

his service. It is common boilerplate, in commenting on collections from different authors, to state that not all items can be of equal quality. In this instance, variations add a refreshing change of pace. The differences relate mostly to the characteristics of the subject and the era in which he served.

The reports end with General Barrow, June 30, 1983. The editors determined that it was too soon to give a dispassionate evaluation of more recent incumbents since some papers are not available or even written and certain things remain classified. It would have made the book more useful if a compromise could have been reached. A red flag could have been raised or a warning label attached that the final entries would be of a different character. They could have been limited to factual biographical data, without judgmental evaluation.

I made no effort to cross check the information in the essays. However, I did turn to Venson's *The United States in the First World War: An Encyclopedia* to find a date for George Barnett and found some statements that might have been pertinent to the summary about him.

There are many books and articles about the Marine Corps, and I have read a fair share. I'm a life member of the Marine Corps Association and, thus, a reader of the *Gazette*, possibly going back to when I attended the Amphibious Warfare School at Camp Pendleton while Chesty Puller headed it. I have limited shelf space for more books, but I plan to keep this one. History is well told by the lives of leaders, and this book serves that purpose.

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Hit to Kill: The New Battle over Shielding America from Missile Attack. By Bradley Graham. New York: Public Affairs, 2003. Photographs. Notes. Glossary. Index. Pp. 445. \$18.00 Paperback. ISBN 1-58648-209-2

Hit to Kill recounts the evolution of America's national missile defense, from the systems tentatively fielded in the 1960s to the programs established by President George W. Bush early in his administration. Bradley Graham, a writer and editor for the *Washington Post* for more than twenty years, has focused on national security and international affairs since the early 1990s. He has combined his extensive reporting background, in-depth research, and exceptional access to key military and civilian leaders to produce a detailed story of how technology, policy, and politics have shaped U.S. missile defense from its inception.

In other fora, Graham has expressed his personal views and opinions on missile defense, but *Hit to Kill* is an unbiased, factual history. By treating all the partici-

pants—whether they are proponents or opponents of missile defense and without regard to political affiliation—in an even-handed fashion, he has succeeded in producing a clear account of a complex story.

Graham depicts the history of American missile defense as the result of interaction among several parallel threads: the real or perceived ballistic missile threat posed by current and potential enemies; the judgments of political and military leaders regarding how to deal with the threats; the constraints imposed by existing international treaties; and the ability of industry to develop and build effective, affordable defense systems.

At first glance, the question of whether a missile defense system is needed seems clear. Surely the U.S., faced with the USSR's significant ICBM capability in the 1960s, should deploy a system to defend itself against such attack. But Cold War logic did not support this seemingly straightforward view. To the contrary, the U.S. and USSR concluded that the best defense is a good offense, and determined that mutually assured destruction (MAD)—where each side had sufficient offensive capability to eradicate the other—was the best way to deter use of ICBMs. By allowing a national leader to believe, rightly or wrongly, that his nation could survive a counterattack, the fielding of missile defense systems might actually increase the likelihood that offensive nuclear missiles would be used. This led to the 1972 Anti-Ballistic Missile (ABM) treaty which limited the number of missile defense sites to two each in the U.S. and USSR (subsequently reduced to one per nation).

The treaty limitation, coupled with MAD, might have been sufficient to maintain the status quo between the two superpowers, but the emergence of potential new threats from other nations (most notably China, North Korea, and Iran) caused the U.S. to reenergize its missile defense efforts. Throughout much of the 1980s and 1990s, attention was focused on technological challenges and treaty issues.

After debating the relative merits of space- and ground-based systems, decision makers determined that a ground-based system offered the greatest likelihood of early deployment. The technical challenge was considerable. Simply stated, the task was to detect a speeding bullet in the atmosphere, discriminate between the incoming warhead and dozens of decoys, and then kill the warhead with another speeding bullet. Developers made reasonable progress, but found it difficult to keep pace with an overly optimistic schedule that reflected political and treaty concerns. After some near misses and some well-publicized and expensive failures, the "hit-to-kill" capability was successfully demonstrated in 1999.

On the treaty front, policy makers in the Pentagon, State Department, and White House devoted considerable time and energy

to determining how far they could go in building and deploying system components without violating the ABM treaty. This was a major issue, because an effective nationwide defense system, even one designed to counter limited threats, required at least two sites. The question of treaty compliance was resolved three months after the September 11 terrorist attacks when President Bush informed Russia that the U.S. would withdraw from the ABM treaty. As the book closed in late 2002, the ground-based system had been successful on five of eight intercept tests, ground had been broken on a site in Alaska, and the President had announced plans for a second site in California.

Although *Hit to Kill* is essentially a history book, it is far more readable than one might expect of that genre. Much of the book focuses on the Pentagon (arguably the world leader in producing a unique vocabulary and acronyms), but the text is remarkably free of jargon and "Pentagonese." A glossary defines the essential terminology, and the book is further enhanced by sections that identify the key players and provide a chronology of the major political and technological milestones in the evolving history of America's missile defense.

Graham does an excellent job of weaving the threads that constitute the story. For anyone who wants both a clear understanding of how the nation's missile defense program has evolved over time and a solid foundation for understanding future developments in missile defense, *Hit to Kill* is a great place to start.

Lt. Col. Joseph Romito, USA (Ret.)

Rhetoric and Reality in Air Warfare: The Evolution of British and American Ideas about Strategic Bombing, 1914-1945. By Tami Davis Biddle. Princeton and Oxford: Princeton University Press, 2004 [original edition, 2002]. Notes. Bibliography. Index. Pp. viii, 406. \$19.95 Paperback ISBN: 0-691-12010-2

In this much anticipated study, Biddle examines the ideas that shaped the strategic bombing campaigns of the U.S. and UK in World War II. She argues, "The history of strategic bombing in the twentieth century is a history of the tension between imagined possibilities and technical realities." The strength of this study comes not from this obvious thesis but from its comprehensive sweep.

On a number of sub-issues, though, Biddle offers revisionist accounts. She dismisses the usual suspects in the story of air power theory. "Billy" Mitchell is just an "energetic publicist," noting that he "never articulated a coherent body of doctrine that devolved from consistent theories or logical postulates." She also gives the Italian theo-

rists, Giulio Douhet and Count Gianni Caproni, short shrift. Douhet's writings were dramatic, which is why English-speaking theorists cited him. But they were doing so to bolster ideas that they had already reached.

Biddle instead argues that a number of lesser recognized individuals in the realm of aviation developed the ideas that turned into strategic bombing doctrine. The most significant of these figures include Gen. Jan Christian Smuts (future Prime Minister of South Africa), Sir Hugh Trenchard, and Viscount Tiverton/the Earl of Halsbury (two different titles for the same individual). These three individuals, and several others, developed most of the core ideas that became the strategic bombing doctrine for the RAF and Army Air Forces. The coverage in this study leans more towards the British in both number of pages and importance; no American reaches the level of significance of the British theorists.

The airmen in both of the English-speaking countries were convinced that enemy societies were vulnerable to sustained military pressure. The major difference between the British and American the-

ories was the nature of the vulnerability. The strategists in the two countries did a good deal of mirror imaging. The Americans in a reflection of the boom of the 1920s and the bust of the 1930s focused on what might now be called the industrial web, looking for economic vulnerabilities that they could incapacitate with precision strikes. Since the United Kingdom is a more class-conscious society, British strategists were looking to put pressure on the social divisions of their foes.

Biddle also shows that neither air force really made any effort to test these theories. Professional military education in both services was disappointing. Athletics was particularly important at the RAF Staff College at Bracknell, while horseback riding was important both there and at the Air Corps Tactical School at Maxwell Field. With little analytical rigor both services became dogmatic in their commitment to strategic bombing. There was, though, more classroom thoroughness at Maxwell than at Bracknell. This makes one wonder why Biddle devotes so much coverage to the British side of the story.

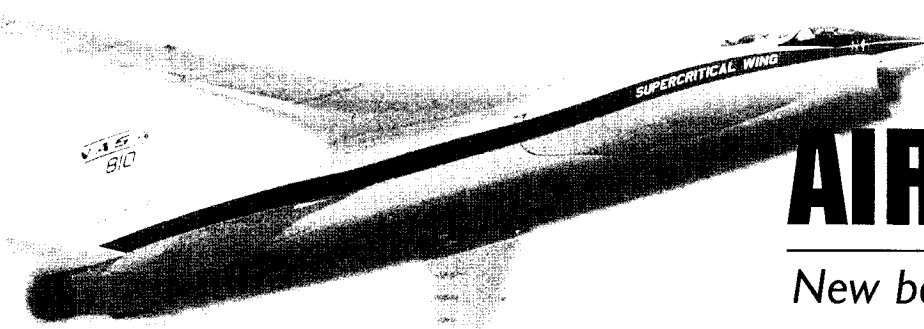
In the end, strategic bombing ideas held

up poorly in the test of combat. The combined bomber offensive was more of a contest between the two English-speaking air forces than a coordinated attack. The Germans came quite close to defeating both before attrition took its toll on the *Luftwaffe*. Biddle, instead of summarizing her argument in a long conclusion, wanders from her topic and shows that USAF leaders tried and failed to employ strategic bombing in the wars that followed.

Biddle provides her readers with a solid summary of how theories of air power changed during the first forty years of aviation history. This book should be considered the first stop for serious readers interested in a comprehensive survey.

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Royal Air Force Historical Society Journal 32: Air Power: Anglo-American Perspectives, 21st October 2003. By C.G. Jefford, ed. Northmoor, UK: Advance Book Printing, 2004. Tables. Diagrams. Illus-



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