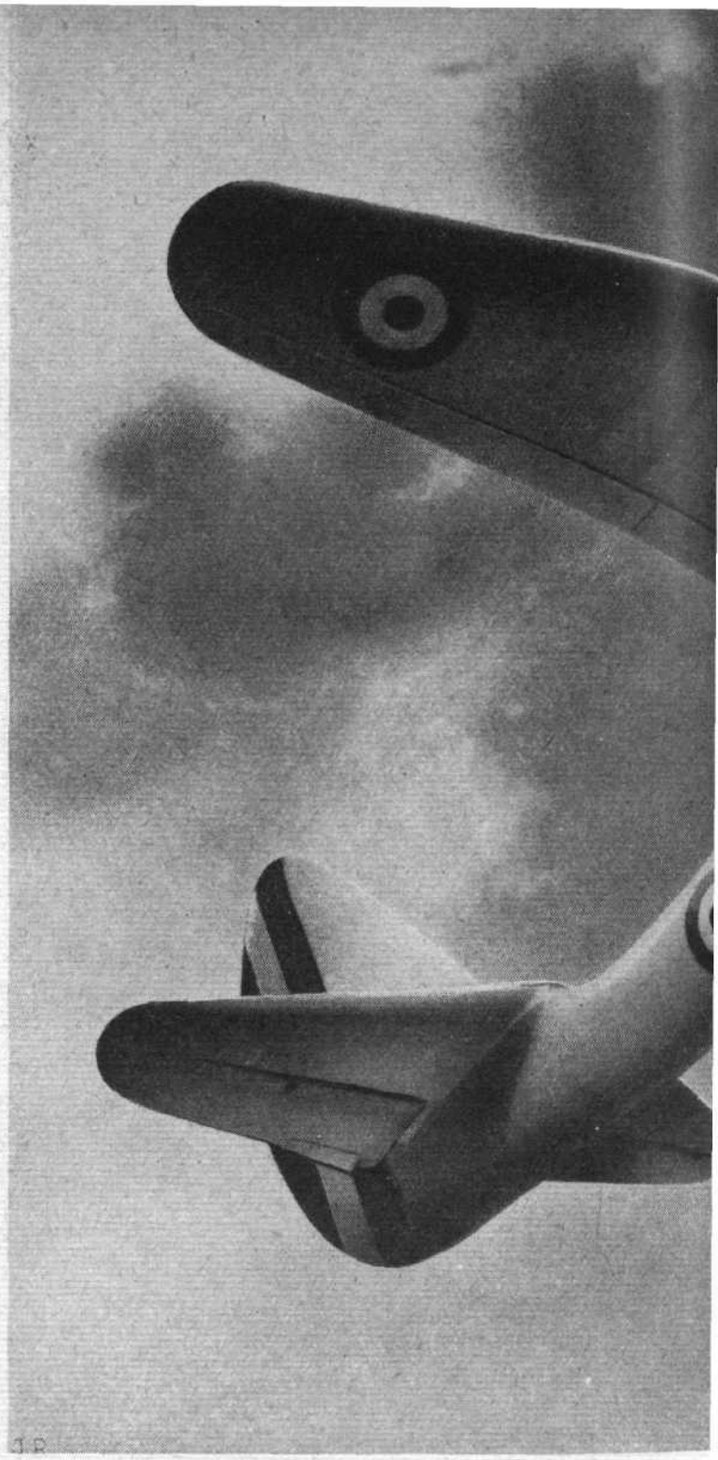
The fuselage is of semi-monocoque construction, and incorporates channel-section transverse frames and extruded longitudinal stringers with a smooth skin covering. Like the wing it is built in three sections, the parts being bolted together. The nose section consists in the main of transparent panels; the mid-section, built integral with the centre section of the wing, includes the bomb bay; and the tail section runs aft from the rear spar bulkhead. The cantilever tailplane is likewise in three sections and the elevators are part metal and part fabric covered.

Of fully retractable type, each of the main units of the undercarriage has a single oleo-pneumatic strut attached to a half fork—an arrangement making for easy removal and replacement of tyres. Retraction is effected hydraulically, though there is an emergency hand pump.

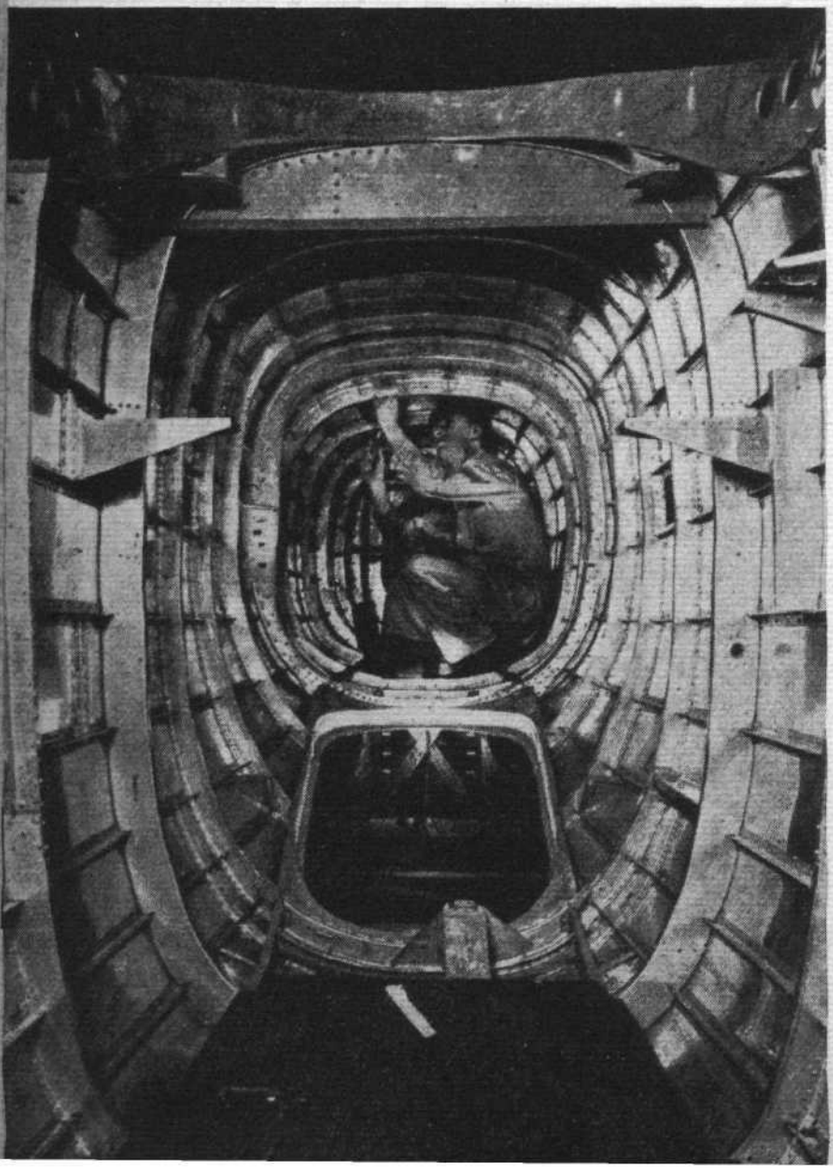
Removable Nacelles

The undercarriage, when raised, is housed in the nacelles, each of which, with its engine, may be removed as a unit, though the cowling has first to be taken off. Engine mountings are of welded chrome molybdenum steel tubing, the upper members being attached directly to the wing and the lower ones connected to the structure which supports the undercarriage.

The pilot's cockpit is over the leading edge of the wing and the bomb-aimer's position somewhat forward of this. A gunner is stationed aft of the trailing edge, where there is a partially retractable gun position on top of the fuselage. Provision is also made for a second gun to be installed in the bottom of this position and to fire through a hatchway which has removable covers. Wireless equipment is installed in the same compartment and is operated by the gunner. All crew positions are covered with Plexiglass except the forward portion of the cockpit, where laminated plate glass is utilised.



The salient features of the Martin 167F reconnaissance bomber as supplied to France, are evident in the above *Flight* copyright drawing.



An interior view of a 167F under construction. This is reproduced by courtesy of *Fortune*.

Either the pilot or the bomb-aimer can fly the machine, the controls for the latter being arranged so that they may be stowed to provide maximum freedom during bomb aiming. The auxiliary controls, however, are limited to the elevators, rudder and ailerons, although provision may be made for landing gear and flap controls.

Any of the three models of the Pratt and Whitney Twin Wasp (R-1830 series) may be specified. The SC3-G is a single-speed supercharged version operating on 87 octane fuel and delivering 1,050 h.p. at 2,700 r.p.m. at sea level and 1,000 h.p. at 2,800 r.p.m. at 11,500ft. With these engines the 167 has a maximum speed of 274 m.p.h. at sea level and 304 m.p.h. at critical altitude. The service ceiling in this case is 29,000ft., and rate of climb at sea level 2,000ft./min