

POPULAR SCIENCE



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Here Come the New Fire Engines

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INSIDE the Flying Wing

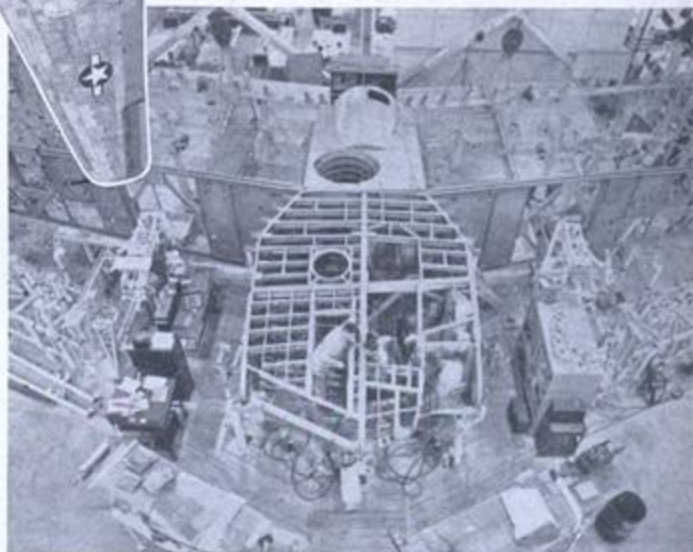


Skeleton of crew nacelle, below, shows its position, forward of the big main spar around which the trusswork is built. The cylindrical section behind the nacelle carries the tail cone, which is also accessible to the crew.

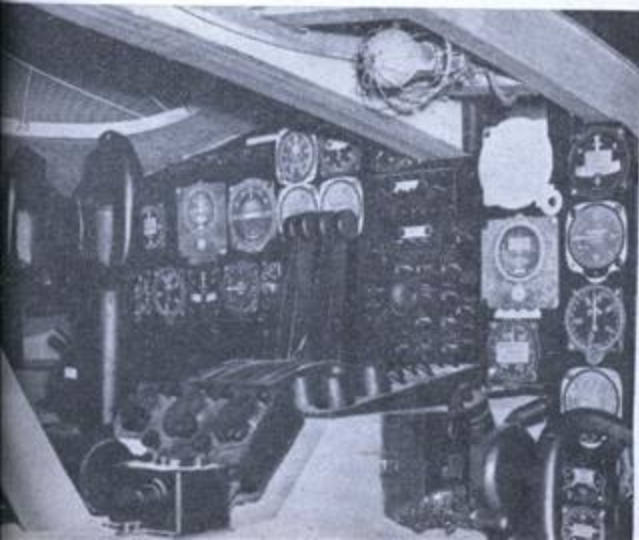
COMPLETELY enclosed within the outer skin of the XB-35 there is a many-sided room that houses the 15-man crew. Pressurized for high altitudes and large enough to provide sleeping accommodations for six, it is the heart of the Flying Wing.

Around this center of operations is a mass of trusswork resembling a bridge—a simpler structure than that of a conventional airplane because the craft's weight is distributed throughout the wing and needs no "beefing up" around a fuselage.

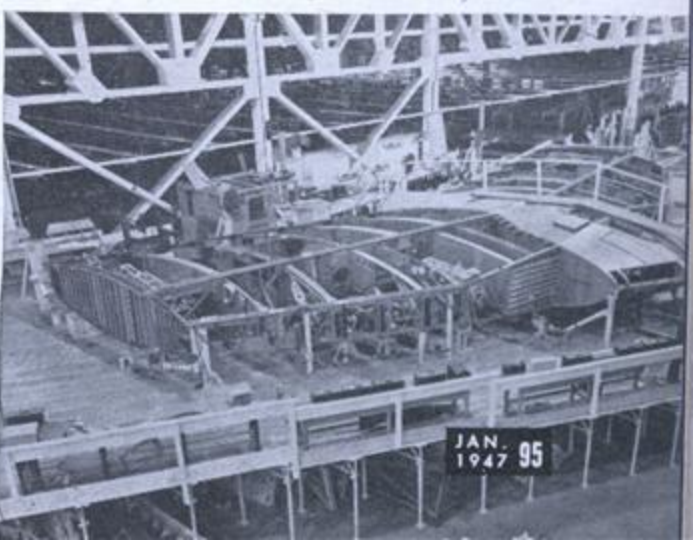
The pictures on this and the following page, taken at the Northrop Aircraft plant in California, show details of the crew nacelle and the massive 172-foot framework in which it nestles.

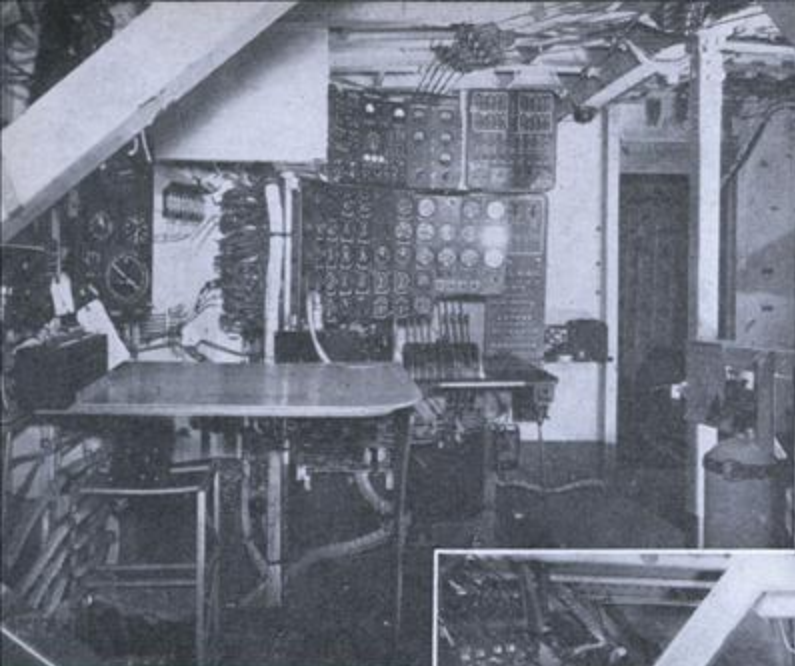


Instruments and controls of the plane are shown in a full-size wooden mockup. Pilot's wheel is at left, and his head projects up into Plexiglas blister directly above it. Co-pilot's wheel, at lower right, is behind windows in leading edge of wing.



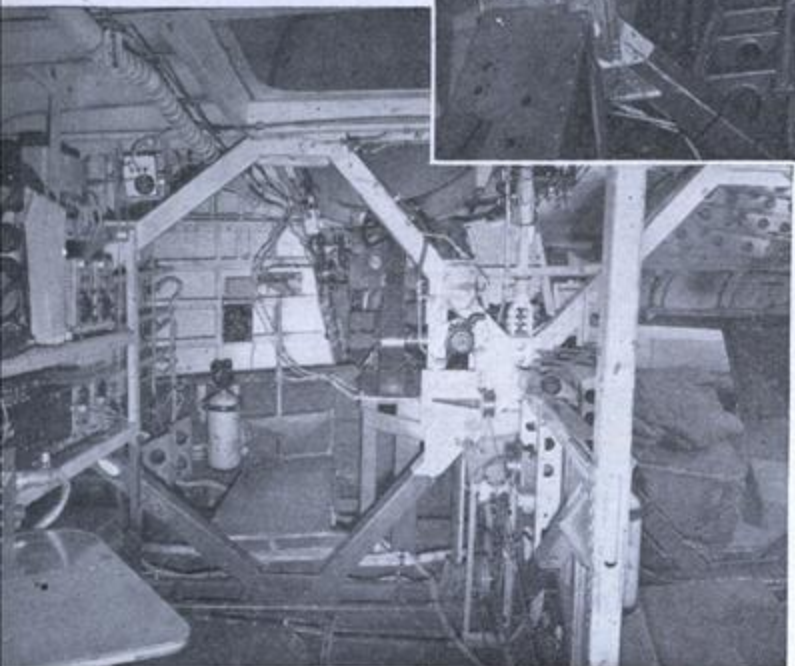
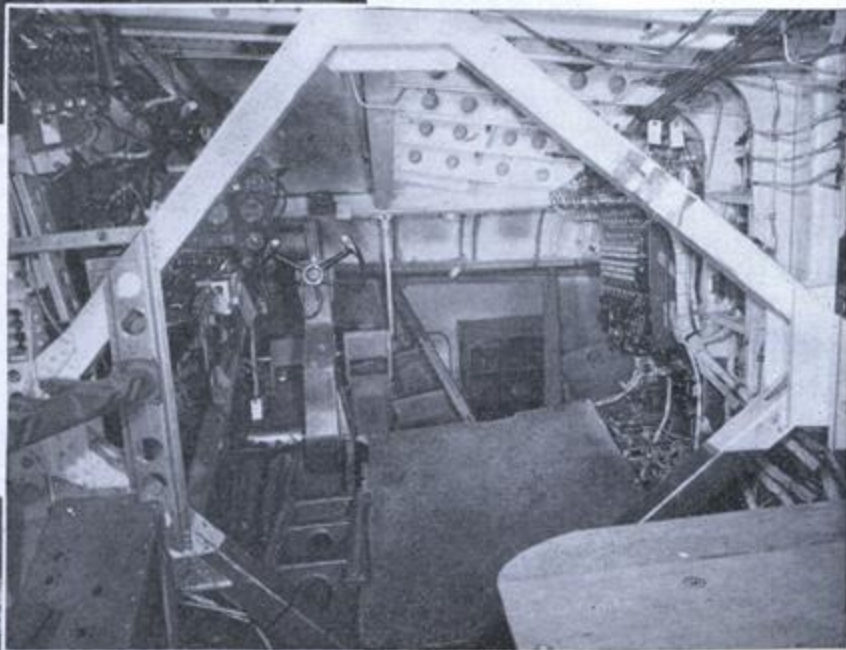
Structural strength of the giant wing is indicated by framework, below, taking shape around the center nacelle. This stage of construction also illustrates relative simplicity of building a plane in which the fuselage is an integral part of the wing.





Taken inside the plane itself, the photo at left shows flight engineer's station and the mass of instruments he has to observe to check on plane's performance. The engineer rides backward, about 10 feet behind the co-pilot's seat. The navigator sits near him at the table in left foreground; table is also shown at bottom right of picture below.

The view at right, looking forward to the co-pilot's station, shows location of bombardier's station. The square opening just below and to the right of the control wheel is for a glass panel in the forward wing surface, behind which the bombardier sits or kneels to operate bombsight.



At left is the pilot's station, as seen from center of the crew nacelle. The overhead blister can be seen through the diagonal braces, which partly obscure the control wheel and instrument panel. Table at bottom left is the radio operator's station, shown with some of the flight-test equipment required for early trials of the Flying Wing.

PLN-UP

NORTHROP FLYING WING. First of 15 being built for the AAF, this 172-foot giant's four internal Pratt & Whitney engines give it 12,000 horsepower to lift an overload gross weight of 209,000 pounds. Streaks across its belly are from exhaust stacks. Dummy remote-control gun turrets are outboard of the propellers.

