

# AIR POWER

## History

WINTER 2006 - Volume 53, Number 4

Forward Air Control: A Royal Australian Air Force Innovation <i>Carl A. Post</i>	4
USAF Combat Airfields in Korea and Vietnam <i>Daniel L. Haulman</i>	12
Against DNIF: Examining von Richthofen's Fate <i>Jonathan M. Young</i>	20
"I Wonder at Times How We Keep Going Here." The 1941-1942 Philippines Diary of Lt. John P. Burns, 21st Pursuit Squadron <i>William H. Bartsch</i>	28
<hr/>	
Book Reviews	48
<i>Fire in the Sky: Flying in Defense of Israel.</i> By Amos Amir	48
Reviewed by Stu Tobias	
<i>Australia's Vietnam War.</i> By Jeff Doyle, Jeffrey Grey, and Peter Pierce	48
Reviewed by John L. Cirafici	
<i>Into the Unknown Together: The DOD, NASA, and Early Spaceflight.</i> By Mark Erickson	49
Reviewed by Rick W. Sturdevant	
<i>Commonsense on Weapons of Mass Destruction.</i> By Thomas Graham, Jr.	49
Reviewed by Phil Webb	
<i>Fire From The Sky: A Diary Over Japan.</i> By Ron Greer and Mike Wicks	50
Reviewed by Phil Webb	
<i>The Second Attack on Pearl Harbor: Operation K and Other Japanese Attempts to     Bomb America in World War II.</i> By Steve Horn.	50
Reviewed by Kenneth P. Werrell	
<i>Katherine Stinson Otero: High Flyer.</i> By Neila Skinner Petrick	52
Reviewed by Andie and Logan Neufeld	
<i>Thinking Effects: Effects-Based Methodology for Joint Operations.</i> By Edward C. Mann III, Gary Endersby, and Thomas R. Searle	52
Reviewed by Ray Ortensie	
<i>Bombs over Brookings: The World War II Bombings of Curry County, Oregon and the Postwar     Friendship Between Brookings and the Japanese Pilot, Nobuo Fujita.</i> By William McCash	53
Reviewed by Scott A. Willey	
<i>The Long Search for a Surgical Strike: Precision Munitions and the Revolution in Military Affairs.</i> By David R. Mets	53
Reviewed by Mike Jackson	
<i>Masters of Chaos: The Secret History of the Special Forces.</i> By Linda Robinson	54
Reviewed by John A Glover	
<i>Aviation's Most Wanted: The Top 10 Book of Winged Wonders, Lucky Landings, and Other Aerial Oddities.</i> By Steven A. Ruffin	54
Reviewed by Joseph Romito	
<i>Wreaking Havoc: A Year in an A-20.</i> By Joseph W. Rutter	55
Reviewed by Mike Jackson	
<i>Forging the Shield: Eisenhower and National Security for the 21st Century.</i> By Edited by Showalter	55
Reviewed by Bill Nardo	
<i>Tiger Force: A True Story of Men and War</i> By Michael Sallah and Mitch Weiss	56
Reviewed by George M. Watson, Jr.	
Books Received & Coming Up	58
Letters and News	60
In Memoriam	62
History Mystery	64



**Air Force Historical Foundation**  
1535 Command Drive – Suite A122  
Andrews AFB, MD 20762-7002  
(301) 736-1959 Fax (301) 981-3574

**E-mail: [afhf@earthlink.net](mailto:afhf@earthlink.net)**  
**On the Web at <http://afhistoricalfoundation.com>**

**Officers, 2006-2007**

**President/Chairman of the Board and  
Chair, Executive Committee**  
Lt Gen Michael A. Nelson, USAF (Ret)

**1st Vice Chairman**  
Gen John A. Shaud, USAF (Ret)

**2nd Vice President and Chair, Development Committee**  
Maj Gen Silas R. Johnson, Jr., USAF (Ret)

**Treasurer and Chair, Finance Committee**  
Lt Gen Richard E. Brown III, USAF (Ret)

**Chair, Membership Committee**  
Maj Gen Charles D. Link, USAF (Ret)

**Chair, Services Committee**  
Maj Willard Strandberg, Jr., USAF (Ret)

**Chair, Technology Committee**  
Lt Gen Timothy A. Kinnan, USAF (Ret)

**Publisher**  
Brig Gen Alfred F. Hurley, USAF (Ret)

**Secretary and Executive Director**  
Col Tom Bradley, USAF (Ret)

**Advisors**

Gen T. Michael Moseley, USAF  
Lt Gen John F. Regni, USAF  
Lt Gen Stephen R. Lorenz, USAF  
Brig Gen(Sel) Michelle D. Johnson, USAF  
CMSAF Rodney J. McKinley, USAF  
Mr C. R. "Dick" Anderegg

**Board of Directors, 2006-2007**

Col Kenneth J. Alnwick, USAF (Ret)  
Lt Gen Richard E. Brown III, USAF (Ret)  
Lt Gen Russell C. Davis, USAF (Ret)  
CMSgt Rick Dean, USAF (Ret)  
Lt Gen Marvin R. Esmond, USAF (Ret)  
Gen Ronald R. Fogleman, USAF (Ret)  
Brig Gen Alfred F. Hurley, USAF (Ret)  
Maj Gen Silas R. Johnson, Jr., USAF (Ret)  
Lt Gen Timothy A. Kinnan, USAF (Ret)  
Mr John F. Kreis  
Maj Gen Charles D. Link, USAF (Ret)  
Lt Gen Michael A. Nelson, USAF (Ret)  
Mr Jacob Neufeld  
Gen John A. Shaud, USAF (Ret)  
Maj Lawrence Spinetta, USAF  
Maj Willard Strandberg, Jr., USAF (Ret)  
Col Jere Wallace, USAF (Ret)  
Col Darrel Whitcomb, USAF (Ret)

**Contributing Members**

The individuals and companies listed are contributing members of the Air Force Historical Foundation. The Foundation Trustees and members are grateful for their support and contributions to preserving, perpetuating, and publishing the history and traditions of American aviation.

**Donors**

Lt Gen John B. Conaway, USAF (Ret.)  
Col Kenneth Moll, USAF (Ret.)  
Lt Gen Michael A. Nelson, USAF (Ret.)  
Maj Gen John S. Patton, USAF (Ret.)  
Gen W. Y. Smith, USAF (Ret.)

**Supporters**

ATV Capital Management, Inc.  
Col Tom Bradley, USAF (Ret.)  
Mrs Irene W. McPherson

**Friends**

Col Kenneth J. Alnwick, USAF (Ret.)  
Mr F. Clifton Berry, Jr.  
Lt Col Maynard Y. Binge, USAF (Ret.)  
Lt Gen Charles G. Cleveland, USAF (Ret.)  
Gen Howell M. Estes, Jr., USAF (Ret.)  
Brig Gen Alfred F. Hurley, USAF (Ret.)  
Gen David C. Jones, USAF (Ret.)  
The Honorable Hans Mark  
Col Helen E. O'Day, USAF (Ret.)  
The Honorable Verne Orr

**AIR POWER**  
*History*

The Journal of the  
Air Force Historical Foundation  
Winter 2006 Volume 53 Number 4

**Publisher**  
Alfred F. Hurley

**Editor**  
Jacob Neufeld

**Technical Editor**  
Robert F. Dorr

**Book Review Editor**  
Scott A. Willey

**Layout and Typesetting**  
Richard I. Wolf

**Advertising**  
Tom Bradley

**Circulation**  
Richard I. Wolf

**Air Power History** (ISSN 1044-016X)  
is produced in March, June, September,  
and December by the Air Force Historical  
Foundation.

Prospective contributors should consult the  
GUIDELINES FOR CONTRIBUTORS at  
the back of this journal. Unsolicited manu-  
scripts will be returned only on specific  
request. The Editor cannot accept responsi-  
bility for any damage to or loss of the ma-  
nuscript. The Editor reserves the right to  
edit manuscripts and letters.

Address **Letters to the Editor** to:

Air Power History  
P.O. Box 10328  
Rockville, MD 20849-0328  
e-mail: [jneufeld@comcast.net](mailto:jneufeld@comcast.net)

Correspondence regarding missed issues  
or changes of address should be addressed  
to the **Circulation Office**:

Air Power History  
P.O. Box 151150  
Alexandria, Virginia 22315  
Telephone: (301) 736-1959  
Fax: (301) 981-3574  
e-mail: [airpowerhistory@yahoo.com](mailto:airpowerhistory@yahoo.com)

**Advertising**

Tom Bradley  
1535 Command Dr--Suite A-122  
Andrews AFB, MD 20762-7002  
(301) 736-1959; fax (301) 981-3574  
e-mail: [afhf@earthlink.net](mailto:afhf@earthlink.net)

Copyright © 2006 by the Air Force  
Historical Foundation. All rights reserved.  
Periodicals postage paid at Lexington, VA  
24450 and additional mailing offices.

**Postmaster:** Please send change of  
address to the Circulation Office.

As illustrated by the cover photo of this issue of *Air Power History*, the United States Air Force Memorial at Arlington, Virginia, finally made its public debut on October 14, 2006. Heading the cast of notables attending this historic event was President George W. Bush. For the text of his remarks about the Air Force and the war on terrorism, see page 60.

Also, I wish to direct to the readers' attention the results of an extensive restructuring of the Air Force Historical Foundation. Spear-headed by Lieutenant General Nelson, at the direction of the Board, the new structure evolved over a two-year period during which a small executive committee studied the Foundation's *raison d'être* and the best means for achieving its goals. On page 2, you will notice that the lists of Trustees and Trustees Emeriti have been replaced by a Board of Directors and an expanded list of Officers, each of whom is assigned an operational responsibility.

Now, about the articles in this issue. Ever since they first appeared over the battlefield, aircraft displayed the potential to prove decisive. However, when employed in proximity to friendly forces, air power could be a double-edged sword. The most effective method for avoiding "friendly fire," was through airborne forward air control (FAC). In the lead article, Carl Post posits that the first FAC missions were most likely flown during World War II in the Southwest Pacific by Royal Australian Air Force squadrons.

When it was established in 1947, the United States Air Force did not have its own engineering capability for air base construction. Instead, it relied on the U.S. Army Corps of Engineers and the Navy's Civil Engineer Corps. By 1950, an interim arrangement was worked out with the advent of Special Category Army Personnel with Air Force (SCARWAF). In the second article, Dan Haulman tracks how the Air Force acquired its own capability between the Korean War and the War in Southeast Asia.

In the third article, "Against DNIF," Jonathan Young challenges a theory that Manfred von Richthofen—the famed World War I Red Baron—was brought down due to a severe brain injury which should have grounded him. Lieutenant Young argues persuasively that the Red Baron's demise was probably caused by several other factors.

Bill Bartsch's fourth article presents an annotated diary of Lt. John P. Burns, a pursuit pilot in the Philippines. The diary reveals the day-to-day feelings of one of the American airmen who were caught up in the events from the attack of December 8th, 1941, and the subsequent campaign.

More than a dozen new books are reviewed by our cadre of book readers. Again, we invite anyone interested in joining their ranks to contact Scott Willey. See page 58.

Sadly, we mark the passing of Brig. Gen. Robert McDermott, USAF (Ret.), an airman who flew combat missions in World War II, an educator, and a business leader. A tribute to "McD" by his friend and colleague, Brig. Gen. Alfred F. Hurley, appears on page 62.



*Air Power History* and the Air Force Historical Foundation disclaim responsibility for statements, either of fact or of opinion, made by contributors. The submission of an article, book review, or other communication with the intention that it be published in this journal shall be construed as prima facie evidence that the contributor willingly transfers the copyright to *Air Power History* and the Air Force Historical Foundation, which will, however, freely grant authors the right to reprint their own works, if published in the authors' own works. In the case of articles, upon acceptance, the author will be sent an agreement and an assignment of copyright.



*Forward Air Control: A Royal Australian  
Air Force Innovation*



Carl A. Post

(Overleaf) P-40s and aircrew of the 7th Fighter Squadron, 49th Fighter Group in the Darwin area, 1942. (All photos courtesy of RAAF Museum RAAF Base Williams Point Cook, Victoria, 3027 Australia.)

**BETWEEN THE TWO WORLD WARS, MANY AIR FORCES STRUGGLED WITH THE PROBLEM OF CONTROLLING THE CLOSE AIR SUPPORT OF GROUND FORCES**

**IN SEPTEMBER 1941 THE ROYAL AIR FORCE IN THE WESTERN DESERT PUT INTO EFFECT A DIRECT AIR SUPPORT SYSTEM**

Since military aircraft first appeared in the skies over the battlefield they have threatened to intervene decisively in the land-battle. In World War I evidence of this power was demonstrated in Palestine during the Battle of Armageddon in September 1918. Following a rupture of the Turkish lines by the Allied ground forces, the British 40th Wing (Army), which included No. 1 Squadron Australian Flying Corps, devastated the retreating Turkish forces in scenes that prefigured the destruction of the Iraqi army fleeing Kuwait on the “Highway of Death” during the 1991 Gulf War.<sup>1</sup> The impact that air power can have on enemy surface forces has increased over time with developments in the capability of the platform itself and in the capacity and precision of its weapons. However, unless this airborne firepower is closely controlled it can be a two-edged sword, when employed in close proximity to friendly ground forces. From World War I to the recent invasions of Afghanistan and Iraq aircraft have been involved in “friendly fire” or “blue-on-blue” incidents that have caused the death of cooperating forces on the ground.<sup>2</sup> The struggle to develop a way of avoiding these unfortunate incidents began shortly after the end of World War I.

In the period between the two world wars, many air forces struggled with the problem of controlling the close air support of ground forces. Most developed methods of communicating the needs and locations of friendly ground troops to the aircraft providing the support. Initially these methods included the use of smoke, candles, flares, and large panels arranged on the ground to indicate friendly and enemy locations.<sup>3</sup> These techniques proved cumbersome and in close terrain, such as in jungle environments, their use proved to be less than ideal. During this same period radio equipment continued to reduce in size while its reliability increased and it became the most efficient way for ground forces to communicate with the supporting aircraft.

In response to the German initial successes at the beginning of World War II both the Royal Air Force (RAF) and the American Army Air Corps (AAC) closely studied the problem of providing air support to ground units. Radio communications were fundamental to the methods developed by both countries. The RAF’s Army Cooperation Command and the AAC’s Air Support Commands did much to develop the theory and practice of radio controlled air support, but the most effective organization and procedures were eventually developed in the Western Desert.<sup>4</sup>

In September 1941, the British Army and the Royal Air Force (RAF) in the Western Desert put into effect a direct air support system that relied

heavily on radio communications. This system employed light reconnaissance aircraft to find enemy ground targets. When located, the information was passed to mobile radio-equipped control parties called Forward Air Support Links (FASL) that were located with army brigades and divisions. The FASL maintained communications with both the reconnaissance and strike aircraft to ensure the strikers had the latest information before they carried out their attack. However, control of air support missions remained the responsibility of the ground-based FASL.<sup>5</sup> While ground-radio control of airborne support was the most effective method developed, it still left much to be desired as the ground observer’s perception of the target and its surroundings could still be quite different to that of a pilot.

In the interwar period the Royal Australian Air Force (RAAF) also addressed the close air support problem and as part of its response it developed specialist Army Cooperation squadrons that focused on supporting army operations through land reconnaissance, artillery spotting, message dropping, ammunition resupply and other general support tasks. At the outbreak of war with Japan, No. 4 Squadron RAAF was one of these specialist Army Cooperation squadrons flying the Wirraway aircraft.<sup>6</sup> Although outdated the Wirraway was ideal for ground reconnaissance and observation as it possessed the ability to fly so slowly that it could almost hover over the battlefield. The squadron was first committed to active operations in the army cooperation role during the battles of Buna and Gona in the period November 1942 to January 1943. In these operations the squadron distinguished itself to both Australian and American ground forces who described their work in the following way:

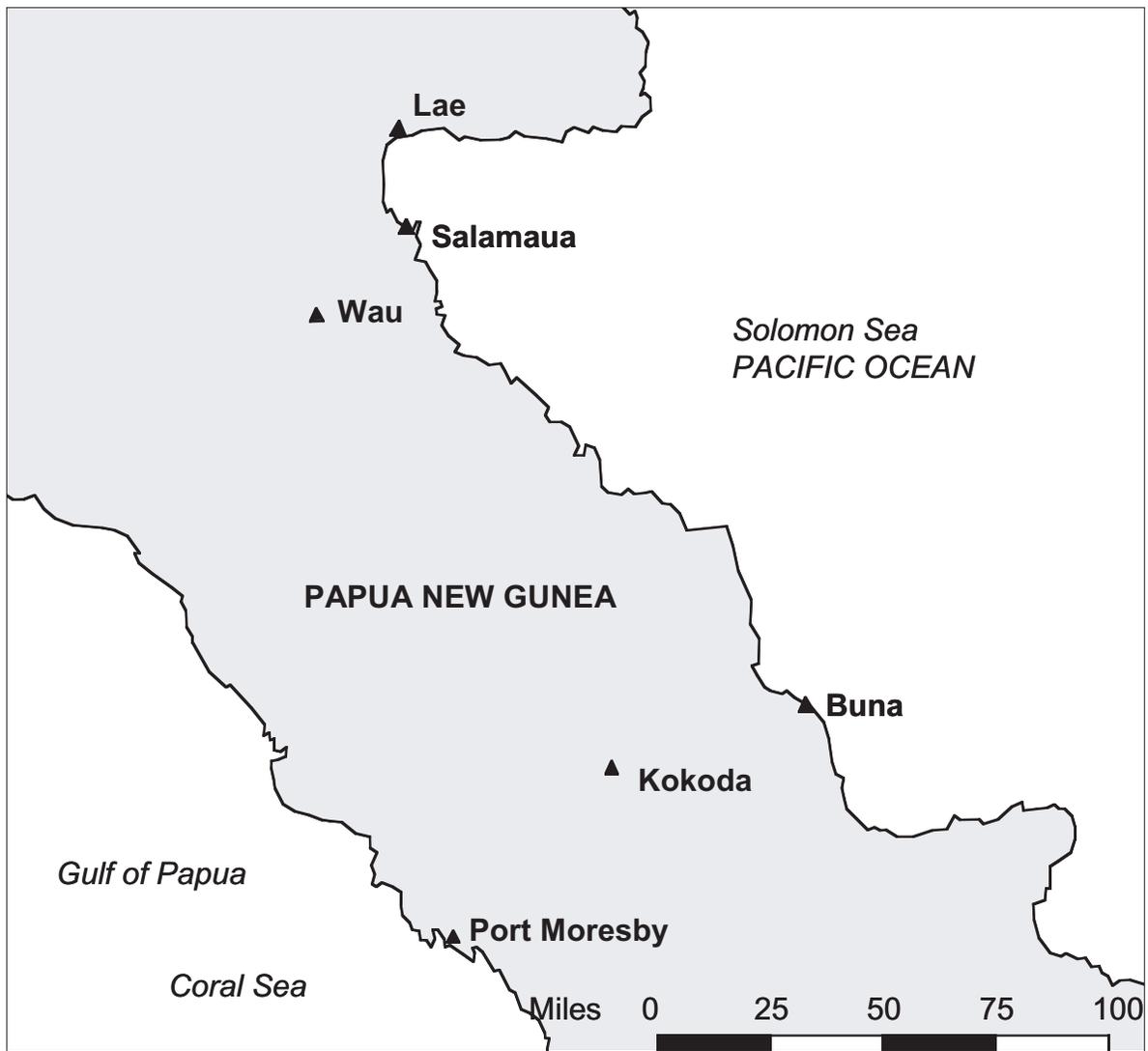
*The Wirraway hovered continually over the Jap[anese] lines giving such coordinates of targets as “two tanks 100 yards SE on road, American troops using Jap emplacement at 263-273. Fire west of Giropa Point.” They spotted shell bursts, lured enemy AA into disclosing their positions, reported Jap[anese] trying to escape; they were forced down and occasionally crashed in flames; one daring Wirraway pilot shot down a Zero. Their work, according to the official artillery report was “superb.”<sup>7</sup>*

In respect of No. 4 Squadron’s work the American ground commander, Lt. Gen. Robert L. Eichelberger, commented ‘I never hope to fight with braver men.’<sup>8</sup>

*Carl A. “Alex” Post joined the Royal Australian Air Force (RAAF) in 1993 as an Air Defence Officer. He has participated in military air operations as a Flight Controller, Senior Controller, and Air Defence Instructor. He also has significant experience in surveillance and intelligence operations from working as a Surveillance Officer and as the Operations Officer of Australia’s Jindalee Over-the-Horizon Radar. Alex completed his Master of Arts (War Studies) at the Australian Defence Force Academy in 2003, and completed a Chief of Air Force fellowship in 2004. He is currently undertaking research for a Ph.D. thesis entitled “The RAAF-USAAF Relationship in the SWPA in World War II.”*

THE ROYAL AUSTRALIAN AIR FORCE ALSO ADDRESSED THE CLOSE AIR SUPPORT PROBLEM...IT DEVELOPED SPECIALIST ARMY COOPERATION SQUADRONS

JAPANESE PRISONERS, HIGH AND LOW, CLAIMED THAT THE JUNGLE ARTILLERY OF THE AUSTRALIANS WAS ONE OF THE MOST POTENT FACTORS IN THEIR DEFEAT



The effect of the squadron's artillery spotting activities was also recognized by the Japanese. During and after the war Japanese prisoners, high and low, claimed that the jungle artillery of the Australians was one of the most potent factors in their defeat. The army's official historian, David Dexter, acknowledged that the power of the Australian artillery could not have been so effective without the excellent support of the RAAF's army cooperation squadrons who spotted so precisely for them.<sup>9</sup>

The commander of No. 4 Squadron's parent formation, No. 9 Operational Group (9OG), also noticed the work of the Wirraways. Group Captain "Bull" Garing wrote in his monthly tactical appreciation for December 1942 that:

*[t]he cooperation between air forces and the ground forces leaves much to be desired. In many cases the targets were simply an area denoted by map reference and no attempts to guide our direct support aircraft to the target by R/T, forward troops, smoke candles, ground strips and T[actual] R[econnaisance] have been essayed. In many cases no activity of any kind was visible in the area designated as the target. Consequently, the results were obscure. This*

*does not apply, however, [to] the Wirraway Army Cooperation Squadron, the aircraft of which have carried out commendable work in the battle areas. These aircraft have been in contact through R/T with the forward army positions. Some dive bombing and strafing attacks on enemy positions in the Bona area were determinedly carried out.<sup>10</sup>*

In his tactical appreciation for January 1943, Garing revealed some of the thoughts that he had developed in regard to the problem of providing direct support to the army. In doing so he almost spelled out the eventual solution to this problem.

*Some improvement has been noticed in co-operation between air and ground forces since a closer liaison is being developed. However, due to the jungle terrain and the guerilla type of warfare of the ground forces bombing and strafing restrictions are necessary over considerable areas in which enemy troops may possibly be moving about. To seek out and destroy the enemy in this theatre of war calls for the closest possible co-operation between the army and air force especially in regard to troop dispositions and swiftness of communication of this information. Wirraway aircraft continue to give most valu-*

**ALL THE ESSENTIAL ELEMENTS OF THE FORWARD AIR CONTROL (FAC) ROLE AS IT IS PRACTICED TODAY WERE PRESENT IN THIS MISSION**



*able help to the army forward units especially in respect of artillery spotting and sifting out Japanese troop dispositions.*<sup>11</sup>

Soon after writing these words Garing was presented with an opportunity to further develop his thoughts and put them into action during the fighting that took place around Wau in north-western Papua.

With the loss of Buna and Gona in January 1943, the Japanese decided to secure their bases at Lae and Salamaua by taking possession of Wau. The small Australian force operating in the Wau area was outnumbered and reinforcements and air support were provided so that Wau would remain in Allied hands. On the ground at Wau, troops of the Australian 2/6th Battalion and 2/5th Independent Company had contacted a significant Japanese force. A deliberate attack against the Japanese was planned for February 3 and air support was requested. In response, Nos 4 and 30 Squadrons RAAF were tasked by 9OG to carry out an attack on the enemy in preparation for the ground attack.

No. 30 Squadron was to supply the striking power with its Beaufighter aircraft. Each Beaufighter was equipped with four 20mm cannons and six .303 machine guns that produced a heavy volume and weight of fire. In contrast to the slow Wirraway, the Beaufighter was one of the fastest aircraft at very-low levels, and could outrun the Japanese Zero in this environment.<sup>12</sup> While high

speed was an advantage in many tactical situations it was a disadvantage when trying to visually acquire ground targets and then attack them.

The concept of how this firepower was to be directed and applied was contained in the tasking order sent to Nos 4 and 30 Squadrons by 9OG.

*WAR.42 3 FEB. 9OG/C1/3. "Flight Beaufighters rendezvous with Wirraway over Wau at 1430L/13 FEB. Follow Wirraway who will indicate target by firing tracers into it. Beaufighters will follow Wirraway in and straffe [sic]."*<sup>13</sup>

At 1320 hours the infantry at Wau, saw the 4 Squadron Wirraway circling overhead and indicated their positions to the aircraft by firing flares. Once the Wirraway had determined the relative positions of friend and foe it departed and returned at 1439 hours with the Beaufighters in company. The Wirraway then designated the target area to the Beaufighters by firing tracer rounds into the enemy positions and the Beaufighters then delivered their attack to the same area.

The infantry observed the attack and believed that two of the Beaufighters appeared to be off target. Their own assault broke down through lack of communication between the two ground units involved and they were unable to further assess the results of the air mission.<sup>14</sup> No. 30 Squadron recorded their view that the Wirraway direction was a 'very accurate method of target indication',

A RAAF Beaufighter flying over a beach in the SWPA in 1945.



but they were also unable to observe the results. Soon after, however, a Japanese prisoner who had been present in the target area during the attack and was later captured, “described the strafing as terrifying, and reported that 40 out of 60 troops in his immediate vicinity were killed outright.”<sup>15</sup> The perspective of the target obtained by the Wirraway’s aircrew appears to have been superior to that of the infantry on the ground and was probably a major factor in the success of the air attack.

All the essential elements of the Forward Air Control (FAC) role as it is practiced today were present in this mission – communication with the local ground forces, acquisition of friendly and enemy locations, the indication of the target to the attacking aircraft. At the time the term FAC was not yet in use and No. 4 Squadron recorded the mission as a ‘land reconnaissance’ sortie. After this mission however, sorties of the same type were referred to as ‘tactical reconnaissance’ missions by the RAAF’s army cooperation squadrons, Nos 4 and 5 Squadrons.

American air historian, Richard P. Hallion, referred to this pioneering work of the RAAF in his book *Strike from the Sky* when discussing international efforts to more effectively control close air support missions.

*The Australians went further, and developed airborne strike coordinators and controllers, anticipating the post-World War II forward air control sys-*

*tem utilized in Korea and Southeast Asia. Using two-seat Commonwealth Wirraway tactical reconnaissance and liaison aircraft, Royal Australian Air Force pilots and observers led strike flights to ground targets. Subsequently, the RAAF introduced the Commonwealth Boomerang, a specialized army cooperation and ground support fighter which operated like a “fast FAC” over the edge of battle, leading strikes and marking targets for attacking aircraft.*<sup>16</sup>

After Wau this style of mission became a feature of the operations of the RAAF’s two army cooperation squadrons in the South West Pacific Area. The skills acquired by these squadrons in this specialised role resulted in the RAAF possessing the world’s most advanced method of providing accurate and safe close air support.

During 1944, No. 5 Squadron in Bougainville further developed the method of marking targets after they found that tracer rounds did not provide a lasting reference point for the bombers. The Boomerang and Wirraway pilots had employed 30-pound phosphorous bombs during their training in Australia and experimented with these to mark the target and they ‘immediately proved successful.’ In Bougainville the squadron worked with Nos 20 and 31 Squadrons Royal New Zealand Air Force (RNZAF) who were equipped with the Vought F4 Corsair.<sup>17</sup> At times No. 5 squadron controlled the bombing of up to 20 Corsairs and the target would need to be remarked during the strike as the origi-

## THE FAC ROLE HAD TO BE REDISCOVERED IN THE KOREAN CONFLICT IN 1950

No. 5 Squadron Boomerangs over Bougainville, 1945.



**THE FAC  
ROLE  
FIGURED  
PROMI-  
NENTLY IN  
THE  
TRAINING  
GIVEN TO  
THE SOUTH  
VIETNAMESE  
AIR FORCE IN  
THE PERIOD  
1960 TO 1965**

nal smoke drifted away from the target. The Australians also used radio communications to direct the dropping of ordnance at specific distances from the smoke markers (100 yards to the left, 50 yards short, etc.) to ensure the accuracy of the attack and the safety of the troops on the ground. The confidence that developed between all the forces involved, air and ground, grew to the point that weapons were able to be dropped 150-200 yards from friendly ground units.<sup>18</sup> At the same time No 4 Squadron employed similar marking and directing techniques and achieved similar results in New Guinea working with Australian and American squadrons in support of the Australian infantry. A notable success in this area of operations was the squadron's direction of American P-40s from the 7th Fighter Squadron who bombed in support of the successful Australian assault on Shaggy Ridge in December 1944.<sup>19</sup>

While the Australians were discovering the solution to the problem of delivering safe and effective close air support, others developed similar solutions on the other side of the world. In May 1944 the Americans in Italy utilized a light aircraft, the Piper L-5, to locate and indicate targets to strike aircraft. The codename Horsefly was given to this type of operation. The marking method usually involved the dropping of a smoke bomb on the target from the Horsefly's operating altitude of 3,000 to 4,000 feet. Horsefly techniques were also

used in the invasion and subsequent operations carried out in southern France, and continued in that area until the end of the war in Europe.<sup>20</sup>

The FAC role had to be rediscovered in the Korean conflict in 1950. Strike aircraft speeds had significantly increased since World War II and a way had to be found to accurately mark targets. L-5 and AT-6 Texan aircraft were modified to replicate the Horsefly operations of World War II. A new radio call-sign resulted in these FAC flights being called Mosquitoes. The Korean conflict also saw the introduction of specialised smoke rockets as target markers and these became the primary tool of FACs from Korea onwards.<sup>21</sup>

The FAC role figured prominently in the training given to the South Vietnamese Air Force in the period 1960 to 1965. The use of FAC grew considerably with the introduction of American combat forces to Vietnam in 1965 and over the ensuing years. One of the most intense periods of FAC operations centred on the Battle of Khe Sanh in 1968. During the battle 1,600 FAC sorties were used to control 25,000 tactical sorties which dropped 95,000 tons of ordnance. It is the American use of FAC in Vietnam that usually comes to mind when the term FAC is used.<sup>22</sup>

Although the American use of FAC on such a large scale dominates the history of this key air power role, it is important to remember where it first originated. The innovativeness, ingenuity,



skills, and resourcefulness of RAAF personnel in an under-resourced and overlooked theatre of World War II produced a new concept of operations that was used for the first time with great efficacy.

The procedures they developed have withstood the test of time and continue to be used today by air forces around the world for the precise and safe application of close air support. ■

## NOTES

1. F. M. Cutlack, *The Australian Flying Corps in the Western and Eastern Theatres of War 1914-1918*, Angus & Robertson, Sydney, 1935, pp. 151-71, see particularly p. 161.
2. Sydney Morning Herald, Friendly Fire Incidents and Accidents, *Sydney Morning Herald*, 8 April 2003, and, Benjamin S. Lambeth, *Air Power against Terror: America's Conduct of Operation Enduring Freedom*, Rand Corporation, Santa Monica, 2005, pp. 143-44, 179, 223.
3. Richard P. Hallion, *Strike From the Sky*, Smithsonian Institution Press, Washington, 1989, pp. 54, 66.
4. *Ibid.*, pp. 149-55, and John Terraine, *The Right of the Line*, Wordsworth Editions, London, 1997, pp. 346-52
5. *Ibid.*, pp. 152-56.
6. The Wirraway was an Australian built derivative of the North American NA-16-2K, sometimes referred to as the NA-33. The Wirraway differed in having a retractable undercarriage, strengthened structure for dive-bombing, increased gun armament and underwing bomb racks. The Wirraway was used by the RAAF as a fighter in the defence of Rabaul where it was hopelessly outnumbered and outclassed by the Japanese. Stewart Wilson, *Aircraft of WWII*, Aerospace Publications, Fyshwick, 1998, p. 35.
7. Dudley McCarthy, *South-West Pacific Area - First Year Kokoda to Wau*, Australian War Memorial, Canberra, 1959, p. 368, and Assistant Chief of Air Staff Intelligence: Historical Division, Army Air Forces Historical Studies: No. 17 Air Action in the Papuan Campaign 21 July 1942 - 23 January 1943, USAF Historical Division, Maxwell AFB, 1944, pp. 89-90.
8. Charles Buttrose, *Sydney Morning Herald*, Jan. 27, 1943, quoted in Douglas Gillison, *Royal Australian Air Force 1939-1942*, Australian War Memorial, Canberra, 1962, p. 677.
9. David Dexter, *The New Guinea Offensives*, Australian War Memorial, Canberra, 1961, p. 649f. Dexter also records that the communication between airman and gunner was conducted in a very conversational way. For example: *The gunner: "Is there a machine-gun post at —?"*
10. RAAF Historical Records (RHR), No. 9 operational Group Monthly Tactical Appreciation December 1942, Microfilm Roll 458, Document 272.
11. *Ibid.*
12. RHR, No. 30 Squadron Monthly Tactical Appreciation, Nov. 1942, Microfilm Roll 460, Document 855.
13. RHR, No. 30 Squadron R.A.A.F. Unit History Sheet: Detail of Operations Feb. 3, 1943.
14. McCarthy, *South-West Pacific Area - First Year Kokoda to Wau*, pp. 562-63.
15. RHR, No. 30 Squadron Monthly Tactical Appreciation February 1943, Microfilm Roll 460, Document 855.
16. Hallion, *Strike From the Sky*, p. 166.
17. Oliver A. Gillespie, *The Pacific*, R.E. Owen Government Printer, Wellington NZ, 1952, p. 258.
18. RHR, Development of Pathfinding and Bombing Technique: Interview with Flight Lieutenant L.W. Atthow, Feb. 20, 1945, by Pilot Officer I.C. Pratt, Microfilm 459, Document 735A. Atthow also comments that the RNZAF squadrons first employed 325 lb depth charges against Japanese ground targets on 7 December 1944 and found they were highly lethal anti-personnel weapons and effective in clearing a 40 yard square area of lightly timbered country. The 625 lb depth charge did not provide proportionately greater results but they were more effective in heavily timbered country.
19. Steve Birdsall, *Flying Buccaneers: The Illustrated Story of Kenney's Fifth Air Force*, David and Charles, London, 1978, p. 144, and Dexter, *The New Guinea Offensives*, pp. 706-708.
20. Hallion, *Strike From the Sky*, pp. 181-82.
21. Gary Robert Lester, *Mosquitoes to Wolves: The Evolution of the Airborne Forward Air Controller*, Air University Press, Maxwell AFB Alabama, 1997, pp. 34-37, 55.
22. *Ibid.*, pp. 87-88, 133-34.

# USAF Combat Airfields in Korea and Vietnam





Daniel L. Haulman

(Overleaf) C-119s of the 314th Troop Carrier Squadron sit on the edge of the pierced steel planking runway.

## ENGINEERING PERSONNEL WERE SOMEWHERE IN BETWEEN THE ARMY AND THE AIR FORCE

## EARLY IN THE KOREAN WAR, FEAF UTILIZED EXISTING AIRFIELDS IN JAPAN AND SOUTH KOREA

Between 1950 and 1953 and again between 1964 and 1973, American armed forces took part in Far East conflicts, one in Korea and the other in Vietnam. While each of the wars was unique, they also shared some common characteristics. The United States supported a non-Communist South against a communist North. In both conflicts, U.S. Air Force units and aircraft played significant roles. Those roles depended greatly on the acquisition, improvement, construction, and maintenance of combat airfields.

When it was born in 1947, the Air Force lacked an organic engineering capability. According to the National Security Act of that year, the Army Corps of Engineers and the Navy Civil Engineer Corps shared responsibility for Air Force construction. In peacetime, the arrangement saved money by avoiding senseless duplication, but the Far Eastern conflicts exposed the need for the Air Force to have its own engineers for forward airfield construction.<sup>1</sup>

### Air Base Construction in Korea, 1950-1953

When North Korea invaded South Korea in June 1950, the Far East Air Forces (FEAF) had limited theater airfield construction capability. Installations squadrons were prepared to repair and maintain airfields, not to build them. In the course of the conflict, USAF tactical unit commanders eventually gained responsibility for air base development, but adequately trained personnel and stockpiles of spare parts were always in short supply.<sup>2</sup>

The engineer aviation battalions of the Korean War were similar but not identical to those of the U.S. Army Air Forces in World War II. By 1950, aviation engineering personnel were somewhere in between the Army and the Air Force, serving as "Special Category Army Personnel with Air Force" (SCARWAF) troops. When the Korean War broke out, five of these battalions were active in Japan, Okinawa, and Guam, organized under the 930th and 931st Engineer Aviation Groups. In April 1951, the Air Force organized an Engineer Aviation Force under the Continental Air Command to provide operational training for construction battalions expected to deploy from the United States to Korea.<sup>3</sup>

Early in the Korean War, FEAF utilized existing airfields in Japan and South Korea. Many of these were formerly Japanese military airfields, and some of them had been converted to civilian airports. Before long, almost all of South Korea had been taken over by the invaders, leaving only a handful of airstrips in the southeastern corner of

the peninsula available for USAF use. The most important of these were Taegu, Pohang, and Pusan West. The 930th Engineer Aviation Group and its 811th and 822d Engineer Aviation Battalions, deployed from Japan to Korea to keep these fields operational. Aviation engineers in Japan improved airfields at Itazuke and Tsuiki for tactical fighter missions to Korea, just across the Korea Strait.<sup>4</sup>

In late 1950, United Nations forces pushed the North Korean invaders out of South Korea and marched northward. Expectation of a quick victory, acquisition of North Korean air bases, and concern about the defense of western Europe restricted airfield construction in Korea. The North Koreans, reinforced by thousands of fresh Chinese troops at the end of 1950, resumed the offensive by early 1951 and invaded South Korea again.<sup>5</sup>

The shortage of operational airfields in South Korea was especially crucial during the spring Communist offensive of 1951. The introduction of Soviet-made MIG jet fighter aircraft into the war created a demand for the newest U.S. fighters in Korea, along with airfields able to accommodate them. Runways at Taegu, the most active of the USAF airfields in South Korea, failed at the end of May. Pierced steel planks placed on unstabilized ground could no longer support the F-80s that were based there. USAF fighters based in Japan could reach the front in Korea, but not quickly enough to be very effective. Furthermore en-route fuel consumption considerably reduced time over the target area. Moreover, even in Japan, only four airfields were suitable for jets.<sup>6</sup>

The 931st Engineer Aviation Group joined the 930th in Korea by the end of May 1951. Not until June were there enough aviation engineer battalions in Korea to build or repair all of the airfields that the Fifth Air Force required. Eventually, aviation engineer battalions operated throughout South Korea under the 417th Engineer Aviation Brigade and three engineer aviation groups, the 930th, the 931st, and the 934th. The 930th Engineer Aviation Group handled new construction and heavy maintenance of airfields in deep southern Korea, such as Taegu, while the 931st managed air base construction in the Seoul-Suwon and Kimpo areas and in central Korea. The 934th labored on a new jet airfield near the village of Osan-ni, the only major USAF facility in Korea built from scratch.

The creation of the base at Osan was the largest single construction project of the war. Its 9,000-foot concrete runways were ready for F-86 jet fighters by the end of 1952. Engineers required 102 days to construct its runways.<sup>7</sup>

*Dr. Daniel L. Haulman is a historian at the Air Force Historical Research Agency, at Maxwell AFB, Alabama, where he has worked since 1982. He earned his Ph.D. in history from Auburn University in 1983 after earning previous degrees from the University of Southwestern Louisiana and the University of New Orleans. In the course of his degree work, he taught high school history for five years. Since 1982, Dr. Haulman has taught several history courses as an adjunct professor at Huntingdon College, Auburn University in Montgomery, and Faulkner University. He is the author of two books, four Air Force pamphlets, has published many historical articles and has presented papers at more than a dozen historical conferences.*

Members of the 811th Engineering Aviation Branch work on a runway extension at a South Korean airstrip while a Curtiss C-46 takes off.



**AT THE BEGINNING OF 1964, THE RMK-BRJ CONSTRUCTION CONGLOMERATE HAD ALREADY SUFFERED FOUR WORKERS KILLED AND SIX WOUNDED**

Improved air bases near the front in Korea gave relatively short-range jets the capability not only to hit their targets and return, but also to conduct reconnaissance and air superiority missions. Aviation engineers built fighter bases in Korea that dwarfed those of World War II. Jets required 9,000-foot-long runways, whereas World War II vintage propeller-driven fighters could operate from fields as short as 3,600 feet. Larger storage facilities had to be constructed to hold the jet fuel that the new aircraft guzzled so greedily. F-80, F-84, and F-86 aircraft not only required longer runways than the propeller-driven fighters they replaced, but also smoother and more durable surfaces able to withstand the erosion of jet exhaust. Jets worked better on concrete or asphalt than PSP. Older-surfaced runways failed under heavy use not only at Taegu but also at Pusan West and Kunsan. Eventually 9,000-foot runways, all made of concrete or asphalt, were available at four of the airfields in South Korea: Taegu, Suwon, Kunsan, and Osan-ni.<sup>8</sup>

C-124s flying to Korea carried an average load of more than 17 tons. Larger and heavier transports with complex landing gear demanded improved runways, taxiways, and ramps. It took three times as long to construct a typical airfield in Korea than it had in World War II—4.5 battalion-months versus 1.5 battalion-months.<sup>9</sup>

Natural obstacles also challenged the aviation engineers in Korea. High land was sometimes too rocky and low land too marshy for airfield con-

struction. Heavy seasonal rain produced floods and mud, and alternately freezing and thawing ground threatened pavement stability. The extreme cold in Korea prepared engineers for the construction of Distant Early Warning sites in Alaska and Canada in later years.<sup>10</sup>

The Korean War also posed logistical problems, such as long supply lines. Equipment and spare parts for airfield construction and maintenance sometimes had to come all the way from the United States, 10,000 miles away from the theater. The most critical of the airfield construction problems in the Korean War, however, was the shortage of trained personnel. Commanders complained that as soon as their personnel became proficient in the use of their equipment, they rotated out of the theater. To mitigate the problem, the Air Force in November 1952 authorized Far East Air Forces (FEAF) to assign air installations personnel to engineer aviation units.<sup>11</sup>

### **Combat Airfields in Vietnam**

Unlike World War II and Korea, the war in Vietnam started slowly as a guerilla conflict, with no clearly defined fronts. Partly for that reason, most of the initial airfield construction was performed by civilian engineers under contract. As the war intensified, there was good reason to increase the use of military engineers. Civilians sometimes failed to show up for work because of labor disputes

**BETWEEN  
MID-1965 AND  
MID-1967, U.S.  
ARMY ENGI-  
NEERS BUILT  
OR REHABILI-  
TATED MORE  
THAN 80 AIR-  
FIELDS IN  
SOUTH  
VIETNAM**

or enemy action. At the beginning of 1964, the RMK-BRJ construction conglomerate had already suffered four workers killed and six wounded. Contractors sometimes faced difficulties in obtaining security clearances for their personnel, inflation in the costs of materials, and poor quality of equipment acquired in local markets. Moreover, theater commander General William C. Westmoreland wanted an airfield within 25 kilometers of any given point in South Vietnam. Military and civilian engineers had to work together to achieve that goal.<sup>12</sup>

The U.S. Army Corps of Engineers' 18th Engineer Brigade and 35th Engineer Aviation Group constructed facilities across South Vietnam. Between mid-1965 and mid-1967, U.S. Army engineers built or rehabilitated more than 80 airfields in South Vietnam, many of them designed for C-130 tactical airlift aircraft. For example, the U.S. Army's 62d Engineer Battalion constructed a 10,000-foot-long airstrip of aluminum panels (AM 2) for incoming USAF units at Phan Rang.<sup>13</sup>

By the end of 1965, there were 14 construction battalions of the U.S. Army, Navy, and Marine Corps in addition to 22,000 construction contract personnel working in South Vietnam. The Air Force lacked an organic forward airfield construction capability at the beginning of the conflict. The service did, however, survey airfields in South

Vietnam to determine their ability to accommodate USAF aircraft. For example, in March 1962, the 315th Air Division determined that 75 of South Vietnam's airfields were suitable for twin-engine C-123 cargo aircraft. In 1966, the Seventh Air Force established a permanent airfield survey team, and noted that 66 airfields were already in use by four-engine C-130s. In May of that year, the Seventh Air Force and a U.S. Army working group developed a master plan for forward airfield development and chose 20 airfields for improvement, including Khe Sanh. Air Force delivery of more than 12,000 tons of equipment and supplies there between January and April 1968 helped Marines at that base survive weeks of Communist encirclement and avoid another Dien Bien Phu debacle. C-130s also delivered numerous 500-gallon helicopter fuel bladders from Tan Son Nhut and Qui Nhon to Pleiku.<sup>14</sup>

In the midst of the war, the Air Force reorganized its civil engineering structure to allow some forward airfield construction capability. SCARWAF units had inactivated in 1956, depriving the service of assigned Army engineers. By 1963, the Air Force had as many as 44,000 of its own civil engineers in uniform, mostly in the Strategic Air Command, but responsible to the Air Force Director of Civil Engineering, Maj. Gen. Robert H. Curtin. When Con-

**Major USAF-used Bases in SE Asia, 1965-1973**

Air Base	Country	Civil Engineer Squadron, Heavy Repair (Red Horse unit) or detachment
Ban Me Thuot	South Vietnam	554 (det)
Bien Hoa	South Vietnam	823
Cam Ranh Bay	South Vietnam	554, 555
Da Nang	South Vietnam	554, 820
Nha Trang	South Vietnam	554 (det)
Phan Rang	South Vietnam	554
Phu Cat	South Vietnam	819
Pleiku	South Vietnam	819 (det)
Qui Nhon	South Vietnam	819
Tan Son Nhut	South Vietnam	823 (det)
Tuy Hoa	South Vietnam	819, 820
Vung Tau	South Vietnam	823 (det)
Ban Satterhip	Thailand	819
Korat	Thailand	556 (det 5)
Nakhon Phanom	Thailand	556 (det 3)
Takhli	Thailand	556 (det 2)
U-Tapao	Thailand	554, 556
Ubon	Thailand	556 (det 4)
Udon	Thailand	556 (det 1)

**Sources:** 1st Civil Engineering Group Histories, 1968 and 1969 (AFHRA call no. K-GP-AB-1-HI); Carl Berger, *The United States Air Force in Southeast Asia, 1961-1973: An Illustrated Account* (Washington, D.C.: Office of Air Force History, 1984), pp. 342-352; Ray L. Bowers, *Tactical Airlift* (Washington, D.C.: Office of Air Force History, 1983), pp. 176, 230, 669-670; Organizational record cards and lineage and honors histories of the 554th, 555th, 556th, 819th, 820th, and 823d Red Horse Squadrons at the AFHRA Research Division; "Red Horse, Thailand, 1966-1967," AFHRA call no. K-SQ-INST-556-SU-PH.

Engineers of the 1903rd Engineering Aviation Battalion in Korea reverse the adage of making mountains out of molehills.



## GENERAL CURTIN CREATED FROM THE BEST OF THE PRIME BEEF TEAMS TWO NEW CIVIL ENGINEER SQUADRONS FOR HEAVY CONSTRUCTION DUTY IN VIETNAM

gress began questioning the need for so many blue-suit engineers, Curtin authorized a Civil Engineering Manpower Study Group. The group justified keeping the Air Force military engineers but recommended the establishment of Prime BEEF (Base Engineer Emergency Force) teams to make them more supportive of the combat mission. Enemy mortar and rocket attacks on USAF-used airfields in Vietnam hastened the organization of the Prime BEEF teams, which began deploying to Southeast Asia in August 1965. By mid-February 1968, more than 40 such teams, composed of from 25 to 50 men each, had deployed to the combat theater. They undertook emergency airfield construction projects, such as the building of aircraft revetments.<sup>15</sup>

The Prime BEEF teams were not enough. As early as 1965, Secretary of Defense Robert S. McNamara asked Secretary of the Air Force Eugene M. Zuckert if the Air Force, like the Marine Corps, could create a multi-squadron airfield from the jungle in Vietnam within a month. In response, General Curtin created from the best of the Prime BEEF teams two new civil engineer squadrons, heavy repair (CES, HR), the 554th and the 555th, for heavy construction duty in Vietnam. They became the first Rapid Engineer Deployable Heavy Operational Repair Squadron-Engineering (RED HORSE) units. In February 1966, the 554th began runway repairs at Phan Rang Air Base (AB) in Vietnam, and the next month the 555th started similar work at Cam Ranh Bay. The Air Force directed the 2d Air Division to manage the two squadrons.<sup>16</sup>

Although the work of these squadrons was designed to supplement and not replace the work of

U.S. Army Corps of Engineers and contractors working under the U.S. Navy, neither the Army nor the contractors could keep up with the demand for airfield facilities in Vietnam. In 1966, the Military Assistance Command in Vietnam and the Military Assistance Command in Thailand assigned to the Air Force's heavy repair civil engineer squadrons certain construction projects normally assigned to contractors. The same year, General Curtin established the Civil Engineering Construction Operations Group (CECOG) at Wright-Patterson Air Force Base, Ohio, as single manager for assignment of the Prime BEEF teams and RED HORSE squadrons.<sup>17</sup>

By 1967, five RED HORSE squadrons were serving in South Vietnam under the 1st Civil Engineering Group. A sixth RED HORSE squadron worked on several air bases in Thailand. At the peak of their operations, the six RED HORSE squadrons in Southeast Asia contained 2,400 military personnel and managed 6,000 local nationals. At each of the major USAF airfields in the combat theater, the squadrons undertook a variety of construction projects, including repairing damage caused by enemy mortar and rocket attacks and constructing or upgrading operational facilities such as runways, taxiways, roads, and buildings. RED HORSE Engineers also built aircraft shelters composed of steel corrugated shells covered with 15 inches of concrete to protect fighters from enemy attacks (Project Concrete Sky).<sup>18</sup>

In order to train replacements for the six RED HORSE squadrons in Southeast Asia, the Air Force organized the 560th Civil Engineering Squadron,



**IN EARLY  
1968, NORTH  
KOREA  
SEIZED THE  
U.S. NAVY  
SHIP  
PUEBLO,  
GENERATING  
A NEW  
CRISIS THAT  
CALLED FOR  
THE RAPID  
CONSTRUCTION OF  
AIRFIELD  
FACILITIES IN  
KOREA**

Heavy Repair, at Eglin Air Force Base in Florida, whose Auxiliary Field #2 became the “Home of Red Horse.” As early as 1967, the squadron also evaluated civil engineering field construction techniques, including “bare base” methods involving the rapid construction of air bases almost from scratch. Such experiments laid the foundation for future expeditionary civil engineering operations.<sup>19</sup>

In early 1968, at the height of the Vietnam War, North Korea seized the U.S. Navy ship *Pueblo*, generating a new crisis that called for the rapid construction of airfield facilities in Korea to accommodate a buildup of forces there under Operation COMBAT FOX. At first, Air Force Prime BEEF teams deployed to Korea to build tent cities. In April 1968, the Air Force set up the 557th CES (HR) at Osan, which managed airfield construction detachments at five other locations across South Korea.<sup>20</sup>

During the Vietnam War, Prime BEEF and RED HORSE engineers faced some of the same problems that challenged their counterparts in earlier conflicts. To combat the problem of mud generated by monsoon rains, engineers covered airstrips with waterproof and dustproof T-17 membrane and used solid steel plank (M8A1) and aluminum panels (AM-2). Enemy forces often attacked air bases with mortars and rockets, usually concentrating on aircraft rather than on pavements because they knew that rapid runway repair was becoming a USAF art. New bulldozers were equipped with cabins to better protect their operators from enemy snipers. As in World War II and Korea, the 10,000-mile supply line across the Pacific challenged engineers logistically, but larger and faster cargo air-

craft such as C-141s and C-5s shortened delays in delivery of equipment and supplies.<sup>21</sup>

### **Conclusion**

During its first 26 years, between 1947 and 1973, the U.S. Air Force depended on the acquisition, improvement, and construction of overseas airfields for the projection of its air power resources. While the Air Force continued to depend on the other services and on civilian contractors for much of its forward air base construction, it continued to develop its own engineering personnel, organizations, and techniques. In Korea, Army troops in the service of the Air Force (SCARWAF) and installation squadrons largely met the need, while in Vietnam, the Air Force activated Prime BEEF teams and RED HORSE squadrons. In Korea, jet aircraft required longer, wider, smoother, and more durable runways, and asphalt and concrete largely replaced the pierced steel plank that was so popular in World War II. In Vietnam, engineers of the Air Force and its sister services experimented with the use of solid steel planks, aluminum panels, and waterproof membranes. The development of new aircraft that could be refueled in the air increased the speed with which equipment and supplies could be delivered. While allowing a reduction in the number of airfields, larger and faster aircraft also demanded that remaining airfields be larger and more robust. By 1973, the Air Force had taken a leading part in two major wars, and was more ready than ever to project its resources globally on the foundation of its forward airfield experience. ■

Crushed rock is one ingredient of a good runway. Here a bulldozer pushes the crushed rock while a steam shovel waits to move it for further processing.



## NOTES

1. Major P. J. Toussaint, "AAF-USAF Airfield Construction, 1939-1982," Air Command and Staff College Student Report (AFHRA call no. K239.043-26 1939-1982), p. 50.
2. Toussaint, pp. 49-51; Robert F. Futrell, *The United States Air Force in Korea, 1950-1953* (Washington, D.C.: Office of Air Force History, 1983), pp. 61-62, 636.
3. Futrell, pp. 61-62, 393.
4. *Ibid.*, pp. 109-12; Toussaint, pp. 58, 61; A. Timothy Warnock, editor, *The USAF in Korea: A Chronology, 1950-1953* (Washington, D.C.: Air Force History and Museums Program, 2000), pp. 8-18.
5. Warnock, *Korea Chronology*, pp. 14-36. *American Military History* (Washington, D.C.: Center of Military History, 1989), pp. 553-65; Toussaint, p. 60.
6. Futrell, pp. 389-90. Capt. Peter C. Bahm and Capt. Kenneth W. Polasek, "Tactical Aircraft and Airfield Recovery," Reading 8 in vol. 6 of Air Command and Staff College Seminar and Correspondence Lesson Book (Maxwell AFB, Ala.: Air University, 1994), p. 60.
7. Futrell, pp. 499, 635; Toussaint, pp. 59-60; "Osan Air Base," Fact Sheet, 51st Fighter Wing Public Affairs, Osan AB, Korea [www2.hickam.af.mil/pacaf/facts/osan.htm](http://www2.hickam.af.mil/pacaf/facts/osan.htm).
8. Futrell, pp. 635-36; Toussaint, pp. 56-57; Bahm and Polasek, p. 60.
9. Toussaint, p. 57; Futrell, pp. 419, 563, 635.
10. *Ibid.*, pp. 58, 62, 66.
11. Futrell, pp. 61-62, 636-37.
12. Toussaint, pp. 69-70, 77.
13. Maj. Gen. Robert R. Ploger, *U.S. Army Engineers, 1965-1970*, (Washington, D.C.: Department of the Army, 1974), pp. 36, 46, 55, 84, 108, 110-11.
14. Ray L. Bowers, *The United States Air Force in Southeast Asia: Tactical Airlift* (Washington, D.C.: Office of Air Force History, 1983), pp. 163, 214, 230, 232, 235-36, 315.
15. Oral History Interview of Brig. Gen. William T. Meredith by Lois E. Walker, AFHRA call no. K239.0512-2428, vii-viii; Carl Berger, editor, *The United States Air Force in Southeast Asia, 1961-1973: An Illustrated Account* (Washington, D.C.: Office of Air Force History, 1984), p. 251.
16. Meredith interview, viii-ix. Ronald Hartzer, *A Horse with Wings: RED HORSE History* (HQ AFCEA) cited in John Pike, *RED HORSE* (<http://www.globalsecurity.org/military/agency/usaf/redhorse.htm>) 2 Aug 2004; Air Force Regulation 85-25, 27 Nov 1967 "Project Red Horse."
17. Meredith interview, viii; John Pike, *RED HORSE* (<http://www.globalsecurity.org/military/agency/usaf/redhorse.htm>) Aug 2, 2004
18. John Pike, *RED HORSE* (<http://www.globalsecurity.org/military/agency/usaf/redhorse.htm>) Aug 2, 2004; Toussaint, pp. 72-76; organizational records of the 554th, 555th, 556th, 819th, 820th, and 823d Civil Engineering Squadrons (Heavy Repair) at the AFHRA; Berger, 251; History of the 1st Civil Engineering Group (AFHRA call no. K-GP-AB-1-HI [CE]) Apr-Jun 1969, v. 2.
19. History of the 560th Civil Engineering Squadron, Heavy Repair, Jul-Dec 1967 (AFHRA call no. K-SQ-INST-560-HI), pp. ix, xii, 1, 111.
20. John Pike, *RED HORSE* (<http://www.globalsecurity.org/military/agency/usaf/redhorse.htm>) Aug 2, 2004
21. Toussaint, p. 77; Berger, p. 250; Bahm and Polasek, p. 60; Ploger, pp. 55, 112-15, 119.

# AGAINST DNIF: EXAMINING



# G VON RICHTHOFEN'S FATE



Jonathan M. Young

(Overleaf) Baron von Richthofen and his famous *Jadstaffel II* all lined up for inspection at Douai during March 1917. Just before the greatest month of their history. (USAF Photo. All other photos courtesy of the author.)

VON RICHTHOFEN IS WIDELY CONSIDERED ONE OF THE GREATEST AIR WARRIORS OF ALL TIME

VON RICHTHOFEN SUFFERED A SERIOUS HEAD INJURY IN COMBAT ON JULY 6, 1917

**M**anfred von Richthofen, the Red Baron, is widely considered one of the greatest air warriors of all time. He conquered the skies and the imagination at a time when war degraded from a noble endeavor to an industrial and impersonal slaughter. It is for that reason that historians still study his life and death. Mostly, historians are searching for an answer as to why such a skilled and seemingly invincible maverick of the sky put himself in the nearly suicidal position of chasing a low-flying adversary and being exposed to enemy ground fire. This article will argue that Baron von Richthofen, although injured, was not incapable or even gravely threatened on his fatal flight and that personality traits, including his determination for individual recognition, reveal a character that felt the need to sacrifice everything, including safety, to be the best ace of all time.

### Duties Not Including Flying (DNIF)

In 2004, Thomas Hyatt and Daniel Orme published an article with the theory that Manfred von Richthofen's head injury on July 6, 1917 debilitated his brain functions so greatly that it effected his piloting ability and led to his death under circumstances that the master ace would not normally be in. Hyatt and Orme's article, "Baron Manfred von Richthofen—DNIF (Duties Not Including Flying)" gained international attention as it used theories of modern neuroscience to shed light on a famous question from the past. The article, because of its notoriety and fascinating subject matter, deserves a closer examination. Although the article was visionary because of its use of cutting edge science, the theory ultimately failed as it rested on imprecise data and the fact that von Richthofen's wound did not seem to diminish his functioning until April 21, 1918, von Richthofen's last.

### The head wound

As was mentioned, Baron Manfred von Richthofen suffered a serious head injury in combat on July 6, 1917. The Baron later reported an immediate paralysis of the appendages, blindness, and as his vision recovered—colorblindness. Von Richthofen quickly recovered these critical body functions and landed his plane. Upon reaching the ground, the Baron lapsed in and out on consciousness and appeared dead. Von Richthofen was taken to a hospital and examined. The physicians found a skull fracture and a four inch groove in the top of his skull, which contained multiple bone splinters. The Baron's doctors diagnosed a concussion of the brain and possibly a cerebral hemorrhage.

The difficulty with making a hypothesis based on another's reports is that the information studied



can be inaccurate. The data that Hyatt and Orme used to diagnose von Richthofen as brain damaged is not specific enough make such a judgment. The German physicians who treated von Richthofen never noted exactly where the bullet wound was on his skull. The medical reports claimed that there was a "ten centimeter [four-inch] groove in the top of his skull" but based on such a general statement, it is impossible to determine if this injury actually did damage von Richthofen's critical frontal lobe, on which Hyatt and Orme's hypothesis rests, or another area of the brain.<sup>1</sup> While Hyatt and Orme's theory is a fascinating, unfortunately the condition of medicine at the time of the Red Baron's injury limits the information that they could use for their work. Without exhuming von Richthofen's body and examining the skull with modern physicians and equipment we cannot be reasonably sure that it was in fact the frontal lobe that was damaged.

### DNIF? Von Richthofen's performance as a flyer and leader after his injury

Another problem with Hyatt and Orme's thesis was the contention that Manfred von Richthofen's July 6, 1917 head injury was so serious that it caused "personality and cognitive changes" to the Red Baron and ultimately resulted in his diminished

*Second Lieutenant Jonathan Young is a class of 2006 graduate of the Catholic University of America in Washington, D.C. where he received a B.A. in history. Lt. Young is also a Distinguished Graduate of the 130th Cadet Wing at Howard University. He is currently stationed at Goodfellow AFB, Texas as an Intelligence Officer.*

(Left) Manfred von Richthofen

(Right) The Fokker Dr.I taking off. The tri-plane design gave the plane incredible climbing capabilities but it was unstable in a steep dive and it's wings sometimes snapped.



## THE RED BARON'S HEAD INJURY WAS FAR MORE SERIOUS THAN A MILD CONCUSSION

ability to fly and fight. By early July 1917, Manfred von Richthofen had already accumulated fifty-seven aerial victories. Von Richthofen was Germany's second highest scoring ace of the war, behind only *Oberleutnant* Ernst Udet, before his injury. He was obviously an accomplished fighter before he was injured, but what about after the injury?

Following his near death experience and against the wishes of his squadron's physicians, von Richthofen returned to the air in August 1917 and recorded four more kills before being sent home to recuperate. He shot down two more foes in November 1917 but did not return to full duty until March 1918. March 1918 was von Richthofen's second most efficient month of his career and it was during this time that he shot down eleven enemies.<sup>2</sup> The Red Baron was finally killed in April 1918 after downing eighty-enemy aircraft, twenty-three of them after sustaining his head injury. Von Richthofen was undoubtedly affected by the injury but it did not appear to diminish his decision making, piloting, or fighting abilities. He demonstrated the same ruthless efficiency after his brush with death as he did before it and was able to shoot down nearly as many enemies in a few months than America's leading ace Eddie Rickenbacker did in his entire career.

Hyatt and Orme also noted that mild concussions can lead to an "increased vulnerability to fatigue, deficits in attention, concentration, and the ability to process complex information."<sup>3</sup> Surely, the Red Baron's head injury, which included a skull fracture, a four-inch groove in the top of his skull that contained multiple bone splinters, and probably a cerebral hemorrhage was far more serious than a mild concussion.<sup>4</sup> Hyatt and Orme attributed the Red Baron's poor decision making during his fatal flight, including lapses in planning and judgment, to this injury.<sup>5</sup> However, von Richthofen demonstrated excellent foresight as a leader and wartime aviator after his injury when he helped commission trials for a new German fighter.

The Adlershof trials were an attempt by German aviators and Dutch aircraft designer Anthony

Fokker to replace the aging Fokker DR. I triplane. Taking place in 1918, they tested the Fokker D. VII, a biplane regarded as the best fighter of the war. Von Richthofen was a leader during these trials and his testing of the D. VII brought modifications that greatly improved its performance, reliability, and safety. In fact, von Richthofen's changes essentially ended the competition because they proved to be so decisive.<sup>6</sup>

Obviously, von Richthofen's injury, as serious as it was, did not reduce his ability to plan and play a major role in solving the problems of his nation's air force. Personality changes were noted by many in his personal life but the injury did not make him a brooding loner, incapable of social functioning or cognitive processing.<sup>7</sup> On the contrary, Manfred von Richthofen was still thinking, leading, and advocating change for Imperial Germany's war effort. Despite his severe injury, von Richthofen was far more than a killer. The Adlershof trials evidenced that he remained a leader and innovator in aerial warfare until his final days.

### The hunter develops in von Richthofen

Baron Manfred von Richthofen was an individualistic hunter throughout his short life. Both his civilian and military lives were characterized by dynamic actions. Manfred preferred dangerous sports such as climbing, gymnastics, and soccer over more sedentary, traditionally aristocratic pursuits. Additionally, Manfred loved to hunt on his family's Prussian estate. In his biography, von Richthofen claimed to have started hunting when he was a small child. His first kills were some of his grandmother's tame ducks and the Red Baron kept several feathers from these ducks as trophies for the remainder of his life.<sup>8</sup> Once he became a fighter pilot, von Richthofen began stylizing aerial warfare as a kind of hunt. Von Richthofen envisioned air combat as a relationship of predator against prey, where the better man always won. He referred to his missions as "hunts" and liked to go find his victims after he shot them down.<sup>9</sup> Eventually, his cas-

## VON RICHTHOFEN ENVISIONED AIR COMBAT AS A RELATIONSHIP OF PREDATOR AGAINST PREY

Manfred's elite squadron, Jasta 11. Manfred is in the cockpit of the fighter and his brother Lothar is seated.



## THE RED BARON WAS ALSO A RISK TAKER

tle in Prussia was decorated with the propellers, altimeters, machine guns, and engines of his downed foes. The Baron's more worthy and notorious foes had special places in his castle. British RAF ace Lanoe Hawker's "machine gun rammed itself into the earth and now it decorates the entrance over my door."<sup>10</sup> The spirit of the hunter was ingrained in Manfred since he was a boy and that killer instinct made him the most successful aviation ace of all time. It also may have contributed to his death.

The Red Baron was also a risk taker. His biography contained many stories of instances in which he put the search for conflict above his own personal well being. Before he began his flying career, Manfred was commissioned into the German army as a young cavalry officer. One night while alone on patrol on the Western Front, von Richthofen was surrounded by a crowd of angry Luxembourgers who shouted at him and threatened his life. Manfred claimed that "This amused me" and drew his pistol as he prepared to fight for his life against the mob!<sup>11</sup> Luckily for him, the gamble paid off and the mob disbanded without violence. Taking chances, even risking his life, was an elementary issue for the Red Baron. He would not have been the single greatest ace of all time if he wasn't willing to take such risks.

Finally, Manfred Freiherr von Richthofen was a relentless militarist. He came from a proud military family and his father was a major in the army. Von Richthofen called his commission into the army "a glorious feeling, the finest I have ever experienced, when people called me Lieutenant."<sup>12</sup> For many new officers, the military profession is the realization of a lifelong dream. For von Richthofen, that dream was coupled with his skill as a hunter

and sense of adventure to create a personality that found flying an addiction. Manfred was not happy just being in the German Flying Service; he sought to be a part of the air war as much as possible because of his personality and his sense of nationalism. In his biography, von Richthofen claimed that the essence of the Teutonic people was that of a warrior who brazenly sought combat against their foes.<sup>13</sup> Once he entered the Flying Service, nothing short of death or an armistice was going to prevent the Red Baron from seeking battle for his own glory and the glory of Imperial Germany.

### Manfred "the invulnerable": The Red Baron's self-confidence grows

Manfred von Richthofen's personality as a hunter and skilled warrior made him the most celebrated aerial combatant in history. In World War I, he considered himself nearly invulnerable and he shot down fifty-seven allied planes before being shot even once.<sup>14</sup> He claimed that he was never wounded, although he did admit to near misses that punctured his clothing, boots, jacket, and scarf.<sup>15</sup> This outstanding luck gave von Richthofen an inflated sense of security and led to his belief that he was immune from harm while in the air. Ultimately, this belief was detrimental to the great ace as it allowed him to justify some of his dangerous actions which had little, if any, military significance.

In addition to his sense of invulnerability, von Richthofen developed a single-mindedness for bringing down the enemy once he engaged them. The Red Baron wrote the Air Combat Operations Manual which stated:

*One should never obstinately stay with an opponent*



*who, through bad shooting or skillful turning, one has been unable to shoot down, when the battle lasts until it is far on the other side and one is alone and faced by a greater number of opponents.*<sup>16</sup>

However, other sources have him violating his own aerial combat dogma before sustaining his head wound. One story in particular noted:

*After the first 100 shots, the enemy observer stopped shooting. The plane began to smoke and twist in uncontrolled curves to the right. As this result was not satisfactory to me, especially over the enemy's lines, I shot at the falling plane, until the left part of the wings came off.*<sup>17</sup>

Both events happened to the same man. Von Richthofen could codify his military theories as much as he wanted but his actions are how he is remembered. Von Richthofen's conviction that "he must fall" seemed to be the singular driving force behind his combat adventures, far more than complex notions of tactics or maxims. It should be noted that von Richthofen was very young and extremely talented at his profession. The Red Baron's Air Combat Operations Manual was obviously meant to teach other aspiring pilots and von Richthofen probably believed that a pilot of his skill could bend the rules slightly while flying. This theory still holds true in modern aviation as complacency, or "the lack of appropriate vigilance for a given phase of flight" is a common cause of aviation accidents.<sup>18</sup> History has shown that significant experience behind the stick can lead even the best pilots to overestimate their abilities and fly overconfidently. This is a plausible scenario for the Red Baron's fate.

### **Trophy hunting and narcissism**

Manfred Freiherr von Richthofen also had a somewhat immature and naïve sense of what war actually was. His biography seldom mentioned the overall fluidity of the air war or the impact of his stunning achievements. Rather, the Red Baron's thoughts seemed to be intently focused on the mere hunting and killing aspect of war. As was noted earlier, von Richthofen kept a running tally of the amount of kills, materiel destroyed, and prisoners that he personally took part in.<sup>19</sup> In fact, he compared his kills nightly with other squadrons in the Imperial German Flying Service and even attempted to commission a set of eighty silver chalices noting the relevant information for every one of his kills.<sup>20</sup>

In addition to the obsession over scoring aerial victories, von Richthofen also appeared to be greatly concerned with how others viewed his military prowess. In 1915 on a visit with his younger brother Lothar and his mother to Berlin, his mother pointed out how more women were interested in the much taller Lothar than Manfred.<sup>21</sup> Manfred swore to "make more of them look at me sometime."<sup>22</sup> It appeared that from his earliest days as a pilot, von Richthofen was "possessed" by an inner demon that forced him to strive ever onwards in the quest to be the most renowned fighter pilot in the world. Such vanity is common in youth, but for von Richthofen to feel jealousy in the middle of a fight to the death seems unbelievable.

### **Admiration of death in the sky**

Together with other psychological traits that endangered his life, von Richthofen admired the deaths of brave friends and foes during the war for



**THE RED BARON WAS OBSESSED WITH THE HUNT, AND CARED MORE ABOUT PERSONAL VICTORIES THAN WARFARE IN GENERAL**

the sky. One of von Richthofen's comrades was a particularly interesting case. Manfred von Richthofen joined up with pilot *Oberleutnant* Georg Zeumer early in his career as an observer and gunner on the Eastern Front. Zeumer was a talented flyer as well as a good friend and he was primarily responsible for helping young Manfred become a pilot. Eventually, Zeumer was struck with a pulmonary illness that many deemed terminal. This caused Zeumer to take chances in combat that his superior officers thought were outrageous. Zeumer was ultimately injured on two different occasions and finally shot down. Von Richthofen noted that:

*Yesterday, Zeumer was killed in air combat. It was the best that could have happened to him. He knew he had not much longer to live. Such an excellent and noble fellow. How he would have hated to have to drag himself on toward the inevitable end. For him it would have been tragic. As it is, he died a heroic death before the enemy. Within the next few days, his body will be brought home.*<sup>23</sup>

Both von Richthofen and Zeumer shared many characteristics. They shared a profession, rank, philosophy, and eventually they shared serious injury. Von Richthofen may have adopted Zeumer's belief in fighting on until the bitter end despite grave injury. Certainly, both remained obsessed with taking life long after war had detrimentally altered their own lives.

#### **Alternate hypothesis**

Now that the Red Baron's life and death have been examined in great detail, an alternate hypothesis can be suggested. Primary and secondary sources reveal that he was a daring risk-taker, obsessed with the hunt, and cared more about personal victories than warfare in general. He also had a sense of invincibility because he was never injured while flying, unlike many of his comrades. Also, he admired the courageous deaths of his fel-

low warriors in the air. Understanding this, a case can be made for the possibility that von Richthofen became completely obsessed with raising his score, to the negligence of his own personal safety.

Another scenario involving the Red Baron's death might include post-traumatic stress disorder. PTSD is a relatively new phenomenon and more information is needed about how the human mind works before knowing the complete effects of PTSD, but PTSD as a consequence of experiencing death and being a combat veteran cannot be ignored. Examining veterans from the Vietnam War, nearly fifty percent have exhibited serious stress reaction symptoms, including depression, substance abuse, and behavioral problems stemming from PTSD.<sup>24</sup> By the summer of 1917, von Richthofen claimed that he was overcome with somber thoughts of death and funerals after witnessing the death of so many friends.<sup>25</sup> An obsession with death is a sign of PTSD and so it is possible that not only did von Richthofen suffer from PTSD after fighting in World War I for four years but that it changed his personality and caused him to behave and fight in normally unthinkable ways.

#### **Summary**

In summation, an argument can be made for the fact that Manfred von Richthofen had a brain injury following a brush with death on July 6, 1917. However, such a theory relies too greatly on the imprecise data given by World War I era physicians who treated von Richthofen. Those same physicians tried to ground von Richthofen, which was probably a correct judgment, but as a commander, von Richthofen was able to circumvent their objections. Grounding von Richthofen could have been just as beneficial to the German Flying Corps because they would have gained a sound leader and public relations figure to promote their war efforts. Perhaps the Baron could have taken a more active role in aircraft development or instruction to aid his homeland? Undoubtedly, this was not a

(Near right) Manfred (L) and his brother Lothar in 1916. Lothar was also an accomplished fighter pilot who was credited with 40 victories.

(Far right) The Red Baron in 1917.



VON RICHTHOFEN CLAIMED THAT HE WAS OVERCOME WITH SOMBER THOUGHTS OF DEATH AND FUNERALS

solution that von Richthofen relished. He preferred to fight and die like a warrior and went on until his death in 1918. To this day, no pilot of any nation matched the number of aerial victories achieved by the Red Baron. Von Richthofen took to his life in

the air like no other pilot. Defeating enemies and recording brave deeds through trophies in his castle became the purpose of his life. Unfortunately, this same preoccupation was partly responsible for his death as he put glory above his physical well-being. ■

## NOTES

1. Thomas Hyatt and Daniel Orme, "Baron Manfred von Richthofen—DNIF (Duties Not Including Flying)," *Human Factors and Aerospace Safety* 4 (2004), p. 69.
2. Leon Bennett, *Three Wings for the Red Baron: Von Richthofen, Strategy, Tactics, and Airplanes* (Shippensburg, Pa.: White Mane Books, 2000), p. 205.
3. Quoted in Hyatt and Orme, p. 70.
4. Quoted in Hyatt and Orme, p. 69.
5. Hyatt and Orme, p. 67.
6. "Fokker D. VII," Fokker D. VII, [http://en.wikipedia.org/wiki/Fokker\\_D.VII](http://en.wikipedia.org/wiki/Fokker_D.VII) (accessed March 14, 2006).
7. Floyd Gibbons, *The Red Knight of Germany: The Story of Baron von Richthofen* (Garden City, New York: Garden City Publishing Company, Inc., 1927), p. 301.
8. Manfred Freiherr von Richthofen, *The Red Air Fighter* (New York: Arno Press, 1972), p. 10.
9. Von Richthofen, pp. 78-82.
10. Gibbons, p. 9.
11. Von Richthofen, p. 36.
12. Von Richthofen, p. 27.
13. Von Richthofen, p. 38.
14. Considering aircraft of this period were completely unarmored, slow, delicate, and unreliable, this is an astounding feat. Had von Richthofen been killed on July 6, 1917, from his serious head wound, he would have still been the second highest scoring ace in German history behind only Ernst Udet.
15. Von Richthofen, p. 54.
16. Quoted in Hyatt and Orme, p. 68.
17. Quoted in Gibbons, *The Red Knight of Germany*, p. 125.
18. Anthony T. Kern, Maj., USAF, *A Historical Analysis of U.S. Air Force Tactical Aircrew Errors in Operations Desert Shield/Storm* (Ft. Belvoir, VA: Defense Technical Information Center, 1995), p. 63.
19. Gibbons, p. 105.
20. Wikipedia, "Manfred von Richthofen," [http://en.wikipedia.org/wiki/Manfred\\_von\\_Richthofen](http://en.wikipedia.org/wiki/Manfred_von_Richthofen) (accessed February 28, 2006).
21. Lothar von Richthofen (1894-1922) was also an accomplished WWI fighter ace. He scored 40 kills and was seriously injured three times. Due to the long amount of time that he spent on convalescent leave, he should be considered one of the most efficient aces of the war.
22. Quoted in Gibbons, *The Red Knight of Germany*, p. 53.
23. Quoted in Gibbons, *The Red Knight of Germany*, p. 37.
24. "Epidemiological Facts about PTSD," National Center for Post-Traumatic Stress Disorder, [www.ncptsd.va.gov/facts/general/fs\\_epidemiological.html](http://www.ncptsd.va.gov/facts/general/fs_epidemiological.html) (accessed March 16, 2006).
25. Gibbons, p. 279.

**“I Wonder at Times How We Keep Going Here”:  
The 1941-42 Philippines Diary of  
Lt. John P. Burns, 21st Pursuit Squadron**





William H. Bartsch

(Overleaf) B-17s and B-18s on Del Monte Field, Mindanao, mid-December, 1941 (Photo courtesy of Ralph L. Fry. All photos provided by the author.)

IN MY RESEARCH IN THE 1980s FOR *DOOMED AT THE START* I WAS HANDICAPPED BY THE LACK OF ANY DIARIES

IN FEBRUARY 2006, I LEARNED THAT JOHN BURNS DID KEEP A DIARY

In my research in the 1980s for *Doomed at the Start*—the story of the 24th Pursuit Group in the ill-fated Philippines campaign of 1941-1942—one of my main sources of information were the entries in the diaries kept by a number of the pursuit pilots. The diaries were invaluable in affording me an insight into the day-by-day feelings and experiences of the young men caught up in the depressing events of the five-month campaign. However, for the experiences of the pilots assigned to two of the Pursuit squadrons—the 21st and 34th—who had arrived less than three weeks before the initial Japanese aerial attack on the Philippines of December 8, 1941, I was handicapped by the lack of any diaries and had to rely on memoirs and correspondence years after the events they experienced.

In February 2006, while assisting John Lukacs, who is preparing the first biography of Ed Dyess, the commanding officer of the 21st Pursuit Squadron whose POW experiences and escape made him famous during World War II, I learned that John Burns—one of the 21st Pursuit pilots—did keep a diary and that it was in the possession of his younger brother, Reverend Richard Lee Burns. Reverend Burns kindly made a copy of it for Lukacs and allowed him to make a copy for me too.

How the diary ended up in the hands of the Burns family turned out to be a story in itself. According to Rev. Burns, it was received in a package in 1945 from an American soldier who had been engaged in the seizure of Buna, New Guinea, from the Japanese in early January 1943. The soldier indicated that he had taken the diary off the body of a Japanese soldier killed in the battle. Following his return to the U.S. at the end of the War, the American soldier—whose name is no longer remembered—was able to locate the Burns family to return the diary.

Research by the author would seem to indicate that the Japanese soldier was a member of the 41st Infantry Regiment, which on May 9, 1942, had captured the American air base at Del Monte, Mindanao and its satellite fields, ending the Philippines campaign. The 41st Regiment was subsequently assigned to the New Guinea campaign, arriving in July 1942. It fought its last battle in defense of Buna in early January 1943, at which time the Japanese soldier was evidently killed.

One wonders how the Japanese soldier came into possession of Burns' diary and why he was carrying it on his body at the time he was killed. Burns had been killed in an accident taking off from Dalirig strip, Mindanao, on April 13, 1942, and was

buried at nearby Del Monte that evening. It is likely the chaplain who buried him—probably Joseph V. LaFleur, the chaplain of the 19th Bomb Group who was at Del Monte at the time—found the diary in Burns' living quarters and kept it for return to the family as part of his duties. His intention would have been thwarted when he was taken prisoner with the rest of the surrendering American force at Del Monte and turned over the "souvenir" when ordered by the Japanese.

The diary provides an invaluable day-by-day account of the activities of Burns from the time of his departure from the U.S. on November 1, 1940 through April 11, 1942, two days before his death. It is the only contemporary source that exists of the initial operations of the 21st Pursuit Squadron and its subsequent experiences on beach defense and at Bataan Field in January, February, and March 1942. Had I known of its existence at the time of writing *Doomed*, it would have provided me better documentation for my coverage of the squadron's operations.

In the way of background information, John Patterson Burns was born on September 22, 1917, in Mansfield, Ohio, and graduated from Uniontown High School in 1936. In June 1940, he graduated from Ohio University with a degree in electrical engineering and a commission in the Infantry of the Army Reserve. Burns received his wings from Kelly Field on February 7, 1941, in the class of 41-A, fulfilling a childhood ambition. He was subsequently assigned to the 21st Pursuit Squadron of the 35th Pursuit Group at Hamilton Field, California, where he served until his squadron and the sister 34th Pursuit Squadron were ordered in October 1941 to "PLUM", the code name for the Philippines.

In 1949, John's body was returned home after being disinterred from its original Del Monte grave. He is buried in Greenlawn Cemetery, Uniontown, Ohio.

#### November 1, 1941

*Left San Francisco at noon on the S.S. President Coolidge. An awful day to be starting to go someplace and not know where. Under the Golden Gate bridge at last; by boat, damn.*

Along with Burns, 12 other pilots of the 21st Pursuit Squadron (under command of 1st Lt. Ed Dyess) and 15 pilots of the 34th Pursuit Squadron (under 1st Lt. Sam Marett) were being sent to PLUM, along with the enlisted men of the two squadrons. The remaining officers of the two

*Following his retirement from the United Nations system in 1992, William H. Bartsch has been consulting on employment planning in developing countries, and doing research and writing on the early campaigns of the Pacific War. His two books—Doomed at the Start (Texas A&M University Press, 1992) and December 8, 1941: MacArthur's Pearl Harbor (Texas A&M University Press, 2003)—covered the air war in the Philippines 1941-1942. He is currently working on a detailed history of the experiences of Army pursuit pilots in the defense of the Dutch East Indies, December 1941-March 1942. In its Summer 1997 issue, Air Power History published his earlier article, "Was MacArthur Ill-Served by his Air Force Commanders in the Philippines?"*



2d Lt. John P. Burns just before leaving Honolulu on the U.S. Army transport *President Coolidge* for the Philippines, November 6, 1941. (Photo courtesy of Richard Lee Burns.)

squadrons of the 35th Pursuit Group were to follow on the next transport. Along with the 28 Pursuiters, there were 85 officers and accompanying enlisted men of the 27th Bomb Group (Light) on board, also assigned to PLUM.

#### November 2, 1941

*Water, water, everywhere and God how it does heave. Not sick, but I've felt better plenty of times. Boat O.D. today, Sunday, but you wouldn't know it.*

#### November 3, 1941

*Finally caught up on my sleep. Now to read and catch up on my letter writing. The food is mighty fine. I wonder, are they fattening us for the kill?"*

The *Coolidge* was a luxury liner on its first run as an Army transport and was still fitted out with two swimming pools, a gym, huge sun deck, with fine meals and movies every night.<sup>1</sup>

#### November 4, 1941

*Good thing Clark and Parcher are easy to get*

*along with. I fear that before we get to Manila that lots of nerves will be close to the breaking point.*

The junior officers on board were assigned three to a cabin, while the senior officers had a stateroom to themselves.<sup>2</sup> Second Lt. Robert D. Clark was Burns' classmate at Ohio University, a 41-C Kelly Field graduate, while 1st Lt. Larry Parcher was the administrative, non-flying, officer of the 21st Pursuit.

#### November 5, 1941

*Tomorrow we get to Honolulu. Thank God for that, never thought I'd get tired of having nothing to do, be unable to sleep, and that sort of thing, but here it is.*

#### November 6, 1941

*Woke up this morning and there was Oahu. Spent 9 hours on shore, some place. Clark and I decided it would be a swell place to shack up. Oh days at Bolinas or in the mountain.*

The *Coolidge* had arrived at dawn and all were given short leave, to be back for sailing that afternoon.<sup>3</sup>

#### November 7, 1941

*Blackout last night and from now on. Rather annoying to say the least. At this point I'd sure like to get inside an airplane and have a date.*

#### November 8, 1941

*Today, approximately 3000 miles from San Francisco, about 5000 from Manila. We still wonder where PLUM is. Poker not bad today.*

Evidently the pilots had been informed they were going to Manila, but they evidently thought that PLUM was a code name for a location in the Philippines, not for the Philippines as a whole.

#### November 9, 1941

*We crossed the international dateline today. Now I don't know what day this is or tomorrow will be. Poker good today. Time to start writing letters home and to friends.*

#### November 11, 1941

*Lost a day, maybe sometime I'll make it up. Weather hot, feel sticky all the time. Hear we are going to Guam so the *Pierce* can pick up water. *Astoria*, a light cruiser, the watch dog.*

The *President Coolidge* had picked up the *President Pierce* (actually, the *Hugh L. Scott*, as renamed in July 1941) and the *Astoria* (CA-34, actually a heavy cruiser) that would be serving as armed escort, in departing Honolulu.<sup>4</sup>

#### November 12, 1941

*Wrote letters and drank scotch today, got a mighty fine buzz on. Getting hotter, must be getting close to the equator.*



**November 13, 1941**

Noon today—half way from Honolulu to Manila. Wrote four letters today. Scott had some trouble so the distance covered was pretty small, 337 miles. Makes us late to Manila.

**November 14, 1941**

Same old stuff, not making much headway. Getting hotter and hotter.

**November 15, 1941**

Today we were supposed to reach Guam but won't be there until tomorrow morning. Today starts the third week of this.

**November 16, 1941**

Sunday again, you wouldn't know it, no church services or nothing. Woke up outside Guam. Navy planes patrolling all the time. We lay off harbor. Funny tubs about 100 miles/hr.

**November 17, 1941**

Moving at a pretty good clip again. Will be in Manila Thursday. Find out where PLUM is then. Sky cloudy, frequent rains, air sultry.

**November 18, 1941**

Only 750 miles to go—tomorrow we'll be among the islands. Went to amature [sic] show, very good, one kid sang "Does your heart beat for me", takes me back to Texas. Captain's farewell dinner.

**November 19, 1941**

In San Bernardino Straits today—Islands on all sides. Good to see land again. Swell day but cloudy in spots. Everyone feeling fine.

**November 20, 1941**

Disembarked at about 9:00 a.m. Very hot on boat and not much cooler off. Seems like everyone has classmates here but me. Thanksgiving Day.

The Coolidge docked in Manila "amidst playing of "Dixie" by a Filipino band." They were greeted by "a crowd of soldiers, civilians, and whatnot."<sup>5</sup> There were no pursuit pilots already based in the Philippines who had graduated from Kelly Field in 41-A with Burns. However, his fellow passenger, 2nd Lt. Don Pagel of the 34th Pursuit, was also a 41-A member, but graduated from Brooks Field, not Kelly.

**November 21, 1941**

Reported to Nichols Field this morning and N.F. is PLUM for the present. We are to be someplace in the P.I.'s. We are not happy about it.

Nichols Field was just south of Manila, where the 17th Pursuit was currently based. Evidently the 21st and 34th Pursuit pilots still thought that PLUM was a base in the Philippines to which they were being assigned.

**November 22, 1941**

Today we rented an Apt. Darn nice, hope we are here long enough to get some good out of it. Manila is an awful dirty place. Very little of value.

**November 23, 1941**

Looked town over and loafed. I can't see what the U.S. sees in this place that is worth fighting for. It sure is a bee hive, though.

**November 24, 1941**

Squadron got a couple P-35s today to fly until

Mitsubishi Type 97 "Ann" light bomber attacking American positions on Bataan, early 1942. (Signal Corps photo 334310)



*40's ready. Tomorrow we fly, been over a month. Field looks awful small on ground.*

The 21st and 34th were being given the old P-35As discarded by the 24th Pursuit Group as the 3rd and 17th Pursuit switched to 50 P-40Es that had arrived at the end of September 1941. Dyess and Marett had been informed prior to leaving Hamilton Field that 50 P-40Es would await them on their arrival in the Philippines, but the crated ships had not yet reached Manila.

#### **November 25, 1941**

*Flew a P-35A for first time today. Not a bad plane but could be much better. Will be glad when the P-40Es are fixed. Shouldn't get lost in this country.*

On this day, a freighter brought 24 crated P-40Es into Manila Bay, the first part of a shipment of the new aircraft being sent for the two

newly-arrived squadrons of the 35th Group. Fifty P-40Es had been taken from the production line to equip the two squadrons. In order to speed up delivery to their squadrons, some of the 21st's and 34th's mechanics were at the Philippine Air Depot helping its personnel uncrate and assemble the ships.

#### **November 26, 1941**

*Enough time for flight pay now. Tomorrow we start formation again. Things getting settled down fine. Must be about time for them to move us now. One week gone.*

#### **November 27, 1941**

*Today 2nd Thanksgiving—half day off. Plenty to do. Landed at Clark Field first time today—field big but rough.*

#### **November 28, 1941**

*Formation with Dyess today—6 ships in a*



Detachment of mechanics with one of the few remaining P-40Es at Bataan Field, January, 1942. (Photo by Brig. Gen. Harold H. George, courtesy of Jesse K. White.)

*loop—rough but fun, best work out in a long time. Started getting P-40Es today, probably fly them tomorrow.*

In *Doomed*, I had indicated that the 21st began receiving its P-40Es on December 4th, when 10 were reported delivered. Burns' diary provides first-hand information that the turn-over was six days earlier.

#### **November 29, 1941**

*Today we went on a 24 hr. alert. Available at all times. Moving within three days. All planes fully loaded and charged at all times. Looks like they mean business. Called to field at 9:00 p. Practice.*

Maj. Gen. Brereton had issued an order putting the FEAF on a "readiness" alert. The pursuit pilots—including the 21st and the 17th at Nichols Field—were put on one hour's notice to take off in their combat-loaded P-40Es and intercept in the event of a Japanese attack.

#### **November 30, 1941**

*Quiet day—moved out near the field. Still on*

*alert, have 9 P-40Es now. 34th left this morning. No air raid drills.*

The 21st was assigned to Nichols Field, while the 34th was being sent to Del Carmen field, fifteen miles south of Clark Field. In *Doomed* I had indicated the 34th's pilots flew into Del Carmen on November 27th, but Burns' diary provides first-hand evidence they arrived three days later. Marett and his pilots were miffed that the 21st was being given all the 24 newly-arrived P-40s and would have to wait for theirs until the next half of the shipment arrived. Reluctantly, they left Nichols in some 12 to 15 of the cast-off P-35As, a plane they had never flown before arriving in the Philippines. Six of them were ground-looped when their pilots came in to land at the newly-operational field.

#### **December 1, 1941**

*No flying today—crews working on planes. Getting armament fixed on all planes. Looks serious. Half squadron on alert at all times.*

The armorers of the 21st Pursuit were boiling off the thick Cosmoline in which the .50 caliber

guns had been packed, then installing the guns in the wings and boresighting them.

#### **December 2, 1941**

*Looks worse every day. Col. George called us together and told us would be only a matter of a couple days. Have oxygen masks in planes, headsets, etc. already to go. Dyess has me weaving at hot spot at present.*

Other sources suggested that the meeting of the pilots of the 17th and 21st Pursuit Squadrons with Colonel George occurred on the morning of December 6th, four days later. However, the date of Burns' diary should be taken as authoritative, being the only contemporary source.

#### **December 3, 1941**

*Not letting us fly now. Want planes ready to go all the time. Bad business—they need slow time and bugs removed. Plans always changing.*

#### **December 4, 1941**

*Got a couple of pilots from the 17th today to make three flights. I now have "C" Flight, no more weaver. I guess I am glad.*

Four pilots of the 17th Squadron—John Vogel, Charles Burris, Bob Krantz, and another unidentified, plus Bob Newman from the 3d Pursuit, were assigned to the 21st to reach the 18 required for three flights. Four days later, for an unknown reason, Burns' buddy Bob Clark had taken over "C" Flight, though as a 41-C graduate he was junior to Burns.

#### **December 5, 1941**

*On fifteen minute alert today. Could not get off field all day, left at 6 p.m. though. All kinds of stories around. Going to San Marcellinas [sic] soon, bad spot we are told.*

This is the first reference I've ever seen that the 21st Pursuit was going to be assigned to San Marcelino field, on the west coast of Luzon. The 27th Bomb Group was to be assigned there too on arrival of their A-24s and apparently the 21st Pursuit was going to provide it protection. It was indeed a "bad spot." The just-completed field lacked a water supply, nor did it have any facilities for maintaining aircraft.<sup>6</sup>

#### **December 6, 1941**

*Finally got in the air today. Slow time. Plane sure is different with the guns fully loaded. Still on alert. Doing nothing is sure getting on my nerves.*

The 21st Pursuit had received another 10 P-40Es this date, with two more scheduled to be turned over to it on December 8th.

#### **December 7, 1941**

*Sunday again but you would never know it. Flew this morning. More slow time. Would like to*

*get some practice in tactics, shoot the guns.*

Due to a shortage of .50 caliber ammunition and gun-charging mechanism problems, none of the pursuit squadrons had fired their .50 caliber guns as of this date.

#### **December 8, 1941**

*Two alerts before daylight. War started. Had patrol about noon. Moved to C.F. just before dark. C.F. bombed to hell and while we were patrolling over N.F. No air defense at C.F. Complete surprise.*

At about 11:45, Dyess had received a phone call ordering him to take his squadron to Clark Field. A and B Flights took off, but C Flight—led by Bob Clark—was delayed in getting off due to engine difficulties and was unable to locate the other two flights. Evidently Burns was flying with A or B Flight rather than his C, for some unknown reason. As Dyess led A and B Flights to Clark, he received a radio call from 24th Group operations to turn around and return to the Manila area, where he was to await Japanese bombers expected from the west to attack Manila. In the meantime, the P-40Es of Bob Clark and his wingman Jimmy May—not yet completely slow-timed—were throwing oil on their windscreens and the two were obliged to return to Nichols, with Sam Grashio taking over the flight. Not having picked up the call from Group, Grashio led the four to Clark Field, where they ran into the Japanese attack on the field that began at 12:35. A and B Flights patrolled over Manila area—as did the three flights of the 17th Pursuit—and did not encounter any Japanese bombers, a group of which—53 Bettys—had hit Iba Field on the west coast at 12:40 while the other group of 53 (Bettys and Nells) bombed Clark.<sup>7</sup>

At 5:30 p.m., the 17th and 21st Squadrons received orders to shift their aircraft up to Clark Field, a runway there reportedly in good enough shape for landings. The 21st flew up its 18 remaining operational ships in a group with the 17th Pursuit's. Those of Joe Cole, Bob Clark, Jimmy May, and Sam Grashio were left behind.<sup>8</sup>

#### **December 9, 1941**

*Took off before daylight. R.D. Clark killed on take-off. Also wrecked three other planes. Saw no Nips. Flew 7:00 hours. No food, sleep, or clean clothes, getting dirty as hell, also tired and weak.*

Before daylight, Dyess led off his 21st Pursuit, their mission to cover the expected landing of B-17s at Clark coming in from Mindanao and their take-off for an attack on Formosa. Blinding dust after each take-off of the P-40Es caused Bob Clark to crash into a B-17 parked off to the side of the field, while L.A. Coleman wrecked his ship taxiing into a bomb crater, Johnny McCown crashed into trees after his engine failed at 100 feet, and a fourth pilot struck a field light and wrecked his ship. When no B-17s showed up, Dyess led most of

Brig. Gen. Harold H. "Pursuit" George at his shack near Bataan Field, February-March, 1942. (Casey Papers, Historical Division, Corps of Engineers.)



his pilots to Rosales as their gas supply was getting low. Burns (and others?) evidently continued to patrol over Clark during the day.

**December 10, 1941**

*Took off at 9:00, went Rosales and Nichols. Alert at N.F. Patrol there, just coming in when Nips hit. Didn't stay long, landed out of gas at Cabanatuan Field covered with barrels, wrecked plane.*

Burns and squadron mate Gus Williams were flying a patrol over Nichols Field in late morning and low on gas were coming in to land about 12:40 when Zeros began to strafe. Williams managed to land and escape the attack, while Burns opted to head for Maniquis Field, at Cabanatuan, 60 miles north of Manila, instead. Out of gas, Burns did not wait for Filipinos to clear the field of obstacles—set up to deter a feared Japanese landing—and crashed through the drums. He was unhurt, but his ship was a complete wreck. Dyess had flown down to Manila and spotted the bombers unloading on the dock area, but his guns were not working and he landed at an auxiliary field. Lack of documentation leaves us in the dark about the activities of the other 21st Pursuiters this day.

**December 11, 1941**

*All day at Cabanatuan, no news from C.F. Been so long without food that I could hardly eat. Rested and wrote three letters, not happy ones, I'm afraid. Have a ride to C.F. tomorrow.*

Due to the heavy losses of P-40Es the first three days, USAFFE Headquarters this day

ordered the pursuiters to "avoid direct combat," wanting to limit their remaining 22 ships to reconnaissance missions only.

**December 12, 1941**

*Arrived C.F. in time for raid—9 planes went directly overhead at about 2000'. Awful to hear bombs getting closer and nothing but a hole for protection. No pursuit in the air, are saving them until we have more.*

At about 10:30 this morning, 18 Japanese Betty bombers in two sections descended below the heavy overcast obscuring Clark Field and dropped their loads from about 900 feet only. Many of the bombs failed to go off and were detonated later in the day by demolition crews. It had been a terrifying experience for those on the field.

**December 13, 1941**

*Light strafing attack on C.F. early, bombs an hour later. Left for Man. Arrived in time for raid, but it was on N.F. 54 ships. One bomb fell in city near us. They mostly missed N.F. but really cleaned out the barrio.*

Joe Cole and other 21st Pursuiters arrived with Burns from Clark Field during the raid. The bombs were missing Nichols Field, falling one block west, where two 3d Pursuit pilots were hunkered down. One of them, 1st Lt. Bob Hanson, was hit and killed by bomb fragments. Many of the bombs fell on Barrio Baclaren adjacent to Nichols Field, resulting in carnage among the Filipino inhabitants.

**December 14, 1941**

*Sunday again. Are staying in Catholic school in city, fairly safe. Several raids during day, no bombing. Good to be back with the Sqd'n again. Morale is high, everyone wants ships and a crack at the Nips.*

Burns evidently had been separated from the squadron since landing at Cabanatuan on December 10th. The 21st's officers and enlisted men—who had remained behind at Nichols Field—were moved to de la Salle College in Manila city, awaiting new orders.

**December 15, 1941**

*All of Sqd'n left for -x- today—10 officers here in M. for a while. Bombed N.F. again today, very little damage.*

Dyess plus four other of the 21st's pilots and all the enlisted men were taken by bus to a new secret field seven miles west of Lubao, a small town 35 miles northwest of Manila. Burns, Sam Grashio, Gus Williams, and seven other pilots were given new assignments in non-flying activities

**December 16, 1941**

*Very quiet day—had no raids. Reported into AF Hdq. Found jobs for all officers. Parcher and I do nothing but wait. Looks like Japs were trying to knock us out all at once—failed—now we shall see.*

At Lubao, Dyess and the others were busy camouflaging the field. The officers and senior non-coms were living in a house west of the field, but the enlisted men were sweltering in nipa shacks on the field.

**December 17, 1941**

*Another quiet day—no raids. Did very little but report into A.F. Hq. Sure wish we would get some mail. Have that last letter memorized now.*

**December 18, 1941**

*Had a raid today. Was down town at time. They hit Nichols light.*

**December 19, 1941**

*Two raids about noon, hit Cavite. Don't think much damage done. Getting tired of this doing nothing.*

**December 20, 1941**

*Been here a month now. Sure has been a busy one at times. One raid hit N.F. Am so tired of all this, war, etc. that I could scream. Give anything to be safe back in the U.S.*

**December 21, 1941**

*Sunday but just like every other day. I'm spoiling for something to do. I don't want to fight, just something to keep me occupied.*

**December 22, 1941**

*Japs raided at breakfast today, something new. Large landing party at Lingayen. Navy must be asleep or not strong enough to keep them out. Or maybe some plan.*

The main Japanese invasion force landed at Lingayen Gulf, only 70 miles north of Clark Field. In the remaining P-40Es of the 24th Pursuit Group, pilots of the 17th Pursuit took off from Clark and strafed the troop-laden Japanese transports, followed later, relay-fashion, by the 20th Pursuit. Unknown to Burns, the Asiatic Fleet had been withdrawn south to the Dutch East Indies except for its 29 submarines. Five were ordered to Lingayen to contest the invasion ships but only one entered the shallow Gulf and actually attacked the transports.<sup>9</sup>

**December 23, 1941**

*Couple air raid alarms but no planes. Landing parties not doing so well. With something to do the days aren't so long, censoring mail now.*

**December 24, 1941**

*Raided Port Area today. Started to evacuate all Air Corps troops from this vicinity. Blew up Nichols. Spent Xmas eve getting things ready to go myself. Took off about 11:00 p.*

The personnel of the Far East Air Force were ordered to move to Bataan peninsula. All MacArthur's forces were being evacuated to Bataan for a last-ditch resistance until the arrival of reinforcements. Col. Harold "Pursuit" George, CO of the 5th Interceptor Command, was taking over what remained of the FEAF following Brereton's orders to take his Headquarters to Australia. Engineers were ordered to blow up the runways at Nichols and set afire thousands of gallons of stored gasoline.

**December 25, 1941**

*Rode all night and to noon. No food until night. Can't find Sqdn. Slept on ground, dirty, etc. Merry Xmas! They bombed hell out of Manila or vicinity.*

Ed Dyess, the four 21st Pursuit pilots with him, and the squadron's enlisted men were just northeast of the entrance to Bataan peninsula, eating Christmas dinner at a hacienda about ten miles from Lubao field with pilots of the 20th Pursuit Squadron who had been at Clark Field and had been ordered to fly out all aircraft in commission to the secret Lubao Field the day before. They couldn't find it but after spending the night at Del Carmen Field finally located it Christmas morning. Burns and other 21st Pursuiters assigned to Manila tasks evidently missed the squadron's camouflaged field when entering Bataan.

**December 26, 1941**

*Second day in jungle, bombings for about 3 1/2 hrs. Don't know what they were after. Not many fell near us. Wish we could find the Sqd'n. Getting even*

more dirty. Only eating twice a day now. Spend the day out.

#### **December 27, 1941**

Moved to A.F. Hq. Rest of detached officers there. Japs did quite a bit of bombing. Don't know how things are going up north, holding I guess.

Air Force headquarters was at a newly-established camp at Signal Hill on southern Bataan, where flying officers with no current assignments were assembled.

#### **December 28, 1941**

Sunday again. Moved again, now with 3rd Pursuit Sqd'n up in the mountains. Swell place. Lots of fresh water, clean at last. Wouldn't mind staying here a long time.

Lt. Hank Thorne had moved his 3d Pursuit Squadron high up on the peak of Mount Mariveles, on the southern end of Bataan, 2 ½ miles from the main road. Thorne and his men transformed the primitive site into a very comfortable camp, which they called Shangri-La because it was such a beautiful place. Many unassigned pilots from the 24th Group's squadrons were staying there.

#### **December 29, 1941**

Bombed Corregidor hard today. Start of 4th week of the war. Two months today since I've had any mail. Lots of good rumors in the air but nothing definite. The Xmas season has been different than I planned.

The Shangri-La campers watched the first Japanese bombing of Corregidor this afternoon from a nearby cleared hillock. They felt frustrated as they observed the Japanese bombers—Army and Navy alike—flying unopposed over the island and unloading their bombs on Corregidor's Fort Mills.

#### **December 30, 1941**

Very little bombing today. Nothing else much. Another year is about to start, wonder what it will bring. Will probably be rough. That is OK as long as I live and get back to the States.

#### **December 31, 1941**

No bombing at all today. Doesn't seem possible that there is a war going on. Beautiful sunsets, lovely moonlight nights. This would be a nice tour of duty some other time.

Early this morning, Colonel George had called the camp to order seven of the more senior, combat-experienced, pursuit pilots there to report to his Headquarters at noon. They were being assigned to go to Australia and pick up P-40s that had arrived there as reinforcements for the Philippines and fly them back to Bataan. At 3:00 p.m. they flew out of Bataan Field in an old Beech 18 transport and headed south.

#### **1941.**

Not a bad year as a whole, finished flying school, got Pur. All set to get married. Assignment to the P.I.'s fixed that, but could have waited and am planning on it. However, I have a war to go through now. Hope I can get out OK. Will be lots of fighting though between now and then, maybe the Japs don't know my name. I hope.

#### **January 1, 1942**

Reported that a few Japs had been in Manila and left. Don't know, though. Quiet day. Still with 3rd up in Mts. I'll bet folks at home are in a storm, worrying about us.

Another group of four senior Pursuit pilots, these at Lubao, including 40-G Ben Irvin of the 21st Pursuit, joined Buzz Wagner—CO of the 17th Pursuit—Jim Rowland, and Bud Sprague, former Operations Officer of the 5th Interceptor Command—at Orani Field at the head of Bataan early this afternoon. Just after 2:00 p.m. they boarded their beat-up Beech 18 and lifted off for Mindanao, their first stop on the way to Australia. Like the others, they were to fly back P-40s that had arrived from the U.S. in crates on December 23rd at Brisbane.

#### **January 2, 1942**

Got a break today—had a low overcast and the bombers couldn't see anything to hit. They were there, though. Our Sqd'n is not far from here, tomorrow we go back. Light rain this evening.

Dyess had received orders the day before to abandon Lubao Field, which was now almost on the front lines, the Japanese only a few miles away, moving into Bataan. He led his non-flying personnel in a truck convoy early that evening for their new bivouac area, on the southern tip of Bataan near Mariveles.

#### **January 3, 1942**

Back with Sqd'n again, good feeling. Drove to Pilar, someone going to do some flying. Not much bombing today. Rumor has it that it won't be long until we get in a few licks.

Dyess was at Pilar Field, half way down the east coast of Bataan, for a meeting with pursuit pilots based at Orani and Pilar. Col. George had decided to move all of his dwindling number of P-40s to the southern island of Mindanao to get them out of harm's way, with the Japanese too close. Eighteen of the pursuiteres were selected by Dyess to fly out the following day, nine from Orani Field (ten miles north of Pilar) and nine from Pilar Field. Two were from Dyess' 21st—Joe Cole and Bob Ibold—both to fly out of Pilar.

#### **January 4, 1942**

They did a lot of bombing today, but not much damage, quite a few clouds helped us. Took it fairly easy today, have a sore back. Today was Sunday.

The nine Pilar pilots left for Mindanao as scheduled, but the Orani pilots under Dyess had received new orders canceling the Mindanao mission. They were to land at newly-operational Bataan Field instead, far to the south of Bataan and evidently considered out of harm's way. The Pilar pilots had not received the new instructions in time.

#### **January 5, 1942**

*Today starts the 5th week of the war. Quite a few planes overhead but not many bombs fell. Did a good day's work, moved farther back into the hills.*

Japanese Mitsubishi Ki-30 "Ann" single-engine bombers were operating up and down Bataan, bombing and strafing Bataan Field this date.

#### **January 6, 1942**

*Went up on the mt. Mighty rough country and thick brush. Be mighty tough fighting in that stuff. Dividing Sqd'n into Platoons and going to teach them Infantry tactics. I have "C" Flight—3rd Platoon.*

MacArthur's Chief of Staff, Sutherland, had told Colonel George on January 7th that he wanted all Air Corps officers and men remaining on Bataan—except flying personnel and those in support of flying operations—assigned to infantry duties on beach defense, albeit on a temporary basis. The Headquarters Squadron of the 24th Pursuit Group, plus its 3d, 21st, and 34th Squadrons, were being assigned to Brig. Gen. Selleck's 71st Division, charged with defending the west sector of Bataan. Apparently Burns and the other 21st Pursuit officers had gotten the word a day earlier. Dyess was back with his squadron and was supervising the training. He divided the enlisted men into three platoons of about fifty men each, with each platoon assigned a non-flying officer of the squadron. According to my documentation, 2d Lt. Linus Schramski was in charge of the 3rd platoon, evidently an error given Burns' first-hand statement that he was put in charge of it, converted from his old C Flight.

#### **January 7, 1942**

*Took Platoon up to top today and started the inf. drill. We're going to be mighty expensive dough-boys. Have three days to get everything taught. I've forgotten an awful lot of this stuff.*

It was indeed an expensive use of trained Air Corps personnel and not surprisingly met with disgruntlement among many. Having taken ROTC at Ohio University and commissioned as a 2d Lt. in Infantry, Burns was familiar with basic infantry training.

#### **January 8, 1942**

*Organized the 3d Plat. of the 21st A.C. Co. today. No bombers for two days now. Wonder what is up. Sure a swell bunch of men in "C" Flight and engineering.*

With the abandonment of Pilar and Orani fields, all flying operations of Col. George's tiny unit—comprised of 9 P-40s, two P-35As, and one A-27—were now out of Bataan Field. They were to be used only for reconnaissance missions ordered by USAFFE.

#### **January 9, 1942**

*Third day no enemy planes, must be something in the air. Walked down to coast on Vigia Point. Nice country, walked a good 20 km, plenty tired. Won't be long until I'm in good condition.*

Vigia Point was on the southwest coast of Bataan, west of Mariveles.

#### **January 10, 1942**

*Took it easy today, washed clothes and self. Couple enemy planes early in morning. This certainly is nice country, wish we weren't playing for keeps. Would like some candy or something sweet.*

#### **January 11, 1942**

*Sunday. No bombers, details most of the day. Have church services tomorrow. Been playing a little bridge in evenings, can't lose.*

#### **January 12, 1942**

*Mapped about 5 klm of coast. Mighty rough, out from 10:15 to 2:30. Whole bunch dead tired. R.C.A. from Jean today, best news since the war started. Sure changed my outlook on things. Also made me untired.*

#### **January 13, 1942**

*Yesterday started the 6th week of the war. Easy day today, no bombers. Should write to Jean and the folks, but no use because no mail leaving anyhow. I know for sure that I'm going through this mess.*

#### **January 14, 1942**

*Short problem today, mostly rest though. Few bombers. All reports sound pretty good.*

#### **January 15, 1942**

*Another easy day, a little fatigue and that is about all. Few bombers today. Wish we would get planes and get going.*

Unknown to Burns, the day before, at the request of II Corps complaining about unhampered operations of Japanese aircraft over its troops at the Main Line of Resistance that was damaging morale, MacArthur had authorized pilots flying recon missions to shoot down Japanese observation planes they encountered. On the 15th, five of the pursuers at Bataan Field attacked Japanese planes over the Abucay area, to the cheers of the soldiers below. But Col. George only had five P-40Es and two P-40Bs at his disposal for such operations.

#### **January 16, 1942**

*Easy day, quite a bit of enemy air activity*

*though. The nights get mighty cold. Takes two blankets to keep warm.*

#### **January 17, 1942**

*Went to Bagac. Lot of rough, dusty riding. Dust on side of road about an inch thick. It hangs in the air for about 15 min. after a car passes. Very little air activity.*

#### **January 18, 1942**

*Sunday. Moved into a "bomb target." Much less walking to do. Rumor of Jap transports not far off.*

#### **January 19, 1942**

*Start of 7th week of hate. Saw four 40s in the air today. Sure looked good. If they would only bring one in for me to fly*

The four P-40s that Burns saw had taken off from Bataan Field that morning to cover the landing of four P-40s returning to the field from Mindanao. Over the front lines, they spotted eight Japanese below them, Army Ki-27 "Nate" fighters. Engaging them in combat, they believed they shot down two, but one of their number—Marshall Anderson—was downed and bailing out had been shot and killed in his chute. This atrocity enraged the Bataan Field pilots.

#### **January 20, 1942**

*Not much doing today, short hike, more tomorrow. We all stayed up last night and talked about the good times we used to have in the States. That seems like another world or a swell dream.*

#### **January 21, 1942**

*Spent the day mapping an area. A lot of walking, plenty tired.*

#### **January 22, 1942**

*Spent day on recon. Covered a large area picking out locations for rifle Plat. This would sure be rough country to fight in. A friend found some wine so we had a party.*

#### **January 23, 1942**

*Called out at 3:00 A. and after last night. Two small detachments of Japs on our end of the island. We can't have that. Half the Sqd'n still out hunting them.*

One force of 900 Japanese under Colonel Tsunehiro embarked in landing craft the night before and set out for the west coast of Bataan. However, due to inadequate maps, heavy seas, and attacks by PT 34, the Japanese became separated, one group of 300 landing at Longaskawayan Point and the others six miles north at Quinauan Point. The Longaskawayan landing was opposed by the Naval Battalion and the 3rd Pursuit, while at Quinauan, the Japanese were met by 260 men of the 34th Pursuit Squadron. Burns' 21st Pursuit was in reserve, further inland, though apparently part of the squadron had been ordered to join in the resistance the first day of the landing, return-

ing that night to its bivouac area.<sup>10</sup>

#### **January 24, 1942**

*Washed clothes and hunted snipers all day. After evening meal went up to 34th again, then up to front. Spent night there, very little sleep. Guns firing all night. Mighty rough country.*

The 200 officers and men of the 21st Pursuit, on bivouac near the Biaan River were awakened after midnight on January 23/24 and loaded into buses for the seven-mile trip to Quinauan to reinforce the sister 34th Pursuit, now under Brig. Gen. Clinton Pierce, who had just replaced Selleck as CO of the 71st Division.

#### **January 25, 1942**

*Formed lines and started a push. Working with P.C. trying to catch one group up to another when hell broke loose about 75 ft. away. In between our lines and Japs. Machine gun fire is awful. Snipers in trees. No sleep.*

This morning, the 21st Pursuit was integrated with the Philippine Constabulary and Company A of the 803rd Aviation Engineers and ordered to form a skirmish line across the neck of the 1,000 yard peninsula between Quinauan and Agloloma Bays.

#### **January 26, 1942**

*Pretty much tired out, ran messages and helped the doc. At dark the eng's came in, badly shot up by some Mg. nest I ran into yesterday. Got a little sleep and some decent food, but not very hungry.*

#### **January 27, 1942**

*With own outfit today. In a secondary line for 1st time. Spotted Jap barges up coast, got 37 mm and shelled it. One meal and some sleep. The scouts are supposed to come in tomorrow.*

Another landing of Japanese had been made the night before on the promontory area between Silaiiam and Anyasan Bays. The men of the 17th Pursuit Squadron were sent in to oppose the 200 men.<sup>11</sup>

#### **January 28, 1942**

*Scouts in, a good looking bunch of men. Beat the brush and went back to our old camp. Clean clothes, bath, etc. sure good. Dyess made Capt. today. I'm sweating out silver bars.*

This morning, the 21st Pursuit's men were ordered back to their camp area, along with men of the Philippine Constabulary and Company A of the 803rd Aviation Engineers, who had proved ineffective in containing the Japanese at Quinauan. They were being relieved by the 500 men of the 3d Battalion, 45th Philippine Scouts, a crack unit of professional infantry. That evening Company B of the 57th Philippine Scouts joined them as reinforcements.

**January 29, 1942**

*Loafed most of the day. Washed a few clothes. Good to have nothing much to do and sleep a lot. Co. of scouts camped in here with us. Comforting feeling.*

**January 30, 1942**

*First year's service through now. Lazy day. Organized sniper hunting details, going hunting, maybe. Don't know why I got myself into it, but here I am.*

**January 31, 1942**

*Not much doing. Relieved Golden at 71st Div. C.P. in evening.*

2d. Lt. Leo B. Golden, Jr. was one of the 21st's pilots, a 41-C graduate from Kelly Field but like the others now assigned to infantry duties.

**February 1, 1942**

*Sunday. Quiet day. Know a little more of what goes on here. Busy night, Japs tried a landing, but accomplished little. Art. And Mg. fire stopped it pretty well.*

A battalion of 500 Japanese attempted to land at Quinauan Point, but were slaughtered by strafing P-40s, PT boats, and artillery fire.<sup>12</sup>

**February 2, 1942**

*Quiet day, mostly spent reorganizing positions. Art. Fire most of day. Quiet night.*

**February 3, 1942**

*Scouts mopping up on Agl. Pt. Rumored that Japs broke through our line, no confirmation. Sqd'n put on alert*

Dyess received new orders this day to take his men back to Quinauan Point to reinforce the 45th Philippine Scouts, who had been unable to wipe out the dug-in Japanese during their six days of fighting, even with the addition of three light Stuart tanks. That afternoon, Dyess reported in to the Executive Officer of the 45th, who briefed him and his men on the gravity of the situation.

**February 4, 1942**

*Sqd. here at daylight. Sent in to help mop up Agl. Pt. Didn't finish. Lt. J.E. May killed, also several enlisted men.*

2d Lt. Jimmy May, another 21st flying officer assigned to infantry duties, was killed when a Japanese in a bypassed foxhole rose up and shot him as he followed behind one of the tanks.

**February 5, 1942**

*Agl. Pt. still going. All fronts doing good. Day quiet.*

By noon, all platoons of riflemen advancing behind the tanks had pushed the Japanese back to the cliff above the beach at Quinauan Point, where

they had taken refuge in caves in the cliffs and below. (Aglaloma Point was also called Quinauan Point).

**February 6, 1942**

*Day quiet. Little air activity lately. Sqd. to stay on Agl.Pt. for a while. A couple of inter island boats have come in recently.*

It was proving impossible to dislodge the Japanese in the caves despite heavy fire into them.

**February 7, 1942**

*Quiet day. Brought in several prisoners today, one spoke English. Small men. Think I'd know one if I saw him loose. Attempted landing, few got ashore, with others.*

A scheme to dynamite the Japanese in the caves only collapsed some of the caves. In the afternoon, Dyess was ordered to send an officer and 12 men from his squadron to Mariveles to embark on landing craft for transport during the night to Quinauan Point, where they were to assault the beach at daybreak the following day. Dyess assigned himself to head up the operation and added 2d Lt. Jack Donalson of his squadron too.

To the north, at Silaiim Bay, several new attempts were made by the Japanese this night to land reinforcements, with some 75 managing to get ashore. They were wiped out.<sup>13</sup>

**February 8, 1942**

*Sunday. Sqd. returned to camp at night. Quite a bit of air activity today.*

At the beach, two whaleboats of men of the 21st under Dyess and Donalson went ashore in the morning and systematically cleaned out the Japanese on the beach after having blasted the caves with 37 mm cannon and machine guns. But several of the men were killed or wounded by Japanese dive bombers flying up and down the beach area. Inland, the Scouts worked their way down to the beaches and by 1:50 p.m. the sector was cleared of all remaining Japanese.

**February 9, 1942**

*Enemy attempted landing last night, no luck. A lot of them floating around in water today. Cleaned it up. Quiet day and night.*

The 21st this day was occupied in search and cleaning up operations, an unpleasant task due to the stench of the dead and swarms of flies. The landing attempt mentioned by Burns was again at Silaiim Bay, repulsed by artillery and machine gun fire from the beaches.

**February 10, 1942**

*Went back to camp for a while today. Most of officers at flying field now, wish I was there. Quiet day. Lost quite a few good men on this last trip to Quin. Pt. Rumored Japs withdraw.*

The 21st lost six killed and an undetermined number wounded, as against 74 killed and 234 wounded for the Scouts. This day it was relieved of its duties and went into bivouac at Kilometer Post 184.7, with the sister 34th Pursuit taking over the Quinauan beach defense from them. In the bivouac area, Gen. George paid Dyess a visit and informed him that the 21st was being assigned to Bataan and Cabcaben fields. Leo Golden, Gus Williams, and Johnny McCown were sent to Bataan Field ahead of other pilots. Pilots from the other squadrons previously flying from the two fields were to remain there, attached to the 21st Squadron, now administratively responsible for George's small flying detachment.

#### **February 11, 1942**

*Day quiet. Learned in the evening that Sqd'n is moving to a field, sure is good. Men will now be doing something they are trained for. Things here in west subsector coming along fine. Planes soon I hope.*

#### **February 12, 1942**

*Easy day. Waiting for orders to go back to Sqd'n. Have been away much too long. Benton treated us to quite a bull session, he is a character. Must get book—Ben Aub (sic) stories sometime.*

First Lt. Benjamin A. Benton, Jr. was Armament Officer of the 24th Pursuit Group until assigned to I Corps on Bataan.

#### **February 13, 1942**

*Fri. the 13th. Left the 71st's C.P. in morning, returned to Sqd'n at field. Nice place, much better than sweating out alerts as we have been doing.*

The evening before, Dyess and the men of the 21st Pursuit arrived at Bataan Field to formally take over flying operations. Dyess was now made Flying Detachment commander. Assigned as engineering officer was one of Dyess' non-flying officers, 2nd Lt Leo Boelens, while 1st Lt Larry Parcher was being sent to Cabcaben with 80 of the squadron's enlisted men. Burns evidently was given an administrative job at Bataan Field.

#### **February 14, 1942**

*Spent day clearing place for and setting up a tent, rough work. Like the set up here more and more. Still sweating out a convoy and mail. Believe today is Val. day??*

#### **February 15, 1942**

*Sunday. The day I figured help would get here. But no soap. Fixed the tent up today. The A.C. can be thankful for Gen. George, he is on the ball.*

Burns apparently refers to promised help from the U.S. (Then) Colonel George had moved his command to Bataan Field on January 17th in order to supervise operations of his little flying detachment directly. He was immensely popular with officers

and enlisted men alike, evincing concern about their welfare and disdainful of the privileges of his rank.

*From the time we left Manila for Bataan until now has been pretty near hell. Sqd'n turned Inf. and lost some of our best men fighting in the brush. We aren't getting enough to eat, and are tiring out, all troops need a rest. I can't see what they are thinking of in the States, they surely could have gotten some help in here, both troops and planes, U.S. aid for every place but the P.I.'s. There certainly have been some big errors made since this thing started. I hope I get a chance to tell about them. Would give a heck of a lot to see the folks and Jean.*

#### **February 16, 1942**

*Starting 11th week of this mess. They did some flying today so the field was bombed after supper. No damage. Singapore gone now. British up to their usual tactics, to the last American.*

Two pilots flying their first missions under Dyess dropped ammunition to cut-off USAFFE men at Jones, northern Luzon, followed by two others dropping pamphlets in central Luzon and finally Dyess and Golden repeating the pamphlet operation.

#### **February 17, 1942**

*Bombed the field again this morning. Dropped a lot of bombs but no damage. Rest of day quiet. Had tooth filled today.*

#### **February 18, 1942**

*Not much doing today. Climate is getting me or insufficient food and improper diet is doing it. Getting awful lazy and tire out quickly. Everyone seems to be that way.*

#### **February 19, 1942**

*Looked over another field today. Had tooth refilled, permanent this time. Not much traffic on roads now, gasoline ration keeps them home.*

#### **February 20, 1942**

*Went to finance dept. today to draw a little money, first I've gotten since early in Dec. Won at poker in evening enough to more than cover what I've lost.*

#### **February 21, 1942**

*Enlisted men put on show tonight, pretty good, should have them more often, good for morale. Shame that musical talent that some of the men have should be wasted on the battlefields.*

Cpl. Robert L. Greenman was an accomplished concert pianist and probably was playing on a salvaged piano, as he did 10 days later.

#### **February 22, 1942**

*Sunday. Quiet day. Learned in evening that I'd been made a First Lt. effective the 20th of Feb. Good*

*news, more pay and more rank, not that it does any good.*

#### **February 23, 1942**

*Started to brush up on Code today. Sworn in as 1st Lt. effective Feb. 21. Must write to mother and have her buy some bonds for me out of the allotment I'm going to send her.*

#### **February 24, 1942**

*Have another allotment now. They are as follows: \$125.00 to the Bank of America at Hamilton Fld., \$8.10 insurance and \$33.57 to mother. That is my total base pay as 1st Lt. \$166.67.*

#### **February 25, 1942**

*Not much doing today. The orders making me 1st Lt. came from HQ USAFFE, Fort Mills, P.I. and are Special Orders No. 48, Par. 2. (Matter of record in case I lose the orders and need copies).*

#### **February 26, 1942**

*Usual thing around camp today. Every one wants candy mighty bad, also liquor, but not near as much as candy. Enlisted men have no cigarettes. Thank god I still have some.*

#### **February 27, 1942**

*Flew a couple hours in evening. Recon to Subic Bay and Lingayen Gulf, not bad and I feel a lot better about the whole thing. Trying to send wires to Jean and the folks. Ears plugged up.*

Ordered on a reconnaissance of Lingayen Gulf, Burns took off at 5:05 pm from Bataan Field and squadron mate Johnny McCown from Cabcaben Field. They flew their missions without incident.

#### **February 28, 1942**

*A year ago today I reported in to Hamilton Field. A lot of water has passed under the bridge since then. Miss the good old days and the things I didn't use to like. General, smoking too much, before I get up in bed etc. never did before. Sqd'n has been cited for its activity on Quinauan Pt. Must find out more about this.*

#### **March 1, 1942**

*Sunday. Went to A.F. Hq. to watch them plot an interception problem. A good set up and a good basis to work on when we really start operating.*

#### **March 2, 1942**

*Busy day. Radio control at Cabcabin, then about dark flew with Capt. Dyess. Straffed Grande Isl. Straffed tanker; Dyess blew it up. Wrecked plane landing at C.C., lot of damage.*

General George had received a report on the buildup of Japanese supply ships in Subic Bay, which suggested the Japanese would be trying a renewed landing on the west coast of Bataan. He ordered his pilots to take their remaining five P-40s at Bataan, Mariveles, and Cabcaben fields

and attack the vessels. Round the clock strafing and bombing missions were mounted as from 1:00 p.m. As daylight was fading, Dyess and his weaver, John Burns, took off for the last attack at 6:40 p.m. Dyess in his P-40E "Kibosh" from Bataan Field and Burns in a P-40B from Cabcaben. After shooting up the dock area of Grande Island, Burns and Dyess strafed a large ship in Subic Bay and on the return flight Dyess in darkness spotted and strafed another vessel. Preparing to land at their Bataan fields, the twosome were fighting a heavy tail wind. Dyess made a rough landing, but Burns, tricked by the tail wind, came in too fast at Cabcaben and on each bounce his six .50s sprayed fire down the field. Continuing to roll past the far end of the field, Burns ran into stumps, swerved, and flipped over on one wing, tearing out the landing gear and damaging the wing and propeller. Unhurt but shaken, he slid down from the cockpit and asked, "Has anyone got a cigarette?" His armorer checked the cockpit and saw that Burns had forgotten to turn off his gun switches after the strafing attack and had inadvertently pressed the trigger switch on the stick on each bounce. His ship was the last survivor of the 31 P-40Bs received in the Philippines.

#### **March 3, 1942**

*Had a party in evening for nurses from hospitals. Good time, food and liquor.*

As a morale booster, General George had arranged the party, to which he invited nurses from Bataan Hospital No. 2. The pilots "whooped it up" at George's thatched shack, fueled by the alcoholic concoction they had fixed. Cpl. Greenman pounded out boogie woogie on the old piano as they danced with the 12 nurses who had accepted the invitation. The party lasted until 3:00 a.m., when the inebriated pilots drove the girls back to their hospital, a round trip of only five miles but with the lights out of their vehicles, it took one hour.

#### **March 4, 1942**

*USAFFE reports that we sank 32,000 tons of shipping on the 2nd, good toll for one plane we lost, even if USAFFE doesn't admit it. Estimate 50 million dollars damage done.*

MacArthur's communiqué reported that the pilots had destroyed three vessels of 12,000, 10,000, and 8,000 tons, plus two motor launches, and did not mention any P-40 losses. Japanese records, however, indicated only a 385-ton converted sub-chaser as sunk.<sup>14</sup> Burns was evidently not informed that in addition to his ship, three of the P-40Es were wrecked, two on landing at Mariveles and the third shot down, the pilot (Lt. Crellin) killed. Only Dyess' "Kibosh" was now operational.

#### **March 5, 1942**

*Not much doing. Running again. Sent wire to Jean. Pretty quick after the last but better take every chance I get.*



Special breakfast for Bataan Field pilots on March 4, 1942, two days after the successful Subic Bay raid. Ed Dyess seated second from left on left side of table. (Photo courtesy of John H. Posten, Jr.)

This afternoon, mechanics of the 21st succeeded in producing a hybrid P-40B/E out of Burns' ship with parts from the wrecked P-40Es. Although recorded as a P-40B in subsequent operations reports, it was known as the "P-40 Something" among the Detachment personnel.

#### **March 6, 1942**

*Nothing doing today. The Japanese press release to Tokyo says we used 54 planes in the raid the other day, many of them 4 engine jobs, also report 6 were shot down.*

#### **March 7, 1942**

*Nothing doing today. Going to take over construction of officers mess and Asst. Adj. Will be something to do.*

#### **March 8, 1942**

*Worked some today. Sunday. Went to C.C. to spend a week. Will take up where I left off at B. when get back. Three months of the war gone now.*

Bill Rowe (17th Pursuit) was also assigned with Burns on one week's alert duty at Cabcaban.<sup>15</sup>

#### **March 9, 1942**

*Didn't do much. Lay around letting a sore on my foot heal and getting rid of diarr. Rumored we got Silver Stars for Subic Bay deal. Don't feel myself that it was so grand. I don't know, though.*

The rumor was false; none of the Subic Bay raid pilots received Silver Stars.

#### **March 10, 1942**

*Had tent put up to stay in here at C.C. Up most of the night, watch on field. Radio Tokio reports that they destroyed 32 of our planes on ground here in Bataan. Must be part of the ones we used against Subic.*

#### **March 11, 1942**

*Fixed tent up and moved in. Alert at field all afternoon. Evening "Voice of Freedom" announced citations for organizations, looks like almost everybody has two, means a ribbon of some sort.*

#### **March 12, 1942**

*Nothing doing today. News of war doesn't sound too good. I wonder at times how we keep going here, also wonder at the individuals desire to get through, the instinct of preservation.*

#### **March 13, 1942**

*Fri. the 13th, this is three in a row. No bad luck though. Rations cut again, food situation bad. Diet is chiefly rice, bread and gravy to go with it, once in a while some meat or other food, not often though.*

Burns memory slipped: this was not the third Friday 13th in a row—in January the 13th was a Wednesday. As against prewar rations of 70.9 ounces, the Americans on Bataan were now cut

back to between 14.54 and 19.32 ounces, a starvation level.<sup>16</sup>

#### **March 14, 1942**

*Cor. Doing a lot of shelling about noon. Alert in aft. Rowe flew Recon, no trouble. Golden replaced Rowe here, I go back tomorrow.*

This afternoon on his final duty, Bill Rowe took off from Cabcaban on a recon mission of Nichols, Nielson, Zablan and Del Carmen fields where it was reported that some large-scale operation was being prepared by the Japanese. He spotted numerous aircraft on Nielson and Nichols Field, which he reported on landing at Bataan Field at 6:00 p.m. Rowe's replacement at Cabcaban, Leo Golden, repeated the recon the following day.

#### **March 15, 1942**

*Sunday. Returned to B. by way of the hospital in aft. Fellows doing pretty well.*

#### **March 16, 1942**

*Not much doing today.*

#### **March 17, 1942**

*Wrote letters to parents and Jean, also made out will. Have a fair estate and it will get larger daily.*

#### **March 18, 1942**

*Spent day working on officers mess. MacArthur and George now in Australia. MacA. in high command of all United Nations forces. Maybe he and Gen. Geo. will do us some good here.*

Gen. George's departure on March 11th as a member of MacArthur's evacuation party dispirited his pilots, who realized that he was very reluctantly leaving them. He promised them he would get planes up to Bataan for them no matter what. Lt. Col. Orrin Grover, previously CO of the 24th Pursuit Group, took over from George as commander of the Flying Detachment.

#### **March 19, 1942**

*Not much doing, O.D. so spent most of my time at Gen. Geo.'s shack listening to the radio. KGEI really putting out some good programs now.*

#### **March 20, 1942**

*Quiet day. The food ration is pity-ful (sic) now. Enough to keep you from starving but not enough to do much work on. One day's food for 250 men—14 loaves of bread, 15 cans milk, 17 cans salmon.*

#### **March 21, 1942**

*Alert for couple hours in aft. Had party in evening. It was awful drunk out, self included. Have no interest in girls any more. Guess Jean is the explanation (sic).*

With Grover's approval, the pilots arranged another of their planned twice-a-month parties this

evening, inviting 20 nurses from the hospitals. Lasting until 4:00 a.m., "it was another drunken brawl, but everyone had a good time", one of the other pilots recorded in his diary. But it looked like it would be the last one, as they were running out of alcohol.

#### **March 22, 1942**

*Sun. Stayed in bed most of the day. Whit. got in from Cebu, brought me two wires, Jean and parents. Sure makes me feel good, especially Jean's. She is one in millions, love the hell out of her.*

Major Hervey Whitfield, formerly Weather Officer at Clark Field, was one of the of the "Bamboo Fleet" pilots flying in medicine, food, and supplies from the southern Philippines.

#### **March 23, 1942**

*Lay around most of day, headache, I believe, too much sun Sat. eyes hurt. Had a couple candy bars today, a real treat. Food very poor.*

#### **March 24, 1942**

*Sick today, fever, chills, etc. Terrific headache, ache all over. Japs have started pushing us again, using their big bombers again, dropping some big stuff too.*

On March 23rd, the Japanese began a new aerial offensive with twin-engine bombers, 54 attacking on that day in the defenders' rear areas and following up with nine that hit Mariveles and Cabcaban on the 24th.<sup>17</sup>

#### **March 25, 1942**

*Mother's birthday. Wish she was here to nurse me, 'cause I sure am sick. She sure used to do a good job of taking care of me. I'll bet she really worries about me.*

#### **March 26, 1942**

*Feel a little better, but very weak, can't eat, would like some fruit. Heavy bombing raids continuing, don't know what damage they are doing, uncomfortable to lie here in bed and wonder if they will go over us.*

#### **March 27, 1942**

*Got up for awhile this afternoon but so weak I had to lie down pretty quick. Started in evening feeding the pilots special food. Must be fattening us for the kill. Something brewing.*

The flight surgeon of the detachment had reported to Maj. Gen. King, commander of the Luzon Force on Bataan, that if the pilots did not get extra food, there would be no more flying. A "training table" was established for 25 of the pilots, beginning March 27th. Extra food and vitamins were to be sent from Corregidor to provide three full meals for ten days to build up their strength.

**March 28, 1942**

*Food fine today, didn't do much, gaining back strength. Dyess told me I was going south with Brad. before dawn. Engine trouble so didn't get off, will leave tomorrow night. Darn the engine.*

"Brad" was Capt. William "Jitter Bill" Bradford, the 47-year old engineering officer of Bataan Field and Bamboo Fleet pilot. Dyess had ordered Burns, Rowe, and a third pilot south, but then unaccountably canceled the order. The old Bellanca "Skyrocket" left two nights later after repairs.

**March 29, 1942**

*Sun. Got things in better shape for leaving today. About supertime learned that the rock has a bunch of men to go so I'm screwed. Just another thing to hate the rock for. Guess the men are need (sic) though. I go Wed. maybe.*

The "rock" was Corregidor, where rumor had it the food conditions were much better than on Bataan.

**March 30, 1942**

*Spent day at C. on alert. Saw a large Jap bomber hit by A.A. Spun from about 25,000. Was an awe-inspiring sight. Sure feel sorry for poor devils in it. The nights sure are beautiful, moon and a few clouds.*

In response to a report on March 28th that the Japanese were planning a landing on the east coast of Bataan, Dyess was maintaining three pilots on alert at Bataan and Cabcaban fields, day and night, ready to move the remaining two P-40s down to Mariveles if a landing materialized.

**March 31, 1942**

*Still bombing, but little damage. Pilots food pretty good, poor for others, everyone hunting. Will have this place really cleaned out of game when we leave.*

**April 1, 1942**

*No April Fool joking this year. Alert at C. again. Wish they would get over it. Had an earthquake just after I got in bed, sure was a funny feeling.*

**April 2, 1942**

*Did not do much all day, but was up all night, bringing in and sending out ships. The 21st and 34th are now officially in Australia. Don't know what that makes us.*

Other sources indicate that it was the night of March 31/April 1, rather than April 1/2, when it was like "Grand Central Station" at Bataan Field, with the Beechcraft Staggerwing of the Bamboo Fleet flying in from Mindanao and back out again, the Stearman 76D3 taking two passengers south, and the Grumman Duck taking three of the Detachment pilots to Mindanao where two of them were to fly the two P-35As—flown down to Mindanao on January 11th—back to Bataan.

**April 3, 1942**

*Slept most of the day. Catching up for last night. Still a lot of heavy bombers in the air. Today Good Friday.*

**April 4, 1942**

*Bombers around most of the day. Up most of the night, alert in case of attack and bring plane in and out.*

John Posten and Ray Gehrig brought the two P-35As in at Bataan Field from Mindanao at 7:15 a.m., the two ships loaded with candy, cigarettes, quinine, cigars, brandy, and mail.

**April 5, 1942**

*Sunday. Easter. No rest from bombers all day. Evening a large thunderhead full of lightning up north put on quite a show. Really was something to watch. A bunch of new pilots came in in evening.*

**April 6, 1942**

*Bombed Bataan Pen. all day, spent day running to holes. Don't do much damage but it is very annoying. Bad on morale.*

**April 7, 1942**

*Up early, left for Cebu before daylight. Spent day there in Civilization [sic], it doesn't seem possible, good food, no bombers. I felt like a kid with a new toy. Left for Del Monte, arriving at dusk.*

Burns doesn't indicate how he got down to Cebu and Del Monte, but he was probably a passenger in one of the Bamboo Fleet planes. However, according to Tony Bilek, a mechanic at Bataan Field, Burns flew down to Mindanao in one of the two P-35As at the field.<sup>18</sup> If so, it must have been flown back to Bataan that evening, as the following afternoon both P-35As were on Bataan. One would also think that Burns would have described his experience had he been a passenger (in the baggage compartment) or the pilot.

**April 8, 1942**

*Today starts the 5th month of this mess and a new era for me. It is wonderful here. Hardly know a war is going on. Food much better as a whole than Bataan.*

**April 9, 1942**

*Rested all day. Reported in morning that things are very bad at Bataan. In evening reported that Bataan has fallen. Corr. Still holding though. Those poor guys there. I wonder how long it will be here.*

**April 10, 1942**

*Another lazy day. Not much news of Bataan. Terms being arranged. Cebu attacked. Quite a few of the pilots got out of Bataan. We wonder who. Lundee trying to get us on south from here. Dyess stayed on—naturally.*

Ozzie Lunde flew south in one of the P-35As on April 8th, another pilot in his baggage compartment. Hank Thorne—the CO of the 3d Pursuit—took the other P-35A to Mindanao, with 34th Pursuiters Larry McDaniel and Ben Brown in the compartment. Joe Moore flew the “P-40 Something” out and Jack Donaldson took Dyess’ “Kibosh” south, but damaged it on landing at Iloilo. Dyess had refused to leave his men behind. Roland Barnick managed to get the old Grumman Duck airborne after last-minute repairs that evening and flew three 34th Pursuiters out along with Carlos Romulo, MacArthur’s former press relations officer.

#### April 11, 1942

*Day quiet. At supper time 10 B-25s and 3 B-17Es came in. Going to do a bit of bombing then back and chance to move on south. I hope I get it. Was a wonderful sight to see them come in.*

At about 5:00 that afternoon, the personnel at the Del Monte Field were startled when three B-17s and 10 twin engine bombers of a type they had never seen before approached the field and came in to land. Headed by Maj. Gen. Ralph Royce, they were on a special mission from Australia to raid targets on Cebu (central Philippines), Mindanao, and (for the B-17s) Luzon. The pursuit pilots were to provide support for their operations.

#### April 12, 1942

(No entry).

Japanese floatplanes—Mitsubishi “Petes”—operating in pairs appeared over Del Monte field in the early morning and made unsuccessful bombing attempts on the three B-17s on the ground. In the afternoon they reappeared and again dropped their small bombs on the B-17s, hitting one and damaging two.

\*\*\*\*\*

At the satellite fighter strip at Dalirig, eight miles south of Del Monte field, Gus Williams and John Brownell (17th Pursuit) took off on the morning of April 13th for a strafing mission of Davao. Then they spotted two “Petes” over the area and in a dogfight Brownell shot one down, but Williams’ “P-40 Something” went into wild gyrations in climbing, then its engine quit. Williams managed to get his malfunctioning ship down safely, however.

About 12:35, a report came in from an observer post that the bothersome Japanese float planes were again approaching the area and that the one P-40 on the field at the time (a P-40E, perhaps Brownell’s on his return from the Davao mission?) should be used to intercept. As the alert officer had gone for lunch five minutes earlier, Burns was left to take the mission. In his take-off roll, he failed to hold the ship in the center of the 200-foot wide runway and veered off into large rocks that lined both sides of the strip. The P-40E plunged over the side of the canyon that bordered the field and caught fire. No one could reach him in time and there was no fire fighting equipment at the field. Burns burned to death in the cockpit. That evening the chaplain and friends buried him in a little graveyard in a grove of trees.<sup>19</sup>

Sadly, he was reportedly on the list of pilots the Royce mission was to evacuate on its return flight to Australia.<sup>20</sup> ■

#### Acknowledgments

I am indebted to John Lukacs for drawing my attention to the existence of the diary of John Burns and putting me in touch with his brother, the Rev. Richard Lee Burns, who helped me with information about John’s early life and provided documentation regarding the circumstances of his fatal accident and burial.

#### NOTES

Except as cited below, the source for all the annotations is the author’s *Doomed at the Start* (College Station: Texas A&M University Press, 1992).

1. Lt. Roland R. Birn, “A War Diary”, *The Air Power Historian*, Vol. III, No. 4, October 1956, p. 195
2. Unpublished “War Diary” (1997) of Ronald Hubbard, 27th Bomb Group.
3. Birn, *loc. cit.*
4. [www.history.navy.mil](http://www.history.navy.mil)
5. Unpublished diary of J. Harrison Mangan, 27th Bomb Group, November 20, 1941 entry.
6. William H. Bartsch, *December 8, 1941: MacArthur’s Pearl Harbor* (College Station: Texas A&M University Press, 2003), p. 242.
7. Bartsch, *op. cit.*, pp. 302-03, 310, 322, 326, 328-29, 342-43, 375-76.
8. Bartsch, *op. cit.*, p. 393
9. W.G. Winslow, *The Fleet the Gods Forgot: The U.S. Asiatic Fleet in World War II* (Annapolis: Naval Institute Press, 1982), pp. 112-13.
10. John W. Whitman, *Bataan: Our Last Ditch* (New

York: Hippocrene Books, 1990), pp. 249-51, 269-70.

11. Whitman, *op. cit.*, pp. 295-96 (and *Doomed at the Start*, pp. 276-77).
12. Whitman, *op. cit.*, 304-05 (and *Doomed at the Start*, pp. 292-94).
13. Whitman, *op. cit.*, p. 315; (and *Doomed at the Start*, p. 303)
14. General Headquarters, Far East Command, “The Imperial Japanese Navy in World War II”, Japanese Monograph No. 116 (Tokyo: ca. 1947), p. 174 (and *Doomed at the Start*, pp. 335-36)
15. Letter, Rowe to Maj.Gen. Ralph Royce, April 25, 1943.
16. Whitman, *op. cit.*, p. 449.
17. Whitman, *op. cit.*, p. 464.
18. Author’s telephone conversation with Tony Bilek, May 1, 2006.
19. Letters, Maj. Gen. Ralph Royce to Mrs. W.L. Burns, January 30, 1943 and December 20, 1945 (and *Doomed at the Start*, p. 399).
20. Author’s telephone conversation with Richard Lee Burns, April 8, 2006.

**Fire in the Sky; Flying in Defense of Israel.** By Brig. Gen. Amos Amir, IAF (Ret.), translated by Ruvik Danieli. UK: Pen and Sword Books, Ltd., 2005. Photographs. Index. Pp. 292. £19.99 ISBN 1-84415-156-5

General Amir has written an outstanding story—an autobiography of a top Israeli Air Force (IAF) fighter ace. Moreover, the book relates not only the story of the man, but also the commander, and the true airman. The general looks at the period from the infancy of the IAF, when Israel was a new country threatened with early extinction by its Arab neighbors, through 1982, when the IAF had proven itself to be a battle-hardened, superb fighting force. From the Tel Aviv skies of 1948 through the battles over Lebanon in 1982, Amir weaves a highly fascinating account of Israel's military aviation history.

He tells his story as a truly professional military man. Amir pulls the reader into the narrow cockpits of the various aircraft he flew from the early stages of pilot training through his combat missions and operational training; and these included not only jets, but helicopters as well. Many of his missions involved rough air-to-air sorties against long-range Soviet jets used by the Egyptian Air Force. He also relates stories of the Yom Kippur War of 1973 and the early stages of the war in Lebanon in 1982. Amir recalls reconnaissance missions and a memorable flight piloting an F-4 from the deck of the *USS Kittyhawk*. From his experiences in the Dassault Mirage to the superb McDonnell F-4 Phantom, he holds one's interest.

General Amir goes to great length to describe his family life. The trials and tribulations of military life were not easy. However, being a close-knit family, they survived. In fact, the only drawbacks to the book were the references to the author's love life which, in places, briefly turned an outstanding history into more of a novel.

The general served in many command and staff positions through his career and, prior to his retirement, served as Deputy Commander-in-Chief of the IAF. He retired with the rank of brigadier general in 1982, but his life continued in aviation. He went on to responsible leadership positions that included Executive Vice President of El Al Airlines and Director of the Israeli Civil Aviation Administration.

This book is very easy reading. For somebody interested in the history of a great warrior, a great military establishment, and a great leader, it's a must!

*Stu Tobias, Indianapolis, Ind.*



**Australia's Vietnam War.** By Jeff Doyle, Jeffrey Grey, and Peter Pierce. College Station: Texas A & M University Press, 2002. Maps. Notes. Appendix. Bibliography. Index. Pp. xxiii, 218. \$39.95. ISBN: 1-58544-137-6

Today's conflict in Iraq is being fought by soldiers from a number of nations besides the United States. This was equally true during the Vietnam conflict. One of those nations in both wars, Australia, has been an ally from the early dark days of World War II's Southwest Pacific area of operations through the Cold War and combat in Korea. Vietnam exacted so much from Americans, but it also demanded similar sacrifices from Australia. With a population at that time of less than 11 million (the U.S. population was approximately 200 million), it possessed a significantly smaller military and far fewer resources than the U.S. During Vietnam, Australia lost some 500 soldiers out of a total of approximately 50,000 who saw service there. In fact, the Vietnam War was at that time Australia's largest military commitment since World War II.

Why read this particular work about Australia's experience when, in the United States, we are literally awash in books focused on the Vietnam War? Aside from a small number written by former allies from Southeast Asia (e.g., the U.S. Army Center of Military History Indochina Monograph series and Lam Quang Thi's *The Twenty-Five Year Century*) there is a paucity of informed works addressing the "others" who fought alongside U.S. forces. Collectively, we Americans really don't know very much about contributions made by other nations, including Australia.

Questions that I should have asked a long time ago came to mind as I read this book, and the authors satisfactorily answered them. Why were Australian forces serving in Vietnam? What was the national mood in Australia when soldiers were dying there? What experiences did Australian "vets" have when they returned? What anti-war sentiment existed in Australia? What experiences and viewpoints do we who served in Vietnam share with Australian veterans?

This is not a lengthy book nor does it dwell very much on the Australian Task Force's tactical level of operations in Vietnam. It does, however, deliver a clear appreciation of what it was all about from the Australian perspective.

President Kennedy's inauguration

speech in 1961 made it clear that if the Free World were to thwart communist aggression it would be by countering so called "wars of national liberation." For Americans, these wars—aside from Cuba—seemed so far away. This was not true for Australia. There were insurgencies and emergencies taking place on her doorstep. As a Commonwealth nation, Australia sent troops to fight in Malaya and Borneo from 1948 to 1962. In the 1960s Indonesia, after seizing Dutch New Guinea, violated the borders of Australian New Guinea. To compound the equation, communist forces were fighting in not terribly distant Southeast Asia. It was a time of nervous uncertainty for Australia's security, and Australia badly needed to be snugly in bed with the west's superpower, the United States. To cement the relationship, Australia elected early on (1965) to deploy ground combat units and air assets in Vietnam (Australian advisors had been there since 1962) at the same time conventional U.S. forces were arriving in country. The authors recall the geostrategic background to Australia's decision to commit forces before going on to discuss the nature of forces sent to Vietnam, including naval combat patrols in nearby waters. The book then follows with a discussion on anti-war activism in Australia and the struggle of veterans to gain recognition for their issues. The authors make clear how important it was for Vietnam veterans to be recognized as having served in the near-mythical traditions of the ANZAC (Australian-New Zealand Army Corps). ANZAC accounts of sacrifice and heroism in combat in the two world wars, in South Africa (think of the film "Breaker Morant"), and in Borneo and Malaya were legendary in Australia. Returning Vietnam veterans felt that because they had served in an unpopular war they were being excluded from the ANZAC aura. They also felt betrayed because they had been sent to fight in Vietnam in order for Australia to curry favor with the United States. The authors draw from Australian and American literature, poetry, and film to illustrate Australian perceptions of the Vietnam era. The book closes with how veterans achieved the recognition they felt was deserved when the nation belatedly conducted an official welcome home parade in 1987 (fifteen years after the last soldier departed Vietnam) and in 1992 with the dedication of the Australian Vietnam Forces National Memorial.

I served alongside Australian forces in Vietnam, Iraq, and elsewhere. Only after reading this nicely written, informative, and easy-to-read book did I realize how uninformed I had been of the back-

drop to their contributions and sacrifices. If for no other reason, read this work to appreciate the “others” who have served alongside Americans, and give them their due.

Col. John L. Cirafici, USAF (Ret.),  
Milford, Del.



**Into the Unknown Together: The DOD, NASA, and Early Spaceflight.** By Mark Erickson Maxwell AFB, Ala.: Air University Press, 2005. Tables. Photographs. Notes. Bibliography. Index. Pp. ix, 667. ISBN: 1-58566-140-6

Rarely does a dissertation, even one submitted as a doctoral requirement, merit publication without significant revision. Mark Erickson’s “The Evolution of the NASA-DoD Relationship from Sputnik to the Lunar Landing” (George Washington University, 1997) is an exception to the rule. Now, published with minor alterations under the title *Into the Unknown Together*, it is available in paperback or on line at the Air University Press website. The author examines continuity and change in NASA-DoD-Air Force (USAF) institutional relations during three presidential administrations—Eisenhower, Kennedy, and Johnson—and across five human spaceflight programs—NASA’s Mercury, Gemini, and Apollo, plus the USAF Dynasoar/X-20 and Manned Orbiting Laboratory (MOL).

At the presidential level, Erickson observes continuity with respect to the policy of peaceful uses of outer space, but he finds considerable change from Eisenhower to Kennedy and Johnson regarding the promotion of human spaceflight for national prestige. If Eisenhower minimally supported enhancing prestige through a space race with the Soviet Union, Kennedy and Johnson vigorously endorsed prestige-related competition. In the context of the Cold War, the latter two Presidents viewed the considerable expense of engaging in a race to the Moon as worthwhile, because they perceived that the prestige of winning would strengthen national security over the long haul. Eisenhower supported the concept of two space programs—one military and one civil—but Kennedy, possibly sharing General Bernard Schriever’s resistance to drawing an arbitrary distinction between military and civil uses of outer space, favored a single, coordinated program—part DoD and part NASA—oriented toward non-aggressive uses.

According to Erickson, the Office of the Secretary of Defense played a critical role in determining the DoD-NASA rela-

tionship and depriving the USAF of human spaceflight. Implementation of Secretary of Defense Robert McNamara’s Planning, Programming and Budgeting System (PPBS) left USAF man-in-space projects in as tight a fiscal bind as under the Eisenhower administration. Although USAF leaders had good reason to feel slighted, the service worked to fulfill Chief of Staff General Thomas White’s commitment to cooperate with NASA and to provide experienced missile and space officers to occupy key NASA management positions. Nonetheless, difficulties between the DoD and NASA ranged from policy-level USAF designs on subsuming NASA to working-level control over positions or functions at launch ranges. At the highest bureaucratic level, personality clashes between McNamara and NASA Director James Webb translated into DoD-NASA disagreements. Coordination and support occurred, but institutional rivalries and personal conflicts prevented an efficient, intricately meshed national space program.

As the ample annotations and more than 100 pages of bibliographic citations indicate, Erickson used an extraordinary number and variety of sources to construct his detailed, analytical narrative. He plumbed the collections of the NASA History Office, Air Force Historical Studies Office, Air Force Historical Research Agency, National Archives, Library of Congress, and Space Policy Institute for unpublished, primary material. An equally exhaustive search for published records, augmented by immersion in dozens of secondary accounts from books and magazines, prepared Erickson for crafting an incredibly captivating, tantalizingly interpretive account of NASA-DoD relations before 1970. *Into the Unknown Together* admittedly focuses on human spaceflight, leaving at least three other common-interest areas—large rocket engines, communications satellites, and meteorological satellites—unexamined. One might anticipate, however, that careful study of those areas would yield something fundamentally similar to Erickson’s findings.

Dr. Rick W. Sturdevant, Deputy Command Historian, HQ Air Force Space Command, Peterson AFB, Colorado



**Commonsense on Weapons of Mass Destruction.** By Thomas Graham, Jr. Seattle and London: University of Washington Press, 2004. Appendices. Glossary. Index. Pp x, 206. \$12.95 Paperback. ISBN: 0-295-98466-X

The recent advent of the Global War on Terror, coupled with the proliferation and potential use of Weapons of Mass Destruction (WMD) by terrorist organizations and/or “rogue” nations, presents perhaps the greatest threat to mankind in the modern post-Cold War era. Astutely recognizing that the key to ensuring global security lies not only in eliminating the widespread proliferation of WMDs, but also in educating an informed public, this pivotal book by a former U.S. ambassador provides a great first step toward accomplishing both endeavors.

Inspired by the suggestion that he should write a book on WMD proliferation “for the average person,” Graham has provided an easily read and brilliantly executed executive summary encompassing a brief overview of the history of weapons proliferation, the current status of this critical issue, and an irrefutable argument for the need to take immediate action against the spread of WMDs. Written on the premise that information about “arms control, nonproliferation, and international law” should be readily available to the general voting public, and that the WMD issue is just as relevant today as it was at the height of the Cold War, Graham’s primary purpose for writing this book is predicated on the hope that an informed citizenry can leverage their leadership into taking positive action. By tapping into his vast first-hand knowledge and thirty-plus years of experience in WMD nonproliferation diplomacy, Ambassador Graham is able to clearly and succinctly define the insidious nature of today’s weapons proliferation and then logically show the urgent necessity of preventing further WMD proliferation.

Through the ample use of pertinent facts and figures regarding the vast extent of this current problem, Ambassador Graham adroitly makes an ardent case for curtailing the proliferation of modern weaponry: “Today, it is estimated that there remain more than 1,000 tonnes of HEU [highly enriched uranium] and several hundred tonnes of plutonium in the territory of the former Soviet Union.” From these data, he clearly deduces the true extent of the danger to this nation and the international community when he quotes directly from a report by Senator Howard Baker and Lloyd Cutler: “The most urgent unmet national security threat to the United States today is the danger that weapons of mass destruction or weapons-usable material in Russia could be stolen and sold to terrorist or hostile nation states and used against American troops abroad or citizens at home. This is a clear and present danger to the international community.”

Going beyond weapons of mass destruction, the last few chapters deal with myriad related topics: missile defense, the weaponization of outer space, land mines, and small arms. The only weapon system notably absent from mention in the book is portable surface-to-air missiles (which could also be stolen easily and used by terrorists). Also of notable interest to the reader are a number of wonderful appendices which contain a wealth of useful related information such as the status of global nuclear states today, an index of total warheads built from 1945-2000, a chronology, and also a glossary.

Overall, *Commonsense on Weapons of Mass Destruction* is an enlightening and convincing book on a most serious and complex subject which we, as responsible citizens, cannot afford to ignore. For to do so, would be folly.

*LCDR Phil Webb, USN, USS San Antonio, Norfolk, Va.*



**Fire from the Sky: A Diary over Japan.** By Ron Greer and Mike Wicks. Altona, Canada: Friesens, 2005. Photographs. Pp. 203. \$16.35 ISBN: 0-9768712-0-3

This is a simple book, really, about a vast and complex subject: the strategic bombing campaign of Japan during the waning days of World War II. Not meant to be a rigorous historiographical work, it is simply one man's story of "the horrors of war" as seen through the eyes of a "23-year old frightened boy" caught up in the tragic events of a world at war.

Greer and Wicks have given us a journalistic account of a young B-29 Superfortress radio operator, Staff Sergeant Herbert L. Greer, who flew on 23 combat missions over Japan. Intended to "take the reader back to experience the reality of war," it is based primarily on the vivid wartime entries made by Sergeant Greer in his military-issue service diary. The authors, using a unique and effective approach in writing this book, have also included a good number of excerpts and much recent commentary gathered from a series of extensive interviews of the book's principal participant, Herb Greer. These add further clarity and depth as well as additional insight into the incredible events that occurred over a half century ago.

Though this is the story of but one man, the message is universal, and we are

able to glimpse "the contribution made by all those who fought for our freedom, especially those who flew in the B-29 Superfortress over the Pacific." For they all, to a greater or lesser extent, shared and felt the same emotions and stresses, the same pains, the same joys, and the same sense of loss associated with mortal combat. "Will this be my last mission?" or would it "be my face missing at breakfast tomorrow?" were surely common thoughts running through their minds. Not one to bow down to modern-day conservatism or political correctness, Herb Greer's recounting of the war is told just the way it was. At times it is seemingly brutal but, to be sure, that was what war in the Pacific was like. He also documents the fate of many of his fellow B-29 crewmen shot down over Japan—beheaded or cruelly tortured by their captors. And he tells of the equally harsh American attitude, as sometimes expressed by commanders, "Burn Tokyo or you're going back tomorrow."

But *Fire from the Sky* is more than just a personal account of the war. It is also about the awesome power of modern weapons of war being unleashed and how the technologically advanced B-29 Superfortress bomber was used in a strategic bombing campaign of Japan to usher in a new era of modern warfare—a new type of war, one of such complexity and absoluteness, as never before seen or envisioned by mankind, where in a brief moment, in a solitary explosion and blinding flash of light, wrought by a single bomb, an estimated 71,000 people were silenced forever. *Fire from the Sky* serves as a reminder to us over sixty years later, as well as to those who fought and suffered in this conflict, that the price of freedom is never free.

*LCDR Phil Webb, USN, USS San Antonio, Norfolk, Va.*



**The Second Attack on Pearl Harbor: Operation K and Other Japanese Attempts to Bomb America in World War II.** By Steve Horn. Annapolis Md.: Naval Institute Press, 2005. Notes. Appendix. Glossary. Bibliography. Index. Pp. vii, 346. \$29.95 ISBN: 978-1-59114-388-8

This book covers a number of Japanese offensive operations and plans against the United States that are unknown to most Americans and little known to military historians. Alton "Steve" Horn, a retired USAF officer who

served with Strategic Air Command, has interviewed numerous participants, researched official records, used secondary sources, and scoured newspaper accounts to produce this book. The raid identified in the main title consisted of two flying boats that attacked Hawaii in March 1942; but despite the great effort, their few bombs fell harmlessly. The author also discusses in detail the shoot down of a flying boat off Midway in March 1942 and briefly covers the attacks by float planes that were carried by submarines off the North American coast that went on to bomb Oregon forests (also without effect) in September 1942 and a one way float plane reconnaissance of Pearl Harbor in October 1943. In addition, the book touches on submarine bombardment of Hawaiian and west coast targets in 1942; balloon bombs launched from Japan in 1944-45; and a number of abortive plans to attack the American east and west coasts, Texas oil fields, and the Panama Canal.

Horn provides much context and background which tends to drown out his focus. It appears that he attempted to give an account as indicated by his title, but then got deeply into the subject of the Japanese flying boats and float planes. The result is obviously a labor of love, an exhaustive work that also exhausted this reader. The story probably could be better presented as a tightly focused article rather than as a book. The editors of this work failed both their author and their readers by not providing the organization and focus that it presently lacks.

Some interesting tidbits are to be found here. Horn shows that America's confusion, if not incompetence, continued after Pearl Harbor in both the Hawaiian Islands and on the west coast. In contrast, both American code breaking and direction finding were first rate and useful. On the Japanese side, the efforts discussed didn't lead to anything effective or to later breakthroughs by others. For example, Horn details the attempts of various nations to operate aircraft from submarines. This was best accomplished by the Japanese; however the technique turned out to be of no consequence. Similar disappointments include their use of large flying boats and balloon bombs. In the end, Horn demonstrates that the Japanese were innovative and aggressive; but he leaves the reader to draw the obvious conclusion that these efforts were misdirected, puny, and ineffective compared with later American assaults on the Japanese home islands.

Few except seaplane/float plane enthusiasts and those who seek "little known details" will find it worthwhile to

# Gunning for the Red Baron



LEON BENNETT

Leon Bennett explores the combat sequences, the arts of aerial gunnery, and the weapons and planes used by the World War I fighter pilots. He gives the lowdown on why it was so hard to score a hit and what qualities helped the aces succeed. Bennett uses his detailed insight into the mechanics of air warfare to search for the answer to the enduring controversy of what finally brought the Red Baron down. 156 pp. 65 b&w photos. 67 drawings. 20 graphs. \$29.95 cloth

# DOMINANCE of the SKIES

## ELECTRONICS IN THE EVOLUTION OF FLIGHT



ALBERT HELFRICK

Albert Helfrick traces the paired history of modern aviation and electronics, or avionics, from its earliest years to the indispensable tool it is today. He provides a thorough account of the roles played by the famous and the obscure, from Edwin Howard Armstrong to David Sarnoff, in the successful creation of aviation technology. 224 pp. 16 b&w photos. 1 line drawing. \$37.95 cloth. \$19.95 paper

# In Hostile Skies



An American B-24 Pilot in World War II

James M. Davis  
edited by David L. Sneed



James Davis piloted a B-24 on more than thirty missions in the European Theatre during World War II. He flew support missions for Operations Cobra and Market Garden and numerous bombing missions over occupied Europe in 1944. *"This marvelous story will take you there with [Davis] and his crew."* —LTC Charles H. Freudenthal, USAF Ret. 304 pp. 22 b&w illus. 1 map. \$27.95 cloth



## With the Possum and the Eagle

The Memoir of a Navigator's War over Germany and Japan



Ralph H. Nutter

Brigadier Gen. Haywood "Possum" Hansell and Maj. Gen. Curtis "the Eagle" LeMay pioneered the concepts of strategic airpower and high-altitude precision bombing. This book offers a rare insider's perspective. *"Simply the best original work I have read in thirty years."* —Tom Britton, National Air and Space Museum 368 pp. 24 b&w photos. 2 maps. \$29.95 paper



University of North Texas and Texas A&M books available through

**TEXAS A&M**  
University Press

www.tamu.edu/upress  
800-826-8911  
Fax: 888-617-2421

invest the time, money, and effort required to read this book—an excellent example of a subject, researched probably as far as is humanly possible, that likely will have only limited appeal. *The Second Attack on Pearl Harbor* highlights the worst aspects of a buff book: somewhat disjointed, not particularly well written, and covering a very narrow and unimportant subject. However, in contrast to many such books, this one has no photographs. Buffs have produced some well done and important books and have made significant contributions to aviation history; but, regrettably, this is not one of them.

Kenneth P. Werrell, Christiansburg, Va.



**Katherine Stinson Otero: High Flyer.**

By Neila Skinner Petrick. Illustrated by Daggi Wallace. [Juvenile Nonfiction] Gretna, La.: Pelican Publishing Co., 2006. Illustrations. Pp.22. \$15.95 ISBN: 9781589803688

*Katherine Stinson Otero: High Flyer*, by Neila Skinner Petrick, is a book about a girl who has a dream to become a pilot. This story was cool because it was about real history. It took place in 1907—almost 100 years ago. Katherine was special because she was very young and young girls were not allowed to fly planes. Everyone she asked to teach her how to fly said no, except a guy named Max. She finally learned to fly and became a good pilot. She went on to do many amazing things in her plane and became famous.

Ms. Otero was very brave because she wanted to fly, even though hardly any women were pilots then. She set a long distance world record of 610 miles, flying from San Diego to the Presidio of San Francisco. No one had flown that far before. Our favorite part was when she was on her way to San Francisco and she had to climb up 8,000 feet in the air to get over a mountain. We liked that part because 8,000 feet is very high for us to imagine. On this trip, she had no instruments to tell her how much gas she had left. When she landed, she had only two gallons left.

She also was adventurous and was the first woman to do a loop-the-loop at an airplane exhibition in California. She also flew over a temple in Beijing, China. Later, during the Great War, she helped care for wounded soldiers in Europe by driving an ambulance

We can recommend this book because it is interesting to read and other kids would like this book because it sounds like fiction. But all of the stories are actually true. Katherine Otero was a brave woman and her story is very inspiring.

*By Andie and Logan Neufeld, ten-year-old twins, are students at College Gardens Elementary School, Rockville, Maryland.*



**Thinking Effects: Effects-Based Methodology for Joint Operations [CADRE Paper No. 15].**

By Col. (Ret.) Edward C. Mann III, Lt. Col. (Ret.) Gary Endersby, and Thomas R. Searle. Maxwell AFB, Ala.: Air University Press, 2002. Tables. Diagrams. Notes. Glossary. Pp. xi, 99. Paperback ISBN: 1-58566-112-0.

“Only in the last decade of the twentieth century did we begin to reach the levels of technology necessary to accelerate an effects-based perspective to its maturity.” These were the words of Lt. Gen. David Deptula, USAF Pacific Command Vice Commander, in the March 2006 issue of *Air & Space Power Journal*. He pointed to new technologies that “offer a basis for dynamic concepts of operations.” These new technologies help develop the actions taken against enemy systems that contribute directly to the desired military and/or political outcome; or simply put, effects-based operations.

Just a little more than ten years ago with the collapse of the Soviet Union, a notable shift in geopolitics began with the United States military replacing their perspective of a “unitary, implacable, and constantly threatening foe” with a more “nebulous and multifarious threat.” The authors emphasized that U.S. forces must develop “concepts of military action to meet the challenges and exploit the opportunities presented” in the shifting geopolitical environment. Operations Enduring Freedom and Iraqi Freedom showed, and continue to show, that combating the terrorist threat requires “interservice, interagency, and international coordination” for all actions—direct, indirect, intended, and unintended. *Thinking Effects* focuses on three specific areas: “(1) a fully developed theory grounded in effects-based thinking, (2) a process to facilitate development of an organizational culture of effects-based operation processes, and (3) a lexicon that promotes understanding through a common language.”

The book proposes that part of the

United States military transformation for operations of engagement “should deal with how the military thinks and operates.” It stresses that effects-based operations are not focused on conquest but represent those actions taken against enemy systems designed to achieve specific effects that contribute directly to desired military and political outcomes. But, unfortunately, they often pursue objectives without direct reference to the appropriate effects that would create the conditions for achieving them and with little consideration of other effects that were created along the way.

With the world’s altered geopolitical situation, the U.S. military establishment struggled with its role in this new world order. The authors recommend that planners move from paradigm of conquest to a new one that focuses on success across the “entire spectrum of engagement—political, military, and/or humanitarian.”

Key to this new paradigm is planning which, in effects-based operations, consists of five “continuous and iterative phases.” The first phase, strategic environment research, attempts to gather information on all relevant and potential adversaries. The second phase determines policy goals with intended effects and outcomes that lead to their achievement. Developing a strategy that employs the resources available to achieve desired effects is the third phase. The fourth phase, mission parsing and integration, is the determination of what elements of national power are best suited to achieve the policy goals. The final phase, effects assessment, is provided through intelligence collection, determining whether the policy goals were achieved or what needs to be done next to fulfill the goal.

*Thinking Effects* points to “analytic rigor” as a necessity in effects-based operations methodology to move objectives-based planning to the next level. The authors state that this rigor comes “more or less naturally with analysis of desired effects” and allows planners to “examine conditions and casual linkages through which actions lead to the objectives.” The main challenges to fully implementing effects-based operations methodology are modifying both service and joint doctrine and Command and Control (C2). These determine how both intelligence analysis and combat assessment are performed and integrated into the planning process.

General Deptula stated that by “applying an effects-based approach to all aspects of our profession, we will continue to discover innovative means of realizing our national security objectives.” Through effects-based operations, the USAF can achieve its objective with a leaner and

meaner force. *Thinking Effects* is a must read for all airmen, challenging them to use effects-based operations in each and every part of the mission.

Ray Ortensie, Historian, 479th Flying Training Group, Moody AFB, Ga.



**Bombs over Brookings: The World War II Bombings of Curry County, Oregon and the Postwar Friendship between Brookings and the Japanese Pilot, Nobuo Fujita.** By William McCash. Bend Ore.: Maverick Publications, 2005. Maps. Diagrams. Illustrations. Photographs. Notes. Bibliography. Pp. xiii, 117. \$14.95 Paperback ISBN: 0-9729830-4-X

On April 18, 1942, Lt. Col. Jimmy Doolittle led sixteen U.S. Army Air Forces B-25s on a bombing raid over mainland Japan from the *USS Hornet*. While relatively little damage was done by this small force, there were two significant results: (1) The Japanese high command was shocked. In the long term, fighters were kept at home that could have served elsewhere; and the raid, at least in part, also led to the Midway operation. (2) It was one of the first pieces of good news the American public had received since Pearl Harbor and substantially boosted morale at home.

This book, on the other hand, deals with one of the more obscure events of the Pacific War, and certainly one of the least significant. On September 9, 1942, Warrant Officer Nabuo Fujita piloted a Yokosuka E14Y1 "Glen" reconnaissance seaplane from the deck of the Japanese submarine I-25 (a sub just missed by one of Doolittle's bombs), a boat designed to carry and launch these scouting aircraft. Launching in the early dawn from a point west of the small town of Brookings, Oregon, (just north of the California border), Fujita and his navigator/bombardier flew over the coast and forests of Southeast Oregon. Near 2,696-foot Mt. Emily, the crew dropped the first of two 76-kg (168-lb) phosphorus bombs. The second was dropped about five miles away. The purpose of this raid: start a major conflagration in the dry, dense forest that would burn cities and spread panic! Needless to say, nothing happened. Nor did a repeat performance on September 29 have any effect. These four bombs were the only ones dropped on the continental U.S. during the war by manned aircraft (many came down in the later balloon-

bomb campaign). Strategically and tactically, there was no effect on the U.S. and its military forces.

McCash extensively researched archives and interviewed people involved who were still alive so many years later. He well outlines the various degrees of mismanagement and fumbling exhibited by the Forest Service, FBI, Army, Coast Guard, and Aircraft Warning Service. But despite these problems, one readily senses the vast differences between the two early bombing raids made by the U.S. and Japan against the other's homeland.

Unfortunately, I found two flaws with the book. While it was clearly established that two bombs were dropped on September 9, McCash notes the second, but that's the last we hear of it. The first bomb site is covered in great detail. What happened to bomb two? Second, he notes that the forests get a little dry by September in that part of the country. In one place he noted the damp forest that contributed to the fizzle, but a little weather research would have made the story more complete. Why wasn't the forest as dry as the Japanese thought? Nearly half of the book covers post-war events. It is an interesting account of how Brookings and Fujita came together some twenty years later and cemented a friendship that has continued to this day. Out of an insignificant act of war, a peace bridge was built between two peoples that is far more significant and well worth reading about.

For those interested in one of the more obscure actions of World War II, this book is an easy read that takes only a few hours. Since it is a local publication, one can obtain it from [www.browsersbookstore.com](http://www.browsersbookstore.com) or by writing the author at PO Box 1053, Corvallis OR 97339-1053 and including \$3.00 for postage. Readers will have an enjoyable evening.

Col. Scott A. Willey, USAF (Ret.), NASM Docent and Volunteer



**The Long Search for a Surgical Strike: Precision Munitions and the Revolution in Military Affairs.** By David R. Mets, Ph.D. Maxwell AFB, Ala.: Air University Library/Air University Press. 2001. Photographs. Drawings. Notes. Bibliography. Pp xii, 79. ISBN: 1-58566-096-5

This is the twelfth paper sponsored for publication by the Airpower Research Institute of the Air University's College of

Aerospace Doctrine, Research and Education (CADRE). From the subtitle, the reader might at first assume that this publication is focused at how today's extraordinarily-accurate precision weapons have forever changed the U.S Air Force. And in part, this is true. But as Dr. Mets explains, precision munitions alone are not enough to revolutionize a fighting force. Accurate munitions must be supported by capable aircraft, propulsion systems, organizational structure, intelligence, training, and appropriate doctrine. Improvements in each of these areas can provide incremental improvements in a fighting force; but until all these pieces fit together seamlessly, a true *revolution* in military affairs (RMA) cannot take place.

The booklet defines RMA as a rapid change in military technology, doctrine, and organization leading to a sweeping new way that wars are fought. Mets explains that Douhet and Mitchell believed that the airplane itself was an RMA in the 1920s. The enemy could no longer hide behind fortified borders. Airplanes could fly deep into enemy territory and attack. The sanctuary of distance was removed. In those early days, munitions—or, more to the point—the accuracy of those munitions was an afterthought. As is often the case, advances in one technology area lead directly to advances in a related technology area. For example, airframes alone have never allowed the military to fight in a sweeping new way. Airframes needed to be supported by propulsion systems, command and control, detection capabilities, accurate weapons, effective training, and appropriate doctrine. Mets explains these relationships in an eloquent manner that naturally leads the reader to the conclusion that precision weapons are only one piece of a complicated puzzle.

Mets summarizes airpower developments and advances in technology in World War II, Korea, South East Asia, Yom Kippur, NATO, and the Gulf War I. He describes the evolution of doctrine from the earliest days of the Army Air Corps, to the deep strike doctrine of the cold war, to today's precision air force. The focus is primarily on the air-to-ground aspect of combat, but air-to-air and surface-to-air dimensions are discussed as well. Readers should pay particular attention to the over one hundred notes; they contain a wealth of information.

This booklet provides a context for why the technology of air power has changed over the years. It describes many of the technology gains developed by the USAF in the years that span Billy Mitchell's sinking of the captured German battleship *Ostfriesland* through Desert

Storm of the early 1990s. It's fair to say that the average person watching the nightly news in the last few years most likely thinks that the technology of precision weapons alone has revolutionized the Air Force. After reading this booklet, that person should understand that the precision weapons being used in Iraq and Afghanistan are important, but they are only a small part of the story that allows today's USAF to fight in a sweeping new way. Technology geeks will especially enjoy reading this booklet.

*Mike Jackson, Boeing Technical Fellow; and Docent, National Air and Space Museum*



**Masters of Chaos: The Secret History of the Special Forces.** By Linda Robinson. New York: Public Affairs, 2004. Maps. Photographs. Index. Pp. xx, 388. \$26.95. ISBN: 1-58648-249-1

In the early 1960's, a little-known segment of the U.S. Army began to receive a great deal of publicity. It was an era where nuclear confrontation was a reality and Mutual Assured Destruction a likely potential outcome. As the Cold War thermonuclear powers stepped back from the brink of the Cuban Missile Crisis, President Kennedy's administration sought to counter Soviet-supported wars of national liberation being waged throughout former European colonies and underdeveloped nations. With increased funding for unconventional warfare (UW) training and operations, public admiration of their professionalism, and his approval of a distinctive Rifle Green beret, Kennedy brought a group of publicity-shy, highly-trained soldiers into the sunlight. Two years later, Sgt. Barry Sadler's *Ballad of the Green Berets* became a hit record, and U.S. Army Special Forces (SF) soldiers became military icons. I earned the beret and, during a significant portion of my active duty career, had the privilege of serving in the organization whose collective motto is *De Oppresso Liber* (To Free the Oppressed).

SF is one Army component of U.S. Special Operations Command (USSOCOM). Special Operations encompass a wide variety of missions and capabilities from civil affairs and psychological operations to the direct-action raids conducted by Ranger forces in Afghanistan and Iraq. While trained for some direct action missions, SF usually function in small teams and are better employed for UW operations, deep reconnaissance, and more spe-

cialized and/or clandestine undertakings.

Linda Robinson is a writer for *US News & World Report*. Robinson received her first exposure to Special Operations Forces (SOF) as the result of a Harvard fellowship in 2001. Until 2003, when she was an embedded reporter during Operation Iraqi Freedom, she received continued entrée to the SF community. Her travels took her to South America and throughout the U.S. where she had an unusual and extended opportunity to observe training and real-world operations. Her long-term research was extensive and included access to contemporary documents, archival records, and first-hand discussions with policy makers, senior leaders and SF personnel.

Robinson's work is actually two books in one. For SF soldiers, *Masters of Chaos* is a good compilation of the lessons learned over the last two decades. For those with little first-hand exposure to SF, the text provides a fair-minded and balanced glimpse into the history of Army SOF as well as the lives and activities of men who balance their role as husbands and fathers against unique, often hazardous, and sometimes fatal undertakings.

The first half of the book serves two purposes. First, it personalizes an admittedly shadowy organization by introducing the reader to a representative slice of SF sergeants, warrant officers, and officers. The career experiences of these men become the topics for treatment in the later chapters. Second, Robinson takes the reader through the long selection, assessment, evaluation, and on-going SF training process. To this end, she succeeds in demonstrating that not everyone who applies is suited to handle situations for which "book" solutions do not exist. For SF members, the ability to think critically and unconventionally, while functioning as the member of a cohesive team is a critical requirement: the "John Wayne" and "Rambo" stereotypes exist only in Hollywood, though conventional Army rank structure is often ignored in the field.

The second half of the book is Robinson's primary focus. In it, she makes good use of primary sources and exposes the reader to recent SF operations using first-hand accounts of the men she introduces in the early chapters. Her crisp style manages to illustrate a wide gamut of SF missions and capabilities and provides treatments of intelligence collection and network development, POW rescues, targeting of insurgent leadership assets, and assisting indigenous populations with internal defense. Her account of Operation Viking Hammer, an attack on terrorist training facilities in northern Iraq,

particularly held my attention.

The book has some minor inaccuracies. In the most obvious example, while virtually all Special Forces soldiers are military parachutists, not all are qualified in High-Altitude/Low-Opening (HALO) parachute operations. Other minor errors will not be apparent to a lay reader and certainly do not invalidate Robinson's research, efforts, or overall treatment of her topic.

Having been an academic for the last fifteen years, with continuing interests in UW, asymmetric conflict and expeditionary operations, I feel Robinson's final chapter presents an excellent encapsulation of current geopolitics, contemporary U.S. policies, and potential psycho-political impacts on SOF. She correctly notes that "... the inherently political nature of war is even more pronounced in an unconventional conflict, where the adversary is not a state or an army but rather a small irregular force that is hard to detect yet capable of causing major political and psychological impact ..."

In writing the book, Robinson had access to both "worker bees" and senior leaders. It is obvious that she paid attention to what she heard and saw. The final chapter is a reflective and reasoned assessment, in light of emerging national and regional threats, of potential changes in SF organizations and employment. In sum, while Robinson's work is not perfect, it is a well-written and balanced examination of U.S. Army Special Forces.

*John A. Glover, Ph.D., Historian, 8th Fighter Wing, Kunsan AB, ROK*



**Aviation's Most Wanted: The Top 10 Book of Winged Wonders, Lucky Landings, and Other Aerial Oddities.** By Steven A. Ruffin. Washington, D.C.: Potomac Books, 2005. Photographs. Bibliography. Index. Pp. 313. \$12.95. Paperback. ISBN: 1-57488-674-6

Do you ever wonder about such things as what aircraft has been produced in the greatest quantity of all time? Can you name the late-night television personality who flew more than 80 combat missions in Korea? Or would you like to know the highest altitude from which someone has fallen and survived to talk about it?

If these are the kinds of questions that spark your interest, then Steven Ruffin's book is right up your alley. His objective was to build a collection of "top 10" lists that would, in his words, give his

readers insights into the “momentous achievements, inspiring personalities, humorous anecdotes, high drama, and ... heart-breaking tragedy” across a wide range of aviation and space-related topics. He has achieved the objective in fine style, with over four dozen lists that cover everything from flights before the Wright Brothers to mankind’s accomplishments in space. Some of the lists are based on objective data (the highest, the fastest, the farthest), but many are based on Ruffin’s own opinions, such as the 10 greatest aviation books ever written, the top 10 instances of military missions that went bad, and the 10 pilots with the most of what Tom Wolfe called “the right stuff.”

So as not to leave you in suspense, here are the answers to the questions posed in the opening paragraph:

*The Cessna 172 Skyhawk is the most produced airplane in history. More than 38,000 of these four-place general aviation aircraft have rolled off the assembly line since 1955, and the airplane is still in production.*

*Ed McMahon, who for nearly 30 years was Johnny Carson’s sidekick and straight man on The Tonight Show, was a Marine Corps pilot during both World War II and the Korean War. During World War II he served in the U.S. as a flight instructor; then returned to active service for Korea and logged 85 combat missions.*

*Flight attendant Vesna Vulovic holds the unenviable record for having survived the highest fall in aviation history. She was serving aboard a JAT Yugoslav Airlines DC-9 in 1972 when a bomb shattered the airplane. Ms. Vulovic, who was in the tail section as it fell over 33,000 feet to the ground, was the only survivor.*

The objective lists might help to settle the occasional friendly argument among aviation enthusiasts, and the opinion-based lists could just as easily start new arguments. And that’s probably exactly what Ruffin had in mind. All in all, *Aviation’s Most Wanted* deserves kudos as a well-researched, well-written book that will both educate and entertain just about everyone.

*Lt. Col. Joseph Romito, USA (Ret.), Docent, National Air and Space Museum.*



**Wreaking Havoc: A Year in an A-20.** By Joseph W. Rutter. College Station: Texas A&M Press, 2004. Photographs. Maps. Flight Log. Index. Pp xxi, 258. \$29.95. ISBN: 1-58544-289-5

It’s often said that good things come in small packages. And that is certainly true about Joseph Rutter’s book. This small gem is loaded with details of what it was like to be an A-20 pilot in the U.S. Army Air Forces of the 1940s. Rutter follows the common recipe for a book that deals with a pilot’s experiences during World War II, including his boyhood life and the impact of aviation; life as a young man; Pearl Harbor; basic, primary, and advanced flight training; transition to the theater; and, finally, combat. Along the way he describes his family, friends, fellow pilots, the enemy, and the machines he encountered during his service in the Pacific.

The book describes all aspects of an attack pilot’s life in the Pacific during World War II. It recounts particulars that would be known only by a veteran who not only was there, but also by a veteran who paid attention to the smallest of details while being there. For example, Rutter describes the weakness of the A-20’s brakes when compared to those of a B-25, the excitement of buzzing a farmer and his mules on a Carolina cotton farm during training flights, and the clarity (or perhaps the peace) of the night skies over Dutch New Guinea. There is enough detail included in this book about flying the A-20 that the average reader might think he could squeeze into that small cockpit and fly a mission himself. The text is packed with details that any reader drawn to a book on combat aviation will appreciate.

Walk into most bookstores today and you can find a pretty good book describing what it was like to fly a high performance fighter or a lumbering bomber over Europe during the Second World War. One can also have his choice of fine books describing the adventures of U.S. Navy pilots half a world away in that same war. It is, however, not as common to find a book describing the life of an Army Air Forces pilot in the Pacific, and almost impossible to find if that pilot flies a medium attack aircraft like the A-20. Rutter plugs a hole that has existed in this genre for some time now.

For those who enjoy reading about combat aviation during World War II, this book will prove to be very enjoyable.

*Mike Jackson, Boeing Technical Fellow; and Docent, National Air and Space Museum.*



**Forging the Shield: Eisenhower and National Security for the 21st Century.** By Dennis E. Showalter, Ed.

Chicago: Imprint Publications, 2005. Notes. Appendix. Index. Pp. 235. ISBN: 1-879176-44-0.

This book contains eleven essays from a January 2005 symposium dealing with “Eisenhower and National Security for the 21st Century.” It also contains a verbatim transcript of a Roundtable Discussion held during the symposium. Due to the wealth of information, I selected two essays to review in depth: “Clandestine Victory: Eisenhower and Overhead Reconnaissance in the Cold War,” by R. Cargill Hall; and “Eisenhower and Space: Politics and Ideology in the Construction of the U.S. Civil Space Program,” by Roger D. Launius.

In the introduction, Showalter speaks to Eisenhower’s reputation and how he was considered by many as “an amiable dolt, more concerned with polishing his golf swing than grasping the reins of government.” He continues to say that many political analysts saw the Eisenhower presidency as being stagnant on domestic issues and ineffective in dealing with foreign affairs.

Hall disagrees with this view. He states that as a military man, Eisenhower understood the importance of military intelligence. Early in his first term, he reviewed the status of the intelligence community and found it lacking. The more intelligence we have, and the better its quality, Eisenhower believed, the more likely we will be able to prevent war, or win the war if one should start. Human intelligence was not always accurate and timely, so he authorized secret overflights by U.S. aircraft over the USSR, although international conventions prohibited such practices.

At the same time, Eisenhower overhauled the way classified information was filed and accessed. Today’s Confidential, Secret and Top Secret categories were created then, as was the Sensitive Compartmented Information (SCI) concept. SENSINT (Sensitive Intelligence), which contained the information obtained by the overflights, was its own “compartment.”

Eisenhower’s relentless pursuit for intelligence continued into his second term. The TALENT security control system replaced SENSINT. The President created a committee to follow and assess Soviet technical advancements vis-à-vis our own. He once again authorized overflights using the new Lockheed U-2 reconnaissance aircraft. KEYHOLE, CORONA, ICBMs, and artificial satellites, were looming on the horizon; and electronic intelligence (ELINT) was becoming the “preferred information of choice.”

SENSINT, TALENT and CORONA were all carried out in the utmost of secrecy. Had these projects not been highly classified, the public may have seen Eisenhower as a high powered and dynamic President—one who championed the development of ICBMs, nuclear powered submarines and aircraft carriers, nuclear warheads, spy planes, and intelligence gathering satellites. Only now is history beginning to place Eisenhower in a positive light rather than unfairly making him out to be a “golf bum.”

In *Eisenhower and Space*, Launius talks about Eisenhower’s space program prior to the launching of Sputnik—a “measured” program because Eisenhower wanted to move ahead in small, incremental steps that would not overpower the budget. This attitude upset parts of the scientific and military communities as not being aggressive enough, especially in light of recent Soviet advances in space technology. Eisenhower was not worried about this; his hidden agenda was sending reconnaissance satellites over Soviet Bloc countries. When the Soviets launched Sputnik, the U.S. public perceived we were far behind the USSR in all areas of space technology and demanded that the President correct this problem. Eisenhower knew this not to be true and tried to quell public fears, but to no avail. The pro-space communities stirred up enough political pressure that, in the end, Eisenhower established a new civilian-run federal agency—NASA—which centralized many smaller individual space programs under one umbrella. In the Eisenhower tradition, it was moderately funded. However, pro-space communities wanted a bigger and more powerful NASA with much more funding. Eisenhower aimed for the middle ground. Although he did not want to create a new agency, he did so to relieve political pressure, but limited its scope and funding. Later, the Kennedy administration would change that.

Launius stated that, “More than perhaps any other president of the Cold War era, Eisenhower had a formal strategy for defeating the Soviet Union. It was based on long-term economic, military, international, and social and moral policies that would enhance the United States as the world leader. It represented a commitment to constant pressure on the Soviet Union on a broad front, but refrained from confrontation that would require nuclear war to resolve. A key ingredient of this strategy involved not responding to every situation vis-à-vis the Soviet Union as a crisis.” Based on this philosophy, one can now understand Eisenhower’s reluctance

to react to the Soviet’s Sputnik successes.

Launius disagrees with former President Reagan’s assessment of the fall of the Soviet Union when he said that the U.S. simply outspent them into economic oblivion. Rather, it was Eisenhower’s Cold War strategy that started the final downward spiral, an ultimately successful strategy used by every Cold War President. Pretty good for a “golf bum.”

Each author thoroughly researched his chosen topic. Every essay of this book is heavily documented: Launius’ 23-pages essay refers to 100 footnotes, and Hall’s essay has 88. Writing style is clear and precise. This is an excellent book for anyone interested in the politics of military/defense issues of the Eisenhower administration.

*Bill Nardo, NASM Docent Emeritus*



**Tiger Force: A True Story of Men and War.** By Michael Sallah and Mitch Weiss. New York: Little, Brown and Company, 2006. Photographs. Notes. Index. Pp. xi, 403. \$25.95. ISBN-10:0-316-15997-2.

You can spend a lifetime pursuing an unattainable goal or story, but sometimes fortune just dumps it in your lap. This is the case with this book as two reporters, Michael Sallah and Mitch Weiss, were handed 25,000 documents of former Army Criminal Investigation Division Commander Henry Tufts’ personal papers. The Tufts collection dealt with war crimes cases during the Vietnam War. The book grew out of an investigative newspaper series by these two men that was published in the *Blade of Toledo*, Ohio, and the *Pittsburg Post-Gazette* from October 19 - 22, 2003, earning the pair the Pulitzer Prize for reporting. The cache of documents was a gift. But the luck factor subsided and was overridden by a tremendous amount of intensive research, writing, interviewing, and editorial work resulting in the article series and eventually this book.

In the last box of the Tufts papers, Sallah found a folder marked the “Coy Allegation.” The case was named after Gary Coy, a soldier who tipped off Army investigators that a soldier somewhere in the mountains near Chu Lai had severed the head of a baby. The package contained twenty-two documents marked “Confidential” or “For Official Use Only.” Both re-

porters noted that there were no hearings dealing with the “Coy Allegation,” which was not the situation with the other cases in the Tufts collection. (p. 310)

The story begins with chief investigator Gustav Aspey seeking to interview the key Tiger Force team point man, Sam Ybarra at his home on an Indian reservation in Arizona in March 1975. Aspey told him about the alleged atrocities committed between May and November 1967, while Ybarra served with the Tiger Force, a special unit from the 1/327 of the 101<sup>st</sup> Airborne Division. Army planners purposely created the Tiger Force with minimal oversight. Only a few commanders knew what the platoon was actually doing (p. 274). Ybarra was reluctant to talk and asked for a lawyer.

The narrative then shifts to a bar in Kontum, Vietnam, in 1967, where Ybarra met a former high school chum, Ken Green. Ybarra convinced Green to join the Tiger Force shortly after it had suffered heavy casualties at a battle the Tigers called the “Mother’s Day Massacre,” on May 15, 1967. Next, the Tigers were ordered into the Song Ve River Valley in Central Vietnam, a bountiful rice-producing region whose populace had lived and worked as farmers for centuries. The rice was the Viet Cong’s staple food.

Recognizing this, the South Vietnamese Government with its Allied American troops opted to remove the entire population to the Nghia Hanh relocation camp. The people hated the camps because of their prison like atmosphere—it was surrounded by barbed wire and patrolled by armed soldiers. Food was scarce and its populace was forced to sleep outdoors during the monsoon season because there were too few wooden barracks. The camp had only two latrines, which added to the misery and unsanitary conditions that promoted the outbreak of dysentery, and infectious hepatitis and malaria. On June 26, 1967, the refugees broke into the food storage facilities and a riot ensued with two boys killed. Many escaped the camp and joined the Viet Cong, while others headed home to hide out in the hills surrounding the valley, where they hoped to secretly attend to their crops and wait out the occupying troops.

So with the population properly warned and supposedly removed, it became the task of Tiger Force to round up the excess population and ready them for transfer to the camp. The combat tested Tiger Force expected to find only hostile people in the area because it had been declared a “Free Fire Zone.” Under this definition all people—whether armed or

unarmed—were deemed to be the enemy. Controlled from higher headquarters, the Tiger Force was free to roam the countryside and to make its own assessments with respect to the enemy.

The Mothers Day Massacre also brought forth a new and controversial platoon leader, Lieutenant James Hawkins. He joined the Army out of high school in 1958 and had received a battlefield commission in 1966. Hawkins held ROTC and West Point graduates in utter contempt.

Hawkins' educational shortcomings emerged when he was unable to read map coordinates. Fortunately, another officer took over the map reading before Hawkins' failure nearly obliterated the Tiger platoon by friendly fire. While the authors paint a dismal portrait of Hawkins, they

also leave some unanswered questions such as: (1) just how did Hawkins win a battlefield commission? (2) how did he become a helicopter pilot and later a pilot instructor and serve another tour in Vietnam? (3) How and when did he receive flight training after leaving the Tigers? (4) Why did Hawkins harbor so much disdain for the Vietnamese people?

With Hawkins in charge, factions evolved within the Tigers. Some plainly hated his methods and character, some would stand up to him, others despised him but were afraid to challenge him. Eventually mutilation of corpses became the "norm." Yberra was the most notorious participant with Team Leader Sergeant William Doyle a close second.

There were charges that some prison-

ers, who were supposedly sent to the relocation camp, instead were subsequently shot at point blank range. Reports also told of attacks without warning on hamlets. The subsequent body count of enemy dead listed old men, women, and children. Some soldiers left the unit in disgust when they could, and others reported the incidents to higher authorities. Many of the reports were "buried."

The story shifts to the three-year investigation supervised by Gustav Aspey, whose interviews shed more light on the plight on the Tiger Force personnel following the war. He discusses the convoluted definition of the term "Free Fire Zone." Aspey suspected that even battalion commanders knew that the free-fire zones were being abused, but chose to "look the other way." (p. 290)

Perhaps no one knows just how he/she would react in a combat situation. Some might feel pain for committing atrocities; some others might not experience immediate pain but later their minds might conjure up tormenting thoughts. War itself is an atrocity and it is not for those without its experience to judge proper behavior in hellish combat situations. Did the Department of Defense and the Army do the right thing by burying the issue?

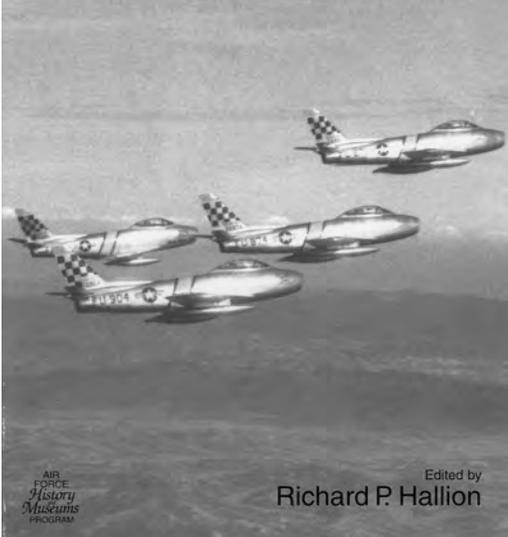
The U.S. Army in 1975 was beset by serious drug problems and anti-military and anti-military spending citizenry. The Vietnam War was over and the Army was protecting its troubled institution by burying the case. They had no desire to deal with another Mi Lai massacre episode. Were they wrong to want to move on?

The authors dealt fairly with their discovery and they showed sympathy not only for the soldiers and their victims, but also for the plight of the Vietnamese farmers who were displaced from their ancestral lands. The authors may take pride in their work and rest assured that their find could only come to fruition in book and article form in a democracy such as ours. In a dictatorship their work would never have seen the light of day and any newspaper willing to publish it would be subsequently squelched.

This is a quick and enthralling read. As a Vietnam War veteran I am proud to live in a country that allows its citizens to be critical of the wrongdoings of its institutions.

*George M. Watson, Jr., Ph.D., Senior Historian, Air Force Historical Studies Office.*

## *Silver Wings, Golden Valor: The USAF Remembers Korea*



Edited by  
Richard P. Hallion

Available at  
[WWW.GPO.GOV](http://WWW.GPO.GOV)

AIR  
FORCE  
*History*  
and  
*Museums*  
PROGRAM

# Books Received

Armstrong, Jim. *From POW to Blue Angel: The Story of Commander Dusty Rhodes*. Norman: University of Oklahoma Press, 2006. Maps. Illustrations. Photographs. Glossary. Bibliography. Pp. xx, 295. \$29.95 ISBN: 0-8061-3764-9

Benson, Erik. *Aviator of Fortune: Lowell Yerek and the Anglo-American Commercial Rivalry, 1931-1945*. College Station: Texas A&M University Press, 2006. Photographs. Notes. Bibliography. Index. Pp. xii, 264. \$45.00 ISBN: 1-58544-500-2

Chertok, Boris. *Rockets and People*. Vol. II: *Creating a Rocket Industry*. Washington, D.C.: NASA History Division, 2006. [NASA SP-2006-4110]. Illustrations. Photographs. Notes. Glossary. Index. Pp. xxviii, 669. ISBN: 0-16-076672-9

Franks, Norman. *Air Battle for Dunkirk, 26 May-3 June 1940*. London: Grubb Street, 2006. Photographs. Notes. Appendices. Bibliography. Index. Pp. 192. \$19.95 ISBN: 1-904943-43-8

Galula, David. *Pacification in Algeria, 1956-1958*. Santa Monica, Calif.: RAND Corp., 1963 [new Edition, 2006]. Illustrations. Appendixes. Pp. xxv, 298. \$28.50 Paperback ISBN: 0-8330-3920-2

Gillespie, Ric. *Finding Amelia: The True Story of the Earhart Disappearance*. Annapolis, Md.: Naval Institute Press, 2006. Maps. Illustrations. Photographs. Notes. Index. Pp. xiv, 276 + DVD. \$28.95 ISBN: 1-59114-319-5

Gross, Chuck. *Rattler One-Seven: A Vietnam Helicopter Pilot's War Story*. Denton: University of North Texas, 2004. Maps. Photographs. Notes. Glossary. Bibliography. Index. Pp. xiii, 229. \$14.95 Paperback ISBN: 1-5441-221-3

Kinney, Jeremy R. *Airplane: The Life Story of a Technology*. Westport, Ct. and London: Greenwood

Press, 2006. Photographs. Glossary. Bibliography. Index. Pp. xxiii, 160. \$ ISBN: 0-313-33150-2

LaGrandeur, Philip. *We Flew, We Fell, We Lived: Stories from RCAF Prisoners of War and Evaders, 1939-1945*. St. Catharines, Ont.: Vanwell Publishing, 2006. Maps. Tables. Diagrams. Illustrations. Photographs. Notes. Appendices. Glossary. Bibliography. Index. Pp. 400. \$29.95 ISBN: 1-55125-10-8

Long, Austin. *On "Other War": Lessons from Five Decades of RAND Counterinsurgency Research*. Santa Monica, Calif.: RAND Corp., 2006. Photographs. Appendix. Pp. xvii, 101. \$20.00 Paperback ISBN: 0-8330-3926-1

Masin, Barbara. *Gauntlet: Five Friends, 20,000 Enemy Troops, and the Secret that Could Have Changed the Course of the Cold War*. Annapolis, Md.: Naval Institute Press, 2006. Map. Photographs. Notes. Appendices. Glossary. Bibliography. Index. Pp. xii, 382. \$29.95 ISBN: 1-59114-515-5

Moyar, Mark. *Triumph Forsaken: The Vietnam War, 1954-1965*. New York: Cambridge University Press, 2006. Maps. Photographs. Notes. Glossary. Bibliography. Index. Pp. xxvi, 512. \$32.00 ISBN: 0-521-86911-0

Ostlund, Mike. *Find 'Em, Chase 'Em, Sink 'Em: The Mysterious Loss of the WWII Submarine USS Gudgeon*. Guilford, Ct.: The Lyons Press, 2006 [an imprint of the Globe Press]. Maps. Photographs. Appendices. Bibliography. Index. Pp. xxi, 471. \$26.95 ISBN: 1-59228-862-6

Pons, Gregory. *8th Air Force: American heavy bomber books in England 1942-1945*. Paris: Histoire & Collections, 2006. Photographs. Illustrations. Pp. 192, \$39.95 ISBN: 2-915239-82-7

## PROSPECTIVE REVIEWERS

Anyone who believes he or she is qualified to substantively assess one of the new books listed above is invited to apply for a gratis copy of the book. The prospective reviewer should contact:

Col. Scott A. Willey, USAF (Ret.)  
3704 Brices Ford Ct.  
Fairfax, VA 22033  
Tel. (703) 620-4139  
e-mail: [scottwille@aol.com](mailto:scottwille@aol.com)

\* Already under review.

# Coming Up



Compiled by George Cully

## GOOD NEWS & BAD

The good news is that George Cully, the editor of this department since 1996, was promoted and named to be the Chief Historian for the Air University at Maxwell AFB, Alabama. The bad news (for us) is that his new duties preclude him from continuing to compile "Coming Up." "Congratulations, George! We're going to miss you."

Consequently, readers are invited to send listings to:

Air Power History  
P.O. Box 10328  
Rockville, MD 20849-0328

## 2007

### Jan 4-7

The **American Historical Association** will hold its 121st annual meeting in Atlanta, Georgia. Theme: **Unstable Subjects: Practicing History in Unsettled Times**  
See: <http://www.historians.org/annual/2007/index.cfm>

### Jan 16

The **Military Classics Seminar** will meet at Ft. Myer, Va. David W. Hogan, Center of Military History, will review Alan D. Gaff's book, *Bayonets in the Wilderness: Anthony Wayne's Legion in the Old Northwest*. Norman, OK: University of Oklahoma Press, 2004.

### Feb 20

The **Military Classics Seminar** will meet at Ft. Myer, Va. Edwin C. Bearss will review Bell I. Wiley's books, *The Life of Johnny Reb: The Common Soldier of the Confederacy*. Bobbs-Merrill, 1943 and *The Life of Billy Yank: The Common Soldier of the Union*. Bobbs-Merrill, 1951.

### Mar 20

The **Military Classics Seminar** will meet at Ft. Myer, Va. Mark D. Mandeles, j. de Bloch Group, will review Michael R. Gordon's and Bernard E. Trainor's book, *Cobra II: The Inside Story of the Invasion and Occupation of Iraq*. New York: Pantheon, 2006.

### Mar 20-21

The **American Astronautical Society** will hold its 45th annual meeting at the University of Maryland. Theme: "Sputnik to Orion" – Perspectives, Opportunities and Future Directions." For information, call: (703) 866-0020

### Mar 29-Apr 1

The 100th meeting of the **Organization of American Historians** will be held in Minneapolis, Minnesota. In addition to commemorating its centenary, the OAH has dedicated the meeting to "American Values." See: <http://oah.org.meetings/2007>.

### Apr 17

The **Military Classics Seminar** will meet at Ft. Myer, Va. Dina R. Khoury, George Washington University, will review two books: Wilkinson D. Bird's, *A Chapter of Misfortunes: The Battles of Ctesiphon and of Dujailah, and the British Campaign in Mesopotamia, 1915-1916*. London: F. Groom, 1923 (Reprint London: Helion, 2006) and Charles V. F. Townshend's *My Campaign in Mesopotamia*. London: Thornton Butterworth, 1920.

### Apr 19-22

The **Society for Military History** will host its 74th meeting at the Catocin Center for Regional Studies at Frederick (Maryland) Community College. The theme will be: "Crossroads of War" concerning the intersection between the military and civilian sectors of society. See: <http://catocincenter.frederick.edu>

### May 15

The **Military Classics Seminar** will meet at Ft. Myer, Va. Timothy K. Nenninger, National Archives, will review Edward M. Coffman's book, *The Regulars: The American Army, 1898-1941*. Cambridge, Mass.: Belknap Press, 2004.

### June 19

The **Military Classics Seminar** will meet at Ft. Myer, Va. Sanders Marble, Office of Medical History, U. S. Army, will review Laurence Stallings's book, *The Doughboys*. New York: Harper, 1963.

### Oct 18-21

The **Society for the History of Technology** will hold its annual meeting in Washington, DC. See <http://www.historytechnology.org/annualmtg.html>

### Oct 24-28

The **Oral History Association** will hold its annual meeting at the Marriott Oakland City Center in Oakland, California. The theme is: "The Revolutionary Ideal: Transforming Community through Oral History." See [http://omega.dickinson.edu/organization/oha/org\\_am.html](http://omega.dickinson.edu/organization/oha/org_am.html)

## Piston-Engine Afterburner?

I found the article, “Cobras Join the Battle: P-39s and P-63s in Soviet Forces,” [*Air Power History*, Vol. 53, No. 2] very interesting, but in my eyes, one small item spoiled the whole thing. The author states that the operational life of the engines was degraded because of “excessive afterburning that overheated the engine oil and fused and jammed the bearings.” Since when did piston-engine, propeller-driven aircraft sport an afterburner? Afterburners are for jet aircraft, not the World War II piston engine aircraft. I believe the author had in mind the use of war emergency power, which is obtained by injecting a 50-50 water-methanol mixture directly into the engine cylinders. This prevented detonation of the fuel, which allowed the use of greater manifold pressure, which in turn increased the power.

Robert V. Brulle, Ft. Myers, Florida

*Editor's Note:* You are correct, but the author is not at fault. Mr. Kulikov's article was writ-

*ten originally in Russian, translated into French, then retranslated into English, and finally into American English. Obviously, something was lost in translation.*

## Spell-check, please.

I doubt that I am the first to write you on this subject, but here goes. Your article on the subject World War II plane by Muscovite Victor Kulikov was an interesting one (I thought the P-63 was far superior to the P-39, but the Russians apparently thought not). Anyway, I had always called the P-39 the Airacobra, but here the Muscovite omitted the middle “a.” I entered “P-39” in my computer and came up with many hits all spelling it “Airacobra”. What do you think of that?

Ed Mason

*Editor's Note:* We did it the old-fashioned way—we checked Craven and Cate. Your suspicion was confirmed—the middle “a” was omitted erroneously.

## The Unforgettable B-29s

I enjoyed reading, “The Unforgettable B-29s: A Tribute,” [*Air Power History*, Vol. 53, No. 2]. Yang Jing is to be congratulated on the historical accuracy of his article. I was the top gunner of a B-29 crew in the XXth Bomber Command's 468th Bombardment Group, 792d Squadron. The 468th was based near Kharagpur (Salua Airfield), India. Our forward base in China was designated as A7, which was near Pengshan (Penshan). The four forward China bases for the various XXth Bomb Groups were all in the Chengdu area. Our bomb group lost four B-29s due to the Mukden missions. For some reason, unknown to me, our crew wasn't scheduled to go on these two missions. I wrote a book, *My B-29 Story*—which contains many details about the Mukden missions and the 468th; it was reviewed in *Air Power History* [Vol. 52, No.2] by Col. Scott Wiley.

Roger Sandstedt, Ballwin, Missouri.



## President George W. Bush at the Dedication of the Air Force Memorial

Thank you all. Thank you very much. Mr. Secretary, thank you for your kind words. Secretary Nicholson, General Hayden, General Pace, Secretary Wynne, General Moseley, Chief Master Sergeant McKinley, Ross Perot, Jr., Major General Grillo, members of the Armed Forces, military veterans, and distinguished guests: Laura and I are honored to join you on this historic day.

With today's ceremony, the United States Air Force begins a year-long celebration of its 60th birthday. As someone who recently crossed that milestone—it's not all that bad. I can think of no better way to begin the celebrations than by dedicating this magnificent monument. So, General Grillo, here in the company of the brave men and women of the United States Air Force, I proudly accept the Air Force Memorial on behalf of the American people.

A soldier can walk the battlefields where he once fought; a Marine can walk the beaches he once stormed; but an airman can never visit the patch of sky he raced across on a mission to defend freedom. And so it's fitting that, from this day forward, the men and women of the Air Force will have this memorial, a place here on the ground that recognizes their achievements and sacrifices in the skies above.

Building this memorial took a lot of talent and creativity and determination. Like the aircraft whose flight it represents, this memorial is an incredible feat of engineering. Like the country whose freedom it represents, this memorial is hopeful and optimistic. By its design, this monument raises our eyes toward the vast and open skies, and focuses our mind on the endless possibilities of human flight.

Having flown an F-102, I know the exhilaration of flight; and as a son of an aviator who was shot down in combat, I am keenly aware of its dangers. I have spent a lot of time with the aviators, and one thing about them that has always struck me, aviators, by their nature, are optimistic people. It takes an optimist to climb into a steel tube, race to the sky at 1,500 miles an

---

hour heading toward danger, and expect to return home safely. Yet this is precisely what the men and women of the Air Force do for our country every day.

America is grateful for your service, and I'm proud to be the Commander-in-Chief of such fine men and women

Today it's hard to imagine a world without the Air Force protecting us in the skies above. Yet, by the standards of history, air power is still a relatively new phenomenon. Men have been fighting on land and sea for thousands of years, but there are still Americans alive today who were born before man had ever flown. Over the past century, manned flight has gone from the dream of two brothers working in an Ohio bicycle shop to an indispensable tool in our nation's arsenal.

We saw the importance of air power six days ago—six decades ago, after our nation was attacked at Pearl Harbor. Soon after the attack, General Hap Arnold called Lieutenant Colonel Jimmy Doolittle into his office and gave him an unprecedented mission—retaliate against Tokyo. Just over four months later, Doolittle's raiders had shocked the world by striking the enemy capital some 4,000 miles away from Pearl Harbor. To do it, they had to load B-25 bombers on the deck of an aircraft carrier, sail within a few hundred miles of enemy territory, take off and drop their payloads, knowing they had little chance to make it safely to China.

But the Doolittle raid sent a clear message to America's enemies: If you attack this country and you harm our people, there is no corner of the Earth remote enough to protect you from the reach of the aviators who wear our nation's uniform.

Five years ago, our enemies learned this lesson anew after the attacks of September the 11th, 2001. Within weeks of the attack, pilots at Whiteman Air Force Base in Missouri boarded B-2 stealth bombers, flew halfway across the world, refueling in mid-air, took out the Taliban and al Qaeda targets in Afghanistan, dropped into Diego Garcia for engine running crew changes, and then made the journey home. Jimmy Doolittle would have been proud.

Together with Navy and Marine aircrew, submariners, Special Ops forces from every service, and a vast coalition of nations, the United States Air Force helped deliver justice to a regime nearly 7,000 miles away from the World Trade Center, and helped put the terrorists on the run.

Five years have passed since the opening salvos in the war on terror, and every day in this war we depend on the skill and determination of the men and women of the United States Air Force. In this war, Battlefield Airmen on the ground scout out enemy positions, locate targets for aviators circling above, and use advanced laser guidance systems to steer bombs, allowing us to strike the terrorists and spare innocent civilians.

In this war, Air Force aviators in Nevada step into a camouflage trailer on their base, sit down in front of computer consoles and fly Predator unmanned aerial vehicles half a world away over the skies of Iraq, using them to find and remove terrorist nests in remote corners of the world.

In this world—in this war, our airmen operate advanced space satellites circling the Earth. They beam down real-time images of terrorist positions to our troops on the ground so they can strike the enemy before the enemy can strike our country. In this war, Air Force C-130 crews deliver supplies to our troops on the front lines; Air Force teams disarm and remove roadside bombs; Air Force maintenance squadrons keep our planes in the air; Air Force A-10 Thunderbolts provide close air support for troops in contact with the enemy. And Air Force search-and-rescue teams evacuate soldiers and sailors, airmen and Marines injured in the war on terror.

Whether they are serving on the front lines, or bases overseas, or here in the homefront, the men and women of the United States Air Force bring honor to the uniform, and they are bringing us victory in the war on terror.

The stakes in this war could not be higher. Terrorists and extremists are fighting to overthrow moderate governments across the broader Middle East so they can take control of countries and use them as bases from which to attack America. If we do not defeat these enemies now we will leave our children to face a Middle East overrun by terrorist states and radical dictators armed with nuclear weapons. We are in a war that will set the course for this new century and determine the destiny of millions across the world. Defeating the terrorists and extremists is the challenge of our time, and the calling of this generation.

And like generations that came before, we will answer history's call with confidence. We will confront the threats to our way of life; we will fight for our liberty without wavering; and we will prevail.

Victory in this war depends on the one thing that has not changed since the founding of the Air Force six decades ago—the courage of the men and women who wear the Air Force blue. We see that courage in the men and women of the Air Force who return from battle with wounds they will carry with them for the rest of their lives. We see that courage in the airmen who left our shores to defend freedom and did not live to make the journey home. They gave their lives so that their fellow Americans could enjoy a bright horizon of freedom and peace. We mourn every loss. We pray for their families. And here at this memorial, we consecrate their memory for the ages.

This memorial lies in sight of Arlington National Cemetery, where so many of those fallen airmen are buried. This memorial also lies in sight of the Pentagon, where our nation came under attack. It is a fitting location. Under these magnificent spires we pay tribute to the men and women of the Air Force who stand ready to give all for their country. And looking from this promontory to a place once filled with smoke and flames, we remember why we need them.

Every man and woman who has worn the Air Force uniform is part of a great history. From the Berlin Airlift to the Korea War, to Vietnam, to the Gulf War, to Kosovo and today's war on terror, a long blue line of heroes has defended freedom in the skies above. To all who have climbed sunward and chased the shouting wind, America stops to say: Your service and sacrifice will be remembered forever, and honored in this place by the citizens of a free and grateful nation.

May God bless you all.

## **Brigadier General Robert F. McDermott 1930-2006**



A determined leader and dynamic innovator, Brig. Gen. Robert F. McDermott, USAF (Ret.) died after a stroke in San Antonio, Texas, on August 28, 2006. McDermott pioneered the development of the pace-setting academic programs at the brand-new United States Air Force Academy. After retiring from the Air Force, he expanded USAA from a small automobile insurance firm into a giant financial services company.

Born in Boston, Massachusetts, on July 31, 1920, "McD", as he was publicly known to his peers and superiors and privately among those of us who were his junior officers, graduated from the Boston Latin School in 1937 and studied for two years at Norwich University. He won an appointment to the United States Military Academy at West Point in 1939. In 1942, he and his classmates who successfully completed flight training won their wings. Upon his early graduation and commissioning in January 1943, Second Lieutenant McDermott went to California for training in the *Lockheed P-38 Lightning* with the newly formed 474th Fighter Group. He flew 61 combat missions in the European Theatre, became Assistant

Group Operations Officer for the 474th Fighter Group and earned the Bronze Star, the Air Medal with the Silver Oak Leaf Cluster, and the European Theater of Operations ribbon with six battle stars.

After the war, McDermott stayed in Europe for duty on General Eisenhower's staff. Pentagon service came next, followed by his selection to study for an MBA degree at the Harvard Business School that prepared him for a tour as an economics instructor at West Point. He told me when I was working for him as a faculty member at the Air Force Academy that he had sought exchange pilot duty with the U.S. Navy after his service at West Point. In the meantime, Lt. Gen. Hubert Harmon, the director of the planning for the future Air Force Academy and Superintendent-designate, intervened to bring him to that institution in 1954 as Professor of Economics and Vice Dean of the Faculty at its temporary location on Lowry Air Force Base in Denver, Colorado.

Appointed Dean of the Faculty in 1956 and a Permanent Professor in 1957, he began to push curriculum initiatives that would challenge cadets to broaden and deepen their education and introduced admission policies that favored those future cadets who met the "whole man" mental, physical, and character standards. His initiatives got the attention of the other service academies, which had long offered only a lock-step education. Also, his leadership won the highly unusual academic accreditation of the Academy before its first class had graduated in 1959 from its permanent site near Colorado Springs.

The excitement of the Academy's opening at its permanent site in August 1958 permeated its temporary faculty offices when I reported there from graduate school in that month as a new captain. An early invitation to lunch with other recent arrivals at the Dean's table on the staff tower of the just-opened dining hall (later dedicated as Mitchell Hall) gave me my first contact with then-Colonel McDermott, unmistakably a feisty Irish American, New England accent and all. President Eisenhower would nominate him in 1959, with Congressional approval, to be the Academy's first Permanent Dean of the Faculty with the rank of brigadier general.

He would serve as Dean of the Faculty until 1968. In two separate tours of duty across seven of those twelve years, I and many other faculty members had regular opportunities to see him in action or to be aware of his tireless involvement as an “around the clock” worker in shaping new academic initiatives and making his presence felt in all aspects of the Academy’s life. One special sign of his presence was the trombone he played so well at social functions; another was his large family. When the end of his twelfth year as Dean approached, however, one sensed that he felt he had “topped out” professionally as an Air Force officer and was ready to move on to a new career. He retired from the Air Force with the Distinguished Service Medal after accepting an invitation in the Fall of 1968 to move to San Antonio as Executive Vice President of USAA (then, United Services Automobile Association). By January 1969, he was the head of USAA and was on his way to an extraordinary business career, although never far away from his military and especially, his Air Force ties through his contacts with the primary customers of the USAA.

Through his leadership in maximizing the involvement of its employees in the life and work of USAA and the surrounding community and in developing easy working relationships with the people the company served, its membership grew four hundred percent and its assets increased from \$207 million to over \$30 billion. A significant corollary to his leadership of USAA was his leadership in promoting the economic development of his company’s host, the City of San Antonio. In rapid succession, he led, among other activities, the Greater San Antonio Chamber of Commerce in 1974; in the next year, he founded the Economic Development Foundation and was its Chairman until 1980. In 1984, he co-founded the Texas Research and Technology Foundation to start the development of the Texas Research Park. During the same decade, he began a volunteer corps and mentor program at USAA to involve company employees in social and charitable efforts throughout their city.

In 1993, he became Chairman Emeritus of USAA, devoting himself to community work with business and charitable activities. An abundance of state, national and institutional recognition had already begun to come his way during and after the nineteen-eighties, to include his induction into the Texas Business Hall of Fame in 1987 and the American National Business Hall of Fame in 1989; West Point gave him its Distinguished Graduate Award in 1993; Harvard Business School singled him out in 1998 for its highest honor, the Alumni Achievement Award, in recognition of his attainments at the Air Force Academy and USAA. In 1991, The City of San Antonio recognized his many contributions by naming part of Interstate Highway 10 West after him and the Air Force Academy named its Cadet Library in his honor in 2003.

His Funeral Mass in San Antonio on September 1, 2006 drew a capacity audience. A majority of those attending understandably were past or present USAA employees, who had risen to identify themselves when invited by the pastor of the church. His family of five children and their spouses, fourteen grandchildren and twelve great-grandchildren were strongly represented. The memorable one hour and forty-five minute service was marked by eulogies and hymns including “On Eagle’s Wings” and a very appropriate trombone rendition of “When the Saints Come Marching In”. Later that day, his body was buried with full military honors at the Fort Sam Houston National Cemetery.

His first wife, another McDermott, Alice Patricia, whom he had married on the day after his graduation from West Point, preceded him in death in 1990. He married his second wife in 1994, Marion Slemon of Colorado, who was the widow of the former Deputy Commander of the North American Air Defense Command, Canadian Air Marshal, C. Roy Slemon.

General “McD” made a special mark in both war and peace through his service in combat, in powerfully helping to strengthen the education of future Air Force officers and leaders, and in his remarkable leadership in business and community service.

*A tribute by Brig. Gen. Alfred F. Hurley, USAF (Ret.)*



The "What is it?" aircraft in our last issue was a Boeing B-50 Superfortress bomber of the 1950s. At least one reader thought this mystery challenge too easy. After all, 371 of the bombers were built between 1947 and 1953, and performed many missions.

In early 1951, B-50 Superfortresses dropped five atomic bombs in a Pacific test program called Operation Ranger. The nuclear tests enabled the U.S. to improve the triggering devices in its doomsday weapons. The tests also demonstrated the prowess of the B-50—the four-engine, long-ranged strategic bomber that resembled its famous predecessor, the B-29.

The B-50 never dropped a bomb in combat. Except where it served as a reconnaissance aircraft on the frontiers of the Cold War, no B-50 ever confronted gunfire from an enemy. Only the EB-50 electronic surveillance version was used in the Korean War. But thousands of airmen flew and maintained the B-50 in the critical early years of the atomic age before the Air Force converted to jet bombers.

The B-50 looks almost like the B-29. Its distinguishing features include a taller tail (32 feet, 8 inches high) and external 700-gallon wing tanks (on most models) that provided a range of 4,650 miles. Four Pratt & Whitney R-4360-45 Wasp Major turbocharged radial engines, rated at 3,500 horsepower, powered the B-50 (and its prototype, the XB-44).

Although intended as a strategic bomber and performing that job well, the B-50 series also gave us the KB-50 air refueling tanker (that was em-

ployed briefly during our early years in Vietnam), RB-50 reconnaissance, and WB-50 weather versions. A program called "Tiger Boy," mounted from Yokota Air Base, Japan, sent RB-50s prowling the borders of North Korea and the Soviet Union, while language-trained radio operators monitored Soviet Bloc communications.

The first production B-50A flew on June 25, 1947. On March 2, 1949, a B-50A Superfortress named "Lucky Lady II" of the 43rd Bomb Group completed the first nonstop round-the-world flight, covering 23,452 miles in 94 hours and one minute. Commanded by Capt. James Gallagher with a crew of 14, "Lucky Lady II" was refueled in flight by KB-29 tankers.

The final versions in service were KB-50J and KB-50K tankers with extra power provided by a pair of podded 5,200-pound thrust General Electric J47 turbojet engines beneath the outer wings.

Those who enter the "History Mystery" contest rarely get it wrong, yet of 39 readers who participated, four identified the B-50 incorrectly. So much for the idea that this choice of aircraft was too easy.

This quarter's history mystery winner is retired Col. Robert J. Powers of Shreveport, Louisiana. He will receive a mint copy of *Chopper*, my book about American helicopter pilots and crews. Maj. Eugene Sommerich took our follow-up photo of a KB-50K of the 429th Air Refueling Squadron at Langley Air Force Base, Virginia, on June 10, 1955.

## This Issue's Mystery Plane

Once more, we present the challenge for APH's plane-spotting readers—depicted in another photo by Sommerich. See if you can identify this month's "mystery" aircraft. But remember the rules, please:

1. Submit your entry on a postcard. Mail the postcard to Robert F. Dorr, 3411 Valewood Drive, Oakton VA 22124. Entries may also be submitted via e-mail to robert.f.dorr@cox.net.

2. Correctly name the aircraft shown here. Also include your address and telephone number. Entries not accompanied by a phone number will be disqualified.

3. A winner will be chosen at random from

among those who correctly identify the aircraft, and will receive an aviation book.

This feature needs your help. Do you have a photo of a rare or little-known aircraft? We'll return any photos provided for use here.

