
The U.S. Army Air Forces in World War II

**The
High Road to
Tokyo
Bay**

The AAF in the Asiatic-Pacific Theater

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The High Road to Tokyo Bay

In early 1942, Japanese military forces dominated a significant portion of the earth's surface, stretching from the Indian Ocean to the Bering Sea and from Manchuria to the Coral Sea. Just three years later, Japan surrendered, having lost most of its vast domain. Coordinated action by Allied air, naval, and ground forces attained the victory. Air power, both land- and carrier-based, played a dominant role.

Understanding the Army Air Forces' role in the Asiatic-Pacific theater requires examining the context of Allied strategy, American air and naval operations, and ground campaigns. Without the surface conquests by soldiers and sailors, AAF fliers would have lacked bases close enough to enemy targets for effective raids. Yet, without Allied air power, these surface victories would have been impossible.

The High Road to Tokyo Bay concentrates on the Army Air Forces' tactical operations in Asia and the Pacific areas during World War II. A subsequent pamphlet will cover the strategic bombardment of Japan.

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Rogue Nation

Japan Becomes a Global Threat

In the 45 years between 1895 and 1940, the Japanese empire expanded enormously. Before World War I, it had absorbed Formosa, Sakhalin, and Korea. The Versailles Treaty granted Japan many of the former German island chains in the Pacific. Under an increasingly militarist government in the 1930s, Japan captured Manchuria, and in 1937 it went to war with China, quickly occupying much of the Chinese coast. By the close of the decade, Japan's leadership had fought two brief (but disastrous) campaigns against Soviet Russia. With even more serious consequences, the dominant Asian power had firmly aligned itself with the two great expansionist powers: Nazi Germany and Fascist Italy.

After Germany defeated France in 1940, Japan successfully pressured the pro-Nazi Vichy regime to allow Japanese troops to occupy French Indochina. Officials in Tokyo dreamed of a "Greater East Asia Co-Prosperity Sphere" in which Asians would drive out European settlers (allowing Japanese to take their places). Though Nazi forces had defeated the Netherlands in 1940, the Netherlands East Indies remained independent and pro-Allied. Resource-poor, Japan sought access to the oil and rubber of the Netherlands East Indies to sustain its war effort in China. Obviously, any attempt to control that territory automatically meant Japan would be in conflict with the British in Malaya. And undoubtedly, such aggression would draw in American forces in the Philippines. Ultimately planning to conquer all three areas, and imbued with a racist ideology against all foreigners, Japanese military leaders decided to knock out the most substantial military force available to challenge them: the American Pacific Fleet at Pearl Harbor in the Hawaiian Islands.

The enemy carrier task force attacked Pearl Harbor on December 7, 1941 (December 8 on the other side of the international date line). That same day, other Japanese forces invaded the Philippines and Malaya. The Pearl Harbor attack, like the British attack on the Italian fleet at Taranto, clearly demonstrated the superiority of aircraft over ships. At Wheeler and Hickam Fields, Japanese pilots destroyed more than a third of the Hawaiian Air Force's planes, most of which were imprudently lined up wingtip-to-wingtip so that they could be guarded more easily against saboteurs. At Clark and Iba Fields in the Philippines, enemy air raids destroyed half the aircraft belonging to the Far East Air Force, including seventeen of thirty-five newly arrived B-17 Flying Fortresses.

Before the end of December, Japanese land-based torpedo-bombers sank the British warships *Repulse* and *Prince of Wales* off Singapore, depriving the Allies of much of their regional naval strength. Japanese air forces had shattered the hopes of naval adherents who believed in the invincibility of steaming battleships exposed to air attack. Using air power to supplement naval and ground offensives, the aggressor was well on the way to conquering both the Philippines and Malaya by the end of 1941. Japanese strategists hoped to consolidate the expanded borders of their empire before the Americans or the British could seriously interfere.

Organizing for Global War

British and U.S. Leaders Build a Coalition

Prime Minister Winston Churchill of Great Britain and President Franklin D. Roosevelt of the United States met in Washington on December 24, 1941, at the Arcadia Conference. In organizing a joint war effort, they created a Combined Chiefs of Staff composed of the top British and American military leaders and also agreed to direct their primary war effort to defeating Adolf Hitler, while holding the line against Japan. Following the conference, British and American leaders divided the world into theaters and appointed Allied commanders for each region. Early in 1942, the United States reorganized its military forces under the Joint Chiefs of Staff, consisting of General George C. Marshall, Army Chief of Staff; Lt. Gen. Henry H. (Hap) Arnold, Chief, Army Air Forces; Admiral Ernest J. King, Chief of Naval Operations; and Admiral William D. Leahy, assistant to the President.

To check Japanese expansion in Asia, the Allies organized a coalition command composed of American, British, Dutch, and Australian forces (ABDACOM) under British General Sir Archibald P. Wavell. ABDACOM would prevent the Japanese from conquering Burma, Malaya, the Dutch East Indies, New Guinea, the Philippines, and Australia. Unfortunately, the coalition lacked the necessary resources, and the Allies grossly underestimated Japanese military strength and abilities. ABDACOM soon lost all of these areas, save southeastern New Guinea and Australia. By the end of May, most dishearteningly, Japanese forces had easily captured even Singapore, the reputed "Gibraltar of the East". In June the enemy consolidated positions in New Guinea and some of the Solomon Islands. Japanese military forces seemed invincible and surprised even themselves with the rapidity of their conquests. They drove back

the Allies to India, western China, and a toehold on New Guinea near Cape York, Australia.

Faced with a greatly expanded Japanese Empire, Allied leaders divided eastern Asia and the Pacific into three separate theaters with independent commanders. On the mainland of Asia, in what came to be called the China-Burma-India Theater, Generalissimo Chiang Kai-shek of China and British Admiral Lord Louis Mountbatten wielded supreme command. U.S. Army Gen. Joseph W. Stilwell commanded American military forces in the theater. The Pacific Area, delegated exclusively to the United States because of its greater contribution of personnel and resources there, was divided in two. Gen. Douglas MacArthur of the U.S. Army, ordered in March 1942 from the Philippines to Australia, became commander of the Southwest Pacific Area, including Australia, New Guinea, the Bismarck Archipelago, and the western Solomon Islands. Australian, New Zealand, and Dutch forces supported him. Admiral Chester W. Nimitz of the U.S. Navy presided over Allied forces in the Pacific Ocean Area.

Two significant naval battles helped stop the seemingly relentless Japanese advance. The Battle of the Coral Sea on May 7-8, 1942, was the first battle in naval history fought by aircraft from ships out of sight from each other. Although the Americans suffered more losses than the enemy, Coral Sea was a *strategic* Allied victory, for it forced the Japanese to abandon their attempt to capture Port Moresby and southern New Guinea by sea. Such a conquest would have brought the Japanese to the Australian shore. In June Admiral Isoroku Yamamoto, the architect of the Pearl Harbor raid and supreme Japanese naval commander in the Pacific, attempted to capture Midway Island in the Hawaiian chain and draw out the American fleet for destruction. U.S. intelligence experts had deciphered Japanese codes, and Nimitz was ready for the invaders, though with a pitifully small armada of ships. His airmen more than made up for many material shortfalls: the Battle of Midway, on June 4-6, 1942, a decisive Japanese naval defeat, was the turning point in the Pacific War. The enemy lost four carriers and a cruiser, while the United States sacrificed only one carrier and a destroyer. After Midway, the Japanese had no choice but to defend their ill-gotten empire rather than extend it further.

Although Army Air Forces aircraft flew at Coral Sea and Midway, carrier aviators determined the outcome of both battles. Boeing B-17s and Martin B-26 Marauders attacked both enemy troop transports and aircraft carriers during the Battle of Midway, but land-based aviation would not make a significant contribution to the Pacific war effort until later.

Into the Breach

"Flying Tigers" and Airlift Save China

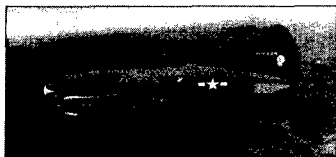
The Allies ultimately achieved victory over Japan in the Pacific, but in the China-Burma-India Theater, the goals were more defensive: to defend India, keep China in the war, and liberate Burma. Theater commanders were British and Chinese, as were the bulk of the troops. The American effort consisted almost entirely of air and logistical support. Three air forces—the Tenth, Fourteenth, and Twentieth—furnished the Army Air Forces' share of the Allied effort in this theater.

The first Americans to fight the Japanese on the Asian mainland were not members of the regular armed forces. They belonged to the American Volunteer Group, better known as the "Flying Tigers", organized by Claire L. Chennault in China during the summer of 1941 at the behest of the Roosevelt administration. The Flying Tigers' first combat missions were over Burma in December 1941, and they continued operations there during the bleak first half of 1942. Between mid-December 1941 and early July 1942, the volunteers claimed 297 enemy planes destroyed. Flying Curtiss P-40 fighters adorned with leering sharkmouths, the group downed more enemy planes than it lost. Though the Flying Tigers on their own could not stop the Japanese from driving British and Chinese forces out of Burma, they did prevent the Japanese from securing air superiority over southwestern China.

When enemy forces conquered Burma during the spring of 1942, they cut the Burma Road by which the Allies transported supplies to China. To continue the flow of essential war materials to Chiang Kai-shek, the Army Air Forces inaugurated an airlift from British-controlled India over the Himalayas (the so-called "Hump") to southwestern China. U.S. airmen flew Curtiss C-46, Douglas C-47, Douglas C-54, and Consolidated-Vultee C-87 transports. When the Tenth Air Force under Maj. Gen. Lewis H. Brereton moved to India, it took over the Hump airlift from the Assam-Burma-China Ferry Command. The Tenth's first mission was to protect the Hump route, which stretched all the way from Karachi, India, to Kunming, China.

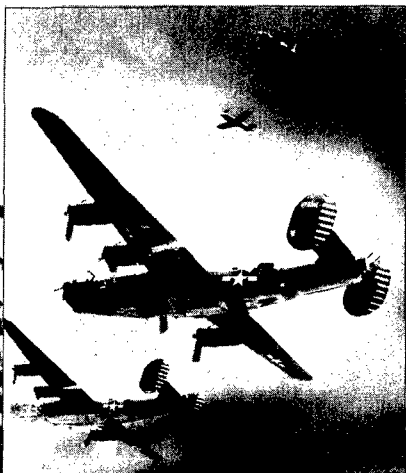
The Flying Tigers supported this effort, especially after June 1942, when Brereton and most of the Tenth Air Force's bombers and some of its transports moved to the Middle East to help the British counter the German threat in North Africa. The skeletonized Tenth Air Force remained in India and continued the airlift with reduced resources; Chennault assumed command of the China Air Task Force under the Tenth Air Force in July.

The China War



TOP LEFT

A Curtiss C-46 Commando transport of the Air Transport Command flies over the mountains of western China, on the famed Hump airlift route.



TOP RIGHT.

Protected by escorting P-40s of the 23d Fighter Group, Consolidated-Vultee B-24J Liberators of the 308th Bombardment Group, Fourteenth Air Force, drone towards Sinshih, an important Japanese supply point.

CENTER.

Bombs from Fourteenth Air Force B-24 Liberators blast the railroad marshalling yards at Haiphong, French Indochina.

ABOVE.

Bearing gaudy sharkmouths inspired by the Flying Tigers, these Curtiss P-40E Warhawks of the Tenth Air Force's 51st Fighter Group defended the Indian terminus of the Hump Route. They also supported Allied forces during a Japanese invasion of northern Burma in 1943.

As the German pressure eased following El Alamein, the Tenth Air Force slowly rebuilt its forces. It flew various missions—raiding Japanese bases in China, defending Allied airfields in Yunnan Province from enemy air raids, and attacking Japanese shipping along the Chinese and Indochinese coasts. By autumn 1942, targets included port facilities at Hong Kong, Canton, Haiphong, and Saigon. Long-range Consolidated-Vultee B-24 Liberators even struck harbor and railroad facilities as far as Bangkok, Thailand, flying more than 2,700 miles round trip from bases in India.

By late 1942, the Tenth Air Force was overloaded. It could not easily manage both the Hump airlift and combat operations in China, India, Burma, and southeast Asia. So the AAF reorganized some of its theater resources, assigning Hump flights to the globe-girdling Air Transport Command. It also set up an India Air Task Force, on the order of the China Air Task Force. The new task force defended airfields in Assam Province in northeastern India against Japanese air attack; attacked shipping in the Andaman Sea; raided Rangoon, Burma, and Bangkok, Thailand; struck railroad bridges in Burma; and defended the Hump route.

Further reorganization followed, partly to improve relations among the Allies. In March 1943, the AAF activated the Fourteenth Air Force under General Chennault to take over the responsibilities of the China Air Task Force. This left the Tenth Air Force to deal with missions in India and Burma that had been handled by the India Air Task Force. Later in the year, the Tenth became part of the Eastern Air Command (under Lt. Gen. George E. Stratemeyer), which served the Southeast Asia Command under Lord Louis Mountbatten, the Allied theater commander.

Desperate Struggle

Air Power's Role in the Burma and China Conflicts

Tenth Air Force airplanes moved, supplied, and supported Allied troops that liberated Burma. Leading the list of targets was Rangoon, the capital and largest port, Mandalay in central Burma, and Myitkyina in the north. Republic P-47 Thunderbolts and North American B-25 Mitchells routinely struck Japanese lines of supply between Rangoon and the front lines near the Chinese and Indian borders. The Tenth's bombers mined the Rangoon and Irrawaddy Rivers and attacked railroad bridges in northern Burma.

During the autumn of 1943, the Tenth Air Force targeted Myitkyina and other Japanese airfields in northern Burma to reduce

cargo losses in the Himalayan airlift. Monthly tonnages over the Hump had doubled between June and September, and the Japanese redoubled their efforts to destroy transports. Soon long-range Lockheed P-38 Lightnings and North American P-51 Mustangs arrived in the theater. Some were used to escort transport planes, but mostly they flew more productive air superiority sweeps against enemy fighters.

The Tenth Air Force's 1st Air Commando Group was a true composite wing, consisting of P-51 fighters, B-25 bombers, C-47 transports, and CG-4 gliders (as well as small spotter planes and even America's first helicopter, the R-4). Most notably, the air commandos dropped Allied special forces units behind Japanese lines in Burma and delivered supplies to them in the spring and summer of 1944. The special forces included British Major General Orde C. Wingate's "Chindits" and American Maj. Gen. Frank D. Merrill's "Marauders". In March 1944, an air task force under AAF Brig. Gen. Philip Cochran supported Wingate by landing about 10,000 men and pack animals in jungle clearings behind enemy lines in Burma. To help sustain the offensive, Allied planes delivered almost three million pounds of cargo. Wingate and Merrill severed Japanese lines of communication, weakening enemy resistance to British and Chinese armies pressing from the northwest and northeast. Meanwhile, Air Transport Command airlifted Chinese troops from China to India and on to Burma for Army Gen. Joseph W. Stilwell, commander of U.S. forces in the theater.

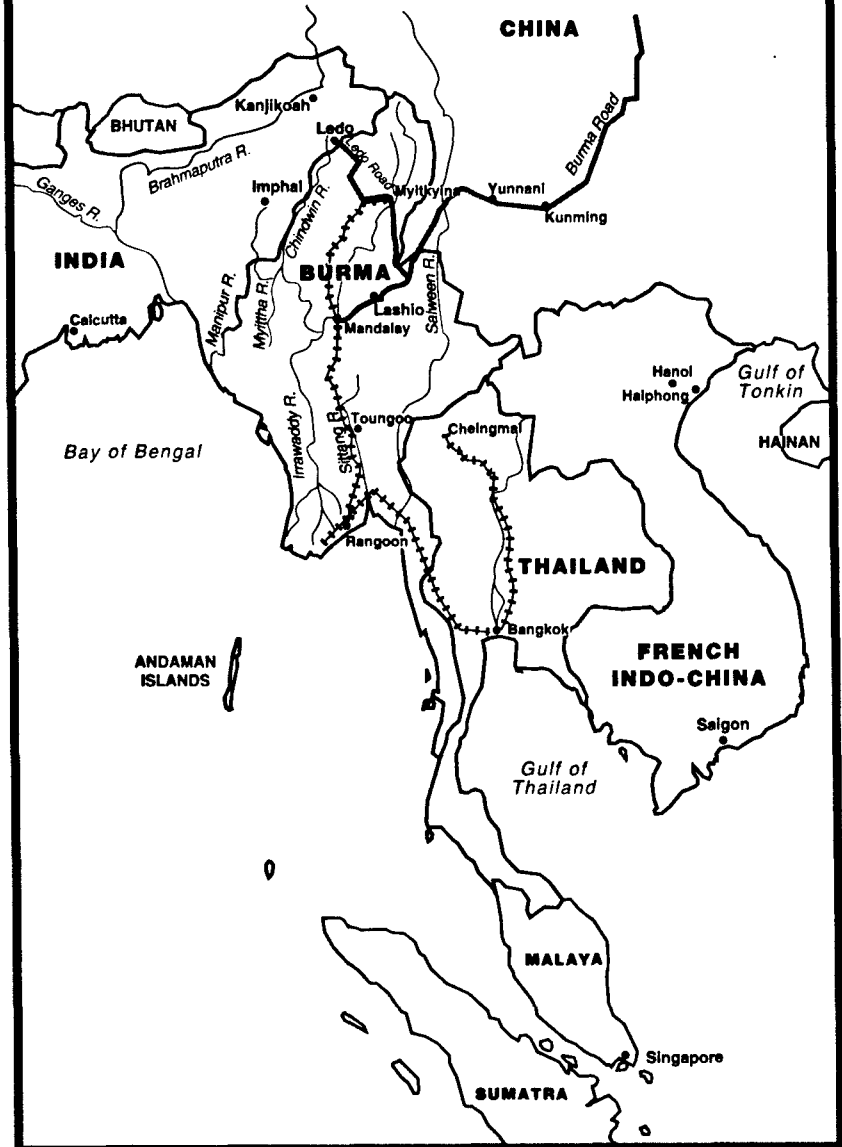
American airplanes furnished critical support to Allied forces liberating Burma between mid-1944 and the spring of 1945. Having captured Myitkyina in northern Burma after a long siege, the Allies used the landing strips to receive airlifted supplies so that the ground offensive could continue. In early 1945, AAF transports delivered reinforcements, rations, gasoline, and ordnance to Chinese and British troops.

Allied soldiers completed a new Burma Road between India and China in January 1945, but the Hump flights continued. The road by itself could not possibly handle all the cargo en route to China. Brig. Gen. William H. Tunner took command of the Hump airlift in the summer of 1944 and supervised accelerated deliveries over the Himalayas. Monthly tonnages increased from 46,000 tons in June 1944 to 71,000 tons in July 1945. Cargo airplanes, including C-46s, C-47s, C-54s, and C-87s, delivered fuel, weapons, and ammunition from Assam province in eastern India to Yunnan Province in southern China. The Hump airlift not only helped sustain the Chinese army but also supplied American air bases in China. On average, transports flew 900,000 ton-miles per day.

SOUTHEAST ASIA

----- Railroads

———— Burma & Ledo Roads



Tenth Air Force airplanes continued to support Allied ground forces, bombing Fort Dufferin in central Burma so that troops could capture Mandalay in March 1945. In May the Tenth bombarded Rangoon's coastal area to prepare for an Allied amphibious assault and then dropped Indian Ghurka paratroops south of the city for the final assault. When Allied troops entered the Burmese capital, the Japanese had already left, thanks to unrelenting Allied air attacks.

The Tenth Air Force also assisted ground forces defending India. Early in 1944, British and Indian troops in the Imphal area of eastern India, near the Burmese border, faced encirclement by advancing Japanese troops. Responding to their allies' request for airlift support, the Troop Carrier Command borrowed C-46s from the Air Transport Command and delivered more than 1,000 tons by air between January 1 and mid-February. The Eastern Air Command transported supplies and reinforcements to the British 17th Division defending Imphal in the spring. The emergency airlift, coupled with intense Allied air attacks, helped the defenders break the siege, Shattered, the Japanese left India for good.

With the Tenth Air Force busy in Burma and India, the Fourteenth Air Force maintained a hectic pace in China. Having been activated in March 1943 from components of Chennault's China Air Task Force, the Fourteenth at first employed older P-40s and B-25s inherited from the Tenth. Eventually Chennault established a chain of bases in south central China and acquired long-range B-24s and P-38s suitable for extended power projection missions. These included defense of American bases against Japanese air raids (both by interception and by counter raids), attacks on enemy bases at Hanoi, Haiphong, and other parts of Indochina, defense of beleaguered Chinese ground forces, and destruction of Japanese shipping along the Asian coast. Attacks on coastal shipping helped strangle Japan's wartime industry and its logistical lifeline to Southeast Asia.

The Fourteenth Air Force often provided support to Chinese troops under enemy attack. In May and June 1943, Japanese forces launched an offensive against Chungking, the provisional capital. When the Chinese appealed to the Fourteenth for direct assistance, B-24 Liberators from Chengtu attacked the invader's supply lines and columns in the Yangtze River gorge, the only easy route to Chungking. In November the Fourteenth Air Force supported Chinese troops along the Salween River in northeastern Burma. This effort continued into the spring of 1944, as Chiang Kai-shek attempted to block enemy forces from entering southern China from Burma. American B-25s and P-51s also struck enemy troop columns in China in response to a new Japanese offensive in April.

The Fourteenth's heavy and medium bombers routinely struck Japanese shipping along the Indochinese and Chinese coasts

from the summer of 1943 through most of 1944, not only by attacking ships and port facilities, but also by sowing mines in Japanese-controlled harbors of China, Indochina, and Formosa. American bombers also raided occupied ports along the great rivers of China, attempting to cut enemy lines of communication running both north and south across the rivers and east and west along them.

Fearing that the United States would soon base long-range Boeing B-29 Superfortresses in China for raids on Japan, the enemy launched a massive assault in the south. Despite vigorous Allied air raids and desperate Chinese resistance during the summer and fall of 1944 and into 1945, the Japanese ground forces doggedly advanced, though with fearful casualties. American aircraft strafed enemy columns and supply lines between Yochow and Hengyang late in 1944. Yet between June 1944 and January 1945, the Fourteenth lost thirteen of its bases to the Japanese. Gradually, the enemy's advance slowed, then stopped.

In 1945, while continuing to strike enemy railroads, airfields, and river shipping, the Fourteenth provided close air support for Chinese forces on the Honan and Hunan fronts in central and southeastern China. Helping with these missions was the Chinese American Composite Wing, an organization composed of personnel from both Chiang Kai-shek's army and the U. S. Army Air Forces. That spring, Chinese forces, with American air support, began a counteroffensive that pushed the Japanese out of some of the areas they had recently taken. In May enemy forces withdrew from southern China, under the pressure from the Allied China and Pacific campaigns. The Fourteenth continued to bomb and strafe Japanese rail lines, airfields, and troop columns in northern China until the end of the war.

Boeing Behemoth

The Superfortress Goes to War

Besides the Tenth and Fourteenth, the Twentieth Air Force played a role in the China-Burma-India theater. Unlike the other numbered air forces, which served army or navy theater commanders, the Twentieth operated under the direct command of General Arnold, as executive agent of the Joint Chiefs of Staff, and Commanding General of the AAF. Arnold sought to prevent strategic bombardment resources from being wasted on missions of lesser priority and tasks for which they were not designed. The Twentieth Air Force employed the Boeing B-29 Superfortress, capable of flying



higher and farther than B-17s or B-24s and carrying up to ten tons of bombs. The elegant B-29 featured remote-controlled gun turrets and a pressurized cabin for high-altitude missions. At the Quebec Conference of August 1943, American military leaders convinced the Allies initially to use B-29s against Japan from bases in China. The project came to be known as MATTERHORN.

Long-range B-29s arrived in India in the spring of 1944. On June 5, the Superfortresses flew their first mission against railroad shops at Bangkok, Thailand. Temporarily serving as long-range transports, these aircraft also carried cargo and aviation fuel over the Hump into China to help establish bases for MATTERHORN. On June 15, 1944, B-29s conducted the first bombing raid on Japan's Home Islands since the Doolittle Raid of April 1942. Forty-seven Superfortresses from Chengtu bombed steel works at Yawata on Kyushu. Attacks followed on other strategic targets on Kyushu and in Manchuria. The B-29s also flew missions in Burma, Malaya, and other parts of southeast Asia. In August 1944, XX Bomber Command B-29s took off from a staging base at China Bay, Ceylon, to bomb Sumatra in the Dutch East Indies. The 4,000-mile round trip marked the longest non-stop bombing mission of World War II.

Despite these heroic efforts, the sporadic achievements of the B-29s in China were hardly worth the enormous costs. Each MATTERHORN mission was a tremendous drain on resources, especially munitions and fuel, which had to be ferried over the Hump. By late 1944 American forces had captured islands in the Pacific from which Superfortresses could strike Honshu and the other Japanese Home Islands with greater ease and effect. The XXI Bomber Command in the Mariana Islands assumed the burden of bombing Japan, and in early 1945 the Twentieth Air Force abandoned its dusty bases in China and India for the lush Pacific islands of Guam, Tinian, and Saipan.

Despite the obstacles, the Army Air Forces in the China-Burma-India theater succeeded in keeping China in the war, defending India, and liberating Burma. The accomplishments of American airmen in the China-Burma-India Theater were both legion and legendary. The rest was up to the Pacific.

Holding the Line

The AAF in the South and Southwest Pacific, 1942

Even after the Battle of Midway in early June 1942, the Japanese did not yet recognize the necessity of going completely on the defensive. The southeastern boundaries of their vast perimeter remained unsettled, and Premier Heidiki Tojo and his senior military leaders hoped to secure New Guinea and the Solomon Islands and then threaten Australia. To that end, Japanese military forces advanced southward from their powerful base of Rabaul in the Bismarck Archipelago, setting the stage for the prolonged and bloody Solomons campaign.

Enemy forces had failed to take Port Moresby (in southeastern New Guinea) by sea, for such a victory was impossible after the Battle of Coral Sea. Next, in the summer of 1942, they tried an overland offensive from Buna in northeastern New Guinea, rushing troops and equipment from Rabaul. Both the towering, fog-shrouded Owen Stanley Mountains and treacherous swampland separated the Japanese from Port Moresby and the narrow straits to Australia. American and Australian troops at Port Moresby and Milne Bay defended the southeastern corner of New Guinea in bitter and relentless battle. They were supported by the Allied Air Forces, Southwest Pacific Area, under the command of Maj. Gen. George C. Kenney as of August 1942.

Kenney, an air power visionary, was arguably the most gifted American air combat commander of the Second World War. He strengthened Allied air power in the theater in several ways. First, he directed the improvement of maintenance facilities in Australia, increasing the number of airplanes in commission. He encouraged subordinates to think in innovative ways, and they did so. They developed skip-bombing and low-level attack techniques that turned attack and medium bombers such as the Douglas A-20 Havoc and the B-25 Mitchell into deadly ship-busters. By increasing the number of machine guns in the noses of their B-25s and A-20s, Kenney's airmen improved their effectiveness against enemy antiaircraft, parked airplanes, and ships. Another important innovation was a parachute-retarded fragmentation bomb, the parafrag, which allowed A-20s and B-25s to bomb enemy airplanes on the ground from low altitudes and then escape the explosions. By improvising new bomb types, Kenney adapted air power to specific targets. He located his maintenance facilities close to the front lines and to extend the range of his airplanes,

acquired jettisonable fuel tanks. Kenney also encouraged MacArthur to rely increasingly on airlift to drop paratroops and supplies near the front.

While the Japanese attempted to take Port Moresby from Buna, the Allies tried to take Buna from Port Moresby, triggering bitter fighting in the New Guinea heartland. In August 1942 Kenney's fighter aircraft struck Japanese supply lines between Buna and the Owen Stanley escarpment. His medium bombers hit enemy convoys in Milne Bay, helping the resourceful Australians defending the eastern end of New Guinea. The combination of air-land combat eventually turned the tide at Buna. What had begun as an Allied defensive effort turned into MacArthur's first offensive.

MacArthur's air arm under Kenney, which became the Fifth Air Force in September 1942, played an important part in the eventual Allied conquest of Buna. By attacking Japanese convoys between Rabaul and New Guinea, raiding enemy air bases both in northern New Guinea and the Bismarck Archipelago, and providing air support for Allied troops north of Port Moresby, the Fifth Air Force gave Allied ground forces an advantage over the enemy. Airlift also contributed significantly to MacArthur's victorious Buna campaign. Using the ubiquitous C-47, Kenney airlifted Allied troops from Australia to Port Moresby and from Port Moresby to the front lines near Buna. At the end of the year, Allied air forces gained complete control of the skies over Papua, southeastern New Guinea. American and Australian troops finally subdued Buna and the surrounding area at the beginning of 1943.

During the Buna campaign, Japanese forces began to construct an air base on Guadalcanal Island in the Solomons—a critical point for controlling sea lanes between the United States and Australia. The Solomon Islands lay in the South Pacific Area, east of MacArthur's domain. Vice-Admiral Robert L. Ghormley, serving under the "CINCPAC," Admiral Nimitz, commanded Allied forces in this region.

In August 1942 American Marines invaded Guadalcanal, supported by carrier aircraft of the U.S. Navy. Meanwhile, Army Air Forces B-17s from Australia bombed Rabaul's airfields to weaken the enemy's defense. Other Flying Fortresses from Espiritu Santo in the Hebrides Islands, southeast of the Solomons, flew reconnaissance missions. After the Marines established a beachhead, AAF planes covered naval supply convoys and provided close air support, using the former enemy air field on Guadalcanal, renamed Henderson Field. For the next six months, American and Japanese forces struggled for control of the island.

Admiral Ghormley proved reluctant to commit his resources at Guadalcanal, and Lt. Gen. Millard F. Harmon, who led U.S. Army ground and air forces in the area, questioned Ghormley's manage-

ment of air power in the campaign. In September General Arnold visited Admiral Nimitz at Noumea in the South Pacific, and they agreed that Ghormley had to be relieved. Nimitz replaced him with Vice Admiral William F. Halsey, a feisty and combative sea warrior. Harmon, the administrator, and Halsey, the naval aviator, worked well together despite their ties to different services.

Late in 1942 the Seventh Air Force (formerly designated the Hawaiian Air Force) entered the fray at Guadalcanal, launching warplanes on reconnaissance and bombing missions from the New Hebrides Islands. Continued American control of Henderson Field helped tip the logistical scales, because air power combined with sea power allowed only American ships to unload cargo on the island during daylight hours. Army Air Forces Lockheed P-38 Lightnings and Bell P-39/P-400 Airacobras from Guadalcanal joined Marine Corps and Navy flyers to take control of the skies over the southern Solomons and attack Japanese ships and barges ferrying reinforcements to Guadalcanal. During the campaign, a squadron of radar-equipped B-24 Liberators struck Japanese shipping from low altitudes at night, proving even more effective than B-17s that struck by day from higher altitudes.

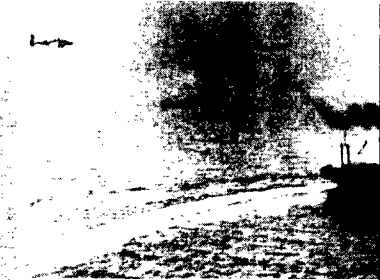
In January 1943, the Army Air Forces activated the Thirteenth Air Force in the South Pacific Area and Maj. Gen. Nathan Twining, who had been General Harmon's chief of staff, became its first commander. In February, Rear Admiral Charles P. Mason assumed command of all aircraft on Guadalcanal in a joint organization called Air Command, Solomons (COMAIRSOLS). Employing Army, Navy, Marine, and New Zealand air resources, (including planes and personnel of Twining's Thirteenth Air Force), COMAIRSOLS proved a successful experiment in interservice cooperation and a valuable model for subsequent joint force operations. Within weeks of its establishment, the Japanese evacuated Guadalcanal. Loss of air superiority had directly led to unacceptable sea and land losses.

American victories at both Buna in January 1943 and Guadalcanal in early February prepared the way for subsequent Allied offensives in the Pacific. Japan lost some of its best air groups and much shipping in eastern New Guinea and the Solomon Islands, and these setbacks, coming on the heels of the destruction of Japanese carrier aviation at Midway, doomed the Tojo regime. Nevertheless, Generals Kenney and Harmon continued to badger General Arnold to send more and better aircraft and crews to the Pacific despite the continued Allied emphasis on defeating Nazi Germany first. American P-39s and P-40s had suffered in combat with the Mitsubishi A6M-2, Type 0, the infamous Zero, but their replacement by the more modern P-38 and P-47 Thunderbolt more than offset the nimble Zero. Later in the war, the AAF deployed the

Land-based Air Power versus Japanese Shipping

The Bombing of
Japanese Sea Lanes by Army Air Forces

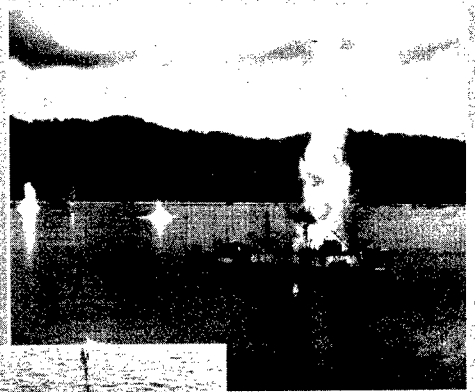
In a short, violent assault
waves of B-25s covered
P-38s devastated Ra
and the shipping shelter
in its harbor



A troop transport desperately attempts to avoid the intentions of Fifth Air Force B-25s during the Sea in March 1943.



The B-25s also targeted Japanese shipping lanes, and the shipping shelter in its harbor.

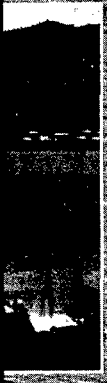
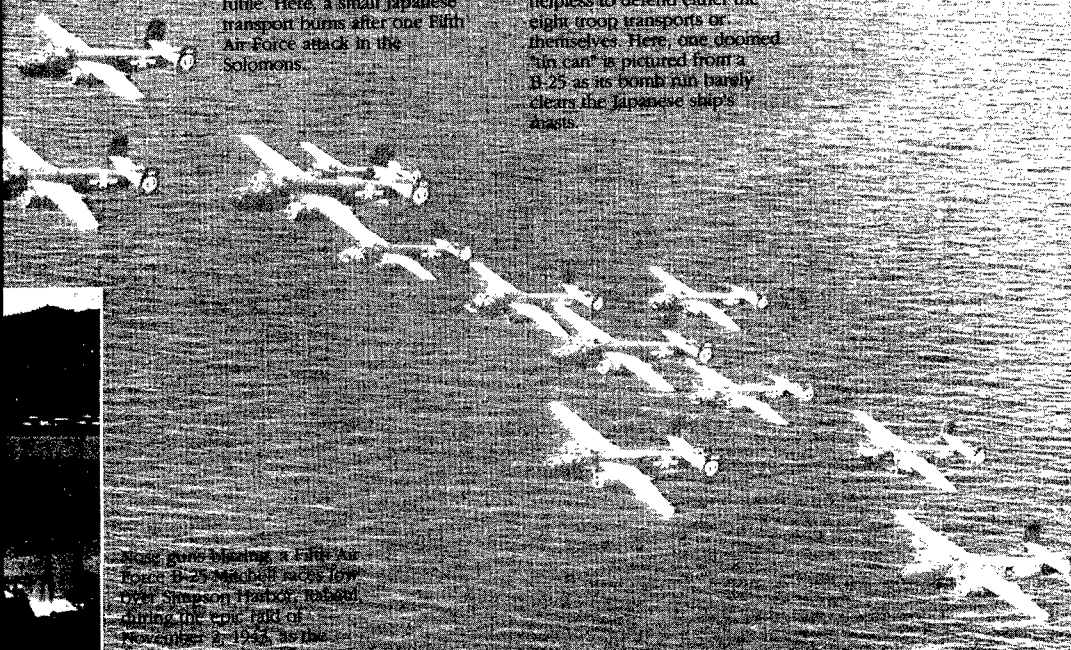


Continuous Allied air attacks devastated Japanese shipping off New Guinea. Here, B-25s of the Fifth Air Force bomb transports off Wewak in September 1943.

The pedigree of the Bismarck

Persistent Allied air attacks made Japanese resupply efforts futile. Here, a small Japanese transport burns after one Fifth Air Force attack in the Solomons.

In a Bismarck Sea battle, escorting destroyers were helpless to defend either the eight troop transports or themselves. Here, one doomed "tin can" is pictured from a B-25 as its bomb run barely clears the Japanese ship's mast.



Heavy guns blasting a Fifth Air Force B-25 Maubel racer for crew Simpson (left) and Rabold during the epic raid of November 2, 1943, as the aircraft erupts in flames and smoke.

BACKGROUND

B-25 Maubels of the Fifth Air Force's 25th Bombardment Group pumpe the Gulf coast, looking for a Japanese convoy. 1943. End of the war, Japanese shipping suffered a major blow as the IAF attacked.

Northrop P-61 Black Widow, a powerful, radar-equipped night fighter that ensured Allied air supremacy even in the dark. B-24s, which had greater range and speed than the B-17s, arrived in increasing numbers in the South and Southwest Pacific theaters.

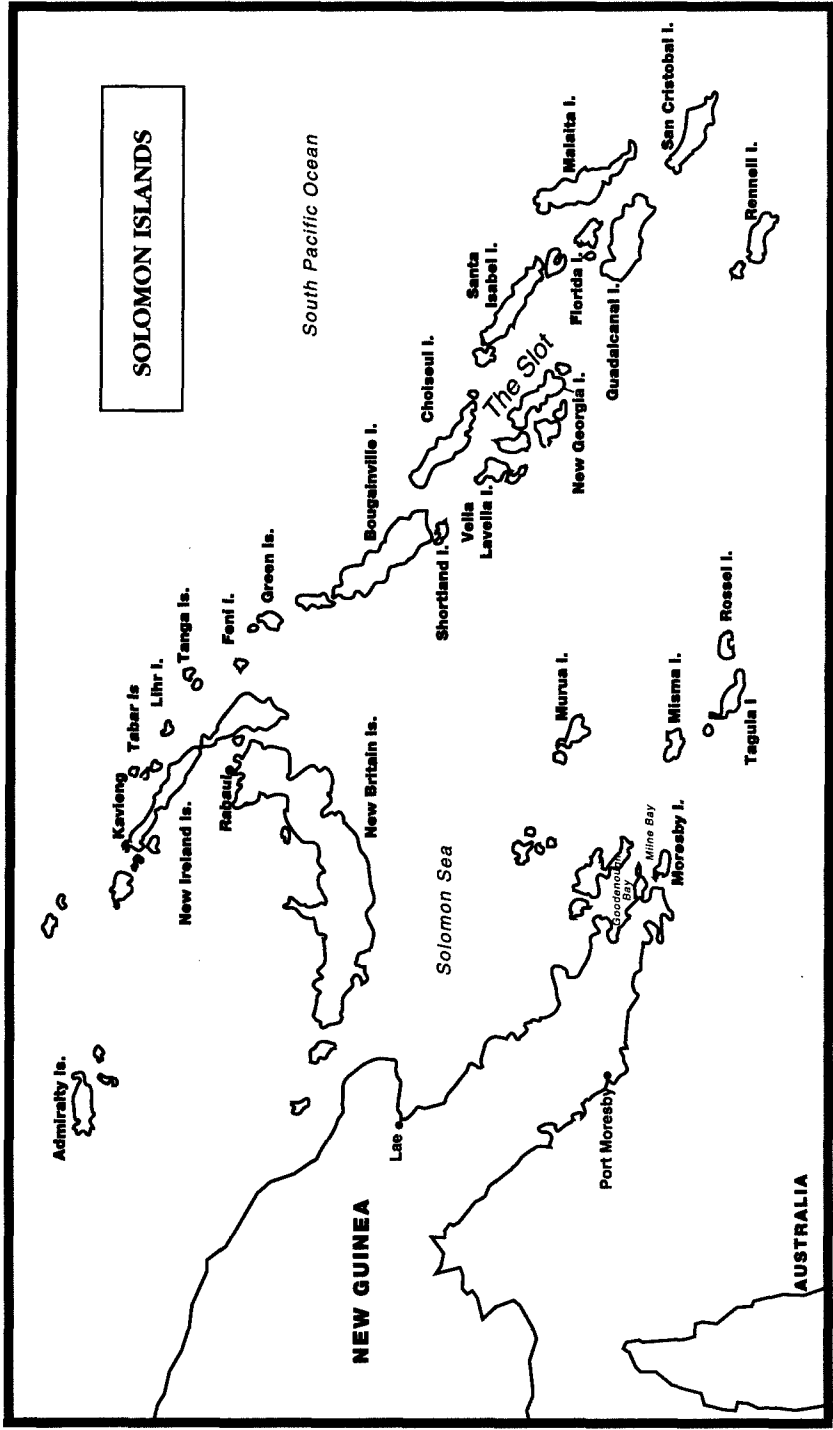
Not only could American aircraft factories outproduce the Japanese, but the United States could quickly replace losses of trained air crews, something Japan had been unable to do since Midway. Elaborate sea and air logistical chains across the Pacific provided the ground crews, support personnel, and equipment needed to sustain American offensives in the theater, and American naval and army construction crews became adept at new air base construction on the Pacific islands. (Indeed, the entire Pacific campaign can be interpreted as an effort to secure bases ever closer to Japan for the projection of long-range strategic air power.) The enemy simply could not keep up with this deluge of planes, trained crews, supplies, or bases. By the beginning of 1943, the initiative in the Pacific had passed to the United States.

Operation CARTWHEEL

The Encirclement of Rabaul

During the first half of 1943, Allied planners developed Operation CARTWHEEL, an offensive in New Guinea and the Solomon Islands that would proceed in two prongs toward a common objective, the powerful Japanese base of Rabaul on the eastern end of New Britain Island in the Bismarck Archipelago. Command of the operation would be split between MacArthur in the Southwest Pacific Area, and Halsey in the South Pacific. While MacArthur fought his way across northeastern New Guinea and crossed to the western end of New Britain, Halsey would seize the Solomons Island chain from Guadalcanal to Bougainville. Kenney's airmen and their Navy, Marine, and Allied counterparts would support the troops ashore.

While the CARTWHEEL plans were still being worked out, and with the help of signals intelligence, Kenney's planes found and sank a Japanese resupply convoy, consisting of eight transports and eight escorting destroyers, enroute to Lae during the first week of March 1943. In what became known as the Battle of the Bismarck Sea, Fifth Air Force B-17s, B-25s, and A-20s, protected by friendly fighters and assisted by Australian Bristol Beaufighters and Beauforts, sank twelve of the sixteen ships, including all eight transports. This demonstrated the ability of land-based airplanes to interdict seaborne



SOLOMON ISLANDS

forces. After the Battle of the Bismarck Sea, the Japanese abandoned attempts to reinforce Lae, sealing the fate of their besieged New Guinea garrisons.

Recognizing the threat of rising American air power in the region, Admiral Isoroku Yamamoto, commander of the Japanese Combined Fleet, launched a series of air raids on Allied air installations in New Guinea and the Solomon Islands. The raids were generally unproductive, because of effective American interceptions and counter raids on Japanese air fields. So Yamamoto made a trip to personally offer encouragement to some of his units in the northern Solomons area. Capitalizing on intelligence information, Guadalcanal-based P-38 pilots intercepted and shot down Yamamoto's aircraft over Bougainville on April 18, 1943, depriving Japan of its greatest military commander and the architect of the Pearl Harbor attack.

Overall, Army Air Forces fighter pilots compiled impressive numbers of aerial victories during the Pacific war, the P-38 pilots most of all. Major Richard I. Bong shot down forty Japanese airplanes in two years (December 1942–December 1944). In a year and a half, Major Thomas B. McGuire, Jr. achieved thirty-eight victories before perishing in an accident while trying to outmaneuver a Japanese fighter attacking one of his fellow pilots.

By the summer of 1943, Admiral Halsey was ready to fulfill his part in CARTWHEEL. When American forces invaded New Georgia Island northwest of Guadalcanal in July 1943, the Thirteenth Air Force provided cover, close air support, and supplies. After the capture of Munda in August, American planes used that base to accelerate attacks on Bougainville in the northern Solomon Islands. The Thirteenth helped the U.S. Navy neutralize Kolombangara Island northwest of New Georgia so it could be bypassed. Finally, in November American forces invaded Bougainville. To support the landings, the Fifth Air Force attacked Rabaul with B-25s and P-38s. In a whirlwind raid, they sank or damaged several Japanese ships and destroyed thirty-one planes. Thirteenth Air Force aircraft also supported the invasion, striking enemy shipping around the island and Japanese airfields in the area. Along with naval aviation, they also countered enemy air attacks and provided close air support. By early 1944, the Thirteenth had new bases on Bougainville; Rabaul, as a useful Japanese base, had been utterly neutralized.

Meanwhile, General MacArthur directed an offensive that captured the Huon Gulf area of northeastern New Guinea and the western end of New Britain. He depended in great measure on Kenney's Fifth Air Force to capture Japanese bases at Lae and Finschhafen in September 1943. P-38s, P-47s, A-20s, B-25s, and B-24s flew missions to support the invaders, while transports

dropped 1,700 paratroops to capture Nadzab in New Guinea's Markham-Ramu River Valley and transform it into a key American base. Kenney's airmen also struck Wewak, Madang, and other air bases in northern New Guinea, effectively smashing Japanese air power. Possessing clear air superiority, in mid-December 1943 American forces, with Fifth Air Force support, invaded western New Britain, sealing Rabaul's southwest approaches. In March 1944 the Allies secured bases in the Admiralty Islands northwest of New Britain. The encirclement of Rabaul was complete. MacArthur wisely left it to wither for the rest of the war.

One-Two Punch

The MacArthur-Nimitz Two-Pronged Offensive

At the Quebec Conference in August 1943, Allied leaders agreed to devote more attention to the Pacific and authorized offensives there. After CARTWHEEL, the Joint Chiefs of Staff planned a two-pronged advance across the Pacific Ocean. Admiral Nimitz would guide an offensive across the central Pacific from one island chain to another, each closer to the Japanese Home Islands. He would first strike the Gilbert Islands, then the Marshalls, then the Marianas, where B-29 bases would be established for the strategic bombing of Japan. Finally, he would advance to the Palau Islands to establish bases for the invasion of the Philippines. Meanwhile, General MacArthur would continue westward across the northern coast of New Guinea and its adjacent islands to Morotai. The two offensive arms would meet at Leyte in the Philippine Islands.

Although the offensives had different routes, they had common goals. First was the defeat of Japan through an invasion, if needed, which would require bases closer to the Home Islands. Secondly, the Joint Chiefs of Staff desired bases close enough to the main Japanese cities for a strategic bombing offensive which General Arnold thought might knock Japan out of the war before an invasion would be necessary. Other objectives included stopping the flow of raw materials by sea from Southeast Asia and the East Indies to the Japanese war machine and liberating key islands such as the Philippines from enemy occupation. With careful timing, each of the two Pacific offensive arms would synergistically help the other.

The AAF supported both offensives, the Seventh Air Force behind Nimitz in the central Pacific, and the Fifth and Thirteenth Air Forces backing MacArthur in New Guinea and the Philippines. The

Thirteenth transferred from the South to the Southwest Pacific Area in March 1944, because Nimitz could draw upon the bulk of carrier-based naval aviation resources. As they moved across the central Pacific and New Guinea, both MacArthur and Nimitz chose to bypass certain Japanese bases, isolating and neutralizing their garrisons. Only superior land-based and sea-based air power allowed this "island-hopping" strategy.

Straight Up the Middle

Nimitz's Central Pacific Offensive

When the Japanese attacked Midway Island during the first week of June 1942, they also invaded Alaska's Aleutian Islands. After air raids on Dutch Harbor, enemy forces landed on Kiska and Attu, islands in the western end of the archipelago. Eleventh Air Force airplanes based in the Aleutians raided the Japanese positions and covered a U.S. Army amphibious landing on Attu in May 1943. Having secured Attu, American forces landed on Kiska in August, pleasantly surprised to find that the Japanese had already abandoned their positions in the face of Allied air and sea power. Although the Aleutian Campaign did not significantly affect the outcome of the war, it did end the Japanese threat to Alaska and provided island bases from which American aircraft could strike the Kurile Islands northeast of Japan, forcing the enemy to keep large defensive forces in the north. The bulk of the Pacific action, however, happened farther to the southwest.

In November 1943 heavy bombers of the Seventh Air Force supported U.S. Army and Marine forces invading the Gilbert Islands, several hundred miles northeast of the Solomons. B-24s from Canton, Funafuti, and Nukufetau bombarded Tarawa and Makin Islands before amphibious landings there. To reduce Japanese air power, the bombers also struck air bases in the Marshall Islands to the northwest. By December, after bitter fighting and severe casualties, both Tarawa and Makin were under American control, and the Seventh set up air bases for use against Nimitz's next objective, the Marshall Islands. Nimitz shrewdly employed air power in a consistent pattern to support his amphibious island advances. Before the invasions, he would send carrier- and land-based planes to smother enemy air bases near the objective and to soften the landing area. He used carrier aviation for close air support during the battle, but set a priority on establishing new bases on the conquered islands for long-range aircraft. Once the new air fields became operational, Nimitz would withdraw his carriers and move on to new targets.

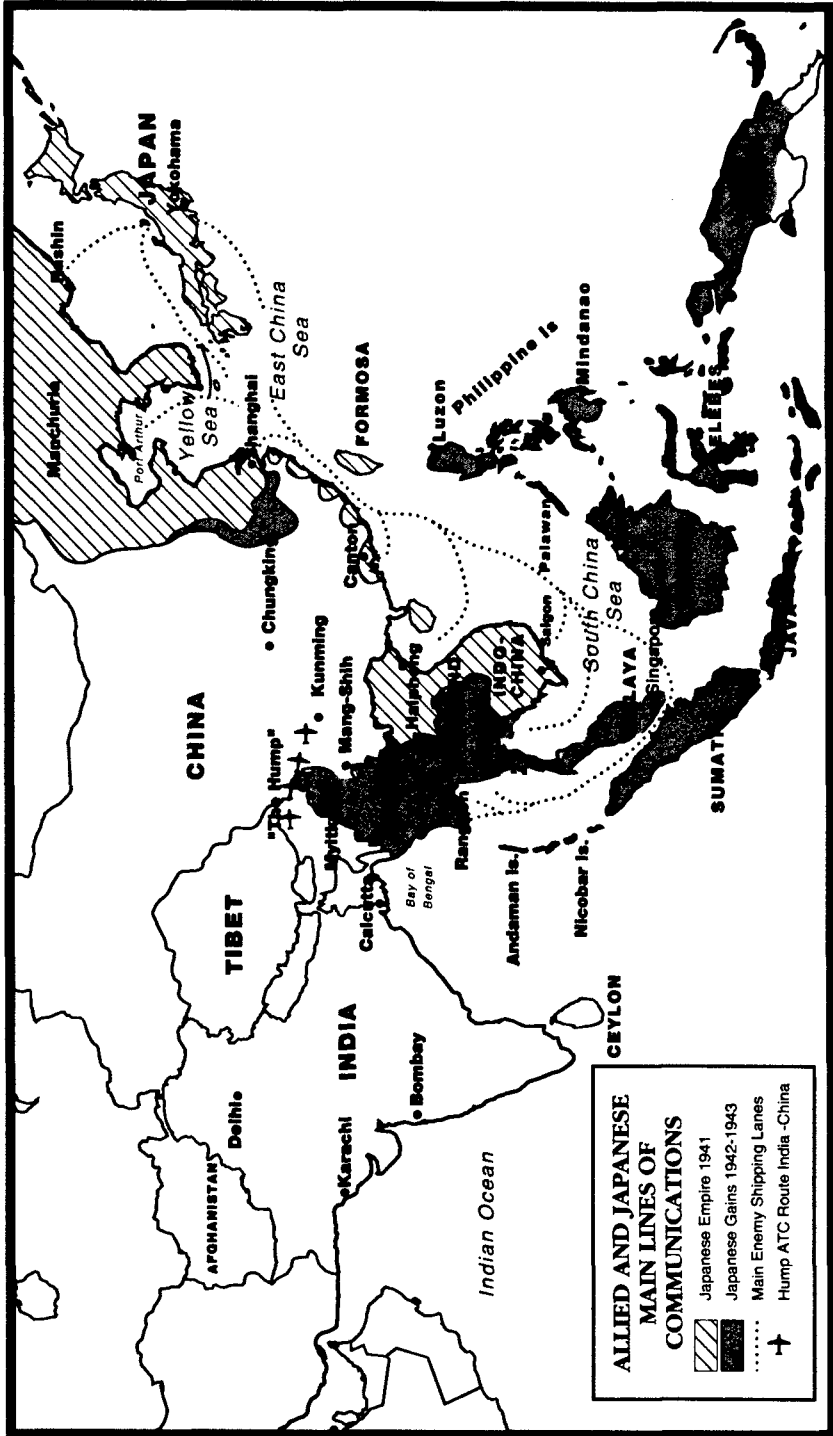
When American forces invaded the Marshall Islands during January and February 1944, they selectively targeted key islands. U.S. Marine and Army units landed on Majuro, Kwajalein, and Eniwetok atolls, but skipped other islands, where isolated Japanese garrisons remained. Seventh Air Force aircraft neutralized the bypassed bases, striking from the Gilbert Islands. After the Seventh Air Force set up heavy bomber bases on Kwajalein in March and April 1944, B-24s raided the bypassed Japanese islands in the Marshalls, while medium bombers continued to strike them from the Gilberts, ensuring that their frustrated garrisons remained impotent.

Using Eniwetok, a Marshall atoll northwest of Kwajalein, as a staging base, Seventh Air Force B-24s also bombed enemy bases in the eastern Caroline Islands, including Truk and Ponape. Like Rabaul, Truk atoll had been one of the most powerful enemy naval bases in the Pacific, and although naval air attacks had forced most of the larger Japanese warships to retire westward, dangerous airfields remained. Seventh Air Force raids on Truk commenced in mid-March 1944. Between April and June, the Seventh Air Force raided Truk from Kwajalein and Eniwetok, while Thirteenth Air Force bombers hit it from the Solomons to the southeast. When the Thirteenth Air Force moved north to the Admiralties in June 1944, it was in a better position to strike, while Seventh Air Force units continued bombing the atoll from another direction. Meanwhile, B-25 medium bombers from the Gilberts raided Ponape, a Japanese-held island east of Truk in the eastern Carolines. American land- and sea-based air power allowed Nimitz to isolate, neutralize, and bypass Truk and Ponape, just as it had permitted MacArthur's similar strategy in the Southwest Pacific.

More important than either the Gilbert or the Marshall Islands were the Marianas, to the northwest of the Marshalls. The Marianas controlled sea lanes between Japan and the Carolines and New Guinea. If the Navy established submarine bases in the Marianas, it could threaten Japan's ability to reinforce New Guinea and cut off the enemy's supplies from the East Indies. Above all, the islands of Guam, Saipan, and Tinian offered air bases for B-29s, within range of the Japanese Home Islands. Such bases would be essential for the strategic bombing of Japan.

To prepare for the Marianas invasion, the Seventh Air Force launched air raids from the Marshall Islands. Some of the B-24s practiced shuttle bombing, flying from Kwajalein through Eniwetok to bomb Guam, then landing in the Admiralty Islands to reload and refuel, and bombing Ponape on the way back to Eniwetok.

In June 1944, American amphibious forces invaded Saipan, while Seventh Air Force bombers escorted Navy reconnaissance planes over Guam and Saipan to prepare the way. As soon as the



invaders captured an enemy air base on the island (four days after the initial landing), Army Air Forces P-47s took off from the decks of the escort carriers that had ferried them to Saipan and landed ashore. From the new air base the Thunderbolts supported ground troops as they conquered the rest of Saipan, Guam, and Tinian. P-61 night fighters also prevented enemy bombers from harming the ground troops after dark.

The Marianas offensive attracted the Japanese Navy, rebuilt after Midway, which now attempted to destroy the U.S. invasion fleet. During the Battle of the Philippine Sea, American Navy pilots eliminated the threat of Japanese carrier-based aviation, shooting down at least two hundred enemy airplanes. In addition, some Japanese planes were downed by anti-aircraft fire from the ships. Many Japanese pilots lacked training and experience, and the battle was so one-sided that it entered the history books as the "Great Marianas Turkey Shoot". For all practical purposes, Japanese carrier-based aviation was destroyed for good off the Marianas.

By early August, Allied ground forces, with air support, had secured the three most important islands in the Marianas: Guam, Saipan, and Tinian. Many Seventh Air Force units moved to new bases in the Marianas, from which they could raid bypassed Japanese bases in the Carolines. They also attacked Iwo Jima and Chichi Jima in the Volcano Islands northwest of the Marianas, half way to Japan. Allied strategists realized that these islands lay in the projected path of Twentieth Air Force B-29s that would soon begin the strategic bombardment of Japan from the Marianas. Iwo Jima and Chichi Jima could not be allowed to harbor enemy forces that would harass the raiding B-29s and—conversely—the islands could serve as U.S. bases for escort fighters and as emergency landing fields for damaged or ailing bombers. In October 1944, the first B-29 Superfortress landed on Saipan, and by the end of November, about one hundred of the big bombers were stationed on Guam, Tinian, and Saipan. Nimitz next moved on to the Palau Islands southwest of the Marianas. From there, his air and naval forces could strike westward to the Philippines, where they would join MacArthur.

By Stealth from the South

MacArthur's Advance to the Philippines

After Nimitz's fast carriers attacked Truk in February 1944, clearing the Japanese fleet from the New Guinea flank, General MacArthur's hand was strengthened to launch his offensive into northwestern New Guinea and the islands leading to the Philip-

piners. To prepare for MacArthur's invasion of north central New Guinea, Kenney's Fifth Air Force launched a series of air raids on Japanese bases at Wewak and Hollandia. Between late March and early April, airmen claimed almost three hundred Japanese planes destroyed on the ground. In late April, MacArthur bypassed the remaining garrison at Wewak and invaded Hollandia. Allied warplanes provided ground support for the amphibious landings and struck enemy troops and supplies along the northern coast of New Guinea. The Thirteenth Air Force attacked enemy airfields in the western Carolines from which Japanese planes might have challenged the invasion.

Almost as soon as ground forces established control over former Japanese airfields, the Fifth Air Force set up its own bases there. Hollandia became an Allied air base in May 1944. On June 15 the Fifth and Thirteenth Air Forces united under General Kenney's command in a new organization called the Far East Air Forces or "FEAF" (not to be confused with the earlier Far East Air Force, which had become the Fifth Air Force). American warplanes next struck islands off the northwest New Guinea coast to support amphibious operations there. As at Nadzab earlier, AAF transports dropped some 1,500 Allied paratroops at Noemfoor. By the end of July, FEAF had established bases on many of the newly acquired islands. Meanwhile, Nimitz's advance in the Marianas to the northeast ensured the Japanese could not reinforce their desperate forces remaining in the New Guinea area.

In September 1944 FEAF planes supported Allied amphibious forces in taking Morotai, a small, but strategically important island north of Halmahera between New Guinea and the Philippines. Once Morotai became an American air base, Kenney's aircraft were in good position to strike the East Indies to the west and south. From Morotai, Sansapor, and Owi, Thirteenth Air Force warplanes raided Japanese shipping and bases in Borneo, Celebes, and Halmahera. Fifth and Thirteenth Air Force B-24s struck at the enemy's oil refineries at Balikpapan, Borneo, an important source of aviation fuel. But the most important targets were the Philippine Islands to the northwest. MacArthur captured Morotai about the same time that Nimitz moved into the Palau Islands. From these bases, the two arms of the Pacific advance would meet at Leyte.

American and Allied airmen contributed significantly to MacArthur's offensives. They seized control of the air, allowing Allied forces freedom of maneuver. They helped isolate the battlefields by blocking enemy reinforcements attempting to come by land or sea. They covered the advance of ground troops, intercepting air raids and striking the bases from which those raids could come. They also delivered supplies and reinforcements.

Finally, they helped deny supplies to the enemy, weakening the Japanese garrisons on both the target and bypassed islands.

A Promise Fulfilled

The Liberation of the Philippines

General MacArthur fulfilled his promise of 1942 by returning to the Philippines in October 1944, landing on Leyte. Nimitz's own central Pacific drive arrived off the Philippines at the same time; and indeed, MacArthur's troops relied upon naval escort carriers to provide air support for the amphibious landings, because most of the FEAF bases were simply too far away. The Army Air Forces, however, did play a key role. Bombers from the Fourteenth and Twentieth Air Forces in China joined Navy planes to strike Formosa, where powerful Japanese air bases posed a threat to the Allied invaders. At Leyte, the Japanese introduced the *Kamikaze* (Divine Wind) into the military lexicon. During *Kamikaze* attacks, suicide pilots aimed their planes like guided missiles directly at American ships. The *Kamikaze* strikes did not succeed in sinking many of Nimitz's ships, but they did make even more urgent the destruction of Japan's remaining airplanes, for these bomb-and-fuel laden planes could inflict horrendous casualties. While the Leyte landings were proceeding, the Japanese navy attempted to destroy the amphibious forces by luring Halsey's fast carriers away with a decoy fleet. Although Halsey fell for the bait, heroic action by a small group of escort carriers and a major fleet action in Leyte Gulf frustrated Japanese hopes.

At the end of the month, MacArthur's Leyte forces had secured enough of a beachhead for the first Army Air Forces planes to land in the Philippines since the dark days of 1942. By the end of November, FEAF bombers and fighters were flying missions out of Tacloban, Leyte. Meanwhile, the Seventh Air Force, which had been advancing westward with Admiral Nimitz across the central Pacific, established a bomber base on Angaur in the Palau Islands from which to attack Luzon.

Before the end of 1944, American forces invaded Mindoro, another Philippine island, closer to Luzon. The Far East Air Forces transported airborne troops and supplies from Leyte to Mindoro and covered convoys of Allied troops. In December Kenney's fighters supported an Allied landing at Ormoc, a major enemy base on the west coast of Leyte. C-47 transports delivered supplies to Allied forces on the island as they advanced.

From the new air bases in the Philippines and the Palaus, FEAF and Seventh Air Force warplanes began systematic attacks on Luzon, the most important of the Philippine Islands. Luzon was the site of the capital, Manila, and the most significant former American military bases. It also was the most northern of the major islands in the chain. By seizing Luzon, MacArthur could cut off the Japanese on Mindanao and other bypassed islands in the southern Philippines. Control of the Philippines would further impede the flow of raw materials from the Japanese-occupied East Indies and provide a staging area for eventual invasion of the Home Islands. When General MacArthur landed on Luzon in January 1945, he had the support of Kenney's fighters, medium bombers, and heavy bombers, which covered his convoys to Lingayen Gulf, attacked enemy airfields harboring *Kamikaze* planes, raided enemy shipping in the South China Sea, and supplemented naval airplanes in striking targets in the battlefield area. Before long, FEAF had new bases on Luzon from which to support ground forces as they liberated Manila and Clark Field. C-47 transports dropped reinforcements and delivered gasoline to MacArthur during his Luzon offensive. They also dropped paratroops to capture Corregidor Island in Manila Bay.

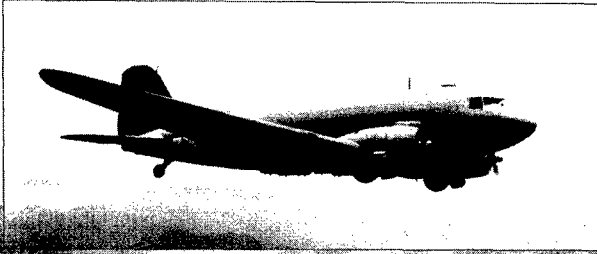
The Invasion of Borneo

Seizing Japan's Source of Raw Materials

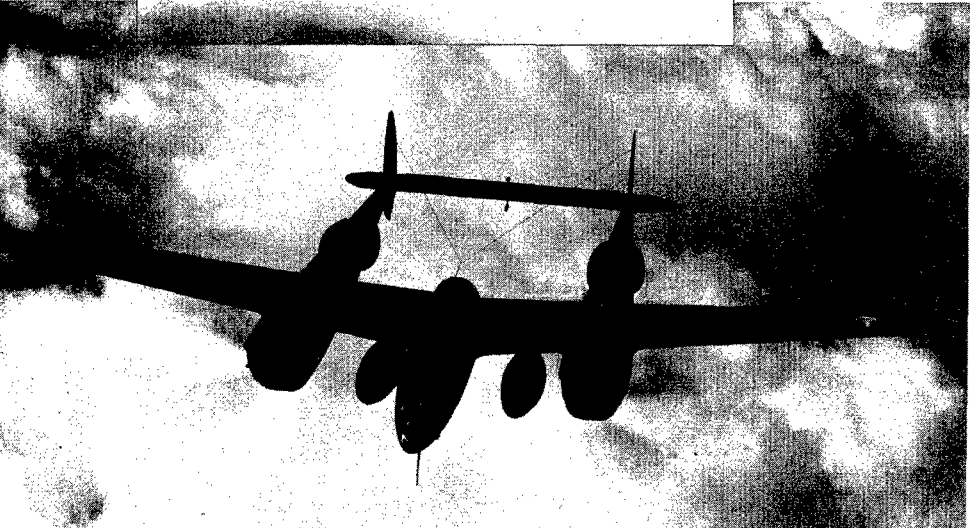
Once MacArthur had liberated the most important parts of Luzon, some of the Far East Air Forces resources were diverted to support an offensive to the southwest, the Australian invasion of Borneo. There were several reasons for the new offensive. The Allies were determined to drive out the Japanese and restore British and Dutch authority in the East Indies. They also wanted to stop the flow of raw materials to the Japanese war machine, and instead, secure them for their own use. Beginning in January 1945, the Thirteenth Air Force emphasized destruction of enemy shipping in the seas around Borneo. At the end of March, the Royal Australian Air Force took over the job of blockading the waters east and south of Borneo, leaving responsibility for the South China Sea north and west of Borneo to FEAF. The Allies used air power to prevent the flow of resources from Borneo to other parts of the Japanese domain, and to block enemy reinforcements to the island.

Before the Borneo invasion, MacArthur established air bases on Palawan Island and the Zamboangan Peninsula of Mindanao in the southwestern Philippines, which were just across the Sulu Sea

Confronting the Japanese Empire



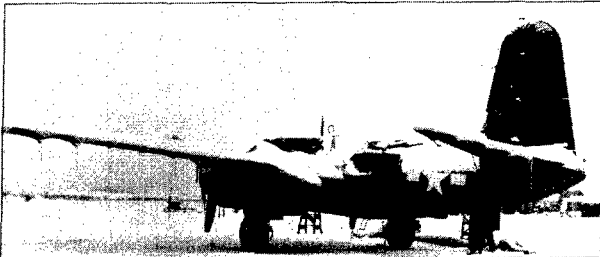
This Douglas C-47 Skytrain is shown flying near Yorkima Strip, Bougainville, during the Solomons campaign. As in other war theaters, airlift of troops and supplies was critical to ensuring victory.



CENTER.
The long-range, twin-engine Lockheed P-38 Lightning proved the outstanding AAF fighter of the Pacific war. Aircraft of this type shot down Admiral Isoroku Yamamoto in April 1943, thanks to timely intelligence and careful mission planning.



RIGHT.
Intensive Japanese flak made low-altitude sorties hazardous. Here a crippled A-20 Havoc attack bomber of the Fifth Air Force dives into the water, narrowly missing a squadron mate.



BOTTOM RIGHT.
A Douglas A-20 Havoc attack bomber sits amidst the falling snow at Ladd Field, Alaska, during the Aleutian campaign.

from northeastern Borneo. To support Allied operations there, American and Australian aircraft based at Morotai and areas of the Philippines already under MacArthur's control flew missions against Japanese air bases in Borneo. This was a typical case of air power and ground forces supporting each other. As soon as MacArthur's forces captured Palawan and the Zamboangan Peninsula, Kenney set up air bases there to support further surface operations against the Netherlands East Indies.

Allied forces invaded Borneo between May and July 1945 in a series of operations called OBOE. Australian and Dutch troops assaulted the island in three places: Tarakan in the northeast (May), Brunei Bay and Lutong in the northwest (June), and Balikpapan in the southeast (July). FEAF units and the Royal Australian Air Force's 1st Tactical Air Force provided air support. Flying from bases on Morotai and the Philippines, Allied planes neutralized airfields in Borneo and neighboring Celebes. They also covered the invasion convoys from Morotai, bombarded the beaches just before the amphibious landings, laid smoke screens for the invaders, and provided direct air support during the battles. By attacking land and sea routes in and around Borneo, Allied warplanes kept Japanese reinforcements away from the beachheads. Australian and Dutch troops, with American and Australian air support, successfully captured their Borneo objectives. The next logical step was an invasion of Java, but Allied successes in other parts of the Pacific made the invasion of Java unnecessary.

The End in Sight

Iwo Jima and Okinawa

Before MacArthur and Nimitz were ready to invade Japan, they needed to capture two more islands: Iwo Jima, and Okinawa. Iwo Jima was a small island that lay between Japan and the Marianas. As a Japanese air base, it could threaten the B-29 bomber bases on Guam, Saipan, and Tinian, and intercept the Superfortresses as they made their way to and from Japan. But the Joint Chiefs of Staff were interested in Iwo Jima for other reasons than merely denying its use to Japan. As an American air base, it could host fighters to escort the B-29s. The island could also serve as an emergency landing field for B-29s unable to continue their missions or damaged in combat. Equipped with radio navigation aids, a base there could also help the bombers navigate to and from their targets. In February 1945 two Marine divisions invaded Iwo Jima, followed by a third division.

After weeks of hard fighting, supported by Seventh Air Force B-24s from the Marianas and by off-shore naval aviation, the Marines prevailed (at the cost of more than 20,000 American casualties) and established a new U.S. air base on the island. P-51 Mustang fighters used the new airfield to support infantry that took over the rest of Iwo Jima, and soon were escorting the B-29s flying from the Marianas. Ahead lay Okinawa.

Between April and June 1945, American forces struggled for control of Okinawa in the Ryukyu Islands, southwest of the Japanese main islands and northeast of the Philippines. Though the invasion began with deceptive ease, Okinawa soon degenerated into a brutal battle, with heavy casualties on both sides, as American troops sought to dislodge tenacious and, indeed, fanatical Japanese defenders from well-thought-out emplacements and fortifications. MacArthur and Nimitz needed Okinawa as a base for the invasion of Japan. They also wanted to use the island to stop shipping between Japan and Formosa. The Army Air Forces supported Marine and Army troops on Okinawa with planes from the Fifth, Thirteenth, and Seventh Air Forces, some of which bombed *Kamikaze* bases on Formosa and Kyushu to defend beleaguered American ships, many of which were damaged or sunk by Japanese suicide pilots.

After Okinawa finally fell in the summer of 1945, the Seventh Air Force moved there from the Marianas and joined the Far East Air Forces. From newly won bases, FEAF flew bombing and strafing missions against Kyushu, one of the main islands of Japan, and enemy-held areas of eastern China. Air raids against southern Japan and against shipping between Japan and Korea prepared the way for the anticipated Allied invasion of the Home Islands. The Southwest Pacific, Central Pacific, and China air wars were now one: ahead lay Japan.

But before an even more costly invasion could be mounted against Japan, the B-29 raids from the Marianas and two atomic bombs dropped in August 1945 ended the war. On September 2, 1945, Japanese envoys surrendered to the Allied powers aboard the USS *Missouri*, anchored in Tokyo Bay. Overhead flew waves of B-29s and other aircraft—a fitting climax to the Pacific War.

The Legacy of Valor

Courage, Sacrifice, and the Defeat of Japanese Militarism

Seven numbered American air forces—the Fifth, Seventh, Tenth, Eleventh, Thirteenth, Fourteenth, and Twentieth—contributed to the ultimate Allied victory. On the Asian mainland, the Tenth and Fourteenth Air Forces assisted Allied ground forces in defending India, driving the Japanese out of Burma, and keeping China in the war on the Allied side. In the Southwest Pacific Area, the Fifth and Thirteenth Air Forces aided MacArthur as he drove the Japanese out of strategic portions of New Guinea, the East Indies, and the Philippines. In the Central Pacific, the Seventh Air Force established bases ever closer to the enemy's heartland, from the Gilberts to the Marshalls to the Marianas, bringing Tokyo and other important Japanese cities in range of Twentieth Air Force bombers. The Eleventh Air Force assisted in driving the Japanese out of the Aleutians, from which American bombers could strike the Kuriles.

Statistics reveal the magnitude of the American air effort against Japan. According to the *AAF Statistical Digest* for the war, AAF aircraft dropped more than 500,000 tons of bombs on Japanese targets in Asia and the Pacific, and expended millions of bullets. They destroyed more than 10,300 Japanese aircraft, while losing 4,530 of their own. The AAF flew 669,235 combat sorties against the Japanese, and in July 1945 had 8,722 combat aircraft on hand in Asia and the Pacific. These figures do not include the thousands of U.S. Navy and Marine Corps aircraft that also participated.

By the summer of 1945, American land-based airplanes threatened Japan from China, Okinawa, the Marianas, Iwo Jima, and the Aleutians and were fully capable of bombing the enemy's cities, ports, airfields, military facilities, and mining coastal waters. The circle of air bases had tightened until all Japanese targets were within range, not only of the B-29 Superfortresses, but also of B-24s, medium bombers, and fighters. Thus, no part of the Japanese Empire remained out of reach of Allied planes, ships, and submarines. The combination of air, land, and sea power had reduced the Japanese perimeter to a fraction of its reach in mid-1942 and prepared the way for the final strategic bombing offensive. The submarine blockade of the Home Islands and the Soviets' entry into the war helped convince the Japanese to surrender without an invasion, but the projection of land-and sea-based air power over vast distances and from hard-won bases made the conditions for victory possible.

The Allied success required cooperation, not only among the Allied nations, but also among their military services. The U.S. Army and Navy cooperated with each other, and the Army Air Forces worked with both. Joint operations achieved the victory—evicting the Japanese from islands the Allies needed for strategic bombing bases, liberating the Philippines, and depriving Japan of the resources it needed to continue the war. Neither surface nor air forces could have succeeded without the other. Protected by land- or sea-based air power, soldiers and sailors secured new airfields, and these in turn served as bases for future operations by both services. The American military experience in Asia and the Pacific during World War II demonstrated the importance of joint operations and the need for the services to cooperate to achieve common goals. And with far-reaching implications for global security, the Army Air Forces' wartime successes marked the coming of age of American air power.

This seasoning came at a heavy price of lives lost and shattered—the ultimate cost of defending freedom. The Pacific air war was fought by courageous young men employing an adolescent but rapidly-maturing form of military power. They did so under conditions that were often appalling, and against an enemy both skillful and brutal. There was no leeway for error or accident. They suffered the wrenching loss of friends to enemy action and frequently to no-less-dangerous operational circumstances. Any account of the war would be incomplete without a salute to the brave and resourceful airmen of the AAF and the ground-based comrades who kept them aloft.



The End of the Road:
General Douglas MacArthur adds his signature to the Japanese surrender document on the deck of the battleship USS *Missouri*, September 2, 1945, bringing the Pacific War to an end.

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