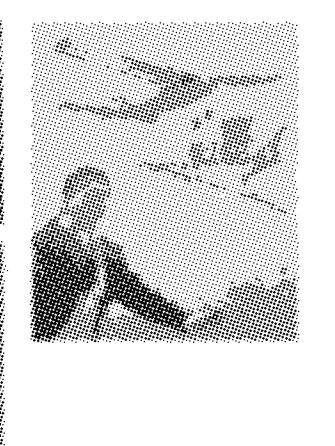


**Aermacchi—  
Lockheed 60  
'Santa Maria'**  
35-inch profile semi-  
scale model for .5—8 cc.  
designed by VIC SMEED



- Materials required**
- 1 sheet of 3/4 x 2 in. x 18 in. balsa.
  - 1 sheet of 3/4 x 3 x 36 in. balsa.
  - 1 sheet of 3/32 x 3 x 18 in. balsa.
  - 3 sheets of 1/16 x 3 x 36 in. balsa.
  - 1 strip of 1/4 x 36 in. shaped L.E. balsa.
  - 1 strip of 1/4 x 36 in. shaped T.E. balsa.
  - 2 strips of 1/4 x 1 x 36 in. balsa.
  - 1 strip of 1/4 x 1 x 9 in. hard balsa.
  - 1 strip of 1/4 dia x 6 in. dowel.
  - 8 x 8 in. of 1/16 in. plywood.
  - 8 in. of 3/4 x 4 in. hardwood bearer.
  - 36 in. length of 14 s.w.g. piano wire.
  - 1 1/2 in. Keilcraft spinner.
  - 1 packet Keilcraft modelling thread.
  - M.S. Timer Tank.
  - 6 B.A. bolts, nuts, washers, etc.
  - 3 sheets lightweight tissue.

SOME THREE YEARS ago a factory was established by Lockheed in Mexico for the primary purpose of constructing a utility aeroplane which, by its Mexican associations, was christened *Santa Maria*. Lack of orders, however, frustrated the intention, and the design was taken up through Lockheed's Italian connections to be built as the Aermacchi-Lockheed 60. This new arrangement worked with greater success and the machine will be seen in increasing numbers in European skies, both in the uniform of the Italian Air Force and in civilian dress. Examples are to be seen flying regularly over Great Britain. For a utility plane the lines are handsome and belie its considerable capacity. As a prototype for a model, it is ideally proportioned, although we have taken certain liberties to simplify it even further.

As drawn, our model has a profile fuselage only 1/2 in. wide. This makes it extremely easy, quick, and inexpensive to build: it is also remarkably rugged and requires

a ridiculously small amount of power to fly it. Even at 10 1/2 oz., the AS55 will zoom it up in a near vertical climb! We have slightly increased tailplane area, given the wing standard dihedral (the full-size is virtually flat) and omitted the struts; nevertheless, it still looks like the prototype and makes a fine flier.

Radio enthusiasts might like to make the body from 1/2 by 1 in. strip instead of 3/4 by 3/8 in., which would give plenty of room for miniaturised equipment. Scale fuselage width beneath the centre-section, by the way, would be 3 1/2 in. and the whole fuselage is practically rectangular in section throughout.

First, cut the 3/4 in. balsa fuselage core with slots spaced for your engine bearers, cement these in and when dry, lay over the plan, and add 3/8 by 1/8 in. fuselage structure plus scrap blocks. When dry, rub smooth with sandpaper and add the upper (port) 1/16 in. balsa fuselage side and 1/16 in. ply nose doubler with a good

butt joint. P.V.A. glue is most useful for this work. Remove from building board and fit the opposite side plates. The wing platform is then made from 1/16 by 2 1/2 by 5 1/2 in. hard balsa (grain across fuselage), scored down the centre, and bent to the dihedral angle. The 3/8 by 1/8 in. balsa support should be vee'd to accept the platform.

Cut away plywood covering the engine bearers on the left hand side for crankcase clearance. Drill for 8 B.A. engine bolts. Oversize drilling will allow movement for downthrust. The whole assembly is then sanded smooth.

Bend the u/c units and solder wheels to axes after binding the nose leg with soft copper wire. Drill the 1/16 in. holes for binding to fuselage with strong thread. Rub plenty of cement in to give a secure joint.

The wing is a simple two piece structure made directly over the plan. First notch the port side trailing edge and

pin it down with the lower 1/2 by 1/2 in. spar. Cement the ribs in place before adding the leading edge. When dry, the dihedral brace should then be cemented in and the top spar added. Add the rough shaped tip block and remove from plan. The starboard panel is built over on reverse traced plan while the panel is still pinned in place, join the portside on by means of the dihedral brace. Add centre section sheeting.

Tail surfaces are elementary 1/2 in. sheet balsa flat plates which must be sanded and doped carefully to avoid warps.

The fin has a trim tab held in place by soft wire, to act as hinges. Cement the fin into the slot in the fuselage top, adding the strake at the lower leading edge. Give the whole frame work one coat of sanding sealer, and after rubbing smooth, cover with lightweight tissue. Rub on two coats of thinned clear dope and add colour dope and transfers. I-MACM, the demonstrator, has a most attractive cream, orange and blue scheme as

can be seen on our cover this month.

Next all the paint should be cleaned out of the bolt holes and a coat of fuel proofer added, before fitting the tank and engine.

Leaving our prototype Nats-wind grounded model in a car in the hot sun induced a considerable warp in the starboard wing, and first flights had this handicap to overcome. However, once the warp was removed the model became completely docile and very easy to trim. Balance on the front edge of the mainspar (a little ballast would be better than adjusting the surfaces, though the prototype was exactly right), and check that there are no warps, that the surfaces are square, and that you

have remembered the washers under the front engine bolts to give right sidethrust. Check glide, then put on slight right rudder tab and launch with engine running slow. Remember that a profile model of this configuration does not like tight left turns, and you should experience no difficulty whatsoever. It is better to kill looping tendencies with more right thrust rather than excessive downthrust. And don't forget your name and address—this model really goes!