

AEROPLANE SILHOUETTES FROM THE PARIS SHOW.

THE BREGUET BIPLANE.

CONSTRUCTED by Louis Breguet at Douai. Fuselage and framework of steel and wood. Planes double-surfaced throughout. The main planes are connected by four stanchions placed a short distance back from the leading edge. Well known for its weight-lifting powers. On one occasion M. Bréguet carried five passengers beside himself, the total weight of the six persons being 420 kilograms. Beside the one described, a racing model with only 20 sq. metres bearing surface, and fitted with a higher-powered engine, is also made.

General Dimensions.—Bearing surface, 38 square metres. Length, overall, 9.20 metres. Span of upper main plane, 13.20 metres; of lower main plane, 9.90 metres. Wings of normal type are 1.70 metres broad.

Seating capacity.—Two seats, placed one behind the other.

Engine.—50-60-h.p. 5-cyl. semi-radial R.E.P. motor. Normal revs., 1,000. Any motor fitted.

Propeller.—Breguet, of two blades. Diameter, 2.90 metres. Geared down, variable pitch. Normal revs., 600.

Chassis.—Three wheels, one centrally in front of other two (which are each double); short skids in front of each wheel; front wheel is steerable by means of ordinary control wheel. The entire aeroplane is suspended on these three wheels, there being neither skid nor wheel under the tail.

Tail.—Cruciform monoplane tail, mounted on universal joint.

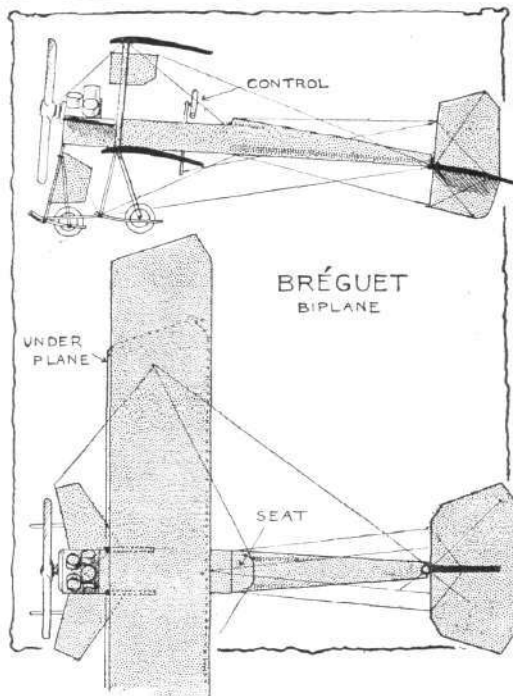
Lateral stability.—By the flexing of the trailing edges of the main planes.

Weight.—About 475 kilograms, complete with motor.

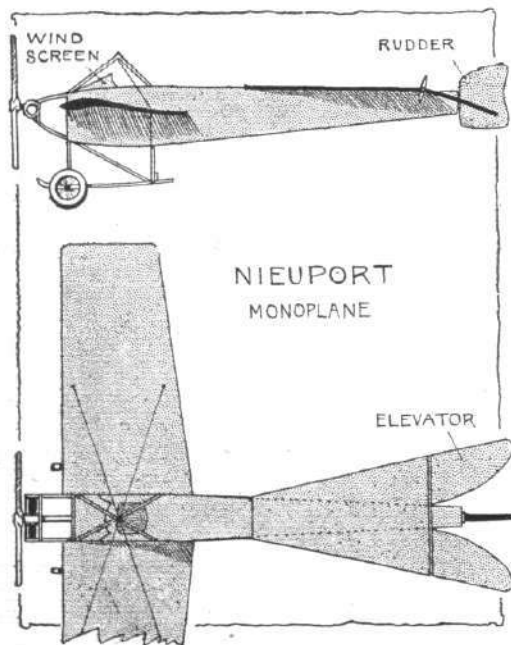
Speed.—85 kiloms. an hour.

System of control.—By a wheel placed on a lever. Rotation of the wheel steers the machine. Backward and forward movements of the entire column elevate and depress the aeroplane, and a sideways movement to the right or left depresses the opposite wing in either case.

Price.—With 50-60-h.p. R.E.P. motor, 30,000 francs.



THE NIEUPORT MONOPLANE.



FRENCH-BUILT monoplane. Made its first appearance at the Rheims Meeting, 1910. Planes double-surfaced throughout. Entire fuselage is covered in with fabric. One of the lightest and most efficient aeroplanes on the market.

General dimensions.—Bearing surface, 14.9 metres; length overall, 7.50 metres; span, 8.40 metres.

Seating capacity.—One or two seats.

Engine.—20-25-h.p. 2-cyl. horizontal opposed air-cooled Darracq motor. Normal revolutions, 1,200. The 5-cyl. 40-h.p. Anzani or the 50-h.p. Gnome can be fitted at an increased cost, as shown below.

Propeller.—Chauvière Intégrale. Diameter, 2 metres. Pitch, 1.20 metres. Effective revs., 1,200.

Wheels and skids.—Two wheels connected by a flexible leaf spring. A single skid is placed centrally curving forwards and upwards.

Tail.—Non-lifting fin extending to elevator, which is in two parts to allow single rudder placed centrally to work freely.

Weight.—Complete with engine, 250 kilograms.

Lateral stability.—Maintained by flexing the trailing edges of the wings. The wings are connected by a patented arrangement by which one wing automatically alters the curvature of the other wing when under undue pressure, thereby maintaining stability to some degree.

Speed.—75 kiloms. an hour.

System of control.—The flexing of the wings for the maintenance of lateral stability is performed by two independent pedals, each controlling one wing. A wheel control actuates the rudder, and the backward and forward movement of a lever works the elevator.

Price.—Two-seater, with Darracq 20-h.p. motor, 18,000 francs. Two-seater, 40-h.p. 5-cyl. Anzani, 22,000 francs. One-seater, 50-h.p. Gnome, 24,000 francs. Two-seater, 50-h.p. Gnome, 26,000 francs. Any engine can be fitted if required.