

1/32 SCALE BREWSTER BUFFALO

BY J · A · F · HALLS

THE Brewster Buffalo, or F2A-2 as it is known in the U.S. Navy, is a single-motor mid-low-wing monoplane of corpulent proportions and as a first-line Fleet fighter has now been superseded by faster and more heavily-armed types.

It is powered by a Wright Cyclone nine-cylinder air-cooled radial motor developing a normal output of 900 h.p., and has a maximum speed of 313 m.p.h. at 13,500 ft. The usual operating speed is around 250 m.p.h., and the Buffalo has an initial rate of climb of 2,070 ft. per minute. With auxiliary fuselage tankage the range is nearly 1,500 miles.

The armament consists of four .5 machine-guns mounted two in the motor cowling and one in each wing, and there is provision for an external bomb-load of 200 lbs.

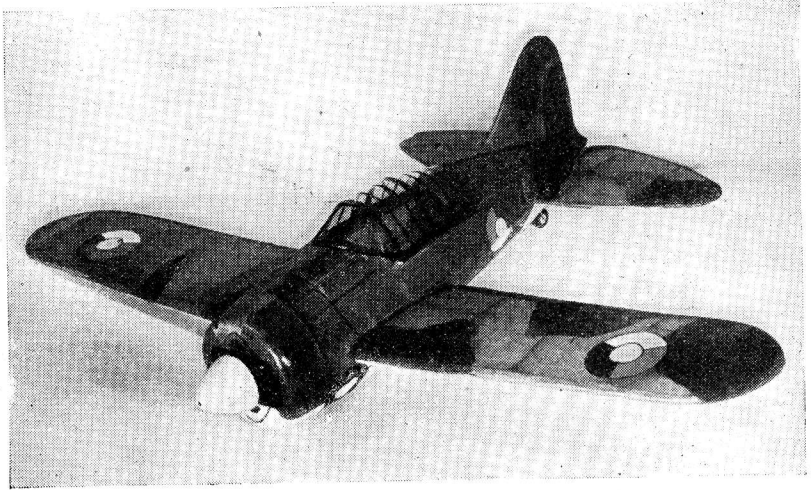
The fuselage is a semi-monocoque construction of light alloy, and the wings and tail-unit are metal structures with stressed skin covering. The movable control surfaces are fabric-covered.

The undercarriage retracts inwards into the fuselage and wings and is hydraulically-operated.

The Buffalo has a span of 35 ft. and is 26 ft. long. The wing area is 208.9 sq. ft.

Buffalo fighters arrived in this country in the summer of 1940, and after being tried out on operations were relegated to Training Command. Later versions were delivered to fighter squadrons in the Far East, but with the arrival of the Japanese S-OO on the scene were found to be of little use.

Buffaloes have also been delivered to the Belgian, Netherlands and Finnish Air Forces.

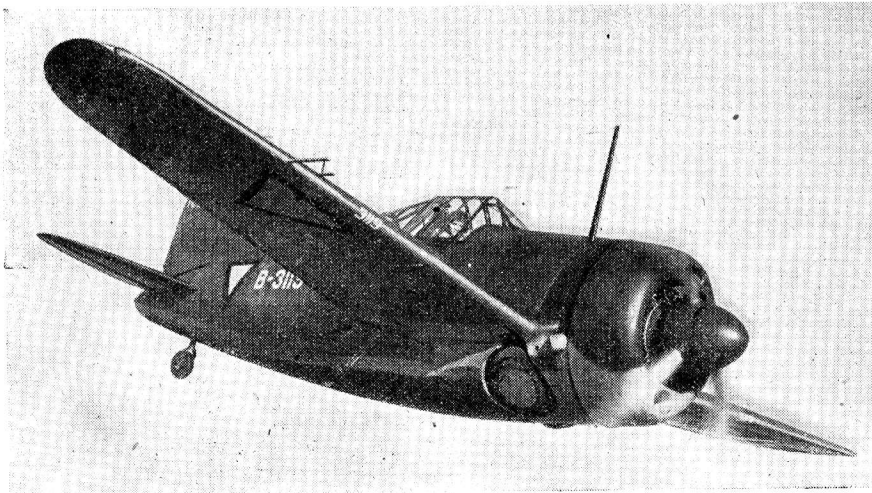


British and Dutch Buffaloes were camouflaged on the sides and upper surfaces with dark earth and dark green, and were light grey underneath. The modified Dutch marking consists of an orange triangle with a black outline, and this version is shown in the lower photograph.

Construction.—Fuselage: Cut out all formers from $\frac{1}{16}$ -in. sheet, cut out keels from $\frac{1}{16}$ -in. sheet substitute; pin on to plan. Cement on left half formers, checking that they are upright while setting; when set add stringers. Next build cowling: Cut out C1 and C2 from $\frac{1}{8}$ -in. sheet, cement together, cut out block to fit the square hole in C2. Cement CC (an $\frac{1}{8}$ -in. sheet disc) to this block, drill the block and cement in a length of aluminium tubing. Cement on 8 cowlings spacers ($\frac{1}{8}$ in. by $\frac{1}{16}$ in.) spaced at 45 degrees, add C3, cover with $\frac{1}{32}$ -in. sheet. Remove fuselage left half and add right formers and stringers. Cement on the soft balsa block at the tail and the two $\frac{1}{16}$ -in. sheet rear motor peg attachments. Add cabin framework. Cement on rib A on each side.

Wing and Tail Unit.—Build direct on plan, as shown on plan. Wing and U.C. may be made detachable. The U.C. is made from 20 s.w.g. wire. Cover cabin with celluloid; cut out the dotted portion of K3 and K4, cement on a piece of celluloid to represent the lower view panel. Cement on tail-unit. Cover fuselage and tail-unit, add tail wheel and radio mast. Cover wings. Spinner either built up with $\frac{1}{8}$ -in. sheet discs or turned on a lathe, drilled to take aluminium tubing, hollowed at rear to take three cup-washers. Prop. shaft 18 s.w.g. Prop. blades set at 30 degrees pitch angle.

Power with four loops of $\frac{1}{8}$ -in. flat rubber (it *does* exist in limited quantities).



The model above has a useful performance R.T.P. Note that it carries the old type markings, since modified as shown by the full size aircraft on the left.