



With the wooden pilot's seat removed, a female worker has easier access to cockpit instrument panel wiring although the control stick remains a barrier (aircraft's radio call sign is 36-044). During the early portion of Mustang production, workers usually just wore their normal day clothes.



At each step of the production line, components were added to the Mustang in an orderly fashion. In this case, a worker installs the SCR-274 command radio behind the P-51A pilot's position. This radio was the main communication between the pilot, ground bases, and other aircraft. The substantial rollover structure immediately forward of the radio compartment would save many pilots during takeoff and landing accidents.

Snaking lines of A-36As head toward completion. To the far left, incomplete fuselages head toward the camera before making a U-turn and being fitted with engines, cowlings, etc. On the right, rapidly completing A-36As move to the camera. Closest aircraft is 97-297.



Plywood trim tabs were installed on the ailerons. A metal bracket on each trim tab provided an attachment point for the trim tab actuating rod. The two holes in the tab for the bracket attachment screws were spot-faced on the side opposite the bracket so that the head of the screw was below the surface of the tab. After the bracket was installed, the holes above the heads of the screws were filled with wood filler. Each tab was hinged to the respective movable surface by three hinge bearings attached at the cutouts provided in the leading edge of the tabs.

Metal-covered sealed aileron-type wing flaps were installed on the trailing edge of each wing between the fuselage and the ailerons. The main structure of each flap consisted of two spars, 12 nose ribs, 11 main ribs, and a series of rolled section stringers. The main ribs and stringers were covered with .032-inch-thick sheet aluminum. The trailing edge of the flap was formed from a single .020-inch-thick aluminum sheet reinforced with 27-sheet aluminum supports in the form of tapered hat sections. The forward spar was a single

.040-inch-thick aluminum sheet with both edges braked at right angles to the surface of the spar. Flanged lightening holes in the spar surface permitted access to the inner structure of the flap after the skin was on the flap. The aft spar consisted of a single .032-inch-thick aluminum sheet formed into a U-channel. A stainless steel rubbing strip curved forward and down on the nose ribs from the top of the forward spar. Three flap hinge brackets bolted to the forward spar provided hinge bearing attachment points. The flaps hinged on three sealed-type bearings.

Landing Gear

The landing gear consisted of two retractable main gear assemblies with disc-type brakes and 27-inch smooth-contour wheels, installed in the main wings, and a retractable auxiliary tail gear assembly with a 12.5-inch, smooth-contour wheel, installed in the tail of the fuselage. When the alighting gear was retracted, the main gear was completely enclosed in the wings, and the auxiliary tail gear was completely enclosed in the fuselage by the landing gear fairings. The mechanical and hydraulic operation of the landing gear was controlled by means of the landing gear control handle on the lower left side of the cockpit. The tail wheel was steerable and full swiveling. The air-oil system of shock absorption was used in all of the landing gear struts. Baffles and a metering pin in the shock strut cushioned the shock of a landing. A mineral-base hydraulic fluid was used in all of the shock struts.

The landing gear locks were all actuated by means of mechanical linkage from the landing gear control handle bell-crank, with one exception; the main gear down-lock pin was actuated hydraulically.

Cables extending aft from the upper and lower ends of the landing gear control handle bell-crank actuated the tail gear up-latch and down-lock pin.

A push-pull rod system, which extended forward from the lower end of the control handle bell-crank, actuated the lock system torque tube in the main wheel bay. Lock rods connected to the inboard bell-crank on each end of the torque tube actuated the main gear up-latches.

The fairing door locks were actuated by a push-pull rod system connected to the outboard bell-crank on each end of the torque tube and was transmitted through bell-cranks, which were installed on the forward spar of the wing, to the upper arm of the fairing door lock assembly in such a manner that the lock assembly rotated vertically. The upper arm of the lock assembly was slotted so that the spring-loaded lock assembly could be pushed open against the spring pressure to engage the fairing door locking lug. A rod extended outboard from each lock assembly to bell-cranks just above and outboard of the main gear retracting cylinder. A bracket on the main gear retracting strut piston contacted the inboard arm of the bell-crank when the landing gear was in the down position.



The nearly completed fuselage of P-51A 99-132 is lowered onto its wing. Exact alignment markings on the factory floor allowed precision fitting of the two components.