

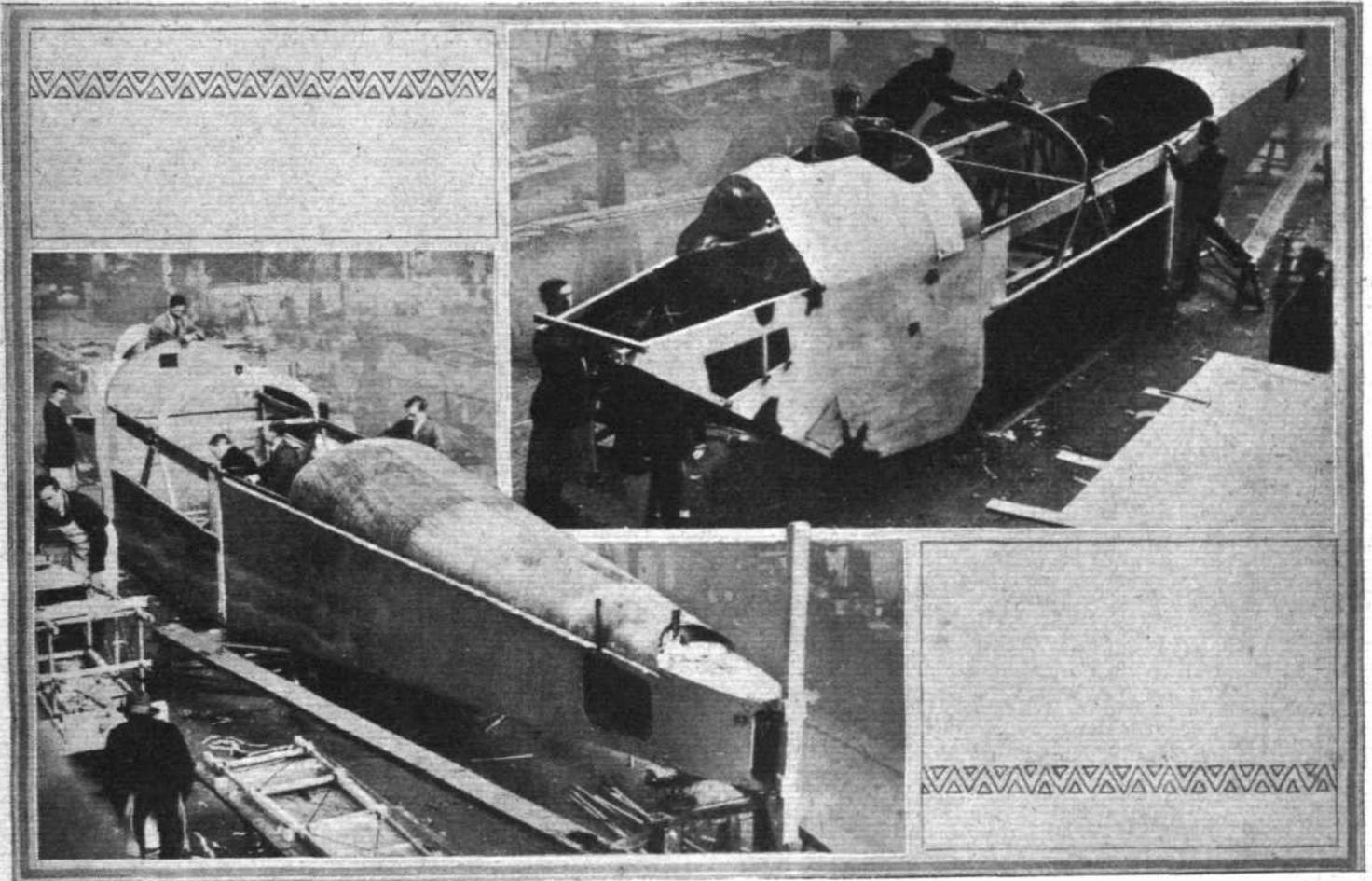
TWO NEW DE HAVILLAND MACHINES

A SHORT time ago we were able to announce that the de Havilland Aircraft Co., Ltd., were building, at their Stag Lane, Edgware, works, a large air liner to be put on the regular air routes. This machine, the D.H.54, will have accommodation for 14 passengers and will be fitted with a Rolls-Royce "Condor" engine. This week we are able to show our readers two views of the fuselage of this machine during construction at Stag Lane. The men working on the fuselage serve to convey a very good idea of the size, which would not otherwise have been apparent. It will be seen that the cabin will afford ample head-room for standing up, as the height from floor to ceiling is more than 6 ft. Actually the dimensions will be: Length overall, 51 ft.; wing span, 68 ft.; and height, 16 ft.

The seating accommodation will be somewhat unusual in that there will be three rows of seats abreast, a single row along one side and a double row along the other, with a passage running the whole length of the cabin.

The other de Havilland machine of which we are in a position to give details this week is a small two-seater school machine suitable for use by light 'plane clubs. It may be remembered that Capt. de Havilland did not, last summer, consider 1,100 c.c. sufficient for two-seater light 'planes, and it is not, therefore, surprising to learn that the new de Havilland school machine, to be known as the D.H.60, will fall outside the light 'plane class, as the term has come to be understood in this country.

The D.H. 60 (perhaps the fact that the type number is that of the old "clutching hand" with a 0 added is significant) will be a tractor biplane of normal form, and will be equipped with a new engine of 50-60 h.p., which is being produced in close collaboration with the D.H. designing department. (No, we are sorry, but that is all the information we are permitted to give.) This engine will be of exceptionally robust construction, and it is expected that it will be as easy to maintain as the engine of a motor-car.



A NEW DE HAVILLAND AIR LINER: The fuselage of the D.H.54 in course of construction at the Stag Lane Works of the de Havilland Aircraft Company. The men alongside give some idea of the size of the machine, which will carry 14 passengers. The power plant is to be a Rolls-Royce "Condor."

A novel feature of the D.H.54, which will have a total loaded weight of 11,000 lbs., will be the oleo-rubber undercarriage, which has been so designed that it can be dropped should the machine be forced to alight on the sea. Not only so, but the lower portion of the fuselage will be made watertight so that the machine will float on an even keel. Thus it will be seen that the de Havilland Aircraft Company have been working on much the same lines as Pierre Levasseur in France, who exhibited at the Paris show a two-seater fighter incorporating these features. As the D.H.54 was designed long before the Paris show, the firm can certainly not be accused of copying, and it will be remembered that last summer a D.H. machine was deliberately "landed" in the sea at Felixstowe in order to find out the behaviour. As the new D.H.54 is to have a cruising speed of 100 m.p.h., the expenditure of 50 h.p. per paying passenger cannot be regarded as excessive. The landing speed, it is estimated, will be about 52 m.p.h., which is a very reasonable figure, and should enable the machine to be put down almost anywhere, especially as the new de Havilland automatic wing flaps will be fitted.

The machine is to be fitted with dual control, but the set in the passenger's seat will be easily removable. A luggage space capable of holding approximately 40 lbs. is to be provided. The biplane wings will be designed to fold, and it is estimated that the operation will occupy but three minutes. The overall width folded will be 10 ft., so that the question of housing should be a simple one.

A special undercarriage has been designed for the D.H.60 which, although of very simple form, will absorb even very violent shocks. The petrol system, it is almost superfluous to state, will be of the direct-gravity type, and the tank capacity will be sufficient for 3½ hours' flying.

The D.H.60 will weigh, fully loaded, 1,350 lbs., which, although somewhat heavier than the weight of the Lympne two-seater light 'planes, is considerably lighter than the loaded weight of training machines hitherto in use. A maximum speed of 90 m.p.h. has been calculated, with a landing speed of 38 m.p.h., so that it will be seen that the speed range, if realised in practice, is excellent. The fuel economy should be fairly good, the estimated figure being 20 miles per gallon.