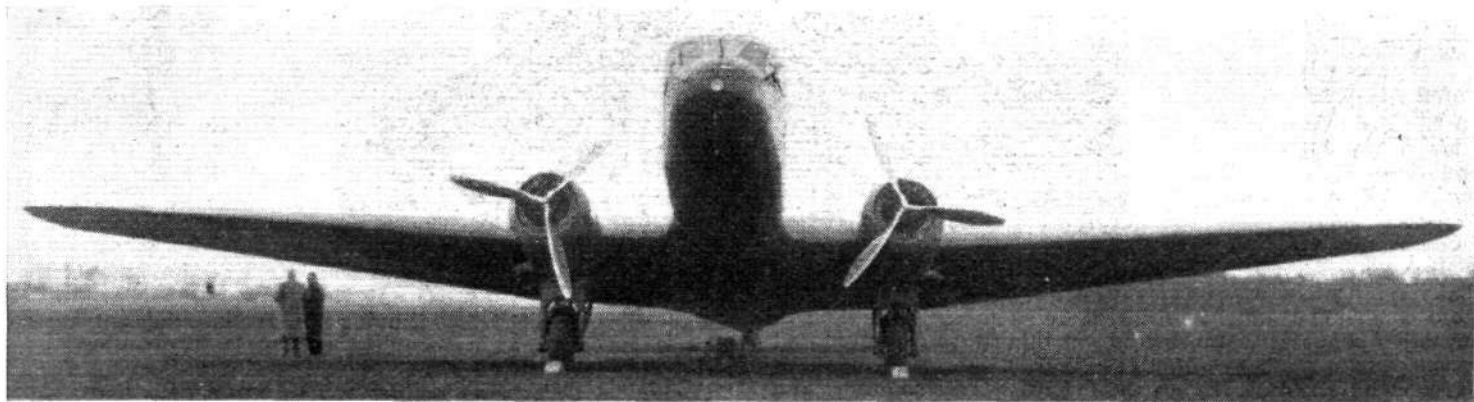


VARIATION on a THEME

The Breguet-Wibault 670, Although Built to the Modern Formula, is no Slavish Copy of Successful Designs



MANUFACTURERS' trials of the new Breguet-Wibault Type 670 eighteen-passenger commercial monoplane are almost completed, and the machine will shortly be presented at Villacoublay for official tests.

It is a low-cantilever-winged monoplane of metal construction throughout, and may be regarded as an enlarged and improved development of the Breguet-Wibault Types 282 and 283 triple-engined machines which have met with great success on the European lines of Air France.

Of typical Wibault form, the cantilever wings are built in three sections—a centre section and two outboard panels. The centre section, which carries the two engine mountings, is of a uniform thickness; the outer panels taper down to a chord of 5 ft. 8 in. at their tips, and their thickness also is much reduced. Duralumin sheet fillets fair the junction of the wings with the fuselage. Structurally the wing is of two-spar type, with spar webs built up of sheet duralumin, and embodying extruded flanges. The covering is of duralumin. Slotted ailerons extend for approximately two-thirds of the wing span, the balance of which is taken up with slotted trailing-edge flaps.

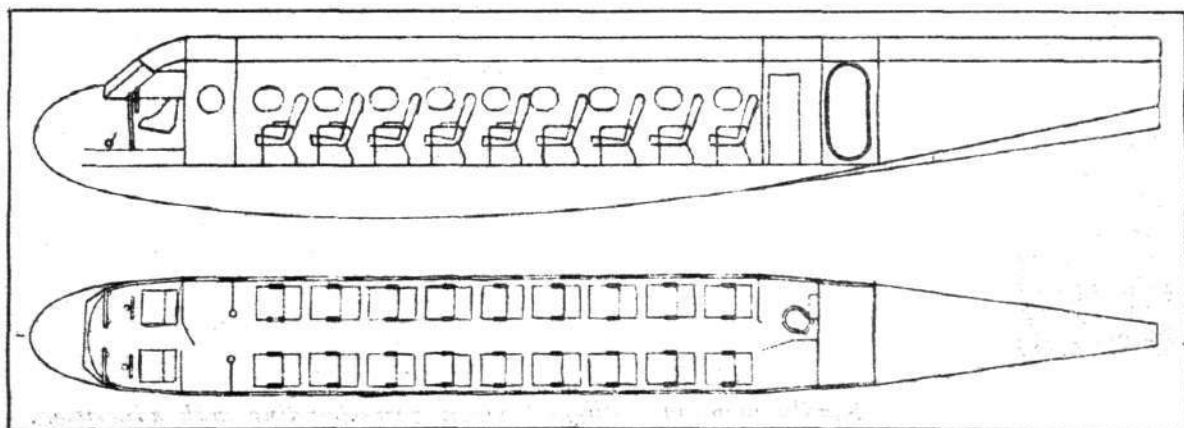
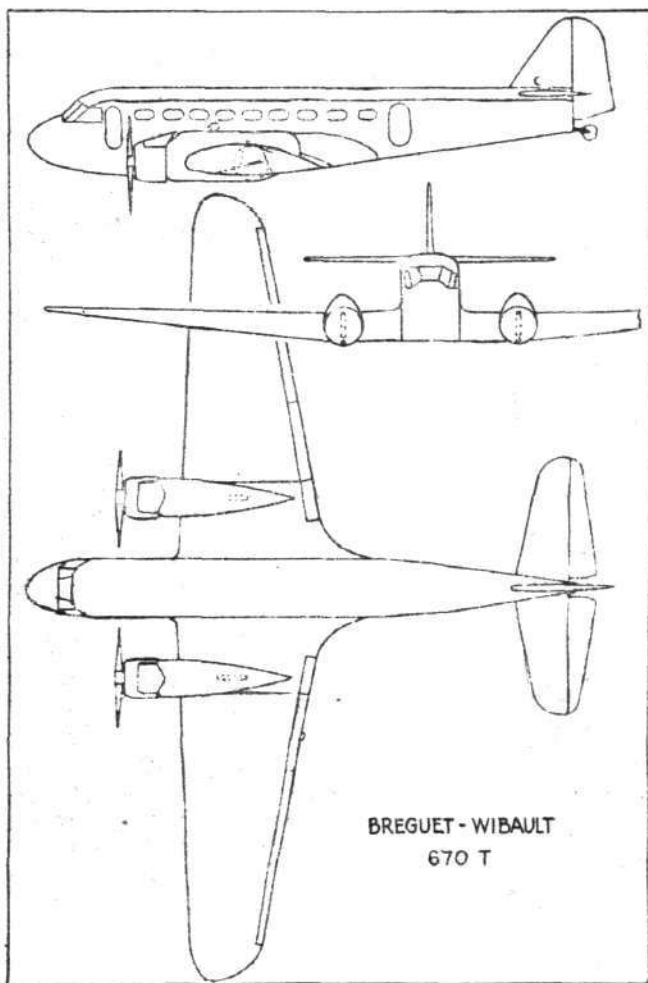
In the main the fuselage is of rectangular section, although the nose portion is well rounded. The complete structure, with its covering, is of duralumin. In the nose is the pilot's cockpit, furnished with dual controls, and aft of this is a position for the wireless operator. The cabin has chairs for eighteen passengers, arranged in two rows of nine, each chair being placed beside a window. Soundproofing and ventilation have been carefully studied, and the cabin is by no means cramped, measuring 5 ft. 9 in. high and 5 ft. 6 in. wide. An entrance, a lavatory and a baggage hold are located aft of the cabin.

Power is furnished by two Gnome-Rhone "Mistral Major" or K 14 two-row fourteen-cylinder radials, geared 3/2 and moderately supercharged to produce 900 h.p. each at 4 500 ft.

The retractable undercarriage is of Breguet design, with each compression unit composed of a pair of shock-absorbing struts, disposed one on each side of the wheel.

The general characteristics are as follows:—

Span, 80 ft. 9 in. (24.86 m); Length, 60 ft. 9 in. (18.74 m); Height, 23 ft. 5 in. (7.2 m); Wing area, 846 sq. ft. (78.6 m²); Gross weight, 19,800 lb. (9 000 kg); Range, 625-1,250 miles (1 000 km-2 000 km); Maximum speed at 5,000ft (1 500 m), 219 m.p.h. (350 km/hr); Speed at 62% per cent. full power, 186 m.p.h. (298 km/hr).



That the new Breguet-Wibault's maximum speed is 219 m.p.h. can be well believed after a glance at the heading photograph and the general arrangement drawings. The cabin plans show the wide gangway and the position of the lavatory and doors.