

Hap Arnold's unique B-29 force brought Japan to its knees and helped make the case for an independent Air Force.

The Twentieth Against Japan

SIXTY years ago, Gen. Henry H. Arnold, Commanding General of the Army Air Forces, formed and began to lead a new numbered air force, created to conduct B-29 operations against Japan's home islands. Hap Arnold's creation of Twentieth Air Force to spearhead a strategic bombing offensive in the Pacific not only led to Japan's defeat but also proved to be a landmark in the long struggle of airmen to organize and operate an independent air force.

Numerous studies have documented the technical and engineering problems that had to be overcome in developing the B-29. Less has been written about the critical decision of how to command this long-range bomber force. The answer was fundamental to prosecuting the strategic bombing offensive against Japan.

The final decision, reached April 4, 1944, placed Twentieth Air Force directly under Arnold. It was an unprecedented arrangement that would lead, in the Cold War era, to placement of the newly formed Strategic Air Command directly under the Joint Chiefs of Staff as a specified command.

It was "one of the most important events in the history of the United States Air Force," said retired Maj. Gen. Haywood S. Hansell Jr., a former air planner and first chief of staff for the Twentieth, in his memoirs.

Arnold was a visionary and, as Europe headed into World War II, he saw the need for a four-engine

strategic bomber whose range, speed, and bomb load would be far superior to the B-17 and B-24. He initiated development of the B-29 Superfortress in November 1939, two months after Nazi Germany's invasion of Poland.

The Essential B-29

After Japan's sneak attack on Pearl Harbor, Arnold was determined to show that Japan could be driven out of World War II without a land invasion of the home islands. He believed the B-29 was essential to that outcome. Once the United States entered the war, Arnold came under increasing pressure from President Franklin D. Roosevelt and Gen. George C. Marshall, Army Chief of Staff, to have the AAF's long-range bomber forces show results.

The B-29 was a greatly advanced bombing airplane, with a pressurized cabin, intricate fire-control system, and powerful new Wright R-3350 engines. However, the B-29 developed critical problems, which brought the entire program into question. If the nation had not been at war, the extent of B-29 development difficulties would have forced Arnold to stretch out testing and production or even to halt it temporarily. Instead, Arnold cut corners and ordered the bomber into production before it had completed a rigorous testing program.

The Allies' primary objective in World War II was the defeat of Nazi

By Herman S. Wolk

B-29s of Twentieth Air Force crowd the flight line on Guam's North Field.



Germany. Early AAF planning had outlined potential B-29 operations in the European Theater, but the bomber's development problems and the pace of Allied operations in Europe made those plans moot.

By May 1943, the Allies decided to shift more attention to defeating Japan. According to a 1943 Joint Chiefs of Staff study on the conduct of the war, the Allies agreed to "maintain and extend unremitting pressure against Japan with the purpose of continually reducing her military power and attaining positions from which her ultimate unconditional surrender can be forced."

Roosevelt and high-level Administration officials, outraged at Japan's offensive against China, increasingly emphasized the need to bomb Japan's home islands. At high-level Allied conferences in 1943 at Casablanca and Quebec, Roosevelt advocated deploying B-29s to the China-Burma-India Theater.

At Quebec in 1943, Arnold presented the "Air Plan for the Defeat of Japan," which called for deployment of Superfortresses to central China. This plan, prepared by Brig. Gen. Kenneth B. Wolfe, emphasized that the 1,500-mile range of the B-29 would allow it to strike Japan's major industrial centers.

Arnold wanted to ensure the B-29s were used first against Japan. In a May 1943 memo to Marshall, Arnold wrote: "If B-29s are first employed against targets other than against Ja-



Pictured above are the Superfortresses under production. The B-29 brought a revolutionary capability. The long-range bomber featured a pressurized cabin, intricate fire-control system, and powerful new engines.

pan, the surprise element will be lost." Arnold maintained that Japan would "take the necessary actions to neutralize potential useable bases."

Challenging Arnold

In the summer of 1943, Lt. Gen. George C. Kenney, commander of the Allied Air Forces in the Southwest Pacific and Fifth Air Force, challenged the plan put forth by Arnold and his Air Staff. Kenney had been informed by his Washington sources that many viewed the B-29 as the airplane that would "win the war." Kenney's idea, however, was to attack oil refineries

in Sumatra and Borneo, not industrial centers in Japan.

In a cable to Arnold, Kenney said: "If you want the B-29 used efficiently and effectively where it will do the most good in the shortest time, the Southwest Pacific area is the place and the Fifth Air Force can do the job. Japan may easily collapse back to her original empire by that time (1944), due to her oil shortage alone."

Kenney, however, had no real chance to get the B-29s. Arnold never wavered in his conviction that the Superfortresses should be used to strike at the heart of Japan.

At the Cairo conference in late 1943, Roosevelt approved the plan to base B-29s in India and China. Maj. Gen. Laurence S. Kuter, assistant chief of Air Staff for plans, informed Kenney in March 1944 that Roosevelt wanted the B-29s in place by May 1944. The plan was to base B-29s in India and stage them through China for initial B-29 attacks against Japan, then, once the Allies had taken the Marianas, launch B-29 raids from there.

Kenney did not take this news well. He described attacks against Japan from the Marianas as "nuisance raids."

Before deploying the B-29s, Arnold moved to make sure that he had operational control over them. The official history of the Army Air Forces in World War II speculates that Arnold wanted to command Twentieth because he had not previously commanded combat units. In his memoirs, Arnold said that he was



Gen. Hap Arnold, Commanding General of the Army Air Forces, and Gen. George Kenney, commander of Allied Air Forces in the Southwest Pacific, sparred over initial use of the B-29. Arnold's plan to strike Japan's home islands prevailed.

reluctant to make this decision, but a lack of unity of command in the Pacific forced him to command the B-29 force himself.

As was the case in the European Theater, long-range bombing operations raised unique organizational and command and control problems. Arnold did not want the B-29s under the control of theater commanders—Gen. Douglas MacArthur (Kenney’s boss), Adm. Chester W. Nimitz, or Gen. Joseph W. Stilwell—who would employ them as they saw fit.

Gen. Curtis E. LeMay, who commanded the B-29 force in the Pacific Theater, explained Arnold’s decision this way: “Arnold did this so we would have a command in the Pacific where we were free to fly over anybody’s theater, to do an overall job. Naturally, Admiral Nimitz wanted everything he could get his hands on; General MacArthur wanted everything he could get his hands on; and General Stilwell wasn’t behind-hand in wanting everything as well. And we were flying over all three of their theaters. We simply had to have central coordination on this deal.”

The Control Issue

During 1943, Arnold and his Air Staff in Washington had weighed the advantages and disadvantages of organizing strategic air forces outside the control of a theater commander. Arnold saw more advantages than disadvantages. According to the official US Army history, the Air Staff developed a concept that was a “radical departure from the [existing] chain of command.” Under the new concept, Arnold would command Twentieth as executive agent of the US Joint Chiefs of Staff.

In January 1944, a somewhat similar arrangement emerged with the creation of the US Strategic Air Forces (USSTAF) in Europe. It was commanded by Gen. Carl A. “Tooe” Spaatz, who directed Eighth Air Force’s long-range bombing offensive from the United Kingdom and Fifteenth Air Force’s strategic bombing strikes from Italy. The Combined Chiefs of Staff (CCS) exercised control over USSTAF through their executive agent, Air Chief Marshal Charles “Peter” Portal, Royal Air Force Chief of Air Staff.

The conflict in the Pacific, however, was primarily in the hands of the Americans, and Arnold wanted



Above, a B-29 on Saipan is framed by the wreckage of a Japanese blockhouse. The capture of the Marianas was critical to the American war effort, as it brought the B-29s within range of Japan.

to retain US control over the long-range bomber force. The problem was how to convince Marshall and the Chief of Naval Operations, Adm. Ernest J. King.

Historically, unity of command over Army forces resided with a theater commander, who held operational authority within a geographic area. Fleet units of the US Navy ultimately were commanded by the Chief of Naval Operations, who was commander of the US fleet and who reported to the JCS.

Britain proposed that Twentieth Air Force—and, subsequently, a British bomber force—should report to the Combined Chiefs of Staff, as in the European Theater. The US Joint Chiefs opposed this concept, which Britain quickly dropped. Marshall and King, according to Hansell, had been persuaded that the B-29 campaign required unity of command from Washington—free from the control of theater commanders. Marshall accepted Arnold’s position almost immediately, but why King acceded so readily remains unclear.

On April 4, 1944, the Joint Chiefs activated Twentieth Air Force. The War Department directive to Arnold authorized him “to implement and execute major decisions of the Joint Chiefs of Staff relative to deployment and missions, including objectives of the Twentieth Air Force.” The unprecedented command arrangement had the effect of placing the Army Air Forces on an equal

footing with the Army and Navy in the Pacific.

The new organization reflected Arnold’s strategic concept: The great range of the air arm makes it possible to strike far from the battlefield and attack the sources of enemy military power. The AAF commander wanted to demonstrate the independent power of the air arm. The importance of airpower’s role in the war already had been reflected in Arnold’s position on the JCS and the CCS. “The Army Air Forces,” he noted in a memo, “are being directly controlled by the Joint Chiefs of Staff and the Combined Chiefs of Staff more and more each day. Consequently, AAF representation in the joint and combined planning staffs has become a position of paramount importance to me.”

In addition to naming Arnold to head Twentieth, the Joint Chiefs also directed theater commanders to “coordinate B-29 operations with other air operations in their theaters, to construct and defend B-29 bases, and to provide logistical support and common administrative control of B-29 forces.” The Chiefs said that, “should strategic or tactical emergencies arise requiring the use of B-29 forces for purposes other than the missions assigned to them by the Joint Chiefs, theater commanders are authorized to use the B-29 forces, immediately informing the Joint Chiefs of such action.”

Acting upon decisions made at the

Cairo conference, Arnold in November 1943 had established XX Bomber Command to oversee B-29 training in the US. He placed Wolfe in command. In December 1943, advance AAF personnel arrived in India to oversee construction of airfields in India and China. By April 1944, there were eight fields ready to receive the B-29s.

Striking Japan

Arnold designated XX Bomber Command to be an operational unit under Twentieth Air Force, and Wolfe led the unit to India. Under the plan known as Operation Matterhorn, Wolfe, on June 5, 1944, began B-29 operations against Japanese railroad facilities in Thailand. The first direct strike on Japan's home islands came on June 15, when B-29s struck the Imperial Iron and Steel Works on Kyushu. Of the 68 bombers in the strike force, only 47 bombed the primary target. Ten had mechanical problems, four crashed, and seven bombed secondary targets.

The operation suffered from maintenance and logistical problems, which delayed the next strike by almost a month—by which time, Arnold had decided to replace Wolfe with LeMay, who had led Eighth Air Force's 305th Bomb Group, and achieved success testing new concepts and tactics. At the time, Arnold said, "With all due respect to Wolfe, ... LeMay's operations make Wolfe's very amateurish."



Pictured shortly before the peak of the 1945 bomber offensive against Japan are then-Maj. Gen. Curtis LeMay (left) and Brig. Gen. Roger Ramey. LeMay commanded XXI Bomber Command. Ramey later led XX Bomber Command.

LeMay improved XX Bomber Command's record, but the operation still suffered from supply difficulties. Supplies had to "fly the Hump"—they had to come in over the Himalayas, the world's highest mountain range. Distance from China to targets in Japan proved a major obstacle, too. Tokyo was more than 2,000 miles from the B-29 staging bases in China. That exceeded the range of the bombers.

Arnold never expected to deal Japan a crushing blow using bases in China. In October 1944, XXI Bomber Command (a second subunit of the

Twentieth activated in August 1944) was getting set up in the newly captured Mariana Islands, which lay 1,500 miles from Tokyo. Use of the Marianas not only put most of Japan within the B-29's striking range but also made it possible to supply and sustain hundreds of B-29s at once.

Arnold named Hansell commander of XXI Bomber Command. On Nov. 24, Hansell launched his first strike against the home islands.

Dubbed San Antonio I, the mission sent 111 B-29s, led by Brig. Gen. Emmett O'Donnell Jr., to bomb an aircraft engine plant on the outskirts of Tokyo. Flying in bad weather, only 24 B-29s struck the plant. Bombs from 64 others fell on docks and urban areas. Some 125 Japanese fighters managed to down one B-29.

Though the bombing results were not particularly good, the psychological impact was significant.

Between October 1944 and January 1945, the Superforts struck Japan's aircraft engine, component, and assembly plants. However, bad weather and mechanical difficulties continued to limit their success. Arnold, under enormous pressure in Washington and determined to show results with the B-29 force, once again called on LeMay. In January 1945, LeMay replaced Hansell, who had been LeMay's commander in England.

In Arnold's mind, he was racing against time. The Joint Chiefs had acceded to his desire to command the very long-range force from Wash-



Heavy B-29 attacks devastated Japan even before the atomic bombs were dropped. Here, Superfortresses unload fire bombs on Yokohama in May 1945.

ington. Roosevelt and Marshall expected significant results. Arnold realized that, if B-29 operations failed to accomplish something decisive, Allied forces would have to launch a ground invasion of Japan.

LeMay Changes Tactics

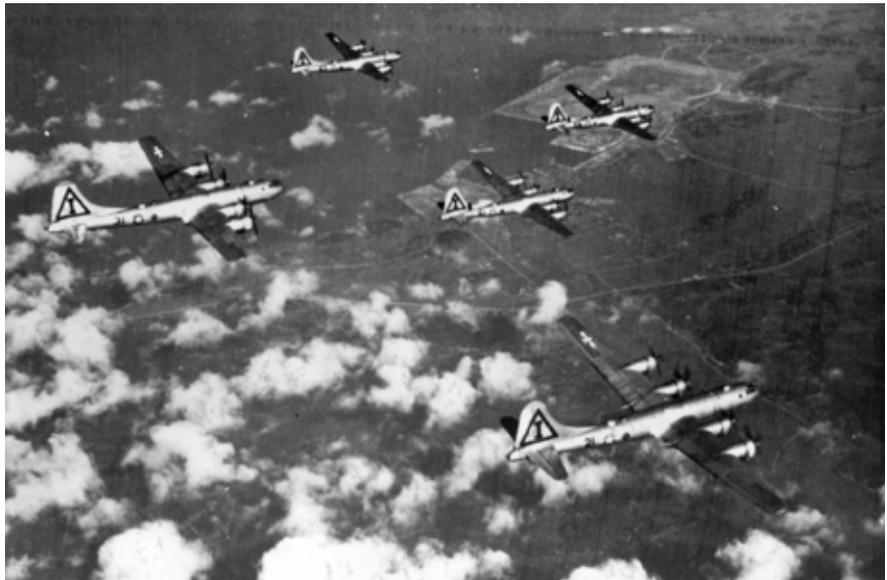
LeMay had Arnold's confidence, but he realized he was on the spot. "The turkey was around my neck," he recalled. "We were still going in too high, still running into those big jet-stream winds upstairs. Weather was almost always bad." LeMay figured he had only five or six good bombing days per month. Brig. Gen. Lauris Norstad, who had replaced Hansell as Twentieth Air Force chief of staff, informed LeMay that Arnold wanted an incendiary campaign. Time was running out.

In his memoirs, LeMay wrote that Arnold, "fully committed to the B-29 program all along, had crawled out on a dozen limbs about a thousand times, in order to achieve physical resources and sufficient funds to build those airplanes and get them into combat. ... So he finds they're not doing too well. ... General Arnold was absolutely determined to get results out of this weapons system."

LeMay, after discussions with his wing commanders, decided to scrap high-altitude daylight bombing missions and shift to low-level night incendiary attacks, as advocated by Arnold and Norstad. LeMay's XXI Bomber Command would launch a maximum effort in preparation for the Allied assault on Okinawa.

On the night of March 9-10, 1945, LeMay sent 334 B-29s to strike Tokyo. They dropped 2,000 tons of bombs—perhaps the most destructive raid in history, to that point—and burned out a significant portion of the city. The raid resulted in more than 80,000 deaths and left one million homeless.

Air planners had for some time emphasized the vulnerability of Japan's cities to fire. Moreover, they considered urban areas important military targets as they contained heavy, dispersed industries



Five Twentieth Air Force B-29s fly over the coast of Japan. In the late stages of the Pacific campaign, raids by up to 800 bombers helped bring Japan's military and industrial capabilities to a standstill.

that were a major part of the war economy.

Thus began five months of strategic bombing that decimated Japan's urban areas. In July 1945, Arnold transferred the headquarters for Twentieth Air Force from Washington to Guam. Spaatz took command of the US Army Strategic Air Forces in the Pacific, which encompassed the Twentieth. However, strategic control of the B-29s remained with Arnold and the Joint Chiefs. The campaign culminated in August 1945 with the atomic bombings of Hiroshima and Nagasaki, which ended the war in the Pacific.

It would be difficult to overestimate the importance of Twentieth Air Force. In June 1945, Marshall had advised President Truman: "Airpower alone was not sufficient to put the Japanese out of the war. It was unable alone to put the Germans out." In June, Truman directed that planning proceed for a two-stage invasion of Japan—the invasion of Kyushu in November 1945 (Operation Olympic) and an invasion of Honshu in March 1946 (Operation Coronet).

Truman, however, was gravely concerned about the potential loss of American lives. He wanted to prevent "an Okinawa from one end of

Japan to the other." Thus, he ordered employment of the atomic bomb.

After the war, Arnold emphasized that Japan surrendered "because air attacks, both actual and potential, had made possible the destruction of their capability and will for further resistance." These air attacks, he continued, "had as a primary objective the defeat of Japan without invasion." Arnold did not believe that the atomic bombs, by themselves, brought about the defeat of Japan but were only one factor in Japan's decision to surrender. The atomic bomb, Arnold said, allowed the emperor "a way out to save face." Arnold's view is, to say the least, debatable.

The B-29 campaign in the Pacific fulfilled President Roosevelt's directive to Marshall and the Joint Chiefs to end the war as quickly as possible with the least loss of American lives. Placing control of Twentieth Air Force under Arnold was central to that achievement.

The official US Army history of World War II stated that the command arrangement in the Pacific helped US leaders arrive "at a clear-cut definition of the functions and status of the Air Forces in relation to both the Navy and the rest of the Army."

The experience of Twentieth Air Force in World War II proved to be a landmark in demonstrating the independent use of airpower. It made the case for the postwar establishment of the United States Air Force. ■

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