



LATE WAR TRIO

by Colin Owers

THE STORY OF THE SOPWITH HIPPO, Bulldog and Buffalo is complicated as they were designed and built while a large amount of experimental work was taking place in Sopwith's design branch, with fighters, bombers and reconnaissance aircraft in biplane, triplane and monoplane configuration, being developed along with the engines to power them. The Hippo and Bulldog were developed side by side and it is difficult to treat them apart. It may have been unique in that these two machines went up in competition against each other to fulfil the same specifications.

SOPWITH 3F2 HIPPO

The Sopwith 3F2 Hippo two-seat fighter was designed in early 1917 with the view of obtaining French orders. The Hippo was given the serial X11.¹ The machine had heavy back-stagger for its two-bay wings, to give the pilot a good view, and, initially, balanced ailerons. The pilot had two synchronised Vickers guns that were almost completely enclosed, the bulky fairing for the guns interfering with the pilot's view. The gunner was separated from the pilot being located behind the rear spar of the top wing. He had twin Lewis guns mounted on rocking-post mountings. The 200hp Clerget 11Eb rotary was enclosed in a bulky cowling. The fuselage was faired off from the engine cowl and gradually tapered to a vertical sternpost. *The designs of the wing curve (which has a Phillips entry), and the general shape of the fuselage are on the lines adopted in the Sopwith 1½ Strutter.*

The machine was of conventional wood and wire construction. The upper wing was constructed in three parts with a centre section connected to the upper longerons by short vertical struts. The edge of the front centre section was padded for the pilot's protection. *There are no special features of this machine excepting the negative stagger, the front spars of the top planes being vertically above the back spars of the bottom planes.* There was no connection between the pilot and his observer as the top decking of the fuselage met the centre section where it contained the 11-gallon gravity fuel tank. The main (pressure) fuel tank of 30-gallon capacity was directly underneath. *The cockpits provided on this machine are of ample size and the crew fairly well protected from the elements... The positions of the cockpits are excellent for view in every direction, and the observer can see and shoot in any direction except through the propeller field.* The lower wings met the fuselage at stub wings. The Vee strut undercarriage was of wood. *The various parts are not cramped, and repairs and renewals should be easily made. The machine should present no difficulty to manufacture in large quantities.*²

The history of the Hippo is hard to track. It was at Brooklands in November 1917, which would have been for maker's trials. It was fitted with a Clerget 11Eb engine taken from a Sopwith Bulldog. The machine had to be strengthened and new wings were fitted around the middle of December 1917, before it went to Martlesham Heath for official trials in January 1918.³ It is identified as X11 on the official test reports although the

