A new compendium titled *Airpower Pioneers: From Billy Mitchell to Dave Deptula* and edited by Colonel John Andreas Olsen of the Royal Norwegian Air Force is the third in a trilogy released in recent years by the Naval Institute Press that is devoted to exploring the unique capabilities and combat uses of airpower. The first volume, *Airpower Reborn: The Strategic Concepts of John Warden and John Boyd*, reviews the seminal contributions made by two of the better-known twentieth-century American air-warfare strategists. The second, *Airpower Applied: US, NATO, and Israeli Combat Experience*, employs a case-study approach in examining how political, strategic, and employment considerations have affected the varied uses of airpower by the leading airpower players around the world.

This latest volume spotlights the contributions made by a select group of American Airmen who were especially pivotal in the development and application of airpower throughout its brief history, not so much because they were the first to address growing need but more so because they were uncommonly influential in understanding, developing, and then applying unique approaches to the organization, roles and missions, and combat uses of the evolving air weapon.

Olsen, a widely-published writer on the subject of airpower, enlisted an impressive quorum of well-known and accomplished fellow airpower historians to profile the lives and achievements of 12 American air leaders who became particularly influential in the development and application of military aviation throughout the years, both in the US Air Force and in its various predecessor organizations. The individuals and their respective biographers represented in this volume include Brigadier General William “Billy” Mitchell (Richard P. Hallion), General Henry Harley “Hap” Arnold (Dik Alan Daso), Major General Haywood S. “Possum” Hansell Jr. (Richard R. Muller), General Hoyt S. “Van” Vandenberg (Phillip S. Meilinger), General Curtis E. “Curt” LeMay (Paul J. Springer), General Bernard A. “Bennie” Schriever (Karl P. Mueller),
Lieutenant General Glenn A. Kent (David A. Ochmanek), General David C. “Dave” Jones (Brian D. Laslie), General Wilbur L. “Bill” Creech (Benjamin S. Lambeth), Colonel John A. Warden (John Andreas Olsen), General Merrill A. “Tony” McPeak (Heather P. Venable), and Lieutenant General David A. “Dave” Deptula (Christopher J. Bowie).

Although extensive biographies already exist for a number of these accomplished Airmen, no previous effort has focused expressly on their unique contributions, their rise to positions of leadership, and their accomplishments and contributions to the organizational and intellectual evolution of the US Air Force and its place within the broader American national defense establishment. The book is aptly titled, well-researched, well-written, and most pertinent at a time when discussion about the leadership within the ranks of our armed services has become part and parcel of a larger public dialogue, with recent national surveys having shown a marked decline in the American public's confidence in our nation's military.

As a long-time student of military history, I have always been especially interested in the broad topic of leadership, its development, and its practical application. When one looks at this particular group of exceptional Airmen, one quickly sees how their respective careers and contributions were all shaped by the common factors of competency, courage, and character. Olsen's most recent volume in this trilogy offers a concise primer on how these three distinctive attributes of leadership have been defined and nurtured by a combination of professional knowledge, practical experience, distinctive personality, and happenstance opportunity.

During my career I had the opportunity to meet and work with, or for, 9 of the 12 individuals. While I thought I generally understood the roles they played and the contributions they made, as a result of reading this volume, I became aware of things about them and their contributions that I did not know or appreciate. To begin with, a remarkable richness of professional knowledge and acquired experience is clearly evident in the career paths of all of these exceptional past Air Force leaders. Most of them attended professional military educational institutions. Hansell, Vandenburg, and surprisingly, Jones attended one of the earliest of these institutions, the Air Corps Tactical School. With the exception of Jones, all were graduates of an established war college. Those who earned advanced degrees from civilian institutions included Schriever, Kent, Creech, and McPeak. Warden and Deptula earned advanced degrees from the National War College. Jones was an exception to all the others in that he never attended an undergraduate or graduate school. Among the others, the one exception to having pursued an advanced degree at a professional military education or academic institution was LeMay.

All but Arnold and Kent either participated in or actually led units in combat operations, and LeMay was the most experienced in that regard. It might be noted two of them—Kent and Hansell—are not all that well-known by today's students of airpower history.

Before the start of World War II, the US Army Air Corps needed a blueprint for determining its impending requirements by way of manpower, equipment, and munitions for defeating Nazi Germany. Hansell—then a major with less than 13 years of
service time and an instructor at the Air Corps Tactical School—was, along with a small cadre of fellow planners, tasked with developing an air war plan of extraordinary scope and magnitude. At the heart of this plan was a clear recognition that the most vital foundation of a nation’s war-making capacity was its industrial base. Lacking any experience at actual combat yet well-steeped in the professional content and operational concepts that had been taught at the Air Corps Tactical School during the 1930s, Hansell and his cohorts contributed materially toward building the eventual air warfare strategy that would be applied in World War II.

For his part, Kent, the second of the two lesser-known air principals explored in the book, was truly a pioneer in that his career exemplified the first use of a new dimension of airpower thought in which understanding weapons effects became just as important as the actual employment of the weapon. In many respects, the later contributions of Warden in the conventional-force arena were closely akin to those of Kent, whose principal expertise had been in the realm of nuclear weapons employment.

For both Kent and Warden, knowing the combat power of a given weapon was undeniably important, but knowing the likely effect of that weapon on an adversary’s will and warfighting capacity was perhaps even more crucial, because it allowed for more confident decisions about what types of weapons and delivery systems might be most effective at a campaign level. Kent’s work as both a member of and an advocate for a joint strategic planning staff for nuclear weapons employment ultimately led to the creation of the Single Integrated Operational Plan (SIOP), and it introduced the use of computer simulation models in the areas of weapons targeting and campaign planning.

Three pioneers explored in this book made their contributions in different but also important mission areas: LeMay in the creation and growth of the Strategic Air Command; Schriever in the establishment of an intercontinental ballistic missile (ICBM) force, the pursuit of Air Force space operations, and the founding of Air Force Systems Command; and Creech in the revitalization of the Tactical Air Command and the creation of the Air Force’s cutting-edge conventional air-warfare capability that arose in the decade following the Vietnam War.

With the Strategic Air Command, LeMay relied heavily on his past combat experience and on his appreciation of the new demands of modern warfare brought about by the nuclear age. Schriever, after having gained combat experience in the South Pacific during World War II, joined the Army Air Forces headquarters as chief of the scientific liaison branch. From there he went on to head a special agency charged with developing an ICBM force. His expertise in the missile arena led to the eventual development of the Air Force’s capabilities in space.

Creech was also a combat veteran who had career experiences in both the tactical air forces and in modern weapons development. All three airpower pioneers appreciated the need for high standards, abiding discipline, and due care of the Airmen they led. Moreover, they had the needed background and courage of their conviction to pursue key innovations in their respective mission areas.

The force that LeMay built was indispensable to the successful outcome of the Cold War, and the motto at the time of Strategic Air Command’s Eighth Air Force, “Peace
through Strength,” epitomized the contribution which that command’s assets made to
deterrence and stability in a nuclear bipolar world. And the missile and space capabilities
seen to fruition by Schriever yielded an ICBM force that was crucial to the mainte-
nance of peace and stability throughout the Cold War, as well as a national space
capability that went unchallenged into the twenty-first century.

Similarly, the innovations and associated emphasis on technology advances that
were the hallmarks of Creech’s leadership, along with his exacting professional and
personal standards of conduct and his hallmark mentoring of his senior subordinates,
yielded the force that was pivotal in securing a swift and decisive victory in Operation
Desert Storm against Iraq’s Saddam Hussein in 1991. For all these airpower pioneers,
their uncommon competency was a natural outgrowth of their professional knowledge,
operational expertise, and acquired practical experience.

When considered in that context, a related leadership quality—courage—is not so
much about bravery and valor as it is about having the requisite commitment to do
what is both right and essential for successfully pursuing a desired outcome. In this
respect, Mitchell was clearly among the most courageous of all the airpower giants
discussed in Olsen’s compendium. In the end, he sacrificed his career advancement as
a necessary price to pay to help educate the American public and his fellow service
members regarding the still-unrealized potential offered by a determined use of air-
power across the entire conflict spectrum. Another pioneer who evinced a similar
trait was Vandenberg, who worked quietly but effectively during the formative years
of the newly independent US Air Force to demonstrate to the public, to Congress, and
to the president how airpower both could and should be a key element of the nation’s
defense posture.

For his part, Jones was not so much an outspoken proponent of airpower as he was
a leader who fully appreciated the unique capability and potential of airpower, even as
he also showed due obeisance to and respect for the important roles and missions of
the other uniformed services. First as Air Force chief of staff and then as chairman of
the Joint Chiefs of Staff, he recognized how each of the separate services contributed
to the national defense, but even more importantly, how they should best be organized
and led in joint warfare. Jones was tireless in his efforts to make the needed organiza-
tional changes to render the Joint Staff more effective in providing military advice to
the secretary of defense and to the president.

In contrast, Warden was something of a throwback to Mitchell. Warden found
himself faced with an Air Force that had origins in the combat experience of Vietnam
and the subsequent demands imposed by the Cold War throughout the 1970s and
1980s. This resulted in the guiding doctrine embraced by the Air Force’s tactical air
forces as a newly spawned concept called AirLand Battle. This Army-espoused
document portrayed airpower’s primary role as the on-call support of ground-force
employment in conventional warfare.

As Warden pondered this subject, he quickly came to realize that airpower instead
could be the decisive force in such warfare if effectively applied. Toward that end, he
developed his so-called Five Rings Model in which simultaneous air attacks against
carefully selected target sets might bring an enemy to its knees by producing systemic paralysis throughout its armed forces. At a time when most of the Air Force’s senior leaders had bought into the Army’s AirLand Battle doctrine, Warden’s ideas were deemed radical and accordingly were either met with resistance or dismissed outright by key service leaders. But much like Mitchell, he, too, was willing to risk his future career prospects in order to be fully heard. With limited but important support from a few superiors who mattered most to him at the time, his Five Rings model was endorsed by the theater commander for the Persian Gulf region and eventually proven in combat during the First Gulf War.

After the successful outcome of that war, the Air Force moved eventually toward institutionalizing his ideas; however, Warden himself was never given his personal due. In Olsen’s book, his courage and persistent contributions in the face of continued opposition from within the Air Force are documented and duly recognized. In all, the courage displayed by the 12 airpower pioneers was a major contribution to their success and to their ensuing leadership legacies.

Character, the third of the primary attributes of a successful leader, stems from a lifetime of cumulative experiences, observations, interactions with others, and the exploitation of often fleeting opportunities in pursuit of closely held beliefs and goals. All the airpower pioneers explored in this book were men of distinctive professional character. For some, happenstance opportunity played a key role in their respective legacies, including those of Arnold, McPeak, and Deptula.

Arnold did not experience combat during World War I because he had voluntarily removed himself from flying status before the war began. Prior to the war’s outbreak, he had sought to return to flying status, but the Army decided his experience and knowledge of aviation would be more valuable on the Army staff, where his expertise would be used to help with the nation’s nascent aircraft manufacturing industry and with issues involving industrial mobilization and logistics. As a result, during World War I, Arnold met and dealt with all the civilian aviation industrialists who two decades later would be critical to the mobilization of the American aviation industry for World War II. His happenstance opportunity came when Chief of the US Army Air Corps Major General Oscar M. Westover lost his life in an aircraft accident in 1938, as a result of which Arnold became the new chief.

After becoming chief, Arnold recognized the need for a requirements blueprint to guide the further growth of the Air Corps. He accordingly called on Hansell and others from the Air Corps Tactical School to build a war plan defining the air assets needed to defeat Nazi Germany. Arnold secured his blueprint, and Hansell went on to lead combat operations in Europe and the Pacific before being relieved by Arnold for not having achieved desired results from the B-29 force. Given his distinctive personality attributes and his previous stateside duty experience gained during World War I, Arnold proved to be just the person to lead what became the US Army Air Forces during their inception and initial growth.

In the case of McPeak, he moved back and forth between flying and staff assignments throughout the course of his career, and he eventually worked directly for two
four-stars who would play important roles in determining his future, namely, General Charles A. Gabriel, the commander of US Air Forces in Europe and later Air Force chief of staff, and Creech, the commander of Tactical Air Command. While working for Gabriel and Creech, McPeak was anything but a sycophant. On the contrary, he was regarded as an exceptional aviator and a no-nonsense leader at every level of command and staff.

In 1988, he was finally promoted to four-star rank and given command of Pacific Air Forces. Although the Air Force chief of staff position was due to change out in 1990, by that time, McPeak had already been commissioned for 33 years. In the summer of 1990 when General Michael J. Dugan was named chief of staff, it appeared as though McPeak would finish his Air Force career in Pacific Air Forces (PACAF). But after Dugan was relieved not long after by Secretary of Defense Richard B. Cheney in fall 1990, McPeak was chosen to replace him as chief of staff.

With McPeak, the key elements of leadership—professional knowledge, expertise, practical experience, motivation, personality, character, and opportunity—came together in a rare harmonic convergence. During his incumbency as chief, he made many changes in routine operating procedures, but his main contribution was a more fundamental Air Force reorganization into what he saw as a more flexible and effective structure. Along with his competence, courage, and character, he proved, after a happenstance turn of events, to be a strong and effective advocate for airpower. Furthermore, he implemented needed organizational changes in his role as chief even when faced with doubters and critics.

The last airpower pioneer considered in the book is Deptula, called a twenty-first-century reincarnation of Mitchell by the chapter’s author. On one level, I would agree with that assessment, but on another, I would point out that Deptula is less flamboyant than Mitchell. In the end, he may have an even greater impact on airpower advancement than Mitchell.

I have had the opportunity to watch Deptula both throughout much of his career and into retirement. During his earlier career experiences, he flew and led in combat, commanded in both peacetime and in war, and served in key staff positions in between. As a major and a member of the secretary of the Air Force’s staff group, he was the principal author of an important document titled “Global Reach, Global Power.” That document offered a well-founded blueprint for what the Air Force could provide for the nation in the emerging post-Cold War era. The Air Force was the only service to produce such a document at the time, and the secretary of the Air Force used it to helpful effect in communicating with his contemporaries as well as throughout the Air Force and with Congress.

Prior to being assigned to the Secretary’s staff group, Deptula had worked in another organization within the Air Staff headed by Warden. In this position, Deptula helped Warden in developing his Five Rings concept. As the first Gulf War approached, Warden was asked to brief his Five Rings strategy to the incumbent combatant commander, General Norman Schwarzkopf, at his headquarters in Tampa, Florida. Schwarzkopf liked the plan and directed Warden to proceed to the forward
theater and to brief his air component commander, Lieutenant General Charles A. Horner. Horner was a senior Air Force leader who had grown up under the influence of the AirLand Battle doctrine.

Warden took Deptula with him on his trip to brief Horner. The presentation did not go well. Horner sent Warden back to Washington but retained Deptula as a member of his battle staff. Horner already knew Deptula well from an earlier career assignment during which Deptula had impressed him while serving as his instructor pilot. Thus embedded in Horner’s staff, Deptula was able to apply Warden’s ideas in prioritizing and sequencing the effects-based targeting scheme that proved to be decisive in the first Gulf War.

During the later 1990s, Deptula served in both operational and staff assignments and ultimately was chosen to be the Air Force’s representative on both the Commission on Roles and Missions and the Pentagon’s quadrennial defense reviews. His participation in these study groups clearly identified him as the Air Force’s preeminent advocate for the most effective use of airpower in modern warfare. Yet in the process, other service leaders felt distinctly threatened by Deptula’s persuasiveness and success as an airpower advocate, and in a bureaucratic concession to the spirit of “jointness,” he was accordingly denied a fourth star by the Air Force’s senior leadership at the time.

Since his ensuing retirement from active service, Deptula has built the Mitchell Institute for Aerospace Studies into the country’s most respected institution for the advocacy of air and spacepower and an organization highly regarded for its rightful key role in future conflicts. His pioneering vision for air and space operations since the end of the Cold War has truly made him an oracle for air forces around the world.

Like all the American airpower pioneers profiled in this book, Deptula’s leadership emerged from a high level of professional competency developed over time, the needed courage to act when appropriate, and the character traits essential for making good on such action. In the end, that is the main lesson to be drawn from the careers of these leaders and, accordingly, the key takeaway from this book. These 12 Airmen were not just pioneers but also leaders through their thoughts, deeds, and actions. They were, moreover, people who saw things that others could not see—not just ideas for their own sake but also their practical application in the pursuit of air and spacepower. There is an old dictum that says one manages things and leads people. One of the main unifying characteristics of these airpower pioneers is that they showed an uncommon capacity to do both. ÀE

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