

AIR POWER

SUMMER 2013 - Volume 60, Number 2
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History





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Leading off this summer 2013 edition of *Air Power History*—our sixtieth year of publication—are four articles that we are sure you will enjoy.

The first is John Hildebrand's detailed account of the AACS Naples Detachment of the Army Air Corps, 1943-1947. This detachment was one of some 700 that provided global communications before the age of satellites. Although it sounds primitive by today's standards, it was a gigantic undertaking that required much effort and ingenuity to accomplish.

The second article is by Col. John L. Cirafici, USAF (Ret.), the airfield operations officer for Operation Restore Hope, the 1992-1993 humanitarian airlift undertaken to help feed hundreds of thousands of starving Somalis. Here, too, mastering politics and using ingenuity were essential to accomplish the mission and save countless lives caught up in a devastating civil war.

The third article is Part II, of Bill Head's history of the battle for Ra's Al-Khafji from January 29 to February 1, 1992. Air power "had repulsed a three-division attack and thwarted a major Iraqi initiative" and it left more than 300 land vehicles smoldering.

Jacob Neufeld and George Watson surveyed the treatment of Prisoners of War throughout the twentieth century. While they found widespread abuse by all governments, the United States stood out as the most humane.

There are more than twenty book reviews in this issue. Be sure not to miss the "Message from the President," Maj. Gen. Dale Meyerrose on page 60.

On a very sad note, Dr. Alfred F. Hurley, Brig. Gen., USAF (Ret.) died on June 8. (His obituary begins on page 62.) Dr. Hurley was one of the giants of the Air Force and the Air Force Historical Foundation. He served the Foundation with distinction, as a trustee and publisher of this journal. In October 2008, he was honored with the I.B. Holley Prize for his "sustained, significant contributions to the research, interpretation, and documentation of USAF history. We extend our condolences to his wife, Johanna, and the entire Hurley family.

His passing represents a great loss to our Nation.

A handwritten signature in black ink, reading "J. Neufeld". The signature is fluid and cursive, with a large loop at the beginning and a long, sweeping underline.

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The AACSNaples Detachment of the Army Air Corps, 1943-1947





John R. Hildebrand

[AACS] PURPOSE WAS TO OPERATE AIR CORPS RADIO FACILITIES FOR THE CONTROL OF AIR TRAFFIC BETWEEN ARMY FLYING FIELDS

THIS IS THE STORY OF ONE OF THESE DETACHMENTS, THE NAPLES AACS DETACHMENT AT CAPO-DICHINO AIRFIELD, ITALY.

The Army Airways Communications Service (AACS) was created by the Army Air Corps on November 15, 1938, the result of a proposal by Lt. Col. Henry H. (Hap) Arnold, destined to become Chief of the Army Air Corps. Its purpose was to operate Air Corps radio facilities for the control of air traffic between Army Flying Fields in the Continental United States.

Communications have been an integral part of the United States Air Force from its beginning in 1926, when the Army Air Corps was created from the Army Signal Corps. The early Army aviators were aware that the advent of radio offered the potential for air-to-ground and ground-to-air communication, but it was not until the 1930's that radio equipment for aircraft was developed to shield the equipment from engine interference, minimize its size and weight, and eliminate the danger of fire from inadequate wiring. In 1934, then Lt. Col. Henry H. (Hap) Arnold, led a flight of ten B-10 bombers on a round trip flight to Alaska from Bolling Field, Washington, D.C., demonstrating the dependability of newly developed radio equipment. More importantly, the flight demonstrated the Air Corps' need for airways communications dedicated to national defense requirements. Following his flight, Arnold advocated the establishment of a separate communications system for military aircraft. The system would provide point-to-point communications stations for the transmission of flight plans and operating orders, with any one of several stations capable at any time to establish radio contact with aircraft in flight. The network would also broadcast weather information and provide control for all arrival and departure traffic at military airfields.

Initially, the AACS was charged "with the operation of all fixed Air Corps radio facilities installed for the purpose of facilitating air traffic between Army Flying Fields in the Continental United States." Air-ground and ground-air contacts, point-to-point messages relating to the movement of aircraft, control of military air traffic, and the provision of navigational aids were among the new system's responsibilities.

This all changed with the advent of World War II and the resulting increase in Army Air Corps operations. For the AACS, its challenge was to establish a network of over 700 detachments providing fast and reliable communications connecting the United States to all theatres of operations. The resulting system provided unified command, centralized flight control, and flexibility in the employment of tactical aircraft. The system also accommodated the movement of ferried and transport aircraft along military airways and provided data on

which dependable weather predications could be made. Radio and wire facilities circled the globe, providing point-to-point, air-to-ground and ground-to-air communication. Transmission of the human voice, homing signals for aircraft navigation and coded messages were also among the system's functions.

Each AACS detachment connected a variety of commands and theatres, in some instances reaching into forward areas of combat. These detachments varied in scope and complexity, but whatever their capability, it was each unit's officers, radio and teletype operators, cryptographers, equipment maintenance and control tower personnel and other support staff who were responsible for operating and maintaining an uninterrupted worldwide military communications system that was critical to the success of the nation's war effort.¹

This is the story of one of these detachments, the Naples AACS Detachment at Capodichino Airfield, Italy. It was established as a temporary station in late 1943, but was destined to become a permanent Class A station, the largest and most important in the Mediterranean Theatre of Operations (MTO). It was the first AACS detachment to be established on the European mainland.

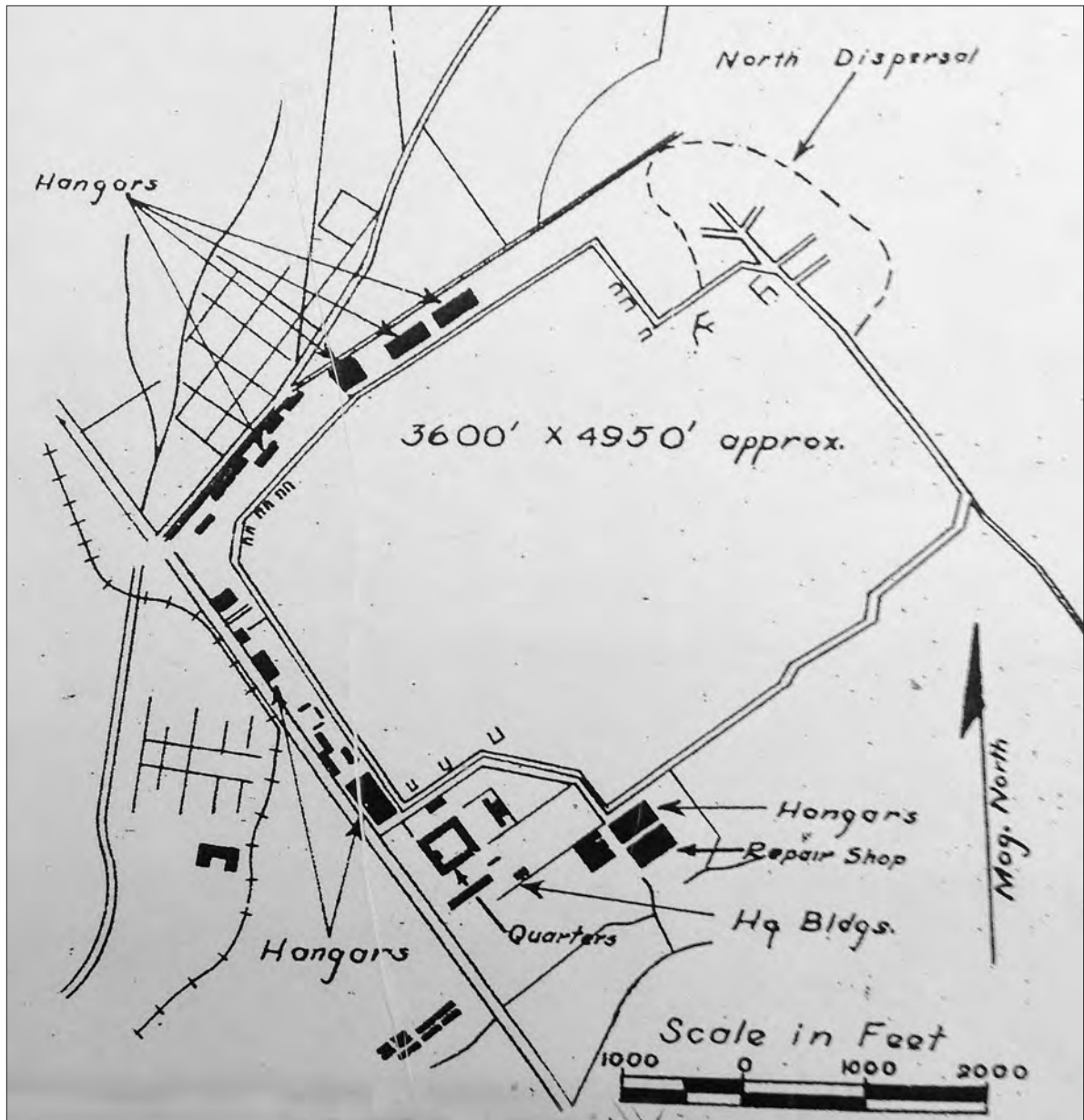
Its story began in North Africa in late 1942, when the 18th AACS Squadron landed at Casablanca, French Morocco. The 18th Squadron had been activated in October 1942 at AACS Headquarters in Asheville, North Carolina and assigned to the Twelfth Air Force. Following the American invasion of North Africa on November 8, 1942, the 18th landed at Casablanca in December and established its headquarters at Algiers, with an operational detachment located at the Maison Blanche airport outside Algiers.

Maison Blanche was the main airfield for Twelfth Air Force units supporting the North African campaign against the German Afrika Corps. Its fighter and bomber groups operated from that location from November 1942 until July 1943. Maison Blanche was also a major hub for the Air Transport Command. In March 1943, the 18th Squadron was transferred from the Twelfth Air Force and placed under control of the AACS African Airways Communications Area.²

With the successful completion of the North African campaign, the American and British armies invaded Sicily on July 9, 1943, and by September 6 the 18th Squadron had located operational detachments at Palermo and Catania. On September 8, Italy and the Allies announced an armistice, the result of secret negotiations. The German army then occupied all of Italy. On September 9, American forces invaded the European mainland at

John R. Hildebrand of Salem, Virginia, was assigned to the Naples Detachment from February until October, 1946. During that period he was promoted to sergeant and served as NCOIC of the Remote Transmitter's station. Hildebrand is a retired civil engineer, a 1950 graduate of the Virginia Polytechnic Institute, Blacksburg, Virginia. After forty-one years as a consulting engineer, retirement afforded the opportunity to examine the history of Virginia and the larger events surrounding his military service in the U.S. Army Air Corps, including the organization and country in which he served.

**THE CAPO-
DICHINO
AIRFIELD
HAD SERVED
BOTH
ITALIAN CIVIL
AND
MILITARY
AVIATION**



Salerno and began their advance up the western side of the Italian Peninsula. They arrived in Naples on October 1 and by the twelfth the German defenses on the north bank of the Volturno River had been breached. The following day Italy declared war on Germany and was admitted into the United Nations as a co-belligerent.

As American and British forces continued their advance north, up the Italian Peninsula, the Twelfth Air Force was moving its fighters and bombers to the airfields of southern Italy. It was time for the 18th Squadron to establish its presence on the Italian mainland. The Squadron's first step was to locate a small detachment of communications specialists and equipment at Capodichino Airfield, located in the Naples suburb of San Pietro a Paterino on the main road north to Caserta and Rome. The group arrived there on November 30, 1943, on a flight in three C-47s from 18th Squadron headquarters at Algiers. The group was organized from the Squadron's smaller units; it included First

Lt. Charles Moxley, MSgt. James Dalzell, station chief, TSgt. Richard Horton, cryptographer chief, TSgt. Fred Gereschied and Staff Sergeants Raymond Hammond, Charles Bennett and W. E. Williams, radio men, William Geiger, maintenance chief and cryptographers Cpl. David Fowley and Ralph Dawson and Pvt. Robert Nichols. First Lt. Joseph E. Ash, the detachment's commanding officer, had arrived in Naples several days earlier.

The Capodichino Airfield had served both Italian civil and military aviation and in early 1943, as many as 175 German and Italian military aircraft had been located there. Support facilities included hangars, repair shops, administrative buildings and personnel quarters. Despite having been heavily damaged by Allied bombers and having a grass runway the facility was considered capable of accommodating as many as 150 Twelfth Air Force aircraft. The field's proximity to the battlefront, then south of Rome, was an additional benefit despite its exposure to German air raids.

**THE AIR
TRANSPORT
COMMAND
INITIATED
OPERATIONS
INTO THE
NAPLES
AREA ON
MARCH 7,
1944**

The 18th Squadron's team was confronted with a challenging set of circumstances. Their generator equipment had been damaged on arrival; the only space available for installation and operation of their equipment was in the airfield's headquarters building. Although damaged by both Allied and German airstrikes, the building had been declared safe for occupancy. Windows had been blown out and replaced with temporary translucent coverings; at night, tar paper provided blackout covers as a precaution against German air raids. Anti-aircraft batteries ringed the field.

Operations and housing were located on the third floor. Initially, cryptography and radio were located in the same room, divided by blankets hung on a clothes line for security. Mess and shower facilities were provided by the 38th Repair Squadron, one of the several Twelfth Air Force units located at the Capodichino Airfield.³

Despite these primitive conditions, the Naples detachment was operational by December 3; its first communications were with 18th Squadron headquarters in Algiers. Over the next few months, the unit maintained reliable communications between the battlefield south of Rome and the rear areas in North Africa.

The unit's proximity to Naples provided little support. The city's railroad yards and port facilities had been heavily damaged by Allied bombing and when the Italian Resistance liberated the city September 27-30, the retreating German Army destroyed and booby trapped much of the city's infrastructure. By the time the American Fifth Army arrived, some 800,000 of Naples' citizens were without food and shelter and public health was an increasing problem. They were dependent on the Allies for survival.

Lt. Ash and his men were not alone in dealing with the damaged facilities at Capodichino. The Twelfth Air Force had been repairing the field and support facilities and mobilizing the personnel and equipment necessary to support the unit's combat operations. Perforated steel planking was installed to strengthen the grass runway and by early January 1944, the 79th Fighter Group was operating from Capodichino, including its 99th Fighter Squadron, one of the famed Tuskegee airmen squadrons. The 79th was joined by the 47th Bombardment Group and the 33d Fighter Group in March and April. By the end of May, the three units had moved north to provide closer support to the American Fifth Army and the British Eighth Army.

The Air Transport Command (ATC) initiated operations into the Naples area on March 7, 1944. Its first flight was into the Pomigliano Airport northeast of Capodichino and was subjected to anti-aircraft fire which fortunately was inaccurate. Thereafter, all operations were conducted from Capodichino and by June the base had become one of the two most important in the North African air transport system, the other being the base at Casablanca.⁴

Mt. Vesuvius, which had been inactive since 1926, erupted on March 18, continuing until the

23d. While readily apparent from Capodichino, the molten lava and ash resulting from the eruption had little impact on the airfield and its operations. The Twelfth Air Force base at Pompeii was not as fortunate. There the volcanic ash destroyed eighty-eight B-25s of the 340th Bomber Group.

Following the establishment of the Naples detachment, 18th Squadron continued to expand and, by early 1944, had established detachments at Bari and Foggia on the Italian mainland and on the islands of Corsica and Sardinia. When combined with its existing detachments in Sicily and North Africa, Squadron headquarters in Algiers found its command, control, and communications overextended. As a result, the African Airways Communications Area divided the 18th Squadron, creating the European Sector with headquarters in Naples. The new Sector was responsible for eight detachments, numbered as indicated: Palermo (eight) and Catania (nine), in Sicily, Naples (eleven), Bari (twelve) and Foggia (sixteen), in Italy, Cagliari (thirteen), in Sardinia and Ajaccio (fourteen) and Borgo (seventeen) in Corsica.⁵

Implementation of this organizational change had begun in January 1944, when Capt. Alfred C. Shephard, a veteran of AACS operations in northwest Africa was assigned to the European Sector. In February, Shephard made a preliminary survey of Naples and in the first week of March returned to the city and set up Sector headquarters in a villa at No. 8, Via Gian Domenico D' Auria in the Vomero district of Naples.

Captain Shephard's next task after establishing the European Sector's headquarters was to rebuild and strengthen the limited capabilities of the Naples detachment and convert it from a temporary facility to a Class A Station. In this assignment he was assisted by a twelve-man team from the U.S. Army Signal Corps' Army Communications Service Plant Engineering Agency (ACS - PEA).

During February and March, 1944, this team, led by Lt. Joseph J. Fortunato, engineered and installed the communications equipment required for the Naples detachment to implement its mission of providing communications from the battlefield to various Air Force commands throughout the Mediterranean Theater of Operations (MTO), to aid in the extension of air transport into Italy and beyond, to provide navigational aids, aircraft control and weather information and liaison with the Mediterranean Allied Air Force (MAAF) headquarters at Caserta, Italy. Support of tactical air operations by the Twelfth and Fifteenth Air Forces was limited, principally to liaison projects.⁶

The permanent facility designed, constructed and equipped by Lieutenant Fortunato's ACS-PEA team at the Capodichino Airfield became the largest and most important AACS detachment in the MTO. The detachment's headquarters, point-to-point and air-to-ground radio operations, teletype equipment and cryptography machines were located in an existing multi-story building near the main entrance to the base. The building also provided housing for personnel and recreational facilities.

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**BY THE END
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AND 129
ENLISTED
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The ACS-PEA team also built and equipped the detachment's remote facilities. The control tower and radio transmitters building were located on the west side of the runway at the north end of the field. The radio receivers building and the radio range navigational aid were located off the field. Diesel generators provided the primary source of power for the headquarters building and the remote facilities. The Italian commercial system provided a limited backup source.⁷

The Naples detachment as a unit of the 18th Squadron's European Sector was short lived. On May 15, 1944, the world wide AACCS organization was reorganized into wings, groups and squadrons. The 18th Squadron European Sector was designated the 58th Group and remained in Naples. Its higher headquarters was the 2d Wing located in Casablanca. The 58th Group included two squadrons, the 116th and the 117th, but only the 116th was activated on May 15.⁸

The 116th Squadron was commanded by Capt. Claude Waters with headquarters at Capodichino Airfield. The 116th inherited the European Sector's eight detachments. Naples became Detachment 5, with Joseph Ash remaining in command. Ash had been promoted to captain and was later reassigned to the States, with Captain Waters taking on the

additional assignment of Detachment commander. The detachment's strength had increased significantly since its arrival in Italy and by May 15, 1944, it included four officers, a warrant officer, and ninety-one enlisted men. By the end of 1944, Captain Waters' detachment numbered eight officers and 129 enlisted men; the unit designation had been changed to Detachment 155.⁹

Detachment personnel included radio and teletype operators and mechanics, cryptographers, control tower operators, diesel and automotive mechanics, and clerks. Radio operations were conducted by voice or coded carrier wave (CW) procedures in sending and receiving air-to-ground and point-to-point messages. Teletype messaging was in code using land lines connecting 58th Group headquarters and its detachments. Cryptographic operations were located in a separate secure room and used machine cypher (SIGABA), board cypher (strip) and RAF movement (code) systems in coding and decoding messages. Radio mechanics staffed the detachment's remote transmitters, receivers and radio range stations. Aircraft arrivals and departures were controlled by voice or light gun instruction. Equipment for navigational aid and transmission and reception of all radio messaging was located in the remote facilities. It was the time of vacuum and

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cathode ray tubes, resistors, condensers, light guns, telegraph keys and manual typewriters.

One of the Naples Detachment's early assignments was to assist in the implementation of a concerted around the clock air assault on Germany, the Eighth and Fifteenth U.S. Air Forces by day, the RAF by night. Planning had begun in February 1944; its objective was to eliminate the *Luftwaffe*, cripple Germany's weapon production, and destroy the transportation network and oil fields in the German conquered areas of eastern Europe.

The assault was based on a "shuttle system" which would allow Eighth Air Force and RAF bombers from England to attack targets in eastern Germany and then fly on to the USSR, eliminating the long return flight through German air space back to England. In the USSR, these planes would be refueled and rearmed and fly to bases in southern Italy, bombing enemy targets in Austria, the Balkans and southern Germany along the way. From Italy, the Allied bombers would reverse the route. The Fifteenth Air Force would operate from Italy to the USSR to England and then reverse their route.

Critical to the plan was a reliable radio navigational-weather data network to guide the bombers to their targets and bases in England, the USSR and Italy. The AACS was responsible for building and operating this triangular network. Two corners of the network were in place: a detachment of the 24th AACS Squadron at Widewing, near London in England, and the Naples detachment at Capodichino. The Soviet corner of the triangle was located at Poltava, north of Moscow. This station had been established by a team of AACS and ACS-PEA personnel. By May 1944, communications had been established between the three stations.¹⁰

The first shuttle mission was launched on June 2, 1944. Lt. Gen. Ira C. Eaker, commanding the MAAF, led four Fifteenth Air Force Groups of B-17's, escorted by P-51s, on a mission to bomb the railroad yards at Debrecean, Hungary, continuing on to Poltava. On June 6, Eaker's mission left Poltava, bombing the airfield at Galatz, Romania, on its return to Italy.

The Eighth Air Force flew its first shuttle mission from England on June 21, 1944; 114 B-17s, escorted by seventy P-51s, bombed a synthetic oil plant south of Berlin and proceeded to Poltava. An undetected German aircraft followed the American planes. Later that night, the *Luftwaffe* bombed and strafed the Poltava airfield, destroying forty-three B-17s and fifteen P-51s, igniting ammunition dumps and 450,000 gallons of gasoline. The next night the Germans raided other secret shuttle airfields at Poltava.

Although later shuttle bombing missions were generally unsuccessful, the Naples detachment continued to provide critical weather and communications to the American and British air forces until the shuttle bombing system was cancelled in late 1944.¹¹

Naples Detachment personnel were never confronted with the dangers and hardships endured by

the soldiers of the Fifth Army in their torturous advance up the Italian Peninsula against strong resistance by the German army. Other than the threat of German air raids, their only contact with combat operations was the constant movement of trucks on the highway passing Capodichino Airfield, carrying men and supplies to the front at Monte Cassino. Monte Cassino was the anchor of the German Gustav Line defenses where the Fifth Army advance had been halted in December 1943. Sounds of the fighting there could be heard at Capodichino until May 15, 1944, when the Allies broke through the Gustav Line. When the Fifth Army broke out of the Anzio beachhead four days later, the German army, escaped being trapped by the two forces and began a slow retreat north to the new Gothic defense line, stretching across the Italian peninsula from Pisa on the west coast to Rimini on the east coast. There, in late September, 1944, the Germans halted the advance of the Fifth Army and the British Eighth Army. Thereafter military activity was limited by winter weather until the spring of 1945.

In addition to their concern for the combat forces along the Gothic Line, AACS personnel at Capodichino and Group headquarters in the Vomero were concerned for the people of Naples as they suffered through the winter of 1944-45. The 58th Group historian described conditions in the city in the following manner. "Walking in the streets was dangerous; walls of gutted buildings collapsed without warning. Shabby figures lay stretched in alleyways, dying from hunger and exposure. The city was filled with refugees from the war zone, with their pitiful carts full of household goods. On the heels of this dislocation of life came a threat of typhus. For three months the city became "off limits" to all outside troops. AACS was not included in this restriction. Thus, our men caught glimpses of official "dusters," armed with blowers and stationed at important intersections, spraying civilians daily with white anti-typhus powder." It was a heart-wrenching situation for many of the American soldiers stationed in the Naples area.

Throughout 1944, the men of Detachment 155 had handled an ever increasing volume of messages connecting the battlefield with the MAAF headquarters at Caserta and higher AACS headquarters in Naples, Casablanca, and Asheville. The major increase in these operations was the result of the ATC's expansion of its services into the areas liberated by the Allied armies. Beginning in June 1944, Capodichino became a major transshipment hub for ATC cargo and passenger operations in the MTO. During that month almost 12,000 passengers passed through the base, many using the three daily flights scheduled into Rome. In July, this schedule was increased to five daily flights. By September, ATC was flying into Marseilles and in mid-November regularly scheduled flights were initiated between Capodichino and Athens. ATC service also extended into England, with flights scheduled through Paris, Marseilles, Rome, Capodichino, Athens, to Cairo. In early 1945, Capodichino became

the starting point for limited service through Bari to cities liberated by the Soviet armies, Belgrade, Bucharest, Tirana and Sofia. In addition, a twice weekly direct flight was made to Budapest.¹²

The Naples Detachment's capabilities continued to be upgraded during late 1944 and early 1945. Four radio teletype channels, twelve point-to-point frequencies and three air-to-ground channels were in operation. The air-to-ground operating position had been improved and the aircraft distress frequency was being monitored on a 24-hour basis. Two new generators were installed at the headquarters building, replacing existing generators which had become unreliable. Italian commercial power remained available for emergency use.

The Detachment's code and radio rooms were the proving ground for all new equipment developed by the Signal Corps and adopted by the 58th Group. In August, the first radio teletype equipment was placed on line, connecting Naples and Algiers, and, in December, new type teleprinters were installed on the Foggia circuit. To accommodate an increase in radio teletype transmissions to France, the ACS-PEA installed a rhombic antenna array at the Remote Transmitters station. Receiving antenna at the Remote Receivers station were replaced to provide optimum reception. The Detachment's experience with both landline and radio teletype equipment and operations set the pattern for detachment operations throughout the 116th and 117th Squadrons. The 116th had added stations at Caserta, MAAF headquarters, and Athens. Its sister squadron, the 117th, had become operational in June 1944, and by the end of 1944, it had stations at Rome's Ciampino airport, Pisa, Florence and had inherited the 116th's stations at Borgo in Corsica and Cagliari in Sardinia.¹³

The surrender of Nazi Germany on May 8, 1945, led to major reductions in the size, composition and capability of the U.S. Army Air Corps in the ETO and MTO. Plans were made to transfer many units to the Pacific to assist in the war against Japan. Other units were to be disbanded and personnel levels reduced as Air Corps operations transitioned from combat to occupation.

In May, the Detachment assisted in handling the communications for the men and planes being deployed to the U.S. via Casablanca and in the operation of the aircraft salvage dump at Cercola, two miles from the Capodichino Airfield. That same month the Naples detachment became one corner of a triangular teletype and facsimile network connecting Caserta and Pomigalino for the operation and maintenance of a teletype and facsimile network for transmission of weather maps. The following month, Naples supported the Bari detachment in relaying teletype communications in the redeployment of Fifteenth Air Force Liberators and Flying Fortresses from the Gioia Airfield at Foggia to the Pacific.¹⁴

The surrender of Japan in mid-August 1945, led to major changes in the plans to transfer units to the Pacific. The MAAF had been dissolved on July 31, its functions taken over by a new command, the

Army Air Forces in the MTO. This command was discontinued on October 1, 1945, and its activities placed under a new command, the United States Air Forces in Europe. Formed on August 16, 1945, its headquarters were located in Wiesbaden, Germany.¹⁵

These changes in the Air Force command structure naturally impacted the 58th Group, its squadrons and detachments. The 58th Group had been transferred from the 2d Wing at Casablanca to the 5th Wing in Wiesbaden on June 1, 1945. The Naples detachment was redesignated Detachment 605 on July 1, remaining a part of the 116th Squadron. The location of Group and Squadron headquarters were unchanged.

The transfer to the 5th Wing resulted in several inefficiencies, the most significant being the impact on cryptographic operations. The majority of coded traffic at Naples used the RAF Movement which was not held by the 5th Wing. This required Naples to substitute the more complex Sigaba and Strip systems, resulting in delays in processing coded traffic.

Despite the minor inconveniences experienced in the changeover to the new command structure in Wiesbaden, the volume of ATC passenger and cargo traffic through Capodichino to and from Europe and the Balkan countries was largely unchanged. The Naples Detachment experienced little change in its workload, operational efficiencies and staffing levels. The services provided by the Detachment were even increased with the addition in late June, 1945, of an aircraft control center at Capodichino. The center used the Detachment's air-to-ground and voice communications facilities and was operated from the control tower on the radio range frequency.¹⁶

This situation changed drastically in mid-August, 1945, when the Air Corps implemented its post war demobilization policy, giving first priority to the discharge of its most experienced and expert men, continuing until March 1946, when men with two years' service were scheduled for discharge. The loss of the more experienced and expert men compromised the effectiveness of every Air Corps unit, none more so than in the Naples detachment.¹⁷

The exodus of the Detachment's senior staff began in September 1945, with their replacements beginning to arrive in November. These men, though trained and qualified in the different AACS communications disciplines, lacked operational experience. Many were scheduled for discharge in March 1946, when they had completed two years' service. The brief interval between their arrival and the exodus of the senior staff left insufficient time for adequate on-the-job training in the Detachment's ongoing operations.

The exodus of experienced personnel continued into June as the remainder of the experienced staff reached the two-year service level and were returned to the U.S. for discharge. Their replacements, scheduled for discharge in the fall of 1946, had arrived in February and, like their predecessors, were trained in AACS technical disciplines, but lacked practical experience.

Commanding Officers, Naples Detachment

116th Squadron	
Nov. 1943 - Jun. 1944	1st. Lt./Capt. Joseph A. Ash
Jul. 1944 - Mar. 1945	Capt. Claude G. Waters
Jun. 1945	Capt. Mario F. Guarcello
Jul. - Aug. 1945	Capt. Herbert M. Pasewalk
Sep. 1945 - Oct. 1945	Capt. Lewis A. Pitruzzello
Nov. 1945	1st. Lt. Charles H. Peters, Jr. (acting)
Dec. 1945	1st. Lt. Roger H. Cough
Jan. - Feb. 1946	1st. Lt. Abraham I. Perl
Mar. 1946	1st. Lt. Wilbur W. Mears
Apr. 1946	1st. Lt. Robert E. Clark (acting)
May 1946	1st. Lt. Gardiner W. Spring
117th Squadron	
Jun. 1946	1st. Lt. Jerome A. Wetter
Jul. 1946	2d. Lt. Robert A. Maddux
Aug. 1946	1st. Lt. Merle A. Schultz
Sep. 1946	1st. Lt. Paul E. Mulrenin

As a result of the Air Corp's demobilization policy, the number of personnel who arrived between September 1945 and June 1946, were never sufficient to offset the departure of the more experienced men. By mid-June 1946, there were only twenty-seven men on the Detachment's permanent roster, which in September 1944, had numbered nearly 170 officers and men. It was a critical situation. Double shifts and no weekend passes were the order of the day.

Several experienced communications technicians joined the Detachment at this time. They were veterans who had decided to remain in Italy as civilians following their discharge or had reenlisted in the Air Corps. Their expertise and experience with the operation and maintenance of control tower, teletype and diesel generator operations were invaluable in alleviating the unit's lack of numbers and experience.

In addition to the continuing loss of its more experienced men, the Detachment faced other challenges. The most significant was the lack of stability in the Detachment's postwar leadership. Between June 1945 and October 1946, there were thirteen different commanding officers, the majority serving for only one month. There were also equipment problems. Following the German surrender, the Air Corps cancelled many procurement contracts and replacement of all types of communications equipment from vacuum tubes to teletype machines to diesel generators had become a serious problem. Detachment personnel devised many unique and imaginative repairs to worn out equipment or, when all else failed, they turned to the old Army procurement method of scrounging or requisitioning from unofficial sources.

That the Detachment was able to continue to operate successfully during the postwar period was a testament to the diligence and dedication of the young replacements in maintaining and upholding the unit's tradition of providing timely and reliable communications for its many users.

The constant changes in the U. S. Army Air Corps command structure in 1946, extended from major commands to the smallest unit, including the Naples Detachment. In February, Rome, Athens, Vienna and Marseilles were designated the 58th Group's major communications centers. As part of a plan for the orderly liquidation of surplus property, the Naples Detachment, once the *aristocrat* of the 58th Group, and those at Pisa and Foggia, were relegated to a lesser responsibility and included with the facilities to be sold at a later date to the Italian government through the Foreign Liquidation Commission.¹⁸

On March 21, the Air Corps was reorganized with the ATC designated as one of its eight major commands. The AACS lost its status as a separate command and was assigned to the ATC as the Air Communications Service (ACS).¹⁹

The 116th Squadron was relocated from Naples to Vienna on June 6. The Naples and Foggia detachments were then reassigned to the 117th Squadron headquartered in Rome. The 117th's other detachments were Rome Ciampino (702), Pisa (703), Poretta in Corsica (707) and Madrid (727). Naples was designated Detachment 725 and Foggia 724.²⁰ Naples Remote Receivers station was closed and all radio teletype operations terminated. The Detachment's teletype transmitters were shut down and the point-to-point transmitters were reduced from twelve to three. The hourly broadcast of the latest Capodichino weather continued and the radio range, control tower, teletype landlines and air-to-ground operations remained in operation.²¹

Even with a reduced capability, the Detachment continued to provide reliable communications services to the ATC passenger and cargo operations at Capodichino. In July 1946, the demand for the Detachment's services increased when the European Air Transport Service (EATS) established its headquarters and operational and maintenance facilities at Capodichino for its Mediterranean operations. The EATS had been formed October 1, 1945, from the squadrons of the 51st Troop Carrier Wing to operate passenger and cargo services for the Army of Occupation. It was deactivated on September 30, 1946.

EATS services in the Mediterranean were provided by the 51st Wing's 305th Troop Carrier Squadron. From its base at Capodichino, the 305th connected Vienna, Udine, Pisa and Rome. The 305th was not exactly welcomed with open arms when its personnel settled into the lower floors of the Detachment's building. Despite this rocky beginning, the two units developed a mutual respect for each others operations, often evidenced by less than formal communications between the control tower operators and the 305th's pilots. Each was likely unaware of the potential danger involved in the flights between Udine in northern Italy and Vienna where their flight plans carried them close to communist Yugoslavian airspace. The danger became a reality when Yugoslavian fighters shot down a 305th C-47 on August 9 and another on August 19. The first reaction at Capodichino was for the safety of the two aircraft crews, which later turned to

anger when it was learned that while the pilot of the August 9 flight was able to land his plane safely in Yugoslavia, he, his crew, and passengers were imprisoned before being released. Sadly, all members of the August 19 flight were killed. As a result of these two incidents, EATS cancelled all flights between Udine and Vienna.²²

Capodichino aircraft control operations were overwhelmed later that month when the aircraft carrier USS *Franklin D. Roosevelt* arrived in Naples as part of a Mediterranean goodwill tour by the U.S. Sixth Fleet to *show the flag* and to later cruise to Piraeus outside Athens to support pro-western forces being opposed by the communists in the ongoing civil war in Greece. Before docking at Naples, the carrier's full complement of aircraft was sent to Capodichino where they remained until the *FDR* departed. The Navy pilots and their high performance Corsairs, Avengers, and Hellcats offered new challenges for the Detachment's tower operators. Despite uncoordinated radio frequencies and failure to observe light gun controls, the Navy planes arrived and departed without accident.

August 1946, marked the beginning of the end of the American military mission in Italy and the Mediterranean. The first evidence of the planned sale of many Air Corps facilities to the Italian government was the assignment of four Italian soldiers to Remote Transmitters for training in Air Corps communications operations. Success of the training was marginal, principally due to the language barrier.²³

On September 11, 1946, the command designation of the Naples Detachment was changed from ACS (Air Communication Service) back to AACs (Airways and Air Communication Service). The Detachment's numerical designation was not changed. At the same time, the men who had arrived as replacements in February began to depart for the U.S. and discharge. Their replacements were three-year Regular Army enlistees, increasing the Detachment's strength to seventy men.

By the end of 1946, negotiations were underway for signing the Peace Treaty with Italy, scheduled for February 10, 1947. The Treaty, the result of the Paris Peace Conference which had been in session from July 29 until October 15, 1946, required that "all armed forces of the Allies and Associated Powers shall be withdrawn from Italy as soon as possible and in any case not later than ninety days from the coming into force of the present Treaty."²⁴

Well in advance of treaty requirements, the Naples Detachment, together with the 117th AACs Squadron's detachments at Rome Ciampino, Pisa, Poretta, Foggia, and Madrid, were deactivated on March 15, 1947.

The Air and Airways Communications Service mission in Italy had ended and the AACs Naples Detachment at Capodichino Airfield, like so many of the United States Army Air Corps' World War II units, large and small, heralded, and obscure, each faithful to its mission, had passed into the "wild blue yonder." ■

NOTES

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Operation Restore Hope, 1992-1993: Recalling Air Mobility Operations in Somalia





John L. Cirafici

(Overleaf) A British C-130 at Mogadishu airport on December 10, 1992. (All photos courtesy of the author.)

IT WAS MY RESPONSIBILITY, ONCE RESTORE HOPE COMMENCED, TO GET MOGADISHU AIRPORT UP AND RUNNING

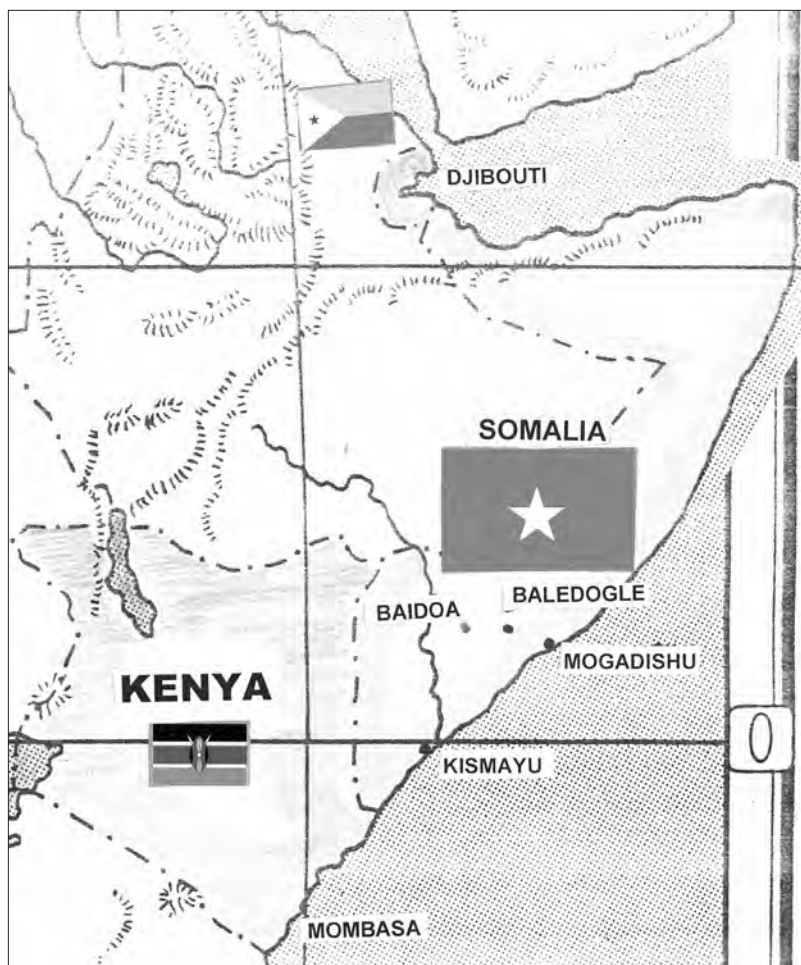
In 1992, Somalia was already a failed state. An earlier and unsuccessful war with Soviet and Cuban supported Ethiopia was the beginning of an unending series of disasters. The fragile nation then fell into civil war, with no winners, and civil order disintegrated. Any semblance of central authority ceased to exist and all power was in the hands of clan and subclan warlords. When it seemed that nothing more would befall the desperate Somali people, the situation worsened to an almost unimaginable degree. A severe famine, caused by drought and exacerbated by endless inter-clan warfare, struck across the country. Before long the images on television and in the press of emaciated Somalis dying by the hundreds of thousands demanded a response. United Nations Secretary General Boutros Boutros-Ghali, appalled by the catastrophe, sought and received authorization in April 1992, with UN Security Council Resolution 751, to begin a humanitarian relief effort. The first attempt at relief, called UNOSOM I, highlighted the near impossibility of feeding Somalis without a ceasefire and containment of the warring factions.

Beginning in spring 1992, UNOSOM I's U.S.-led Task Force Provide Relief with approximately eight assigned USAF C-130s plus German C-160 Transalls and augmenting C-130s from contributing air forces attempted to deliver adequate amounts of humanitarian supplies directly to food centers in Somalia. As the Restore Hope airfield operations officer, I had more than a passing interest in Provide Relief's airlift activities in Somalia. I wanted to observe the operation there in order to identify any limitations we, the Restore Hope task force Air Mobility Element (AME), would have to address before airflow into Somalia was ramped up. It was my responsibility, once Restore Hope commenced, to get Mogadishu Airport up and running and then focus on doing the same for several other airfields. With that in mind, I tagged along as an observer on several Provide Relief missions into Baidoa and Mogadishu. I observed that a typical C-130 mission into Somalia carried a load of four pallets loaded with beans and rice and a tire change kit on a fifth pallet. Some 140 tons of relief aid per day moved this way by air to various food centers. Although a commendable effort, it was, however, inadequate to the needs of a worsening famine that was taking 1,000 to 2,000 lives a day. It quickly became clear that if sufficient relief supplies were to reach the food centers they had to travel overland.

Food arriving at the ports of Kismayu and Mogadishu, however, was being hijacked by warlords. This untenable situation convinced President George H.W. Bush that a much larger and different effort was necessary if the starving was to end. His decision, authorized by UN Security Council Resolution 794, was the authority for commencing Operation Restore Hope on December 9, 1992.

On the Provide Relief sorties I accompanied into Somalia, I noticed that the relationship between the relief providers and the warlords would have to fundamentally change for Restore Hope to work. Delivery of food had been, incongruously, dependent upon buying the goodwill of a local warlord. The warlord not only controlled access to the food center by starving Somalis, he also charged for the privilege of delivering food to him. I watched a sergeant sitting in the back of a C-130 with me hand an envelope with \$300 to a warlord's representative. Not long before Restore Hope began I went into an unimproved airstrip on Mogadishu's west side to get more insights. There, I saw a different sort of ongoing airlift. Light aircraft loaded with khat were streaming in from farms in Kenya. Khat was a popular but addictive narcotic in high demand in Somalia. So there it was in a nut shell; hundreds of thousands had already starved to death for want of food, but, the khat was going to get through, no matter what. I also saw that survival was reduced to small acts of larceny. I watched several Somali workers come onboard a C-130 in Baidoa to off load the food. They would slice open a sack and collect, in a cloth, handfuls of rice or beans. This handful of food might keep a laborer's children from starving before his eyes. When I talked with a Swedish volunteer running a food center in Kismayu she told me that she lived in fear of the local warlord's gunmen who stole food otherwise intended for her kitchen. It was clear, looking at efforts at the ground level, that Operation Provide Relief's airlift could not stem the growing catastrophe. It was equally impossible to ship an adequate level of relief supplies to food centers overland into Somalia because of badly damaged infrastructure and warlords who seized shipments meant to pass through their respective domains. Acting Secretary of State Lawrence Eagleburger, giving his assessment of the situation, testified that 80 percent of food transported overland from Mogadishu port is stolen. Absent civil order, security, and large scale humanitarian deliveries, the effort to save Somalis was doomed to fail. Restore Hope was to change all

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The Operation Restore Hope region.

that. President Bush ordered some 30,000 U.S. military personnel to Somalia as part of a U.S. led force, operating under the United Nations charter, Chapter VII, which authorized the use of force as necessary to restore peace and security. A number of other nations would contribute forces and resources to the multinational effort, inspired in part by the U.S.-led victory in Desert Storm, less than two years before.

Operation Restore Hope begins

Early morning on December 9, 1992, 1,800 Marines of the 15th Marine Expeditionary Unit (MEU) commanded by Col. Gregory Newbold, came ashore from the USS *Tripoli* and, with a Pakistani battalion already there, secured Mogadishu Airport. Thus began Operation Restore Hope, under the command of the Combined Joint Task Force, Somalia. I reentered Somalia that morning from Mombasa, Kenya, on board the first C-141B in support of Restore Hope to land on Mogadishu airfield. This began for me a week of almost no sleep, except for a few hours each day, as I got airfield operations spun up for major air mobility operations into Mogadishu, Baidoa, and Baledogle airfields.

That morning there was only TSgt. Jeff Robbins, a hard charging tactical airlift control element (TALCE) NCO and his 25 k forklift to support me with Mogadishu's ground operations mission.

We were it. Air traffic control at Mogadishu airport was initially directed by U.S. Air Force combat controller TSgt. Pat Moulton and his team. They had arrived on a Marine CH-46 from the *Tripoli* that morning. He was the right man at the right time who would keep the air bridge safely flowing into Mogadishu.

As soon as the mission critical AME advance party was led off the C-141B by Col. Walt Evans—a highly experienced airlift officer, it taxied out and took off. Colonel Evans' job as the director, mobility forces (DIRMOBFOR) was to manage air mobility assets throughout Somalia, and safely maximize the critical flow of personnel and cargo. With total mission focus, his team was operational just a half hour after exiting the C-141B and up on satellite communications (SATCOM) ready to coordinate the airflow. Sergeant Robbins and I then turned our attention to an arriving French C-130 with French Foreign Legionnaires from Djibouti. Immediately after that diversion, I focused on preparing the airfield and ramp area to handle a substantial throughput from the air mobility air bridge.

My first order of business was to survey the airfield. I did it the most expedient way available to me that morning by running in full "battle rattle" the entire 10,500 foot length of the runway and overrun, and back. The surface was in good shape but vegetation growing along the edges had encroached on the runway proper. Next, I checked the ramp for maximum [aircraft] on the ground (MOG) capability. We had big birds inbound. There were C-5s, C-141Bs, KC-10s and Civil Reserve Air Fleet (CRAF) DC-10s and 747s flying our way, besides German and French C-160 Transalls, Italian G-222s; New Zealand Andovers, and C-130s from coalition air forces. There was also helicopter traffic from the Tripoli. The MOG situation as it stood that morning would never support the flow.

To increase the airport parking ramp MOG, I pointed out to Sergeant Jeff Robbins the obstructing light poles and masts that had to go. Using his forklift tines, he knocked them down. Our lighting requirements would be properly satisfied by light carts and an airfield lighting kit for twenty-four-hour operations. With the ramp opened up, I could now accommodate any combination of four C-5s, DC-10s, 747s, and C-141Bs on the ground at any time.

Late in the afternoon of the 9th the TALCE that was assigned to Mogadishu first began arriving from Germany onboard C-5 Galaxys. I needed them up and running that evening. I briefed the TALCE operations officer on my expectations and all the inputs that I could provide from my survey. I specifically spelled out what he must do, to be mission capable. As soon as his TALCE was up and running all airfield operations were his responsibility. I did not know that he had never led an operation like this, but would soon learn that. In the meantime I met on the beach with Colonel Newbold, 15th MEU commander. Almost all the TALCE equipment consumed diesel fuel, of which we had operationally only twenty-four hours worth on hand, based on

MY FIRST
ORDER OF
BUSINESS
WAS TO
SURVEY THE
AIRFIELD.

A Pakistani armored personnel carrier at Mogadishu Airport on December 9, 1992.

GENERAL JOHNSTON HAD NO CONFIDENCE IN THE OPERATIONS OFFICER AND... I WAS TO IMMEDIATELY TAKE BACK COMMAND OF AIRFIELD OPERATIONS



anticipated consumption rates. We also needed an air evacuation procedure in place for personnel in the event of wounded or injured personnel. The USS *Tripoli* had a hospital, helicopters, and fuel onboard. Colonel Newbold, who was tasked with securing the airport environment and then key points and sites in the city, took a moment to make all my requests happen. His professionalism and focus left a lasting impression on me.

On the morning of the 10th, a C-141B arrived with Marine Lt. Gen. Robert Johnston, commanding general of CJTF Somalia, accompanied by Air Force Brig. Gen. Thomas Mikolajcik, component commander of Air Force Forces (COMAFFOR). Unknown to me they began an inspection of airfield operations and talked with the TALCE operations officer. They came away sensing that he had no idea of how to lead an operation of this complexity, magnitude, and importance. We were at the end of the food chain and there was no room for error. General Mikolajcik walked up behind me and simply said, "John." Not knowing who that voice belonged to, I turned around and met him for the first time. He told me that he and General Johnston had no confidence in the operations officer and that I was to immediately take back command of airfield operations and his TALCE, and make it happen. Then he walked away. The actual TALCE commander, Lt. Col. Bob McDaniel, was arriving at Mogadishu in approximately a week, and would assume all

responsibilities for Mogadishu TALCE operations at that time. I knew Bob to be both highly knowledgeable, experienced, and an outstanding leader so I just had to tough it out for a week while also doing my other duties as airfield operations manager for Somalia. I quickly called a meeting of all TALCE officers and section chiefs. I told them what needed to be done immediately and go to it. They were 100 percent mission focused once the concept of airfield operations at Mogadishu was clearly stated and totally prepared when the first of the CRAF aircraft flowing in with Marines, arrived from Camp Pendleton, California. Boeing 747s and DC-10s brought in the Marines and C-5s, KC-10s and C-141Bs delivered cargo. There was one problem that soon surfaced. An NCO responsible for TALCE material handling equipment (MHE) was assembling a loader designed specifically for KC-10 aircraft, when he discovered that two vital components, necessary for operation, had not been shipped to us by the home station. So, here we were with KC-10s soon inbound and our loader was inoperative. Without it, unloading pallets would be difficult, marginally safe, and far too time consuming. At first I was upset that someone had mindlessly shipped us a piece of mission essential, but useless equipment; that, however, was not going to solve the problem. Then, a light went on in my head. The USS *Tripoli* had capabilities just like a base back home. The sergeant mentioned that the two missing parts

Marine Lt. Gen. Robert Johnston arrives at Mogadishu airport aboard a C-141B on December 10, 1992.



I HAD OTHER MISSION REQUIREMENTS ON MY PLATE BESIDES MOGADISHU

were identical to components on the loader that we did have. I asked the NCO to give me those two parts. I quickly made my way over to a USMC CH-46 on the ramp, from the USS *Tripoli*. I asked the crew chief if he could get my parts to the ship's machine shop. He stuck out his hand, took them and a note describing what I needed, and said I would have all the parts, fabricated ones included, back tomorrow. That unnamed hero was good to his word. The next morning my NCO said he had received perfect working parts from the crew chief. And, just in time for an arriving KC-10.

I had other mission requirements on my plate besides Mogadishu. Elements of the Fort Drum, New York-based 10th Mountain Division were to flow into Baledogle (soon called "Bag of Donuts" by name-challenged troops), commencing on December 13. Baledogle, a former Somali fighter base was never designed to support a major airlift with aircraft such as the C-141B, which had a heavy footprint (surprisingly, more than the much larger and heavier C-5). Consequently, I had mission and safety concerns and needed to be briefed on any "show stopper." I expected to be in contact with the arriving TALCE as soon as they were on the ground and setting up. That is a fundamental mission requirement and for whatever reason, it did not happen. I attempted repeatedly, after their estimated arrive time had passed, to reach them. Finally, after twenty-four hours they elected to call

me. Instead of the expected situation report, I got only a statement that they were running out of bottled water. Just to be certain that they were not heading into a drinking water crisis, I touched base with the task force J-4 (logistics). He quickly checked and discovered that there was, just a short distance from the TALCE, approximately 15,000 gallons of potable water in bladders generated by the advance party. It was positioned there solely in anticipation of the arriving forces including the TALCE. It was a glaring example of failure to communicate and coordinate with other elements on the airfield. However, once the flow began the TALCE was fully mission-effective. When the impact of repeated C-141B landings began to, as feared, disintegrate the touchdown zone, adjustments on the spot had to be made. The runway, suitable for C-141Bs, was initially 6,000 feet in length. The usable length grew shorter and shorter as USAF combat controllers, taking the initiative, made adjustments for the gradual loss of usable surface. Fortunately, the "shrinking" runway remained adequate for all of the inbound flow. By mid-January, however, it became necessary to terminate all C-141B operations into Baledogle.

My next concern was Kismayu airfield, located to the south, on the Equator. The task force intended to airland forces and equipment on Kismayu's 11,000 foot runway to establish secure movement of food from the port to food centers.

The author stands next to a six-foot-high termite hill at Kismayu Airfield, December 17, 1992.



OPERATIONS WERE AT A HIGH TEMPO IN DECEMBER AND JANUARY AND THEN MEASURABLY SLOWED DOWN

Most important, Bailey bridges were to be delivered there and used to restore overland routes. By this time Bob McDaniel was in country and running Mogadishu airfield, allowing me to get out of town. On December 17, I was transported with several others by C-130, to inspect the airfield environment at Kismayu. There I discovered several potential show stoppers. There were a number of termite hills over six feet high that would interfere with taxiing C-5s. The airport ramp—where we would bring in the C-5s—had an abandoned Ethiopian B-57 bomber taking up valuable space. I talked with a U.S. Navy Seabee who had equipment standing by, off shore. I told him what I needed, and he said consider it done. And it was.

THE MISSION, AS PRESIDENT BUSH ENVISIONED IT, WAS A SUCCESS

At first we stayed very busy as the flow shifted from U.S. forces to troops from supporting nations. The airlifters flowed in forces from Nigeria, Botswana, Zimbabwe, Kuwait, Saudi Arabia, Morocco, Belgium, Italy, Canada, the United Kingdom, Australia, and other countries. Colonel Walt Evans had his staff design a twice daily channel flight schedule. In order to support the widespread operations. The C-130 channel STAR missions—the Morning Star and the Evening Star—originated in Mombasa, Kenya and transited five Somali airfields.

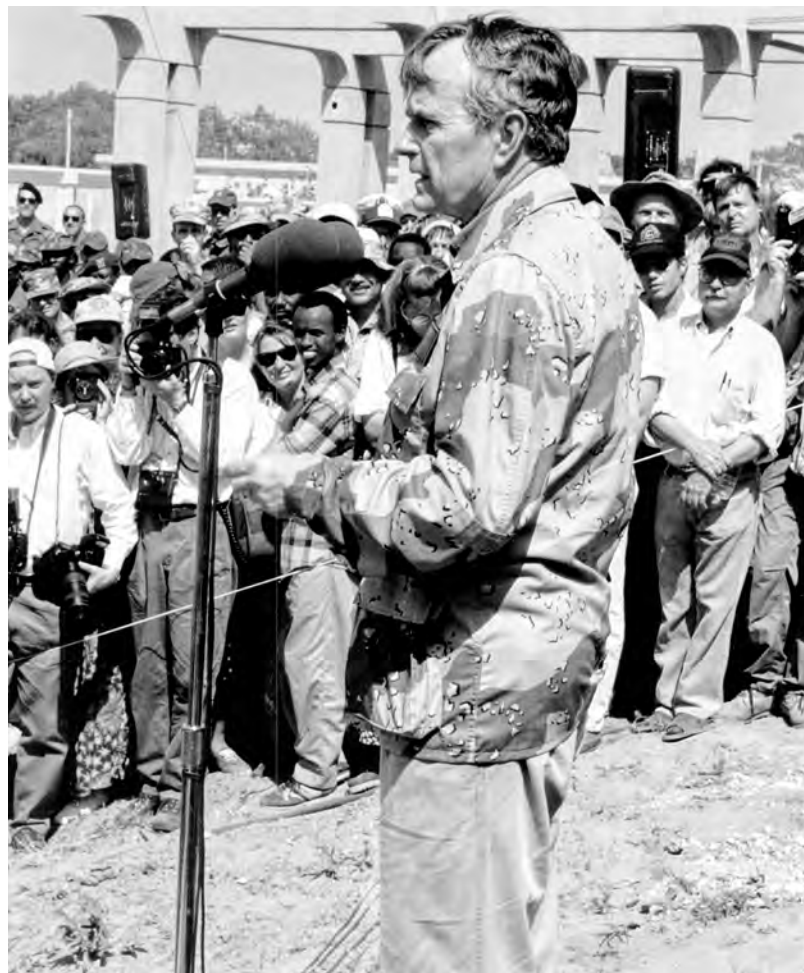
Operations were at a high tempo in December and January and then measurably slowed down. The AME's data reflect that in the first ten weeks of air mobility operations in Somalia, there were 877 intertheater missions. These included 254 C-5, 376 C-141B, 134 KC-10, and 113 CRAF missions. The inbound cargo totaled 26,500 tons; and there were 28,200 passengers. C-130s, C-12s, and the New Zealand C-748 Andovers flew, in that same period, 939 intratheater missions. The AME also managed sixty-seven aeromedical evacuation missions. Mogadishu became the busiest airfield in all of Africa in the first two months of activities. By February, however, mission activity had measurably diminished. AME began to draw down its presence and pull out personnel, and in early March relocated to Mombasa.

The mission, as President Bush envisioned it, was a success. The famine was stopped and countless thousands of lives saved. On December 31, the president came to Somalia to personally thank us, as his presidency was drawing to a close. I was pleased to finally have an opportunity to meet him. He had intended to visit us in Kuwait shortly after we liberated the country during Desert Storm, but never got there. He told us that regretfully he would soon be

The author travels into Mogadishu on an intel-gathering sortie on January 23, 1993.



President George H. W. Bush visits Mogadishu on December 31, 1992.



leaving office before we had all gone home. It was his intention that there would be no “mission creep” to keep the task force in Somalia beyond April. His words seemed to echo the concerns that his national security advisor—Brent Scowcroft—had expressed. In David Halberstam’s book, *War in the Time of Peace*, Scowcroft is quoted, expressing his concern about an exit strategy. “We can get in [Somalia], but how do we get out?” His words, as later events in Somalia demonstrated, were prophetic.

It was clear that once we ended the famine it was time to pack up and leave. By late January one could sense that we had put a real pinch on the warlords and they resented our presence. Random attacks had begun. I was standing just outside the airport entrance when I was the target of a drive by shooting. We were ordered to dig incoming mortar fire shelters close by our tents in the event that attacks escalated. By early February, I had almost nothing to do; I returned stateside as force reductions were implemented.

I did return home with a deep felt sense of accomplishment for having been part of Restore Hope. Because our nation had taken the lead to end a famine of catastrophic proportions we saved countless lives.

I was mistaken to think that I could relax once home. In April 1993, I was sent with a special team into war torn Bosnia and Croatia in anticipation of what should have been the Vance-Owen peace accord. It was another cruel and genocidal conflict in another place, and we hoped that by being there we could make a difference. ■

*The Battle for Ra's Al-Khafji and the Effects
of Air Power January 29-February 1, 1991
Part II*





William P. Head

(Overleaf) An A-10 swoops in for attack.

AS THE IRAQIS MOVED INTO THE CITY, EVERYTHING ELSE SEEMED TO BE GOING ACCORDING TO PLAN

Not everything went well for the Coalition forces at Al-Khafji. During the withdrawal, the Marine's LAV-25 and LAV-AT anti-tank vehicles repositioned to block and engage the Iraqi units as they came out of the other side of Al-Khafji, just in case they continued forward. Vision was poor, and one commander of an anti-tank vehicle asked permission from C-2 to fire on what appeared to be an Iraqi tank. Once the okay came, they fired hitting a fellow LAV-AT only a few hundred yards in front. In spite of the disaster, the LAVs held their ground engaging the Iraqi tanks with their autocannons. While they could not destroy the tanks, they did disorient the Iraqis causing them to take up defensive positions in the town.

At this point, several A-10 ground-attack aircraft arrived. Not possessing the sophisticated targeting devices of other aircraft such as the AC-130s, the pilots had difficulty identifying enemy targets. Aircraft dropped flares to illuminate the area, one landing on an Allied vehicle. Their radio operator tried frantically to alert the aircraft as to its position and identity. It was too late, an A-10 had fired an AGM-65 Maverick air-to-ground missile which struck the vehicle killing the entire crew except for the driver. To prevent further *friendly fire* incidents, C-2 ordered the company to withdraw. The Coalition had lost eleven killed in these fiery explosions.¹

As the Iraqis moved into the city, everything else seemed to be going according to plan. What they did not realize was that a small group of Marines were cut off and hiding in the town on the roof tops of buildings where, as it turned out, they could direct CAS and artillery fire. Throughout the engagement, the Joint STARS E-8A aircraft continued reporting on the movements of the various Iraqi units in and around Al-Khafji.²

In one official Marine account of the situation, they wrote that the first Iraqi units to enter Al-Khafji were members of the 15th Mechanized Brigade. They were "unopposed by ground forces." The only thing that slowed their advance were periodic attacks by Air Force AC-130 gunships and Marine AH-1W Super Cobras.³ Even with this chaotic situation unfolding, General Schwarzkopf refused to be lured into Saddam Hussein's trap. He ordered his commanders to use Marine, Saudi, and Qatari forces in the area, supported "vigorously" by air power, to retake Al-Khafji. To increase the margin of safety and avoid a repeat of the earlier catastrophe, the Marines initiated a phased redeploy-

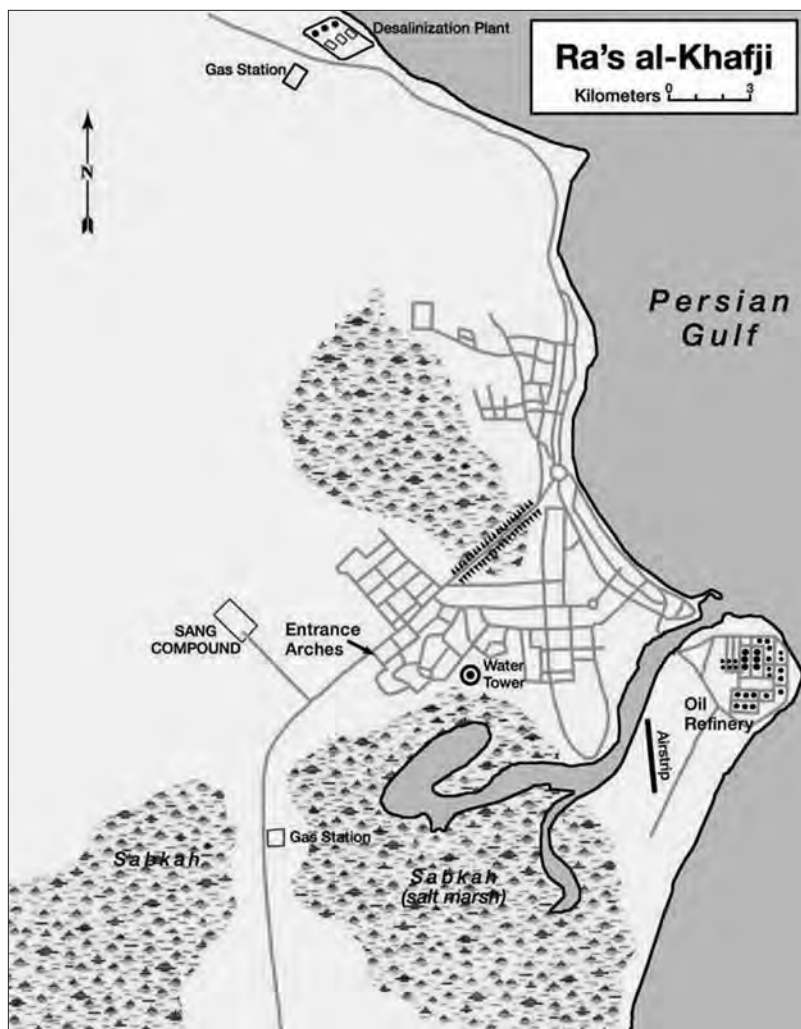
ment in their sector to put a buffer of about ten miles between themselves and the Iraqis. Coalition leaders realized that with air power capable of constant and deep sorties, the ground units would not require reinforcements.⁴

According to General Schwarzkopf, General Khaled happened to be in the area inspecting his troops when the Iraqis attacked. When Khaled contacted headquarters, Schwarzkopf suggested that, "If they are still there in the morning, you'll be able to go in and clear them out." Khaled later informed the general he was making preparations to retake the city. Schwarzkopf responded, "That's great; that's exactly what your forces should be doing. We'll give you all the air support you need." A short time later, Khaled's deputy Maj. Gen. Abdulaziz al-Shaikh came to see Schwarzkopf and reported that King Fahd wanted U.S. air forces to destroy the town rather than let the Iraqis have it. It took a while but Schwarzkopf finally calmed the King, and the Saudi, and Qatari forces began their counter attack.⁵

As these discussions unfolded, conditions at the front became temporarily tense since the Saudis believed they were not receiving the necessary air cover they needed during their efforts to set up their forces for a counter-attack. They believed it was absolutely necessary to take back *sacred* Saudi territory from the Iraqi invaders. As the withdrawal unfolded Gen. Charles Horner and Joint Force Air Component officers directing air assets realized that OP 4 and the Marines needed air cover more than anyone, at least for the time being. As soon, as they reached relative safety, Horner directed his aircraft to support the Saudi and Qatari assault forces. The general relished the opportunity to use air forces against this major Iraqi attack and prove the efficacy of U.S. air power. This fact was soon conveyed from Schwarzkopf to Khaled who—now satisfied that his forces were being shown the respect they deserved—prepared for the counter-attack.⁶

As the combat continued, personnel at the Air Operations Center began altering previously scheduled sorties already airborne in order to attack the moving Iraqi forces which had been targeted by Joint STARS sweeps. To assure maximum coverage and to decrease enemy lethality, controllers directed air attacks into the Kuwaiti Theater of Operations (KTO) from different altitudes and directions using "kill boxes," which measured roughly thirty miles by thirty miles and were subdivided into four quad-

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rants. To quote one account, “planners pushed a four-ship flight through each kill box every seven to eight minutes in daytime and every fifteen minutes at night. In the designated area of the box, a flight lead was free to attack any targets he could identify within the allotted time.”⁷

Fortunately Schwarzkopf’s plan of operation allowed the air component, especially aerial interdiction, to operate independently. The Air Tasking Order had already assigned hundreds of missions against Iraqi forces such as the Republican Guard in the KTO—some in the region where the three divisions attacking Al-Khafji had assembled for the offensive. With these air assets already flying through the “kill boxes,” air controllers passed them to the Marine forward air controllers to support forces near the occupied city.

The very fact that Coalition pilots found it easier to recognize Iraqi armor once they were on the move increased the number of kills and basically ended friendly fire issues. As Rebecca Grant wrote in her article on the battle, “Near Al Wafra, an A-10 pilot described the sight of a column of vehicles as ‘like something from A-10 school.’” Grant also quotes A-10 pilot Capt. Rob Givens as declaring later, “I, myself—one captain in one airplane—was engaging up to a battalion-size of armor on the ground” and “keeping these guys pinned for a little bit.”⁸

From the outset, Air Force AC-130 gunships became a significant part of the engagement. That first night as crews lingered on alert, the word came for them to hasten their aircraft to the region near Al-Khafji. Once over the battlefield, they attacked elements of the 5th Mechanized and 3d Armored Divisions as they reached Al-Khafji. A single gunship targeted the lead column and, using its rapid fire weapons and 105mm cannon, devastated the enemy as they entered the town. While they took some fire from anti-aircraft guns and missile launches, the speed of their assault prevented the Iraqis from bringing to bear the vast majority of their heavier anti-aircraft artillery (AAA) or shoulder-fired SA-7 Surface-to-Air Missiles (SAMs).

In evaluating this initial day it is important to realize that, as the skirmish near OP 4 concluded, elements of the Iraqi 5th Mechanized Division swung south and crossed the Saudi border near OP 1. In turn, a screening company of the Saudi 2nd Light Infantry Armored Battalion spotted the Iraqi unit comprised of nearly 100 Soviet-made Boyevaya Mashina Pekhoty (BMP) fighting vehicles. Command and control vectored A-10s and Harrier jump jets to the area. This column was soon followed by another group, this one consisting of twenty-nine T-62 tanks. American and Coalition F-16 fighter aircraft soon joined the engagement destroying the lead tank with an anti-tank missile. The battle continued in this manner near both OPs 1 and 2. By morning, most of the Iraqi vehicles had been shattered by Allied air power.⁹

As we have seen, the primary attack group of Iraqi tanks and vehicles crossed the Saudi border to the East along the coast and seized Al-Khafji. Troops of the 5th Mechanized Battalion of the 2d Saudi Arabian National Guard Brigade observed the Iraqi tanks until they received heavy fire and withdrew under direct orders. Units of the 8th and 10th Saudi Arabian National Guard Brigades acted in similar fashion. The withdrawal orders proved prudent since, in one case, Iraqi T-55s approached the border with their turrets in reverse, indicating they were surrendering. As the Saudi units advanced, the Iraqis suddenly reversed their turrets and opened fire forcing a Saudi retreat. It was at this point that Coalition commanders in the area sent three AC-130s to the area. During this engagement, they destroyed thirteen enemy vehicles forcing them to take refuge. Still, with all the Coalition ground forces having appeared to pull back, the Al-Khafji road was left open to the remaining Iraqi units.¹⁰

Around midnight of the first day, even as the AC-130s had performed their lethal orbiting *dance of death* with great precision, the Iraqis entered Al-Khafji. It was at this point that two six-man 1st Marine Division reconnaissance teams found themselves cut off from their escape route and trapped inside the city. Rather than panic, they quickly occupied two apartment buildings in the southern sector of the city and called artillery fire on their position to force the Iraqis to halt their search of the area.

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The remains of two of the 6th Armored Brigade's T-62 tanks, destroyed on the night of January 29, 1991, lie abandoned on the sand in front of Observation Post 4.



ALARMED BY THE IRAQI SUCCESS, GENERAL KHALED QUICKLY CONTACTED GENERAL SCHWARZKOPF REQUESTING A CONCENTRATED AIR AND GROUND ATTACK

What began as a mistake soon became a blessing as the Marines called in artillery and air strikes rained reprisal on the Iraqis throughout the night. Fixed-wing and helicopter gunships assaulted enemy tanks and artillery with *extreme prejudice and accuracy*.¹¹

Throughout, Iraqi forces nearly located the Marines. According to Scott Williams as well as Gordon and Trainor, "To encourage the Iraqis to move away from the building, he [Cpl. Ingraham] had called for artillery fire and air strikes on the street around him." Concerns for the Marines increased when one of their number was wounded by artillery shrapnel from U.S. fire. Khaled urged a rapid response by his forces in an effort to rescue the trapped Americans.¹²

It was at this point that the Iraqis in Al-Khafji reported to Baghdad that the Saudi town was theirs. Radio broadcasts in the Iraqi capital declared "victory" saying, "We have expelled the Americans from Arab territory." Thousands of people poured into the streets chanting, "O Saddam, from Khafji to Damman!" People all across the Muslim world, even in places like Indonesia, Pakistan and Malaysia, demonstrated in favor of Iraq's apparent success.¹³ At least at first, Saddam Hussein had accomplished one of his goals to become a major leader in the Arab world.

Counterattack

Alarmed by the Iraqi success, General Khaled quickly contacted General Schwarzkopf requesting a concentrated air and ground attack. Schwarzkopf, with his main air and ground forces focused on preparations for assault on the Iraqi right, opted to retake the city using Arab forces supported by air power. The task fell to the 2d Saudi Arabian National Guard Brigade's 7th Battalion, composed of Saudi infantry and two Qatari tank companies attached to the task force. Plans called for them to be supported by U.S. Army Special Forces and Marine Reconnaissance personnel.¹⁴

The original plan called for attack forces to surround the buildings where the Marines were trapped and free them. A second force would then execute a frontal assault up the main highway directly into the town. This became more daunting when the Coalition discovered that the Iraqis had nearly 1,500 men in Al-Khafji. While the local Marine commander Col. John Admire, promised the Arab force robust artillery and air support, he later recalled, "We didn't do a lot of planning. We just drew it out in the sand and went for it. I emphasized that the Arab force would do the main attack."¹⁵

For the attack, these units were placed under the command of Saudi Lt. Col. Abdul Matar. The

The Saudi National Guard battalions, which freed al-Khafji from the Iraqis, employed Cadillac Gage V-150 Commando light armored vehicles, some of which were equipped with a M220 launcher for the BGM-71 TOW antitank missile.



IT WOULD BE THE FIRST TIME ANYONE IN THE QATARI ARMY HAD EVER FIRED A SHOT IN ANGER

operation began around 5:00 p.m. on January 30. The Arab components soon linked up with elements of the 3d Marine Regiment, just south of Al-Khafji. The plan called for a direct assault on the town by all units. It would be the first time anyone in the Qatari army had ever fired a shot in anger. Fifteen minutes of preparatory artillery fire opened the attack. As the nighttime battle unfolded, a platoon of Iraqi T-55s engaged a Qatari tank company south of the city. The Qatari French-built AMX-30 main battle tanks destroyed three T-55s and captured a fourth. Throughout this phase of the engagement, the attacking forces were supported by artillery fire from the 11th Marine Regiment. At first, the attack was slowed by heavy Iraqi fire but soon, the Saudis reinforced the assault units with two additional companies of their 7th Battalion. Even so, the Iraqis did destroy one Saudi V-150 armored personnel carrier.¹⁶

As the frontal assault ground on, components of the 5th Battalion and 2d Saudi Arabian National Guard Brigade, supported by the 8th Ministry of Defense and Aviation Brigade moved north of Al-Khafji to block Iraqi reinforcements attempting to reach the city. They were supported by a robust air power component that completely stopped Iraqi efforts to reinforce the defenders in Al-Khafji, but not everything turned out well. During the night, a unit of U.S. Army heavy equipment transporters got lost and stumbled into the city. While most were

able to withdraw under heavy fire, one truck was hit and the occupants were wounded and captured.

The 3d Battalion, 3d Marine Regiment quickly sent thirty men to rescue the two soldiers. While they did not find the two truck drivers, they did find the destroyed Qatari AMX-30 with its dead crew. They brought the bodies back to Coalition lines.¹⁷

The initial assault was not successful. Paul W. Westermeyer writes in his Marine Corps History Division account that, "Despite their [Saudi's] efforts the 7th Battalion was not able to retake Al-Khafji nor was it able to relieve the reconnaissance teams still trapped in the city. Part of the problem had been Khaled's collegial desire to rescue his American comrades trapped inside the town who were running out of food, water and luck." Initial planning had resulted in a frontal attack comprised of very little subtlety. Even though they did not retake Al-Khafji immediately, they withdrew to positions closer to the town and adjusted their plans by sending the 5th Battalion, 2d Saudi Arabian National Guard Brigade north to block Iraqi movements in or out of the town. They were soon joined by a battalion of the 8th Ministry of Defense and Aviation Brigade. In addition, Coalition air power in the form of F/A-18s, A-10s and AV-8s provided CAS during the daylight hours and AC-130s during the night. With Allied air forces now focused on Al-Khafji the Saudis and Qataris were in position to deliver the *coup de grace*.¹⁸

A head-on view of an AC-130 gunship, armament bristling on its side.



AS THE DAWN BEGAN TO BREAK THROUGH, THE AC-130Hs WERE ORDERED OUT OF THE AREA FOR FEAR OF BECOMING A TARGET FOR SHOULDER-FIRED SAMs

The Tragedy of "Spirit 03"

The "Spirit 03" became a prelude of one of the worst tragedies of the entire Gulf War. In the early hours of the morning near sunrise, AC-130 call sign "Spirit 03" was shot down by an Iraqi SAM killing all fourteen crew members. The event was a great shock that rippled through the entire Coalition. At first, it had seemed the fixed-wing gunships were invincible. Each night since the Iraqis had first launched their attack, the gunships *licked their chops* at the prospect of plentiful targets, minimum anti-aircraft defense and no enemy aircraft. They feasted on the enemy columns during each of the three nights. However, as the dawn began to break through, the AC-130Hs were ordered out of the area for fear of becoming a target for shoulder-fired SAMs. Three gunships were airborne that morning and the first two had destroyed numerous armored personnel carriers. Air attacks destroyed some vehicles, damaged several more, and forced crews to abandon others. The net effect was to strip the enemy of its ability to achieve the surprise, momentum, massed effects and dominance that are the bases of successful maneuver.

The crew of gunship "Spirit 03," or T/N 69-6567 nicknamed "Ghost Rider," had planned to spend the evening of January 29, searching for Scud sites. However, when the Iraqis attacked their mission changed. Over the next two nights they found them-

selves focused on destroying the forces of the 5th Mechanized and 3d Armored Divisions. On January 31, they and other gunships were busy with so many high value targets under her guns that the crew was reluctant to withdraw with their mission incomplete. One account reveals their eagerness to finish their task, "Allied pilots were thrown into a bloodlust type of frenzy, which put them and their crews in danger." As for "Spirit 03," they simply stayed on site too long. At 6:00 a.m., their luck ran out when suddenly an enemy man-portable shoulder-fired SAM, a SA-7 "Grail," struck the AC-130H. The ensuing explosion hurled the gunship skyward. In spite of desperate efforts to save the aircraft, it crashed just after 6:30 a.m. killing all fourteen crew members. It was the worst single loss of the air war.¹⁹

Bloodlust does not explain the tragedy since their sacrifice was a supreme effort to provide CAS for embattled Marines on the ground. One of the last of three AC-130s on station, "Spirit 03" was preparing to "bug out" when they received a radio call from the Marines requesting the destruction of an enemy missile battery. Facing increasing AAA fire and now illuminated by the light of the breaking day, the crew of "Spirit 03" elected to stay. No sooner had they eliminated the target when they were hit by the SAM.²⁰ As Generals Clay T. McCutchan and Steve Wilson recalled years later, "it was a tragic loss that affected every single mem-

The crew of a Marine LAV-25 scans the desert. The LAV-25 was the backbone of the light armored infantry battalions, an untried concept prior to the Battle of al-Khafji. The battalions were used in a traditional cavalry role, providing a screen in front of the main body of I Marine Expeditionary Force.



IT WAS A TRAGIC LOSS THAT AFFECTED EVERY SINGLE MEMBER OF THE GUNSHIP COMMUNITY

ber of the gunship community.” No one who flies gunships has forgotten, nor doubtless ever will forget, the event.²¹

Bringing the Battle to a Climax

Even as the gunship misfortune unfolded, the Saudi and Qatari forces pushed into the outer defenses of Khafji. As January 31st dragged on, the Iraqis decided their only hope was to send in reinforcements from Kuwait to reinvigorate the offensive and, once more, try to lure the Coalition into a costly ground battle. Late that night, Iraqi commanders sent in fresh troops of the 3d Armored and 5th Mechanized Divisions hoping they would arrive just before sunrise. Coalition forces near Al-Khafji were unaware of this action. Once again air power proved its merit. This time a Joint STARS E-8A spotted columns moving along the coastal road toward Al-Khafji and at other points just inside Kuwait. Air controllers immediately directed airborne assets to strike these Iraqi units. Early in the morning of February 1, an E-8A recorded several of the air strikes which decimated the Iraqi relief columns and forced most of the survivors off the road into the desert. Air power alone halted mobile vehicle columns—something few believed possible.²² “Without even realizing it, January 31 became the Air Force’s finest day. They had repulsed a three-division attack and thwarted a major Iraqi initiative.”²³

Not only had the gunships and attack aircraft been efficient, but the use of BLU-82 “Daisy Cutter” ordnance by Air Force Special Operations Command (AFSOC) crews literally annihilated the Iraqi armor in and around Al-Khafji. At one point, Iraqi General Salah, alluding to Saddam Hussein’s calling Al-Khafji the “mother of all battles,” declared “the mother was killing her children” and then requested he be allowed to withdraw the survivors.

Coalition aircraft had flown 267 sorties against Iraqi units without disrupting air attacks in Kuwait. The results had been devastating for the Iraqis. On the last day, Marine, Saudi, and Qatari forces, supported by AC-130Hs, made their final push into the town, finally uprooting the Iraqis. Coalition forces lost three armored vehicles while destroying twenty-four enemy tanks and thirteen other armored vehicles. During the three days of combat, Allied air power remained overhead ready to spring into action against any and all targets at a moment’s notice. All totaled, the gunships and other CAS aircraft left more than 300 Iraqi vehicles smoldering wrecks between Al-Khafji and Kuwait. As Horner noted, “The systems that were especially effective were the AC-130 gunship patrolling the coast road just offshore in southern Kuwait.” One Iraqi veteran of the Iran-Iraq War later declared that Coalition air power “imposed more damage on his brigade in half an hour than it had sustained in eight years of fighting against the Iranians.”²⁴

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Another Iraqi captain with the 5th Mechanized Division lamented “that his brigade, who had been tasked to support units in Al-Khafji, was stopped short of the border by a combination of air power and Arab tanks.” After action reports reported that this division was less than 50 percent effective after the battle. General Horner later declared, “Khafji was a tremendous victory for Air Power,” and it was a tremendous victory overall in terms of what happened in Operation Desert Storm, because it laid the final nail in the coffin of the Iraqi Army.²⁵

The final assault by the Saudis and Qataris unfolded slowly but surely throughout January 31. Pressing their attack from the north and south soon crushed formal resistance. As the morning of February 1 dawned the Saudi force pushed all the way through the town, mopping up opposition troops as they went. General Khaled soon declared victory and the recapture of the Al-Khafji. While a few Iraqis still had to be rooted out and others surrendered over the next few days the battle was over. To the Saudis it had been a great victory. For the Americans it was a relief since it meant their larger plans for the larger land war could continue as planned. Last, but not least, for the Air Force it proved the decisive power of its air assets.²⁶

One last aspect of the battle was an attempted landing by Iraqi amphibious forces along the coast with plans to move into Al-Khafji. As the boats made their way through the Gulf waters towards Al-Khafji, U.S. and British aircraft caught the Iraqi boats in the open and destroyed the Iraqi amphibious force. As the remaining twenty Iraqi patrol boats, tankers and mine sweepers attempted their escape, perhaps to Iran, Royal Navy forces attacked them at what became known as the Battle of Babiyan. Only three boats survived the engagement. Even though sporadic Iraqi resistance continued in the area, by the end of February 1, 1991, Al-Khafji was once again in Coalition hands. The Marines who had been trapped inside had been rescued. Their services had proved vital in destroying the Iraqi units and vehicles as well as liberating the town.²⁷

The Aftermath: Wins, Losses and Significant Results

The air campaign continued, alone, for nearly four more weeks before the short-lived ground campaign began. Throughout February, various aircraft performed myriad tasks from B-52s stationed at Diego Garcia carpet bombing Iraqi positions in redoubts to fighter-bombers using PGMs shutting off oil leaks and extinguishing oil fires purposely started by the Iraqis. Air Power eradicated whole Iraqi brigades arrayed in combat formations in the open desert and prevented effective Iraqi resupply to forward deployed units engaged in the actual fighting. It also stopped hundreds of thousands of Iraqi troops from achieving the force concentration essential for anything approaching victory in the upcoming land battle.²⁸

During the battle for Al-Khafji, Coalition forces

suffered forty-three killed and fifty-two injured. This included twenty-five Americans killed; eleven from friendly fire and fourteen in the loss of “Spirit 03.” The U.S. had two wounded and two more captured. The Saudi and Qatari forces lost eighteen killed and fifty wounded. Two Qatari AMX-30 tanks and ten Saudi V-150 armored vehicles were destroyed. According to Freedman and Karsh, in their article “How Kuwait Was Won,” the Iraqis had seventy-one killed, 148 wounded, and 702 missing. An official U.S. source claimed that 300 Iraqis lost their lives, and at least ninety vehicles were destroyed. Another source suggested that sixty Iraqi soldiers were killed and at least 400 taken prisoner. It also believed that eighty armored vehicles were destroyed. No matter which numbers the reader might accept, what is clear is that the battle in and around Al-Khafji was an Allied victory that eviscerated three Iraqi heavy armor divisions.²⁹

At first, the Iraqi capture of Al-Khafji had been a propaganda victory for Iraq. On January 30, Iraqi radio declared they had “expelled Americans from the Arab territory.” This euphoria was short-lived. Within forty-eight hours, Saudi and Qatari troops, supported by massive air power, had retaken the city without committing large numbers of Allied ground forces. Saddam Hussein had not drawn the Coalition into his trap, and the ground campaign began on schedule on February 24-25. Significantly, the victory also raised the confidence of U.S. military leaders in the abilities of the Saudi and Qatari armies.

It is also important to realize that following the engagement at Al-Khafji, Coalition officials began to conclude the Iraqi Army was a “hollow force” or a “light beer” version of the Soviet ground forces which had trained and supplied them. General Schwarzkopf, in particular, was convinced this was the resistance that the Coalition ground forces would face later that month. Coalition leaders discovered that air power and its continued use was wearing down the Iraqi forces in the field. For example, sixty-two B-52 bombers flew 1,600 sorties against the roughly 540,000 Iraqi forces positioned in the desert. By the time the ground offensive began, fewer than 250,000 remained in Iraq and 100,000 in Kuwait. Significantly, the equipment captured had shown “a lot of rust and lack of proper lubrication.” This showed that the Iraqis lacked training and supervised maintenance.” Last, but not least, it was a huge morale boost for the Saudis who had successfully defended their own territory.³⁰

Significance for Air Power

Air power had been the cornerstone of this victory along with the courageous efforts of Marine, Saudi, and Qatari ground units. Allied air units had detected the Iraqi units and responded rapidly to prevent the Iraqis from dictating the terms of the battle. Instead, the Harriers, A-10s and later AC-130s halted the enemy’s initiative. Once the Iraqi force became a stationary force, air power carefully destroyed its force with impunity. As one

Capt Douglas R. Kleinsmith poses with his air-ground liaison team. On the night of January 29-30, 1991 Kleinsmith's team was cut off from Coalition forces by the Iraqi advance. They evaded the enemy by maneuvering through the sabkhas and returned to Coalition lines.



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UNITS.**

Air Force pilot reported the enemy vehicles “were lined up in columns on roads, they were easy to find, they were easy to strike.” Indeed, the Central Air Force (CENTAF) showed that by the end of February 1, Coalition aircraft destroyed forty-four of the 5th Mechanized Division’s tanks. In short, one of Hussein’s finest units had all but been destroyed. According to one Defense Department report “only 20 percent of the division made it back.”³¹

General Horner believed, “the Coalition seized the initiative by using airpower to turn the tables on the attacking Iraqis.”³² The General further declared:

*The Battle of Khafji did validate the idea that air power could be used to defeat the enemy army before it closed with our own ground forces, that it could feed the battle indigestible chunks for our own friendly ground forces. Khafji validated what a lot of airmen had been saying for a long time.*³³

They had done so in the most efficient and effective way possible. Rather than have to destroy most or all of the units as the Army believed was necessary to halt enemy maneuver forces, they had stopped their advance by the mere threat of destruction. General Schwarzkopf had established a goal of 50 percent attrition but the Central Intelligence Agency (CIA) found that Allied air forces had halted the Iraqi 5th Division by destroy-

ing fifty-one of its 160 vehicles. Fortunately, as many analysts have recommended U.S. air power has grown in efficacy over the past twenty years. One source says, “Airpower is actually more effective in target identification and weapons employment than it was in 1991.” Thus, “the operational lessons of the Iraqi offensive at Khafji remain intact: Dominance in the air can strip the initiative from an enemy maneuver force—and do it with an efficiency that makes air power the decisive weight in the operational balance.”³⁴

In many ways the Battle of Khafji confirmed the ability of air power to not only act effectively in its role of CAS but halt, devastate, and repel large concentrations of mobile maneuver ground forces. It demonstrated, once and for all, the strategically decisive nature of air power in modern conventional combat. Rebecca Grant writes, “Khafji demonstrated to all but the most ingrained skeptic the ability of deep air attacks to shape and control the battle and yield advantages for engaged ground forces. In 1991, air power identified, attacked, and halted division-sized mechanized forces without the need for a synchronized, ground counterattack.”³⁵

It is worth asking what would have happened had the Coalition not had air superiority? Likely, as not, Saddam Hussein’s attack would have succeeded. One need only recall that during the Iran-Iraq war of the 1980s, the Iraqis frequently lured Iranian forces into bloody land battles that not only

Operating as part of the Marine air-ground task force, AV-8B Harriers provided needed close air support during the Battle of al-Khafji.



SOMETIME AFTER THE BATTLE AT AL-KHAFJI, MAJ. GEN. CHARLES D. LINK, USAF, (RET.) CONCLUDED THAT THE U.S. SHOULD PUT MORE EMPHASIS ON AIR POWER AND LESS ON LAND POWER

cost thousands of lives but devastated the Iranian nation. Clearly, the American public would never have accepted such casualty numbers and they may have forced a withdrawal. Instead, air power blunted the Iraqi attack and eventually devastated Iraqi ground forces.

Sometime after the battle at Al-Khafji, Maj. Gen. Charles D. Link, USAF, (Ret.) concluded that the U.S. should put more emphasis on air power and less on land power. He believed that, "If we are to take to heart the lessons of Khafji, we must reexamine how we spend our defense dollars." During the ensuing decades this notion gained support with the number of aircraft in all services increasing fivefold. By 1998, Joint STARS had reached full operational capacity. Stationed at Robins AFB, Georgia, it has also seen an upgrade to the E-8C. Modern military air power affords battlefield commanders with a rapid reaction force capable of transmitting target information for strikes that can impede enemy offensive initiative and subsequently lead to the denigration of their forces and ability to fight back. Faced with this situation, one can conclude that, no enemy maneuver force has a reasonable hope of successfully realizing its objectives.³⁶

While Operation Allied Force and Enduring Freedom both confirmed to some degree the lessons from Al-Khafji and the First Gulf War, Operation

Iraqi Freedom and the protracted nation-building efforts of the Allied powers in these conflicts placed emphasis once again on the importance of ground forces. However, with the departure of U.S. forces from Iraq in 2011 and the initiation of a phased drawdown from Afghanistan, it is more important than ever to re-examine the paradigm of Al-Khafji and decide how to employ U.S. military units and weapons in an effective composition for future American force structures. With cuts in military spending seemingly on the horizon, one must decide what the U.S. military should look like in the future. For those who have studied the lessons of the First Gulf War, the conclusion is plain; an investment is needed in air power. These students have seen the examples of the efficacy of modern technology when coupled with modern aviation. For them the operational lessons learned from the Iraqi offensive at Al-Khafji remain intact. They realize that control of the skies can and will stifle the offensive ability of any enemy maneuver force, thus, making air power "the decisive weight in the operational balance."³⁷

Perhaps the best way to conclude this work is to quote the renowned military historian David MacIsaacs who said of air power in World War II that it "showed beyond all cavil that air power, especially when applied as widely and in as many directions as the United States could, dominated surface

warfare.”³⁸ As if he had known what future historians would say, in 1942, Field Marshall Erwin Rommel, a great proponents of mobile warfare, concluded, “The future of battle on the ground will be preceded by battle in the air. This will determine which of the contestants has to suffer operational and tactical disadvantages and be forced throughout the battle into adopting compromise solutions.”³⁹ Clearly, the performance of air forces dur-

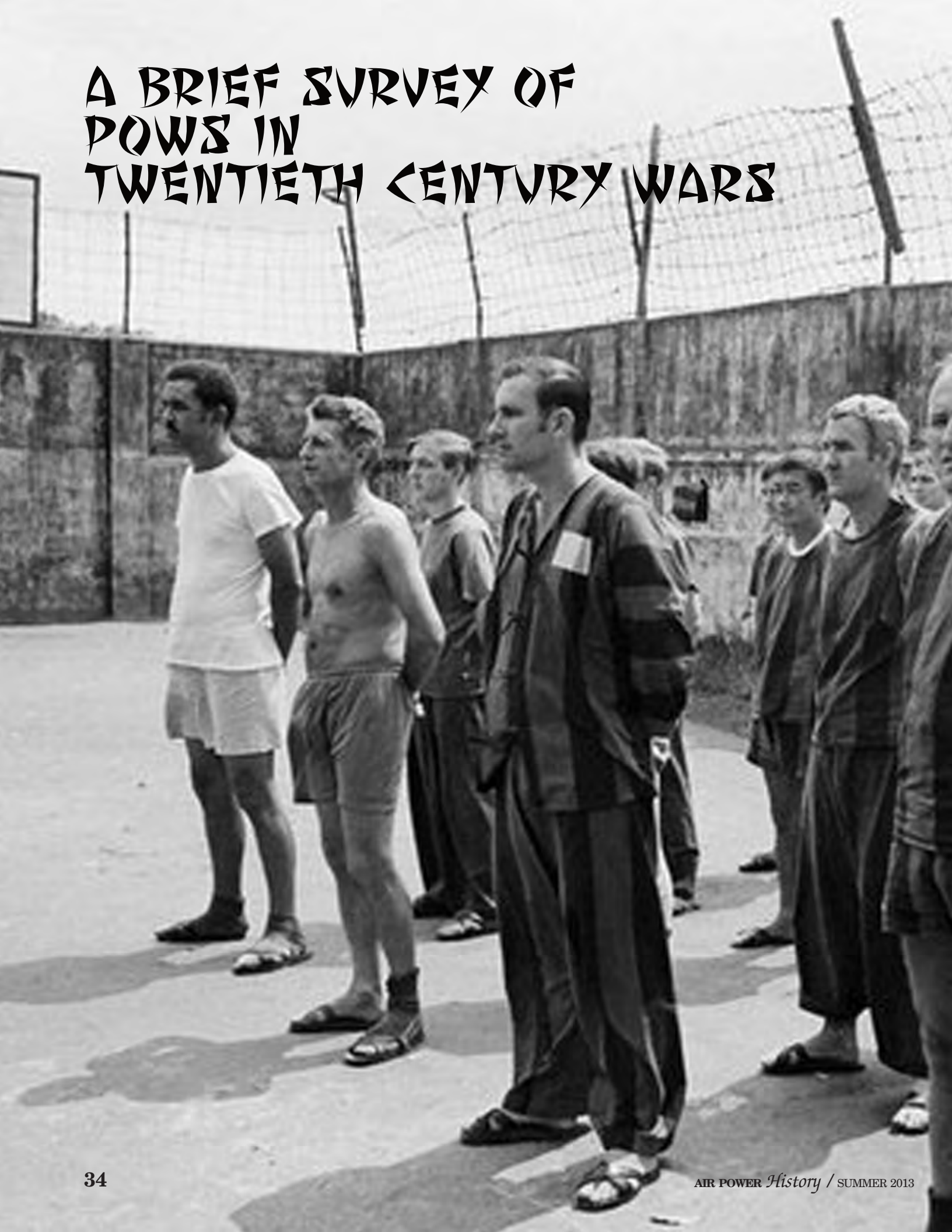
ing this battle confirmed in every aspect the prognoses and pronouncements of both these military professionals. In fact, Coalition air forces in this battle followed U.S. Air Force doctrine to the letter. Its “employment in that engagement (Battle of Khafji) isolated the battlefield, destroyed follow-on forces, halted the Iraqi offensive, and demonstrated to the Iraqis the futility of further offensive action.”⁴⁰ ■

NOTES

1. Williams, “Khafji,” p. 45; Westermeyer, “Marines in Battle,” pp. 27-30; Stanton, “Saudi Guard,” pp. 8-9; “Spirit 03,” William P. Head, *Night Hunter: A History of the AC-130 Gunship*, Air Force Special Study (Warner Robins ALC Office of History: Robins AFB, Georgia, 2012), pp. 316-26, [hereafter *Night Hunters*].
2. Clevenger, “The Battle of Khafji,” “Introduction and Executive Summary,” pp. 1-36; Spirit 03.
3. Westermeyer, “Marines in Battle,” p. 22.
4. Grant, “Epic Battle,” pp. 30-32.
5. Schwarzkopf, *Hero*, pp. 424-26. It should be noted that most of the Qatari forces were comprised of Pakistani mercenaries or Qataris of Pakistani national origin.
6. Westermeyer, “Marines in Battle,” pp. 22-25.
7. Grant, “Epic Battle,” p. 30-31.
8. *Ibid.*, pp. 31-32.
9. Westermeyer, “Marines in Battle,” pp. 25-26; Head, *Night Hunters*, pp. 326-29.
10. Williams, “Khafji,” pp. 46-47; Stanton, “Saudi Guard,” pp. 9-10.
11. Westermeyer, “Marines in Battle,” pp. 29, 31-34; Stanton, “Saudi Guard,” pp. 9-11; Head, *Night Hunters*, pp. 335-340.
12. Williams, “Khafji,” p. 41; Gordon and Trainor, *The General's War*, p. 280.
13. Williams, “Khafji,” p. 19. Original quotes from Alan Cowell, “War in the Gulf: Iraq; Hussein is Controlling Plans for Ground War, report says,” *The New York Times*, Jan. 31, 1991, Section A; p. 11; Youssef M. Ibrahim, “Choosing Sides in the Mideast, A Fear that the War is Only the Beginning,” *The New York Times*, Feb. 3, 1991, Section 4; pp. 1, 3.
14. Williams, “Khafji,” pp. 19, 52-56; Schwarzkopf, *Hero*, pp. 424-26.
15. Williams, “Khafji,” p. 44; Gordon and Trainor, *The General's War*, p. 280.
16. Williams, “Khafji,” pp. 23-25; Freedman and Karsh, “How Kuwait Was Won,” pp. 33-34; Westermeyer, “Marines in Battle,” pp. 27-29.
17. Stanton, “Saudi Guard,” pp. 9-11; Williams, “Khafji,” pp. 23-25.
18. Westermeyer “Marines in Battle,” pp. 28-30.
19. Gordon and Trainor, *The General's War*, p. 284; Interview by Author with Maj. Gen. Clay T. McCutchan and Maj. Gen. Steve Wilson, 29 January 2008, Eglin AFB, Florida, Transcript, pp. 11-14 [hereafter McCutchan/Wilson Interview]; Titus, “The Battle of Khafji,” pp. 17-18; Rick Atkinson, *Crusade: The Untold Story of the Persian Gulf War* (Boston: Houghton, Mifflin, 1993), pp. 210-13; John T. Quinn and Jack Shulimson, “U.S. Marine Operations in the Persian Gulf War, 1990-1991,” in William P. Head and Earl H. Tilford, Jr. *The Eagle in the Desert: Looking Back on U.S. Involvement in the Persian Gulf War*

- (Westport, Connecticut: Praeger, 1996), pp. 211-12; Head, *Night Hunters*, pp. 328-329; Williams, “Khafji,” p. 46.
20. Spirit 03; Head, *Night Hunters*, 328-40.
21. McCutchan/Wilson Interview, p. 14.
22. Clevenger, “The Battle of Khafji,” Appendix B: “Interview with Gen. Charles Horner, USAF (Ret.), CENTAF Commander during Operation Desert Storm,” Feb. 26, 1996.
23. Williams, “Khafji,” p. 16.
24. Clevenger, “The Battle of Khafji,” Appendix B: “Interview with Gen. Charles Horner, USAF (Ret.), CENTAF Commander during Operation Desert Storm,” Feb. 26, 1996.
25. *Ibid.*, p. 28 and Appendix B. Also see Palmer, Scott and Toolan, *An Assessment of Airpower*, p. 5.
26. Westermeyer, “Marines in Battle,” pp. 31-33
27. *Ibid.*, pp. 31-33; Freedman and Karsh, *The Gulf War*, p. 392.
28. Thomas Y'Blood, “Desert to Mountains,” in Bernard Nalty, General Editor, *Winged Shield, Winged Sword: A History of the United States Air Force*, Volume II, 1950-1997 (Bolling AFB, D.C.: Air Force Museum and History Program, 1997), pp. 474-78. For more on AFSOC involvement, see Fred J. Pushies, *U.S. Air Force Special Ops* (London: MBI Publishing, Inc., 2000, rev. ed. 2007), pp. 41-68.
29. Freedman and Karsh, “How Kuwait Was Won,” pp. 11-15.
30. Freedman and Karsh, *The Gulf War*, p. 389-90; See also, Hallion, *Storm Over Iraq*, especially the conclusion. See also, one of the seminal works on the subject, Col. (now Lt. Gen. USAF, ret.) David Deptula, “Parallel Warfare: What Is It? Where Did It Come From? Why Is It Important?” in Head and Tilford, *Eagle in the Desert*, pp. 127-56.
31. Grant, “Epic Battle,” p. 33.
32. *Ibid.* p. 33.
33. Palmer, Scott and Toolan, *An Assessment of Airpower*, p. 2.
34. Grant, “Epic Battle,” p. 34.
35. *Ibid.*
36. *Ibid.*
37. *Ibid.*
38. Lt. Col. Charles M. Westenhoff, *Military Air Power: The CADRE Digest of Air Power Opinions and Thoughts*, (Maxwell AFB, Alabama: Air University, 1990), p. 25.
39. *Ibid.*, p. 39.
40. Palmer, Scott and Toolan, *An Assessment of Airpower*, p. 27. Original found in “Global Engagement: Air and Space Power Organization and Employment,” Air Force Doctrine Document 2, Maxwell AFB, Alabama: HQ Air Force Doctrine Center, Draft Version 8, p. 10.

A BRIEF SURVEY OF POWS IN TWENTIETH CENTURY WARS





Jacob Neufeld and George M. Watson, Jr.

UNDER THE GENEVA CONVENTIONS, THE AUTHORITY TO DETAIN PRISONERS ...IS APPLIED STRICTLY FOR SECURITY PURPOSES.

Tragedies and atrocities characterize nearly all armed conflicts. A soldier may take out his frustration upon an enemy prisoner and kill him at the moment of capture. While such acts are sometimes rationalized as similar to a prizefighter's reactive punch, thrown after the bell has rung, the abuse and mistreatment of prisoners of war (POWs) already in custody violates international law and is subject to criminal prosecution. This survey of the experiences of major combatants during the twentieth century seeks to place the treatment of POWs in historical context. Although the United States has usually claimed the high moral ground with respect to the treatment of prisoners, our record has not been as unblemished as we might have expected.¹

The law of war, a subset of international law, has evolved to mitigate some of the horrors of warfare. In 1863, the United States Army codified a set of rules governing the treatment of prisoners called General Orders 100, or the Lieber Code, or *Instructions for the Government of Armies of the United States*. Lieber's Code aimed to define prisoners as representatives of their government, not criminals. A prisoner was a captive of the enemy government, not the individual captor; he could not be subjected to reprisals, except that he might be tried for war crimes; and he had to be treated decently and humanely. Subsequently, European conventions adopted the Lieber Code for international conflicts and expanded their conventions' coverage and application. Two main tracks evolved: 1) the Law of the Hague, named after the Hague conventions of 1899 and 1907, which prescribed "Rules of Engagement" and is based upon principles of military necessity and proportionality, and 2) the Law of Geneva, named after the Geneva Conventions of 1864, 1906, 1929, 1949, and 1977, which emphasized human rights and responsibilities, including the humane treatment of prisoners. These laws provided POWs' rights to shelter, food, and medical care to ensure they were treated humanely. A primary inducement for combatants to obey the laws is the notion that their imprisoned comrades will receive reciprocal humane and just treatment at the hands of their enemy.²

A broad interpretation of these laws provided that all detainees, including civilians, should be

treated humanely in order to avert needless suffering. On the other hand, those who interpreted the laws narrowly argued that denying rights to irregulars (terrorists) avoided legitimizing their actions. Thereby, the "narrow" school rejected the existence of a state of war and treated the perpetrators as criminals.

Under the Geneva Conventions, the authority to detain prisoners (military or civilians, who pose a danger) is applied strictly for security purposes. The detainee is incarcerated in order to remove him from further participation in combat; it is not for punishment. Prisoners may, however, be punished for crimes committed, after a fair trial.³

Philippine-American War, 1900-1903

During the Philippine Insurrection of the early 1900s, there were some 2,800 skirmishes between American forces and Filipino insurrectionists, in which prisoners of war were taken. After an investigation, the U.S. War Department concluded that enemy prisoners had been treated "humanely and with kindness."⁴

Nonetheless, incidents of torture and murder were reported. Amnesty International USA's executive director, William F. Schulz, compared the use of "water-boarding" (a process of submerging a prisoner's head underwater until they feel that they're drowning) against an Al Qaeda suspect to the so-called water cure administered by Americans in the Philippines war, where "U.S. forces would put bamboo shafts down the throats of their victims and pour [in] as much dirty water as they could into their stomachs."⁵

In his book, *Sitting in Darkness: Americans in the Philippines*, David Bain noted that the U.S. Army was mismanaged in the Philippines and identified Maj. Gen. Elwell S. Otis as the chief culprit. General Otis censored news dispatches and edited every press report, and, since he controlled the only available cable terminal, his power was practically absolute. Further, critical reporters were not allowed to attend press briefings and the most troublesome of them were deported. Nonetheless, some press reports along with soldiers' letters eventually got out and were reported in the American press.

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World War I POWs.

AT THE OUT-
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ENTRY INTO
THE GREAT
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U.S.
CUSTODY

Senate hearings, called the Lodge Committee on the Philippines, followed and laid a fair portion of blame for the crimes committed in that war *on the volunteer soldiers who reached adulthood on the American frontier*. One soldier reported that his company took four prisoners at Caloocan. They asked an officer what to do with them, and later reported, "He said, 'you know the orders,' and four natives fell dead."⁶

Col. Frederick Funston, a highly decorated soldier in charge of the 20th Kansas Volunteer Infantry, bragged to reporters that to avenge the American deaths he had ordered twenty-four prisoners summarily executed. But when he heard that he might be subject to court-martial for his actions, Funston insisted that the prisoners had "attempted to escape" and were subsequently killed in the chase.⁷ It should be noted that President Theodore Roosevelt had dismissed these acts in a speech in which he referred to our army as "carrying to completion a small but peculiarly trying and difficult war in which it involved not only the honor of the flag, but the triumph of civilization over forces which stand for the black chaos of savagery and barbarism."⁸ Although the article was critical of the President, it excused his views for not having sufficient information.

World War I, 1914-1918

At the outset of America's entry into the Great War, the Allies transferred POWs to U.S. custody. Soon however, the number of POWs captured by Americans increased markedly, prompting the U.S. Army Provost Marshal General to publish regulations for processing and handling POWs. In June 1918, new instructions vested in the Provost Marshal responsibility for the custody and control of the prisoners of war.⁹

The POWs were immediately disarmed and sent to a brigade headquarters, where they were searched for concealed weapons and documents

that might have escaped previous observation. From brigade headquarters the POWs went to a division enclosure, where they came under the control of the Provost Marshal General, although the division provided the necessary officers and guards. Here, the prisoners were interrogated by intelligence personnel, and then, under guard furnished by the Provost Marshal, were escorted expeditiously to a central POW enclosure in the rear area.

At the receiving station, the POWs were issued serially numbered tags. From each individual's general information form, index cards were made and addressed postal cards written to the POW's family, informing them of his arrival and of his state of health. Next, the POWs were required to bathe, given a medical examination, and issued renovated, dyed clothing. The POWs were then classified according to occupational history and sent to a stockade where they awaited assignments to a labor company. The positive treatment of prisoners also reflected the Progressive Era's predilection for "efficient management" with regard to providing food, clothing, medical care, and recreation. In return, POWs were required to work.

Prisoners of war captured by the U.S. received the same type food, clothing, medical treatment, and quarters as were provided for American troops. For their welfare, the prisoners had many forms of entertainment and recreation: prisoner orchestras were organized; stockades were supplied footballs, baseballs, handballs, and boxing gloves; and in some instances the POWs were permitted to engage in athletic contests with other POW companies. Generally, the prisoners reacted favorably to the treatment received. By 1919, 907 captured officers and 47,373 enemy enlisted men were in the custody of the American Expeditionary Force (AEF).¹⁰

Labor companies were formed beginning in July 1918. By December 1919, 122 companies had been formed at central POW enclosures. There were three different types, including construction, road building, and general labor companies, each consisting of approximately 250 to 450 men, who were classified according to the skills of the component privates. On average, fifty prisoners were non-commissioned officers, who served as work supervisors.

Few disciplinary problems arose. Once, two POWs escaped and subsequently were recaptured and placed under added restraint. At this point, the other prisoners refused to work until the penalty was lifted. To induce compliance with their work orders, the POW company commander applied "administrative pressure" and refused to issue rations until the prisoners returned to work. The announced "no work, no eat" policy resulted in an almost immediate resumption of labor activities, and the work produced and the manner of performance was better after the incident than before.¹¹

World War II, 1939-1945

During World War II more than 450,000 Axis prisoners—Germans, Italians, and Japanese—were held in the United States at 511 POW camps spread

German prisoners prepare to march from the Aliceville train depot to the POW camp, 1943. (Photo courtesy Alabama Department of Archives and History.)



IN GENERAL, DURING WORLD WAR II THE USE OF PRISONERS AS LABORERS IN THE U.S. PROVED PROFITABLE AND HELPED TO OFFSET THE CRITICAL MANPOWER SHORTAGES

across the nation. Despite isolated incidents of abuse, most German and Italian prisoners were treated well. In his book *Nazi Prisoners of War in America*, Arnold Krammer related several stories of how years later some ex-prisoners returned to the U.S. to visit their former prisons camps. One POW, Wilhelm Sauterbrei, a former *Afrika Korps* corporal, had been imprisoned at a camp in Hearne, Texas. While driving up from Houston in a car full of community dignitaries and reporters, he entertained the occupants with stories and recollections about his camp days. "You must have had it pretty easy," one reporter volunteered. "I'll tell you, pal," Sauterbrei confidently stated, "If there is ever another war, get on the side that America isn't then get captured by the Americans—you'll have it made!"¹² German POWs wrote letters home telling of their good treatment at the hands of the Americans. Undoubtedly, this correspondence helped American POWs in Germany.¹³

In general, during World War II the use of prisoners as laborers in the U.S. proved profitable and helped to offset the critical manpower shortages. Initially, American agriculture and manufacturing were denied the use of prisoner labor due to the War Department's concern over security. However, after the anticipated security violations and sabotage failed to materialize, prisoners were used widely. This practice permitted the release of Americans for combat duty and the transfer of U.S. civilians to essential war manufacturing work. Vital crops were harvested and war industries continued operations. Both civil and military authorities have acknowledged the contributions made by the use of prisoner of war labor.¹⁴

German prisoners were relatively well treated by both the Americans and British. Conditions varied widely from camp to camp, subject to several factors: weather conditions, supply of food and medicine, period of the war when the captivity was spent, whether the camp was constructed for the purpose

of housing prisoners or was requisitioned and converted for such use, and the personality of the camp commandant.

The first prisoners in Britain were segregated into enlisted and officer camps. The latter were interned at a stately house in Lancashire, prompting a complaint in the House of Commons to the effect that it would be cheaper to hold the Germans at London's Ritz Hotel. The number of camps grew from two in 1939 to 600 by 1948. Most camps housed POWs in corrugated tin and wood structures called Nissen huts. Each hut housed eighty prisoners with beds for all and two tables and four benches. There was plenty of recreation: sports, cards, chess, English lessons, and educational opportunities. Strangely, POWs ate the same amount of daily rations as British servicemen—often more than the civilian population received!

With the Allied invasion of June 1944, many more prisoners were taken and transported across the Channel aboard large barges. Prisoners were first held in Command Cages (in racecourses or football grounds) then processed. Prisoners thought to have vital information were questioned by the POW Interrogation Section (PWIS), which used such means as planting undercover agents who were fluent in German.

The British were anxious to separate those fiercely loyal Nazis from the rest. The Nazi loyalists were identified by wearing a black patch and sometimes sent to a remote camp in Scotland to perform farm work, ultimately involving some 169,000 prisoners. About 22,000 German prisoners were employed to build new houses—they were paid union rates of three to six shillings for a forty-eight-hour week.

In December 1944, a group of Nazi prisoners hatched a plot to escape, seize weapons and tanks, and march on London. When an anti-Nazi prisoner, Feldwebel Wolfgang Rosterg reportedly revealed the plot, the Nazis beat him to death. Five of the perpetrators were captured, tried, and hanged.¹⁵

There were disturbing incidents inside some U.S. camps, too, including murders of fellow German prisoners by ardent Nazis. Five of the victims were brutally murdered by German kangaroo courts, one man was murdered because of a personal hatred, and two others were driven to commit suicide. U.S. authorities hanged some of those convicted of the murders.¹⁶

Germany held about 80,000 Americans as POWs. A report by the House of Representatives in 1945 concluded that our POWs were well treated by the Germans because we had treated the German POWs well. This produced a salutary influence on German soldiers in that it made incarceration by U.S. forces acceptable. Gen. Dwight D. Eisenhower ordered that safe conduct leaflets be dropped over the lines promising that German POWs would receive fair¹⁷

While the Germans generally observed the Geneva Convention, there was a horrific incident at Malmedy, in which the Germans shot 100 American POWs, of whom thirty survived. This sparked instances of “duress” exerted on German prisoners at Landsberg. Also, in 1946, the perpetrator of the Malmedy Incident, SS Lt. Col. Joachim Peiper and others were threatened with shooting. Peiper was tried, convicted, and sentenced to death, but “slipped the hangman’s noose,” in part because of the pretrial interrogation.¹⁸

In North Africa, U.S. and U.K. turned over Axis POWs to the French. The French were very abusive and when the Germans learned about this, they contacted the Americans and British to remind them that Germany held thousands of U.S. and U.K. POWs.

In January 1946, *The Washington Post* noted that since the first POW camp had opened in the U.S., 2,499 prisoners had escaped but only fifty-three—twenty-nine Germans and twenty-four Italians—remained at large. Fourteen Japanese POWs who escaped were caught. There were 104 suicides among all prisoners—ninety-two German and twelve Italian—and nine murders, including the ones described above. There were forty-three prisoners fatally shot and a number of others wounded, while trying to escape. A few mass breaks and riots occurred, but most of the escapes were without violence. In cases of strikes, a bread and water diet proved to be an effective deterrent. In addition, the U.S. Army reported that many of the German POWs did not want to return home.¹⁹

About 130,000 U.S. servicemen were captured and imprisoned in World War II. Germany held 93,941, of whom 1,121 died in detention, a one percent rate. Germany also held 4,700 American civilians, of whom 168 died. On the other hand, of the 27,465 U.S. servicemen incarcerated by Japan, an astounding 11,000 or 40 percent died. There were 19,979 American civilians in Japanese detention, of whom 11 percent died. Japan’s code of Bushido held that death in battle brought the highest honor, whereas capture resulted in abject disgrace. Men captured in battle were lower than slaves and had no honor at all. Bushido did not address the case of

women captives.²⁰ The unfortunates captured by Japanese forces endured horrific treatment. In the Bataan Death March of April 1942, Japanese forces marched some 80,000 starving, sick, and injured American and Filipino troops for sixty miles from Bataan to Camp O’Donnell. The captured soldiers were robbed, beaten, tortured, and killed. Estimates are that between 5,000-10,000 Filipinos and 2,300 Americans died. Some 5,000 U.S. POWs died on Japanese “Hell ships,” while the death toll from forced labor stood at 700,000 Koreans, 40,000 Chinese, and several hundred thousand other Asians.²¹

According to some estimates, the Soviets in World War II held more than 1.5 million prisoners who were never released or accounted for, including hundreds of thousands of Poles, Germans, and Japanese. The most infamous example was the discovery, on April 13, 1944, of mass graves in Katyn Forest containing the massacred bodies of thousands of Poland’s leaders, its best and brightest. At war’s end, the Soviets announced that they had captured some three to four million German POWs. Five years later, only half of the German POWs were accounted for. The Soviets also announced that they had repatriated all Japanese prisoners except some 1,500 war criminals and turned over another 971 Japanese to China for criminal prosecution. Some Western reports claimed that in the early 1950s, the Soviets held as many as 500,000 foreign prisoners, including Poles, Germans, Italians, Austrians, and Japanese. The Soviets were also said to hold 380,000 Rumanians and Hungarians. The Soviets acknowledged that some two million foreign laborers were working on the trans-Siberian railroad.²²

The Soviets and Japanese did not observe the Geneva Convention. The USSR had not signed the Convention, while Japan had signed but not ratified the treaty. Because the Soviets did not permit visits with their POWs, the Germans also refused access to their prisoners.

Although France and Germany had signed the Geneva Convention, their treatment of each other’s prisoners often violated the treaty. The question was whether treaties protected prisoners or whether reciprocity determined their fate. When the Axis shot and captured Free French soldiers in North Africa, the French had no compunction in carrying out reprisals against German and Italian prisoners in their custody. Exacerbating the issue was Britain’s concern that French abuse of Axis prisoners would provoke retaliation against British POWs in Germany. The statistics relevant to this issue show that 2.6 percent of German POWs died in French hands, compared with rates of 0.1 percent in the hands of the U.S. and 0.03 percent in British custody. In this context, an astounding 35.8 percent of German POWs died in Soviet captivity. Britain’s problems stemmed from the inability of the Free French in North Africa to control their soldiers’ behavior towards Axis POWs. In July and August 1943 at Camp Bouarfa, Morocco it was reported that the French abused their prisoners by depriving them of food, beating them, and forcing



Korean War POWs.

THE AMERICANS EXPERIENCED DIFFICULTIES CONTROLLING THE PARTISAN GROUPS WITHIN THE PRISON SYSTEM, SPECIFICALLY THE COMMUNISTS AND THE ANTI-COMMUNISTS

them to undergo arbitrary exercise. Various explanations were offered: that POW guards were the unreliable and disobedient, that French commanders could not get their subordinates to obey orders, or that the French Committee of National Liberation lacked overall control.²³

In September 1944, the numbers of German POWs grew steadily, while the British and Americans were unable to provide enough guards. The French were anxious to accept custody and put the captured Germans to work in agricultural harvesting, but the UK/US wanted to avoid German reprisals for French POW abuse. In November, SHAEF planned to turn over the POWs to the Dutch and Belgians, but only with written assurances that the receiving authorities would abide by the Geneva Convention.²⁴

The Korean War, 1950-1953

During the Korean War, some 3,000 of the 7,190 U.S. POWs captured mostly during the first nine months of the war died in captivity. Most died of starvation over a six month period from November 1950 to April 1951. That figure represented a mortality rate of 43 percent that was condemned as barbarous by most adherents to the Geneva Convention.²⁵

Of the 7,190 POWs—held in twenty camps—6,656 were Army, 263 Air Force, 231 Marines, and forty Navy. Typically, POWs went on a forced march, such as one in the winter of 1950-51, when 500 of 700 on the march died. A total of 4,428 returned, but 2,730 died—a 38 percent rate. Prisoner exchanges began in April 1953.

Reflecting these facts more dramatically and concisely is a comparison between World War II and Korean War statistics. Of the total reported Missing in Action by the U.S. Army in Germany, 18 percent got back safely to our lines, 79 percent were later returned alive as prisoners of war, and only 3 per-

cent died. But in Korea, of those reported Missing in Action by the U.S. Army, 12 percent got back to their units, only 30 percent lived to be exchanged as prisoners of war, and an almost “unbelievable 58 percent died behind Communist lines.”²⁶

The North Korean POWs fared much better under American care. In November 1950, the neutral Swiss ICRC Delegate Frederick Bieri, reported on conditions at POW Camp #1 at Pusan: He found 91,662 POWs getting “3 meals daily and that 69 tons of rice and barley were transported daily to the camps.” He found that “large amount[s] of winter clothing [have] already [been issued] greatcoats, jackets or else warm underwear.” Under medical care, Bieri reported that while nutrition that had been poor on arrival, improved greatly after 10-14 days. In addition, of the more than 3,000 patients in the POW hospital, since September 9, only 226 had died—of these most died on arrival.²⁷

This same source noted that when this “pastoral idyll” setting changed after civil war broke out among these same prisoners, there would not be the slightest difference between the food the U.S. provided to Communist and anti-Communist compounds. Indeed, “The Communists who were to stone our soldiers and kidnap our unwary generals fought us on plump bellies, and smoking their daily share of our America cigarettes.”²⁸

The Americans experienced difficulties controlling the partisan groups within the prison system, specifically the Communists and the anti-Communists. Attempts to screen those groups for separation into different camps caused several violent outbreaks and deaths. At times these deaths could be attributed to the training and competence of our garrison troops.²⁹

There were some reports about the difficulties the U.S. experienced in controlling partisan Communists in its POW camps. In August 1952, British Major Dawney Bancroft, of the King’s Shropshire Light Infantry, wrote a report that accused the Americans of “incompetence, ill-discipline, abuse and breaking the Geneva Conventions” regarding the treatment of prisoners. Bancroft referenced a prison camp on the island of Kojedo where 132,000 Northern Korean POWs were held. He reported that American soldiers on sentry duty often fell asleep, or abandoned their post to spend the night in local brothels. They rarely searched the prisoners’ quarters and mail was distributed erratically. He added that the Americans often addressed the prisoners as “slant-eyed, yellow bastards.”³⁰ Major Dawney claimed that the fanaticism of the North Korean commissars ruled prison life. He added that on one occasion he witnessed 100 prisoners die in a clash with American troops attempting to clear the camp.³¹

Comparisons of U.S. MIAs Reported³²

World War II	Korea
18% returned	12% returned
79% returned later	30% returned later
3% died	57% died



A primitive POW enclosure during the Vietnam War.

During the Korean War, of the 75,000 United Nations and South Korean troops captured by the Communists, only 12,000 returned; 63,000 were unaccounted for. North Korean and Chinese armies were accused of numerous war crimes against their UN and South Korean POWs: “murder; assaults; torture; starvation; coerced indoctrination; and other illegal practices.” The Geneva Convention was ignored, specifically articles that forbade isolation, shackling, extraction of false confessions, coercive interrogation, exposure to the local populace, denial of medical attention, poor clothing, inadequate food, and physical mistreatment; 5,000 American POWs died in captivity.³³ About 1.6 million Americans served in Korea. 4,428 survived imprisonment.³⁴

The North Koreans had no formal POW camp system and confined U.S. personnel at collection points, known as valleys. In late 1950, on a forced march of 120 miles, 130 of 700 men died. The Communist Chinese had also captured thousands of U.S. servicemen. At the Valley near Oyoktong, between 500 and 700 of 1,000 POWs died. At the Valley near Pukchin, 800 of 2,000 POWs died. At Kanggye thirty of 300 POWs died. Of 7,245 U.S. servicemen POWs held by North Korea, 2,800 died in captivity, 4,418 were returned to military control, and twenty-one refused repatriation. The North Koreans also killed thousands of South Korean civilians.³⁵

UN camps were also poorly prepared and control was problematic, but conditions improved over time. UN forces held some 132,000 North Korean POWs, guarded by 2,500 personnel. They were moved to Koje-do Island. There, an American general named Dodd was nabbed by the POWs and held by them until their demands were met.³⁶

By 1951, the Chinese decided that the propaganda value of POWs was more important than the POWs’ conversion to Communism. There were no confirmed cases of brainwashing. Although the Chinese abused prisoners, there was no proof that

prisoners died as a result of brainwashing. Still, 2,600 American POWs died officially listed as due to physical abuse, many due to extreme cold, malnutrition, disease, and no treatment of wounds. About 670 or 10 percent escaped. The central issue was repatriation. In Operation Little Switch, between April-May 1953, UN forces turned over 5,195 North Koreans and 1,030 Chinese and got back 684 sick and wounded, including 149 Americans. In August 1953, under Big Switch, the UN turned over 75,823—70,183 North Koreans and 5,640 Chinese—and got back 12,773 troops, including 7,862 South Koreans, 5,397 Americans, 945 British, and 229 Turks. On September 23, the UN turned over more than 20,000 Chinese and North Koreans. There were 359 UN repatriates: thirty-five South Koreans, twenty-three Americans, and one Briton.³⁷

Gen. Matthew B. Ridgway, the commander of UN Forces, Korea, testified that Communist brutality against American POWs was “a studied and calculated course of criminal misconduct...carried out with such callous disregard to human life and suffering as to indicate a design on the part of the Communist leadership.” The Communists’ policy was connected to political ends. “As the peace talks progressed the treatment of [American] war prisoners would improve or revert dependent upon the Communist gains in these negotiations.”³⁸

French Indochina War, 1946-1954

Of some 37,000 French captives of the Viet Minh in the Indochina War, fewer than 11,000 returned. A large number of deaths were attributed to the denial of medical care and to subjecting prisoners to long marches. Many of the French returnees were very ill and emaciated, resembling Auschwitz concentration camp survivors.³⁹

Vietnam War, 1965-1973

On November 27, 1965, the Joint Vietnamese-United States Military Committee ironed out details on the application of the Geneva Convention governing the treatment of POWs by the American, South Vietnamese, and Free World forces. Under the plan, five prisoner of war camps would be built, one in each corps tactical zone and one in the Saigon region, each having an initial capacity of 1,000 prisoners. Each camp would be staffed by Vietnamese military police, with U.S. military police POW advisers assigned to each stockade. The plan was approved in December, with a temporary camp to be established at Bien Hoa in early January 1966 and permanent camps to follow. POW camp construction continued to receive priority command attention throughout 1966. The Bien Hoa camp in III Corps was opened in May, the Pleiku camp in II Corps was completed in August, and the Da Nang camp in I Corps was opened in November. Late in the year, work was begun on the Can Tho Camp in IV Corps.⁴⁰

The POW program for 1967 had several ambi-

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Prisoners were paraded before angry crowds in Hanoi, where loudspeakers blared insults and encouraged the crowd's abuse. Many in the crowd attacked the POWs.

THE COMMUNISTS, ON THE OTHER HAND, MURDERED AND MUTILATED POWS, ASSASSINATED, KIDNAPPED, AND TERRORIZED THEIR ENEMIES

tious objectives: identify and transfer POWs in civilian jails and prisons to Vietnamese Army POW camps; establish a program of repatriation of POWs; establish an accountability process for handling prisoners; establish POW labor and educational programs; and carry out the provisions of the Geneva Convention with respect to mail, education, medical attention, Red Cross visits, visiting privileges, and health and welfare.⁴¹

By the end of 1967, the POW camp capacity had exploded from 3,000 to 13,000. In March 1968, a camp for female POWs was established at Qui Nhon, and in April steps were taken to concentrate all Viet Cong POWs under age eighteen at Bien Hoa, where they received special rehabilitation, education, and vocational training. A central POW camp was constructed at Phu Quoc Island, off the coast of Cambodia. By the end of 1968, the prisoner of war camps could house 21,000 prisoners normally and 32,000 in an emergency. All the camps had gradually expanded until by December 1971 the Vietnamese government held 35,665 prisoners of war in six camps. Of these, U.S. forces had captured 13,365.⁴²

Initially, the South Vietnamese government was reluctant to cooperate with the International Committee of the Red Cross (ICRC), with respect to permitting inspections and furnishing lists of prisoners. This position followed the refusal by the North Vietnamese to allow the Red Cross access to their prisoners. Finally, at the urging of the U.S., South Vietnam's Minister of the Interior, the official responsible for confinement facilities, relented. He agreed to allow visits by Red Cross representatives to Vietnamese civil prisons and re-education centers. As a result of U.S. efforts, representatives of the ICRC visited prisons at Tam Hiep, Con Son, Da Nang, and the camp under construction at Bien Hoa. The representatives were favorably impressed with the camp and agreed to provide health and welfare items on their next visit. Despite the many

problems they encountered, the record is clear the United States and Vietnam made a vigorous effort to adhere to the exacting standards of the Geneva Prisoner of War Conventions.⁴³

The Communists, on the other hand, murdered and mutilated POWs, assassinated, kidnapped, and terrorized their enemies. Americans captured in the Vietnam War were "tortured, publicly paraded, pressured in broadcasting confessions, and denied medical treatment." The Communists treated their prisoners as human pawns to be broken without pity and turned against their country, to be used as instruments of political warfare.⁴⁴

Throughout 1965, 1966, and 1967 the most grievous breaches of the Geneva Conventions continued to be those committed by the Communists. There were several cases where American troops were murdered and their bodies mutilated by the Viet Cong or North Vietnamese. The Viet Cong policy of kidnapping civilians, assassinating public officials, and terrorizing entire populations continued. Communist tactics against the Montagnards, indigenous mountain tribes, were particularly vicious.

On the American side, the massive U.S. troop buildup in Vietnam created many problems for the U.S. command, and incidents of war crimes by U.S. troops began to be reported. From January 1965 to August 1973, there were 241 cases (excluding My Lai), involving allegations of war crimes against United States Army troops. Upon investigation, 163 of these cases were determined to be unsubstantiated. During the same period, thirty-six cases involving war crimes allegations against Army personnel were tried by courtsmartial. In sixteen cases, involving thirty men, the results were acquittal or dismissal of charges after arraignment. Only the remaining twenty cases resulted in convictions. By the time the U.S. troop buildup was in full swing, various MACV (Military Assistance Command, Vietnam) directives contained a clear body of law to define, prohibit, and provide for the investigation of war crimes. The constant rotation of troops created a continual need to get to the troops a clear body of war crimes law that defined what constituted a violation, prohibited such actions, and provided for the investigation of alleged breaches.⁴⁵

At a hearing before the House Armed Services Committee on March 6, 1970, it was noted that the Communists held about 1,400 American POWs. Although North Vietnam was a signatory to the Geneva Convention, the committee reported that the Communists had "rejected the most elemental codes of human decency" in their treatment of the Americans. On the other hand, the 33,000 Communist POWs held by the South Vietnamese were treated according to the Geneva code.⁴⁶

Americans freed in Operation Homecoming, from February 12 to April 1, 1973, included 591 American POWs: 457 from North Vietnam, 122 from South Vietnam, nine from Laos, and three from China. Of these, 566 were U.S. servicemen—325 Air Force, 138 Navy, seventy-seven Army, twenty-six Marines, and twenty-five civilian government employees.⁴⁷

DURING THE
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Cold War

CIA interrogation manuals, written in the 1960s and 1980s, described “coercive techniques” such as those used to mistreat detainees at Abu Ghraib prison in Iraq. “KUBARK Counterintelligence Interrogation-July 1963” contains a section assessing use of “threats and fear,” “pain,” and “debility.” The agency’s “Human Resource Exploitation Training Manual-1983” drew from the 1963 manual and from Army manuals from the mid-1960s generated by “Project X,” training guides drawn from the counterinsurgency experience of the Vietnam War.

Among the guidelines provided in the manuals was that an interrogator ought not make threats unless he “had approval to carry out the threat.” The 1983 manual allowed the interrogator “to create [an] unpleasant and intolerable situation, to disrupt patterns of time, space, and sensory perception.”

In the mid-1980s, after Congress investigated reports of atrocities in Honduras, the 1983 CIA manual was edited to alter passages suggesting use of stress and coercion on prisoners. A new prologue was added, stating, “The use of force, mental torture, insults or exposure to inhumane treatment... is prohibited by law, both international and domestic; it is neither used, nor condoned.” Similar material was incorporated into seven Spanish-language training guides and more than 1,000 copies distributed in Latin America. In mid-1991, an inquiry was triggered when U.S. Southern Command evaluated the manuals for use in Colombia.

In 1992, Secretary of Defense Dick Cheney received a secret report, “Improper Material in Spanish-Language Intelligence Training Manuals,” which warned that U.S. Army intelligence manuals had incorporated CIA techniques for training Latin American military officers in interrogation and counterintelligence techniques. These contained “offensive and objectionable language” that “undermines U.S. credibility and could result in significant embarrassment.” The report recommended that the manuals be recalled.⁴⁸

Persian Gulf War, 1990-1991

As Coalition ground forces advanced into southern Kuwait on Sunday morning, February 24, 1991, the defending front-line Iraqi infantry divisions collapsed. “We captured 5,000 Iraqi prisoners the first day,” Lt. Gen. William M. Keys, commander of the 2d Marine Division, later stated. The large number of Iraqi regulars who surrendered on the first morning confirmed what many Coalition members had suspected: many of the defenders had lost their will to fight before the ground campaign began. “On more than one occasion, a military police unit reported,” the [enemy prisoners of war] were so eager to reach the EPW camps that they volunteered to drive.⁴⁹

During the 100 hours of the February 24-28 ground campaign, Coalition forces accepted more than 65,000 surrenders. The total number of Iraqis

captured during the entire war was 86,743. When U.S. forces captured Iraqi soldiers, they registered them and then transferred them to Saudi custody. During the entire Gulf War, no escape attempts were made from any Coalition prisoner of war camp.⁵⁰

Summary

Several common factors determining the nature of the treatment of prisoners emerged from this survey. Among these was the incompetence of garrison and prison guards, as a result of inadequate training. Poorly trained prison guards may not know how to treat unruly or recalcitrant POWs and are unfamiliar with the detailed provisions of the Geneva Conventions. In the Korean War, American personnel were not well trained for prison duty and their neglect of and inability to grasp the internal workings and hierarchy of their prisoners often resulted in needless confrontations.

If inadequate training can be pointed to as a prescription for disaster, so can improper planning. Before entering a war there ought to be in effect adequate procedures for the processing and protection of prisoners of war, accompanied with an adequate realization that suitably trained personnel need to be in the pipeline to affect that process. In planning for the detention of prisoners, it is important to consider the capacity of the facility as well as its features. Also, the ratio of guards to prisoners is important in order to ensure that guards can carry out their assignments and that prisoners are not mistreated due to inattention by overworked guards.

Another factor determining the treatment of prisoners is the time and place of incarceration. Prisons located within a combat zone may create unusual stress on the guards and create conditions inimical to the treatment of POWs. Thus, enemy firing on the facility resulting in death or injury of friendly forces may result in mistreatment of POWs as a form of retribution. On the other hand, incarceration facilities, located well behind the front lines, are more likely to promote a benign environment. For example, in World War II, German prisoners in American camps performed labor and in return they were well fed, clothed, and cared for. Guards were under less stress and often able to lead normal lives with their families. In the Korean War, however, an unintended consequence of the good treatment of North Korean prisoners held by the Americans may have abetted a “healthy belligerence” on the part of those incarcerated. Conversely, a starving prisoner would find it difficult to speak out in protest.

A nation’s culture or ethnocentrism is another decisive factor in that it shapes the guards’ attitude toward the POWs entrusted to them. Thus, Japan’s code of Bushido considered captives as lower than slaves and without honor. Nazi Germany professed racial superiority over non-Aryan people, including Slavs, Jews, and other races. Europeans treated colonial people as inferior beings. Communist ideology helped to determine how prisoners would be



POWs captured at the Bay of Pigs.

treated. In 1972, Senator James Eastland's Judiciary Committee found similarities in the pattern of the treatment of prisoners by Communist nations—by the Soviets in World War II, the Chinese and North Koreans in the Korean War, and the North Vietnamese in the Vietnam War. These findings did not surprise investigators “because in the eyes of Communists everywhere POWs are not human beings but political pawns—to be broken psychologically...used against their own country...exploited, without pity...as instruments of political

warfare.⁵¹ Communists treated captives as pawns to be exploited for political purposes. Many nations looked at POWs as a free or cheap source of labor.

In making their cases for gaining public support for going to war, national governments tend to demonize their enemies, sometimes to the point of dehumanizing them. Consequently, prison guards, like other citizens have been conditioned to feel an animus towards the enemy POWs and might feel justified in abusing the prisoners because “they deserved it and were not worthy of humane treatment.”

Of course, nations that were not signatories to the Geneva Convention, including Japan in World War II and Communist nations—USSR, China, North Korea, and North Vietnam during the Cold War—did not observe Geneva Convention provisions with respect to their captives. In some cases, these nations noted that since the U.S. had not declared war, it therefore was not entitled to the protection of the Convention. Similarly, American pilots were classified as “air pirates,” not enemy soldiers. One manifestation of this legalism is that even today the United States has defined terrorists as outside the protection of the Convention because they do not belong to an army of any recognized nation. The primary motivation for adhering to the Geneva Convention was the expectation that humane treatment of enemy prisoners would be reciprocated.

Despite the existence of the Geneva Convention providing for the humane treatment of prisoners, no nation in the twentieth century had an unblemished record. Still, the overall treatment of prisoners of war by the United States—while it was marred by many cases of mistreatment—can serve as a model for other nations. ■

NOTES

1. The authors wish to acknowledge research assistance by their colleagues in the Office of Air Force History: Vicky Crone; Perry Jamieson; Priscilla Jones, Yvonne Kinkaid; and Col. James Sale, USAFR. Also, Glenn Curtis, Seth Elan, Marieke Lewis, Priscilla Offenbauer, and Ryan Swanson, of the Library of Congress's Federal Research Division prepared an annotated bibliography under contract.

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From Storm to Freedom: America's Long War With Iraq. By John R. Ballard. Annapolis, Md.: Naval Institute Press, 2010. Maps. Photographs. Notes. Glossary. Bibliography. Index. Pp. xxvii, 321. \$37.95. ISBN: 978-1-59114-018-4

This book provides a useful perspective from which to view the recent war in Iraq. Rather than treating the 2003 invasion and subsequent counterinsurgency campaign as a distinct conflict, the author (Dean of Faculty and Academic Programs and Professor of Strategic Studies at the National Defense University, and a former instructor at the National War, Naval War, and Joint Forces Staff Colleges) instead portrays it as the last segment of a prolonged and continuous state of hostility between the U.S. and Iraq. This war began with the eviction of Saddam Hussein's forces from Kuwait in 1991 and did not end until the U.S. withdrew its forces from a democratic Iraq in 2010. The primary cause of this conflict was the adventurism of Saddam's foreign policy, which endangered neighboring states and U.S. interests in the region. Ballard maintains that the terrorist attacks of 9/11 fundamentally changed U.S. strategy toward Iraq. Faced with uncertainty, and weary of the festering conflict, the Bush Administration decided to end it by using military force to depose the Iraqi dictatorship.

Ballard devotes the first half of the book to the events between 1991 and 2003 and the second half to the invasion of Iraq by U.S. and Coalition forces and the disastrous occupation that followed. He skillfully discusses the role of air power in the planning and execution of Operation Desert Storm and the subsequent American attempts to enforce UN sanctions and resolutions against Iraq and to overthrow Saddam Hussein's regime. His narrative, however, becomes steadily focused upon operations on the ground after the fall of Baghdad in 2003. Readers of this journal might welcome more information and discussion about the appropriate use and role of air power in counterinsurgency conflicts throughout the latter half of the book. Since most of the operational and planning documents have yet to be made public, Ballard has made extensive use of the limited primary sources available. The bulk of the book's source material comes mostly from published memoirs of participants, public statements, and editorial and news items taken from major newspapers and journals. Ballard often quotes at length from these documents, often accepting them at face value rather than attempting to provide critical analysis of their contents.

Unfortunately, the book suffers from a

number of typographical errors and inaccuracies of fact. It shows evidence of slipshod editing and proofreading and includes dozens of errors. These are mostly minor and irritating, but some result in the misidentification of important personalities and military units, as well as chronological confusions. For example, one page includes the sentence, "By December 1991, the tide in Afghanistan had clearly turned." These errors should be corrected in any subsequent printings. Also, for a book primarily focused on ground combat, the maps are overly simplistic. For example, the map of the 2003 invasion does not indicate the British thrust to Basra. Further, a map showing the "Baghdad belt" strategy put into place after the 2006 surge of forces would have been helpful. In sum, Ballard has given the reader a useful context for the U.S. invasion of Iraq, but the "long war" between the United States and Iraq still awaits a more thoroughly sourced study, particularly regarding the contributions of air power to its prosecution and eventual conclusion.

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Soldiers Blue: How Bomber Command and Area Bombing Helped Win the Second World War. By David L. Bashow. Kingston, Ontario: Canadian Defence Academy Press, 2011. Photographs. Index. Pp. 106. Free (print or .pdf) ISBN: 978-1-100-18028-1

To understand Bashow's purpose in writing this book, readers need to understand the controversy that continues to surround the Allied European Bombing Offensive during World War II: it was either immoral and ineffective (often specifically focusing on British night area bombing), or it was effective and moral. *Soldiers Blue* definitely resides in the second camp, as Bashow contends that "the bombing dealt telling blows to Germany's economic and industrial infrastructure . . . [and] helped pave the way, through assisting in the destruction of the enemy's air defences, oil resources, and its extensive and varied transportation networks, for a successful invasion of the Third Reich through northwest Europe in 1944." Bashow's primary purpose is to refute Dr. Randal Hansen's dual-pronged argument in *Fire and Fury: The Allied Bombing of Germany, 1942-1945*, that the campaign was "both immoral and ineffective."

To prove his point, Bashow discusses the development and refinement of British bombing policy from the beginning of the

war. His intent in this effort is to highlight the evolution of British bombing practices to counter the assertion that the British commanders refused to obey lawful orders. Beyond that discussion, Bashow solely focusses on countering Hansen's eight "allegations" related to the campaign. He even goes so far as to point out his intent is to "only summarize briefly the results obtained by the campaign, and elaborate selectively upon those recently brought to the forefront by Doctor Hansen and other detractors of Bomber Command's wartime strategy. This is because my views on this subject, supported by many primary source and secondary references, have already been published extensively."

Obviously content to have readers search out the sources he used in his earlier works, Bashow attacks Hansen's positions by labeling them as "naive and uninformed," "misplaced," "grossly understated," and "fundamentally erroneous." Without the specific information and analysis that are apparently in Bashow's earlier works, readers are often left to make their own judgments. In an attempt to bolster the British effort and refute Hansen's position, Bashow takes to task the discrediting of the American daylight precision bombing effort by labeling it as "overstated" and pointing out that area bombing was "common practice" by the Americans. This does little to strengthen his position.

Bashow missed an opportunity to reaffirm the effectiveness of the Allied bombing offensive. His discussion on British policies is a solid and concise explanation of how they migrated from a daylight precision bombing to a night area bombing approach. Unfortunately, his stated intention of refuting Hansen's assertions adds nothing significant to the field of research. Rather than maintain a focus on primary sources to prove his point, he includes extensive quotes (often up to a half page long) from other air power historians. He would have been better served in arguing his sub-thesis, that the British bombing campaign was both effective and moral, by supporting his position with his own solid analysis. This reads more like a historiography rather than new analysis. In the end, *Soldiers Blue* falls short in countering Hansen's position and comes off as a "he said-she said" book that stoops to name calling.

Lt Col Daniel J. Simonsen, U.S.AF (Ret), Bossier City, Louisiana



Day Fighters in Defence of the Reich: A War Diary, 1942-1945. By Donald Caldwell. Barnsley UK: Pen & Sword, 2011. Maps. Tables. Diagrams. Photo-

graphs. Appendices. Glossary. Bibliography. Index. Pp. 480. \$70.00 ISBN: 978-1-84832-525-8

Forget the high cost of this book. For anyone interested in the U.S. bombing campaign against the Germans and their European-occupied areas in World War II, the book is worth every nickel and then some. It is the definitive study of *Luftwaffe* opposition to the operations of the U.S. Army's Eighth and Fifteenth Air Forces.

Caldwell and Richard Muller previously published *The Luftwaffe over Germany: Defense of the Reich*, which was a narrative history. This second book is a chronological work covering, in superb detail, the daily attacks against the U.S. bombers. As such, the two volumes directly parallel Roger Freeman's classic *The Mighty Eighth and Mighty Eighth War Diary*. While reading *Day Fighters in Defence of the Reich*, I had *Mighty Eighth War Diary* open right next to it. It is unfortunate that no one ever undertook a similar historical effort covering the Fifteenth Air Force and its operations, because Caldwell's book covers, of necessity, missions conducted by both the England- and Italy-based U.S. units. Coverage in Caldwell is, therefore, slightly less detailed for Fifteenth counter-operations than it is for those operations dealing with the Eighth's threat.

So, what do you get for all this money? First in importance, from my perspective, is the finest set of combat maps published on the air war. These show the routes of the incoming attack forces (which Freeman does not include) but also the bases, units, and routes flown by the defenders. Let's take the Eighth's Mission #250 to Berlin on March 6, 1944, as an example. After a brief recap of the information presented in much more detail in Freeman, there is the aforementioned mission map. There is also a map showing the Reich Air Defense division boundaries extant on that date. Several photos of participating aircraft are presented as is a combat report by Lt. Jans Weik, a participating pilot from 10/JG 3. All this is followed by a table over two pages long that provides details on units attacking, types of aircraft flown, from what base, how many losses, claims, times of engagement, etc. This is the pattern throughout the book from VIII Bomber Command's Mission #1 on August 17, 1942 through Mission #968 on April 25, 1945.

The narrative concludes in Chapter 10 with a summary and analysis. Here the reader will find excellent tables on *Luftwaffe* strength and losses by quarter, summaries of missions versus both the Eighth and Fifteenth Air Forces, and

Eighth and Fifteenth missions opposed by the *Luftwaffe*. The essential message is that, while the *Luftwaffe* had several technical and tactical innovations that could be considered successes, and it had a few operational successes, the overall aerial defense of the Reich was an abject strategic failure.

The book contains hundreds of pictures. The maps are exceptional. The narrative is not what some would expect of a diary—boring. And the first-person combat reports (of which there are many) bring life to the story of men pitted against each other in the greatest air battle in history. Buy this book!

Col. Scott A. Willey, USAF (Ret.), Book Review Editor, and Docent, NASM's Udvar-Hazy Center



Viper Force: 56th Fighter Wing--To Fly and Fight the F-16. By John M. Dibbs and Robert "Cricket" Renner. Minneapolis Minn.: Zenith Press, 2011. Photographs. Appendices. Notes. Glossary. Bibliography. Index. Pp. 167. \$40.00 ISBN: 978-0-7603-4032-5

This handsome coffee table volume, packed with noted aviation photographer John Dibbs' stunning photography of 56th Fighter Wing F-16s, is an attractive, yet thorough, reference on the methods, practices, and experience of learning to fly and fight in an F-16. *Viper Force* covers all aspects of the training syllabus from simulators to basic air maneuvers to advanced dogfighting, suppression of enemy air defenses, and use of the impressive array of weapons that this deadly and effective aircraft can carry. The book covers F-16s in flight, on the line, refueling, releasing weapons, and even strafing. Servicing and maintenance are not neglected, with ground crew shown performing such seemingly mundane but vital tasks as inflating tires with nitrogen. Dibbs' arresting photography—much of it from the back seat of an F-16D—and Renner's effective text and pilot interviews so effectively convey the experience of flying the F-16 that the reader can imagine "strapping on" and "wearing" this very agile fighter.

Viper Force joins Peter Aleshire's *Eye of the Viper: The Making of an F-16 Pilot* and Scott O'Grady and Michael French's *Basher Five-Two: The True Story of F-16 Fighter Pilot Captain Scott O'Grady* on the enthusiast's shelf as a record of what it is like to train to fly one of the world's deadliest weapons systems. *Viper Force* quotes numerous aviators, instructors and others; while *Eye of the Viper* and *Basher Five-*

Two focus on one person's training experience. *Viper Force* is highly recommended for the buff or budding aviation photographer. The F-16's weapons are pictured and explained in detail. Colorful quotes from flyers convey the sensation of flying: the jolt of an afterburner lighting, the vibration of the plane's cannon on a strafing run, the almost-before-you-know it takeoff and climb to 30,000 feet from a standing start on a desert runway. Combat veterans indicate how their training benefited them in action. The book has an immediacy and relevance missing from other, more technically oriented monographs on the F-16.

The outstanding photographs of F-16s, their pilots, maintainers, and support team are what make this book worth pursuing. Every shot—even of such day-to-day aspects as the inside of an engine, a lineup of practice bombs, or an aircraft tire and wheel assembly—is a beauty shot. F-16s (including those of foreign air forces that train with the 56th) are seen in colorful sunrises, sunsets, clear blue skies, or the midst of clouds. Mach diamonds march through exhaust torches. Vapor condensation billows above flying surfaces of sharply maneuvering aircraft. Both the photos and text convey the dedication and enthusiasm of those who train, fly, fight, and maintain the F-16.

Appendices and a glossary of technical and operational terms and F-16 production variants are especially helpful. This is a fresh, exciting entry to the field of F-16 books.

Steven Agoratus, Hamilton, New Jersey



Before They Were Black Sheep: Marine Fighting Squadron VMF-214 and the Battle for the Solomon Islands. By Carl O. Dunbar. Gainesville: University Press of Florida, 2011. Maps. Index. Photographs. Notes. Bibliography. Pp. 305. \$32.00 ISBN: 978-0-8130-3725-7

This book deals with the history of Marine Fighting Squadron (VMF) 214 and one young pilot, Carl Dunbar. The author, Carl's son, inherited his father's papers, including letters home to his family in New Haven, Connecticut, from the time he entered Navy training in mid-December 1941 through the end of his third combat tour in the Solomon Islands in late 1943.

Many readers recall VMF-214 as the Black Sheep Squadron under Major "Pappy" Boyington, whose exploits were featured in an exciting television series. This story is about less-vaunted heroics, those of a young man going through Navy

training and flight school, commissioning as a Marine 2nd lieutenant, earning his gold naval aviator wings, and assignment to a combat squadron. The author has seamlessly melded his father's letters with the history of the Second World War in the Pacific. Events from air training stations are interposed with activity in the Pacific that would set the stage for VMF-214's deployment to the Solomons.

The squadron started operations with the Grumman F4F Wildcat in Hawaii at Ewa Air Field and flew them in combat until mid-June 1943 when they were re-equipped with the far superior Vought F4U Corsair. VMF-214 operated from Fighter One airfield in Guadalcanal from March 12 to May 26, 1943. Their first combat tour ended with a much anticipated trip to Sydney, Australia, for rest and recreation. Dunbar's letters tell of the young pilot's experiences as he deals with military service, training as a fighter pilot, and day-to-day details of life and air operations in the fetid setting of Guadalcanal, and later at Munda.

Our young hero did not shoot down any Japanese aircraft. He did collect a few bullet holes from a brief encounter with a Zero fighter. He flew eighty-two missions as escort for bombers and anti-fighter patrols. He was a wingman. Many of the missions were in the fighter-bomber role as VMF-214 supported interdiction of sea-borne Japanese logistic traffic in the Solomon Islands. After VMF-214's second combat tour ended in September 1943, the squadron designation was reassigned to a new group of Marine pilots led by Major Boyington. Carl and others from the old squadron were transferred to other squadrons—Carl to VMF-215. He returned to San Francisco by ship on December 17, 1943. Of the original 27 pilots assigned to VMF-214 in its first incarnation, only 21 made it home—a 22 percent loss rate.

The book is marred by several factual errors, pointing to sloppy research and editing. Doolittle's raiders flew west towards Japan, not east, when they flew off the *USS Hornet* toward their targets in the Japanese home islands. The aircraft carrier *USS Kitty Hawk* did not participate in the Battle of Midway. She was not commissioned until 1961. *USS Kitty Hawk* (AKV-1), an aircraft transport, did participate. During the Battle of Midway, Japanese carriers were not sunk by Devastator torpedo-bombers but by Dauntless dive-bombers. And Major Lofton Henderson led a Marine scout-bomber squadron during the Battle of Midway, not a Marine torpedo-bomber squadron. That said, the book is a very good read about the experiences of an

average young American pilot who went off to war.

*Capt. John F. O'Connell, USN (Ret),
Docent, National Air and Space Museum*



Bailout over Normandy: A Flyboy's Adventures with the French Resistance and Other Escapades in Occupied France. By Ted Fahrenwald. Haver-ton Penn.: Casemate, 2012. Map. Photographs. Pp. 286. \$29.95 ISBN: 978-1-61200-157-9

Early in the morning of June 8, 1944, First Lieutenant Ted Fahrenwald departed his English air base in a flight of P-51D Mustangs on his 100th combat mission as a member of the 486th Fighter Squadron, 352nd Fighter Group. Fahrenwald and his cohorts sought concentrations of Germans rushing to reinforce Nazi positions intended to deny the Allies the opportunity to expand their beachhead in Normandy. While strafing enemy vehicles at treetop level, his fighter suffered catastrophic damage from an explosion. He successfully bailed out, surviving an extremely perilous situation. Over the next two months, the American pilot evaded the enemy, escaped after being briefly captured, and then evaded again until making contact with Allied troops.

Fahrenwald passed away in 2004. After his death, his daughter discovered a manuscript he had written in 1947 describing his experiences. At one time, he apparently considered writing before pursuing a business career. In many ways, his account reads more like a novel than a factual narrative of his adventures. Readers may be left with this impression because of his colorful descriptions of characters he encountered in the French underground, among fellow Allied fliers and German guards while in captivity, and on the lam.

By today's standards, Fahrenwald's evasion techniques probably would be considered somewhat amateurish. However, he appears to have possessed some highly desirable skills and traits—some French language (that improved greatly over time); mental toughness; unlimited self-confidence; keen observation; and, perhaps most importantly, good old-fashioned luck aided by the chaotic state of the German military under pressure from the Allies.

Downed about ten miles south of Le Havre and forty miles east of Caen, Fahrenwald never surrendered his overwhelming desire to return to England as soon as possible. Initially, the French Resistance he encountered discouraged him from what they perceived as an

impossible task of making it through the front lines. They identified the American pilot as an effective fighter and, in effect, drafted him. They were also concerned that, if captured by the Germans, he might jeopardize their security.

Frustrated by the Resistance, Fahrenwald and another airman "escaped." In spite of the presence of thousands of German troops, they reached the English Channel only to discover there would be no opportunity to proceed further from there. Retracing their journey to the south, they were picked up by the Germans and moved through several camps before being scheduled for transport to Germany. At the last possible instant, Fahrenwald escaped.

Again connecting with other elements of the Resistance, he evaded until eventually making contact with members of the 90th Infantry Division northwest of Le Mans. His journey back to England proved to be arduous when dealing with the military bureaucracy.

Aviation buffs should find Fahrenwald's perspectives on the air war going on over his head interesting. For example, just before his repatriation, he and his French colleagues barely survived an attack by a squadron of P-47 Thunderbolts against a nearby German position. All in all, a rip-roaring tale.

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docent, Museum of Flight, Seattle*



History of Rocketry and Astronautics: Proceedings of the 40th History Symposium of the International Academy of Astronautics, Valencia, Spain, 2006; v. 37 of the AAS History Series, and v. 26 of the IAA History Symposia. By Marsha Freeman, ed. San Diego, Calif.: Univelt for the American Astronautical Society, 2012. Photographs. Drawings. Notes. Index. Pp. 600. \$95.00 (\$75.00 paperback) ISBN: 978-0-877-03580-0

This, the latest in the American Astronautical Society/International Academy of Astronautics impressive series of cooperative volumes detailing the history of rocketry and astronautics, continues the series' tradition of blending the scholarship of new and veteran scholars in space history with the memoirs and papers of practitioners in the field. The constantly changing international venue of IAA meetings has always afforded the opportunity for papers from local and regional historians on astronautics in their homeland. So this volume, publishing papers and discussions presented at the 2006 IAA meeting in Valencia, Spain, has an excellent

section of studies on various Spanish contributions to astronautics.

As with virtually all volumes in this series, the range of topics is remarkable, with twenty-nine papers covering administration, biography, research and development, basic and applied science, and various projects, some undertaken, some not. Among those that I found most interesting are:

Charles Lundquist and Anne Coleman furnish a most interesting essay on aerodynamicist Rudolf Hermann's pioneering work in supersonic and hypersonic aerodynamics. John Mankin provides a thoughtful essay examining NASA's Office of Advanced Research and Technology during the tumultuous years of 1966-1973, from the fulfillment of Apollo into the doldrums of the post-Apollo era. Steven J. Dick (now former Historian of the National Aeronautics and Space Administration) has contributed an intriguing overview on NASA's exobiology program. L. Parker Temple examines the somewhat bizarre idea of using an "X-15B" as an orbital spaceplane, a neglected topic that he covers thoroughly. Anthony and Emily Springer make a very significant contribution in analyzing the development and employment of fabrics in flight, from the age of ballooning to that of aircraft and spacecraft. Miguel Ángel Llorca analyzes the little-appreciated, yet vital, role Spain played in the operational history of the Ariane space launch system. Finally, Roger F. Malina contributes a moving and insightful memoir of his father, astronautics pioneer (and artist) Frank J. Malina, one of the original Caltech rocket team that spawned the NASA Jet Propulsion Laboratory, and a remarkable contributor to global astronautics.

Like other volumes in the series, this volume is replete with sources, photographs, and technical drawings, and presents a very fine value for the money, well-justifying its formidable cost.

Dr. Richard P. Hallion, Research Associate in Aeronautics, National Air and Space Museum



Swashbucklers and Black Sheep: A Pictorial History of Marine Fighting Squadron 214 in World War II. Bruce Gamble. Minneapolis, Minn.: Zenith Press, 2012. Maps. Tables. Diagrams. Illustrations. Photographs. Notes. Appendix. Bibliography. Index. Pp 216. \$40.00 ISBN: 978-0-7603-4250-3

Bruce Gamble is *the* authority on the Black Sheep. He has written four books about World War II in the South Pacific,

two of them specifically about VMF-214: *The Black Sheep, the Definitive Account of Marine Fighting Squadron 214 in World War II*, and *Black Sheep One: the Life of Gregory "Pappy" Boyington*, 214's most famous commander. As he notes in the introduction of this pictorial history, his research into the above books uncovered far more pictures than could be included in the standard scholarly texts.

This volume is mostly a collection of those photographs. To place them in context, Gamble has included a fantastic summary of the Black Sheep's history. The narrative begins with the squadron's birth a few months after the attack on Pearl Harbor, and carries it in some detail through its three wartime deployments. Also included are sufficient maps to place the action within the theater and in the larger Pacific war. The last chapter starts in Korea and quickly brings VMF-214 up to the present.

Where the photographic record fails or continues for too long in black and white, Gamble has used the talents of several professional aviation artists. The included art shows historically accurate aircraft profiles with technical data, and color depictions of significant events. Several of the prints are full and double page entries that bring life to the story. The appendix includes major award citations earned, lists of pilots and where they served, and biographies of the four main artists.

Overall the book is large and visually appealing. The tight, yet informative, prose weaves the pictures and artwork into a compelling story about one of the United States' most famous squadrons. It is not an academic text, so the serious researcher will have to look to Gamble's other books for period or squadron detail. It is, however, a great addition to any reader's coffee table.

Cdr. James K. Selkirk, Jr., USN, Instructor and Academic Advisor, Air Command and Staff College, Maxwell AFB, Alabama



The Me 262 Stormbird: From the Pilots Who Flew, Fought, and Survived It. Colin D. Heaton and Anne-Marie Lewis. Minneapolis Minn.: Zenith Press, 2012. Photographs, Drawings, Tables, Appendices, Notes, Index. Pp. 322. Hard cover \$30.00.

So much has been written about the Messerschmitt Me 262 that one can ask how any new work written over sixty years later can possibly add to what is already known. Outstanding historians

including Walter Boyne, Alfred Price, Wolfgang Samuel, Jeffrey Ethell, and William Green have all examined it in depth, using primary documents and accounts from both the Allied and Axis perspective.

But Heaton and Lewis have produced what is likely the definitive operational accounting—at least from a pilot's perspective—drawing heavily on memoirs, recollections, and reports of both German and Allied airmen. They look at the 262 largely with an operational focus, presenting many fascinating recollections and accounts of how it was flown. Readers familiar with the 262 will find no surprises, though they will gain a broader perspective than previously available from any single source or survey. Indeed, the book's greatest value is its distillation of many already available accounts and into a single convenient package.

The anecdotes and narratives illustrate both the aircraft's strengths and weaknesses. The latter included inadequate armament and too high a closure speed. Its four 30mm cannon, while devastating, were too slow-firing and inaccurate except at very close range. This, coupled with the lack of speed brakes, hindered its ability to attack slower targets such as B-17s and B-24s; 262 pilots had to be ever conscious of overrunning and colliding with these much slower targets. One veteran recalled the high closing speed meant "You only had two seconds firing time. Now, in two seconds, you cannot sight. You can fire randomly and hope for the best." Speed brakes would have enabled the pilot to slow without reducing engine power. Those who slowed by reducing power risked being bounced by escort fighters that could make short work of the heavily loaded and sluggish jets before their early turbojets slowly generated sufficient power to get them back up to 550-mph flight speeds.

In short, for all its flashiness, it was far from a perfect weapon. Allied fighter pilots took a heavy toll of the jets; other pilots perished in crashes caused by their own mishandling or mechanical failure. Exacerbating the risk in flying the 262 were mechanical unreliability, and serious low-speed controllability and maneuverability deficiencies.

While a "there I was" flavor predominates, there is little on how the aircraft itself was developed, why it assumed the form that it did, or how Germany approached jet engine development. There is little discussion of the *Luftwaffe's* fighter acquisition effort, German aeronautical research and development, and the transformation of wartime air operations engendered by the first jets. The authors

accept the now-standard criticism that “Hitler ordered it turned into a bomber” (a legacy of Adolf Galland’s *The First and the Last* bolstered by Albert Speer’s *Inside the Third Reich*) without considering (as Alfred Price has) whether or not *der Führer* quite rightly recognized he needed something fairly invulnerable to conventional defenses to attack Allied surface targets, not just a new air-to-air fighter. Readers seeking broader aspects of the 262 story are advised to consider works such as Williamson Murray’s *Strategy for Defeat* and Alfred Price’s *The Last Year of the Luftwaffe*.

The authors relied primarily upon secondary sources and memoirs and did not avail themselves of larger record collections within the Air Force Historical Research Agency; the Air Historical Branch (UK), the U.S. National Archives, and The National Archives (UK) that would have enabled them to explore these issues in appropriate detail (they did use some records held by Germany’s *Bundesarchiv-Militärarchiv*). An extensive bibliography will steer readers to many other useful sources, though there are some omissions. The most surprising is Walter Boyne’s classic *Messerschmitt 262: Arrow to the Future*, an essential starting point for anyone studying the 262 and its development. Other absent works include the USAAF and RAF official histories by Craven and Cate, and Richards and Saunders; and the extremely useful postwar *Luftwaffe* studies series sponsored by the U.S.A.F. Readers may also wish to consult Monika Renneberg and Mark Walter’s *Science, Technology, and National Socialism*; Ernst Hirschel, Horst Prem, and Gero Madelung’s *Aeronautical Research in Germany from Lilienthal until Today*; and Hans-Ulrich Meier’s *German Development of the Sweptwing, 1935-1945*, all of which add important insight into the structure, goals, and methodology of German prewar and wartime research, and its influence on the force-structure and capabilities of the *Luftwaffe*.

Although the first-person accounts and reflections make for occasionally gripping text, the book suffers from frequent overreaching and overwriting. For example, was Fritz Wendel “perhaps the greatest test pilot on either side of the war”? By whose—and what—standard? Was Adolf Galland truly “young and enigmatic” as the *Luftwaffe*’s “General of Fighters”? On what grounds? How can the authors write (at least with a straight face) that “the Germans who flew the world’s first combat jets were not just pioneers of aerial warfare, but also, in their own way, played a role in the future of *world peace* [emphasis added].” Was designer Willy Messer-

schmitt truly a “genius” who designed “some of history’s finest aircraft”? What of his many design embarrassments and non-starters, not least of which was his so-called *Amerika Bomber*, the Me 264; the disappointing twin-engine Bf 110; the failed Me 209, 210, and 309 fighters; and the next-to-useless Me 163 *Komet* rocket interceptor?

Near the end of the book, they excoriate President Truman for his “ill-conceived” desire to deny American entry to any scientist, engineer, or technologist found to have been a member of the Nazi party or to have supported Nazi militarism, arguing that if carried out it “would have had tragic results for the United States,” since it would have excluded rocket scientists such as “Werner von Braun and Dr. Arthur Rudolph, and the physician Dr. Hubertus Strughold.” In fact, of course, as both Michael Neufeld (*The Rocket and the Reich*, and *Von Braun: Dreamer of Space, Engineer of War*), and Michael Petersen (*Missiles for the Fatherland*) have shown, Truman had every right to be concerned. Germany’s aeronautical and rocketry establishments were inextricably bound up with the worst excesses of the Third Reich, including all three of the individuals named here. While von Braun died before his fullest involvement with the Nazi war machine became known, Rudolph was forced to relinquish his American citizenship and return to Germany in 1984 following revelations of his extensive involvement in the management, mistreatment, and brutalization of slave laborers forced to build the V-2. Strughold’s connections to the highest levels of German aeromedical research—marred at its most extreme by use of concentration camp inmates as test subjects, many of whom died in horrific altitude chamber and immersion experiments—raise serious questions as to his own knowledge—and that of American authorities—of such criminal and, indeed, sadistic abuses.

Having criticised Truman, the authors then sweepingly assert, “The end result of following [his] order would have meant that the United States (and by proxy Great Britain and France) would have either been delayed by decades [sic] in developing supersonic aircraft, nuclear-powered submarines and surface ships, stealth aircraft design (such as it was then), rocket and missile technology, submarine and ground-launched intercontinental ballistic missiles, high-altitude pressure and g-force data [sic], and the delay (if not failure) in creating the Redstone, Gemini and Apollo space programs.”

But America’s first supersonic air-

plane was already under construction when Nazi Germany collapsed, and it owed nothing to German research; Nazi Germany’s atomic weapons program was almost laughably off-track; and postwar “stealth” aircraft owed nothing then or later to Nazi wartime research (in fact, Lockheed’s inspiration for *Have Blue*, which led to the F-117 stealth fighter, was a *Soviet* study on radar return from faceted surfaces). While Nazi Germany undoubtedly made important contributions to rocket technology, to imply the United States was exclusively dependent upon Nazi research for its subsequent space successes is misleading. America—and Russia, as well—did not lack for skilled native sons and daughters to probe the space frontier. Indeed, it arguably was Bernard Schriever, not von Braun and the fabled Peenemünde “rocket team,” that gave to America the space access capabilities it currently enjoys, just as it was Sergei Korolov who gave *Sputnik* to the world in 1957.

In sum, as operational history, the book is both informative and strongly recommended. But readers seeking to comprehend the broader implications and place of the 262 and German jet- and high-speed research in World War II (and aviation afterwards) must look elsewhere.

Dr. Richard P. Hallion, Florida Polytechnic University



Two Roads to War: The French and British Air Arms from Versailles to Dunkirk. By Robin Higham. Annapolis, Md.: Naval Institute Press, 2012. Map. Photographs, Tables, Appendices, Bibliography, Index. Pp. xxii, 411. \$44.95 ISBN: 978-1-61251-058-3 and **Unflinching Zeal: The Air Battles over France and Britain, May-October 1940.** By Robin Higham. Annapolis, Md.: Naval Institute Press, 2012. Map. Photographs, Tables, Appendices, Bibliography, Index. Pp. xix, 319. \$39.95 ISBN: 978-1-65251-111-5

Readers of *Air Power History* hardly need an introduction to the name Robin Higham. Indeed, were it not for him, *Air Power History* would not exist; he established and well-edited its predecessor, *Aerospace Historian*, from which *Air Power History* sprang, at a time when aerospace history was at best only imperfectly examined.

It is good, therefore, to find that Higham—veteran Second World War RAF Dakota pilot in the Southeast Asian theater and, after the war, arguably the most influential aerospace historian (particu-

larly military aerospace historian) of his time—is still at it. He certainly has not lost his touch. These two books, which are “stand alone” studies but are best read together, confirm that Higham’s reputation for excellence is both well-deserved and enduring. Both works should be standard references for decades to come.

It is remarkable that, in the decades after World War II, no one undertook a comparative study of Anglo-French air power thinking and development until Higham began his own research. Certainly a number of very fine interwar accounts exist regarding both the British and French air arms, as well as some summary studies on what happened in 1940. The reader will profit most by reading Higham’s books sequentially, for the second follows inevitably from the first and represents the last, sad denouement of two decades of miscast planning and thought: France was left horribly (and unnecessarily) vulnerable to the *Wehrmacht* in 1940, and Britain confronted the full weight of the *Luftwaffe* thereafter. Higham’s two volumes reflect insights and information from decades of official publications and studies by a wide range of authors. Even so, the breadth of his own original documentary research and analysis is impressive.

I found his discussion on French interwar air policy and wartime operations far more interesting than his equivalent sections on the RAF, which has already received a great deal of professional and popular attention. Higham’s examination and discussion of French aviation benefits greatly from the energetic work of the now-disestablished *Service Historique de l’Armée de L’Air* (SHAA). He also draws upon many memoirs from individuals such as Pierre Cot, Paul Reynaud, and Guy de la Chambre who have examined military aviation in the interwar period. And, he delved deeply into official records on both sides of the Channel to assess the nature of Anglo-French coordination and cooperation in air power development and application; the depth of his research is both readily evident and notated.

The story is fascinating, even riveting, despite the fact that its outcomes—dismal for France, victorious for Britain—are well-known. Higham is particularly effective in taking a strongly historiographical approach to his analysis, comparing accounts, sorting out discrepancies (often by referring to original sources), and offering sound and informed judgments. Certainly they should be mandatory reading for anyone seeking to discuss either British or French aviation in that period and the sobering wartime months from September 1939 through the end of the Battle of Britain. Among English-lan-

guage accounts, these books are definitive and are likely to remain so.

Dr. Richard P. Hallion, Institute for Defense Analyses, Science and Technology Policy Institute



Sic Itur Ad Astra: Canadian Aerospace Power Studies [Vol 2, Big Sky, Little Air Force]. By W. A. March, ed. Trenton, Canada: Canadian Forces Aerospace Warfare Center, 2012. Notes. Tables. Index. Pp. 135. ISBN: 978-1-100-52999-8. Available on the Internet at www.airforce.forces.gc.ca/cfawc/eLibrary/eLibrary_e.asp. Hard copy available at anne.pennington@forces.gc.ca.

This short bilingual compilation of selected essays presented over the last two decades at the Canadian Air Force’s annual history conference is the second of a three-volume series examining Canadian air power. The overall title of the series is taken from the Royal Canadian Air Force motto, drawn from the Augustan poet Virgil, who wrote in his *Aeneid* “*Sic Itur Ad Astra*.” “Such is the pathway to the stars.”

Anyone with even a cursory knowledge of military aviation history is aware of the tremendously important role that the airman of the Royal Canadian Air Force and the Royal Canadian Navy played during the Second World War. What is less well appreciated is the overall history of Canadian military air power prior to the war, and its evolution after that conflict, through the Cold War, and into the uncertain “New World Order” and post-9-11 worlds that followed.

For that reason, this work—like the other two volumes in the series (the first one treats air leadership and the third is an eclectic assemblage of essays on various air operations—is most welcome. The editor has compiled an excellent group of essays that affords a perspective on the history of Canadian air power from the late interwar period through fighting in the Balkans in the 1990s. The essays, from a variety of military historians, academicians, and history-minded operators, are uniformly excellent and thoroughly documented.

For a self-described “small air force,” the RCAF has consistently more than pulled its weight, occasionally at fearsome cost. During the Second World War, for example, RAF Bomber Command lost 47,268 airmen. Of this total, fully 9,919 were from the RCAF, thus constituting 21 percent of Bomber Command’s total losses. Readers of this work will gain insight into the state of Canada’s air power forces on

the eve of the Second World War, its air training program (part of the larger Empire air training scheme), the crucially important ferry and transatlantic air transport operation (begun less than fifteen years after Lindbergh’s solo crossing of the North Atlantic), the Canadian perspective on using strategic bombers for tactical air support (Operation Totalize), the vicissitudes of introducing sonobuoy-cued homing torpedoes during the Battle of the Atlantic, the ordeal of Bomber Command during the Battle of Berlin, Canada’s impressive maritime aviation forces in the Cold War and on to Desert Storm, Canada’s role in aerial counter-drug detection and interdiction, and the experience of Canada’s F/A-18 force in Kosovo.

All in all, one finishes this volume (and its two companions as well) with a healthy regard for the air-mindedness, fighting spirit, and accomplishments of Canadian airmen. It is unfortunate that the book lacks photographs; but, altogether, this is a most useful volume on a remarkable and venerable air force, and it is highly recommended as both an historical introduction and most useful reference.

Dr. Richard P. Hallion, Institute for Defense Analyses, Science and Technology Policy Institute



Russian Aeroplanes 1914-1918. By Mikhail Maslov. Old Saybrook Conn.: Icarus Aviation Publications, 2002. Photographs. Illustrations. Tables. Bibliography. Pp. 172. \$23.00 paperback ISBN: 978-0-9724527-0-2

This work is by far one of the best, if relatively unknown, histories of Russian aircraft designed during World War I. It is well illustrated with 250 high-quality photographs, many new to me, as well as forty-one line drawings. Unfortunately, there are no color profiles of any of the aircraft, and the book has no index. However, what it lacks is more than made up for in its content. The book examines aircraft that the Russians designed and built during World War I. It not only covers those aircraft that made it to series production but also looks at the “one-offs,” some of which appear for the first time in print here in the west.

Outside of the former Soviet Union and Eastern Europe, details of military aviation activities in Russia prior to 1920 have been obscure for a variety of reasons, not the least of which is the Russian language. Also, during the Soviet years, there was a substantial lack of access to primary source material. However, in the past twenty-five

years the state-run archives have become more accessible; and material, as well as books from Russian aviation researchers, has begun its steady flow. Much of it, however, is still in Russian, but at least it is now available. In the case of this book, we are more than fortunate to have a work that is written in English by a Russian author who had access to a variety of material and thoroughly understood the subject matter.

As this book was printed a decade ago as a limited run and did not receive wide distribution or notice, it has, for the most part laid languishing. It is with this in mind that I recommend to any reader who is at all interested in the subject, that you should run—not walk—to get a copy as soon as possible.

*Carl J. Bobrow, Museum Specialist,
National Air and Space Museum*



Jet Age Man: SAC B-47 and B-52 Operations in the Early Cold War. By Earl J. McGill. Solihull, England: Helion & Company, 2012. Photographs. Illustrations. Appendices. Pp. 284. \$30.00 ISBN 978-1-907677-46-5.

This is a story of flying in the Strategic Air Command (SAC) during the 1950s and 1960s that focuses on both training and operational missions flown by SAC's premier intercontinental bombers, the B-47 and B-52. The book is written from the perspective of a man who piloted both of these aircraft during this period, and it reads like an adventure story. It relates his flying experiences, awareness of other aircraft flying incidents, and overall perspective of the flying characteristics of these aircraft. Little reflection is offered on the political ramifications of possessing these weapons.

Lt. Col. McGill details flying characteristics and experiences from personal knowledge. Some stories focus on specific incidents when things went badly: often the aircraft was saved; but sometimes, very sadly, it was destroyed and the aircrew was killed. There are several stories of how the B-47 was used as a reconnaissance aircraft which overflew the Soviet Union, all with little or no awareness on the part of the American public (all before the May 1, 1960 shootdown of the U-2). I found these stories extremely interesting and very well written.

McGill writes of his admiration for the leadership qualities of SAC's first commander, General Curtis LeMay and his philosophy of running the command "to train hard to make flying in war time easier." It

was serious business: if you made mistakes, you were not flying anymore; if you did your job extremely well, you got a "spot" promotion to the next highest military rank.

McGill's stories of flying B-52s in low level Oil Burner (OB) routes and standing nuclear alert for a week at a time ring true to me, a guy who flew B-52F and G models during the early 1970s. I also flew numerous OB routes in the western United States; McGill's depictions all bring back memories. He discusses flying *Chrome Dome* missions (which lasted up to twenty-four hours, flying mostly into the Arctic region); the increased airborne and ground-based alert during the Cuban Missile Crisis; flying to and from Anderson AFB on Guam; and then the start of flying B-52 combat operations in Vietnam. All these adventures took place while McGill was a B-52 Instructor Pilot flying from Biggs and Carswell AFBs in Texas.

In a later chapter, McGill relates stories from his days as a mission briefer at the *Arc Light* Operations Center at Anderson AFB during the late 1960s. He assisted in building the combat flight packages used by B-52 aircrews during their early flights into Vietnam. He criticizes some of the targets selected and the bomber flight formations and tactics used at that time and expresses his feeling that the B-52 could have been employed against more strategic targets than the tactical targets of dubious value located within the triple-canopy jungle of South Vietnam.

This is an extremely well written and detailed book on flying B-47s and B-52s aircraft. It is certainly worth any reader's time as you gain more information about flying these early jet bombers from an experienced bomber pilot—a jet age man.

Col. Joe McCue, USAF (Ret.), Leesburg Va.



American Missiles: The Complete Smithsonian Field Guide. By Brian D. Nicklas. Yorkshire, UK: Frontline Books, 2012. Photographs. Illustrations. Appendices. Glossary. Bibliography. Index. Pp. xvi, 176. \$60.00. Hardback ISBN: 978-1-84832-517-3

This work covers missiles used by all branches of the U.S. military from 1962 to the present. Providing detail on such a wide range of types and providing accompanying illustrations must have been a daunting challenge, but Nicklas handled it well. He even included missiles that failed to enter production.

Nicklas is an employee of the National Air and Space Museum's

(NASM) Archives Division who has also freelance written for magazines, newspapers, and websites about aviation for years. He holds a degree from Embry-Riddle Aeronautical University. In NASM, he had access to photographs and materials that give the book added value, many of them from the Herbert S. Desind Collection. Without such a valuable source of photographs, many of the less-well-known and short-lived missiles would lack photographs.

The introduction well explains the military nomenclature of missiles. It also makes clear that the book is not intended as a history book or even as a technical guide. Its intent is to provide a directory of American missiles with an emphasis on providing a visual reference and basic specifications. For those seeking more in-depth technical information or historical background, Nicklas has provided an excellent bibliography.

While the title suggests that the book covers only missiles, it also includes information on drones, many of which are not rocket or even jet powered. They were included because they had a missile designation. Most served as aerial targets or as sensor platforms. Now known as unmanned aerial vehicles, these aircraft have served much longer than most people realize.

The book's organization is confusing because it is not structured by missile type, function, or even military service. Nicklas chose to list the missiles by their "M" number. This led to a missile like Talos—a U.S. Navy shipboard surface-to-air missile—being listed alongside the Sidewinder—an airborne short-range air-to-air missile. To aid the reader in navigating this organization, Nicklas placed a numerical list near the front to serve as a table of contents. Unfortunately, no page numbers are listed with the missiles or other important information such as the type of missile. The only information included is manufacturer, "M" number, and name. Few readers will find this section useful as a substitute for a table of contents. To find the page number to a specific missile, the reader must use the index.

Each missile listing includes one or two pictures with a few exceptions. These play an important role in visual identification. One of the reasons Nicklas decided to write the book was to aid writers, editors, journalists, and historians in missile identification. Tired of seeing missiles misidentified, he saw a need for a missile reference book that could aid these groups in providing accurate missile identification. He included specifications in the missile listings as well. These listings provide basic

information in most cases, but some entries such as warhead data, guidance, users, and operational data can save readers research time. Nicklas wanted to create a book of use to researchers away from their computers and to provide information on missiles not easily found during internet searches.

Each missile listing also has a background information section. A reader can often find interesting information buried here such as the fact that the Iranians converted some Hawk missiles into air-to-air missile replacements for their hard-to-support Phoenix missiles.

Material in the back of the book consists of a missile name list, missile families section, bibliography, a list of missiles held by NASM, an index, and a photograph credit section. The missile name list has the same information as the numerical list section in the book's front except in a different order. It lacks any page information as well. The index is vitally important in this book because it is the only table that a reader can use to quickly find a specific missile.

The book does its job well, but its organization makes using it to look up a specific missile quickly rather cumbersome. Despite this shortcoming, it is a must-have for writers, editors, and researchers who write about American missiles. Those who just enjoy reading about American missiles will find it informative and enjoyable to read as well.

David F. Crosby, former history writer for the U.S. Air Force and doctrine developer for the U.S. Army Air Defense Artillery School



Selling War in a Media Age: The Presidency and Public Opinion in the American Century. By Kenneth Osgood and Andrew K. Frank, eds. Gainesville: University Press of Florida, 2010. Notes. Pp. xii; 278. \$29.95 paperback ISBN: 978-0-8130-3800-1

Throughout U.S. history, and especially during modern presidencies, America's chief executives have meticulously used the media to shape public opinion on issues of war. This is a collection of essays that illustrate how media has played large in U.S. presidencies in promoting war and countering opposition to it. The editors of this informative book establish early on their thesis with references to the recent past when the G.W. Bush administration launched a media blitz to sell the impending war in Iraq. They refer to the insider book by Bush's former press secretary,

Scott McClellan, *What Happened: Inside the Bush Administration*, referencing in particular the chapter aptly titled "Selling the War."

The essays step through media-influenced conflicts beginning with President McKinley's Spanish-American War and Philippine Insurrection. They go on to World Wars I and II, the Cold War, the Korean War, Vietnam, and the Gulf War. The selection of "conflicts" reflects an important consideration in the selling of war; only three were in the traditional congressionally declared sense. The others lacked a degree of legitimacy and required continual "justification."

The essays demonstrate how successive presidencies have framed war policies, using the media to gain or increase public acceptance and support. The point also is made that the process was secondarily educational in nature for a public typically ill-informed about foreign policy. The various authors speak to the rhetorical devices, ideological language, and simplification of historical symbols used by presidents to promote acceptance of decision making and to respond to criticisms. The comparison of Saddam Hussein with Adolf Hitler, as one example, simplified the process of demonizing the enemy and making war more palatable. President Theodore Roosevelt, McKinley's successor, wishing to silence domestic criticism of American misconduct during the insurrection in the Philippines, pointed to American atrocities committed in the South under Jim Crow that should have been of greater concern. The rhetoric of peace also helped to rally support during the seemingly unending Cold War. That is, presidents talked of peace while waging a war that was often fought in the shadows.

The afterword is by the distinguished journalist, David Halberstam, who had been in the vanguard of critical war reporting. His dispatches from Vietnam and subsequent books (*The Making of a Quagmire* and *The Best and the Brightest*) helped focus opposition to the Vietnam War. In a speech given not long before his death, he recalled his own experience with running counter to wartime presidential rhetoric. Kennedy wanted the *New York Times* to transfer him from Vietnam; and Johnson later called him a traitor, simply because they could not control his opposing, and influential, views on the Vietnam War. An important observation in his talk was that the media had, with advances in communication technology, become a crucial instrument of presidential power and, consequently, a powerful marketing tool during conflict.

Selling War is timely because U.S. involvement in undeclared wars has prac-

tically become the norm. Bosnia, Kosovo, Panama, Grenada, Libya, Somalia, Yemen, Pakistan, Afghanistan: the list grows with Syria and Iran looming on the horizon. The American public needs to pay better attention to the rhetoric of war and the function of the media, and this book plays an important role towards that end. *Selling War* also brings to mind the ancient adage that in war truth is the first casualty.

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



Warfare Welfare: The Not-So-Hidden Costs of America's Permanent War Economy. By Marcus G. Raskin and Gregory D. Squires, eds. Washington, D.C.: Potomac Books, 2012. Tables. Notes. Index. Pp. 264. \$32.95 paperback ISBN: 978-1-59797-533-9

Warfare Welfare is a collection of previously published material compiled for a seminar at George Washington University. The theme of that course (and of the book) is obvious from the subtitle. It was edited by the students and by their two instructors, both of whom are professors of public policy and have significant experience in and out of public service.

Although the book contains two articles from each author, the only content not previously published is the introduction. For such a diverse assortment of topics—ranging from American intellectual traditions to Supreme Court cases to the public policy lessons of hurricane Katrina—the introduction should play a significant role. It must provide a supporting framework that allows the reader to follow the theme across many different authors that originally wrote for many different audiences. It must set the parameters of the argument, clarify terms, and make a case for the veracity and importance of the book's argument. Unfortunately, this introduction generally fails on all counts. Little effort is made to define war or to describe our "permanent war economy" (that comes eventually in chapter 6). The historical sketch feels rushed and disjointed. Surely there are advantages and disadvantages to current public policies and the institutions and mindsets that enable those policies. Yet, the introduction glosses over the harder debate concerning what those costs and benefits are and instead drives straight towards the implication that "war should not be an acceptable form of conduct." Thus, at the other end, the book concludes with a chapter addressing the end of war.

As a professional military officer, I am fully aware that wars have costs beyond “blood and treasure.” I am also aware that political calculations that culminate in the decision to wage war, and the public opinion that often supports those decisions, should explicitly acknowledge the many costs incurred. Thinkers, like the editors of this work and the authors of each chapter, can help illuminate factors that may normally escape policy makers and the general public. Yet, the idea that the costs of war will always outweigh its benefits—like most universal prescriptions—appears inaccurate. Additionally, when an end to the war system requires the international community to “suspend vested interests,” it seems like an unrealistic prescription as well.

Maj. Jason M. Trew, USAF, Academic Instructor, Air Command and Staff College, Maxwell AFB, Alabama



Consolidated B-24 Liberator. By Graham M. Simons. South Yorkshire, UK: Pen & Sword Aviation, 2012. Tables. Diagrams. Photographs. Appendices. Glossary. Bibliography. Index. Pp. 256. \$34.95. ISBN 978-184884-644-9

A revision and expansion of a 1990 work, this book stands out in the crowded field of aircraft surveys with its wide scope and detailed coverage of the development, manufacturing, and worldwide service—civil and military—of the B-24 Liberator in war and peace. It describes every B-24 variant known to exist and every military unit of every air force, as well as civil organizations, known to operate it. The pleasing 6 x 9 format makes it feel like a hand-book.

Simon’s concentration on the Liberator in RAF and international service is both refreshing and informative. It details the desperate early days before formal U.S. involvement in the war, when but a handful of Liberators existed, and the rush was on for large, long-range aircraft. The well-organized chapter on how the RAF influenced early design, testing, and production gives the reader a broader perspective on the aircraft.

Although such notable operations as the epic Aug. 1, 1943, Ploesti raid appear in detail, the reader may look to official campaign histories or such works as Roger Freeman’s *The Mighty Eighth* or Osprey’s *B-24 Liberator Units* series for more detail on wartime Liberator exploits. Unlike most aircraft surveys, this book cites day-to-day maintenance, repair, and logistics experiences and concerns that provide

context to combat use of the bomber and an immediacy missing in some other works—the odor of gas in the bomb bay from chronically leaky fuel lines, the conveniently hinged cowl for easy access to the double-row Pratt and Whitney radial engines, and how ground crews repaired flak damage. The inclusion of a good chunk of the Liberator’s flight manual enhances this, as do interpretive and informative photo captions.

Such alternative uses as C-109 tanker and C-87 cargo and passenger conversions are described in detail. Thorough treatment of the wide array of electronics fitted into the Liberator over the years by the U.S.AAF, U.S.N, RAF, and others for a variety of missions nicely complements Roger Freeman’s *Mighty Eighth War Manual*. The U.S. Navy’s extended fuselage, single-fin Privateer (PB4Y-2) version appears as well, although Alan Carey’s works are key references for that aircraft. International operators receive their due, with accounts of the sometimes circuitous routes by which such air forces as those of Turkey, India, and the Republic of China acquired their Liberators. Such postwar Liberator uses as civil airliners, freighters, firefighters, and other uses are interestingly described.

Liberator buffs will appreciate the details of the B-24’s Babylon of model designations, block numbers, and turret variations. Details of the origins and operation of the wartime production pool, especially the classic Ford Willow Run assembly line, give the reader a good picture of the keep-that-line-rolling ethic of the American war effort, nicely complementing Osprey’s *Consolidated B-24 Liberator: Production Line to Front Line* volume.

All-inclusive surveys usually uncover a rare and significant gem, and this book is no exception. Did you know that BOAC tested a *civil* trans-Atlantic passenger service with converted Liberators from February to May 1948 that depended upon probe and drogue aerial refueling? How did this potentially revolutionary development sink from sight?

Unlike many other works, this book seriously analyzes the endless bomber vs. bomber comparisons. The hoary old flight line jibes are there (e.g., the B-24 is the B-17’s packing crate), but the B-24 is compared to the B-17, German and British heavies, and even Italian and Russian designs using such criteria as range, flight characteristics, and armament. Especially interesting is the evaluation of the relatively short, deep bomb bays that characterized American bombers versus the long, shallow ones on British heavies.

There are a few quibbles. No discussion was found of the nose wheel collapse (shimmy) problems that afflicted early

B-24D operations. The odd factual error unfortunately mars the text: the Second Bomb Division of the Eighth Air Force did not originate in 1942; General James H. Doolittle never served as the U.S. Air Force Chief in the Pacific; TB-24Ds trained flight engineers for B-29s, not B-24s. The few typos that exist should have been caught in proofreading, especially for a re-issue. Although the bibliography cites the sources, endnotes or at least a chapter-by-chapter listing would have been helpful. So would some line drawings and tables listing B-24 performance figures. These are minor distractions, however, and this absorbing reference should be on every bomber buff’s shelf.

Steven Agoratus, Hamilton, New Jersey



Fighter Group: The 352d “Blue-Nosed Bastards” in World War II. By Jay A. Stout. Mechanicsburg, Pa.: Stackpole Books, 2012. Illustrations. Photographs. Notes. Bibliography. Index. Pp. xiii, 418. \$29.95 ISBN: 978-0-8117-0577-6

At its peak during World War II, the Army Air Forces (AAF) fielded forty-six fighter groups in the war against Germany. Histories of these units vary greatly from bare and rough wartime official accounts, to more recent efforts that are sleek, well researched, well written, and well illustrated. While all of these outfits deserve a first-rate history to preserve and commemorate their contribution to the Allied victory, unfortunately this is not the case. For a variety of reasons some have received more coverage than others. The 352d Fighter Group is not one of these units although it was successful and in the thick of the action.

In the fight against the *Luftwaffe*, the 352d Fighter Group registered 504 aerial victories to rank eighth of the AAF fighter groups fighting over Europe and North Africa; the group’s 487th Fighter Squadron was the third highest scoring AAF squadron in the entire war. Two of the top AAF European aces, George Preddy (twenty-seven victories) and John Meyer (twenty-four victories), served in the unit and were two of seventeen AAF fighter pilots to score more than twenty victories. Of the five AAF pilots who downed six or more aircraft on one mission against Germany, two were from the 487th. Despite this, the 352d has received little attention.

Jay Stout corrects this in *Fighter Group*. Having published a macro account of the AAF’s fighter war against Germany (*The Men Who Killed the Luftwaffe*), he turns to this micro effort. He uses a wide

range of rich sources, including official documents, interviews, letters, and secondary materials in this effort. There is much on life on the ground, with attention to food, drink, shelter, partying, weather, mascots, natives, and of course, women. Stout also gives context to the story touching on events that occurred some distance from the 352d, but the book centers on the group's combat experience. The story is presented in a chronological sequence with some well-done topical tangents that are informative and often unique in the literature. Noteworthy is coverage of two subjects seldom discussed or even mentioned: claims and charges of shooting at aircrew in parachutes by both Americans and Germans, and aerial and ground-based "friendly fire." Although necessarily brief, Stout's treatment of the GAF's January 1, 1945, attack on the unit's forward air strip (part of the massive German *Bodenplatte* assault on Allied airfields on the continent) is outstanding as is his account of the downing (by "friendly" ground fire) of George Preddy, the unit's leading ace. Stout also deserves accolades for writing a candid account, not characteristic of unit histories, with criticisms of equipment, leaders, individuals who didn't measure up, those who avoided combat or received undeserved medals, and actions that are not heroic. To be clear, the unit's overall record is positive but includes blemishes. The same can be said of *Fighter Group*.

There is too much context, too much color, and too much repetition. At points, the story is told mission-by-mission, encounter-by-encounter, pilot-quote-after-pilot-quote; detailing victories and losses seemingly bullet-by-bullet. Rough and non-existent transitions also mar and slow the flow of the book. *Fighter Group* desperately needed an editor to tighten and trim the excess; emphasize major points; and, especially, cut the repetition.

I wished Stout had pushed somewhat further, as there are a number of fascinating questions he does not address. For example, what accounted for the marked difference in success, measured in aerial victories, registered by the 352d's three squadrons (143 in the 328th, 115 in the 486th, and 236 in the 487th)? How much of the 487th's success can be credited to the example and leadership of aces Meyer and Preddy? Was the 352d a typical or atypical group compared with the other forty-five AAF fighter groups in the European campaign? There is no conclusion, and unlike most unit histories, no statistical summary or listing of pilots lost. In short, this is a narrative, not an analysis of the unit. However, for me the most serious lapse is the haphazard use of cita-

tions. While there are notes and a useful bibliography, some interesting materials as well as a number of direct quotes are not cited.

Individual readers will seek different goals. On the macro level, serious students will find little that is new in *Fighter Group*. However, on the micro level, all will gain an excellent view and an appreciation of life (and death) in a World War II AAF fighter unit engaged against Germany. Stout's extensive research and candor are outstanding, and, aside from the criticisms above, make *Fighter Group* an excellent example of what a unit history should look like. This is a well done book in a difficult genre. For those interested in World War II fighter combat, the AAF's battle for air superiority against Germany, and especially the life and experience of American fighter pilots, this book is highly recommended.

Kenneth P. Werrell, Christiansburg, Virginia



Those Brave Crews: The Epic Raid to Destroy Hitler's Ploesti Oil Fields. By Ray Ward. Waverly, New York: Weldon Publications, 2003. Illustrations. Diagrams. Photographs. Notes. Bibliography. Pp. XVI, 144. \$14.95 paperback ISBN: 0-9724175-0-8

This is a distinctive and unique work on the noted August 1, 1943, low-level bombing mission on the Ploesti oil fields by five B-24 Liberator groups of the U.S. Eighth and Ninth Air Forces. The reader may quickly flip through it and, finding verse instead of standard narrative, be tempted to put it down again. Read this book all the way through before judging it, however. Ward, a U.S.AAF veteran who debriefed combat crews on their return from the mission, was sufficiently awed by their experiences that he felt the time right, some six decades after the event, to express his thoughts in verse to more effectively convey to the reader those aspects of the mission—the audacious concept, the resolute and focused planning and rehearsal, the unforeseen weather, mechanical and navigational difficulties, the selfless sacrifice, the dogged determination to reach the target, the stunned post-mortem—that he feels qualify it to be considered in the top ranks of significant historical annals of courage and sacrifice. Allusions throughout the text locate the mission among such notable historical events as Pickett's Charge, the Charge of the Light Brigade, and the retreat of Xenophon's army.

The reader will gain the most not

from absorbing page-by-page facts, but from an overall impression gained from the entire book. This book inimitably gives the reader the impression of actually having flown the mission. The ambitions, fears, expectations, frustrations, and letdowns all clearly come through in Ward's verse. He focuses on what the crews knew at the time of the mission, vividly relaying, for instance, their suspicions on what role the enemy "weather" team secreted in the North African desert may have played in the loss of surprise, as well as the frustrations of pilots observing General Ent's mistaken turn down the Targoviste valley instead of the Ploesti. One of Ward's purposes is to remind the reader of the routine courage and acts of character, unremarked on at the time because they were so numerous, that accompanied this mission. This book brings to the fore such individual episodes often lost in standard histories as the participation of George Barwell, an RAF gunnery instructor who volunteered to fly the mission and was disciplined afterward by his superiors for failing to obtain authorization! Numerous action photos from personal collections, some appearing in print for the first time, are tied closely to the text, giving a window into what crews saw as the mission unfolded.

Since long-distance navigation and landmarks played so critical a role in this mission, a map or two may have helped the reader visualize its scope and scale. Ward includes numerous explanatory side notes in his two-column format, providing background and explaining facts and allusions in the verse. However, readers will benefit if they already are familiar with the mission from previous readings. This book is required reading for those who wish to gain a full picture of the Ploesti mission and of those early, pioneering days of the 1943 air war in the North African desert.

Steve Agoratus, Hamilton, New Jersey



421st NFS 1943 [Vol. 31 of Miniatury Lotnicze] and 345th BG Vol. 1 [Vol. 32 of Miniatury Lotnicze]. Both by Andre Zbiegniewski. Lublin, Poland: Kagero, 2010. Tables. Diagrams. Illustrations. Photographs. Pp. 80 and 88. \$22.99 paperback ISBN: 978-83-89088-47-9 and 978-83-89088-46-0

These two monographs are part of a series put out by Kagero on various German, Japanese, British, and American aircraft types and units. The books are published in both Polish and English: two

columns per page with parallel narratives. All of the captions for the many pictures are also in both languages. The translation is generally quite excellent; the photo selection is good; and the photos are adequately reproduced. Both monographs contain a centerfold with several sideviews of different aircraft for use primarily by modelers.

The first volume on the 421st Night Fighter Squadron covers both the development and technical details of its primary aircraft, the Northrop P-61 Black Widow. The 421st was formed in May 1943 in Orlando, Florida, equipped with Douglas P-70 night fighters. These inadequate machines would be replaced by the developing P-61, the first airplane designed from the start for night fighting. When the unit arrived in New Guinea, the P-61s weren't yet ready, so the pilots got P-38s—an aircraft totally unsuitable for the job—and P-70s. By the end of June, P-61s began arriving, but between new aircraft, inadequately developed tactics, and New Guinea itself, operations got off

to a slow start. With the advances through New Guinea and then into the Philippines, the 421st was in the thick of the fighting and an effective force. As night fighter operations became less needed, the P-61s eventually performed bombing missions. The war ended for this unit on Ie Shima as it was preparing for the upcoming invasion. By this time, some of the new P-38M night fighters had arrived and joined in operations along with the P-61s.

Volume 32 covers one of the most famous USAAF bombing units of the war, the 345th Bombardment Group (Medium), equipped with the North American B-25 Mitchell. As with the 421 NFS, they operated throughout Gen George Kenny's Fifth Air Force "garden spot" theater of war, New Guinea and its surrounding area, and the Philippines. Unlike the night-fighter monograph, there is little on the development of the B-25; this one concentrates on the seemingly never-ending slog of American and Australian forces up New Guinea. The unit supported Mac-

Arthur's leapfrog advance up the island's coast by sinking innumerable Japanese barges and ships and hitting their remote airfields and isolated garrisons. This first part of the group history takes the reader through the end of 1943.

One thing that readers can take away from both of the monographs is the appalling conditions that the Fifth Air Force operated under throughout the war. Tents; heat; poorly equipped and prepared airfields, a tenacious enemy, and difficult logistics marked this theater. But both units were instrumental in the operations necessary to achieve final victory. These books will be useful to the modeler or anyone interested in Fifth Air Force's operations.

Col. Scott A. Willey, USAF (Ret.), Book Review Editor, and Docent, NASM's Udvar-Hazy Center



PROSPECTIVE REVIEWERS

Anyone who believes he or she is qualified to substantively assess one of the following new books 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: scottlin.willey@gmail.com

Guidelines for Contributors

We seek quality articles—based on sound scholarship, perceptive analysis, and/or firsthand experience—which are well-written and attractively illustrated. The primary criterion is that the manuscript contributes to knowledge. Articles submitted to *Air Power History* must be original contributions and not be under consideration by any other publication at the same time. If a manuscript is under consideration by another publication, the author should clearly indicate this at the time of submission. Each submission must include an abstract—a statement of the article's theme, its historical context, major subsidiary issues, and research sources. Abstracts should not be longer than one page.

Manuscripts should be submitted in triplicate, double-spaced throughout, and prepared according to the *Chicago Manual of Style* (University of Chicago Press). Use civilian dates and endnotes. Because submissions are evaluated anonymously, the author's name should appear only on the title page. Authors should provide on a separate page brief biographical details, to include institutional or professional affiliation and recent publications, for inclusion in the printed article. Pages, including those containing illustrations, diagrams or tables, should be numbered consecutively. Any figures and tables must be clearly produced ready for photographic reproduction. The source should be given below the table. Endnotes should be numbered consecutively through the article with a raised numeral corresponding to the list of notes placed at the end.

If an article is typed on a computer, the disk should be in IBM-PC compatible format and should accompany the manuscript. Preferred disk size is a 3 1/2-inch floppy, but any disk size can be utilized. Disks should be labelled with the name of the author, title of the article, and the software used. Most Word processors can be accommodated including WordPerfect and Microsoft Word. As a last resort, an ASCII text file can be used.

There is no standard length for articles, but 4,500-5,500 words is a general guide.

Manuscripts and editorial correspondence should be sent to Jacob Neufeld, Editor, c/o *Air Power History*, 11908 Gainsborough Rd., Potomac, MD 20854, e-mail: jackneufeld@verizon.net.

Books Received

Felker, Craig C. *Testing American Sea Power: U.S. Navy Strategic Exercises, 1923-1940*. College Station: Texas A&M University Press, 2007. [2d printing 2013]. Notes. Pp viiii,183. \$24.25. Paperback ISBN: 978-1-60344-989-2

Harlow, John., Ed. *History of Rocketry and Astronautics*. San Diego, Calif.: Univelt. 2013. [AAS History Series, Vol. 39, IAA History Symposia, Vol. 22] Glasgow, UK, 2008. Illustrations. Photographs. Notes. Pp. xiii,345. \$95.00 ISBN 978-0-87703-589-3

Hone, Thomas. C., Ed. *The Battle of Midway: The Naval Institute Guide to the U.S. Navy's Greatest Victory*. Annapolis, Md.: Naval Institute Press, 2011. Maps. Illustrations. Photographs. Appendices. Index. Pp xx,360 \$28.95 ISBN: 978-1-61251-126-9

Horner, Dave. *The Earhart Enigma; Retracing Amelia's Last Flight*. Gretna, La.: Pelican Press, 2013. Appendices Notes. Bibliography. Illustrations, Photographs. Index. Pp 480. \$26.95 ISBN: 978-1-455617-81-4

Hunley, J.D. *The Development of Propulsion Technology for U.S. Space Launch Vehicles. 1926-1991*. College Station: Texas A&M University Press, 2012 [2d printing 2013]. Photographs. Notes. Index. PP. xi,383 \$34.95 ISBN: 978-1-60344-987-6

Jackson, Aaron P. *Doctrine, Strategy and Military Culture; Military-Strategic Doctrine Development in Australia, Canada, and New Zealand, 1987-2007*. Canadian Forces College, 2013. Tables. Figures. Bibliography. Pp. xx,185 (in English)(203 pp. in French) Paperback ISBN: 078-1-100-54502-8

Jones, Frank L. *Blowtorch": Robert Komer, Vietnam, and American Cold War Strategy*. Annapolis, Md.:

Naval Institute Press, 2013. Notes. Bibliography. Index. Pp. xi,401. \$52.95 ISBN:078-1-6125-512280

Kaplan, Philip. *Mustang—The Inspiration: The Plane That Turned the Tide of World War Two*. UK: Pen and Sword Aviation, 2013. Index, Pp. 192. \$29.95 ISBN: 978-1-781590-046

Orange, Vincent. *Churchill and His Airmen: relationships, Intrigue, and Policy-Making,194-2005*. London: Grub Street, 2013. Photographs. Bibliography Index. Pp. 320 \$49.95 ISBN: 978-1-908117-3666

Rossano, Geoffrey L., Ed. *Hero of the Angry Sky: The World War I Diary of David S. Ingals, America's First Naval Ace*. Athens: Ohio University Press, 2013. Notes. Photographs. Appendix. Bibliography. Index, Pp. xix,317. \$28.95 ISBN: 978-0-8214201-38-4

Searce, Phil. *Finish Forty and Home—The Untold World War II Story of B-24s in the Pacific*. Denton: University of North Texas Press, 2012. Map. Illustrations. Notes. Photographs. Bibliography. Index. Pp. xiv, 373, Paperback, \$18.95 ISBN: 978-1-67441-510-0

Swinfield, John. *Airship Design, Development and Disaster*. Annapolis, Md.: Naval Institute Press, 2013. Illustrations. Notes. Photographs. Appendix. Bibliography. Index. Pp. 336 \$45.95 ISBN: 978-1-591140344

The Curtis Papers – Canadian Aerospace and Joint Studies. Vol.I, Book I: 2009-2010 Select Masters in Defence Studies Papers. Canadian Forces College, 2013. Notes Pp.184 (in English) 207 in French Paperback ISSN: 2291-2581

Exciting Modern Work on the Tuskegee Airmen



The Tuskegee Airmen, An Illustrated History: 1939-1949, by Joseph Caver, Jerome Ennels, and Daniel Haulman, is a comprehensive account of the pioneering group of African-American pilots beginning prior to World War II. Using many never-before-published photographs, the exploits of the pilots—as well as their support personnel—are chronicled in fine detail. An important feature of this book is a chronology detailing missions flown. The facts presented here debunk some of the myths and legends surrounding this exceptional group. A complete pilot roster is also included.

Available from NewSouth Books: www.newsouthbooks/tuskegeearmen, (334) 834-3556, ISBN 978-1-58838-244-3, \$27.95

Coming Up



Compiled by
George W. Cully

July 10-13, 2013

The **Ninety-Nines**, the International Association of Women Pilots, will hold its annual meeting in Bozeman, Montana. For more details, see the Association's website at www.ninety-nines.org.

July 22-28, 2013

The **International Committee for the History of Technology** will hold its 40th annual symposium in conjunction with the 24th International Congress of the History of Science, Medicine and Technology. The meeting will take place in Manchester, England, and its general theme will be "Knowledge at Work." For additional details, visit the Committee's website at www.icohtec.org/annual-meeting-2013.html.

August 12-14, 2013

The **American Institute of Aeronautics and Astronautics** will present Aviation 2013 at the Hyatt Regency Century Plaza Hotel and Conference Center in Los Angeles, California. This event is one of AIAA's premier forums; it is intended to showcase recent innovations and achievements in aviation, highlight new initiatives and plans, and address key issues that need to be resolved in order to define clear roadmaps for future progress. For details, see the Institute's website at www.aiaa.org/Aviation2013/.

August 12-15, 2013

The **Association for Unmanned Vehicles International** will present its annual Unmanned Systems Exhibition at the Walter E. Washington Convention Center in Washington, D.C. For details, see the Association's website at: www.auvsishow.org/auvsi13/public/enter.aspx

August 15-18, 2013

The **Mars Society** will host its 16th annual international convention in Boulder, Colorado. For more details, see the Society's website at: www.marssociety.org/home.

September 1-6, 2013

The Italian Commission of Military History will host the **39th Congress of the International Commission of Military History** to be held in Torino, Italy. The theme of the Congress is "Memory, Documentary Sources, and War." Scholars from 40 countries are expected to

attend. For more information, contact Prof. Dr. Michael Epkenhans at the Center for Military History and Social Sciences of the German Armed Forces, e-mail michael.epkenhans@bundeswehr.org.

September 4-7, 2013

The Università di Trento, LSE IDEAS-Cold War Studies Programme, European University Institute, Università Roma Tre, Universität Wien, and Università di Bologna, are jointly convening the **Fifth Annual European Summer School on Cold War History** at the Università di Trento, Villa Madruzzo, Italy. For more details, see their website at www2.lse.ac.uk/IDEAS/programmes/cold-war-studies-programme/events/cold-war-20summer-20school/cwss2013cf.aspx.

September 5-8, 2013

The **Tailhook Association** will host its annual symposium and convention in Reno, Nevada. For additional information, see the Association's website at www.tailhook.org/.

September 16-18, 2013

The **Air Force Association** will hold its annual Air & Space Conference and Technology Exposition at the Gaylord National Resort & Convention Center at National Harbor, Maryland. For details, see the Association's website at www.afa.org/events/Conference/2013/.

September 21-22, 2013

The **Pacific War Museum** will hold its annual Admiral Nimitz Foundation Symposium at the museum in Fredericksburg, Texas. For more details as they become available, see the Museum's website at www.pacificwarmuseum.org.

September 26-28, 2013

The annual **Northern Great Plains History Conference** features sessions sponsored by the Society for Military History, and the Society works closely with the Conference Program Chair to provide the strongest possible participation. This year's meeting will be held in Hudson, Wisconsin. For details, contact Dr. Margret Sankey at the Political Science Department, Minnesota State University Moorhead via e-mail at sankeymhist@gmail.com.

September 26-28, 2013

Texas Tech University's **Vietnam Center** and the **U.S. National Archives** will co-host the Center's annual conference at the National Archive's central facilities in downtown Washington, D.C. The theme of this year's conference is "Vietnam: 1963." For details, visit the Center's website at www.vietnam.ttu.edu/events/2013_Conference/.

October 7-9, 2013

The **American Astronautical Society** will offer its 6th annual Wernher von Braun Memorial Lecture in Huntsville, Alabama. For details, see the Society's website at astronautical.org/vonbraun.

October 8-11, 2013

The **Aviation Engine Historical Society** will hold its annual meeting in Nottingham, England. Planned activities during the event will include visits to the Rolls-Royce Heritage Trust Collection, the Imperial War Museum, and the Royal Air Force Museum. For details, see the Society's website at www.enginehistory.org/Convention/Convention2013.shtml.

October 9-13, 2013

The **Oral History Association** will hold its annual meeting at The Skirvin Hilton Hotel in Oklahoma City, Oklahoma. This year's meeting theme will be "Hidden Stories, Contested Truths: The Craft of Oral History." For details, see the Association's website at www.oralhistory.org.

October 10-13, 2013

The **Society for the History of Technology** will hold its annual meeting in Portland, Maine. For more information, visit the Society's website at www.history-of-technology.org/shot2013cfp.html.

October 17-18, 2013

The **Center for Cryptologic History** will host its 14th biennial Cryptologic History Symposium in Laurel, Maryland. This meeting's theme will be "Technological Change and Cryptology: Meeting the Historical Challenges." For more details, visit the Center's website at www.nsa.gov/about/cryptologic_heritage/enter_crypt_history/news/index.shtml.

AFSA

THE AIR FORCE SERGEANTS ASSOCIATION



One Mission; One Voice! AFSA is your "ACE" in the Sky!

As one of the nation's most trusted non-profit organizations, the Air Force Sergeants Association (AFSA) **A**dvocates, **C**ommunicates, and **E**ducates law makers and the Pentagon on behalf of the **Total Force** (Air Force Active Duty, Air National Guard, Air Force Reserve Command) enlisted members, retirees, veterans and thier families. As your **ACE in the Sky**, our five targets: Health Care, Military and Veterans Programs, Educational Benefits, Air National Guard & Air Force Reserve Issues, Military Families and Survivors.

AFSA is a proud supporter of the Air Force Historical Foundation!

Coming Up, continued

October 27-30, 2013

The **Association of Old Crows** will host its 50th annual international symposium and convention at the Marriott Wardman Park Hotel in Washington, DC. For additional information, ping the Association's website at www.crows.org/conventions/conventions.html.

November 21-22, 2013

The **Air Force Association** will host the annual Global Warfare Symposium and Air Force Ball at the Century Plaza Hyatt Regency hotel in Los Angeles, California. For details, see the Association's website at www.afa.org.

November 21-24, 2013

The **History of Science Society** will hold its annual meeting in the Westin Boston Waterfront Hotel in Boston, Massachusetts. The meeting will mark the 100th anniversary of the Society's

journal, *Isis*, one of the premier international journals in its field. For more information, see the Society's website at www.hssonline.org/.

Readers are invited to submit listings of upcoming events Please include the name of the organization, title of the event, dates and location of where it will be held, as well as contact information. Send listings to:

George W. Cully
3300 Evergreen Hill
Montgomery, AL 36106
(334) 277-2165
E-mail: warty@knology.net

2014

February 20-21, 2014

The **Air Force Association** will host its annual Air Warfare Symposium at the Rosen Shingle Creek Conference Center in Orlando, Florida. For more information, see the Association's website at www.afa.org.

April 14-17, 2014

Global War Studies and the **Royal Military Academy Sandhurst** are pleased to announce "1944: Seventy Years On," an international conference on the Second World War with 1944 as its core theme. The conference will be held at the Academy. For more details, contact Robert von Maier via e-mail at globalwarstudies@gmail.com.

From the President

Dear Members:

As always, let me thank you for the part each of you has played a part in the history and legacy of air power across the decades, and for your generous support of the Foundation. We are particularly grateful for your response to our year end appeal, which has carried us through another two issues of Air Power History.



I noted in my previous message to you that the Foundation has been working on several initiatives that would help achieve our main goal of a stable financial future. I would like to share with you of one these initiatives that we feel will help us reach that goal. The Air Force Association Board of Directors has agreed to examine the possibility of joining forces with the Air Force Historical Foundation, in order to take advantage of various synergies to sustain and promote mutual support of our Air Force.

From AFHF perspective, we see three opportunities from this union going forward:

- Provide recognition of the legacy of the Foundation and its enduring mission to a broader audience

- AFA accountability, stewardship, and operations sustainability

- Leverage of synergies of the two organizations to enhance the mission, credibility, and viability of both—particularly in the area of educating and training modern day airmen, researchers, and authors

As we seek innovative ways to make our organization more useful, attract a wider audience and reach broader participation, we need your feedback to guide us; it is of the utmost importance to our success. Please, let us know your thoughts.

A handwritten signature in dark ink, reading "Dale W. Meyerrose". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Dale W. Meyerrose, Maj Gen, USAF (Ret)
President and Chairman of the Board

Reunions

Ploesti Raid. July 30 - August 1, 2013.
Fairborn, OH. Contact:
Blaine Duxbury
16323 Meadowlands Lane
Westfield IN 46074
(317) 697-9584
bdux@aol.com

Bien Hoa AB, RVN. August 22-24, 2013.
Fairborn, OH. Contact:
Chester Tate
565 Hickory Lane
Burlington NC 27217
(336) 227-7869
tate4224@bellsouth.net

510th Fighter Sq. September 4-8, 2013.
Mason, OH. Contact:
Guy Wright
1701 Mall Road Apt. 14
Monroe, MI 48162
(734) 740-3164
guywright@chartermi.net

8th Tactical Fighter Sq. (1972 Takhli).
September 5-8, 2013. Fairborn, OH. Contact:
Ron Hunt
1328 Meadow Moor Drive
Beavercreek, OH 45434.
(937) 426-0867
ron.hunt.oh@gmail.com

379th Bomb Gp. Assn. September 5-8,
2013. Fairborn, OH. Contact:
Larry Loveless
140 Newton Road
Fredericksburg, VA 22405
(540) 373-1596
ginlotfarms@verizon.net

Tuy Hoa AFB. September 5-8, 2013.
Fairborn OH. Contact:
Dale Brown
1747 East Townsend Road
St Johns MI 48879
(517) 927-7859
dvcbrown@charter.net

PTC-48B. September 10-12, 2013. Day-
ton/Fairborn, OH. Contact:
William Bell
2322 Shadow Hill Drive
Riverside CA 92506-3462
(951) 781-6629
bgaden58@sbcglobal.net

PTC-53F. September 16-19, 2013.
Fairborn OH. Contact:
Ralph Mayton
2000 Tynne Meadow Lane
Prince George VA 23875-2564
(804) 732-2225
jjmayton@yahoo.com

57th Bomb Wing Association. Sept. 26-
29, 2013. Fairborn, OH. Contact:
Robert Marino
116 Juniper Way
Basking Ridge NJ 07920
(908) 766-7316
rbmarino@verizon.net

**57th Alumni Association (57th TCS,
57th MAS, 57th AS, 57th WS).**
September 26-29, 2013. Fairborn, OH.
Contact:
Woodie Hall
5305 Forest Breeze Court
St Cloud FL 34771-7743
(407) 301-5133
alumni57th@gmail.com

MacDill Flyers. October 4-6, 2013.
Fairborn, OH. Contact:
Gene Stevens
3380 Greenburn Road
Beavercreek, OH 45434
(937) 429-1552
genestevens@sbcglobal.net

Ranch Hands Vietnam Assn. October
10-13, 2013. Fairborn, OH. Contact:
Jack Spey
4245 South Rome Way
Hurricane, UT 84737
(435) 877-1166
maresfwb@aol.com

List provided by:

Rob Bardua
National Museum of the U.S. Air Force
Public Affairs Division
1100 Spaatz Street
WPAFB, OH 45433-7102
(937) 255-1386

Marshall Foundation Releases Mons Pocket iBook at Apple iTunes Books

The George C. Marshall Foundation has published an interactive iBook called *The Mons Pocket*. Written by Steve Bowman and Jack Neufeld with Gen. Paul Gorman, USA (Ret.), it describes the battle of the Mons Pocket in June 1944 during World War II. It contains maps and narrative to describe the positions of the combatants during the battle and tactics used by Gen. Bradley to accomplish his strategy. It is available at iTunes Books. <https://itunes.apple.com/us/book/>

The Mons Pocket joins a previously released iBook, *Stolberg 1944: Through the Siegfried Line*, written by Foundation Advisor Gen. Paul F. Gorman, USA (Ret.), on the Marshall Foundation's virtual bookshelf. This book details an important military campaign during WWII. In addition the Foundation has recently published two books about the Marshall Plan.

Written for high school students and social studies teachers, the recently released book, *The Marshall Plan: Promoting Europe's Unlikely Postwar Recovery*, includes many interactive features that make the presentation come alive with visually and historically rich embedded files obtained from the Foundation's extensive proprietary archives.

The second book, *In Search of a Usable Past: The Marshall Plan in Postwar Reconstruction Today*, was written by Dr. Barry Machado and was published by the Foundation as a paperback volume in 2007 following a series of meetings to identify practical features of the still-popular and relevant post-World War II program that restored the economies of Western Europe.

Both books are available at Apple iTunes books also. Appreciating the opportunity now available through advanced computer technologies, the Foundation intends to publish more history and leadership-related iBooks.

For more information, contact Rick Drake at edrake@marshallfoundation.org

**Brig. Gen. Alfred F. Hurley
(1928-2013)**



Alfred Francis Hurley, who was Chancellor of the University of North Texas System from 1982 to 2002 and also President of the University of North Texas (UNT) until 2000, passed away on June 8th in Dallas.

Prior to coming to UNT, he had a distinguished thirty-year career in the U.S. Air Force, retiring as a brigadier general. He was 84 years old. Dr. Hurley was a warm and loving father and a devoted husband who shared a love of stories, adventure, and social events with his wife Johanna, an educator who traveled the world as a Pan Am stewardess the year before they married. He was also a great mentor to his children and took great pride in their educational, professional and personal achievements. He was a fitness advocate who ran at least three miles a day. Dr. Hurley considered himself a New Yorker yet he loved his and his wife's adopted state of Texas. He and his wife had celebrated their sixtieth wedding anniversary in January.

Dr. Hurley was born October 16, 1928 in Brooklyn, New York, to Patrick and Margaret Hurley, both of whom were Irish immigrants. He was the oldest of four children. Survivors include his wife and partner, Johanna Leahy

Hurley, his brother William, and the couple's five children, Alfred Jr., Thomas, Mark, Claire and John as well as fourteen grandchildren. His parents, his brother John, and sister Jeanne predeceased him.

Growth was the hallmark of Dr. Hurley's tenure which started in 1982 and ended in 2002. The University of North Texas System, which includes UNT and the UNT Health Science Center, rose to educational leadership in the North Texas region. Enrollment at the University increased from less than 19,000 to over 27,000. The University's endowment grew from \$850,000 to \$45 million, and nearly \$200 million was raised across two capital campaigns. Over \$260 million was invested in renovations and new construction. The increased stature of the University was signified by the change in 1988 of the University's name from North Texas State University to the University of North Texas. In January 2001, the UNT System was recognized by the Texas Legislature as a formal system, making it one of the six recognized higher education systems in the state. As a tribute, the Board of Regents of the UNT System named the administration building, the "Alfred F. and Johanna H. Hurley Administration Building." The citation accompanying the ceremony naming the building pointed to a Dallas Morning News editorial spotlighting Dr. Hurley as an "unsung hero of higher education."

In addition to the accomplishments described above, the citation highlighted the nationwide recognition of many of UNT's academic programs; creation of the UNT Office of Postgraduate fellowships; establishment of UNT's Texas Academy of Mathematics and Science; transformation of the Texas College of Osteopathic Medicine into the UNT Health Science Center at Fort Worth; and creation of the UNT System Center at Dallas, including creation by statute, of UNT at Dallas - the first public university within the Dallas city limits. The Regents also recognized Dr. Hurley's accomplishments with the title of Chancellor Emeritus. Dr. Hurley was the first resident of Denton to chair the North Texas Commission and to join the Dallas Citizens Council. He was Co-Chair of the Coalition of Urban Metropolitan Universities (CUMU) and served on its Executive Committee; President, Texas Philosophical Society; Director, Fort Worth and Denton Chambers of Commerce; Vice Chairman, Denton County Business Leaders Council; President, Denton County United Way; Chairman, (Texas) Council of Public University Presidents and Chancellors; and Director, Association of Texas Colleges and Universities. He received the Otis Fowler Award from the Denton Chamber of Commerce in 1986.

In Memoriam

After he retired as Chancellor, Dr. Hurley became a professor in UNT's Department of History from 2003 to 2008. In addition to teaching courses to undergraduate and graduate students, he and his wife continued to play a key role in organizing UNT's annual Military History seminar which enabled business and community leaders throughout Texas to hear and question both a leading scholar and a current or retired military officer who had served in combat discuss various topics. At its twenty-third anniversary in 2006, the seminar was endowed by many of its participants and named the Alfred and Johanna Hurley Military History Seminar.

Dr. Hurley enjoyed a similarly distinguished Air Force career. He enlisted as an airman two weeks before the outbreak of the Korean War in 1950 and retired as a brigadier general in 1980. From 1966 to 1980 he was Permanent Professor and Head of the Department of History at the U.S. Air Force Academy, as well as a member of the Academy's executive board and Chairman of the Humanities Division from 1977 to 1980. Prior to his appointment as a Permanent Professor by Lyndon Johnson, General Hurley was one of the three youngest lieutenant colonels in the Air Force and had served in assignments as a navigator (achieving distinction as a Master Navigator with 3,630 hours), planner, administrator, and educator in Texas, North Carolina, Colorado, Germany, Washington D.C. and Vietnam. He was the navigator on seventy reconnaissance missions while stationed in Germany during the height of the Cold War in 1963 and 1964. In the summer of 1968, he served a tour of duty in Vietnam where he flew missions and worked on the EC-47 program. This program, which he conceived and organized, produced 100 histories of the air war in Vietnam, researched and written on the scene.

As Permanent Professor and Head of the Department, General Hurley built a nationally regarded history department. He took great pride both in teaching cadets and recruiting and mentoring the officers who served in the department. Many of the cadets and officers went on to have distinguished careers themselves, including General Ronald R. Fogelman, the 16th Chief of Staff of the Air Force. Hurley enhanced the national academic profile of the department by initiating and hosting eight Military History Symposia which brought together leading scholars in the field from the US and Europe. He and members of his department also often lectured at the U.S. War and Navy War Colleges as well as various Air Force service schools. General Hurley's military decorations included the Air Force Commendation Medal with oak leaf cluster, Legion of Merit with oak leaf cluster, Republic of Vietnam Gallantry Cross with Device, and Vietnam Service Medal with two Bronze Stars.

General Hurley graduated summa cum laude from St. John's University in 1950 and received its President's medal in 1990. While serving in the Air Force, he received an M.A. and Ph.D in history at Princeton University in preparation for his initial assignment to teach at the Air Force Academy from 1958 to 1963. During his first tour at the Academy he expanded his Ph.D dissertation, *Billy Mitchell Crusader for Airpower*. Initially published in 1964 and revised in 1975, his book is still considered to be the definitive scholarly treatment of the topic and was reissued by Indiana University Press in 2006. He also wrote numerous articles and reviews for books and other scholarly publications.

General Hurley was both a Guggenheim Fellow and a Fellow in the Eisenhower Institute of the Smithsonian Institution. He served as Chairman of the Advisory Committee to the Secretary of the Air Force on the Air Force Historical Program; Trustee of the American Military Institute; Trustee of the U.S. Commission, Military History, Director, American Committee, History of Second World War; Trustee of the Air Force Historical Foundation; Trustee, Falcon Foundation, USAF Academy; and Trustee, Air Force Historical Foundation. Throughout both of his careers, General Hurley had the reputation of not only using his own talents to the maximum, but also inspiring exceptional enthusiasm in others to do the same. The officers in his history department at the Academy presented him with a picture of a desk overflowing with work that said "Where the action is" and signed it "We do the work of 500 men."

Dr. Hurley equally loved his time at UNT and was extraordinarily committed to the school. It was the job he had always dreamed of and found his experience in the military (and in particular at the Air Force Academy) as ideal preparation for it. On multiple occasions he was approached regarding becoming president or chancellor of other institutions. However, he declined to even consider them. At one point in his tenure, the school's Board of Regents demanded that he accept a pay raise although the institution lacked the funds for a more broadly shared increase in faculty pay. Dr. Hurley's response was to donate the incremental compensation that he received back to UNT to fund scholarships for deserving students. General Hurley was buried on Friday, June 14th. A military funeral and a reception at Doolittle Hall followed a Catholic Mass at the Air Force Academy Chapel. In lieu of flowers, the family requests that contributions be made to one of the following organizations: The Alzheimer's Disease Center at the University of Texas, Southwestern Medical Center, Falcon Foundation, or Alfred and Johanna Military History Seminar at UNT.

An appreciation by Col. Thomas Keaney, USAF (Ret.)



Our mystery plane in the last issue was a Martin 4-0-4 airliner, the aircraft that was used for a military mission with the Coast Guard under the designation RM-1.

We took a slight detour from our “air power” mandate to feature the civilian version because the 4-0-4 airliner owned by the Glenn L. Martin Maryland Aviation Museum near Baltimore recently received a brilliant new, mostly-yellow color scheme when it was repainted to represent the prototype in the series, which wore civil registry number N40400.

The museum is located at Martin State Airport in Middle River where thousands of B-26 Marauders, PBM Mariners and other great warplanes rolled out of factory doors during the busy years of World War II. The founder of the planemaking company there, Glenn L. Martin, was a mentor to other famous names in industry—Curtiss, Douglas, McDonnell and Northrop, among others. His name

lives on in the identity of today’s Lockheed Martin Corporation.

Derived from the unpressurized, 30-passenger Martin 2-0-2, our larger 4-0-4 was a 40-passenger, pressurized, air-conditioned prop liner viewed as a potential DC-3 replacement and as a competitor to the Convair 240/340. Martin test pilots took the first 4-0-4 on its maiden flight on October 21, 1950. Martin built 103 4-0-4s.

The 4-0-4 was powered by two 2,400-horsepower Pratt & Whitney R-2800-CB16 radial piston engines. After service with front-line carriers, many were sold to other users. One became an executive transport for Frank Sinatra. With a wingspan of 93 feet and a cruising speed of 280 miles per hour, the 4-0-4 was faster than its Convair competitor but costlier to operate. Its modest success and the happy memories it created were overtaken by the jet age.

The museum’s 4-0-4 is one of ten that survive today. None is airworthy. “When we received the plane its exterior paint finish was in a poor condition,” said museum Gene DiGennaro. “The recent repainting project was made possible by a \$25,000 grant from Lockheed Martin. Because no color photo of the prototype exists, the museum used a photograph of a contemporaneous model and descriptions in literature to come up with the final color choice and design.

The two Coast Guard RM-1s served for many years at Washington National Airport. In the 1950s, before metal detectors and fence, a teenaged air enthusiast could walk around them freely and soak up their original all-silver brilliance. They were redesignated VC-3As in 1962.

Our latest History Mystery winner is Charles McIntyre of Detroit. Stan Piet provided both of our 4-0-4 photos.

See if you can identify our latest mystery aircraft. Remember, too: we’d like to know whether you think this long-running contest is too easy or too difficult. For that matter, we’d like to know your opinion on continuing this feature, which is at the quarter-century mark.

A reminder of the “History Mystery” rules:

1. Submit your entry via e-mail to robert.f.dorr@cox.net. Entries may also be sent via postal mail in any format to Robert F. Dorr, 3411 Valewood Drive, Oakton VA 22124.

2. Write a sentence about the aircraft shown here. Include your address and telephone number. Remember to include a phone number.

3. A winner will be randomly chosen from the correct entries and will receive an aviation book.

And let’s get serious about those historical treasures in your attic or basement. Some readers

say they just don’t remember where their color slides are. Come on, members! Dig out your slide or snapshot of a rare aircraft and lend it to *Air Power History* for this contest.



This Issue's Mystery Plane



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