Press (<http://www.unmpress.com>), 1312 Basehart Road SE, Albuquerque, New Mexico 87106-4363, 2009, 485 pages, \$44.00 (hardcover), ISBN 978-0-8263-4691-9.

In May 1991 Dr. Robert Fugate, an Air Force scientist from Kirtland AFB, New Mexico, astounded a standing-room-only audience at the 178th meeting of the American Astronomical Society in Seattle. He disclosed eagerly anticipated details about an innovation that would bring an exponential improvement in the quality of images from space. Showing “before and after” photos as proof, he described how specialized laser beams integrated with waveform sensors, high-speed processors, and deformable mirrors could compensate for the atmospheric turbulence that had heretofore blurred the vision of the world's most powerful terrestrial telescopes. Since that revelation, all new large telescopes

have incorporated this adaptive-optics technology, and many older ones have been retrofitted.

Dr. Robert Duffner, longtime historian for the Air Force Research Laboratory directorates and predecessor organizations at Kirtland AFB, thoroughly explains the development of adaptive optics in this informative book. Because military uses for adaptive optics include tracking, identifying, and (theoretically) disabling satellites in orbit as well as focusing directed-energy weapons to destroy missiles and other targets, development of this technology was shrouded in secrecy from its birth in the 1970s until the end of the Cold War. As the author makes clear, the military potential of adaptive optics encouraged the Air Force, the Defense Advanced Research Projects Agency, and later the Strategic Defense Initiative Organization (now the Missile Defense Agency) to keep investing the money and time required. Bringing the story almost up to date, the book describes the Air Force's continued work with adaptive optics, including its sophisticated telescopes in New Mexico and Hawaii, as well as the YAL-1A Airborne Laser.

The author bases his study on exhaustive research, enhancing its credibility by providing source citations for almost every paragraph. These include interviews with more than 70 people—not only scientists and engineers but also managers, commanders, and high-level decision makers (including several former Air Force secretaries, chiefs of staff, and other Department of Defense executives). In describing the technical challenges that had to be overcome, Duffner gives full credit to various military organizations, MIT's Lincoln Laboratory, and many private companies; quite appropriately, he also emphasizes “in-house” teams of Air Force civilian and military personnel responsible for some of the most impressive breakthroughs.

To help readers unfamiliar with lasers, optics, or the history of defense research, the author provides plenty of background information and other details. At the risk of being repetitious, many chapters summarize material covered previously. Some of the topics can seem a bit too technical for the average reader, but almost 100 well-placed illustrations and photographs aid in understanding the text. Unfortunately, the publisher did not use a color version of any of the images of adaptive optics in action for the book's dust jacket; doing so would have better indicated its contents than the old black-and-white snapshot selected.

*The Adaptive Optics Revolution* is a prime example of technology transfer—that is, how military research and development (R&D) programs can spin off beneficial civilian applications. This well-written history should be of special value to all R&D professionals and anyone interested in modern astronomy.

**Lawrence R. Benson**  
*Albuquerque, New Mexico*

### **The Art of Command: Military Leadership from George Washington to Colin Powell**

edited by Harry S. Laver and Jeffrey J. Matthews. University of Kentucky Press (<http://www.kentuckypress.com>), 663 South Limestone Street, Lexington, Kentucky 40508-4008, 2008, 304 pages, \$32.50 (hardcover), ISBN 978-0-8131-2513-8.

*The Art of Command* is a collection of nine essays, each written by a different author on various facets of military leadership. The presentation of the essays preserves the sweep of American military history from the outset of the Revolutionary War in 1775 through the Gulf Wars of the 1990s to the retirement of Gen Colin Powell, chairman of the Joint Chiefs of Staff, from active duty on 30 September 1993.

The editors identify nine leadership “themes” and nine military officers who exemplify those themes, stating explicitly at the outset that “each leader personified many, if not all nine, of our key themes” (p. 3). We add that the essayists identify many more than nine.

It is not difficult to recommend *The Art of Command* to a broad spectrum of readers. For those who have neither the time nor the inclination to read book-length biographies, this collection provides brief accounts (20–30 pages) of the lives and contributions of the selected American military men. More importantly, “Integrity and Leadership,” the opening essay on General Washington, elaborates one of the prominent themes in current research on leadership: namely, the influence of the leader’s character upon the success of any enterprise. Caroline Cox brilliantly clarifies the relationship of character to actions in the life of Washington.

We have other reasons for recommending the book. First, the essays’ order of presentation from Washington to Powell offers a useful overview of US military history. Second, veterans

may find an opportunity to relive a portion of their own history. Third, some readers may become acquainted for the first time with some lesser-known figures. Fourth, students of leadership may rediscover the power of transactional and transformative leadership in military guise. The text provides insights into the enormous contributions made by nine genuine American heroes.

Despite the generally positive tenor of this review thus far, we find *The Art of Command* flawed in several respects. First, separately and collectively, the essays contribute little new to our knowledge of leadership, in either its theoretical or applied sense. For example, to point out repeatedly that leading from the front, showing determination and flexibility, and having consideration for subordinates seems hardly original. Second, with the exception of H. R. McMaster, who draws upon the classic work of Carl von Clausewitz, the essayists appear to systematically ignore the extant literature on military leadership, as well as the larger body of leadership research in business and management.

Imprecision in language also flaws the text. For example, the contributors use terms like *styles, traits, themes, and qualities* interchangeably and, in our view, inappropriately. This pattern carries over to essay titles that make no differentiation between characteristics of leadership (integrity, determination, vision, and adaptiveness) and the context of leadership (institutional, cross-cultural [more precisely, coalitional], and technological). All were simply “themes.”

We must also point out biases in the text. For example, of the nine individuals profiled, seven—including Henry H. “Hap” Arnold—were career Army officers. Lewis B. “Chesty” Puller served in the Marine Corps, and Hyman G. Rickover was a Navy admiral. All nine were flag officers, and all but one (Powell) were white males. The hidden messages are clear, if unintended, despite the fact that the nine selected undeniably deserve respect and honor. Finally, we note that the editors only minimally achieve their purpose, as articulated in the “Introduction,” of “provid[ing] . . . a historically grounded exploration of leadership *development*” (emphasis added, p. 2). Although all the essayists refer to their subject’s efforts regarding professional development, they clearly consider that topic of only minor importance.

Despite its shortcomings, we recommend *The Art of Command* to the military and general

readership. We do so in large part because in our current age of historical revisionism and political correctness, it is refreshing to find a book that unabashedly profiles and celebrates genuine American military heroes.

**Dr. Paul A. Pohland**  
*West Paducah, Kentucky*

**Col Eric A. "Ric" Pohland, USAF, Retired**  
*Melbourne, Florida*

**Hell Hawks!: The Untold Story of the American Fliers Who Savaged Hitler's Wehrmacht** by Robert F. Dorr and Thomas D. Jones. Zenith Press (<http://www.zenithpress.com>), 729 Prospect Avenue, P.O. Box 1, Osceola, Wisconsin 54020, 2008, 352 pages, \$24.95 (hardcover), ISBN 0-7603-2918-4; 2010, 336 pages, \$17.99 (softcover), ISBN 9780760338254.

Perhaps the most fundamental airpower issue is the relationship between air forces and surface forces. At one extreme one finds the doctrine of Giulio Douhet, as expounded in his seminal work *The Command of the Air*. According to Douhet, airpower is best employed as an independent arm, directly attacking the enemy homeland and achieving victory by bombarding it into submission. The United States applied Douhet's theory in its purest form during the mid-to-late 1950s, when its military strategy emphasized Strategic Air Command. At the other extreme, airpower functions as an enabler and force multiplier, but the ground force is the decisive arm—an apt description of the use of airpower in Operations Enduring Freedom and Iraqi Freedom.

In the middle of this spectrum lies a balanced approach, whereby air and land forces are equal partners in a combined-arms team. One finds an example of this middle way in the successful drive of the 12th Army Group and Ninth Air Force across northwestern Europe from Normandy to Germany in World War II. In *Hell Hawks!* aviation writers Robert F. Dorr and Thomas D. Jones tell the story of the 365th Fighter Group, nicknamed the "Hell Hawks," which operated P-47D Thunderbolt fighter-bombers as part of Ninth Air Force. The authors use as their primary source

extensive interviews that they conducted with aging veterans of the 365th.

After two initial chapters describe the action the Hell Hawks saw over Normandy during the first few days of the June 1944 invasion, the narrative returns to the activation of the unit in 1943 in Richmond, Virginia; its training in Dover, Delaware; and its deployment to England in December of that year. In succeeding chapters, the Hell Hawks have their combat debut, move to a forward airfield in Normandy, and then fight across Europe. By September 1945, the group had turned in its war-weary aircraft for scrapping and returned to the United States for deactivation.

Drawing on their interviews, the authors paint a vivid picture of the 365th Fighter Group at war. As one would expect, the book includes plenty of stories of air combat, as the Hell Hawks' powerful and rugged Thunderbolts inflict heavy losses on enemies in the air and on the ground. Of course the protagonists also suffered losses—and not only in the air. Based close to the front, the Hell Hawks faced some of the same threats and discomforts as their comrades in the ground forces. Pilots detailed as forward air controllers came within small-arms range of the Germans. Death could come by way of a German air raid or a motor-vehicle accident on an icy road. The authors describe how the enlisted members of the unit maintained the aircraft, always outdoors, in primitive conditions and in all weather. Dorr and Jones also stress the equal importance of logistics, which involved moving into a base, operating from it, and then in a few weeks moving to another base, as the Hell Hawks supported the offensive on the ground and then relocated to keep up with it.

No book can be everything to all readers, so it is worth mentioning what *Hell Hawks!* is not. It is not a book about the P-47 Thunderbolt, nor is it an analysis of how airpower contributed to the campaign in which the 365th Fighter Group participated. It is essentially a view of war from the perspective of the enlisted men and junior officers whom the authors interviewed.

*Hell Hawks!* is a fine contribution to the collection of World War II unit histories. Students and practitioners of airpower will enjoy this tale of how our predecessors fought in the greatest of all wars, nearly seven decades ago.

**Kenneth P. Katz**  
*Longmeadow, Massachusetts*