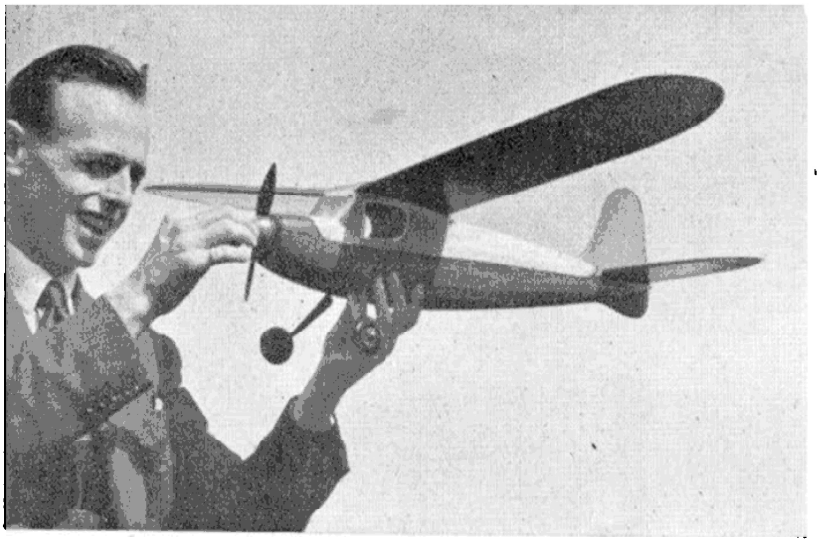

Vic Smeed's latest sportster for point - fives

MAM'SELLE

HERE IS A sport model that gets away from the slab-sider groove, but which takes no longer to build and is as rugged as the most fumble-fisted could desire. Any motor of from .5 to .8 c.c. is ideal, and if you take care in trimming, *Mam'selle* will handle 1 c.c. quite comfortably. You can instal the motor upright or inverted with very little modification, if you prefer, though the side mount shown offers ease of starting and accessibility of controls and only means either rotating the tank slightly on a motor such as the Dart, or fitting a small, separate tank to the other side of the bearers. Whether you build for the pleasure of construction, the fun of flying, or the more serious business of concours winning, we feel sure that this smooth little model will fill all your requirements.

Commence construction by pinning down the fuselage crutch and cementing in the cross-members. Note that medium balsa is specified throughout, and if you're undecided, go in for softer balsa rather than hard. While the crutch is drying, cut the formers; the grain direction is shown and should be followed for the strongest possible structure. F. 1 and F. 3 are cut from $\frac{1}{16}$ in. ply. The notches are best cut with the edge of an old file of appropriate width.

Form the undercarriage and sew in place on F. 3, using carpet or similar strong thread passed through holes previously made with a fine awl or old dart, etc. Cement all formers in place, checking for alignment; the central top and bottom stringers may be added to ensure truth if desired. Add the $\frac{1}{4}$ in. sq. wing runners and fit all stringers in place, working in pairs from the crutch towards the top and bottom. Trim the lower stringers to blend smoothly in at the tail. Go over the whole frame carefully with fine glasspaper—you can't expect a top-line covering job if any odd bumps or bulges show.

Now add engine bearers, F.1, and noseblock, and sheet in between the stringers where indicated with $\frac{1}{16}$ in. sheet. Fit the sheet cabin fill-ins and the front cabin sheeting round F. 2; cut a piece of scrap $\frac{1}{8}$ in. sheet for the front cabin top and sand to a bevel to receive the celluloid.

Temporarily position the motor and mark and drill for the bolts. Tack F. 1A lightly in place, sandwiching a piece of greaseproof paper between it and F. 1. Plank the cowling with soft $\frac{1}{8}$ in. and sand to a smooth shape when dry. Now with a really sharp blade, cut through the noseblock and the cowl sides and remove the cowling top. Fit the front locating pegs and a bent pin hook, secured with a scrap of silk, in the top of the cowling. Add wing and tail dowels, undercarriage fairings, and all remaining small details.

The tail surfaces are completely straightforward and require little comment. As shown, the fin is cemented to the tailplane centre-section after covering, but a plug-in dowel system could quite well be used. The wing is equally simple and is built in the conventional way, either by building the two outer panels separately and joining with the centre-section, or by assembling the mainspar flat on a level surface as a single unit before building the panels. In the latter case, pin down the short length of centre-section spar on a horizontal line and measure the approximate height of the outer spar tips from the base line. Glue the dihedral brace in place and leave under pressure until dry. Note that the centre-section ribs will require to be cut right through when installing the ply dihedral brace.

Cover all parts of the model with lightweight Modelspan and dope two coats of clear. Cover the cabin with celluloid (three pieces, jointing on F. 3), using paper templates to avoid mistakes in cutting the celluloid.

A model such as this lends itself to a nice finish, and the original model was colour-doped all over in a two-tone scheme. Heavy? Well, it weighed 9½ ozs. ready to fly—a wing-loading of around 6½ ozs./sq. ft., or an overall loading of less than 5 ozs./sq. ft. The clean lines give a fairly fast glide, but a remarkably flat one, and a parachute D.T. would be an investment if you are one of the long run fraternity. Balance the model just behind the mainspar and try for glide. Use ballast or *slight* incidence change if necessary. Under power, *Mam'selle* will turn in tight circles in either direction without coming in, but best trim is 20-30° right tab giving a wide left climb (with a 4 in. pitch prop) and a right glide circle. Needless to say, don't heave it off at full bat straightaway; it's a very safe model, but even the safest needs a flight or two at reduced revs.

After the maiden flight, we hope you'll agree with a bystander's remark—"She flies as good as she looks."