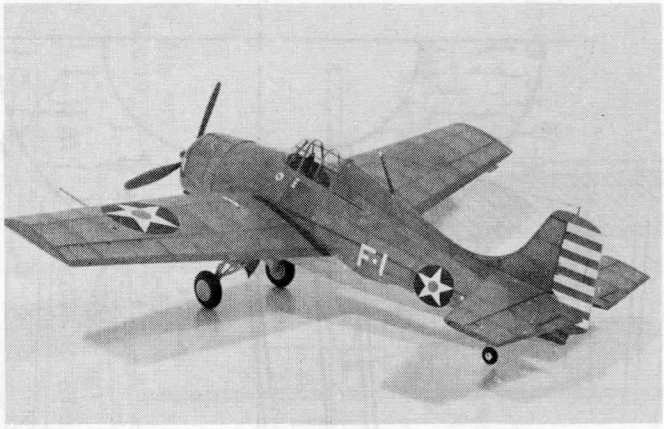
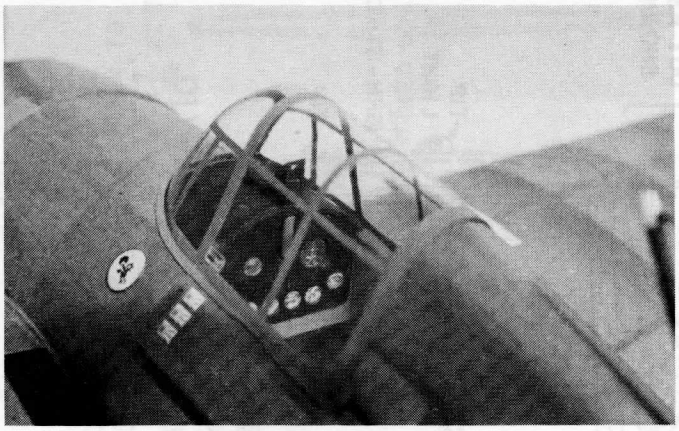


The author's model is decorated in the markings of late 1941, early 1942, with blue tissue on top, and white on the bottom.



A little cockpit detailing goes a long way toward improving the appearance of any scale model. Very little weight is added.

structure that has been added to the left side to this point. Remove fuselage assembly from the spacer jigs and add all other stringers to both sides alternately. . . except the side stringer immediately below the F-18 side keels.

From bulkhead F-4 through F-6, and F-6 through F-8, inset and cement trimmed pieces of soft 1/32 balsa between top keel F-14, and the first top stringer below and adjacent to it on each side of centerline. Inset and cement similar trimmed balsa pieces between same bulkheads on bottom of fuselage between same bulkheads on bottom of fuselage between bottom keel F-17 and first stringer above and adjacent to it on each side of centerline. From bulkhead F-2 to F-3, pieces of 1/32 soft balsa should be inset, trimmed, and cemented between all adjacent stringers and keels in the complete area under the engine cowl.

Cement the 1/8 inch bulkhead F-1 to F-3, including all inset pieces, to a smooth cross-sectional fuselage shape. Cut top and bottom engine cowl outer skin pieces from 1/32 sheet soft balsa, trim for accurate fit, and cement into position.

From small, soft pieces of scrap balsa, cut out and sand to rough shape the left and right sides of the tail cone. Hollow out both pieces for ultra light weight, and cement to F-13 and tail cone structure. Finish sand the complete tail cone to a smooth contour.

At this point, fit, trim and glue the 1/32 ribs in the vertical fin and rudder. Construct the trim tab, either from a single piece of very light balsa, or build up as shown on plan. Cement light, soft copper wire to tab for hinges, but do not attach to rudder at this time. Sand entire vertical tail including ribs, leading edge, trailing edge, and tip to final streamlined shape.

After cutting aft motor peg supports from 1/32" ply, cement to aft side of bulkhead F-12, top side of side keel, and the stringer above the side keel as shown on plan.

At this stage, the fuselage is ready for covering with Japanese tissue. Brush on a first coat of thin clear dope on all exterior surfaces of sheet balsa covering and all stringers and keels. After that, add two more coats of full strength clear dope. Sand lightly before the last coat. The fuselage is covered with strips of tissue running lengthwise, with a separate piece for each adjacent pair of stringers. When each piece of tissue is in correct position either on the stringers or on the sheet balsa, brush thinner through the paper to secure it. (For a unique method of covering with large pieces of tissue, see McHard's how-to article.) When shrunk and dry, brush or spray on two coats of thin clear dope over the entire outer surface of fuselage covering.

Cut, trim, and sand to fit, lower keel fairings in front and back of the wheel well location on either side of keel.

Form the lower V-struts for the landing gear from 1/32 wire to shape shown on plan. Insert into position in the bottom edge of lower keel, align, and cement securely to keel. The outboard free ends of the wire can be soldered or epoxied to the main landing gear wire strut which is already in position in the fuselage. All wire struts can be covered with plastic tubing or shaped balso to give realistic thickness to the struts. The wheel wells can be simulated by cutting pieces of black tissue to their exact shape, then attaching them to fuselage covering using thinner followed by a coat of clear thin dope. The small windows aft of the wheel wells on the lower fuselage can be done in the same manner. Exposed portion of lower keel at landing gear location can be painted a medium gray.

Cut the front cowl formers, C-2, C-3, and C-4 from 1/8 sheet balsa, and C-1 from 1/16. Stack and align formers carefully, then cement together. After drying, tack glue the stack of formers to front of finished fuselage. Carve and sand exterior carefully to match shape of fuselage. After final sanding, remove from the fuselage and carve out interior with a small power tool. Sand interior smooth, and use colored dope or enamel to paint inside a matt black or dark gray. Paint forward surface of bulkhead F-1 the same color. Paint exterior of cowl front blue on top and off-white on bottom to match the colored tissue used on fuselage, and cement permanently to front of fuselage.

The nose block is built up on either side of a 1/32 inch thick circle of plywood. Cylinders can be simulated by pieces of drawings or photos glued in proper locations on front of 1/32 ply circle.

The cockpit canopy is molded from a small sheet of clear plastic that is heated and stretched over a carved form block. The actual canopy frame is simulated by applying strips of Japanese tissue using clear dope as an adhesive. If desired, the strips can be painted to match the color of the top fuselage.

MOTOR AND PROPELLER

A 6 or 7 inch plastic or carved balsa propeller can be used. These, of course, are of the standard two-bladed type. Also, a laminated sheet balsa prop could be constructed with the blades formed, when wet, over a curved surface such as a glass jar or a tin can. Various rubber motor combinations can be tried, with anything from a single loop of 1/8 flat rubber 13 or 14 inches long to, perhaps, two loops of 3/16 inch flat rubber of about the same length. Don't use too much power, but do try different reasonable combinations with different propellers.

FLYING

With the rubber motor installed, the model should balance at approximately the front spar of the main wing. Set rudder trim tab to give a slight left turn in glide. With all the drag of the landing gear struts, and the model being a midwing design, very little to no downthrust may be needed to control powered flight. However, a slight amount of left thrust may be set in, if the right wing aileron tab is set to keep the left wing up in turns. Begin with low power (100 turns maximum) and increase the number of turns as trim adjustments give more and more stable flights. Good luck. ●