



***Your winter project!***  
**An interesting biplane with a  
 fabulous colour scheme—**

$\frac{1}{8}$  Scale, Class 2 model

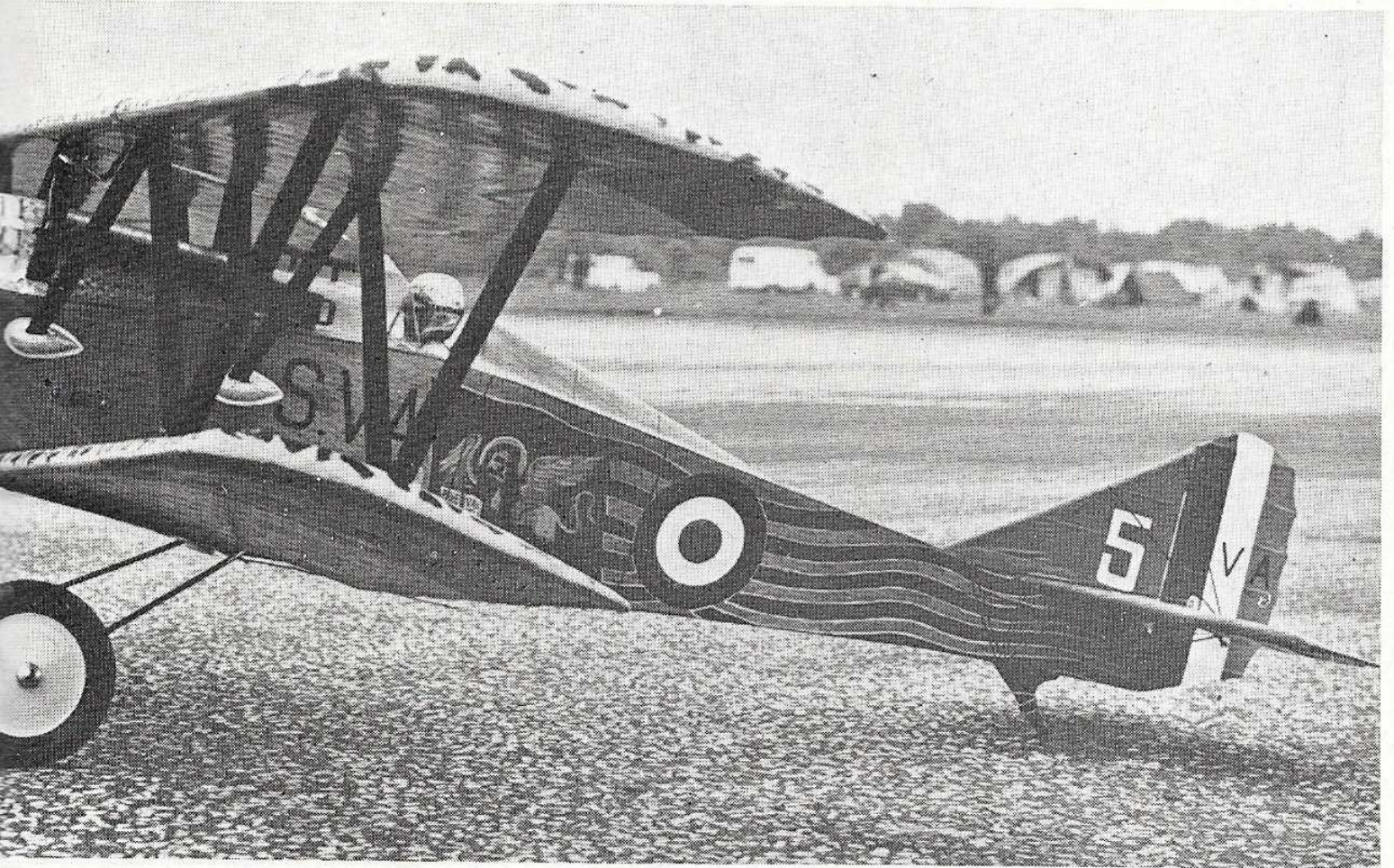
**NORMAN McFARLAND'S**

# SV A 5 ANSA

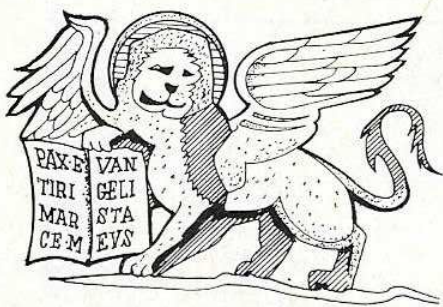


THUMBING THROUGH some "Aircraft Profiles" one evening early this year, I stopped abruptly at No. 61—the *Ansaldo*. What a magnificent colour scheme! The inside front cover of the publication shows a machine of the 87° Squadriglia Ricognizione, "La Serenissima," in full colour. The fuselage is mainly a natural varnished wood, while the upper wing surfaces are dapple camouflaged in yellow and green. The wing undersurfaces are buff coloured, the outer four feet or so of the starboard ones being green, and the port ones a reddish brown. The tailplane and fin are a royal blue, while the rudder bears the red, white and green vertical stripes of the Italian national markings.

At the side of the fuselage, just in front of the roundel, is the magnificent "Lion of St. Mark" emblem of 87° Squadriglia, and from it, in



# ALDO



a kind of comet's tail effect, passing behind the roundel, are streamer-like wavy lines, in light brown, reaching right back to the sternpost. All in all, this adds up to one terrifically colourful model—quite apart from its interesting shape!

The SVA series have been said to have been the most significant Italian design of World War I, and they were the forerunners of several historic aircraft of later years. It was one of the best all-purpose

aircraft of the war—and the climb characteristics of some variants were superior to the Fokker DVII and the SE5a. The prototype flew in March 1917 and, though conceived purely as a fighter, in fact served in a scout/reconnaissance bomber rôle on the Italian front. Their soundness of design is underlined by the fact that the SVA's continued in useful service in Italian skies right into the 1930's.

One of the things—apart from the opportunity to use one's artistic (?) ability—that attracts the modeller to this aircraft is the unusual arrangement of the interplane struts, the Warren truss. Probably the most unusual feature, however, is the change in cross-section of the fuselage. This goes from rectangular at the fore end to virtually triangular just aft of the cockpit. This has been achieved in the model by practically the same means as in the full size machine, with longerons and struts, as may be seen from the photograph of the uncovered fuselage framework.

I put my *Profile* aside for a while, but after all the work involved in organising the Blackburn club's W.W.I Scale Day was over, I pulled it out again and managed to

get my *Ansaldo* drawn up and started. However, due to other commitments, it was not eventually finished until the Friday before the Nationals (as usual!) and, in fact, the final decor was actually added between rounds!

## CONSTRUCTION

Construction is not difficult and in fact will progress fairly fast if this sequence is followed. Start by laying down a pair of fuselage side frames, using P.V.A. glue, then spend the next couple of hours cutting wing ribs. Build the wing halves as shown on the plan, packing under the spars where necessary, leaving the tips and root fillets until later. (Note that the trailing edge is not scalloped until just before covering.)

When dry, the fuselage sides and wing panels can be lifted from the board, and the wing part of the plan coated with paraffin (kerosene) so that the plan can be reversed for the other wing panels, which are now laid down.

Attention may now be paid to the fuselage. Fit F1, F2 and cross-members at F4 position, using P.V.A. and many elastic bands. When dry, fit all cross braces and chamfer the bottom longerons where they meet (see bottom plan) then glue together.

This is the most difficult part of the model—previously glued joints tend to come apart, and care is needed to keep the fuselage straight. Bulldog clips and small clamps are of assistance, and it will be found necessary to clamp the bottom wing saddle at the receiver position to prevent too much bulging of the sides.

Back to the wings—fit hardwood blocks (undrilled), ply plates and bellcranks and all four tips, then the bottom wing is joined as usual, then sheeted. The top wing joint is rather unusual, the way I designed it, having been rendered necessary by the scale gap at centre line, but should not present any difficulty. Don't forget the bellcrank pushrod. After joining, link up the bellcranks before sheeting the leading edge. The ailerons may now be cut free and hinged.

The stabiliser should be made complete and covered at this stage, to enable all the rigging to be done at the same time.

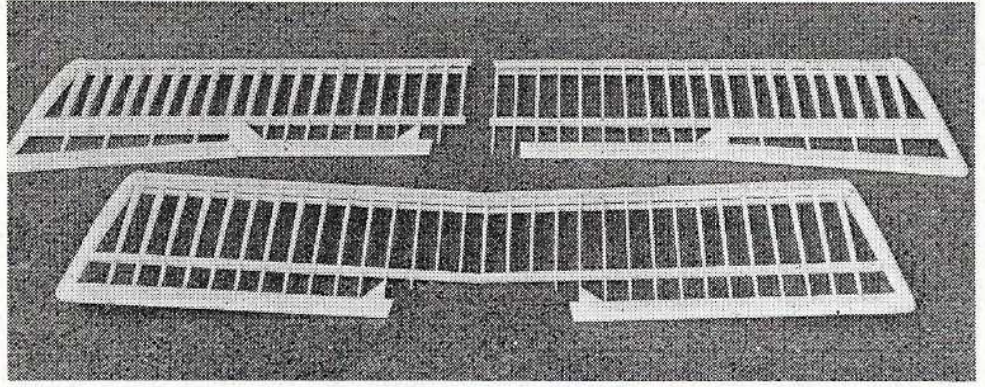
The fuselage will, by this time, be ready for fitting ply undercarriage and wing plates. It is then sanded and the  $\frac{1}{32}$ in. ply side skins fitted. Cut each skin  $\frac{3}{8}$ in. larger all round from the plan, leaving a little more (say 1in.) at the lower front part, forward of the wing.

Glue the skins with P.V.A. and clamp them in position. The bottom of the Vee is best held with wooden spring clothes pegs, pinned right through the peg, and ply, into the longerons. The deviation from box-like construction becomes obvious here as the smooth curves are admired! When dry, trim all round and seat the bottom wing, and stabiliser which can be glued in position.

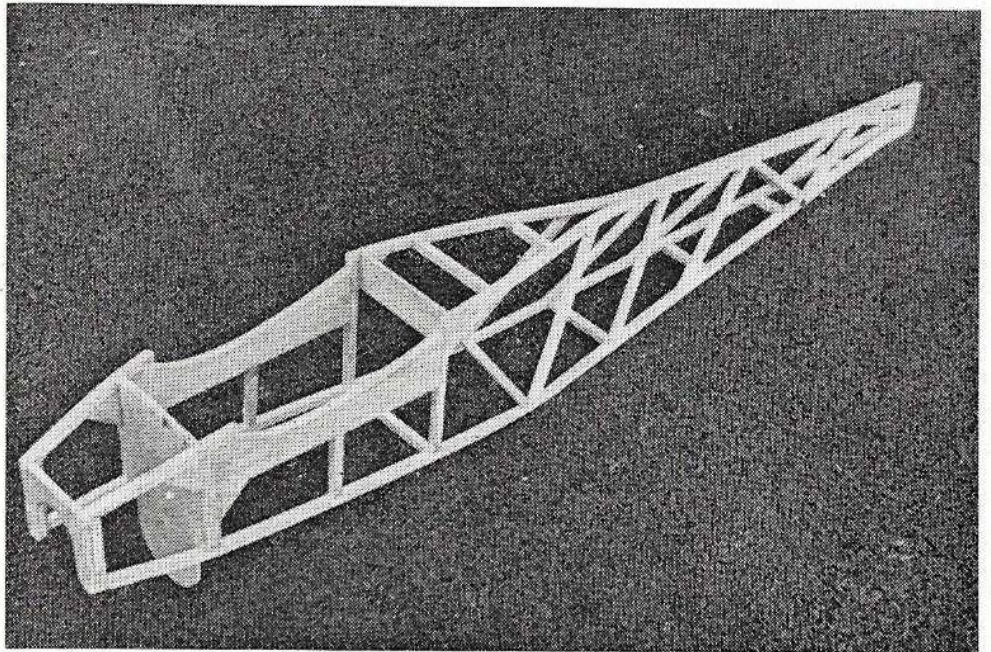
Cut a pair of wing rigging jigs (teachest lid—shown dotted on plan) and hold in place with elastic bands for aligning the 12g. cabane struts and top wing. The hardwood blocks can be drilled using a  $\frac{1}{16}$ in. drill held in a pin-chuck (very handy tool—carry one in your model box) and the saddle clamps coated with epoxy when alignment is complete. Fit the interplane struts at this time also.

The  $\frac{1}{8}$ in. ply servo plate is now fitted, it being preferable for the servos to be held in one of the proprietary clips which are available. (On mine the servos were mounted directly to the plate which was lower, but proved almost impossible to remove due to the rear wing plate obstructing access to the screws.)

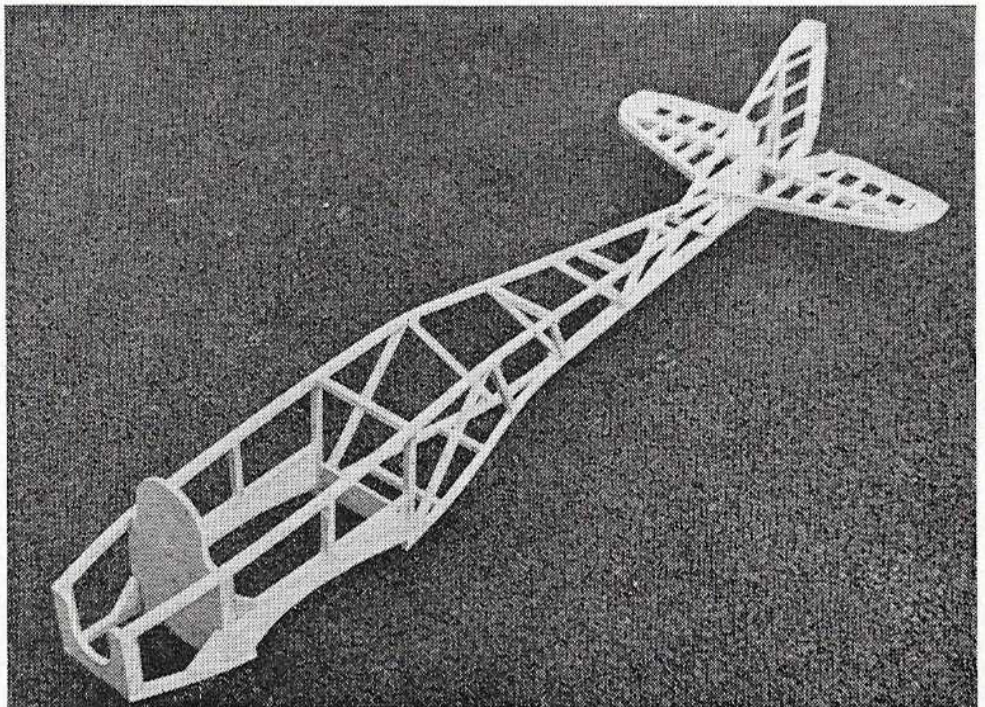
Fibreglass both sides of F2. The engine may now be mounted, undercarriage tubes stitched and glued, pushrods and top decking added. The fin, elevators and rudder

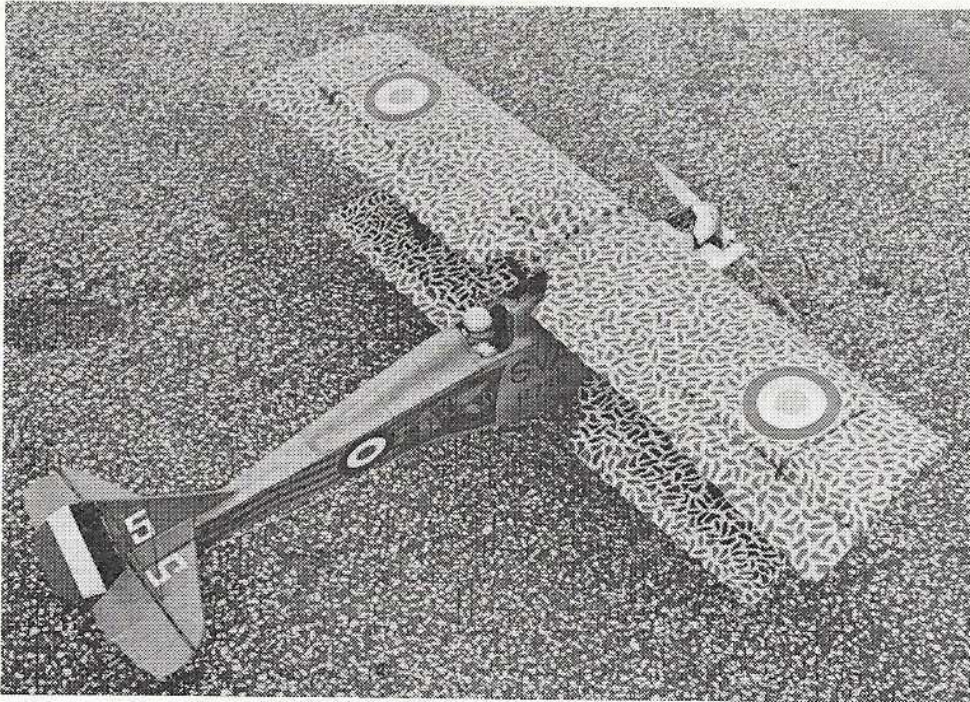


This shot of the nearly finished wings gives a good idea of the sort of construction involved. Note the reinforcement aileron positions, and the gap in the trailing edge of the lower wing. (Trailing edges are not scalloped until just before covering—which is kept right to the very edge by use of beeswax).



These two shots of the uncovered fuselage show the very simple basic construction. The rear lower longerons are brought together, aft of the lower wing, so that the cross-section changes from rectangular to triangular. The side skins, of  $\frac{3}{32}$ in. ply are then fitted.





are next made, covered and fitted in the above order, then the fuselage painted as necessary.

Trim former F3 to clear the tank, paint the tank bay with fuel proofer (fibreglass resin is best) and fit the tank. Cowling the engine departs a little from normal scale practice, in that only the front is readily removable. This is built up as plan and cut to clear the throttle linkage. Locate it with  $\frac{1}{8}$ in. dowels and retain with elastic bands. Thin aluminium sheet (old litho plate begged from the local printer!) is "engine turned" with a  $2 \times \frac{3}{8}$ in. dowel, slotted and emery cloth slid into the slot, using light pressure in a bench

All these pictures were taken at Lindholme—where the model does a chameleon act on the speckled runway!

drill. The sheet is then bent and cut to fit, being contact glued to the top front sheeting and pinned to the longerons in the full-size rivet positions (cut the pins to  $\frac{1}{4}$ in. long after piercing holes). The under panels are contact-glued only.

The undercarriage is bent up as illustrated, sides fitted into tubes then the axle is bound and soldered. "Spring" out at the front first, and hinge back to remove and replace bottom wing. The wire ends are rounded off, to ease fitting and

replacement. The axle fairing (see *Profile*) is  $\frac{1}{8}$ in. sheet but soon gets knocked off so can be forgotten!

Covering the wings (nylon recommended) is quite normal, apart from the use of Beeswax as described on the plan. Cover the top wing all over then, after clear doping, cut away at the servo and centre positions. This minimises distortion of the ribs here.

Final colour scheme is no problem as a look at the *Profile* will confirm—mine was done in the gaudy décor of 87° Squadriglia, using medium-oak polyurethane varnish on the fuselage and Humbrol enamel elsewhere. Interplane and cabane struts are matt black.

Very little scale detail is required. A chap in the cockpit and a pair of Williams Vickers guns, (strictly the wrong scale but don't look out of place) are contact glued to the dummy cabane, balsa "egg" fairings to the cabane wires, a couple of gold painted card "steps" and it couldn't be much simpler.

### Flying

Flying really needs no comment as, provided the c.g. is somewhere near, there should be no problem. No ballast was required with a Webra 61, but a fair old chunk of lead may be required with a 40.

The model is nippy, but not hairy, with a 61—too fast at full tap to look realistic, but quite docile with low throttle or a 40. Landings are typical W.W.I., with the occasional nose-over on grass, hence the beefed-up fin and rudder.

Get building!

