

A simple SISKIN for 1.5cc C/line

THE SISKIN is an aircraft which hardly ever appears as a model, though its proportions are suitable for a control liner and it can be made into a most colourful machine. It was the first all-metal fighter to fly with the Royal Air Force and was the standard mount of several famous squadrons in the early thirties. With a simplified structure and a minimum of external detail it makes a pleasant handling model for the 1.5 cc. motors and should present no difficulties to anyone who has completed a planked fuselage.

A feature of the design is that all parts are made and finished separately and the aircraft is assembled from the completed components. This makes it easier to cope with the painting of the squadron markings and to put a good finish on inaccessible parts of the airframe.

To achieve this the order of construction is important. Make the upper wing halves separately

over the plan and join with dihedral braces. The angle is small but important. Carve the lower wings to section in one piece before making the dihedral bends. Cut the fin and tailplane from sheet balsa, then cover all these parts in lightweight modelspan.

Complicated bending patterns for the wire parts have been avoided. Everything can be made in two dimensions, bending the wire over the plan so that it fits exactly on the patterns shown. Only one of the undercarriage components needs a slight extra bend, which shows in the elevation and is best put in after bending to fit the drawing. The fairings, made from strips of balsa shaped to a triangular section, are attached with an impact adhesive such as Goodyear Pliobond. The adhesive is run along the edge of the fairing, and down the side of the wire to which it must be fitted, and left for ten minutes. Then when the two surfaces are pressed together a firm joint results. The fairing is com-

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SISKIN III

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38, CLARENDON RD., WATFORD, HERTS.

Materials Required

2 sheets of 3/32 x 3" x 36" balsa
 1 - 3/16 x 3" x 18"
 1 - 1/4" x 3" x 18"
 1 strip - 1/8" x 3/8" x 36"
 1 - 1/16" x 1/4" x 36"
 5" x 3/8" x 1/16" engine borer,
 2" x 8" of 1/8" obachi or 3/32 ply.
 1 off 36" of 14 s.w.g. wire
 2 - 36" - 18 s.w.g. wire
 6" of 20 s.w.g. wire
 1 cc. fuel tank. Black balsa
 2 off 1/2" dia. lightweight wheels.

ALL WOODS ARE Balsa UNLESS OTHERWISE STATED.

Ribs 16 off 1/16 sheet.

1/16 x 3/16 hard balsa fastened to wire with Pliobond, then tissue wrapped interplane and cabane struts constructed alike.

Balsa block

Black shaped to fit cylinders

3 lams of 3/32 sheet

Scale dia shown. Recommended wheels are 1 3/4" dia. pressed celluloid.

D.C. Sabre shown.

5/8 x 1/16 hardwood bearer.

Slot for interplane strut

1/8 dihedral under each tip

Upper wing (2 off) For ribs, see side elevation.

Dihedral brace position 1/4 sheet

Aileron hinge

3/16 sheet

Slot for dihedral brace

U/C slot full depth

Lower centre section 3/16 sheet (1 off).

Lower wing. 3/16 sheet (2 off)

Strut slot.

3/8 dihedral under each tip.

Push-rod. 18 s.w.g.

1/8 sheet.

Plank sides with 3/32 x 3/8

18 s.w.g. wire.

Tailskid in wire as shown. Build up with scrap ply and paper covered to appear as on side view. Fit into block. Inner space filled with scrap ply and cement.

Solder

Original tank system used on prototype. Only one filler vent, tank is filled with throttle open and model held with nose pointing straight downwards. This reduces waste.

Commercial tank fitting.

3/32 sheet top

1/16 or 1/8 M.M. ply horn.

Join elevator halves with a piece of 3/32 dia. dowel

14 s.w.g.

3/32 sheet tailplane

1/16 or 1/8 M.M. ply horn.

Join elevator halves with a piece of 3/32 dia. dowel

14 s.w.g.

3/16 x 1/16 ply strips, bound on all wire parts

14 s.w.g.

Interplane struts. (2 off)

Solder

18 s.w.g.

Position of line guides.

Cabane struts. (2 off) 18 s.w.g.

Rear row cylinder arrangement. 18 s.w.g.

Cylinder arrangement front row.

F1, F2 & F3. 1/8 sheet obachi or 1/8 ply. 3/32 sheet.

F4 - F8

Original tank. A = 3cm. B = 1.5cm. C = 3cm.

Fin from 3/32 sheet

F1, F2, F3, F4, F5, F6, F7, F8

Cylinder arrangement front row.

Rear row cylinder arrangement. 18 s.w.g.

Interplane struts. (2 off)

Solder

18 s.w.g.

Position of line guides.

Cabane struts. (2 off) 18 s.w.g.

Rear row cylinder arrangement. 18 s.w.g.

Cylinder arrangement front row.

F1, F2 & F3. 1/8 sheet obachi or 1/8 ply. 3/32 sheet.

F4 - F8

Grey

Black

Red

White

Blue

Aircraft main colour silver.

6588R

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Photographs show how this simple construction is most effective in the final result when squadron markings are applied. Model flies as well as it looks, too

by Clive Hall

pleted by wrapping with lightweight tissue and treating with sanding sealer. The wire parts are attached by strips of ply, bound with strong thread to the wire, which fit into slots on the other parts of the airframe.

The fuselage is built on the halved former and spine system. This is suited to a sidewinder motor and will result in a true fuselage if the planking is built up symmetrically on each side.

Pin the spines and engine bearers to the plan and cement on the first set of former halves. Remember that for some motors, the motor bearers must be raised from the plan with scrap balsa so that the thrust of the motor is in line with the centre of the fuselage. When dry, remove from the plan, install the fuel tank and control plate, and put on the remaining former halves. Then plank the fuselage sides, preferably with planks about $\frac{3}{8}$ in. wide cut from the same sheet of medium balsa, and sheet the top of the fuselage in two pieces. Fit a piece of medium block at the tail, carving it to section.

Make the notches for attachment of the undercarriage parts A and C, and cement the parts in place. Add the fuselage bottom using sheet aft of the wing position and block in front of it, making sure that it is cemented to the fuselage and to the wooden strips of the undercarriage.

Make the lower wing fit the fuselage at this point by carving airfoil shaped bays in the edges of the planking, then wrap medium garnet paper round the wing centre section and rub the carved spaces to make shape which the wing will fit exactly. This makes allowance for any inaccuracies in the wing section. Make sure at the same time that the wing meets the fuselage at the correct angles.

Build up the remainder of the block round the nose and the port half of the dummy crankcase, ready for installation of the motor. Before fitting the motor give three coats of fuel proofer to all parts which cannot be reached when the motor is bolted in place. Cut the notches in the fuselage sides and cover the fuselage with tissue.

Now give all the components three coats of sanding sealer, sanding between coats, to prepare all the surfaces for their final coat of colour, which is most rewarding if sprayed.

Apply the silver first to all surfaces, then the white and the colours, masking as required. Now the components are finished, but separate and ready for assembly.

Cement undercarriage part B into its slot in the lower wing, and the lower wing in place under the fuselage. Then attach the cabane struts to the fuselage and the interplane struts to the lower wing. Solder together the lower ends of the undercarriage. Cement the tailplane and fin together and set aside to dry. Cement the upper wing in position on the main assembly by attaching first the cabane struts and then the interplane struts, pin in position until dry. Now cement the tail unit in place on the fuselage with two thin hardwood struts to secure.

The Siskin takes off with an immediate sharp climb on full up elevator, and lands, if its airspeed is maintained by a gentle dive, with some up elevator when it has almost touched the ground.

