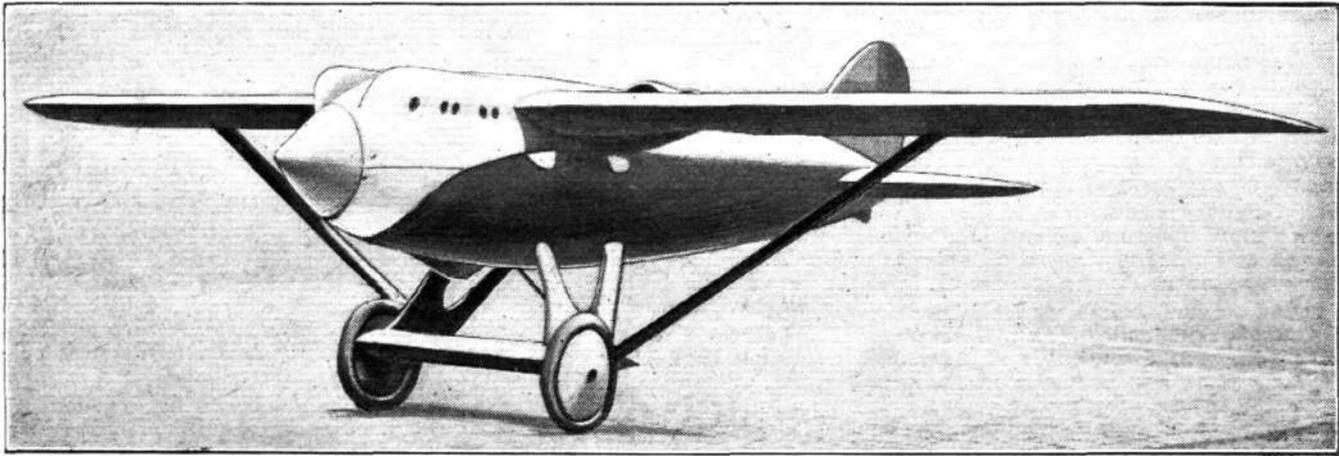


THE NIEUPORT-DELAGE TYPE 42

600 H.P. Hispano-Suiza Engine

THE French *Coupe Beaumont*, for which the Gloucestershire Aircraft Co., Ltd., had entered a machine, was competed for on June 23 by French machines only, the Gloucestershire machine not being ready in time for the race. As recorded in *FLIGHT* at the time, the race was won by Sadi Lecoq on a Nieuport-Delage Sesquiplan with 600 h.p. Hispano-Suiza

The wing section employed is, it will be seen, of the bi-convex type, with probably a relatively low maximum lift coefficient but high L/D, especially at high speeds. That the landing speed is extremely high is scarcely to be doubted in view of the fact that the wing loading is as high as 21 lbs./sq. ft. Assuming a maximum lift coefficient of 0.5—and it



Three-quarter front view of the Nieuport-Delage type 42, with 600 h.p. Hispano-Suiza engine.

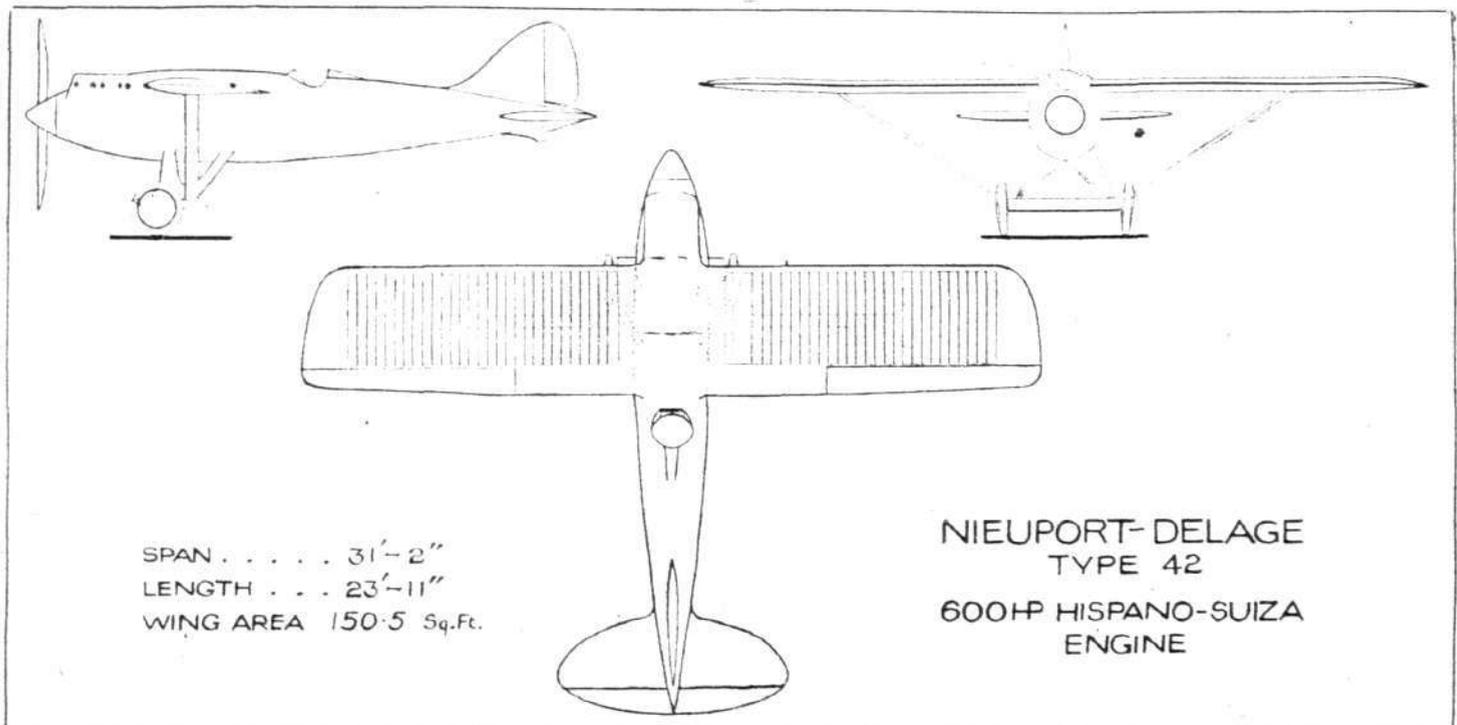
engine. The following article and illustrations dealing with the new Nieuport-Delage machine are based upon illustrated descriptions that have appeared in our French contemporaries, *Les Ailes* and *L'Aéronautique*, to whom we wish to express our indebtedness for the information concerning the latest successful French racing machine.

The *Coupe Beaumont* Nieuport-Delage carries the type No. 42. Like previous machines designed by this firm during the last few years for racing purposes, the 42 is of the type known as a sesquiplan, or one-and-a-half 'plane, i.e., essentially a monoplane with a small plane added which encloses the wheel axle of the undercarriage, and to which the main wing is braced by a single strut on each side. As the general arrangement drawings will show, the type 42 is of very clean outline, made possible mainly by the fact that wing radiators are employed. These, it will be seen, extend over nearly the whole of the wing area, and the fact that Sadi Lecoq was able to cover the 500 km. distance at record speed seems to indicate that the radiators performed their work satisfactorily.

seems unlikely that it will be more for a section of this type—the landing speed with this wing loading would be approximately 91 m.p.h. Although this figure is certainly high, it is not, perhaps, as excessive as might appear at first glance, if it is remembered that the space available at Istres, where the *Coupe Beaumont* was held, is very vast and leaves a pilot ample room to land, even at such high speeds and with very long runs after touching the ground.

From a constructional point of view, the Nieuport-Delage 42 follows normal Nieuport practice in that the fuselage is of the monocoque type, associated with the Nieuport firm for many years, and the wing is the usual wood structure. Certain detail innovations have, however, been introduced in the 42, such as building the fuselage in two halves and covering most of the wing with ply-wood.

The monoplane wing is in one piece, the spars being bolted to specially strengthened bulkheads inside the fuselage. The two main spars are of the built-up box-section type, and are made from spruce, afterwards wrapped in fabric. The ribs are of three-ply, and the compression struts for the internal



THE NIEUPORT-DELAGE TYPE 42 : General Arrangement Drawings. Note the wing surface radiators.