

BOEING

B-29

SUPERFORTRESS

JAMES H. LEVI

101 CEDAR ST.

RECEIVED CENTRE 59, MASS.

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JAMES H. LEVI
101 CEDAR ST.
NEWTON CENTRE 59, MASS.

BOEING B-29 SUPERFORTRESS

one of a series of booklets in

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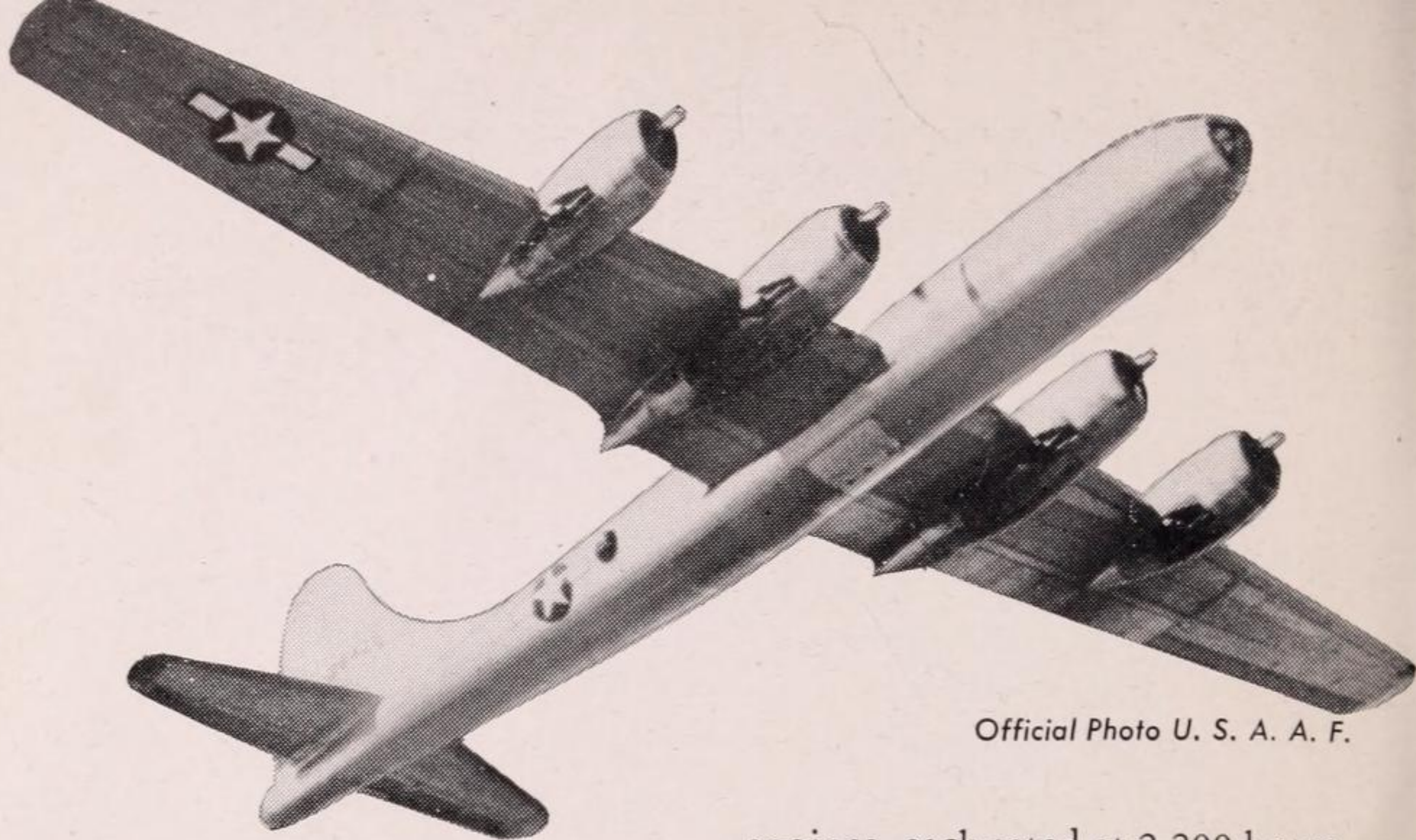
Boeing Photo

Famous B-29 has remote control turrets, pressurized cabin, long range, big bomb load

WORLD'S GREATEST BOMBER

In shining, silver fleets, full of grace yet bearing deadly loads, the B-29's brought the Pacific War straight home to Japan. In mission after mission—gleaming beneath the sun or winging silently through

a moonless night—the war birds came. And with each coming, the strength of the enemy was drained, his power to resist made weaker. Then the epoch-making Atomic Bomb! Again the B-29, chosen on



Official Photo U. S. A. A. F.

the basis of past performance, was the carrier, and with two single bombs brought an end to the Pacific War.

This, then, is the Superfortress B-29—probably the most widely hailed of the military aircraft to come out of World War II. Boeing-designed and Boeing-developed, the B-29 is a midwing, four-engine, all-metal monoplane with a tricycle landing gear. Half again as large as the Boeing Flying Fortress, its gross weight is twice as great and its speed is substantially greater, comparing favorably with the latest and fastest of the world's pursuit and fighter planes.

The mammoth bomber is powered with four Wright Cyclone

engines, each rated at 2,200 horsepower for takeoff and 2,000 normal horsepower, nearly twice the power of the Flying Fortress.

These engines turn, through reduction gears, the largest propellers in use on airplanes today. They are four-blade Hamilton Standard propellers with a diameter of 16 feet, 7 inches.

The reduction gears, built especially for this bomber and of the lowest ratio ever used on an airplane, turn the propellers but 35/100ths times as fast as the R.P.M. of the engines. This great reduction was necessary because it was essential, for aerodynamic reasons, to keep the speed of the propeller tips below the speed of sound, and yet to utilize the maximum power of the engines. Oper-

ating through these gears, the propellers turn slower than those of any other airplane, but the speed of the propeller tips, because of their great diameter, compares with the speed of the tips of propellers on other airplanes.

Each engine on the Superfortress has twin, exhaust-driven, turbo-superchargers. This dual installation, devised by Boeing, was necessary because no single supercharger available was large enough for the high horsepower engines used on the B-29.

The B-29 is the nearest any airplane has yet approached to being all-electrically operated. Every piece of equipment on the bomber that moves is activated either by an electric motor or cables, with the exception of the braking system. It alone is hydraulic.

The nose wheel of the B-29's tri-cycle landing gear consists of dual wheels, the first to be so used on an airplane. The main landing gear also has dual wheels.

Armament consists of power turrets with multiple gun installa-

tions and with guns aimed and fired by remote control.

A flight engineer is included as a crew member and so the pilot's instrument board has only the flight, manifold pressure and tachometer instruments.

The navigator's station is equipped with a table, map wheel, drift-meter, flashlight, storage space and instrument board.

Despite its size, the Superfortress is still "cleaner" aerodynamically than the smaller B-17 Flying Fortress. The landing gear is completely retractable and the gear fits into wells whose doors close flush for streamlining. Virtually all the rivets are driven flush to increase the streamlining. Aluminum sheets are butt-jointed. Turbo-superchargers, drains, vents, air intakes and de-icer boots are flush. Radio loop, pitot tubes, etc., are highly streamlined. Engine nacelles are of an exceptional streamlined design. To illustrate the plane's aerodynamic qualities: the drag of the Superfortress is doubled when the landing gear is down.

Boeing "117" Wing — Great Engineering

One of the great engineering achievements of the B-29 is its wings. They have more aerodynamic refinement than has ever been

achieved in a wing of its type and magnitude. Because specifications called for speed and range, it was necessary that the wing carry a

greater load (fuel and bombs) per square foot (wing loading) than any other wing ever built. This was achieved by development of a new airfoil section known as the Boeing "117" wing, and the incorporation of a remarkable set of wing flaps.

These great wing flaps — which give the airplane its short takeoff performance and its short-distance landing qualities—constitute nearly 20 per cent of the wing area. They are the largest wing flaps ever installed on an airplane produced in quantity.

Wing structures are of web-type construction, differing from the tubular-spar construction used in the Flying Fortress. The web-type was chosen because of its simplic-

ity and also because it allows more room in wings for gasoline tanks.

The fuselage is an all-metal, semi-monocoque design, with an aluminum alloy stressed skin.

The large control surfaces of the B-29 are actuated "direct" by the pilot. A signal engineering achievement, developed through research conducted by the late Edmund T. Allen, and the Boeing Aerodynamics unit, the control surfaces are so closely balanced, both aerodynamically and statically, that no power or boost is required to move the controls of the plane. This system involves a better "pilot feel" with less cost, less vulnerability, and less weight than the boost system.

The Planning Began in 1936

In 1936—the year after the building of the original B-17 Flying Fortress known as Model 299 — Boeing preliminary design engineers began work on even larger long-range bombers.

During the next three years eight different large bombers reached the preliminary design stage at Boeing. One, the 87,600-pound XB-15, actually was built and de-

livered to the Army in 1937 and flew its way to records in load carrying and range. From these advance designs created concurrently with the development of the Flying Fortress, Boeing engineers gained highly valuable experience in the field of heavy military aircraft.

Late in 1939 the Army Air Forces asked several aircraft companies to submit designs for a larger, long-

range bomber, indicating minimum requirements for performance, carrying ability, weight, range and armament. This was put in the form of a formal bid invitation in January, 1940.

Preliminary Studies

During this period the Boeing company had been completing preliminary design studies of a new bomber design known as model 341, which was radically different from anything previously developed, and in the early part of 1940 the company submitted several progressive proposals to the Army on this model. By that time, however, the war situation had become critical. Consequently, the Army increased the size and armament requirements which had originally been set forth, necessitating a revision of plans.

In May of 1940 Boeing submitted its model 345, an enlarged version of model 341. This was quickly accepted by Army representatives as being the type desired, and a formal contract covering the construction of experimental models, to be known in military records as the XB-29, was drawn up.

In order to save precious time

and relying on Boeing experience in the field of heavy bombers to assure success of the B-29 though it was still in the blueprint stage, a gigantic tooling and production program was inaugurated. The establishment of a manufacturing program and development of the design features of an airplane concurrently had never before been attempted on such a scale.

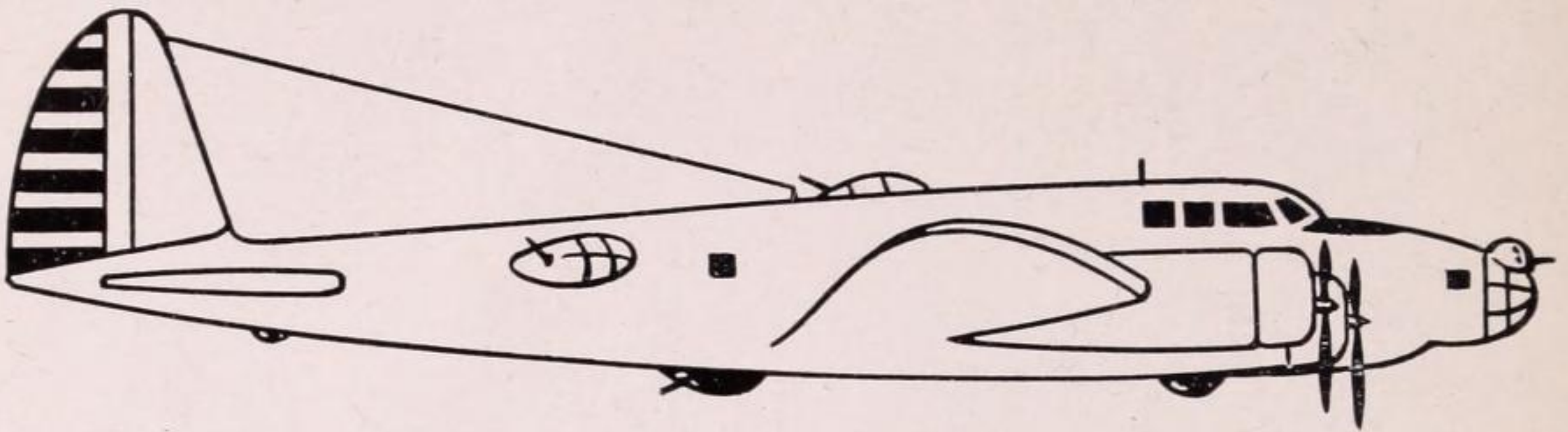
General Arnold Pleased

General H. H. Arnold, commanding the U. S. Army Air Forces, has described the Boeing B-29 as an airplane which places previous four-motored bombing craft in the "light-heavy" class.

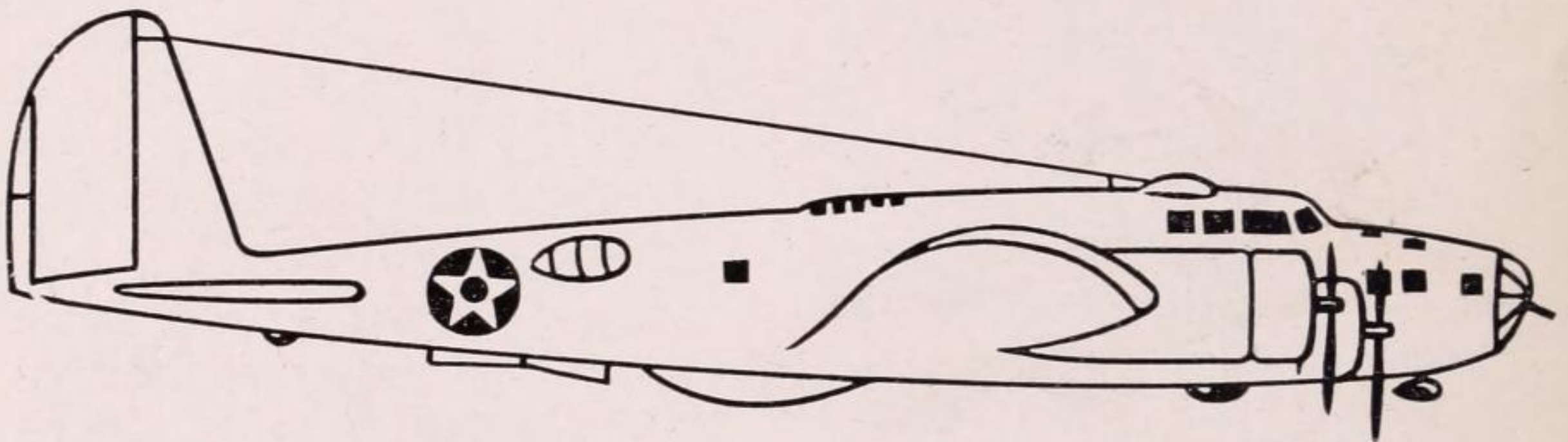
"The B-29 will have a range substantially greater than the maximum effective range of today's longest-range heavy bombers and it will carry quite sizeable bomb loads for that distance," the general has said. "This battleship of the air is armored heavily with multiple-gun, power turrets and can fly at very high altitudes."

General Arnold characterized as "superb" the combat records of previous heavy bombers, but said that the Boeing B-29 had turned in performance records that made it outstanding in the annals of World War II.

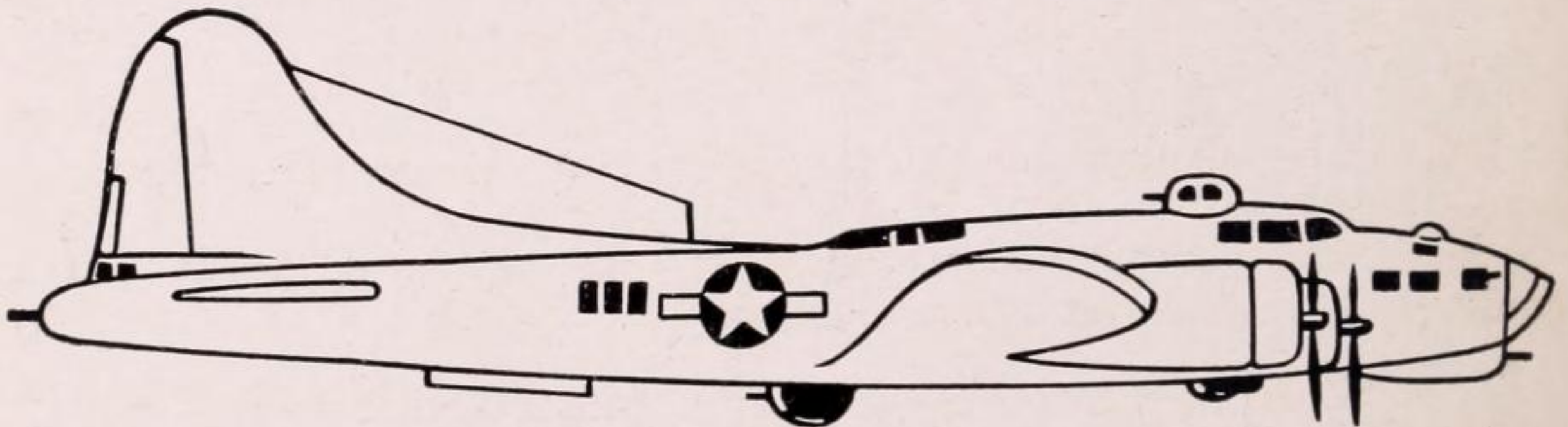
First the Flying Fortress . . .



The Boeing B-17, forerunner of the Superfortress, was first flown in July, 1935, and gave revolutionary performance at extreme altitudes due to successful installation of engine superchargers driven by the exhaust gases. This huge plane had revolutionized heavy-bomber design



and shaped air-war strategy. In the B-17C and B-17D models, produced shortly before Pearl Harbor, flush-type windows replaced blister turrets (see above). The B-17G (below) added remote-control chin turret for greater protection. This model was also the first with external bomb racks.



. . . *Then the B-29 Superfortress*

GENERAL: The Boeing B-29 Superfortress was the Army Air Forces' heaviest bomber in combat use, and the first to be equipped with pressurized cabins for high-altitude flight. It carries a larger bomb load farther, faster and higher than any other bomber in the world.

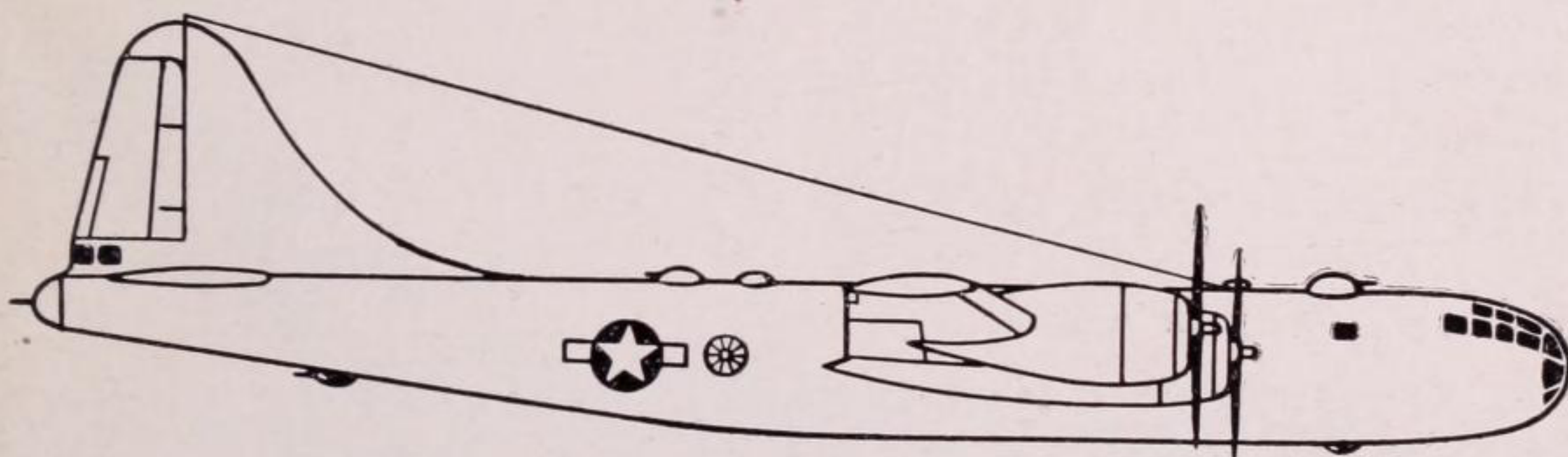
PERFORMANCE DATA:

Speed: (Max) 350 mph. plus (Landing speed, about 100 mph.)

Ceiling: Over 35,000 feet

Range: Over 3,500 miles

Bomb Load: 10 tons



ENGINEERING DATA:

Dimensions: Wing span, 141'3"; length, 99'; height 27'9"; tread width, 31'5"; wing area, 1738.9 sq. ft.—approximately one and one-third times the size of the B-17; total surface area ("wetted" surface), approximately 7,000 sq. ft.; total volume of fuselage, approximately 5,000 cu. ft.

Weight: Approximately 135,000 lbs., roughly twice that of the B-17.

Engines: Four 2,200-h.p., 18-cylinder Wright Cyclone Engines, each equipped with dual turbo superchargers.

Gasoline: When the B-29 is fully loaded with fuel and oil, it holds as much liquid as a railroad tank car.

Propellers: 16'7" Hamilton Standard Hydromatic, 4-bladed.

Reduction Gear: Revolves the propellers only 35/100th times as fast as the rpm. of the engines. Air screws turn at unusually low rpm., but speed of the tips compares with the speed of the propeller tips on other planes.

Landing Gear: Dual-wheel, completely retractable, electrically-operated tricycle.

Wheels: Nose, 36" diameter; main undercarriage, 56" diameter. Tires same size as those on B-17 and B-24.

Brakes: Operated by a hydraulic boost, only hydraulic device on plane.

Drag: Low. So clean is the B-29's

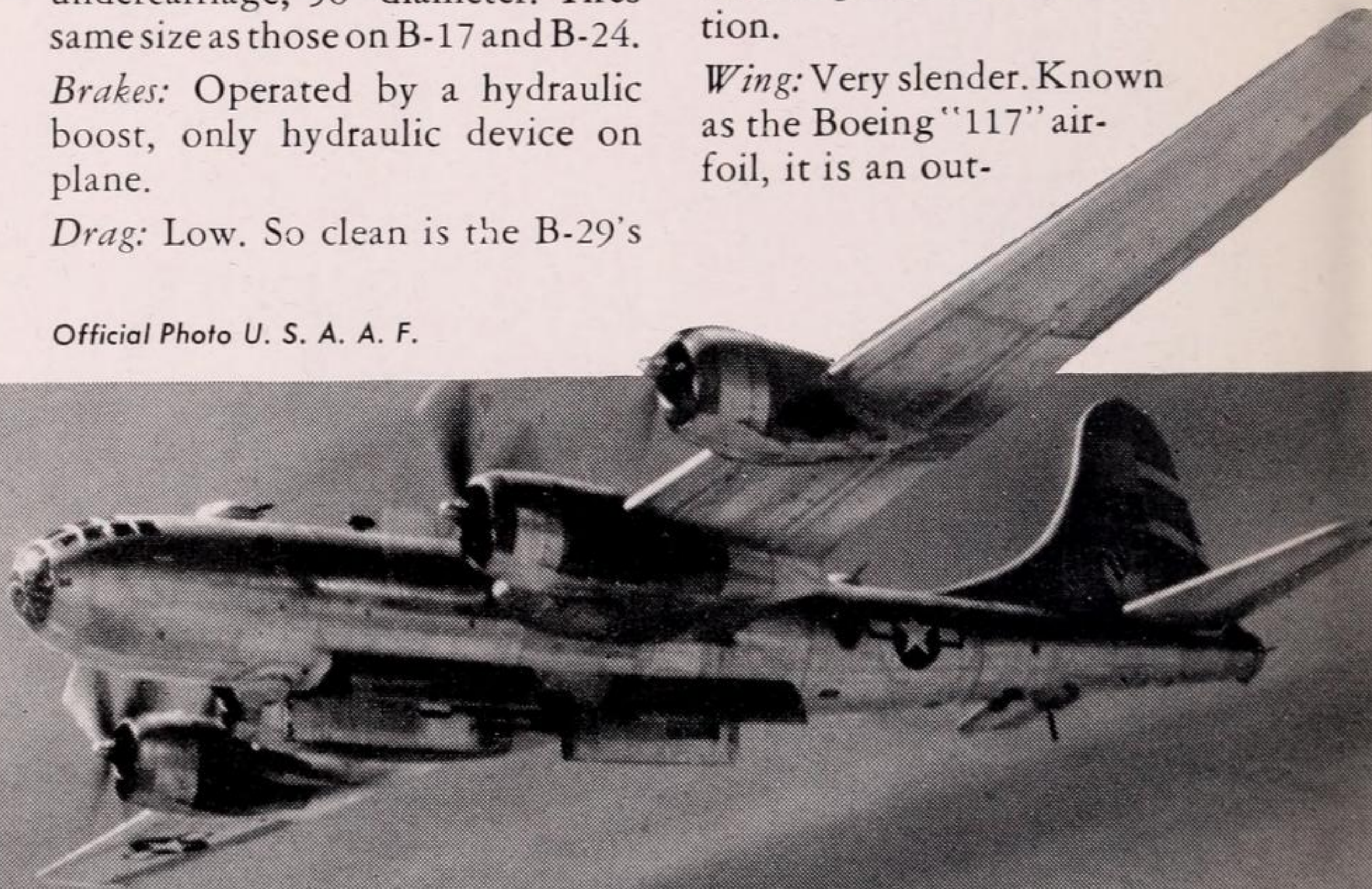
aerodynamic design that lowering of the landing gear doubles drag of the bomber. Turbo superchargers are enclosed. Draws, vents, air intakes and de-icer boots are flush. Low structure of turrets, made possible by remote control, greatly reduces drag. So does butt joint construction and flush riveting.

Fuselage: Cylindrical. Sections of body and accompanying bulkheads are 9' in diameter.

Structural Members: Thicker than used in previous bomber construction.

Wing: Very slender. Known as the Boeing "117" airfoil, it is an out-

Official Photo U. S. A. A. F.



standing factor in the B-29's superior performance. It has decreased drag per pound of weight; provides better stall warning and more gradual stalling characteristics. Wing area is only about 24 percent greater than that of B-17. Trailing edge of wing is approximately straight except for a portion between inboard nacelles and fuselage. Dihedral of the wing is $4\frac{1}{2}$ degrees, and there is a 7 degree sweep-back.

Flaps: Fowler type. Equal to $\frac{1}{5}$ th of the wing area; largest ever put on a production airplane. Provide extra lift for takeoffs and landings. Limit takeoffs and landing runs to those of B-17 and B-24. Flaps extended 25 degrees on takeoff. In extended position they increase wing area 19 percent. Using flap in landing, the B-29 sets down with speed comparable to B-17.

Rudder, Ailerons, and Elevators: Controls handle easier than those on much smaller planes. This is possible due to ingenious use of control tabs which facilitate movement of the larger surfaces. The absence of "boosts" greatly improves pilot "feel" and control of plane.

Electronic Pilot: Minneapolis-Honeywell; can make over 300 flight corrections per minute.

Bombsight: Norden.

Armament: Twelve .50-cal. machine guns, including four in upper forward and two each in lower forward, upper rear, lower rear and tail turrets.

Remote and Central Fire Control System: More than 30 different combinations of turrets available to five gunners. Low silhouette turrets swing about in vertical axis, and up or down, so they can be brought to bear in any direction away from plane, in hemisphere or slightly more. Gunner actually sights directly on enemy fighter, pin-pointing it on tiny spot of light, and enclosing it in ring of tiny dots of light, which can be changed by twisting range control on handles.

Armor: Includes removable, flak-resistant glass panels.

Armor Plate: Heavy built in, plus flak curtains.

Pressurized Cabins: Superchargers maintain near-normal air pressure within the cabins even in the thin atmosphere of high altitudes. Flak or bullet holes do not depressurize cabin too quickly for human system to stand, but oxygen masks are worn on bombing runs.

Life Raft Ejectors: Built in.

Crew: 11 men — Pilot, co-pilot, bombardier, engineer, navigator, radio operator, instrument operator and 4 gunners.

Tales of the B-29 in Action

"Tell the people that the Superfortress is a marvelous airplane. Tell them you can beat her to death and she'll still come back."

This was the message of a veteran pilot, whose story, together with many other tales of B-29 planes and their crews, is told on succeeding pages. As the reports come in from Pacific veterans, and the records become more complete, greater and still more fascinating becomes the story of the B-29 and its exploits in World War II.

Actual performance data recorded after a series of test demonstrations indicate that the Boeing B-29 Superfortress can stay aloft for long distances while using only one of its four engines. It can maintain level flights and handily make 45-degree banks on two engines, and can climb with three engines in operation.

When operating on only one engine, a B-29 weighing 115,000 pounds will travel about 175 miles per hour and lose altitude only gradually. This means that a plane flying at an altitude of 20,000 feet, when cut to one engine power, will travel about 125 miles before it reaches sea level. And so stable is the plane under these conditions that having once reset the control

surfaces for level-flight adjustment, the pilot need not even "retrim" his ship. Even with all four engines inoperative, the Superfortress can still be landed safely.

Read the graphic story* below told by one war correspondent who went along on the first Tokyo raid. It's followed by other narratives, equally interesting, of the B-29.

The Sea Waited Below

**Condensed from an article by
Dennis Warner in "The Boeing
Magazine."*

We bombed the city of Tokyo an hour ago. It was easy, almost too easy. But now we are fighting a bitter battle to get back to Saipan.

The tail gunner is unconscious with a wound in his head, we've lost altitude and our gasoline supplies are more than dangerously low. If we have to make a night landing in the sea there is not much chance for any of us.

We have left the coast of Japan far behind and are heading southeast above banks of heavy clouds. It was full daylight when we took off from Saipan this morning. For the first time in a week it was bright and sunny.

I took up my position in a B-29 immediately behind the pilot and co-pilot and in between the engineer and navigator. We watched the first flight take off, watched almost overloaded planes strain down the runway and disappear over the hill-top toward the bay.

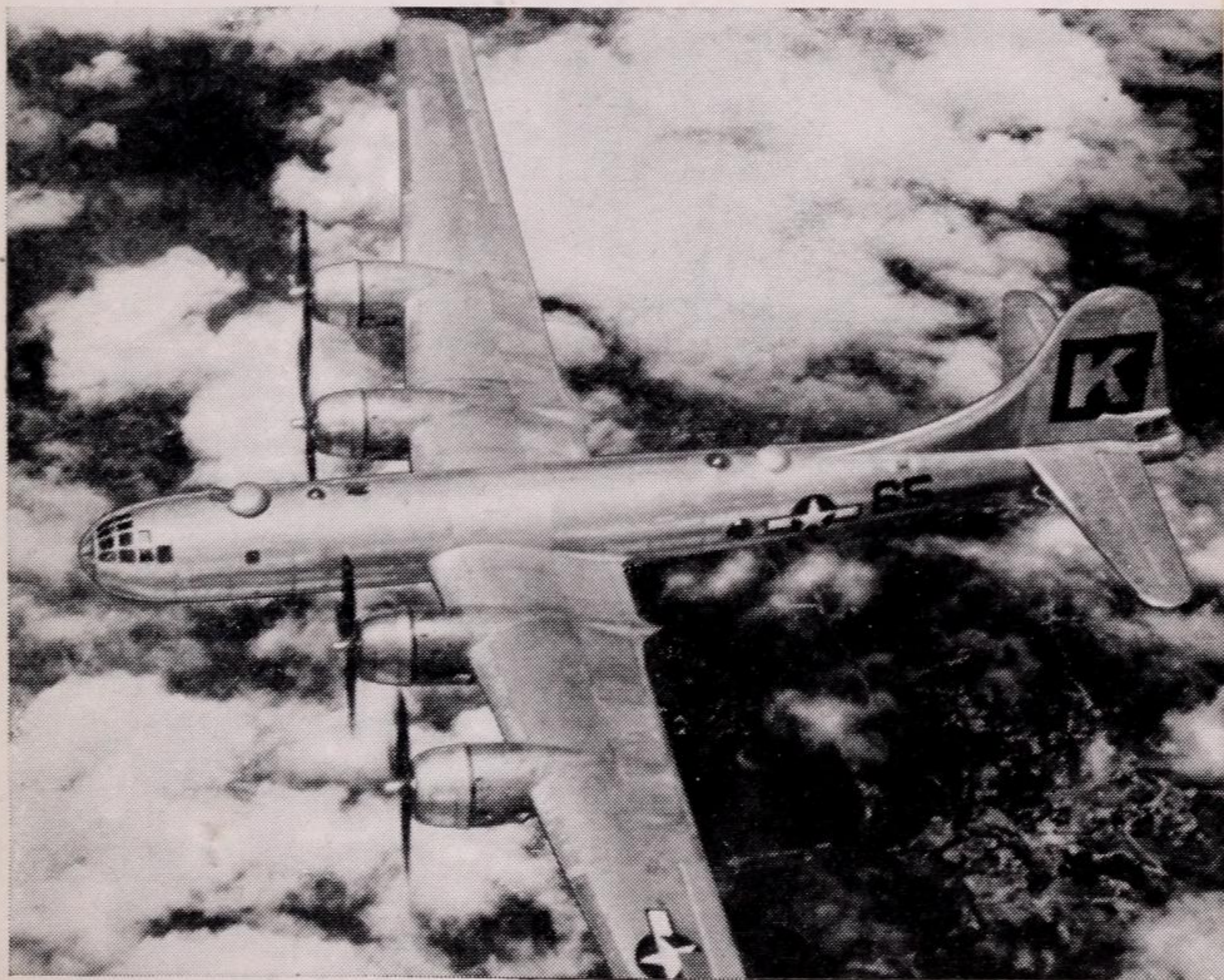
Bulldozers stood by on taxiways to push off any plane that cracked up. Much of the chances of success of the mission depended on getting the planes off on schedule.

I sat on a pile of litter composed of field packets, flying boots, field glasses, with my rusty and battered typewriter.

As we watched, a long line of planes became three or four, then two, and then we were left alone at the starting point.

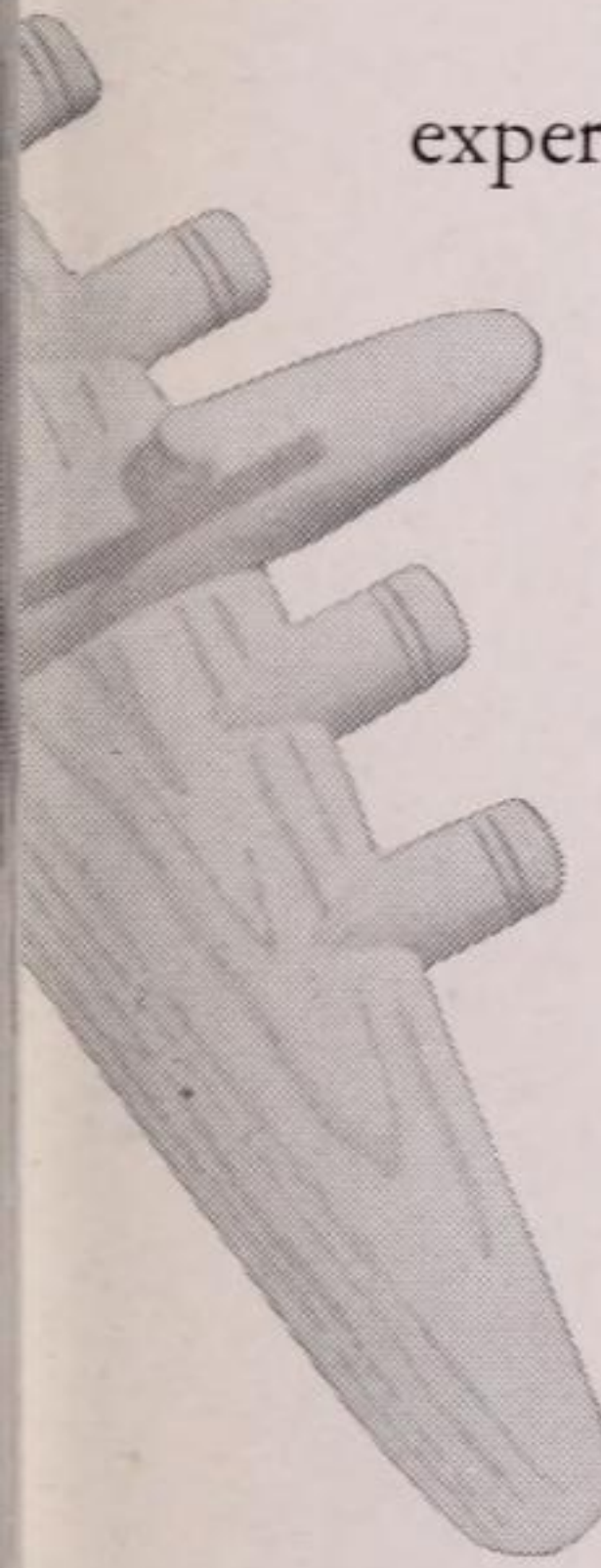
A long black-topped surface of runway disappeared over a slight hill into the distance. It seemed enormously long but it was only just long enough. We seemed to

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THE B-29 SUPERFORTRESS model in this kit is typical of all

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make up speed as we bumped along on the asphalted surface and beyond to within a few hundred feet of the unsealed macadam.

It was an awful moment when we came to the end. Grass and stones, and a hill that fell away into the bay, were only a few feet beneath us, and then we were over the water.

Our pilot was begging the plane to get into the air. Rivulets of sweat were running down his face and neck. His jacket was soaked.

"Come on, come on, we've got to have 90; we've got to have 90," he was entreating his plane.

Gradually we began to pick up altitude and speed. We swung north—then northwest—toward Tokyo.

A Nap Under Pressure

The co-pilot took over and I settled back to try to get a few hours' sleep. The busiest man now was our navigator with his maps and charts. His was the job of getting us to Tokyo—a job that would have confounded experts just a few years ago.

We passed through occasional minor storms, gaining altitude on the long monotonous journey toward Honshu. The cabin was fully pressurized but we put on oxygen masks and parachutes.

Above us, below us, and to each side we began to pick up the formation, Superfortresses trailing immense vapor plumes behind them.

"It's sure pretty, but it's going to give us plenty of trouble when the Japs see it," said the engineer.

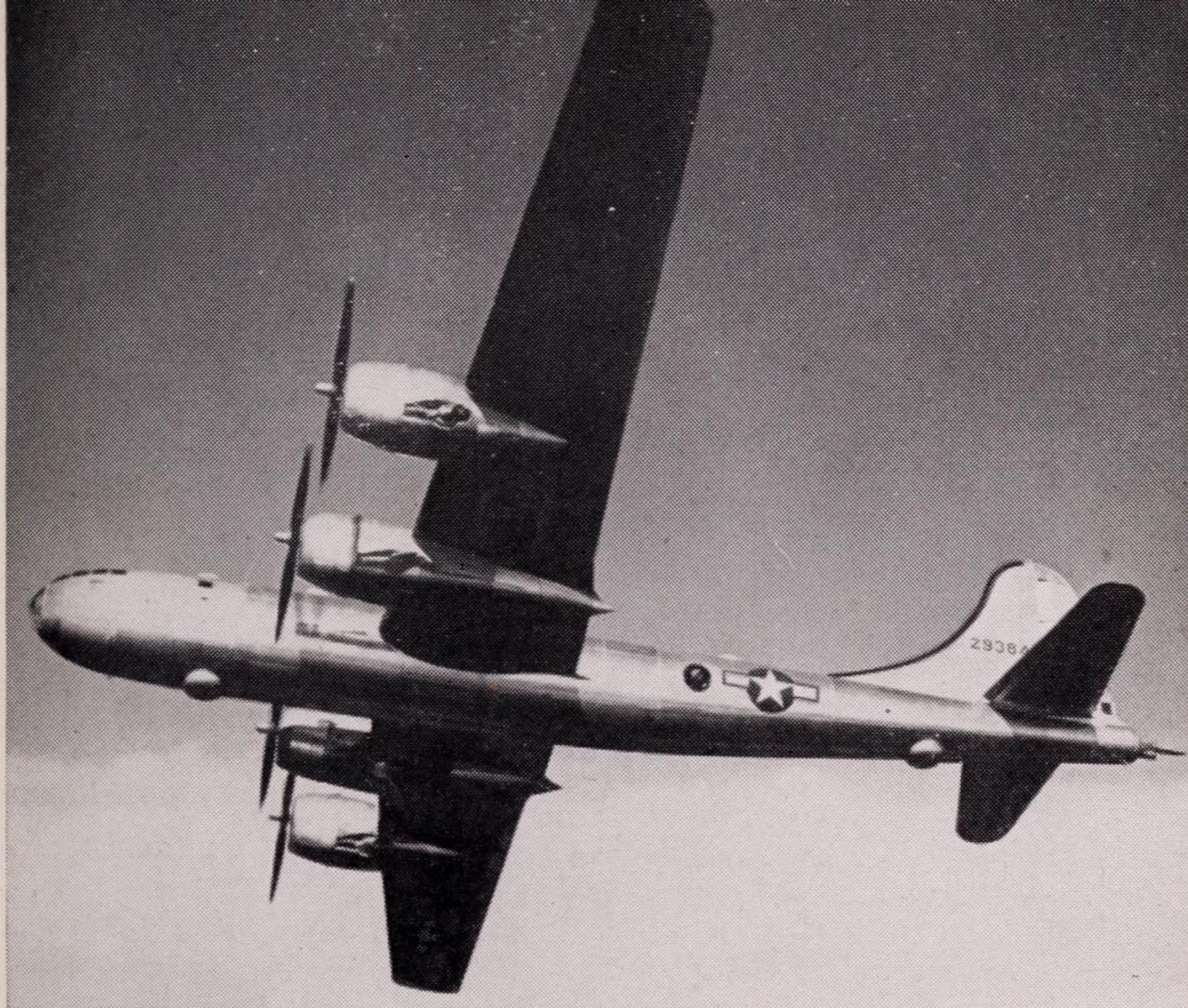
We still were a good many miles out, but there was every chance of fighter interception before reaching our target. Suddenly, Japan came through the mists; just a glimpse of shadowy outline.

As we came over the coastline, the first thing I saw was an immense, apparently concreted, airfield. It was not difficult to imagine the activity that was taking place there at that time.

It was our job to make a formation with the rest of the group. It burned up lots of our precious gasoline, but for our own safety and protection against fighters it had to be done.

Through another break in the clouds I could see a long coastline stretching unbroken for many miles. In a minute my eyes could see the dark brown hills rising sharply beyond. There were houses and villages here and what looked like another airfield.

The pilot was giving the plane all he had to keep up. We'd moved slightly out of position as appar-



Ewing Galloway

ently faster planes went ahead, but we got back again with a big effort.

"We're burning an awful lot of gas," said the engineer with a despairing note in his voice.

We were a long way down the coast, by the town of Hamamatsu. We skirted the coastline, past innumerable airfields. Then we came to Fujiyama. Snowcapped, with low clouds hanging about the base, its peak sparkled in the early afternoon sun. I had always wanted to

see Fujiyama, but it didn't seem too good now. It was, however, our landmark; our beam toward Tokyo.

We turned slightly for a 60-mile run toward our target. Clouds still obscured most of the land, but through long windrift in clouds in which we flew, I could occasionally see the countryside below, mainly rugged mountains with splashes of color here and there, apparently small towns and villages.

It couldn't have taken us long to get to Tokyo but it seemed an eternity. I was straining my eyes to see the city and I was looking for fighters too. I saw the fighters first.

Fighters Come Climbing

There ahead of us, a couple of thousand feet below, but climbing steadily, was the first one. I watched his approach toward us; he came slowly but always upward, with the sun glinting on the red blobs on his wings.

As I watched him, another one jumped in on our tail. A Jap wound up from the center left and made his pass at the tail gunner. Our gun and the Jap's rattled at the same minute. None of us could see what was happening back there. We could only hope for the best. Some of us saw the Jap fighter pull out. All of us wondered why our gun had stopped so suddenly.

But for 30 seconds there were other things to worry about. A lot of ack-ack was bursting a few thousand feet below us and now heavies got right on the mark.

Eight or ten heavy bursts exploded with a shattering roar between our plane and the plane on the left. What looked like incen-

diary stuff exploded in the open bomb bay doors of the other plane. Incredibly, the plane continued on a level course.

Nakajima factory was obscured, but the main part of the city was visible. On our left, miles below, were waterfront wharves and installations. For perhaps twenty seconds we flew with the bomb doors open. Then the bombardier squeezed the release.

As we swung out seaward over wharves and bluish-black waters of Tokyo Bay, we could see more fighters coming up to intercept us. They were too late and too slow to catch our formation.

Off the coast, our pilot checked his crew. The tail gunner, from whom no reply was heard over the interphone, was found in his compartment, badly wounded and in need of oxygen. Things were looking blacker all the time, and our chances of getting home were slim indeed — for night was closing in, and we had hundreds of miles to go.

But at last, with the tail gunner dead in the rear compartment and every gasoline tank showing "empty," we hit the runway and taxied to revetments on two engines, draining the last drop of gasoline from the plane.

The first raid on Tokyo from Saipan was an accomplished fact.

The Colonel Speaks

Lt. Col. Robert B. ("Pappy") Haynes, the veteran whose quotation began this series of stories, flew 108 missions, 33 of them in B-29s over Japan. His last plane, "Thumper," has 40 missions under its belt and has delivered 26 Jap planes "out of this world." It also has taken its share of punishment from Jap ack-ack. "I flew her 1,550 miles back to Saipan from the Japanese coast on three engines," reported the colonel. "At that, we gained altitude."

"Some of the boys have brought their B-29s back from the Jap coast on two engines. One came back on three engines, minus one aileron and practically its entire left stabilizer. Another had lost its right stabilizer and one engine."

"Pappy" Haynes led the second flight of B-29s, in the first (Thanksgiving Day, 1944) raid on Tokyo. Then he took "Thumper" out twice on solo missions at night to obtain weather information as a guide for other raids planned for the immediate future.

He described the first four fire raids on Japan as "very rough." "At first," he explained, "a crew hardly was safe even if it had to ditch its plane in the ocean 50 miles from its base. Our subma-

rines had to battle the Japs to pick up survivors. But as the B-29s struck again and again, and the Japs were beaten back, our men were pretty safe from the enemy if they could make it 200 miles out from Japan."

"Tokyo Rose"

"Tokyo Rose," the first B-29 Superfortress to fly over the Nip capitol, was less than three months off the assembly line when she made the first of a trio of remarkable reconnaissance flights over Japan's first city.

Based on Saipan in the Marianas the bomber made each of the 3,370-mile missions without mishap, paving the way for the first B-29 bombing of Tokyo on November 24. On the third mission, the plane stayed over Tokyo more than an hour and obtained some of the clearest pictures in the history of aerial photography.

"The Wichita Witch"

Rammed by a Japanese "suicide plane" and knocked out of formation during a bombing raid over the enemy homeland, a Wichita-built Boeing B-29 Superfortress named "The Wichita Witch" shot down 11 Japanese planes before

crashing and carrying all of her crew members to death.

The spectacular feat of "The Wichita Witch" in downing 11 enemy planes while spinning to her own death has been written into the official records, as all eleven kills were witnessed by other members of the formation.

"To begin with," reported one observer, "a Jap 'Irwin' rammed 'The Wichita Witch' in a suicide maneuver. When other Japanese fighters saw the B-29 was crippled, about 25 of them swarmed in, trying for a kill.

" 'The Wichita Witch' was out of control but the crew members kept the bomber's guns spitting death and before she went into her final plunge, eleven Japanese fighters had been destroyed."

On the Early Raids . . .

Food, sleep and recreation all were sacrificed by B-29 Superfortress crews on Saipan in preparing for the first extensive raids on Japan from that island. Three times in five days the bombers were sent out, striking Tokyo, Nagoya and Osaka, in the first intensive assault on Japanese objectives.

Crews worked 36 hours non-stop to get the B-29s ready for this triple raid. In the three missions the bombers taking part used

1,000,000 gallons of gasoline and 32,000 quarts of oil.

"The Bataan Avenger"

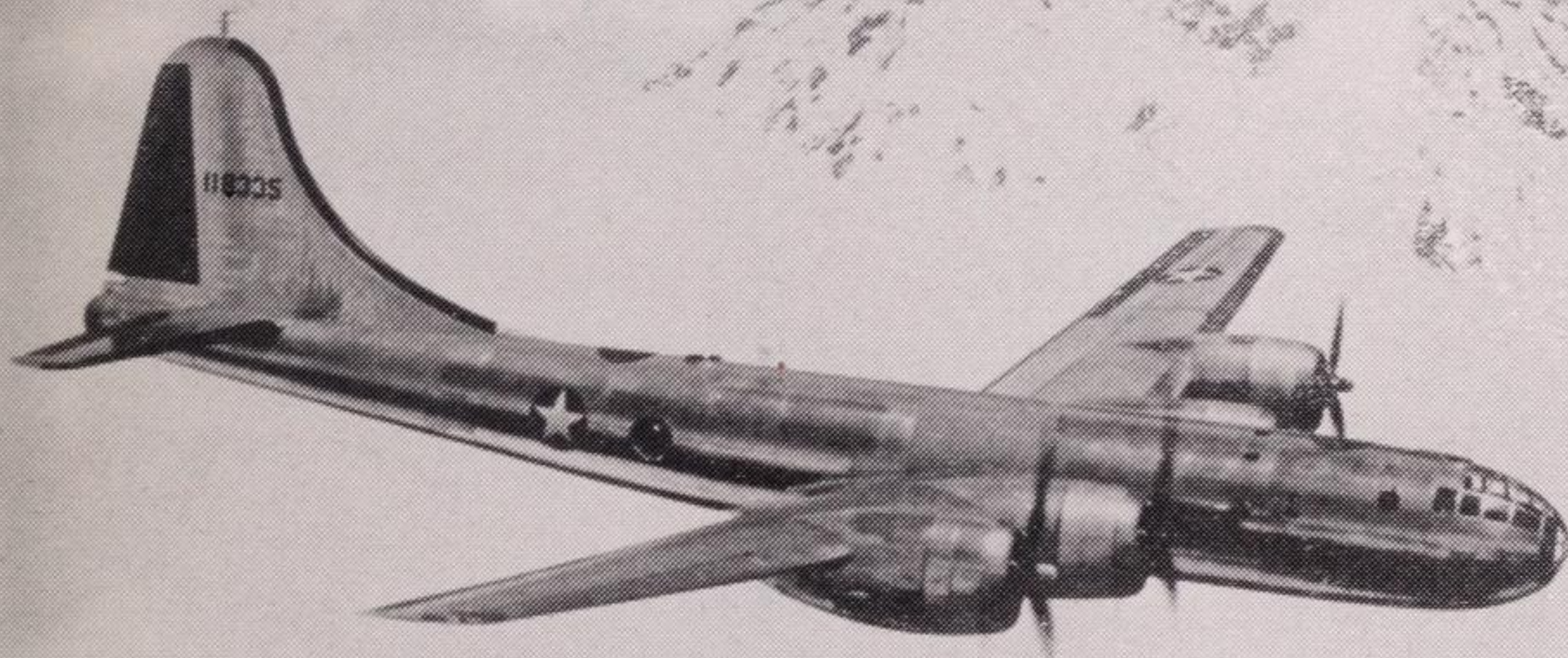
"The Bataan Avenger," a Boeing B-29 Superfortress dedicated to deliver vengeance for those who died on the historic Philippine peninsula, was dramatically baptized in combat less than a week after the big bomber left this country.

"The Bataan Avenger" struck out at the Japs in her first raid in an attack on Osaka, Japan, and was flipped upside-down when caught in a thermal updraft over the blazing Nippon city. But she held to her bombing run despite flak and searchlights, to drop her incendiary load on the already blazing city. As the plane commander threw his plane into a steep bank away from the target, the fires the "Avenger" had helped start nearly proved her undoing. A thermal updraft from the inferno below caught a wing of the sky giant and flipped her over on her back, like a small boy would overturn a turtle with a stick.

The fluorescent lights on the instrument board went out and the pilot had to fly blind in an upside-down plane. A loose flashlight, however, shot a beam on the panel.

"The air speed indicator needle was pointing to 60," the pilot explained, "and, assuming it was 160 miles per hour, I was afraid we might stall out. As we righted

the Marianas, the interior was "unscrambled" and a few days later the "Bataan Avenger" was on the prowl again over Japan, living up to its prophetic name.



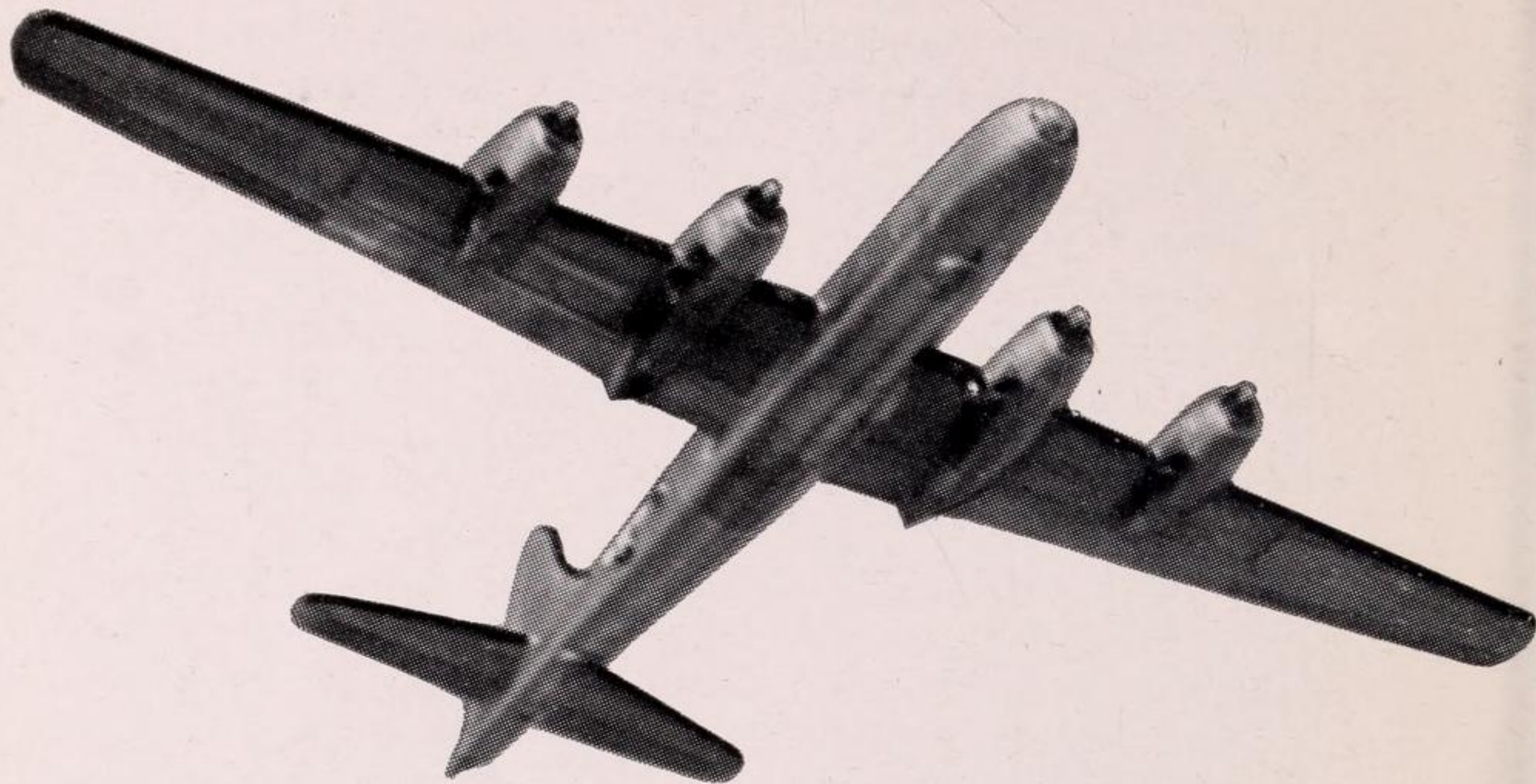
Ewing Galloway

the plane and started to gain altitude, I saw the needle start to unwind. I picked up the flashlight and saw we had been indicating 360 miles per hour."

Members of the plane were battered and skinned by its unscheduled maneuver. Back at base in

The "Twentieth Century Limited"

How members of the crew of a Boeing B-29 Superfortress, the "Twentieth Century Limited," virtually "prayed" their way home



Boeing Photo

after their bomber was damaged in a raid over Nagoya, was told by the crewmen when they returned to their Saipan base. The "Twentieth Century Limited" limped home on two and one-half engines, with 147 holes in the fuselage and with an unexploded Japanese shell lodged above one fuel tank.

"We probably never will know how we managed to get home," said a crew member. "It must have been because every one of us was praying. We had no atheists aboard on that trip. We had a good, spirited prayer meeting most of the way home."

The plane's pilot estimated that there must have been between 125

and 130 separate fighter attacks on the "Twentieth Century Limited." "Enemy fire hit the No. 2 engine and put it out of commission," he said. "Then there was a terrific explosion in No. 3 and it became almost useless. Two ships from another outfit escorted us back home. They did part of our navigation and took care of us like The Good Shepherd."

"Lassie Come Home"

"Lassie Come Home," a Boeing B-29 Superfortress based on Saipan, lived up to her name on her

13th raid on Japanese territory when, raked with bullets from Jap fighter planes, scarred by fire and with two engines out of commission, she limped back to her base after being given up for lost.

The formation of which "Lassie" was a member was jumped by Jap fighters over the enemy mainland and "Lassie" was seen disappearing into the overcast off the coast with one engine gone and another burning. A sister ship left the formation to protect the crippled Superfortress, but on the way home the two bombers became separated and the unharmed ship came in

alone. Its pilot was doubtful of "Lassie's" chances. "I saw them going into the clouds with only two engines," he said. "They can't possibly get back. The odds are too great against them."

But an hour later a faint hum was heard in the distance and within a few minutes "Lassie" came home. It had made the trip with three crew members wounded, the radio shot out, only one strand of wire left on the rudder-control cable and the oxygen system out of commission. In addition, a fire had broken out in the instrument specialist's compartment.

New Planes, New Records . . . for Tomorrow

While the great battle exploits of the B-29's are assured a bright place in history, their performance records are daily being surpassed—so swiftly does engineering progress move today.

Model-builders, of course, will for a long time get a thrill out of putting together the world-renowned B-29, even while they follow with intense interest the peacetime achievements of this mighty plane, perhaps in its transformed state as the Boeing 377

Stratocruiser. Typical of the determined peacetime performance of the B-29 was its record-breaking flight from Guam to Washington, D. C., in a little more than 35 hours. This set a new world's non-stop flight record of 8,198 miles.

And it was a Boeing B-29, the "Dreamboat," that averaged 450 miles per hour on its recent official all-type trans-continental record flight of five hours and 27 minutes between Burbank and Floyd Bennett Field, New York. Many times

during the flight, officials report, the Superfortress attained a speed of 534 miles an hour. From Cleveland to New York the plane averaged 526 miles an hour. The "Dreamboat" flew with sealed barograph on its record flight, and its fuel tanks also were sealed.

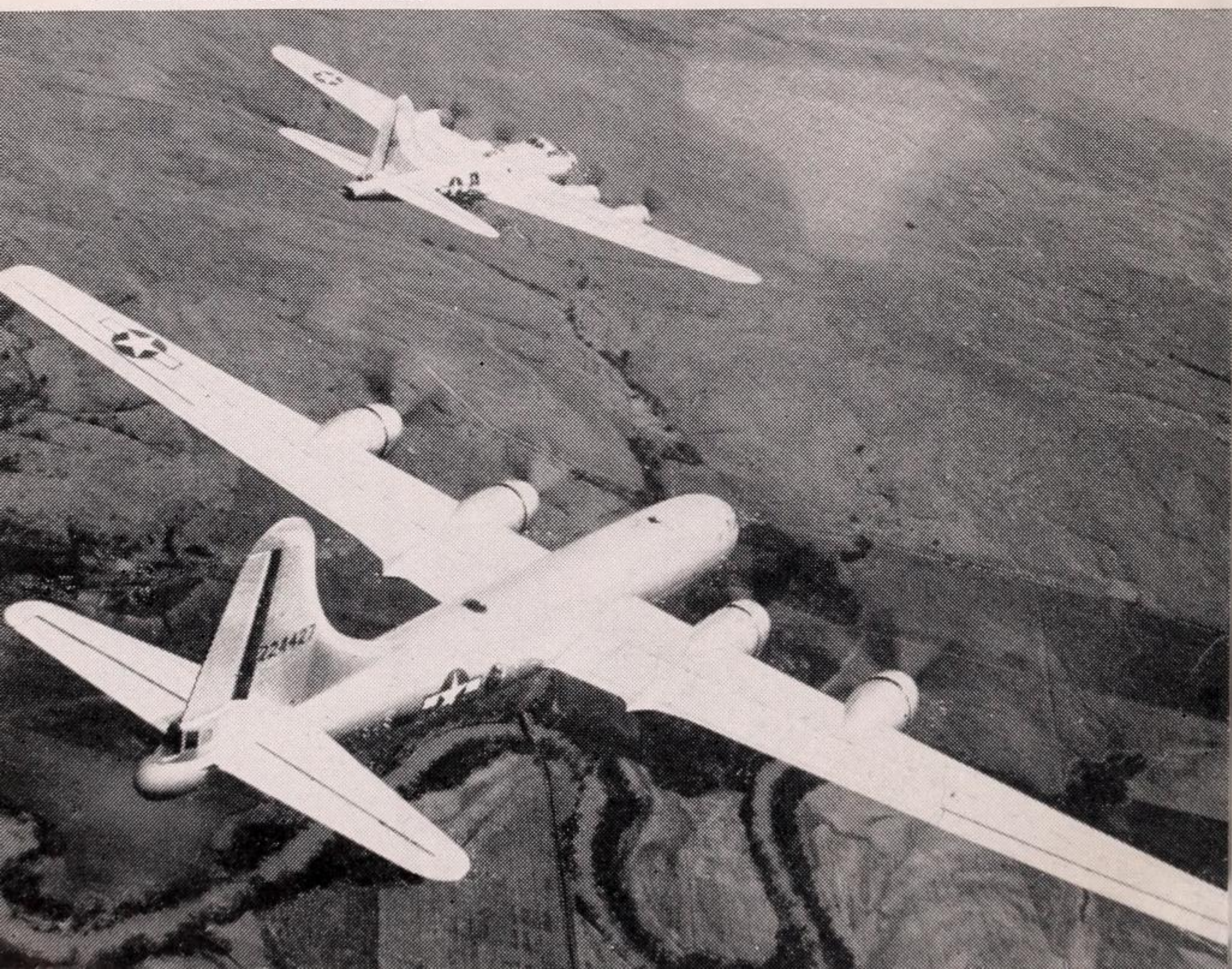
Future records are impossible to foretell at this writing, but "Aeroplane," a British magazine, makes this prediction: "In 1950, traveling at 300 miles per hour, we will make the 13,000-mile Australia-England

trip in 45 hours. In 1960, traveling by rocket ship at 600 miles an hour, we will make this air jaunt in only 25 hours.

"In 19??, traveling from Sidney to London at 3,000 miles per hour, we will leave Australia at 12 midnight just as the clock turns to Sunday and arrive in England at six o'clock the previous Saturday night."

Whatever the records or the planes, StromBecker model fans will keep right up with the parade.

Official Photo U. S. Air Forces

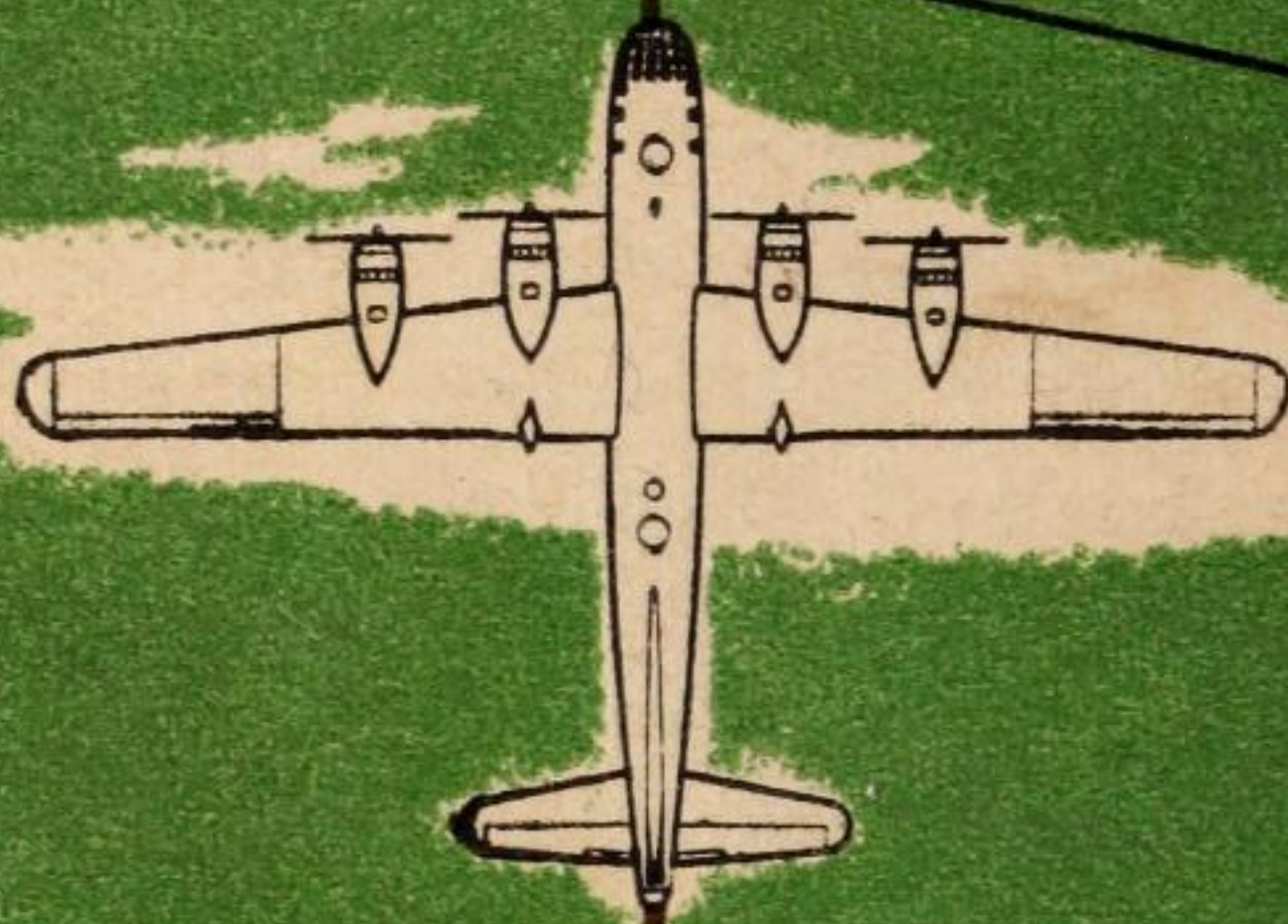


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