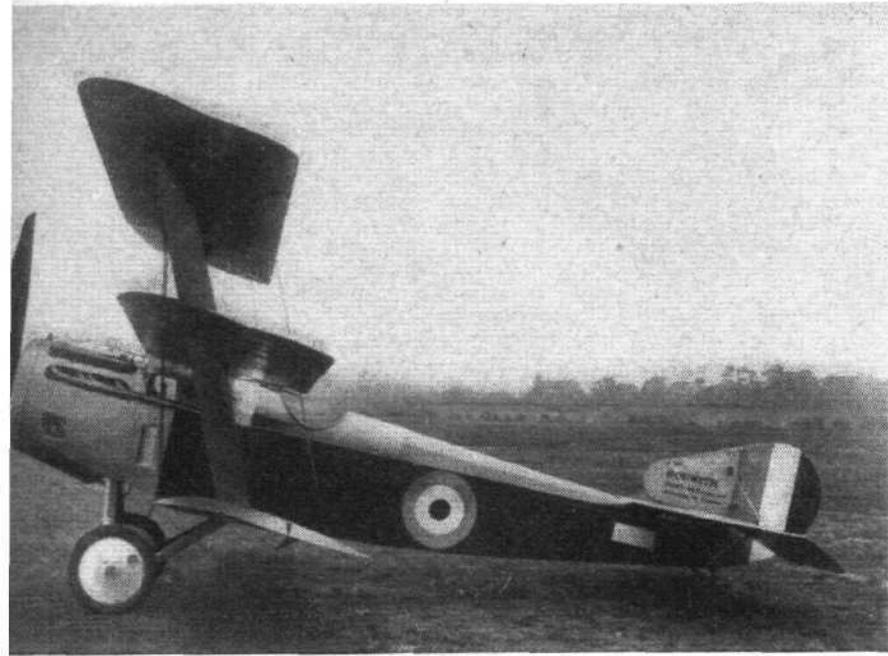


## The second Hispano-Suiza-powered Triplane—No. N.510.



## THE SOPWITH TRIPLANE . . .

Sea. The fact that it was there in March 1917, before a Triplane squadron was fully operational in France, probably indicates that it had been sent out to test its suitability for service in the Aegean area.

To combat the threat of *Kampfgeschwader I*, the German bombing squadron which had arrived at Hudova in February 1917, an R.N.A.S. unit known as "E" Squadron was formed in March. Its equipment consisted of four Sopwith  $1\frac{1}{2}$ -Strutters and the Triplane N.5431, and it was to form part of a composite R.N.A.S./R.F.C. fighting squadron at Hadzi Junas. The five aircraft of "E" Sqn. went to Hadzi Junas by way of Stavros and Salonika, and the Triplane was flown by F/L. J. W. Alcock (who was later to make the first non-stop transatlantic flight). At Salonika, Alcock unfortunately over-ran the small aerodrome: his Triplane ran into a shallow ditch, overturned, and was extensively damaged.

The wreckage was taken back to Mudros, where the aircraft was rebuilt and returned to service, still under the identity of N.5431, although little of the original airframe could have remained. The Triplane was reported in action on September 30, 1917, when, flown by F/L. H. T. Mellings, it shot down one of three enemy seaplanes which approached Mudros. The enemy force consisted of a two-seater escorted by two single-seaters, the latter being of a type known to the R.N.A.S. as "Blue Birds"—almost certainly Albatros W.4s. Mellings shot down one of the "Blue Birds"; the other was driven down by Alcock, who was flying a Camel.

Alcock had spent September of 1917 building a remarkable hybrid aircraft of his own design. It was a single-seat fighter which embodied components of Sopwith Triplane and Pup origin; Alcock, with typical humour, dubbed it his "Sopwith Mouse," and it appears that his machine was also known as the Alcock A.1. The entire forward portion of the fuselage and the undercarriage had belonged to a Sopwith Triplane; the rear portion of the fuselage tapered to a vertical knife-edge at the rudder post, and two low-aspect-ratio triangular fin surfaces were fitted, one above, the other below, the fuselage. The rudder could have been of Sopwith outline, and the tailplane was mounted midway between the longerons. The lower wing was that of a Sopwith Triplane; the upper wing panels had originally belonged to a Pup, and the centre section was mounted fairly close to the fuselage, level with the pilot's eyes. Two-bay bracing was fitted: the interplane struts diverged markedly from the closely-spaced spars of the lower wing to meet the spars of the much broader upper mainplane.

Alcock's "Sopwith Mouse" was originally fitted with a 100 h.p. Gnome Monosoupape engine, but that was later replaced by a 110 h.p. Clerget. Twin Vickers guns were fitted in the conventional position, and the aircraft had excellent lines and bade fair to be a useful fighter.

Unfortunately, Alcock fell into the hands of the enemy on the night of September 30 when No. 2 Wing's Handley Page O/100, Constantinople-bound, was forced down in the Gulf of Xeros with engine failure. Alcock was the pilot, and he and his crew were captured. He therefore never flew his Sopwith Mouse, and it is believed that the machine did not fly until the middle of October. It is not known whether it was ever used operationally, but it survived until early 1918, when it was flown to Stavros on the mainland. As far as is known, it was wrecked there.

That is the true history of the Alcock A.1 or Sopwith Mouse. It differs widely from the account which appears in *The War in*

*the Air*, Vol. V, page 409, where it is stated that Alcock had designed and built an aircraft round a German Benz engine which had been retrieved intact from a twin-engined Friedrichshafen bomber shot down in April 1917. The official history goes on to imply that Alcock was flying this Benz-engined aircraft on September 30 when he shot down the "Blue Bird." It is possible that Alcock, a fine engineer, may have modified some other existing type of aircraft to take the Benz and this may have led to confusion with his own aircraft. There is some evidence to suggest that a Benz engine was installed in one of the Wight pusher seaplanes of the aircraft carrier *Ark Royal*, but the engine in question was taken from a Friedrichshafen seaplane which had been brought down in July.

The Clerget-powered Triplane was not the only Sopwith single-seat fighter to employ the triplane configuration. It was closely followed by another design of which two examples were built: the first, N.509, had a 150 h.p. Hispano-Suiza engine; the other, N.510, had a 200 h.p. Hispano-Suiza. Some references to these triplanes imply that they were merely developments of the Clerget-powered machines. That is not so. The Hispano-Suiza triplane was a completely different aircraft which owed far more to the  $1\frac{1}{2}$ -Strutter than to the Pup or Clerget Triplane: its tail unit was virtually identical to that of the  $1\frac{1}{2}$ -Strutter.

The interplane bracing of N.509 and N.510 was identical to that of the Clerget Triplane, but the mainplanes were of greater chord (4ft 3in) and area. Detail differences existed between the two Hispano-powered machines, but N.510 could be positively identified by its higher thrust-line and left-handed propeller; it also had a different fuel system. Both aircraft were equipped with a circular frontal radiator.

The Hispano-Suiza triplane did not go into production, possibly because all Hispano-Suiza engines were wanted for the S.E.5s then going into production. The Service careers of N.509 and N.510 are not well documented. The former was at Westgate in March 1917, but apparently went from there to Manston, where it was written off after fair wear and tear on October 29, 1917; thus the 150 h.p. triplane outlived N.510, which was at Eastchurch in December 1916, but crashed in the course of its trials there. Its pilot, Lt. Hardstaffe, was killed; he had been one of the first Service pilots to fly N.500, the first Sopwith triplane of all.

Later triplanes built by the Sopwith company were the big three-seat L.R.T.Tr. escort fighter, the ugly Rhino two-seat bomber, and the twin-engined Cobham bomber. This last type was preceded by a single-seat fighter triplane, the Snark. The Snark had a wooden monocoque fuselage and was specifically designed for high-altitude fighting. It could carry as many as six machine-guns, the normal twin Vickers being supplemented by four Lewis, two under each bottom wing. The interplane bracing was more conventional than in the Clerget or Hispano-Suiza triplanes, but the stagger was not constant. According to Oliver Stewart, the Snark, "although it possessed a better performance and was a satisfying aeroplane to fly, did not achieve the supreme handling excellence of the earlier model." The Snark was too late to be considered for Service use, but it was in any event foredoomed to failure, for its engine was the ill-starred A.B.C. Dragonfly.

It is recorded in *The War in the Air* that the original Sopwith Pup and Triplane both survived the war. As far as the Triplane is concerned, that statement is incorrect, for N.500 was written off at Dunkerque after fair wear and tear, on December 17, 1917. Certainly, no Triplanes remained on the R.A.F.'s strength at the time of the Armistice. One alone has survived—N.5912, the third and last Oakley-built Triplane. It flew at the 1936 Hendon Display, by which time it had acquired additional mid-bay flying wires to the spars of the top wing. *Flight* reported: "The performance of the old triplane was something of a revelation; its take-off and climb were surprisingly good, and reminded one that, when it first came out, this type was rather remarkable."

Rather remarkable. The insertion of the somewhat patronizing "rather" was perhaps excusable, for the Triplane, although well enough known as one of the British fighters of the First World War, has been neglected by historians and has not been appreciated at its true worth. In their brief period of operational service, the comparatively few Triplanes destroyed a great number of enemy aircraft and obviously gave the Germans considerable cause for anxiety.

Considered as a form of military aeroplane, the triplane was peculiar to the 1914-18 war, for no serious triplane developments appeared in later years. Of the triplane fighters, the greatest were unquestionably the Sopwith and the Fokker; from the standpoint of all-round flying excellence the Sopwith was probably the better of the two. "It was so beautifully balanced, so well-mannered, so feather-light on the stick . . ." It was, in short, rather remarkable.

(Sopwith Triplane specifications and other data are given on p. 557.)