FOKKER

THE famous Dutch aircraft constructor, whose firm is the *N. V. Nederlandsche Vliegtuigenfabriek* of Amsterdam, will be represented by two aeroplanes, one a commercial type and one a military. The former is the three-engined monoplane type F.VII–3m., similar to that on which Commander Byrd flew to the North Pole, and the latter is the C.V. two-seater fighter.

The Fokker F.VII–3m. monoplane is fitted with three Armstrong-Siddeley "Lynx" engines of 185 h.p. each, and is of the familiar form of Fokker construction with welded steel tube fuselage and all-wood wing. The pilot's cockpit has accommodation for two pilots, and dual controls are provided. The cockpit is equipped with night-landing equipment, and there is ample room for wireless apparatus. A door

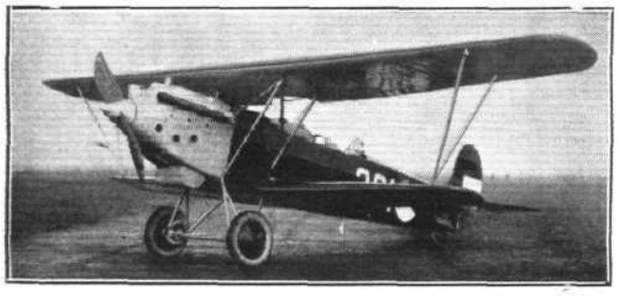
THE FOKKER F. VII. 3m is a commercial monoplane. The three engines fitted are Armstrong-Siddeley "Lynx" of 180 h.p. each.

in the rear wall of the cockpit gives access to the passengers' cabin, which has seating accommodation for 8 passengers. In addition to heating and ventilating arrangements there is a lavatory at the rear end of the cabin, and behind that again, with a separate door in the side of the fuselage, is a large luggage and goods compartment, a smaller luggage space being provided under the pilots' cockpit.

The Fokker F.VII–3m. can also be used as an ambulance machine, when it gives accommodation for 6 stretchers and one attendant. Furthermore, it can be supplied as a night-bomber, when the armament consists of 1 or 2 machine guns, one of which is fitted over an opening in the roof at the rear of the cabin. As bomb load may be carried 10 bombs of 50 kg. each, or 5 of 100 kg. or 2 of 250 kg. or 1 weighing 500 kilos. The crew consists then of one pilot, one assistant pilot or navigator, and one gunner.

Finally the Fokker F.VII–3m can be supplied as a torpedo carrier, when a torpedo weighing 1,000 kg. can be slung underneath the fuselage. In this case the crew consists of one pilot and one observer.

Specification of Fokker F.VII–3m.—In its commercial form the machine has the following characteristics: Span, 19·3 m.; length overall, 14·6 m.; wing area, 58·5 sq. m. (a larger wing having an area of 67 sq. m. can be supplied). Weight empty, 2,150 kg.; fuel and oil, 600 kg.; crew 150 kg.; 8 passengers and luggage, 700 kg.; total loaded weight, 3,600 kg. Wing loading, 61·5 kg./m²; power loading, 6·6 kg./h.p. Maximum speed, 185 km./h.; cruising speed, 165 km./h.; minimum speed, 80 km./h. The climb is as follows: 1,000 m. in 5·8 mins.; 2,000 m. in 12·3 mins.; 3,000 m. in 22·2 mins.; ceiling approximately 4,700 m. Duration approximately 5 hours. These performance figures are guaranteed to within a margin of 3 per cent. on speed and 6 per cent. on climb.



THE FOKKER C. V. can be supplied with a number of different engines, and can be quickly converted into a two-seater fighter, a reconnaissance machine, a bomber, or even a school machine.

The Fokker C.V.—The machine exhibited at the Paris Show will be fitted with a 450 h.p. Hispano-Suiza engine, but this machine can be fitted with almost any engine, a list issued by the Fokker firm including no less than 10 different types, while the use of different wings etc., affords further combinations possible, so that the C.V. can justly be described as a "general-purpose" aeroplane. Furthermore, it can, if desired, be supplied as a seaplane, so that there is practically no end to the variety of forms which the C.V. may take. The choice of wings for different purposes has been greatly facilitated by the cantilever wing arrangement, which calls for but a very few fittings.

As shown at Paris, the Fokker C.V. will have the "D" cellule, *i.e.*, wings giving a total area of 28·8 sq. m. Constructionally the machine follows normal practice in that it has the welded tube fuselage and the wooden wings with three-ply covering. The engine mounting, in order to allow of a rapid change-over to another type of engine, or of replacing a damaged engine, is a complete unit, attached to the fuselage by four bolts only.

Specification of Fokker C.V:—Wing span, 12·5 m.; length overall, 9·53 m.; wing area, 28·8 sq. m.; weight of machine empty, 1,290 kg.; load 600 kg.; total loaded weight, 1,890 kg. Top speed 255 km./h.; low speed 95 km./h.; climb to 1,000 m. in 2·1 mins.; to 2,000 m. in 4·6 mins.; to 3,000 m. in 7·6 mins.; to 4,000 m. in 11·5 mins.; to 5,000 m. in 17 mins. Ceiling, 6,700 m. With a load of 800 kg. the following performances are obtained; top speed, 252 km./h.; low speed, 100 km./h. Climb to 2,000 m. in 5·6 mins.; to 5,000 m. in 23 mins. Ceiling, 6,300 m.

HANRIOT

THE *Avions Hanriot* firm, particularly well known for its training aeroplanes, large numbers of which have been supplied to the French and numerous foreign governments, will exhibit three machines: (1) a type H.35 advanced training aeroplane with 180 h.p. Hispano-Suiza engine; (2) a type H.41 training seaplane with 120 h.p. Salmson engine; and (3) a type H.14S ambulance aeroplane with 80 h.p. Rhône engine.

THE HANRIOT H. 35, with 180 h.p. Hispano engine, is an advanced training machine.

Hanriot H.35 Training Aeroplane

This machine is a strut-braced parasol monoplane which bears a certain resemblance with the Morane-Saulnier training aeroplanes, though, as a matter of fact, the two machines differ considerably in engineering practice.

The H.35 has a composite structure—that is, the wings have duralumin tube spars and lattice work compression members with wooden ribs, the whole being covered with fabric, while the fuselage is built up on four duralumin tube longerons and cross pieces, with wooden fairing members. The fuselage is also covered with fabric, except in the neighbourhood of the engine, where the covering is sheet aluminium. The cabane struts and the lateral bracing struts are faired duralumin tubes, wire-braced.

The landing gear is of the Vee type with a divided, rubber-sprung axle. All the landing gear struts are duralumin tubes.

The ailerons are controlled by means of push-and-pull rods. Dual control is provided; the front control may be declutched from the pilot's seat (at rear), or may be entirely removed if the machine is not to be used for instruction purposes.

The petrol tank is of the gravity type, and is mounted in the centre section. The oil tank is mounted in the engine compartment, and acts at the same time as oil radiator. Fuel for three hours' flight is carried.

Specification of the Hanriot H.35

Engine, 180 h.p. Hispano-Suiza; span, 11·40 m.; length, 7·47 m.; height, 2·75 m.; wing area, 22 sq. m.; weight empty, 600 kg.; useful load, 200 kg.; fuel load, 150 kg.; weight loaded, 950 kg.; maximum speed, 207 km.p.h.; ceiling, 6,500 m.