



# THE De HAVILLAND 18

BY  
E · J · RIDING



*'Photo by courtesy of De Havilland Aircraft Co., Ltd.*

Little was done in the way of serious airline work until August, 1919, when the Aircraft Transport and Travel Company started a regular daily service to the Continent. The machines in use at that time were without exception converted bombers; ill-equipped and not particularly economical to operate. The D.H. 18 was one of the first machines to be designed solely for airline work and was the result of valuable experience gained in the operation of such aircraft as the D.H. 4A—a D.H. 4 with a coupé top over the rear cockpit—and the D.H. 16—a more or less modified D.H. 9A with a widened fuselage capable of seating four passengers and fitted with either a 450 h.p. Napier "Lion," or a 375 h.p. Rolls-Royce motor.

The D.H. 18 was designed and built by the Aircraft Manufacturing Company in the winter of 1919-20. The prototype was registered G-EARI and it was placed on the London to Paris service of the Aircraft Transport and Travel Co., in April, 1920. Its life was, however, comparatively short, for it was crashed and written off the assets in November of the same year.

The second and third machines to be built were known as D.H. 18As. They were registered G-EARO and G-EAUF; both machines being supplied to A. T. & T. where they remained until the firm's decease in December, 1920, caused by a slump in trade due to the winter months and lack of Government support in the face of competition from subsidised French airlines. The remaining firms managed to struggle along until the end of February, 1921, when a general cessation of British air services to the Continent forced the Government to make an investigation, resulting in a subsidised reduction in fares to £6. 6s. 0d. and £12 for the return journey. Services recommenced on March 18th, 'RO and 'UF being taken over by the Air Council.

A fourth machine, G-EAWO was acquired by the Air Council in the middle of May. By September, 1921, G-EARO had flown more miles on the Continental air services than any other aeroplane, and she followed 'RI into retirement during November of the same year. A month later a new machine, G-EAWW, described as a D.H. 18B, was supplied to the Air Council, making its first trip to Paris on December 18th. This was followed by a sixth and last machine, G-EAWX, in January, 1922.

G-EAWO was destroyed in a collision with a French Farman "Goliath" near Grandvilliers during bad visibility on April 4th, 1922. She had been acquired by

the recently formed Daimler Hire, Ltd. By this time, 'UF, 'WX and 'WW were being operated by the Instone Air Line, Ltd., on their Croydon-Brussels, Paris and Cologne routes where they remained until superseded by the D.H. 34s with which they had been competing since the beginning of the year. G-EAWW was the subject of an interesting experiment carried out by the Technical Department of the Air Ministry on May 2nd, 1924. After being partially reconditioned by the makers, 'WW was ditched in Harwich harbour, the object being to determine the time taken for an aeroplane to sink after a forced landing at sea. 'WW started to settle down after about 25 minutes, after which she was towed ashore in order to salvage the engine.

So ended the D.H. 18s. They were good aeroplanes in their time, and they form an important milestone in the history of commercial airlines in this country.

In the 18s and 18As, the fuselage was of wooden construction, wire braced and fabric-covered aft of the passengers' cabin, the forward portion being covered with three-ply. The machine was an eight-seater, the pilot being seated behind the cabin and in the open air. Wings and tail unit were of orthodox wooden construction with fabric covering. The engine was a 450 h.p. Napier "Lion" 12-cylinder, water-cooled type with the cylinders arranged in three banks of four in the shape of a broad arrow.

The 18B had an entirely plywood covered fuselage, improved emergency exits and an engineer's platform on the side of the nose giving easy access to the motor. When not in use, the platform could be stowed alongside the fuselage. G-EAWX was fitted with a three-bladed Leitner-Watts metal airscrew during 1922-23 for experimental purposes.

**Specification:** Eight-seat passenger-carrying aeroplane; span, 51 ft. 3 in.; length, 39 ft. 0 in.; height, 13 ft. 0 in.; wing area, 621 sq. ft.; weight: empty, 4,040 lb.; loaded, 7,116 lb.; max. speed, 125 m.p.h.; landing speed, 45 m.p.h.; fuel: 95 gals. in main tank above cabin, 10 gals. in gravity tank on top centre-section; ceiling, 15,000 ft.; range, 400 miles; running cost, 2s. 8d. per mile.

**Colour schemes:** Daimler Air Hire, Ltd. Red all over, white letters.

Instone Air Line, Ltd. Blue fuselage, aluminium wings and tail, white letters on fuselage, black on wings.