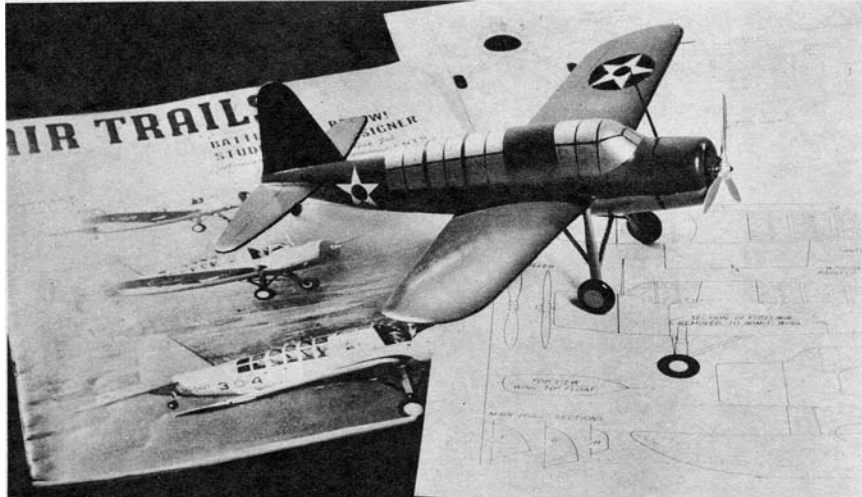


# Build the Kingfisher

by Earl Stahl

YOU'LL WANT TO ADD THIS EASILY CONSTRUCTED  
PINE OBSERVATION SCOUT TO YOUR COLLECTION.



**SINGLED** out for high praise by the navy is the Vought-Sikorsky Kingfisher, a midwing monoplane of all-metal construction designated as OS2U-1. Usable either as a land plane or a single-float seaplane, it functions chiefly as catapult-launched seaplane operating from battleships and cruisers. It is used for long-range reconnaissance missions and to direct gunfire in battles between surface vessels.

From the accompanying plans can be built either the catapult-launched hydroplane or the wheel-equipped land plane based on shore or carrier. The scale is 1/3" to 1' and all parts are shown full size. Trace the top and side outlines of fuselage, hulls and wing, tail surfaces and templates on thin, stiff cardboard. Measure the plans to obtain measurements of the pieces of wood required. Trace the top and side outlines of the fuselage on the block; a jig saw is advised for cutting the outlines. In cutting the side view, it's best to cut out the recess to fit the wing. The cut-out section is recemented to the fuselage block and not removed until the fuselage is smoothly shaped. After the blank has been cut to shape, draw center lines on all sides to use for reference points. Shape the semifinished block to the

desired cross sections, using a sharp penknife and sandpaper to smooth off. Finish the fuselage by using increasingly fine sandpaper until it is very smooth. Cut the tail surfaces from 3/32" sheet and trim them to the necessary cross section. Sand the finished tail units and cement them into position on the fuselage, noting that the one-piece stabilizer is fitted into a notch cut in the rear.

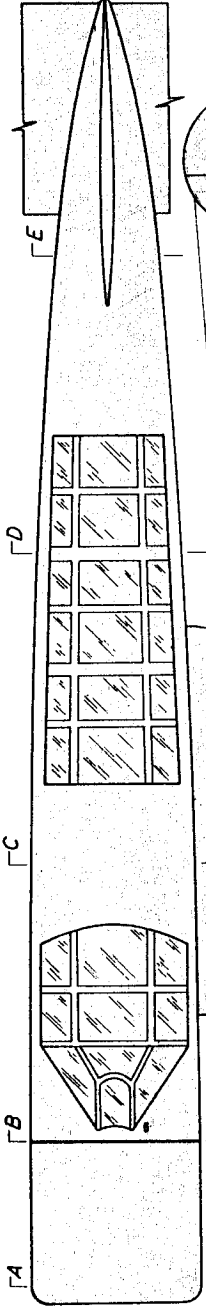
The wing is finished in one piece and then cut in three so that the tips can be elevated to the correct dihedral. Mark the amount of taper on the edge of the wing block and shave the excess off with a small block plane. Use the template to mark the wing shape and cut it out. The wing is reduced to airfoil size by a plane or knife. Use the rib shapes given as guides and check frequently. Finish it by rubbing it with fine sandpaper. Cut the wing apart at the dihedral breaks, bevel the edges carefully and recement with the proper amount of dihedral at each tip. Remove the previously cut-out portions of the fuselage and fit the wing into the recess; if necessary, trim the fuselage until it conforms with the wing airfoil. Glue it fast and then refit the fuselage part so that it joins the wing and fuselage exactly. Flow several coats of cement along the joints; after they have dried, sand.

Seaplane floats or fixed undercarriage, depending on which model is being made, are next. The main hull and tip floats of the hydro are made as is the fuselage. Use the cross sections given, make templates similar to those used for the body and check the parts for correctness. Three struts of streamlined cross section join the hull to the fuselage; wing floats are mounted on small struts. It should be noted that only the outer struts of each unit form an "N"; the two inner struts are parallel. For the land-plane gear, sand thin strips of white pine to streamlined shape and make the two inner "V" struts in a jig of straight pins. Make the larger outer strut of heavier stock and cut to the correct length. Carefully assemble the gear to the fuselage, checking frequently for exact alignment. Wheels can be made or the correct size can possibly be obtained at a neighborhood model shop. On the original model, wheels were held to the struts by small axles of music wire cemented to the main struts. Carve the propeller from scraps and mount it on a straight pin so that it turns freely.

To assure the desirable snappy appearance, the finish must be very neat. Before applying any color, work over the model carefully with sandpaper. Pores should be filled with wood filler lightly sanded between applications, particularly it

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balsa has been used. Several coats of clear dope or shellac will make a good base for the colored dope. The original model was colored blue-green on top, with a bottom of light blue-gray. Apply all the paint necessary, remembering that several coats are better than one heavy application. The propeller should be colored silver. Minor details are last and should be similar to the actual ship.



FUSELAGE  
TOP VIEW

3/32" SHEET  
RUDDER

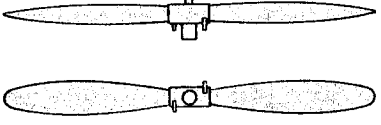
ANTENNA

WINDOWS MAY BE  
PAINTED SILVER OR BLACK

SECTION OF FUSELAGE  
REMOVED TO ADMIT WING

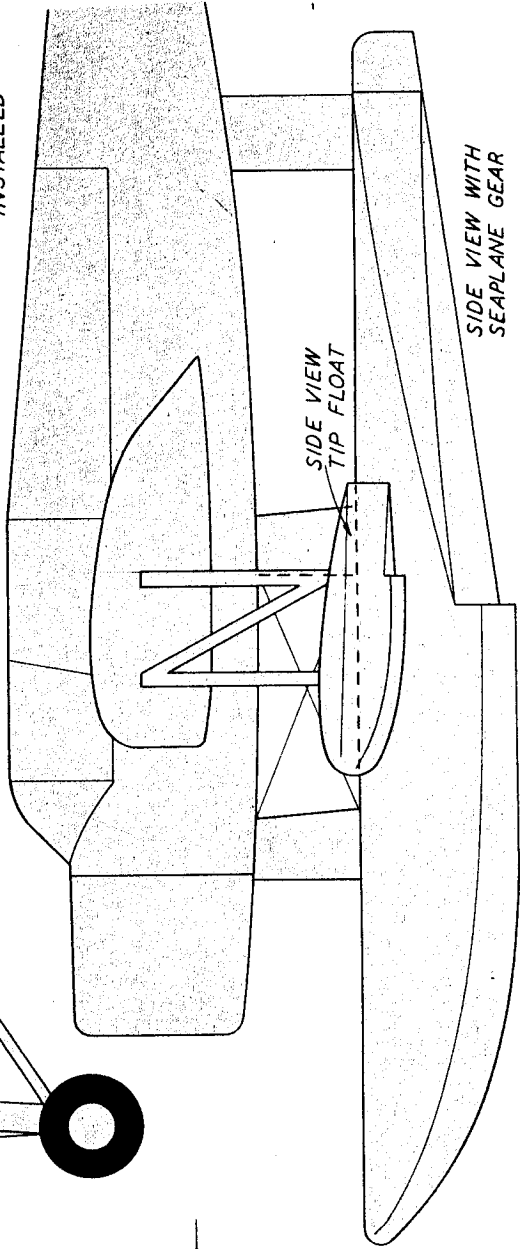
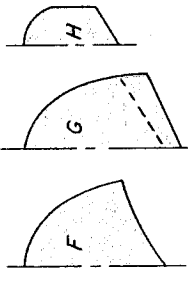
TAIL WHEEL REMOVED  
WHEN FLOATS ARE  
INSTALLED

PROPELLER



TOP VIEW  
WING TIP FLOAT

MAIN HULL SECTIONS

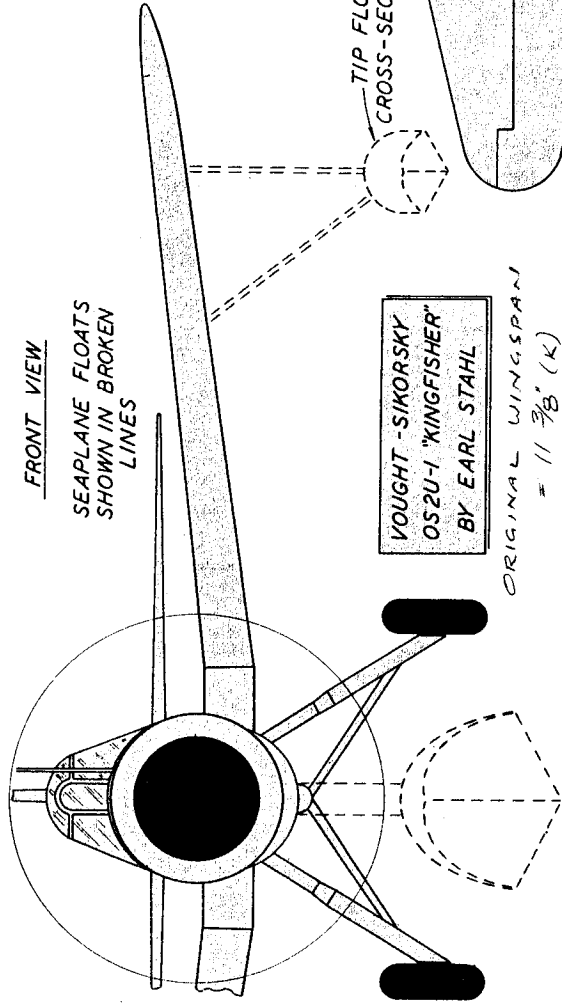


SIDE VIEW  
TIP FLOAT

SIDE VIEW WITH  
SEAPLANE GEAR

FRONT VIEW

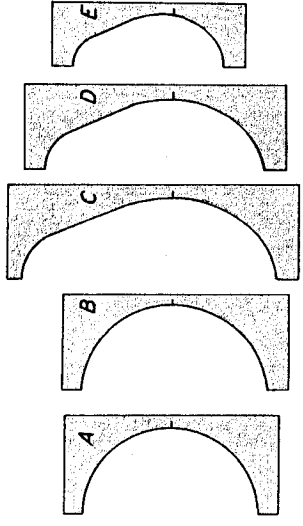
SEAPLANE FLOATS  
SHOWN IN BROKEN  
LINES



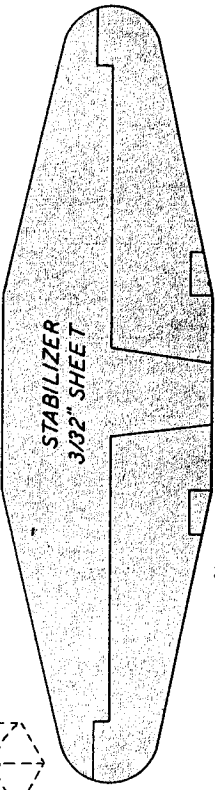
TIP FLOAT  
CROSS-SECTION

VOUGHT-SIKORSKY  
OS2U-1 "KINGFISHER"  
BY EARL STAHL

ORIGINAL WINGSPAN  
= 11  $\frac{7}{8}$ " (K)



FUSELAGE TEMPLATES



STAR ON UNDERSURFACE  
OF RIGHT WING AND  
TOP OF LEFT

