

ARV Super 2

George Simpson offers a

1/5 scale, 46-powered

version of this attractive

lightplane



Plenty of room for cockpit detailing at 1/5 scale; span comes out at a manageable 68" or thereabouts. Easy access to radio equipment, too.



I first saw this aircraft featured on the B.B.C. programme 'Business Matters', and thought that it would be a suitable subject for a scale model.

After writing to the manufacturers I received a rather 'sketchy' outline of the aircraft and proceeded to produce a drawing to 1/5th scale, which gave the model a wingspan of 68.1/2in and a weight of 6lbs, producing a wing loading of 32oz per square foot.

Getting cracking

Construction is pretty well straightforward, but as the fuselage formers are assembled onto the crutch 'in the hand', care must be taken to ensure that these components are true and in alignment. Cut out former F4, cut slots for the insertions of the dural u/cart legs, bolt on to the former the 1/2in x 1/2in aluminium angle and bolt on to this the u/c legs and wing strut mounts.

Having cut out the formers and glued the balsa doublers onto formers F3 and F4 in the cockpit area, assemble onto the crutch and just tack with cyano glue. Use rubber bands, etc, to pull the crutch sides together on to the formers, check for square and alignment and finally glue permanently into place. Cut 1/4in balsa sheet sides, slightly oversize, and glue to the edges of the formers. Next fit the fuel bay floor and fuel tank. Cut top decking, again slightly oversize and, glue into place. Cut bottom sheet oversize, make saw nicks across the grain where the sheet has to bend around the bottom of the fuselage and again glue into place.

Next trim all the sheeting down to the 45 degree corners of the formers, and again fill in with 1/4 sheet. These in turn can now be planed down flush with the main sheeting and the final shape planed and sanded to shape.

The engine mount can now be screwed onto the 3/8 ply firewall, the engine temporarily fitted, and the cowl made up with sheet balsa. There will be a certain amount of carving within the cowl to fit around the engine as the nose arrows quite appreciably. Formers F1 can now be glued into place and the cowl assembly carved and sanded to shape.

Tail bits

Tailplane and fin are both straightforward construction on a sheet core, glued into place and fillets made up with soft block. Receiver, servos and control runs can now be fitted and the cabin details constructed. The seats are carved from 'blue foam' and covered in stretch material. The seat belts are simply boot laces with shim aluminium

buckles. The pilot is a 50p 'Barbi' type doll, dismembered and cut to fit, the limbs being sewn back into place and the hair given a 'short back and sides'! The pilot can now be clothed in a white linen flying suit and glued into position.

The canopy, which was the very first thing I made (no canopy - no model), is formed over a wooden plug carved to the shape of the canopy. Acetate sheet is then bent and stretched over the plug with the aid of a hot air gun; four hands are needed for this, so get a friend who doesn't mind getting his fingers scorched! This can now be glued into a suitable rebate carved around the cockpit area to enable the canopy to be fitted flush all round.

Wing

The wing construction is also straightforward, being built in two sections and joined at the centre with the ply tongue. Mount the wing onto the fuselage, ensure that everything is lined up and fit the 1/4 sheet planking former onto the trailing edge to the profile of the fuselage, allowing for the thickness of the planking. Sand completed planking to fair into the fuselage. As the



With trike u/c and simple wing, model is a perfect scale subject.

ailerons are quite small ensure that there is adequate movement. The tips are a little awkward, the ast two ribs having to be carved to allow the sheet to blend into shape. Wing struts can now be fitted and the cowl cooling ducts and underslung radiator completed. Cover with your favourite heat shrink film, add trim and you're ready to fly!

Airborne!

With the A.S.P. 46 installed the take-off is quite zippy and the model is very realistic flying on half throttle, so a size 40 engine would be quite acceptable. Ensure that you use a compact engine as there is very little space in the cowl, especially for the throttle linkage.

