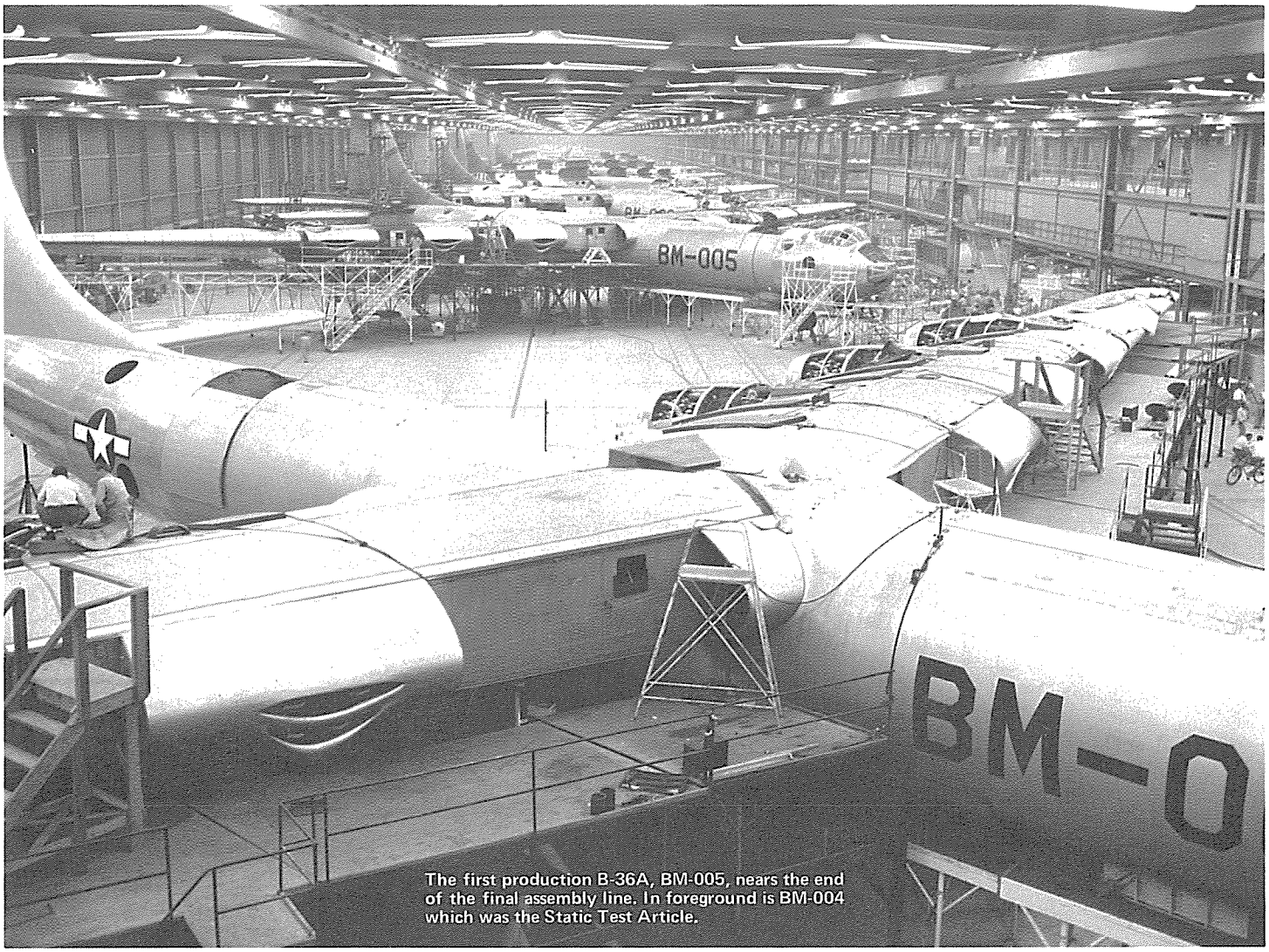


The first production B-36A, BM-005, nears the end of the final assembly line. In foreground is BM-004 which was the Static Test Article.

THE B-36. PRODUCTION BEGINS, 1946 - 1948

By MEYERS K. JACOBSEN

25th ANNIVERSARY
UNITED STATES AIR FORCE

The year 1972 marks the Twenty-Fifth Anniversary of the United States Air Force, created by the National Security Act of 1947. The Act was signed into law by President Harry S. Truman on July 26, 1947, vesting the security of the nation in the Department of Defense, with Secretaries for the Air Force, Army and Navy. It brought into being the Air Force as a separate and co-equal branch of the Services, but did not end its struggle to establish its worth as a defensive and offensive arm of those Services. The long struggle for recognition, begun decades before, culminated in creation of the Department of the Air Force, yet the doctrine of air supremacy, argued for so many years, continued well past 1947.

At this 25th Anniversary, the creation of the B-36 as the "deterrent weapon" in those same early years is recited here by Meyers Jacobsen in this first of two parts of the B-36 production story. The B-36 was created amidst a period of great change, and its future role was never clear-cut. Rather, its use was questioned within the Air Force as well as from outside, in the halls of Congress as well as the barracks. Frought with difficulties in pushing the state of the art of aircraft design and manufacture beyond the known limits, hampered by political pressures, and beset with problems impeding achievement of performance, the B-36 program required great courage by the leaders of the U.S. Air Force and of the industry to pursue. Though other programs since have been of equal or greater magnitude, the successful use of the B-36 by the Strategic Air Command as the "deterrent force" for most of a decade is a tribute to the tenacity and foresight of the men who were in at the birth of the U.S. Air Force.

B-36A's, BM-031, BM-026 and BM-034, in post-assembly modification. At one time there were twelve of them in this status as changes became necessary. BM-031 and -034 (code partly obscured by bomb bay doors in open position) already have red tail for assignment to first operational units. (Photo – General Dynamics, San Diego, No. 5-1623).

Within a few months, the first Secretary of the Air Force, Stuart Symington, had set up the organization plan for the Department, and the first Chief of Staff of the newly created U.S. Air Force was General Carl Spaatz, whose career in military aviation began during World War One. In General Orders No. 4, dated 3 October 1947, Gen. Spaatz announced the establishment of Staff Positions and of the officers who would fill those assignments, effective 10 October 1947. These were:

Vice Chief of Staff	General Hoyt S. Vandenberg
Asst Vice Chief of Staff	Brig Gen William F. McKee
Headquarter Commandant	Lt Col Carlysle B. Burdettex
Secretary of the Air Staff	Brig Gen Bryant L. Boatner
Air Adjutant General	Col Hugh G. Culton
Deputy Chief of Staff, Personnel & Administration	Lt Gen Idwal H. Edwards
Asst Depty	Brig Gen Robert W. Burns
Director of Personnel	Brig Gen John E. Upston
Director of Administration	Brig Gen Edwin B. Lyon
Deputy Chief of Staff, Operations	Lt Gen Lauris Norstad
Director of Intelligence	Maj Gen George C. McDonald
Director of Training & Reqs.	Maj Gen Earle E. Partridge
Director of Plans & Operations	Maj Gen Otto P. Weyland
Guided Missiles	Brig Gen William L. Richardson
Air Communications	Brig Gen Francis L. Ankenbrandt
Deputy Chief of Staff, Material	Lt Gen Howard A. Craig
Asst Deputy	Maj Gen Edward M. Powers
Director of Research & Devel.	Maj Gen Laurence C. Craigie
Director of Proc. & Ind. Plann.	Brig Gen Frederick M. Hopkins
Director of Air Installations	Brig Gen Robert Kauch
Director of Supply & Services	Brig Gen Lyman P. Whitten
Air Comptroller	Lt Gen Edwin R. Rawlings
Asst Air Comptroller	Brig Gen Edward H. White
Chief of Statistical Control	Col Chester W. Cecil
Chief of Budget & Fiscal	Col Robert S. Macrum
Chief of Program Analysis	Col Robert M. Spicer
Cost Control Group	Lt Col Walter I. Miller
Air Inspector	Maj Gen Junius W. Jones
Secretary General, The Air Board	Maj Gen Hugh J. Knerr

PART ONE

Long before the XB-36 prototype took to the air in August 1946 and months before the end of World War II, preliminary planning of assembly line production of the B-36 was started at Consolidated-Vultee Aircraft, Fort Worth, Texas. Tooling for the B-36 Program and fabrication of the basic components of the second prototype, the YB-36, was accelerated after VJ Day and was well underway in the Spring of 1946. The initial production contract of 100 airplanes had been finalized by the Army Air Force in August 1944.

The Fort Worth plant, which had been built for B-24 production, was now challenged to manufacture an airplane roughly twice the size and complexity of the Liberator. This facility was at that time the world's largest integrated aircraft factory – completely windowless, fluorescent-lighted and air-conditioned. In the near-mile length (4,000 ft.) of the main assembly building, bicycles became as commonplace as the many jigs, benches, desks, cabinets and assembly fixtures necessary for the giant task of building the biggest bomber.

Thousands of engineering hours alone had been required just for the fabrication and tooling equipment for the B-36. The sheer size and multiplicity of parts presented design and production problems not before experienced. R.C. Sebold, Fort Worth Chief Engineer, and his assistant, J.W. Larson, headed the Engineering Department. Robert C. Widmer led Advanced Development. I.M. Laddon, Executive Vice-President continued his close supervision of the program as he had done since the early days when the company first submitted the B-36 design in the 1941 AAF Heavy Bomber Design Competition. Roland G. Mayer was the Fort Worth Division Manager during the early production period

(1946-1948) later to be succeeded by his assistant, Ray O. Ryan in September 1948. Supervising the factory operation was Factory Manager C.H. "Cliff" White.

Contributing greatly to many design and operational decisions during the B-36 Program were personnel at the Air Force Air Material Command B-36 Project Office at Wright Field, Ohio. The head of the Office, Col. Donald L. Putt and his assistant, J.A. "Art" Boykin conferred frequently with Convair's engineers. Col. Putt (later General) was succeeded by Col T.P. "T" Gerrity who continued the close AMC-Convair engineering liaison.

The assembly line for the B-36 extended the entire length of the main building, running from south to north. Basically, the plant had three major divisions: Major Components, Major Mating, and Final Assembly. Major Component parts of the airplane were divided into various sections comprising roughly one-third of the south end of the building. Major Mating first united the wing center section together with the fuselage bomb bay section. The entire structure was cradled in a carriage so that it could be moved from the first to the second mating station. Other sub-assemblies were added in preparation for Final Assembly. Final Assembly was divided into 11 separate airplane position stations. As the airplanes progressed up the final assembly line, the landing gear, leading and trailing edges, internal systems and engine nacelles were installed.

Each Wasp Major R-4360 engine, shipped from Pratt & Whitney, was uncrated and suspended on a six-position overhead rack fixture for engine build-up at a convenient height which enabled workers to install accessories and GFE (Government Furnished Equipment). Simultaneously the adjacent engine-mount build-up assembly line was in progress adding turbosuperchargers inter-coolers, electrical systems, ducts and shrouding, fuel and oil fire extinguisher systems and other equipment to the engine mount. When completed, the engine was mated to the engine mount and the cowl structure.

When the fuselage/wing reached the 8th position and it was time for the installation of the outer wing panels it became necessary to use some industrial gymnastics – setting the bomber at a diagonal angle to provide sufficient clearance in the 200-foot bay for its 230-foot wingspan. It was then moved down the remainder of the final assembly line on castered dollies. As it approached the north end of the building, the pilot's canopy, instrumentation, and control surfaces were added, along with GFE such as turrets,communication and navigational equipment, and the propellers.

The Air Force insignias and identification markings were painted on the airplane. This was done by means of templates (stencils) and was sprayed on B-36A and B-36B models. Decals were used on later models.

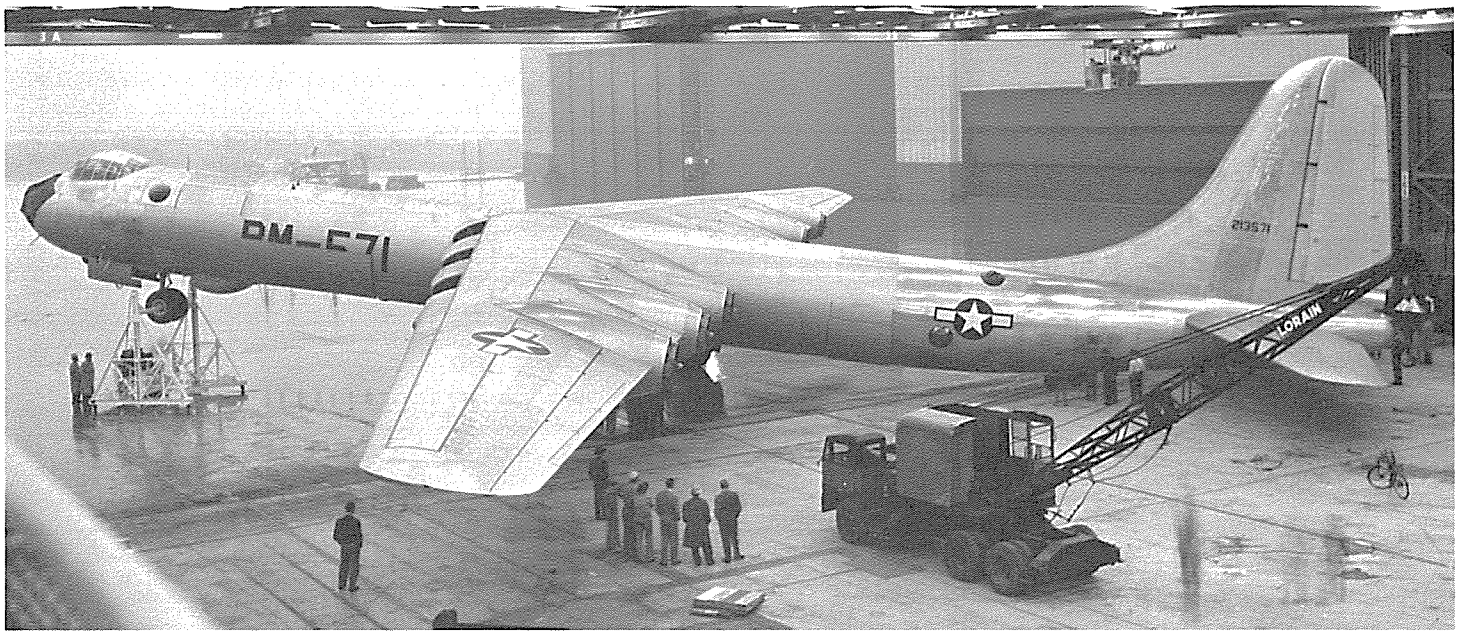
At the 11th and last station, the B-36 was rolled out of the factory and moved to the Field Operations area in the north yard for final clean-up and final inspection. After flight testing by Convair and AF pilots, the B-36 was ready for delivery to the Air Force.

FLIGHT TESTING

Flight testing at Convair, Ft. Worth, in the winter of 1945 consisted solely of one pilot, G.S. "Gus" Green. Green grew up in the small Texas town of Cleburne, 30 miles south of Ft. Worth and had gone to school with Dalton Suggs. He learned to fly at Love Field in Dallas when he was 14 years old and had done a variety of flying including dusting cotton, flying for Shell Oil Company and teaching instrument flying. He joined Convair during the war, flight testing production B-24's and B-32's. He ran across Suggs one day at Convair, finding him working on the B-36 powerplant design. Eventually both men were involved in test programs for the B-36, Green in flight testing and Suggs in engine nacelle testing.

After wartime B-32 production ceased and all partially-assembled B-32's on the production line had been cut up for scrap, the main assembly building became a cavernous, vacant "bowling alley." However, this was only a temporary situation as the B-36 Production Program was to begin soon. When the Program did get started after the first of the year, Beryl Erickson and William Easley, were transferred from San Diego division to work with Green on the new XB-36 Project. They also helped train other personnel for the production flight testing program to come. Erickson was Chief Test Pilot while Green was his superior as Chief of Flight, and Easley was Chief Flight Engineer. Joining them shortly afterwards was James McEachern, a flight engineer and A.S. "Doc" Witchell, a test pilot. These men together formed the nucleus of the new Flight Dept. Maj. Stephen P. Dillon, the Air Force Flight Acceptance Officer, worked right along with them and made many acceptance and service test flights. Convair crews made several "shakedown" flights in each B-36 as it came

Left, General Carl A. Spaatz, Chief of Staff of the newly created United States Air Force. Center, Gen. George C. Kenney, first commander of the Strategic Air Command. Right, Gen. Hoyt Vandenberg, Vice Chief of Staff. These were three among the senior leaders of the Air Force involved in the B-36 program, which became the critical step in the long-range strategic bombing concept struggle of many years. (Photo – USAF)



The YB-36, BM-571, s/n 42-13571, with tail down ready to be rolled from the end of the final assembly line in April 1947. (General Dynamics, FW)

from the production line, checking out all systems and the airplane's performance. Then it was turned over to an Air Force crew who made one or several acceptance flights.

Though Gus Green was the man responsible for the Flight Testing Program, he and his friend, Erickson had a curious working arrangement – on the ground Erickson reported to Green, but once the two of them were airborne in a B-36, the employer-employee relationship took a 180 degree turn and Erickson was in charge. This occasionally led to some rather spirited and "sparkling" conversations to say the least since both were perfectionists and dedicated pilots! Green later became Chief of Service and got out of flying after his wife Mildred asked him to quit. She had followed the XB-36's landing gear mishap and of her husband's danger that memorable day over the radio and the hours of uncertainty were extremely hard on her. Ironically Gus was killed three years later in an automobile accident.

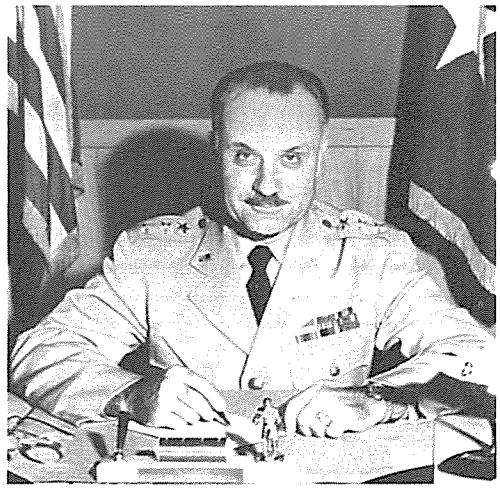
PRODUCTION PROBLEMS

Production line problems developed in the B-36 program, aggravated by the tremendous size. One of the major problems was in making the immense integral fuel tanks fuel-tight. The large number of joints and seals made it necessary for a high degree of skilled workmanship to be applied to every single connection. Fuel leaking plagued the B-36 Program for over three years, but design refinements and technique improvements gradually brought the problem under control. PROSEAL, a rubber-type sealant was developed by Convair and the Coast Paint and Chemical Co. of Los Angeles specifically for this purpose. It was finally necessary to completely coat the entire inner surface of each tank, 6 in all, to prevent leaking.

Another major problem was the bonded structure, primarily secondary structures such as wing trailing edges. Ensuring adequate quality in all bonds was gradually overcome with the divising of special fabrication and inspection techniques In certain areas extensive use was made of METLBOND, a metal-adhesive developed by Convair. It was of value especially in those areas of light structure subject to vibration where conventionally riveted frameworks tended to concentrate the stresses at the rivets.

One most difficult problem was that of change incorporation. At one time nearly a dozen early B-36's filled the Field Operations area undergoing such modifications. Wes Magnuson, Experimental Shop manager during the final construction of the XB-36, supervised this modification work, which included strengthening of the wing flaps and adjustment of the flap synchronization mechanism. The wing flaps were electrically-driven and the control mechanism, to prevent flaps from coming down on one side only in case of electrical malfunction, was rather complex and required precise setting Various components were of such size that contractors were unaccustomed to handling; many hours of thinking went into the design and procurement of new equipment for machining, joining and installing. Early B-36 landing gear main struts had to be forged at the US Naval Gun Factory – the only one capable of the job!

Reliability of the R-4360 engine was still unproven and of concern for a period. Pratt & Whitney kept a crew of personnel at Fort Worth giving certain flight test airplanes "white glove" treatment to obtain the proper high-altitude performance. The engine contractor had a big investment in the future of the B-36



LtGen Donald L. Putt, long associated with the Air Material Command and its predecessors at Wright Field, had direction of A.A.F.-Convair liaison on the B-36 program as (then) Colonel in charge of the Project Office. Putt had been project officer on the XB-17 Flying Fortress and, at the crash of the XB-17 prototype at Wright Field in October 1935, he was among those attempting to extricate the pilots. He was severely burned and hospitalized as a result. (USAF)

In May 1947 both XB-36 and YB-36 were in the North Yard at Convair-Ft Worth, beginning a long series of development flight tests. (GD- 9-2779)

program, consequently, due to unfamiliarity and complexity of the engine, Pratt & Whitney wanted to assist Convair and AF personnel in learning every facet of its operation. The crew from P&W monitored the Flight Testing Program throughout 1947 and 1948, developing procedural systems for proper maintenance and operation. All of this attention led to the "white glove" reference around the Convair plant.

THE YB-36

Ordered as one of two XB-36 prototypes in November 1941, and before the close of the War redesignated YB-36, this airplane was intended to become the production prototype, incorporation new design and engineering changes. Construction was begun in mid-1946 and upon completion in April 1947 it moved to the Experimental Hanger, sharing it with the XB-36. After the "689" Board safety corrections and engineering changes were made the Air Force decided to retain it for an indefinite period as a flight test airplane for the joint use of Convair and Air Force personnel.

Externally, the YB-36 differed principally from the XB-36 by its redesigned pilots enclosure. The XB-36's limited visibility was noted by Erickson and Green. Engineering studies had been done on an improved layout, and a full-scale mock-up was built in June 1945. In this new and improved forward cabin design visibility was greatly increased by the bubble-type canopy surrounding the pilot, co-pilot and flight engineer. Efficiency was improved because the flight engineer was now able to scan the engines in flight and because of improved instrumentation arrangement.

What really clinched the decision to modify the canopy, however, was the Air Force's desire to add a nose turret to the B-36. Experience in combat with the Flying Fortress and the Liberator had shown that the bomber type was vulnerable to headon attacks by fighter aircraft. Nose and chin turrets of various designs were worked out in the early days of the war and applied to B-17's, B-24's and the B-29's. The additional space required for such an installation on the B-36 influenced the canopy/flight deck change to the B-36.

William Easley, Chief Flight Engineer, lent his assistance and was responsible for the design of the new flight engineer's station. The XB-36's flight engineer's station had been laid out by designers who were not flight personnel. Some of the controls had been placed unnecessarily close to the flight engineer and others were scattered over the station in inconvenient locations. Easley endeared himself incidentally, to future flight engineers by laying out the station for operation easiest by a left-handed person; this was somewhat inadvertent – he forgot he was left-handed! Later, when the Air Force decided to commission flight engineers, primarily due to the greater educational background required, Easley again was called on to help write the flight engineer's manual at the Pratt & Whitney plant in Hartford. A new title of Aircraft Performance Engineer was coined for the new officers; the abbreviation A.P.E. was used jokingly instead and Flight Engineer was preferred and used.

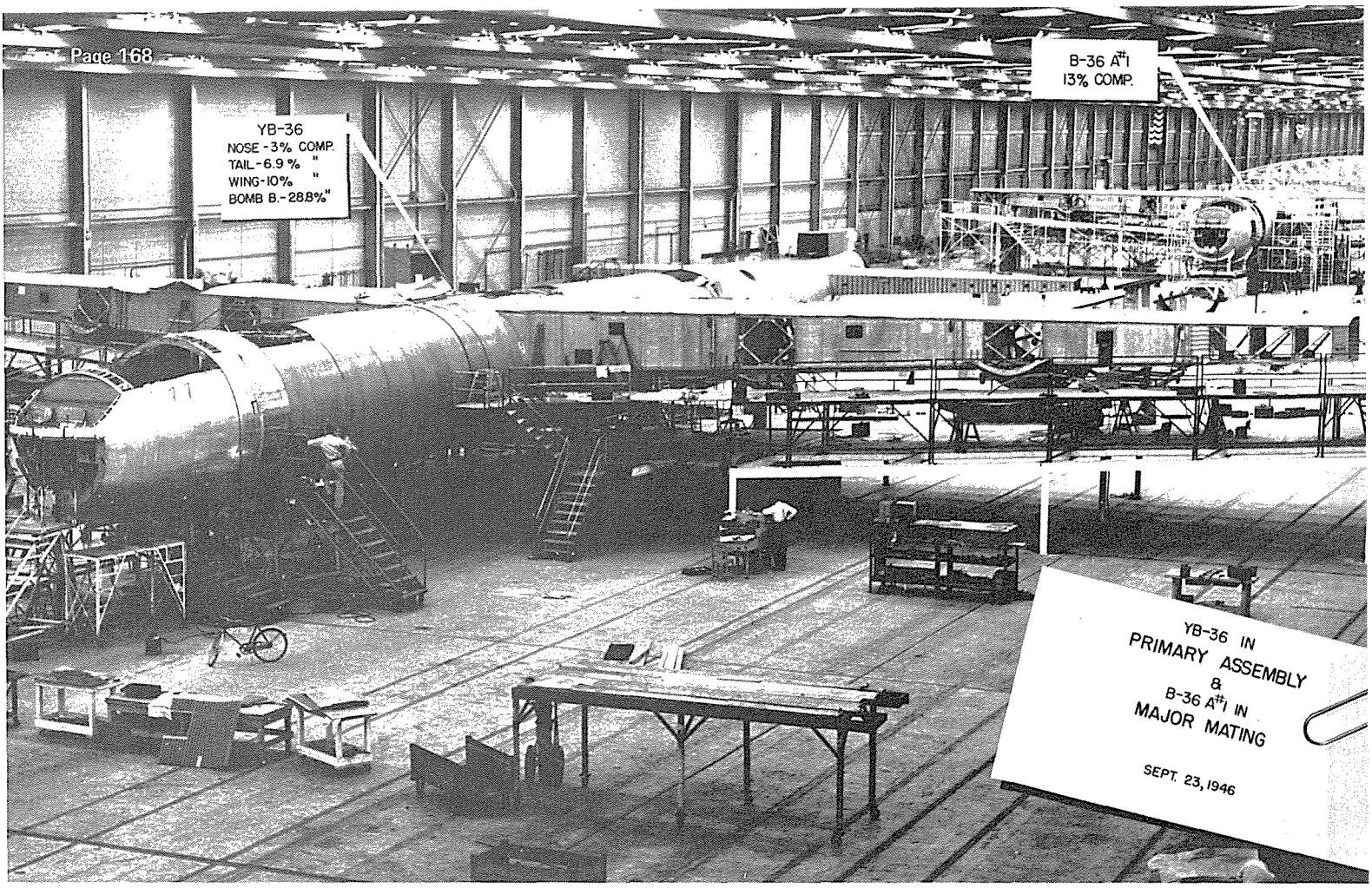
On December 4, 1947 the YB-36 made its first flight – Beryl Erickson at the controls. With its more efficient turbosuper-chargers and other engine equipment changes, it quickly outperformed the original prototype. Only ten days after its first flight, the YB-36 bettered the XB-36's highest altitude mark by 3,000 feet, going to over 40,000 feet.

THE STATIC TEST B-36

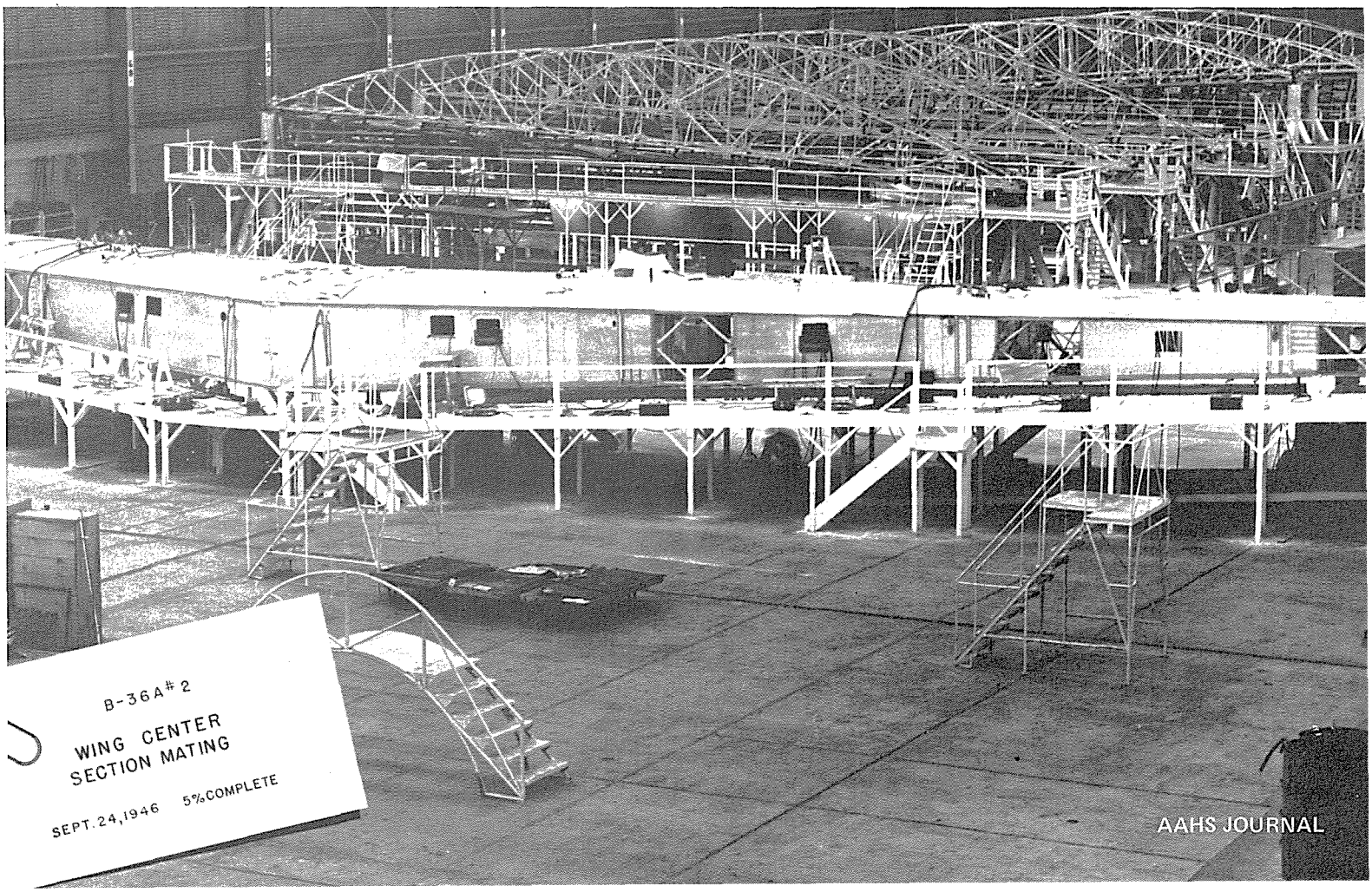
B-36A #1, designated Air Force BM-004, was completed in July 1947 and was the first B-36 equipped with the new four-wheel main landing gear. Erickson took it aloft on August 28th, and two days later, Maj. Dillon ferried it to Wright Field for static and dynamic testing. It had been built with only such equipment as was necessary for the one-time flight which explains why, although it was the third plane off the assembly line, it did fly before the second: flying it to Ohio was eminently more practical than shipping the huge components of the B-36 in disassembled form by rail or truck.

In preparation for the tests, the engines and excess equipment were removed. A special extra-large hanger, nearly eight stories high, had been built. Ten surplus landing gear units, linked together as a hydraulic chain, pulled the 45-ton airplane sideways into the building on castered dollies. An inside overhead crane, on rails the length of the building, lifted the airframe into a cradle-like fixture where the testing would be performed.

In the process of the static load tests, BM-004 was ultimately reduced to scrap. The control system was subjected to different loads on the ailerons, elevators and rudder; the pressurized cabins were tested for air-tightness and later punctured – in all 45 different tests were made. Rubber-to-metal adhesive was used to attach tension patches and pressure pads as the rupture and breaking points could more accurately be determined.



From "Status & Progress Report FZM-039-32" dated October 1946 (Courtesy of General Dynamics, San Diego, Historical Archives)



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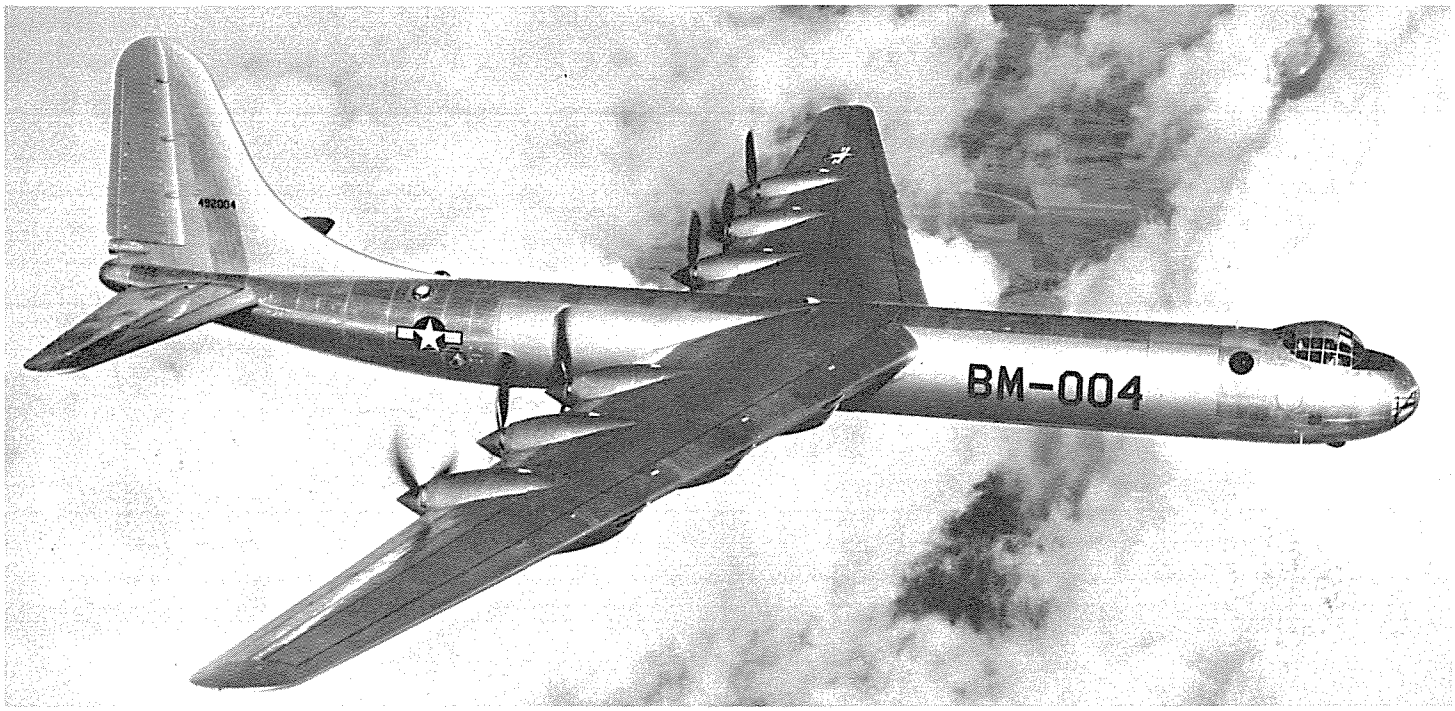
Above, from Report FZM-039-37, March 1947. Below, from FZM-039-41, July 1947. (Courtesy of General Dynamics, San Diego, Historical Archives)

B-36 status and progress

July 1947

Engine



B-36A, BM-004, 44-92004, en route to Wright Field two days after rollout. It had only the necessary one-time flight equipment 30 Aug. 1947. (GD-FW)

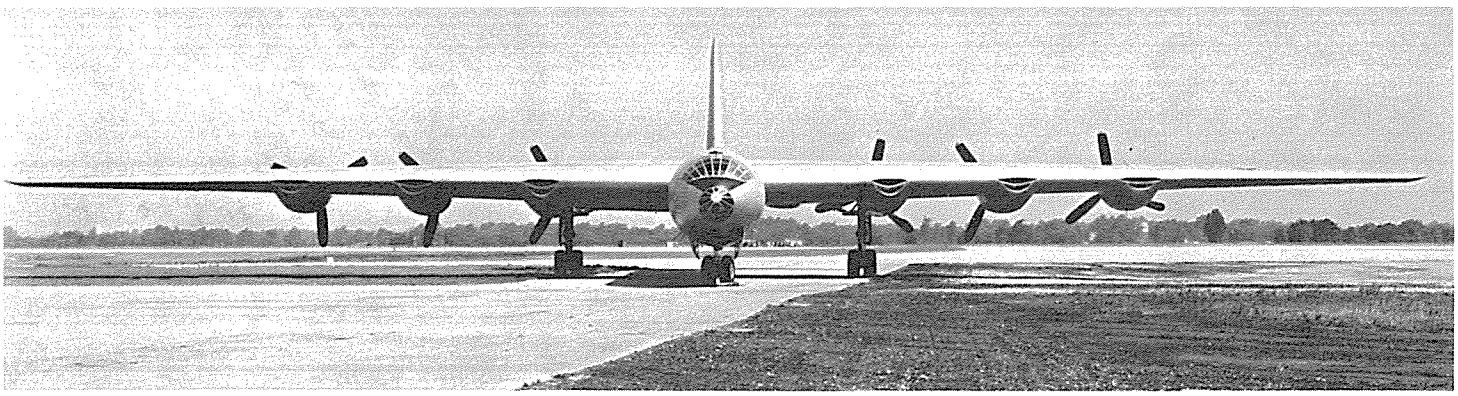
B-36 CONCEPT IN TROUBLE

As the long period of beginning production got underway, criticism of the XB-36's performance and the entire production program was heard from an unexpected source, Gen. George C. Kenney, SAC's new Commander. Kenney was one of the senior officers who had been early supporters of the intercontinental bomber concept. General Kenney assumed command of the Strategic Air Command upon its organization at Bolling Field on 21 March 1946. In December of the same year, he wrote to General Spaatz, Chief of the AAF, suggesting that the 100-plane B-36 order be cancelled in favor of a small number of service test planes. He was concerned about resting the weight of the SAC's unproved reputation and the hard-won struggle for strategic air power upon an airplane which was experiencing difficulties during its flight test program. Available data indicated that the B-36 would have a useful range of only 6,500 miles.

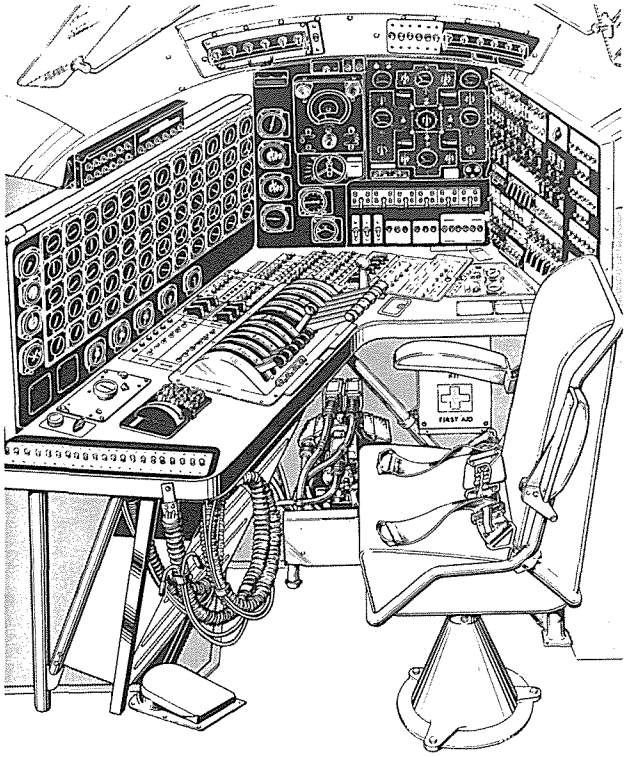
General Kenney favored the Boeing B-50, an improved B-29 model, which he thought superior in all respects except those of bomb load capacity and range. He considered the B-50 to be the standard USAF heavy bomber, with the 6-jet Boeing B-47 as it's eventual replacement. Believing also that the development of built-in range for intercontinental bombers was technically impractical, he felt that strategic bombing operations would always require the use of advanced bases within striking range of enemy targets, or alternately by aerial refueling.

General Nathan F. Twining, then head of the Air Material Command, disagreed and said that the XB-36 could not be judged totally by experimental tests. He cited the fact that both the B-17 and the B-29 had encountered considerable difficulty before they became satisfactory performers. In addition, a new and more powerful R-4360-41 engine of 3,500 had been developed for installation at the 23rd production airplane and the new four-wheel landing gear would be installed on those airplanes currently in production, enabling use of any field suitable for B-29's. Twining agreed with Kenney that the B-52, then in the design stage, would undoubtedly be a better airplane but only in 1953 or later.

Meanwhile, the new U.S. Air Force needed more than a few service test models to properly employ heavy bombers in strategic units. Twining argued that if, in the past, the Air Force had waited for the "best" rather than the "best available" such a policy would have lost the B-17, B-26, P-47 and P-51. Spaatz agreed with him and overruled Kenney's suggestion. The B-36 program continued as scheduled, but Kenney's comments supplied ammunition for other critics. Before a year passed, Kenney again criticized the B-36 (October 1947) and urged that



By late 1949 the new four-wheel landing gear was under the XB-36, an airplane of very clean lines and symetry. (USAF, No. 167391)



Flight Engineer's control station in the B-36A, (General Dynamics FW)

the remainder of the airplanes being built be used for anti-submarine search or as aerial tankers to refuel the B-50 and the proposed Boeing B-54.

The B-36's performance and capabilities were to become the subject of continuous criticism during the next three years, culminating in a special Congressional investigation in the Fall of 1949, sometimes called the "Revolt of the Admirals," but more of this later.

THE VDT ENGINE

The basic engine selected for the B-36 was the Pratt & Whitney R-4360-25 Wasp Major then developing 3,000 horsepower. The improved version of the same engine, the R-4360-41 of 3,500 h.p., was scheduled for the last 78 models of the original contract. In March 1947 a still more powerful version of the R-4360 engine, fitted with a variable discharge turbine – the 4,300 h.p. VDT engine – was placed in development, and proposed by Air Force for the Boeing B-50. Convair, knowing of the new enigne, with Pratt & Whitney's help, proposed it for the B-36. They estimated that with the new VDT engine the B-36 would have a high speed of 410 mph, a service ceiling of 45,000 ft., and a 10,000 mile range carrying a 10,000 lb bomb load.

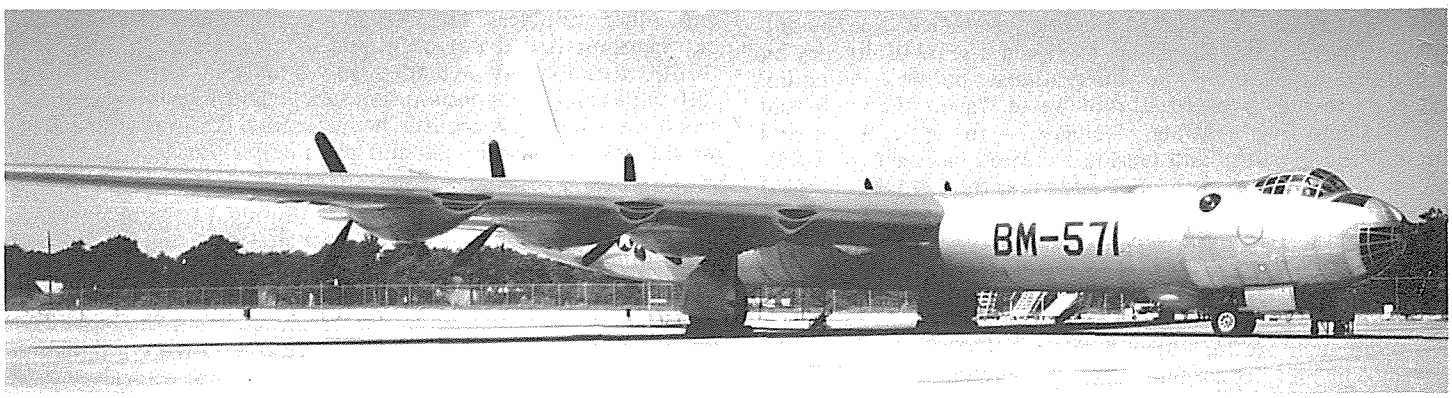
But to accommodate the VDT engine in the B-36 required changing the pusher-type configuration to tractor. Although the engine would remain aft of the wing spar – its position would be reversed, facing forward. The propeller shaft would have to extend 10 feet forward of the wing leading edge. Exhaust gases from the engine would pass through a General Electric CHM-2 Turbosupercharger with a clamshell nozzle controlling the jet thrust by varying the size of the turbine exit. The variable discharge nozzle was to be operated by automatic control, activated by a manifold pressure sensing device. Cooling air then ducted through wing leading edge inlets flanking the nacelle extension.

The proposal to develop the new VDT engine for the B-36 was initially presented by Air Material Command officers at a staff conference in Washington on March 25, 1947. Various conferees opposed the suggestion because research and development funds were then too limited to be spent on the modernization of existing weapons and must be reserved for developing future weapons such as the XB-52 and the new jet-powered medium bombers. On May 6, 1947 another conference was held in the office of General LeMay, then Director of Research and Development, to consider the proposed VDT installation. AMC representatives provided additional data to support the recommendation made at the March 25 meeting.

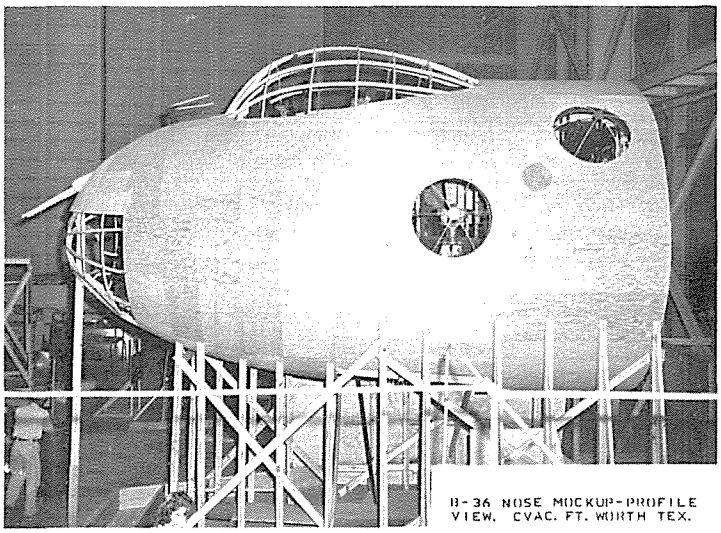
It developed that the cost of adapting the VDT engine to the B-36 could be met largely out of procurement funds instead of R&D funds, which removed the main objection to the proposal. The conferees reversed their previous attitude and tentatively agreed to installation of the new engine, pending further study of the financing problems. In subsequent conversations with personnel from AMC, Convair proposed to finance the cost of the airframe modification for one prototype B-36 with the VDT engine by reducing the contract by three airplanes. The final rationale determined that the cost of the engine development itself was found by the Air Staff to be a proper charge against procurement funds since the VDT engine was merely an improvement of the currently procured R-4360 engine. On this basis the Chief of Staff, Gen. Spaatz, approved the decision to install the VDT engine in one prototype B-36 and one prototype B-50C or B-54.

AIR FORCE REACCESSES B-36 ROLE

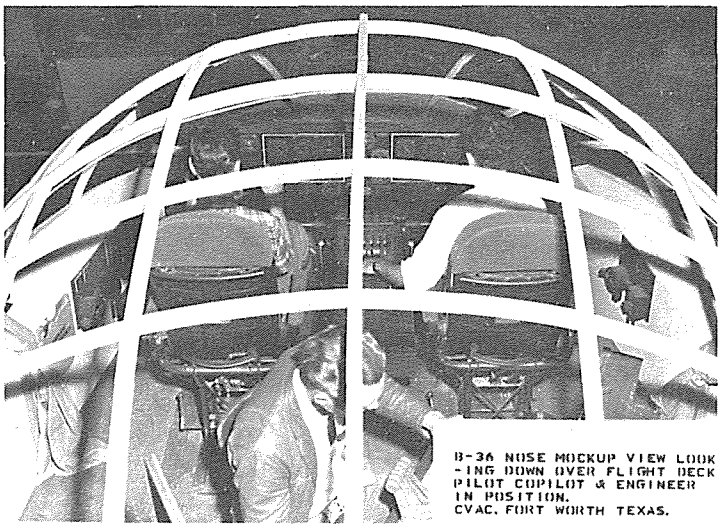
Elevation of the Air Force to a role co-equal with the Army and Navy may have merely legalized a situation which already existed in fact, but it was this external event which crystallized thoughts already in mind for a long time. In the two years following the War, as the implications of wartime events began to be better understood, there was a constant reexamination of the role of strategic bombing and the means of carrying it out. Strategic bombing, employing atomic weapons, was now capable of dealing such powerful blows that it had altered the traditional relationship between military strength-in-being and the strength to be mobilized after war has begun. Survival of the nation might depend on the readiness of the forces needed to deliver that attack and in mid-1947 the B-36 appeared to be the only weapon



YB-36, first to have the new and enlarged flight deck and canopy, in North Yard, June 1947. (General Dynamics, Ft. Worth, No. 9-2777)



B-36 NOSE MOCKUP-PROFILE VIEW. CVAC. FT. WORTH TEX.



B-36 NOSE MOCKUP VIEW LOOK-ING DOWN OVER FLIGHT DECK PILOT COPILOT & ENGINEER IN POSITION. CVAC. FORT WORTH TEXAS.

which would enable the Air Force to launch such an attack without first acquiring bases overseas.

Based on preliminary performance estimates – only the experimental model had flown so far – the B-36 was believed to be vulnerable to enemy fighter attack, owing to its relatively low speed. However, since its great range gave the crew a chance of getting back it was considered a better means of delivering the atomic bomb than medium-range bombers on one-way missions.

In addition, the Air Force needed an all-purpose "workhorse" bomber for the targets which might have to be destroyed by conventional bombs from bases close to a potential enemy. At that time it appeared that the supply of atomic bombs might be limited. Further, large numbers of wartime B-29s were still on hand and included in the Air Force program. It was against this setting that the meetings of the first U.S. Air Force Aircraft and Weapons Board took place between August 19 and 22, 1947. Created by Gen. Vandenberg, Deputy Chief of Staff of USAF, the Board served as a forum at which senior officers would exchange opinions, present factual data, and considered recommendations on matters relating to weapons selection.

Some members of the board considered the B-36 an obsolete weapon and wanted the AF to procure fast jet bombers although they had limited range and would not be available for several years. This would have meant taking the risk that war might occur in the near future and that no overseas bases might be available to accommodate the faster, short-range jet bombers,

Others wanted to increase the speed of the B-36 by installing the new VDT engine, so as to permit its use as the workhorse bomber. Still others favored the modified B-29 (the B-50), then faster than the current model B-36 and which could be further improved in range and speed by the installation of the VDT engine. In some respects, the different viewpoints expressed were reminiscent of the exchange of views between Gen. Kenney and Gen. Twining but the discussion was given a sense of urgency by the deterioration in the international political situation. Following shortly upon the end of World War II, the world had polarized into two separate ideologies – the Free World and Communism. Hostility and tension increased between the USSR and the United States, becoming known as the Cold War. Several countries of Eastern Europe had by then come under total Soviet domination.

After prolonged discussion the Board decided to continue procurement of 100 B-36's as originally planned. This number was considered adequate for a special purpose bomber, in view of the limited availability of atomic bombs. Eventually, the B-36 would be replaced as a special purpose bomber by the B-52, if that model proved satisfactory and if no better means of delivering the atomic bomb were developed.

The B-50 would join the B-29 as a workhorse bomber but would be equipped with the VDT engine if the prototype installation proved successful. The Board also reviewed the previous decision by the Air Staff to install the VDT engine in a single prototype B-36. The promised improvement in speed and range was tempting, but a number of considerations argued against the attempt. There seemed no point in undertaking the expense of a prototype VDT installation for the B-36 unless it was planned to extend procurement beyond the 100 models then under contract.

Convair suggested building an additional quantity of B-36s with the VDT engine under a new contract, the proposed B-36C, but the Board rejected this proposal. Once it had been decided that the B-36 was not suitable as a workhorse bomber, even with the VDT engine, and would be used only as a special purpose bomber, there was no longer a military requirement for more than 100 of these aircraft – again in view of the limited supply of atomic bombs. Mention was also made of retrofitting the last of the original 100 models with the VDT engine. The Board considered this possibility, but feared that the delay in engine availability would postpone completion of the contract, would run up additional expenses and would require appropriation of new funds. For the time being, it was agreed to continue the original contract without change, to build no additional airplanes of this type and to stop the installation of the VDT engine in a prototype B-36 which had been tenatively decided on July 10, 1947. The Chief of the Air Staff approved the decisions of the Board.

On the whole, the Board had shown little enthusiasm for the possibilities of the B-36, understandably, since the XB-36 was so far the only model available and even it had been out of commission intermittently since March 1947 due to landing gear failure and other troubles. The XB-36's performance had not met expectations. It had not been able to maintain an altitude over 30,000 feet for any extended period of time without cooling difficulties and fuel consumption was greater than anticipated. It would be over three months hence before the improved YB-36 would make it's initial flight and give a better profile.

Convair's proposal to increase the B-36 contract by building additional airplanes with VDT engines brought to head a number of interrelated issues which were not directly connected to the new engine. Rough days lay ahead for Convair and USAF B-36 supporters – in April 1948, the low-ebb period of Air Force confidence in the B-36, it was recommended that the remainder of the contract be cancelled! Issues relating to the continuation of the B-36 Program and its near cancellation will be dealt with in Part II of the "B-36 Production Begins" story.

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ABOUT THE AUTHOR

Meyers Jacobsen, an AAHS Member since early 1969, realized one of his goals in documenting the "Design, Development of the XB-36," an article prepared for the JOURNAL, Winter 1970, and for which he was given the Contributors Award, voted by the Membership of the Society at large. In a second part, "Development of the XB-36" in JAAHS, Summer 1971, he told of the major problems in bringing the giant bomber into existence, including an absorbing account of landing gear troubles. New articles are in preparation on the first operational B-36 group at Carswell AFB, the jet-pod modification, and the 1949 Congressional hearings on the program stemming from the bitter Navy-Air Force clash.

In addition to his vocation as interior designer for a San Diego furniture company, Meyers is an avid and dedicated supporter of the Fort Worth B-36 restoration project sponsored by the Peacemaker Foundation. Current difficulties in gaining Air Force release of the big bomber plague the project, but with publicity and much letter writing and dogging the officials, Meyers hopes to bring the project to fruition and bring the world's most spectacular flying museum to the American people

SPECIAL ANNOUNCEMENT

INTERNATIONAL AEROSPACE HALL OF FAME CEREMONY BANQUET

The International Aerospace Hall of Fame will invest four famous men of aviation at its 1972 Annual Awards Banquet in San Diego, California on October 14th, a date which coincides with the 25th anniversary of the flight of the Bell XS-1 with Chuck Yeager in which the speed of sound was exceeded for the first time.

The investure ceremony will be in honor of:

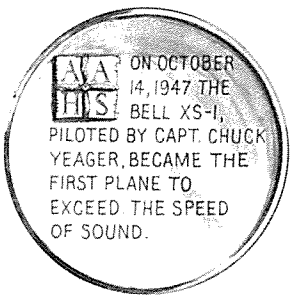
General Henry H. Arnold
Sir Geoffrey DeHavilland
Otto Lilienthal
John K. Northrop

At this annual presentation Major General Charles "Chuck" Yeager, USAF, will be the guest speaker. Gen. Yeager was himself inducted into the International Aerospace Hall of Fame several years ago. The honorees will be represented by next of kin except for Mr. Northrop, who will be present. The Awards will be made in the International Room of the El Cortez Hotel.

A special medal commemorating the first supersonic flight has been struck by the Franklin Mint, and the American Aviation Historical Society will make the first presentation of the medal to Gen. Yeager at the banquet. The presentation speech will be made by Harry Gann, President, A.A.H.S.

Many distinguished persons from the aviation/aerospace community will be present. The Master of Ceremonies will be Mr. Bob Cummings of motion picture and television fame. It is anticipated that several members of the original XS-1 supersonic flight crew will be on hand for an informal reunion.

Members of the American Aviation Historical Society are invited to attend. Although it will be "black tie" or full dress service uniform for the principles at the banquet, other dress will be optional; business suits or semi-formal for ladies are recommended. Tickets for the banquet and presentations are $10.00 per person. Reservations must be made prior to October 10th. Send check or money order to:



International Aerospace Hall of Fame
Balboa Park, San Diego, CA 92101

TIME: Cocktails – 6:30 p.m., Dinner at 8:00 p.m.
PLACE: International Room, El Cortez Hotel, San Diego, Calif.

Copies of the commemorative medal by the Franklin Mint may be obtained through the A.A.H.S. Book Service in either bronze or silver and are about the size of a silver dollar (U.S.) Those interested in one or more for collections or for investment may write to:

A.A.H.S. Book Service, Gerald R. Markgraf, Manager
5033 North Pierce
Lakewood, CA 90712

Prices are:

Bronze, proof finish, $3.00
Silver, proof finish, $10.00

Prices include packaging in an octagonal plastic wallet and postage via first class mail.