

B-29 Superfortress

by Steve Birdsall illustrated by Don Greer



squadron/signal publications



[Cover] Dina Might, from the 421st Bomb Squadron of the 504th Bomb Group.

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B-29s of 462nd Bomb Group return from a raid in Burma, November, 1943. The photo shows the formation of 768th Squadron approaching their home base in India. [USAF]



The B—29 Superfortress

"People of Japan. Evacuate the following cities. The B-29s are coming soon. Your Warlords are powerless to stop them. The next cities on the list are: Yawata, Osaka, Tsu, Fukul...." And so the warnings would go, a chilling psychological blow, blatantly listing the targets for the huge, gleaming armada which was methodically destroying the remnants of an empire.

The story of the B-29 began with an "official requirement", to be translated by the aircraft companies into a design. In February 1940 the companies were asked to design a heavily armed, high altitude bomber capable of carrying a maximum bomb load of eight tons, a ton of them for over five thousand miles, at a speed of four hundred miles per hour. Four companies submitted designs - the Lockheed and Douglas submissions never proceeded, Consolidated's saw brief life as the B-32 - Boeing's Model 345 would become the Superfortress. Two prototypes were ordered on August 24, 1940, and designated XB-29, and a third was ordered in December, along with a static test specimen. Construction of the prototypes began in April 1941 at Boeing's plant in Seattle, and with the prospect of war becoming uncomfortably real, the new aircraft was given top priority. Fourteen YB-29s were ordered for service testing, and a production contract was issued for 250 B-29s in September 1941. So when the Japanese attacked Pearl Harbor in December, the bombers which would eventually kill their people in the hundreds of thousands were already being ordered.

The Superfortress design was a reflection of Boeing's undeniable leadership in the heavy bomber field. It featured a high aspect wing with large Fowler flaps to allow extremely high wing loading without unrealistically high landing speeds. The engines were Wright R-3350s, with two turbo-superchargers, developing 2,200 horsepower at sea level, the most

Fresh from Boeing's Wichita factory, 42-6242, the twenty-ninth B-29-1-BW. The aircraft is equipped with eight .50 caliber machine guns in four fuselage turrets and two more, plus a 20mm cannon, in the tail. This particular aircraft went to the 468th Bomb Group where it was converted to a tanker in 1944 and named Esso Express. After thirty transport missions in the CBI the aircraft returned to the States in November 1944. [Barry Gilkes]

powerful engines installed in an aircraft at that time. The engine nacelles were designed to minimize drag, the inboard nacelles receiving the main landing gear. The tricycle undercarriage was fitted with dual wheels. The circular fuselage was composed of three pressurized sections; the forward area for the pilots, navigator, flight engineer, bombardier and radio operator, connected by a small tunnel above the bomb bays to one for the three gunners and radar operator - the tail gunner had a separate pressurized area. The XB-29 was equipped with Sperry remote-control gun turrets with periscopic sights, originally intended to be retractable, but in the third prototype this was replaced by a General Electric turret system, sighted from domes adjacent to the turrets. All B-29s (except the B-29A) and a wing span of 1411 3", were 99' long, 29' 7" high and had a wing area of 1,736 square feet. The B-29 had an empty weight of 70,140 pounds; the B-29A, 71,360; and the stripped B-29B, 69,000. Cruising speed was approximately 220 miles per hour.

The first Superfortress, 41-002, was taken into the air by Boeing's chief test pilot Eddie Allen on September 21, 1942, and the second, 41-003, flew nine weeks later. There was a rash of engine failures and fires, some serious; then on February 18, 1943 an engine fire caused the second XB-29 to crash, killing Allen, the crew and nineteen civilian workers. After this tragic major setback, the third XB-29 did not fly until June 1943, but it was actually preceded by the first YB-29. These aircraft, and the largest portion of B-29 production, were built at Boeing, Wichita. Production lines were also set up by Bell at Marietta, near Atlanta, Martin at Omaha, and a new Boeing factory at Renton.

Deliveries of the first B-29s from Wichita began in autumn 1943 followed by Bell and Martin aircraft early the following year. These B-29s were armed with four remote-controlled power turrets on the fuselage, each housing two .50-cal, machine guns, and two more machine guns and a 20mm cannon in the tail turret. The B-29s built at Renton were all designated B-29A, and had a different wing construction, a small reduction in fuel capacity, and had a wingspan of 142° 3° and a wing area of 1,738 square feet.

The first B-29 combat unit was the 58th Bomb Wing (Very Heavy), and its 40th, 444th, 462nd and 468th Groups moved to India in Spring 1944. They began flying the Hump, building up stores of fuel, food, bombs and other supplies at forward bases in China, and on June 5 they flew the first Superfortress mission of the war, against railway targets at Bangkok. There were five operational losses. On June 15 they made a night attack on Yawata, Japan, a bad night for the first three B-29s built at Omaha - one crashed on takeoff, one was shot down over the target, and the third flew into a mountain on the way home. The 58th Wing continued operating from the CBI until March 1945, and among their missions was the longest of the war for the B-29, the 3,950 miles from Trincomalee, Ceylon, to Palembang, Sumatra, in August 1944.

The first B-29 formation appeared over Tokyo in the very early afternoon of November 24, 1944, when Brigadier General "Rosie" O'Donnell, in **Dauntless Dotty**, led his 73rd Wing over the Musashima aircraft factory. That was the beginning of the end. The 73rd Wing, composed of the 497th, 498th, 499th and 500th Bomb Groups had moved into Saipan in the Marianas during the preceding month. The 313th Wing - 6th, 9th, 504th and 505th Groups - moved

Bengal Lancer from the 468th Group, a B-29-30-BW with increased fuel capacity due to the installation of four additional tanks in the center wing section, a modification which began with the B-29-25-BW, B-29-5-BA, B-29A-5-BN and all mainstream Omaha B-29s. India, December 1944. IUSAFI



Arming a 444th Group B-29 at Dudhkundi India The 20mm tail cannon was ordered removed around September 1944, and deleted on the production line in the B-29-55-BW B-29-5-BA B-29-25-MO and B-29A-20-BN. The cannon was heavy, had limited ammunition, a different trajectory and slow rate of fire: its main value was deterrence. indicated by the fact that some crews substituted broomsticks to make the enemy fighters believe it was still there. [Frank Smith1



Later Tail Turret





The B-29-40-BW, exemplified by 42-24612, was the first Wichita block to carry the new four-gun upper forward turret. The Wichita plant completed its first Superfort on April 15, 1943, and the last was delivered in October 1945. Peak production, reached in July 1945, averaged 4.2 aircraft per day. [USAF]

The four-gun top turret introduced on the Wichita B-29-40, Bell B-29-10, Renton B-29A-20, and all but the very early Martin B-29s. One pilot recalls that if it was fired suddenly 'it could scare you half to death', sounding very much like cannon shells hitting the aircraft. (Barry Gilkes)

Bell began producing B-29s in February 1944, and 42-63393, a B-29-10-BA, was their forty-seventh Superfort. The aircraft is equivalent to the Wichita B-29-40 and flew with the 462nd Bomb Group; the name Rush Order was derived from the fact that this aircraft flew its first combat mission just fifteen days after coming off the production line. [USAF]

to Tinian towards the end of 1944. The 314th Wing, with the 19th, 29th, 39th and 330th Groups, joined the 313th on Guam in January and February, 1945. The raids against Japan continued, bloody and costly. On March 4 the first B-29 made an emergency landing on lwo Jima, a volcanic "Godsend" roughly half-way between the targets and the B-29 bases; eventually the lwo Combat Stanion Center handled as many as sixty Superforts a day.

March was a decisive month in another way: General Curtis LeMay was not happy with the performance of the Superfortresses, and his antidote was radical. The B-29s would be stripped of guns and ammunition and carry out low-level, individual night attacks with fire bombs. In the evening of March 9, aircraft from the 19th and 29th Groups and the 73rd and 313th Wings rolled down the runways. Stripped of armament, not needing the fuel required for the normal long climb to 30,000 feet, the B-29s were bloated with fire bombs. The midnight darkness over Tokyo vibrated with the sound of three hundred B-29s coming in at altitudes between 4,900 and 9,200 feet. As the initial fires spread the bombers fanned out, starting new fires which quickly merged with others. The fire raid was eminently successful - nearly sixteen square miles of the city was burned out, over eighty-thousand died. Fighter defense had been weak, but flak damaged forty-two aircraft and was responsible for the total loss of fourteen B-29s.

During April and May yet another wing, the 315th, began arriving on Guam, with the 16th, 331st, 501st and 502nd Groups. They differed from the others









The Martin plant at Omaha began building Superfortresses in January 1944, but production did not reach full swing until the middle of the year. This 462nd Group B-29-0-MO, 42-65252, was taking off for a Hump flight on January 4, 1945, when its electrical system blew out following a sudden surge of power from the generators. The pilot circled the field for an hour while the gear was lowered manually, then brought the giant in with bombs, 800 gallons of gas, and twenty men on board. The B-29 hit hard, bounced, teetered on the main wheels and tail skid, then came down too heavily on the nose wheel. [USAF]

The B-29's four Wright R-3350s gave trouble early in the aircraft's career, but better cooling and improved lubrication were early modifications, and the improved R-3350-41 was fitted on the production line on the B-29-50-BW, B-29-20-BA and B-29A-20-BN. [USAF]

The first YB-29 became the sole XB-39, modified with Allison engines. [Boeing]









Boeing's new plant at Renton began producing B-29As in January 1944 and these differed slightly from the aircraft produced at the other three plants. Miss Judy is a B-29A-35-BN, with the red rudder of the 462nd Bomb Group. [USAF]

Double Exposure, an F-13A-55-BW from the 3rd Photo Recon Squadron. These photo Superforts carried standard armament plus seven cameras, and cost \$400,000 more than their bomber counterparts. [Austrailian War Memorial]





In November 1945 this modified B-29B, 44-84061, the Pacusan Dreamboat, established a world non-stop distance record by flying the 8,198 miles from Guam to Washington, DC. Note the absence of all armament. Even the tail gunner's position has been faired over. [Boeing]

- their B-29Bs, built by Bell, were equipped with the top-secret AN/APQ-T Eagle radar. All other B-29s carried AN/APQ-13 radar, which was a navigational aid by design, although used by crews for night and bad weather bombing. The Eagle radar was developed for bombing, with much greater definition. The 315th's B-29Bs were stripped of all armament except the tail turret, which had its own radar control device, and were specifically intended for the night-bombing role. The eighteen foot Eagle airfoil antenna beneath the fuselage gave these aircraft a distinctive appearance as they gathered at Northwest Field on Guam. Their primary task was the destruction of the Japanese oil industry, and the campaign began on June 26, 1945, with a strike against Usube Oil Refinery.

As the war drew to an end, the Superfortresses dotted Saipan, Tinian and Guam in silver hordes. Japanese cities and factories were burned and destroyed, the waters of the Inland Sea were filled with mines, but still the enemy refused to surrender. Finally the 509th Composite Group, with a squadron of fifteen specially modified Omaha-built B-29s, put an end to the futile resistance with atomic bomb attacks on Hiroshima and Nagasaki on August 6 and August 9, 1945.

When Japan surrendered, some two thousand B-29s had been delivered to the USAAF, and 3,960 were built before production ceased at Renton in May 1946. Along the way there had been a reconnaissance version of the Superfortress, the F-13A, with K-18 and K-22 cameras and extra bomb bay fuel tanks. The first YB-29, 41-36954, had been converted to the XB-39 with Allison

engines. Another became the XB-44, with Pratt & Whitney R-4360 engines. Among the cancelled orders for over 5,000 B-29s was the B-29C, which would have had improved engines, and the B-29D, which was re-designated B-50. in 1946.

Post-war conversions of the B-29 included the XB-29E, converted for fire control tests in 1946, the XB-29H used for armament tests in 1947, the six B-29Fs, winterized for Alaska, and the XB-29G, a jet engine test bed. In 1948 the F-13s became RB-29s, and another recon version, the FB-29J, became RB-29J. The SB-29 was an air sea rescue version, WB-29s were weather reconnaissance aircraft, the VB-29 was a VIP transport, QB-29s were target drones, and the CB-29K was a 1949 cargo version. In November 1947 Boeing had been asked to develop air-to-air refueling methods, and in March 1948 two B-29s proved the theory, using trailing hoses and grappling hooks. The Air Force ordered conversion of seventy-two B-29s as tankers, and six of these KB-29Ms refueled the B-50 Lucky Lady II during the first non-stop around the world flight in February 1949. These aircraft used a hose to transfer fuel. Boeing developed the "Flying Boom" which was a greatly improved transfer method - 116 B-29s were modified at Renton with the new equipment and dubbed KB-29Ps.

When the Korean War broke out, the Superfortresses went into action immediately - the 19th Group flew the first mission of the new war on June 28, 1950. The 22nd, 92nd, 98th and 307th Groups also took part, and the B-29s actually dropped a greater tonnage of bombs in Korea than they had in World War II.

It was on June 21, 1960, that the end finally came, when Major Clarence Rarick of the 6023rd Radar Evaluation Squadron landed B-29 42-65234 on Okinawa, completing the last USAF Superfortress flight.



At the end of February 1945 there was dissatisfaction in LeMay's headquarters with the Navy rescue effort per ditched B-29, which seemed 'ridiculously low'. However, the answer was actually there - only the B-29 had the endurance to search for long hours off the coast of Honshu, and after combat B-29s had proved invaluable, a special dubbed modification. 'Superdumbo', was developed. with additional radio personnel and equipment and droppable gear such as pneumatic rafts, provisions, radios and survival kits. After the war the idea was expanded into the SB-29, carrying an A-3 lifeboat. This aircraft, 44-69971, was one of sixteen such conversions. [USAF/ Menard1

The XB-29G, originally built as a B-29B-55, was a flying test bed for turboiet engines. [Boeing]

In April 1947 the Navy acquired four B-29s and gave them the Bureau Numbers 84028 through 84031; the first two were designated P2B-1 the last two P2B-2. These aircraft were used as mother ships and in anti-submarine tests. [Boeing]









Nose Landing Gear



Originally a B-29B-45-BA, 44-83922 was one of 116 Superfortresses modified and designated KB-29P. The first of these reached Strategic Air Command in March 1950. [Air Force Museum-Boeing]



An illustrious B-29-40-BW was 42-24579, Eddie Allen, carrying the yellow tail stripes of the 45th Squadron, 40th Bomb Group. In eight months this aircraft bombed targets in seven countries until finally salvaged in May 1945 due to battle damage. [USAF]





58th Bomb Wing Kharagpur, India & West Field, Tinian

40th Bomb Group flew first mission June 5, 1944, attacking railroad shops at Bangkok, Thailand. Awarded a Distinguished Unit Citation for the attack on Yawata iron and steel works on August 20, 1944, and a second DUC for attacking naval aircraft factories at Kure, oil storage facilities at Oshima, and the industrial area of Nagoya between May 5 and 14, 1945. A third DUC was given for raids on light metal industries in Osaka on July 24, 1945. The 40th Group squadrons were the 25th, 44th, 45th and 395th, the latter disbanded in October 1944. Overseas bases were Chakulia, India from April 2, 1944 until February 25, 1945, then West Field, Tinian from April 4, 1945 until after the war. The group moved to India under the command of Colonel Leonard F. Harman, succeeded by Colonel William H. Blanchard on August 4, 1944, then Colonel Henry R. Sullivan on February 16, 1945, and finally Colonel William K. Skaer after February 27, 1945.

444th Bomb Group flew first mission against Bangkok, June 5, 1944. Received first Distinguished Unit Citation for the Yawata mission of August 20, 1944, a second for strikes on oil storage facilities at Oshima, an aircraft factory near Kobe, and an incendiary raid on Nagoya between May 10 and 14, 1945. Won third DUC for Osaka mission, July 24, 1945. The squadrons were the 676th, 677th, 678th and 679th, the latter disbanded October 1944. Based at Charra, India from April 11, 1944, then Dudhkundi, India from July 1, 1944 until March 1, 1945. Woved to West Field from April 7, 1945. Commanded by Colonel Alva L. Harvey from August 5, 1943 until he moved up to 58th Wing, his place being taken by Colonel Henry R. Sullivan from April 22, 1945; Colonel James C. Selser took over the group on June 3. 1945.

Joltin' Josie, The Pacific Pioneer arrives on Saipan with General Haywood S. Hansell, heralding the coming of the 73rd Bomb Wing. The aircraft was 42-24614, a B-29-40-BW. While later aircraft had 'No Smoking Within 100 Feet' on their nosewheel doors, Josie had the terse message 'clean your feet'. [Robert Meiborg/ Barry Gilkes]

462nd Bomb Group flew first mission June 5, 1944, to Bangkok. Distinguished Unit Citation for Yawata mission, August 20, 1944, second award for strikes on industrial areas of Tokyo and Yokohama May 23, 25 and 29, 1945, third DUC for daylight attack on aircraft factory at Takarazuka on July 24, 1945. Squadrons were 768th, 769th, 770th and 771st, the latter disbanded October 1944. From April 7, 1944 was based at Piardoba, India until February 26, 1945, then West Field, Tinian, from April 4, 1945. Commanded by Colonel Richard Carmichael from August 26, 1943 until he was shot down during August 20 Yawata mission. when Colonel Alfred F. Kalberer took over.

468th Bomb Group flew first mission Bangkok, June 5, 1944. Distinguished Unit Citation for Yawata daylight mission, August 20, 1944, when the 58th Wing lost fourteen B-29s. Second award for incendiary missions against Tokyo and Yokohama between May 23 and 29, 1945, and third DUC for mission against Takarazuka on July 24, 1945. Squadrons were 792nd, 793rd, 794th and 795th, the latter disbanded in October 1944. The 468th was based at Kharagpur, India from April 13, 1944 until February 24, 1945, then West Field after April 6, 1945. Commanded by Colonel Howard E. Engler from September 8, 1943 until August 3, 1944, when Colonel Ted S. Faulkner took over. Faulkner was lost on the November 5, 1944 Singapore mission, and Colonel James V. Edmundson became the 468th's final commander.



Postville Express, a B-29-5-BW, with the red tail stripes and nose motif of the old 794th Bomb Squadron of the 468th Group. This aircraft went home war-weary at the end of December 1944 after thirteen combat missions and eight transport missions, and was credited with being the first B-29 to drop bombs on Japan. [USAF]



Tail Skid

[Below] The 498th Bomb Group moved into Isley Field, Saipan, and flew practice missions against Truk and Iwo Jima prior to the first Tokyo mission on November 24, 1944. The tail markings of the 73rd Wing were applied to a high degree of uniformity, the square denoting the wing and the letter above it indicating the group - A for the 497th, T for the 498th, V for the 499th and Z for the 500th. Fay, T $_{\rm C} = 26$ is 42-65210, the fourteenth Martin-built B-29, with tail cannon and four-gun upper forward turret, in the process of having her captivating nose art applied. Behind is T $_{\rm C} = 24$, 42-24625, Lady Mary Anna. [Right] Fay was lost on March 24, 1945 during a mission to the Mitsubishi plant at Nagoya - no word was ever heard of her fate. [USAF]



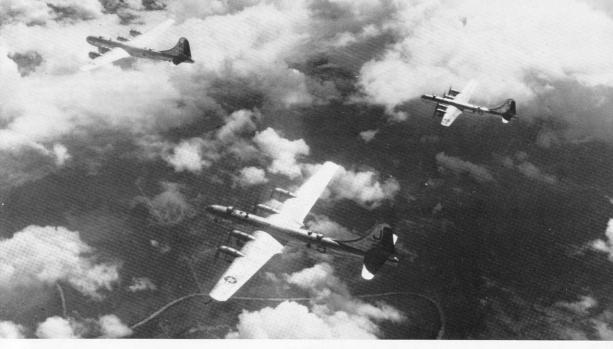




Lady Mary Anna, carrying the insignia of the 874th Squadron, was eventually returned to the States as war weary in July 1945. [Frank Smith]

Eddie Allen [also seen on page 13] was named for the chief test pilot at Boeing who was killed in the crash of the second B-29 prototype. The four camels painted on the nose indicate trips over the Hump. [Boeinq]







The 462nd Bomb Group heads home from Rangoon on November 3, 1944. The aircraft in the foreground is 42-24505, Wild Hair. The 462nd Group used individual aircraft letters, red rudders, and a number to denote the aircraft's squadron. [USAF]





73rd Bomb Wing

Islev Field, Saipan

497th Bomb Group flew its first mission against Japan proper on November 24, 1944. Received a Distinguished Unit Citation on January 27, 1945, when weather obscured the primary target and B-29s withstood heavy attacks to strike Hamamatsu. Second DUC was awarded for strategic attacks between July 26 and August 2, 1945. Squadrons were the 869th, 870th and 871st. Based at Isley Field from October 17, 1944 until November 1945. Commanded by Colonel Stuart P. Wright from April 26, 1944, then Colonel Arnold Johnson from February 26, 1945.

498th Bomb Group flew shakedown missions prior to Tokyo mission of November 24, 1944. Distinguished Unit Citation for attack on Mitsubishi engine plant at Nagoya on December 13, 1944, a second DUC for incendiary attacks on urban industries near Osaka and Kobe during the first week of June, 1945. Squadrons were the 873rd, 874th and 875th. The 498th was based at Isley Field from September 6, 1944 until November 1945. The commanders were Colonel Wiley Ganey from March 14, 1944 and Colonel Donald Saunders from August 10, 1945.

499th Bomb Group flew first mission against Japanese homeland November 24, 1944. Distinguished Unit Citation for mission to Mitsubishi plant at Nagoya, January 23, 1945, second DUC for series of missions against airfields on Kyushu April 22 to 28, 1945. Squadrons were 877th, 878th and 879th. The 499th was based at Isley Field from September 18, 1944. Commanded by Colonel Samuel R. Harris from April 14, 1944, Colonel Morris J. Lee from March 17, 1945, and Lt. Colonel Walter E. Chambers after August 13, 1945.

500th Bomb Group took part in first Tokyo mission on November 24, after shakedown missions. Received Distinguished Unit Citation for attack on Mitsubishi plant at Nagoya on January 23, 1945, second DUC for incendiary strikes on Kyushu, Osaka and Hamamatsu June 15 to 20, 1945. Squadrons were 881st, 882nd and 883rd. Based at Isley Field from September 18, 1944 until October, 1945. Commanded by Colonel Richard T. King from May 5, 1944, until the B-29 in which he was flying was lost during the December 3, 1944 Musashino mission - disabled by gunfire, it dropped down with two engines smoking, and a wing buckled as it disappeared from view. However, King and several of the crew survived as prisoners. Colonel John E. Dougherty commanded the 500th from December 5 until after the war's end.

The cluster of B-29s on Saipan was evidence of the Twentieth Air Force's contempt for what remained for Japanese air power, although air attacks on Saipan were frequent until early 1945. $T\Box$ 22 is 42-24610, Bedroom Eyes, which served with the 498th Group until the end of the war. [USAF]

The 497th's 42-63425 fires up for the first Tokyo mission. Cloud over the target dulled the impact of the mission, but eighty-eight B-29s dumped their bombs on Japan that day and it became only a matter of time until final victory. [USAF]



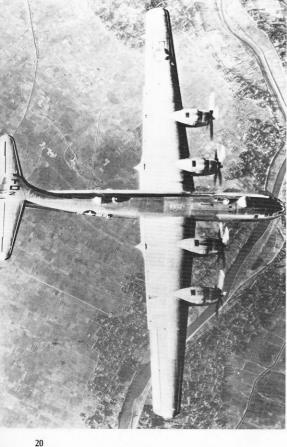


Saipan reverberates to over four hundred Wright R-3350s as the 73rd Wing prepares to strike the Japanese capital for the first time since the Doolittle raiders. [USAF]

November 24, 1944, and the 500th Group's 42-63435 prepares to go to Tokyo. [USAF] $\,$

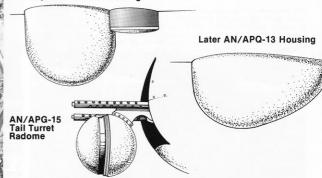
A 499th Group aircraft, bloated with bombs and fuel, leaves Saipan's $8,500\mbox{-}foot\ runway.\ [USAF]$





The Heat's On, 42-24605, a 498th Group original, just west of Tokyo on November 24, 1944. [USAF]

Early AN/APQ-13 Housing



Tokyo Local, 42-24587, an original aircraft from the 500th Group's 882nd Squadron. [USAF]







Procession of 499th Group aircraft on Saipan. Originally a Japanese airfield, Isley was 200 feet wide, 8,500 feet long, and connected to the hardstands by miles of taxiways. Four million cubic yards of coral and rock had been moved to provide the 73rd's base. [USAF]

Armorers lead belted ammunition in to the 497th's 42-24597. [USAF]

The 468th Group's 42-63395 was returning from a raid on Mukden, Manchuria, when it dropped almost straight down from about thirty feet. The B-29 was nearly out of fuel and the pilots' visibility was impaired by ice. The fuselage simply broke in two at the bomb bays, and no one was injured. December 7, 1944. [USAF]







Until certain powers decreed otherwise, B-29 artwork was lavish and spectacular; The Wichita Witch was 42-24654, $T\Box$ 30, destroyed during the last major Japanese air raid on Saipan, Christmas night, 1944. [USAF]

Pilot Ed Campbell mopping up the 73rd Wing's Special Delivery. [USAF]

Ponderous Peg of the 497th Group is towed to her hardstand on Saipan. [USAF]





Some of the finest B-29 nose art was the work of a Marine Corps private named Bud Sprenger, putting the finishing touches on 42-24596, Little Gem at Isley Field. [USMC]

Another Sprenger masterpiece on 42-24626, the 497th Group's Jokers Wild. [USMC]

Major General Curtis LeMay, the man who revolutionized the tactics used by the B-29s. [USAF]



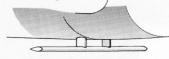


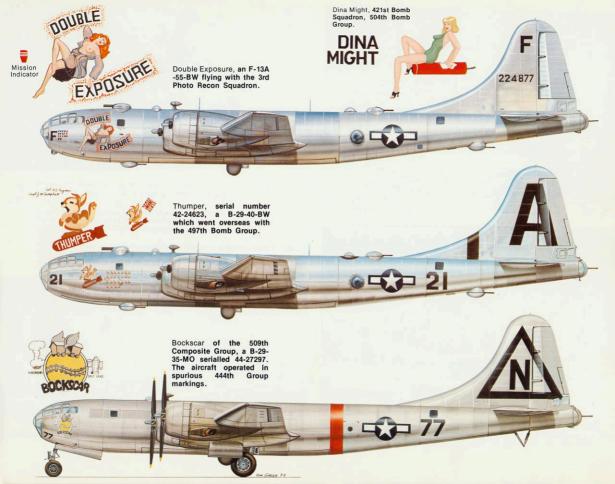


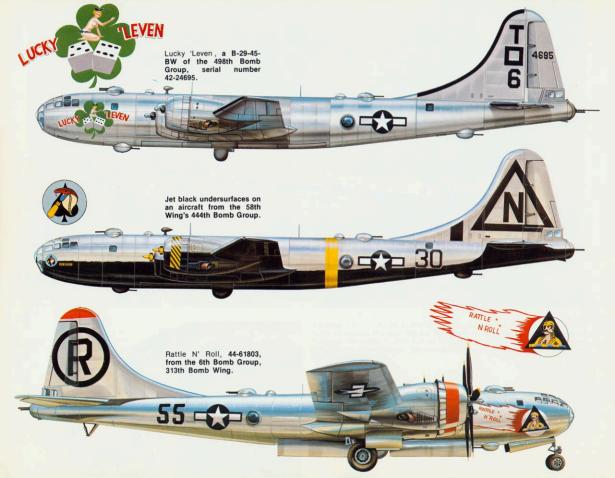


Yokohama Yo-Yo, F-13A 42-24621, flew the second Tokyo recon mission prior to the November 24 strike. The 3rd Squadron was attached to the Twentieth Air Force on November 1, 1944 and on that day one of their aircraft, later named Tokyo Rose, photographed Tokyo and Yokohama from 32,000 feet. [Austrialian War Memorial]

AN/APQ-7 "Eagle" Housing









Poison Ivy from the 3rd Photo Recon Squadron, commanded by Colonel Patrick McCarthy, the 'Mad Mapper.' [Barry Gilkes]

[Right Above & Below] Captain Thomas C. Kendall's Double Exposure, on Morotal in 1945, prior to the application of the 3rd Squadron 'F' markings. The aircraft is an F-134-55-BW. [Australian War Memorial]

The million dollar airplane cracked up on Saipan is a Renton-built F-13A-5-BN from the 3rd Squadron. The ground glass windows cut in the belly are partly visible. [Barry Gilkes]











The 468th Group's 42-63529 approaching the target area at Rangoon on February 11, 1945. This aircraft was shot down over Tokyo during a May night mission. On her tail she carries the 'Billy Mitchell Bomb Group' pennant, awarded to the 468th in August 1944. [USAF]

The 498th Group's 42-24603 over Tanapag Harbor, Saipan. [USAF]





Another casualty of the Singapore flak was this aircraft from the 676th Squadron of the 444th Bomb Group. This is a B-29-25-BA, the first Bell production block to be minus the tail cannon. [USAF]

The 58th Wing put 105 B-29s over Singapore Harbor on February 24, 1945. Only one aircraft was lost, but this 40th Bomb Group aircraft was chewed by flak, although the engine continued to function perfectly all the way home. [USAF]

Battle damaged Coral Queen of the 497th undergoing repairs, surrounded by big pieces and little pieces of other unfortunate B-29s. [USAF]



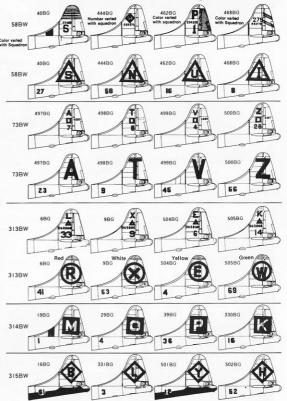


Battlin' Betty III, 44-69772, coming in to Isley Field, now Saipan International Airport. [USAF]

On the night of March 9, 1945 the 73rd Wing put 165 B-29s into the air for the massive Tokyo fire raid. This is T
26, Filthy Fay II from the 498th Group. [USAF]



B-29 Tail Markings



313th Bomb Wing

North Field, Tinian

6th Bomb Group flew first mission against Japan proper on February 19, 1945. Received first Distinguished Unit Citation on May 25, 1945, for a night low altitude attack on Tokyo, second DUG for blockade of Japan by mining harbors in Japan and Korea between July 9 and 19, 1945. Squadrons were 24th, 39th and 40th. Based at North Field from December 28, 1944. Commanded by Colonel Kenneth H. Gibson.

9th Bomb Group flew first mission to Japan February 19, 1945. Distinguished Unit Citation for bombing Kawasaki industrial area on the night of April 15, 1945. Second award for mining operations in the Inland Sea between May 13 and 28, 1945. Squadrons were the 1st, 5th and 99th. Based at North Field from December 28, 1944. Colonel Donald W. Eisenhart was commander from May 1, 1944. succeeded by Colonel Henry C. Huglin on March 6, 1945.

504th Bomb Group first mission against Japan, February 19, 1945. Distinguished Unit Citation for strike on Yokohama industries on May 28, 1945, and again for mining Korean shipping lanes, the Shimonoseki Strait and the Inland Sea between July 27, 1945 and August 14. Squadrons were the 398th, 421st and 680th. Based at North Field from December 23, 1944. Commanded by Colonel James T. Connally from April 6, 1944, Colonel Glen W. Martin after February 6. 1945.

505th Bomb Group received Distinguished Unit Citation for attack on aircraft factory at Ota on February 10, 1945, just four days after its first mission. Second DUC for mining of Shimonoseki Strait and Inland Sea between June 17 and July 1, 1945. Squadrons were 482nd, 483rd and 484th. Based at North Field from December 19, 1944. Commanded by Colonel Robert A. Ping May 3, 1944 until Lt. Colonel Charles M. Eisenhart took over on July 1, 1945.

509th Composite Group joined the 313th Wing's B-29s to attack Japan July 20, 1945. The fifteen specially modified Superfortresses were from the 393rd Squadron. Based at North Field from May 29, 1945, and commanded by Colonel Paul W. Tibbetts. Jr.

Iwo could be dangerous with cripples staggering in one after another. The brakes on this B-29 locked and it swerved through the flight line, demolishing four Mustangs. All the crew escaped, although two were hospitalized with burns. The man in the foregound is ducking exploding ammunition. [USAF]

With Iwo Jima fogged in, the crew of this 6th Group aircraft had little choice. They ditched as close to the shore as they could and swam the rest of the way. [USAF]









The lucky crew pose by the crumpled nose of their B-29. [Porada via Earl]

Coming back from Tokyo with two engines out on one side, this B-29 from the 500th's 881st Squadron made it to Saipan - 1500 miles over water through rough weather and darkness. Then a runaway prop severed the fuselage and the nose sheared off completely. Pilots were Captain James Pearson and Lleutenant Edward Porada, [third from left and second from right, standing]. [Ed Porada via John Earl]

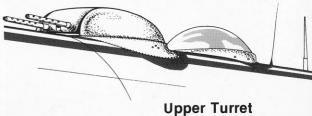
The 499th Group's 42-63447 did not quite make it to Iwo. [USAF]







These two 6th Bomb Group aircraft, The Cultured Vulture, 42-24901, and Flak Alley Sally, sought refuge on Iwo Jima in March, 1945. They both carry the early 313th Wing triangle marking and group letter 'L'. [USAF/USMC]







This 497th Group B-29-55-BW got into trouble before she was even properly marked, and crashlanded on Iwo in March 1945. [USAF]

The 468th Bomb Group lined up prior to the March 17, 1945 Rangoon mission. [USAF]

A 500th Group aircraft, framed by a partly completed portable hangar, clearly shows the high visibility of the twelve foot letters which identified 73rd Wing aircraft after April 1945. [USAF]



314th Bomb Wing

North Field, Guam

19th Bomb Group flew first mission against Japanese home islands during Tokyo strike of February 25, 1945. Awarded first Distinguished Unit Citation for low altitude incendiary attacks on Tokyo, Nagoya, Kobe and Osaka between March 9 and 19, 1945, second for attack on Kobe industries on June 5, 1945. Squadrons were 28th, 30th and 93rd. Based at North Field from January 16, 1945, and commanded by Colonel John A. Roberts, Jr.

29th Bomb Group first mission against Japan flown February 25, 1945. Received Distinguished Unit Citation for attack on Omura airfield on March 21, 1945, and a second for strikes on industrial targets at Shizuoka, Mitsubishi plant at Tamashima and Chigusa arsenal at Nagoya between June 19 and 26, 1945. The squadrons were 6th, 43rd and 52nd. Based at North Field from January 17, 1945. Commanded by Colonel Carl R. Storrie from May 28, 1944, Colonel Robert L. Mason after July 23, 1945.

39th Bomb Group flew first Japan mission April 12, 1945, striking the Hodogaya chemical plant at Koriyama. First Distinguished Unit Citation for a strike against Otake oil refinery May 10, 1945, second for bombing industrial and dock areas of Yokohama and manufacturing districts of Tokyo between May 23 and 29, 1945. Squadrons were 60th, 61st and 62nd. Based at North Field from February 18, 1945. Commanded by Colonel John G. Fowler from February 22, 1945, Colonel George W. Mundy from March 16, 1945, and Colonel James E. Roberts from August 16, 1945.

330th Bomb Group flew first mission April 12, 1945, attacking Hodogaya plant. Won Distinguished Unit Citation for incendiary raids on industry in Tokushima and Gifu and Kofu hydro-electric power center between July 3 and 9, 1945. Second DUC for strike on Nakajima-Musashino plant near Tokyo on August 8, 1945. Squadrons were 457th, 458th and 459th. Based at North Field from February 18, 1945. Commanded by Colonel Douglas C. Polhamus.

The 39th Bomb Group came to North Field on Guam and flew its first combat mission to Maug, in the northern Marianas, early in April 1945. [Barry Gilkes]





[Above & Below] Removing old markings and painting new ones on B-29s was not an overnight job, as evidenced by this crash-landed 500th Group aircraft on lwo Jima. The tall '2' has only been applied to one side of the tail, and the old Z markings are still faintly visible. [USAF]





Colonel Carl Storrie's 29th Bomb Group first struck Japan on February 25, 1945. The Medal of Honor awarded to 'Red' Erwin was the only such award made to a B-29 crewman during World War II. [USAF]

With a 'buddy' for company, a 29th Group B-29 with an engine out heads for Iwo. [USAF]



Red Erwin

It was Thursday, April 12, 1945 and the day's target was a rough one: Koriyama. This was the first time the B-29s had been sent to this chemical plant in the mountains northeast of Tokyo. It was also the deepest penetration of Japan by Marianas-based bombers to that date. Defended by heavy flak, and probably fighters, this cluster of small factories would call for a lot precision flying.

Major George Simeral's Superfortress, the City of Los Angeles, was the lead plane of the 52nd Squadron, 29th Bomb Group. In addition to his regular crew, he had on board Colonel Eugene Strouse, the squadron commander.

riding along as an observer.

As the shores of Guam fell away, Staff Sergeant Henry Erwin settled in as best he could for the duration of his eleventh mission as a B-29 radio operator; one part of an earlier mission, an eight minute flight through what seemed a solid wall of anti-aircraft fire, never completely left his mind, and he found it impossible to really relax like some people could. By the time he had made his final radio checks, the City of Los Angeles was less than two hundred miles from its destination. As squadron lead, it was the aircraft around which the other B-29s of the 52nd Squadron would form their tighter formation at the Initial Point. At the IP it was "Red" Erwin's duty to drop parachute flares and a phosphorous bomb indicating the assembly point for the other aircraft. So he removed his earphones, pulled himself to his feet and got ready.

The phosphorous smoke bombs were thick canisters weighing about twenty pounds, with a six-second delayed action fuse which would allow them to fall some three hundred feet before detonating. The device was literally dropped through a circular release pipe near the bomb bay.

As Erwin stood up he saw something through the small square window at his side. "Fighters", he said, half to himself. A yellowish twin-engined Nick was coming in on their right, shooting into the next four ship echelon of B-29s. The gunners had already seen it, and four Jacks to the left as well.

The B-29s held their level course as the fighters snapped at them. Evasive action was useless anyway. After the initial moment of attack, Erwin again went about his official duty, the signals. By now they were over the Japanese coast, and the first bursts of flak came up to greet them. The City shuddered once, and Erwin fell to the floor, swearing to himself. He got up, got his flares and the phosphorous bomb and stood beside the release pipe, waiting for the drop signal from the pilot. Off to the right a B-29 was trailing a thick stream of smoke, and seemed motionless in the clear, bright sky. Then the giant began to drift downwards, banking on its flak-damaged right wing. As its vast silver underside slowly revealed itself before his eyes, Erwin could see the flames streaming back into the smoke. The four bomb bay doors opened, and the jettisoned bundles of incendiaries tumbled out as the plane turned, straightened up, and began the lonely dash to Iwo Jima.

Simeral raised his hand and looked back from his seat at Erwin. The sergeant dropped the colored parachute flares through the pipe. As they exploded, the eyes of the pilots of the other B-29s turned toward the lead ship, awaiting the phosphorous signal. Erwin set the fuse, held the bomb over the release pipe, and let it slide through his fingers. The device clattered down the pipe, but did not fall through the release gate at the bottom - the flap must

have jammed after the last flare went through. It bounced momentarily, then exploded. A stream of searing flame shot from the tube into Erwin's face. The bomb flew back up the tube, a deadly fireball burning at 1300 degrees. Now it had happened. Crews had talked of what might happen if something went wrong with that damned release tube. With three tons of incendiaries in the nearby bomb bay it was a safe bet that a whole four-plane echelon would go up if one plane's bomb load exploded. And now it had happened.

The blinding fireball zipped through the B-29 like a giant, slow motion incendiary bullet. Hitting the roof, it bounced back, its white heat smothering Erwin. His nose was already burned off, most of his right ear, and the whole top half of his body was charred. He fell backward, his scorched arms flailing. his mind a sea of confusion and terrible, unbearable pain. The bomb at last came to rest on the floor of the aircraft, burning and sputtering, a few feet from the bomb bay. One of the gunners, Sergeant M.P. Curphey, thought maybe he could smother it with parachute packs and let it burn its way through the floor. As he reached for the chutes he became aware that his plan was no use. The bombs were too close, and the thick smoke was choking everyone in the pressurized bomber. Erwin somehow managed to get up from the floor, his mind deadened and hazy. Almost blind, his eyes a mass of blisters, he staggered toward the glowing bomb. He was nearly there when the nose of the aircraft suddenly dipped, throwing him sideways into his radio equipment. Up front Simeral and the co-pilot were choking from the thick smoke which blanketed their cabin. The City was out of control, falling at a sixty degree angle. Colonel Strouse, who had been looking over Simeral's shoulder for most of the flight, was thrown into the tip of the nose with the bombardier. Now only 700 feet from the ground. Simeral couldn't jettison the bombs because of the blast. Cursing wildly, he fought to regain control of the airplane. As he struggled with the controls, Erwin had managed to locate the bomb with his fingers. The clothing on the upper half of his body was all but gone, and the skin was burning as he lifted the fireball in his hand. Slowly, laboriously. Erwin edged toward the nose of the plane, away from the bomb bay. Crying, coughing, he held the phosphorous bomb as his hand and wrist burnt to the bone.

Simeral screamed: "Get it out the window!"

The trudging, burning figure fought his way through the equipment toward them. His trouser, his shoes, his whole body was afire. "Open the window" he cried, bumping into the co-pilot, who was already pointing to the window. He reached for the bomb himself, but somehow Erwin found the opening, heaved the bomb through it, then collapsed, his fifteen second ordeal over.

The aircraft was down around ihree hundred feet, and Simeral, all thoughts of target, mission, enemy gone from his mind, levelled off, gained altitude and turned the aircraft around and dumped the bomb load as he raced for Iwo Jima. He and the crew knew Erwin must die, but they had to try. His body was sprayed with foam until they were sure all the fires were out, and Curphey gave him a shot of morphine. Erwin just lay there, groaning incomprehensibly, then screaming, as veils of consciousness passed over his brain. One of the crew got the radio working and sent a Mayday signal to Iwo. Erwin was the only crew member with any emergency medical training, and while Simeral and the others knew he needed blood plasma, none of them knew exactly how to administer it. Then Erwin stopped shreiking, as his tortured mind somehow adjusted and he became conscious. He could just manage to speak, very



With an engine streaming smoke, this 29th Group B-29 holds formation. Bailout over Japan was the worst of the alternatives. Primary bailout procedure on a Superfortress was for all crew in the forward compartment to jump through the nose wheel well, all crew in the rear compartment through the rear bomb bay, except the radar operator who used the rear entrance door. The tail gunner had his own escape hatch in his compartment. [USAF]

The majesty of the B-29; a 29th Group lead ship takes to the air from Iwo Jima. [USAF]







Danny Mite, 44-69777 of the 498th, went down after losing two engines over Tokyo, May 24, 1981. The group lost four B -298 on this mission - the other three, Filthy Fay III, Antoinette and T□46, were simply never heard of again. [R.W. Harrison]

The 29th Group's cramped quarters at North Field on Guam, home of General Thomas Power's 314th Wing. [USAF]

North Field, Guam, and the 39th Group's Censored swings onto the taxi strip at the head of a procession of fully-loaded B-29s. [Boeing]



slowly. Lying there, he told the crew how to administer the plasma, followed by more morphine. Then he listened to his friends' efforts to convince him he would be alright. For the nearly two hours remaining in the flight to lwo Jima, Erwin was not once granted the relief of unconsciousness. He just stared at the ceiling above him.

When the City reached Iwo, Simeral raced straight in, slammed the B-29 down and braked to a shuddering halt. Stretcher bearers scurried into the aircraft and carried Erwin out. With the crew riding along, they raced him to the hospital.

For four days Erwin was subjected to transfusions, skin grafts, internal surgery and injection after injection. Then he was flown to the larger hospital back on Guam, and slowly his recovery began.

Before leaving Iwo, the twenty-three year old sergeant, encased in bandages from his head to his feet, was presented with the Congressional Medal of Honor by General LeMay, who thought it necessary to repeat the last line of the citation. "Above and beyond the call of duty".

lwo Jima, and B-29s from at least seven different groups gleam in the late afternoon sun. $\left[\text{USAF} \right]$

The 444th Group moved to West Field, Tinian, early in April 1945. With four 8,500 foot runways, Tinian was the largest and busiest airfield in the world. At the head of this lineup is Airborn, a veteran of many CBI missions. IUSAFI







The 468th Group's first mission from the Marianas was flown on May 11, 1945, to Nagoya. [USAF]

Forever Amber of the 6th Group was shot up badly during the fire bomb mission to Osaka on the night of June 5, 1945. During the bomb run the B-29 was caught in a web of radar guided searchlights, and flak tore through the bomb bay. The direct hit killed the radar operator, wounded two of the gunners and blew an arm off the third - although the radio operator tried to save him with a direct blood transfusion from the pilot's arm, he died later. The aircraft struggled back to Iwo, but would never fly again. The engines in the foreground were a prime source of spare parts, as was the hulk of Forever Amber. [USAF]



A 313th Wing Superfortress in trouble over Osaka. [Barry Gilkes]





Loaded Dice and other B-29s from the 16th Bomb Group, part of General Frank Armstrong's 315th Wing. Stripped of all but the tail armament and equipped with top-secret radar, these aircraft began operations against the Japanese home islands in June 1945. [USAF]

The 501st Bomb Group was selected to provide an aircraft to be dedicated to Admiral Chester Nimitz, and the presentation was made by General 'Hap' Arnold at Northwest Field, Guam on June 15, 1945. The AN/APQ-7 Eagle antenna is just visible under the engine. [Barry Gilkes]

315th Bomb Wing

Northwest Field, Guam

16th Bomb Group flew first mission against Japanese home islands on June 26, 1945. Received a Distinguished Unit Citation for unescorted missions against an oil refinery at Shimotsu, Mitsubishi refinery and oil installations at Kawasaki, and coal liquefaction plants at Ube between July 29 and August 6, 1945. Squadrons were the 15th, 16th and 17th. Based at Northwest Field from April 14, 1945. Commanded by Colonel Samuel C. Gurney from July 11, 1944 and Lt. Colonel Andre F. Castellotti from July 11, 1945.

331st Bomb Group flew first Japan mission July 9, 1945. Won Distinguished Unit Citation for attacks in bad weather, fighters and heavy flak against Ube, Shimotsu and Kawasaki July 22 to 29, 1945. Squadrons were 355th, 356th and 357th. Based at Northwest Field from May 12, 1945. Commanded by Colonel James N. Pevton.

501st Bomb Group flew first mission against Japan proper on June 27, 1945. Received Distinguished Unit Citation for attacks on Maruzen oil refinery at Yokkaichi and petroleum center at Kawasaki between July 6 and 13, 1945. Squadrons were the 21st, 41st and 485th. Based at Northwest Field from April 14, 1945. Commanded by Colonel Boyd Hubbard.

502nd Bomb Group flew its first mission to Japanese home islands on July 15, 1945. Won Distinguished Unit Citation for strikes on coal liquefaction plant at Ube, tank farm at Amagasaki, Nippon oil refinery at Tsuchizaki between August 5 and 15, 1945. Squadrons were 402nd, 411th and 430th. Based at Northwest Field from May 12, 1945. Commanded by Colonel Kenneth O. Sanborn.





The famous Thumper, back home after 44 missions with the 497th Bomb Group. [Air Force Museum]



A 444th Group B-29 comes in to lwo in July 1945; while the 497th Group aircraft in the foreground has fully revised markings, the other aircraft still carries its old black diamond marking. (USAF)

This is what officialdom did to B-29 artwork in the 73rd Wing, Gravel Gertie, a weteran of forty-nine mission with the 500th Group, bears the yellow barb and black winged ball which was deemed preferable. August 6, 1945. [USAF]

The 313th Wing, and particularly the 505th Group, was assigned the task of mining Japanese sea lanes, and began on the night of March 27, 1945. By the end of the war this operation was credited with the destruction or damage of about one million tons of enemy shipping. The aircraft in the foreground is from the 505th, in the background a wingmate from the 9th Group. [Frank Smith]

The 6th Bomb Group's Look Homeward Angel was the first B-29 to land on Okinawa's Bolo Strip, after flak damaged her over Japan on August 11, 1945. [USAF]







Twenty Thousand Tons of TNT...

High over the sprawling Japanese city of Hiroshima a B-29-35-MO cruised above the scattered clouds, uninterrupted in its mission of surveillance. At 7:25 a.m. Major Claude Eatherly, pilot of the Straight Flush, sent a brief radio message: "Cloud cover less than 3/10ths at all altitudes. Advice: Bomb Primary." It was the message that destroyed Hiroshima.

The atomic bomb was the end result of six years of planning and research that began in August 1939, when Doctor Albert Einstein wrote to President Roosevelt discussing the possibility of constructing a tremendously powerful bomb from uranium. Early in 1943 laboratory work began. Major General Leslie Groves, director of the "Manhattan Engineer District", as those in charge of the development of the bomb were known, notified AAF General "Hap" Arnold that the new B-29 would be the aircraft most suited to delivering the bombs.

In mid-1944, organization of the special force began. To command the unit, Arnold selected Colonel Paul Tibbets, Jr., a twenty-nine year old pilot who had flown B-17s in Europe and North Africa, and who was currently testing B-29s in Florida.

Tibbets alone knew the purpose and details of the program. His men knew they would be operating with a special kind of bomb, but had no idea of its destructive capacity. For the bulk of the combat crews the 393rd Bomb Squadron, already training in Nebraska, was selected. This was the core of a totally self-sufficient combat unit grouped together as the 509th Composite Group on December 17, 1944.

In May 1945, after extensive training with dummy bombs in Utah, they received their modified Martin B-29s, among the first with reversible pitch propellers. On June 11 the combat crews began checking in at their overseas base, North Field on Tinian, where the 509th was attached to the 313th Wing 313th Wing.

After three weeks of combat training, the 509th took part in strikes on Japan. Their results were good, a reflection of the exceptionally high degree of training. The usual pilot and bombardier made twenty practice visual bombing runs - the 509th's rule was one thousand. The 509th did not lose a

Enola Gay, 44-86292, with false 6th Group markings, from Colonel Paul Tibbets' 509th Composite Group. [USAF]

man or an aircraft in training or combat operations, and their bombardiers could drop a bomb within a 500 foot circle from 30,000 feet.

As July came to an end, the 509th's B-29s were re-marked with a variety of B-29 Wing markings...Enola Gay with the 6th Group's insignia, Straight Flush with the 444th's, Top Secret with the 497th's, and so on.

Early on August 1, in a controlled-temperature building on Tinian, the assembly of the first atomic bomb - known as "Little Boy" - began. Its operation was relatively simple and foolproof; Uranium 235 at each end of a long gun barrel, brought together by a proximity fuse. It was to be dropped on August 3, or as soon after as weather conditions permitted. Enola Gay would carry it.

Ón August 2 President Truman made the decision to use the bomb against Japan. The date for the attack was set at August 6. The briefing of the crews began on August 4, with films of the successful test explosion at Alamogordo, New Mexico, in July. No mention was made of an "atomic" device, simply a bomb with an explosive force equivalent to 20,000 tons of TNT. Pre-mission instructions were given, with special attention to avoiding smoke clouds and the critical distance the plane should be from the target when the bomb was detonated. The crews were then issued protective glasses.

On August 5 Tibbets' aircraft was taxied to the building where the bomb had been stored. The five tons of destructive power were jacked up into the bomb bay, the doors closed, and Enola Gay left under guard. At midnight the fliers assembled for a weather briefing. It seemed August 6 would be a good day, with high visibility and little cloud. Shortly after, Eatherly taxied Straight Flush down North Field's floodlit runway and pointed her toward Hiroshima, 1600 miles away. Simultaneously, Jabbitt III and Full House were heading for the secondary targets. Kokura and Nacasaki.

As soon as Eatherly sent his message confirming good conditions at Hiroshima, he headed back for Tinian, passing the three-plane bombing formation on the way.

Tibbets lifted Enola Gay off at 2:45. Two minutes later the camera plane,

Necessary Evil, piloted by Major George Marquardt, followed, then Major Charles Sweeney's The Great Artiste, loaded with intricate scientific instruments.

As the aircraft levelled out over the Pacific, Captain William Parsons and tt. Morris Jeppson armed the bomb. While conventional bombs were always armed on the ground, it was felt this added precaution should be taken with this bomb. The three aircraft met over barren Iwo Jima, where a seventh 509th B-29, Top Secret, waited to take Enola Gay's place if anything had gone wrong mechanically. The three B-29s began the climb to bombing altitude, and the crew members settled down to the long flight ahead of them.

As Japan drew closer, Tibbets made his way through the aircraft, giving final instructions, and near the enemy coast Captain Parsons took a final look at the bomb. Everthing was OK.

The bomb run began twenty-five miles from Hiroshima, Enola Gay closing in at 328 miles per hour. Twelve miles from the target the bombardier took over. He could see Hiroshima, 31,600 feet below him. At 9.15 a.m., August 6, he released the bomb. The airmen pulled their goggles over their eyes - a few, including Tibbets, forqot to - and waited.

Less than a minute later, the bomb exploded 2,000 feet over Hiroshima. Tibbets had alfready put Enola Gay into a violent 150 degree turn, rehearsed so many times, and was twelve miles from the target.

On the ground, the eighth largest city in Japan was beginning a new day. There had been an air raid alert about an hour before, but it was only one B-29, and the Japanese were used to the recon flights over their country. Hiroshima had received little attention from the Twentieth Air Force, not like Tokyo and

Immediatley after the war the B-29s spent a couple of weeks supplying American prisoners in Japan. The 6th Group's Earthquake McGoon, 42-24866, is loading up at Sajoan in late August. [Raw Pritchard]

Enola Gay, repainted with the 509th's individual marking, a black arrowhead in the 313th Wing's black circle. [USAF]

Enola Gay returns from Hiroshima after her momentous mission. The B-29s in the 509th Group were all built at Omaha and carried no armament other than the tail turret. [USAF]

Also carrying 6th Group markings, the 509th's number 90 displays the clean, perfect lines of the stripped down, specially equipped atom bombers. [Frank Smith]



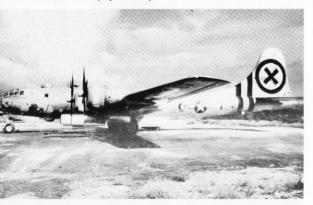






Reamatroid, a B-29-55-BW, 44-69672, flew with the 6th Bomb Group. This photo was taken just after the end of hostilities, and the aircraft has been stripped of armament and carries the words 'PW SUPPLIES' under the wings. [Ray Pritchard]

A lead plane from the 9th Group, with black and yellow fuselage bands and white cowl bands and tail tip. The aircraft is named The Spearhead and has nose art nobody could object to — the Marines raising the flag on Iwo Jima's Mount Suribachi. [Ray Pritchard]



Yokohama, which had been gutted by massive fire bombing. The 245,000 residents thought they had been spared, but could not understand why. They did not know they had been "reserved" for the atomic bomb. Few would have heard the Enola Gay as it passed overhead. Then the whole sky was filled with a blinding light. Walls crumbled and glass whistled through the air. Fires began everywhere at once, creating a terrible firewind that raged through the city. More than four and a half square miles of Hiroshima were completely destroyed, and a cloud of smoke and dust darkened the city.

When the bomb exploded the interior of Enola Gay was completely illuminated by a ball of fire, about 8,000 feet in diameter. The huge atomic cloud rose to 20,000 feet in the first 60 seconds, and eventually reached 50,000 feet. Shock waves radiated from the core, reaching out and buffeting the B-29. Tibbets turned the aircraft to look at the target, then headed back for Tinian, instructing his tail gunner to watch the cloud and let him know when it disappeared from view. Three hundred and sixty-three miles from Hiroshina it was fading from sight. Six years, two billion dollars, one bomb- an immense operation which, with a similar attack on Nagasaki three days later, ended the war.

Operation Crossroads was the first atomic test series after the war. This B-29-40-MO, 44-27354, is Dave's Dream, on the way to Bikini on July 1, 1946. [USAF]





The old 19th Bomb Group moved to Kadena, Okinawa in July 1950, and flew against the new enemy until 1953. This aircraft is Never Hoppen, from the 28th Bomb Squadron. [Boeing]

B-29 Production

The 3.960 Superfortresses were built in five factories: Boeing's Seattle plant produced the three XB-29s, Boeing produced another 1,634 in Wichita. Kansas, Bell built 668 at Atlanta, Georgia, Martin produced 536 at Omaha, Nebraska, and Boeing's Renton, Washington plant built the other 1,119. A few notes regarding B-29 serials are necessary; the Boeing Wichita factory produced 240 of the initial production B-29s, the serial range being 42-6205 through 42-6454, except for 42-6222, 42-6224, 42-6233, 42-6235 and 42-6243 (Bell's first five Superforts), and 42-6229, 42-6230, 42-6231, 42-6232 and 42-6237 (Martin's first five). The other broad serial ranges were Boeing Wichita 42-24420/42-24919, 44-69655/44-70154, 44-87584/44-87783 and 45-21693/ 45-21872 Bell Atlanta 42-63352/42-63751, 44-83890/44-84139, 44-84141/ 44-84149, plus four stragglers - 44-84151, 52, 55 and 56 Martin Omaha 42-65202/42-65313, 42-65315/42-65401, 44-27259/44-27358, 44-86473 Boeing Renton 42-93824/42-94123, 44-61510/44-62328, The audacious use of B-29s stripped of all but the tail armament led to a factory version of the 'stripped' Superfortress, built by Bell as the B-29B. The initial batches were built in normal 'blocks', but during the B-29-40-BA/B-29B-40-BA batch the practice of alternating serials for the two version began. With a couple of exceptions, the serials alternated between even and odd numbers for the fully-armed B-29s and the stripped B-29Bs.

41-36967

BOEING	WICHITA
YB-29-BV	V

B-29-1-BW	42-6205	42-6254*
B-29-5-BW	42-6255	42-6304
B-29-10-BW	42-6305	42-6354
B-29-15-BW	42-6355	42-6404
B-29-20-BW	42-6405	42-6454
B-29-25-BW	42-24420	42-24469
B-29-30-BW	42-24470	42-24519
B-29-35-BW	42-24520	42-24569
B-29-40-BW	42-24570	42-24669
B-29-45-BW	42-24670	42-24769
B-29-50-BW	42-24770	42-24869
B-29-55-BW	42-24870	42-24919
	44-69655	44-69704
B-29-60-BW	44-69705	44-69804
B-29-65-BW	44-69805	44-69904
B-29-70-BW	44-69905	44-70004
B-29-75-BW	44-70005	44-70104
B-29-80-BW	44-70105	44-70154
	44-87584	44-87633
B-29-85-BW	44-87634	44-87683
B-29-86-BW	44-87684	44-87733
B-29-90-BW	44-87734	44-87783
	*See intro	ductory notes
	45-21693	45-21742

41-36954

3-29-95-BW	45-21758	45-21792
	45-21813	45-21842
3-29-96-BW	45-21793	45-21812
3-29-97-BW	45-21743	45-21757
3-29-100-BW	45-21843	45-21872

BELL ATLANTA

В

В

B

P

BELL ATLA	NTA				
B-29-1-BA	42-6222,	6224,	6233,	6235,	6243
		42-6335	2	42-	63365
B-29-5-BA		42-6336	66	42-	63381
B-29-10-BA		42-6338	32	42-	63401
B-29-15-BA		42-6340)2	42-	63451
B-29-20-BA		42-6345	52	42-	63501
B-29-25-BA		42-6350)2	42-	63551
B-29-30-BA		42-6355	52	42-	63580
B-29B-30-B	A	42-6358	31	42-	63621
B-29B-35-B	A	42-6362	22	42-	63691



B-29B-40-BA serials were 42-63692 through 42-63751 except for 3737, 3744, 3750, which were all B-29-40s, and 44-83890 through 44-83895 except for 3894. The B-29B-45-BA serials were 44-83896 through 44-83943 except for sixteen aircraft - 3900, 3904, 3908, 3911, 3914, 3917, 3920, 3923, 3926, 3928, 3930, 3932, 3934, 3936, 3938. 3940 - all of which were B-29-45s. Between 44-83944 and 44-83958, all odd numbers were B-29-45-BA, all even numbers were B-29B-45, 44-83959 and 44-83961 were B-29B-45s. 44-83960 and 44-83962 were B-29-45-BAs. Between 44-83963 and 44-84008, the even numbers were B-29-50-BA, the odd numbers B-29B-50-BA. From 44-84009 to 44-84056, the even numbers were B-29-55-BA, the odds B-29B-55-BA. The even numbers between 44-84057 and 44-84103 were B-29-60-BAs, the **odd** numbers B-29B-60-BA. Finally, the B-29-65-BAs carried the **even** numbers betwen 44-84104 and 44-84152, and the B-29B-65-BAs the **odd** numbers. 44-84155 was a B-29B-65, and 44-84156 was a B-29-65, the final two Bell Superfortresses.

	OMA	

B-29-1-MO	42-6229,	6230,	6231,	6232,	6237
		42-652	202	42-	-65204
B-29-5-MO		42-652	05	42-	-65211
B-29-10-MO		42-652	12	42-	-65219
B-29-15-MO		42-652	20	42-	-65235
B-29-20-MO		42-652	36	42-	-65263
B-29-25-MO		42-652	64	42-	-65313
B-29-30-MO		42-653	15	42-	-65383
B-29-35-MO		42-653	84	42-	-65401
		44-272	59	44-	-27325
B-29-40-MO		44-273	26	44-	-27358
		44-862	42	44-	-86276
B-29-45-MO		44-862	77	44-	-86315
B-29-50-MO		44-863	16	44-	-86370
B-29-55-MO		44-863	71	44-	86425
B-29-60-MO		44-864	26	44-	86473

POEING PENTON

BOEING RENTON	1	
B-29A-1-BN	42-93824	42-93843
B-29A-5-BN	42-93844	42-93873
B-29A-10-BN	42-93874	42-93923
B-29A-15-BN	42-93924	42-93973
B-29A-20-BN	42-93974	42-94023
B-29A-25-BN	42-94024	42-94073
B-29A-30-BN	42-94074	42-94123
B-29A-35-BN	44-61510	44-61609
B-29A-40-BN	44-61610	44-61709
B-29A-45-BN	44-61710	44-61809
B-29A-50-BN	44-61810	44-61909
B-29A-55-BN	44-61910	44-62009
B-29A-60-BN	44-62010	44-62109
B-29A-65-BN	44-62110	44-62209
B-29A-70-BN	44-62210	44-62309
B-29A-75-BN	44-62310	44-62328
There is some	disagreement	regarding the

number of B-29s actually produced. Some normally reliable sources quote a total of 3,970. This listing has been based on a comprehensive breakdown by John T. Wible published in the AAHS Journal. It is interesting to note that only Bell delivered a 'combat ready' B-29 - the other plants sent their finished product to modification centers where alterations were carried out until they could be incorporated at the start of the production line



The Royal Air Force received eighty-seven B-29s, which they called "Washingtons", the first reaching England in March 1950. The aircraft served with eight squadrons - this one, WW353, was passed to the Australians in September 1952 for trials. [Frank Smith]

B-29s in storage at Davis Monthan. While many are newer aircraft, one is 42-6265, a B-29-5-BW which the 468th Group named Raiden Maiden, and which took part in the first B-29 mission of the war on June 5, 1944. [USAF]



