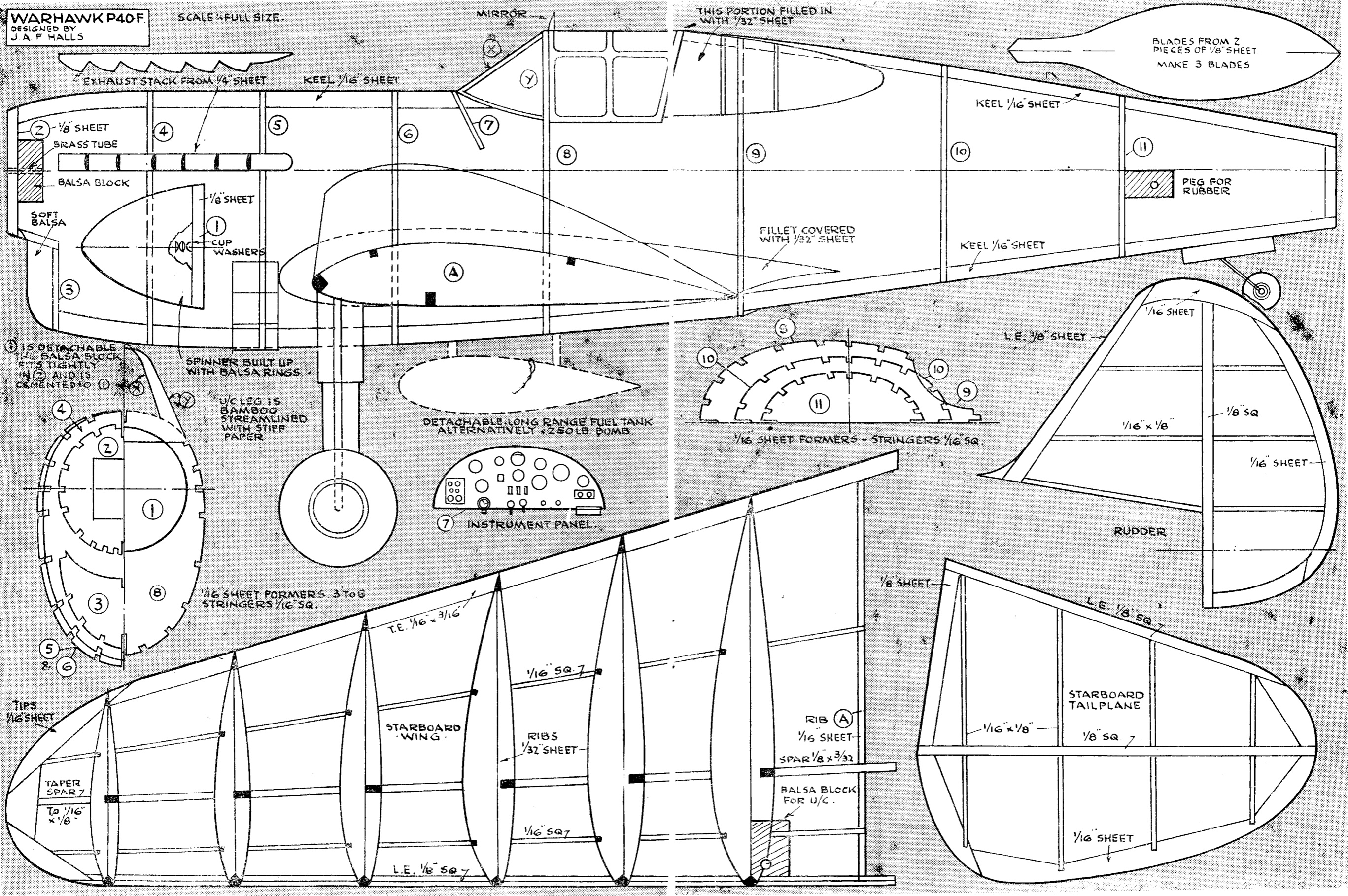


**WARHAWK P40F**  
DESIGNED BY  
J. A. F. HALLS

SCALE - FULL SIZE.



# CURTISS WARHAWK.

By J. F. HALLS.



The Warhawk is the name for the American version of the Kittyhawk II and only differs from the Kittyhawk I in small detail equipment and armament. It is fitted with a Packard-built Rolls Royce Merlin. It is a direct development of the Curtiss Hawk series, but differs from all the previous models in having greatly superior performance at height. No details of armament or performance have yet been released, but it is generally assumed to have a maximum speed of about 365 m.p.h. and an armament of six 0.5 machine guns. It has recently been reported in action in Tunisia where it has done quite well against the mixed bag of German and Italian dive-bombers and fighters. Although a good fighter it does not really compare with the more modern types such as the Mustang, the new marks of Spitfire, and the F.W.190.

**Method of construction.**—Fuselage: Cut formers (1) and (2) from  $\frac{1}{8}$ " sheet, (1) plugs into (2) with a hard balsa block, a piece of brass tube is fitted in the block which is firmly cemented to (1). The other formers are all cut from medium  $\frac{1}{16}$ " sheet balsa. Cut the keels from hard  $\frac{1}{16}$ " sheet or substitute. The formers are cemented to the bottom keel, while the cement is still plastic, add the top keels and keep checking for alignment until the cement is well set. Add the  $\frac{1}{8}$ " square stringers and the soft balsa fairing for the radiator. Next trace on to  $\frac{1}{2}$ " sheet the outline behind the cabin, leaving a small amount of overlap all round, this is cemented in position in the hollows at the top of former (9), the stringers being cut so as to fit on neatly. The cabin is then fitted on, either thin cane or fine gauge wire can be used for the framework.

**Wings.**—Rib "A" is cut from  $\frac{1}{16}$ " sheet, all others are from  $\frac{1}{8}$ " sheet. Lay out the spars on the plan and cement the ribs in position, at the trailing edge leaving about  $\frac{1}{4}$  inch overlap, and finally add the wing tips.

**Tail-unit.**—The rudder and tailplanes are built up on the plan as shown.

**Assembly.**—Before covering fix on both rudder and tailplane, securing with pins; keep checking alignment until the cement is well and truly set. Next block up the tailplane until the centre line (shown dotted on the plans) is horizontal, then check that the rudder is vertical (use a set-square for this). Note the tailplanes are fitted so that they have no incidence, i.e., on the centre line, the  $\frac{1}{8}$  square spar coinciding with the  $\frac{1}{8}$  square rudder post. When the fuselage is correctly set-up, place the wing in position by sliding the trailing edge overlap along the bottom keel until it is stopped by former (9). Put  $1\frac{1}{2}$  inch blocks under each wing-tip, then adjust the height of the leading edge until the incidence is as shown on the plan. Now (and NOT until this stage has been reached) smear plenty of cement around the trailing edge and the leading edge, also the blocks propping it up, give it several hours to set and then remove the framework from the jig. Next fill in the spaces between rib (A) and the adjacent stringers with  $\frac{1}{16}$ " sheet, for the fillet outline with  $\frac{1}{8}$ " sheet. Sandpaper the entire framework, paying special attention to the cemented joints, make sure that former (1) runs smoothly into former (2).

**Refinements.**—The wings may be made detachable at rib (B), the undercart retractable, and cockpit cover sliding, all these points were incorporated in the original.

**Covering and Finishing.**—Cover the underneath with duck egg blue tissue (if unobtainable use white). Cover the top with an olive tissue and dope on the earth to complete the camouflage. Add the exhausts (which are black) and radio mast, the cabin framework is doped dark grey. Add either British or American markings. It would be a pretty safe bet to cover the whole model white and add Russian markings, although it has not been officially reported in action on the Eastern front it is almost bound to eventually reach that theatre of war.