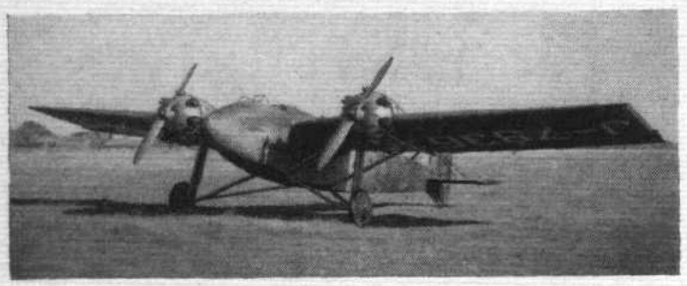
BOBOLINK TO DELTA . . . **Part II**

THE B.P. LINE

P.3 Bobolink.

P.33 Partridge.



P.31 Bittern.

P.82 Defiant I (prototype).

Above, P.82 Defiant I (production); below, P.82 Defiant T.T.1.

FIGHTERS

P.3 Bobolink Originally called the Hawk (until renamed in conformity with an official system of nomenclature), the Bobolink* was the first aircraft built to Boulton and Paul designs. A competitor of the Sopwith Snipe, it was powered, like its rival, with a Bentley B.R.2 rotary engine of 230 h.p. Another point of similarity was the two-bay wing cellule, though a distinction of the Bobolink was the use of interplane struts of N formation. Twin synchronized Vickers guns, having C.C. gear to allow them to fire through the airscrew arc, were mounted forward of the cockpit. Measuring 29ft in span, the Bobolink had a wing area of 266 sq ft, weighed 1,220 lb empty and 1,920 lb all-up. Fuel capacity was 38 gallons, giving an endurance of over 2½ hours. At 10,000ft a maximum speed of 125 m.p.h. was achieved, and at 15,000ft, 110 m.p.h. The climb to 10,000ft took 9½ min and to 15,000ft 18 min. Landing speed was 50 m.p.h.

P.33 Partridge The Partridge was built in 1927/28 for the competition which was eventually won by the Bristol Bulldog, and it appeared in the New Types Park at the R.A.F. Display of 1928. A remarkable feature was its metal structure, which was largely made up of components already standardized for the Sidestrand bomber, thus rendering production cheap and rapid. In common with the Sidestrand also, the Partridge had square-cut wing and tail surfaces—features which contrasted with the well faired fuselage, bulged amidships to house the two Vickers guns. Upper and lower wings were built in two sections, the upper ones being joined on the centre-line. Originally ailerons were fitted to the top wing only, but eventually were added on the lower wings also, upper and lower surfaces being interconnected by struts. The spars had corrugated flanges and webs, and tubular and plate stiffeners and the fuselage consisted of a rectangular frame in two parts. The front part carried the engine mounting, tanks, wing attachments, and pilot's seat, and was built from solid-drawn high-tensile steel tubes, and the after part had Boulton and Paul "locked joint" tube longerons with steel and Duralumin struts. The bay containing the cockpit had top longerons of large-diameter solid-drawn tubes which supported the two Vickers guns without additional structure, and, by reason of their great strength, served to ensure that this section of the structure should not telescope in a crash. Though a Bristol Mercury engine had been intended, the power unit actually fitted was a Jupiter VII, mounted on a flanged ring plate of steel. The petrol tank was unusual in being of dual type, i.e., consisting of a main tank having within it an inner tank serving both as a service tank and as a baffle.

Partridge data were: Span 35ft, wing area 311 sq ft, weight empty 2,021 lb, fuel 471 lb, oil 55 lb, military load (including pilot) 550 lb, gross weight, 3,097 lb, wing loading 9.9 lb/sq ft, power loading 7.35 lb/h.p., maximum speed at 10,000ft 167 m.p.h., climb to 10,000ft 6.5 min, climb to 20,000ft 15.06 min, service ceiling 28,950ft, landing speed 61 m.p.h.

P.31 Bittern The Bittern (1928) was one of the most remarkable fighters of its day, being a single-seat, twin-engined monoplane night fighter with unorthodox armament. The wing was mounted shoulder-high and the pilot was seated ahead of it, in an open cockpit. He was to be provided with a special moving sight, interconnected with two 0.303in Vickers guns mounted on the sides of the fuselage in special cradles, which would allow the guns to be elevated. Thus attack would be possible from positions denied to fixed-gun fighters.

There were two Bitterns, numbered J7936 and J7937. The first had its Lynx engines mounted with their centre-lines approximately on the chordline of the wing. The engines were un-

* *A common American songbird.*

P.92 (flying scale model).