BOOK REVIEW

Airpower Pioneers: From Billy Mitchell to David Deptula John Andreas Olsen (ed.). Published by: KW Publishers (First Indian Edition) ISBN: 9788196585075 (PB) 2024, 446 pp.



ARJUN SUBRAMANIAM

The Indian Air Force (IAF) is among the oldest independent air forces in the world and has emerged in recent decades as a professionally competent and adaptable force to reckon with. A valuable strategic partner of the US Air Force (USAF) since the mid-1990s, this review offers a distant but nuanced summary of the leaders who have shaped the contours of the most powerful aerospace power in the world today.

The use of aeroplanes for military purposes during the early years of aviation saw Great Britain, Germany, France and Italy at the forefront of doctrinal evolution and operational exploitation. With Giulio Douhet, Hugh Trenchard and John Slessor emerging as early military aviation pioneers who championed the case for independent

Air Vice Marshal Arjun Subramaniam, (Retd) is a military and air power historian.

air forces during the inter-war years, the lone figure of 'Billy' Mitchell across the Atlantic kept hopes alive for an independent United States Air Force (USAF). Even though the American air effort during World War I was significant, it was only after World War II – when US airmen had demonstrated skill, courage, operational dexterity and vision provided by leaders such as Billy Mitchell, 'Hap' Arnold, Hoyt Vandenberg and Curtis LeMay – that President Harry S. Truman acquiesced to the idea of an independent USAF, eventually carved out of the US Army Air Forces in September 1947. Since then, it would be fair to argue that the USAF has been the well-spring of global air power doctrine and its application, propelled in no small measure by visionary airmen. *Airpower Pioneers: From Billy Mitchell to Dave Deptula*, an edited volume, put together by John Andreas Olsen, is a befitting tribute to the architects of the modern USAF.

Professor Olsen is an accomplished air power historian with an impressive repertoire of writings that range from theory and doctrine to detailed analyses of almost all air campaigns undertaken by Western air forces in the post-World War II era. What makes this volume special is that Olsen has showcased a remarkable array of 'heavyweight' academics and practitioner-scholars who have done justice to the legacies of twelve visionary airmen who have shaped the destiny of the USAF. Deeply researched, with immaculate references, the profile-essays offer readers the opportunity to dig deeper. Olsen has carefully chosen his 'pioneers' to fit into three distinct eras: the post-war years of consolidation, the Cold War and the maturing of the USAF into a dominant force with global reach and war-winning capabilities in the post-Vietnam and post-Cold War era, and lastly, the transformation of the USAF into an aerospace power with full spectrum capability to cope with the changing character of war and conflict.

Richard P. Hallion does justice to the passion, tenacity and courage of conviction of Brigadier General Billy Mitchell as he bulldozed his way past deeply entrenched operational mindsets and 'ownership' issues to plant the seeds of an independent air force in the minds of the US strategic community. Plunging into 'turf' wars with the US Navy and battling a board of enquiry, Mitchell resigned from the Air Service in early 1926 but remained a vocal advocate of creating a viable military aviation ecosystem that centred around an independent air force, innovative research and a vibrant aviation industrial complex. Mitchell was truly the inspirational gladiator who provided a self-sustaining momentum to the creation of the USAF and convinced influential uniformed policy-makers such as General George C. Marshall of the value that an independent air arm would offer the US in the decades ahead.

If Mitchell was the maverick, General Henry Harley 'Hap' Arnold gave form, substance and operational validation that laid the technological and institutional foundation of the USAF. Dik Alan Daso profiles this West Point graduate who was commissioned into the infantry, transferred into the US Army's Aviation arm in 1911 and cut his teeth as a military aviation planner during the closing stages of World War I. Mentored assiduously by Billy Mitchell, Arnold's rise was steady as he took over command of the Air Corps as a major general in 1938 and remained at the helm of military aviation affairs in various avatars till 1950. The crucible of World War II saw Arnold at his best as he blended theory and technology into practice, giving form to President Roosevelt's vision of mass aircraft production as the ultimate weapons of war. Recognising Arnold's leadership acumen when America entered the war, Roosevelt deputed him with the difficult task of convincing the British that it was time for them to recognise and accommodate US air power as an equal partner, a task that Arnold performed brilliantly. Cementing his strategic and operational acumen during World War II were his conception of the daring Doolittle Raid over Tokyo in response to the Japanese attacks on Pearl Harbour, and the strategic bombing offensive in Europe. Promoted to five-star army general after World War II and then as the first five-star general of the newly formed US Army Air Force just prior to it being renamed as the USAF, Arnold lays a strong claim to be called the father of the USAF.

Since World War II, the USAF has remained a global leader not only in the evolution of air power doctrinal guidance and its strategic employment, but also in their translation into viable tactical concepts. Richard R. Muller attributes much of this to Major General Haywood S. 'Possum' Hansell Jr, who spent several of his formative years in the 1930s at the Air Corps Tactical School (ACTS), giving shape to an initial targeting doctrine that has since seen several iterations over the last eight decades. A professionally trained engineer-pilot, Hansell infused a pronounced systems approach to both the process of intelligence gathering and its subsequent utilisation in assessment of various targets and the associated weapon-to-target matching that is now intrinsic to mission planning. Successful as an operational commander of a bomber wing in Europe, Hansell bore the brunt of Arnold's impatience and ire at the slow going in the Pacific Theatre during the closing stages of World War II and was relieved of his command of the XXI Bomber Command in early 1945. Though he did not rise beyond two-star rank in service, Hansell remained a powerful intellectual voice and advocate of American air power till the mid-1980s – he was probably the only one among the pioneers who was a detailed planner, a proficient combat leader and an air power historian.

A contemporary of Hansell with similar staff and combat experiences in World War II, General Hoyt S. Vandenberg was a rising star by the end of the war, with a clear understanding of airland operations that won him the trust of top surface commanders like Generals Dwight D. Eisenhower and Omar Bradley. Picked by President Truman to lead the Central Intelligence Agency (CIA) for a year as its first director, Vandenberg returned to the USAF as one of the youngest four-star generals in American history. He succeeded General Carl A. Spaatz as the second USAF Chief of Staff in 1948. Colonel Phillip S. Meilinger, one of the USAF's most widely published contemporary practitioner scholars himself, tracks Vandenberg's career as Chief of Staff through the early and tumultuous period of the Cold War that saw non-kinetic American air power emerge as the sword-arm of diplomacy during the Berlin Blockade. Meilinger very lucidly brings forth Vandenberg's flexibility of strategic thought as he wrestled with the realisation that tactical air power in conventional warfare would have to give way to long-range offensive air power, or strategic bombers, as the lead element in nuclear deterrence and war avoidance strategies. This was Vandenberg's final legacy as he gave form and teeth to the Strategic Air Command (SAC) and marshalled the USAF as the first line of deterrence against the Soviet Union. He

remains the longest serving USAF Chief of Staff, serving just over five years.

The cigar-chomping General Curtis E. LeMay, profiled very objectively by Paul J. Springer, emerges in the book as an assertive proponent of air power as the principal instrument of violence, punishment and coercion at the disposal of the US strategic establishment. A strong advocate of the bombing campaign over Germany and then against Japan during World War II, both as an active combat leader and operational planner, LeMay had a ruthless streak in him that led him to execute without any remorse the widespread area bombing of population centres in Japan, and the dropping of the nuclear bombs over Hiroshima and Nagasaki. His leadership and transformation of the SAC during the Cold War ensured that the long-range bomber remained the principal nuclear delivery platform till Intercontinental Ballistic Missiles (ICBMs) joined the fray. Disinterested in the intellectual dimension of warfare, LeMay has emerged as the most controversial Chief of Staff in the history of the USAF. At the helm during the Bay of Pigs incident and the early years of the Vietnam War, he was at odds with Presidents John F. Kennedy and Lydon B. Johnson, Defence Secretary Robert MacNamara, his fellow Service chiefs and the chairman of the Joint Chiefs of Staff over the doctrine of calibrated escalation, advocating instead, an unrestricted bombing campaign to achieve operational and strategic objectives. A controversial figure even after retirement, LeMay has left an indelible impact on the USAF.

In contrast to LeMay and his predecessors who could well be termed as the 'bomber mafia,' General Bernard E. Shriever emerged as an aviator-outlier from the same era. Shriever's greatest contributions to the growth of American air power, according to RAND's Karl P. Mueller, lay in the three domains of ballistic missile development, the military exploitation of space and the several initiatives that looked at technologies for the future. Frequently at loggerheads with LeMay over the vulnerabilities of long-range bombers against a rapidly improving Soviet air defence network, Shriever took the Atlas and Titan rocket programmes to their logical conclusion with explicit presidential clearance as launch platforms for nuclear warheads across thousands of miles into the heart of the Soviet Union. This completed the triad of air, sea and land-based secondstrike nuclear delivery systems well before the Soviets achieved the same. Shriever's prescient belief that space offered immense potential for Intelligence, Surveillance and Reconnaissance (ISR) resulted in the launch of the initial set of Corona satellites that brought back the first detailed images of the Russian hinterland and paved the way for further programmes. Finally, his intellectual humility and dexterity kept him in touch with operational practitioners as he spearheaded programmes such as the search for the optimum aerial refuelling technologies, stand-off weapons and heavy lift long-range transporters, and much more. Shriever was arguably among the few most impactful airmen who did not become Chief of Staff.

An interesting inclusion in the volume is an aviator-turned engineer who proved to be an important voice of the USAF in areas related to the development of national security strategy and military power during the peak of the Cold War in the 1960s and 1970s. The rise of Lieutenant General Glenn A. Kent to the highest echelons of the USAF reflects the development of multi-disciplinary intellectual expertise within the Service. David A. Ochmanek, a senior defence analyst at RAND writes a great piece that does justice to the USAF's legacy of being a leader amongst the three Services when it comes to leveraging current and future technologies. Apart from Kent's several path-breaking initiatives at RAND and the Pentagon after several academic interludes at Ivy League institutions such as Caltech, UCLA, Berkely and Harvard, it was his ability to rise above single-Service turf wars over the control of nuclear weapons that merits close attention at a time when integration is the buzz word across militaries. His initial work was instrumental in the morphing of the Strategic Air Command into a joint combatant command in the 1990s.

From a bomber and missile-intensive force that principally supported policies of deterrence and retaliation, the Korean and Vietnam Wars provided sharp focus for the revitalisation of tactical fighter operations as the vanguard of a transformed USAF. The Vietnam debacle and the failed Iran hostage rescue mission 'Eagle Claw' also forced the US military to reform and transform following the Goldwater-Nichols Act of 1986. At the heart of this reformation was a USAF Chief of Staff who later became the Chairman, Joint Chiefs of Staff (CJCS), General David C. Jones. A bomber pilot himself, Jones's initial reform as Chief of Staff, Air Force (CSAF) was to change the way aircrew trained in realistic conditions – Exercise Red Flag emerged during his tenure as did several new aircraft programmes such as the F-15, F-16 and E-3 programmes. CJCS under two presidents, Brian Laslie profiles Jones as a "skilled administrator and strategist – the driving force behind the most fundamental reorganization and reallocation of command and control of the US military in the post-World War II era."

General Wilbur L. 'Bill' Creech would be another airman like General Shriever who left his stamp on the USAF despite not becoming CSAF. Benjamin S. Lambeth, arguably the most prolific air historian of recent times, is at his best when assessing the legacy of one of the finest fighter leaders the USAF has produced. A protégé of General Jones, Creech was responsible for the complete transformation of Tactical Air Command (TAC) between 1978 and 1984 from a moribund, hierarchical and inefficient combat force into a well-oiled machine that delivered in actual combat during Operation Desert Storm, six years after he relinquished command. At the tactical and operational levels, he was responsible for vastly improving training regimens by expanding the Red Flag series, sharpening Electronic Warfare (EW) capability, improving flight safety, aircraft availability and sortie generation rates among other initiatives. However, the man will also be remembered for his transformation of leadership paradigms and organisational efficiency through a decentralised and empowering approach that dismantled the prevailing toxic environment that 'strangled motivation, leadership and creativity.'

While all the pioneers featured in the book supported ideas, innovation and initiative, none demonstrated the kind of vigour to intellectualise aerial warfare as Colonel John A. Warden did in the 1980s. For long an admirer of Warden and himself an educator over the last decade, John Andreas Olsen argues very convincingly that Warden's greatest achievement was to bridge the gap between theory, doctrine, strategy and practice in a manner that air planners could craft war-winning campaign plans, the likes of which emerged as 'Instant Thunder,' the war-winning aerial campaign during Operation Desert Storm. At odds with several senior leaders of the USAF for his uncompromising views, including General Charles A. 'Chuck' Horner, Joint Force Air Component Commander (JFACC) during Desert Storm, Warden set up 'Checkmate' in the Pentagon to advise, inform and interface with policy-makers in Washington D.C., contributing not only to the strategic air campaign over Iraq but also to the aerial campaign over the Kuwaiti Theatre of Operations (KTO). An unabashed advocate of air power as the lead element of US power projection with his 'Global Reach and Global Power' idea, Warden plunged into his new assignment after Operation Desert Storm as the commandant of the Air Command and Staff College with the same messianic zeal as he had demonstrated during campaign planning. Passed over twice for promotion to one-star rank, Warden retired in 1994 but left an enduring legacy that will be hard to match.

The last CSAF to be profiled in the book, General Merrill A. McPeak, also turns out to be, along with Curtis LeMay, a highly controversial chief of the USAF. Heather P. Venable objectively attempts to give this "disruptor" and "innovator" his due for transforming the USAF to meet its future challenges in a post-Cold War era. Whether it was the merging of the Tactical Air Command and Strategic Air Command into an Air Combat Command, or the conversion of the Military Air Lift Command into an Air Mobility Command, or propagating an increased emphasis on Close Air Support (CAS) as a mission set without compromising the control or ownership of aerial assets, McPeak was unafraid to thrust down unpopular decisions that were taken in national interest.

The choice of Lieutenant General David A. 'Dave' Deptula as the final protagonist in this volume is a testimony to the intellectual thrust in this compilation. In his analysis of 'Zatar's' career, Christopher J. Bowie presents a rare contemporary American USAF leader – specialist fighter pilot in his early career, skillful joint planner and campaign manager in his middle years, inspirational combat leader next, and, finally, a strategist and futuristic innovator, in his final leadership assignment as the Deputy Chief of Staff for ISR. Assuming the role of a mentor and educator after retirement in 2010 as a Senior Scholar at the Air Force Academy's Leadership Centre, he has pushed the boundaries of contemporary aerospace thought as the dean of the Mitchell Institute of Aerospace Studies since 2013.

In conclusion, this excellently compiled and edited volume is a befitting tribute to the architects of the USAF since it was formed 76 years ago. It is a 'must read' for those who want to understand the evolution, growth and transformation of the USAF.

Disclaimer: This essay was first published in the Book Review section of the *Journal for Indo-Pacific Affairs* (JIPA) and has been published with the permission of the editor, JIPA.