

Clive finished the prototype model in an attractive red, white and blue stylised union jack colour scheme. Decoration on a model to the 'Sprite' format is all important and will repay the efforts of the builder.



Sprite

- Aerobatic Sportster for .20 engines

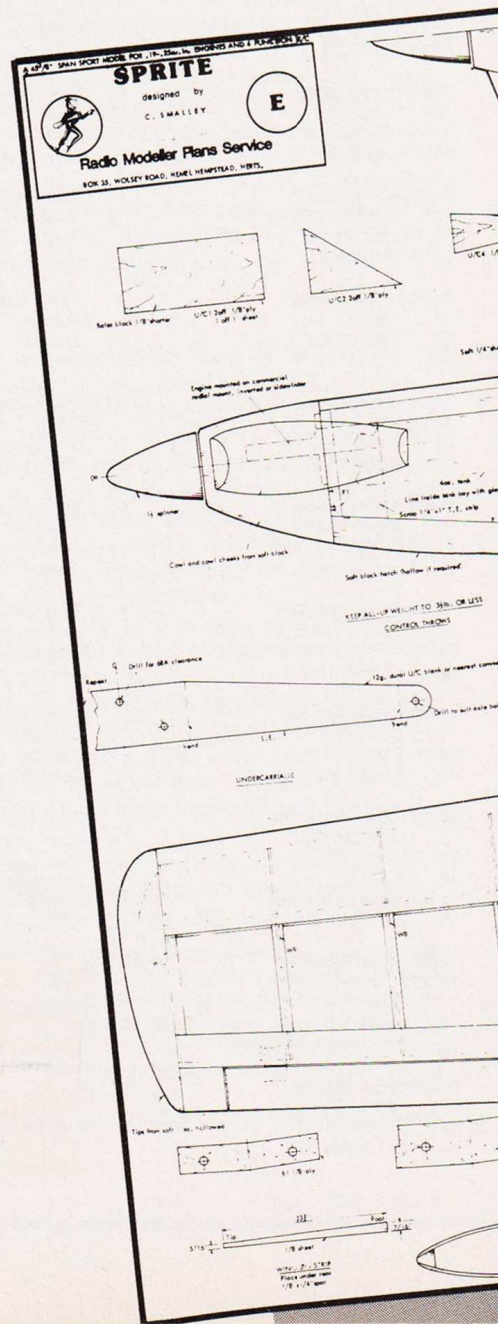
A smart '20' size aerobatic sportster with distinctive lines influenced by pylon racers. Clive Smalley's 'Sprite' has a wing span of 45in and is suitable for standard four function radio.

MY INTENTION BEHIND THE DESIGN of this model, was to produce an attractive full house .20cu ins powered aerobatic model, having simple conventional construction, and racer lines. I have long admired the highly colourful, in all senses, Formula 1 full size machines, which, as models, are usually produced as pylon racers. No attempt has been made to incorporate any particular types, features or lines, but I have merely been satisfied to get away from plank wing/box fuselage/trike undercarriage arrangement to obtain the 'feel' of a racer. Perhaps one day I'll design a .60 powered Cosmic Wind for full-house aerobatics.

By careful design, no great weight penalty has occurred and the 'Sprite' will aerobat happily on a good .20

motor. Please bother to add cheek cowl as these do enhance the appearance. Spats too could be added but I decided against these as the average club flyers patch is usually rough pasture, and spats would be vulnerable in less than perfect landings.

If you are lucky enough to fly from tarmac, or concrete, either commercial or laminated balsa spats could be used for good effect. A word of warning however. Make sure the spats are lined-up dead true and are firmly fixed. Knocked slightly out of true they can cause an upset of trim which is critical for good aerobatics.





The wing is constructed over the plan using the jig-strip shown. This is pinned along the aileron spar/sub trailing edge position with the lower spar pinned flat to the board. Align the ribs on the spar and trailing edge and add as much of the remaining structure as possible while still pinned to the board. Build each wing panel separately and join with dihedral (for appearances sake).

The tailplane is simple sheet construction. Like with all aerobatic models, care taken in constructing the wing dead true will pay dividends time and time again in both aerobatic manoeuvres and slow speed handling.

Finishing touches

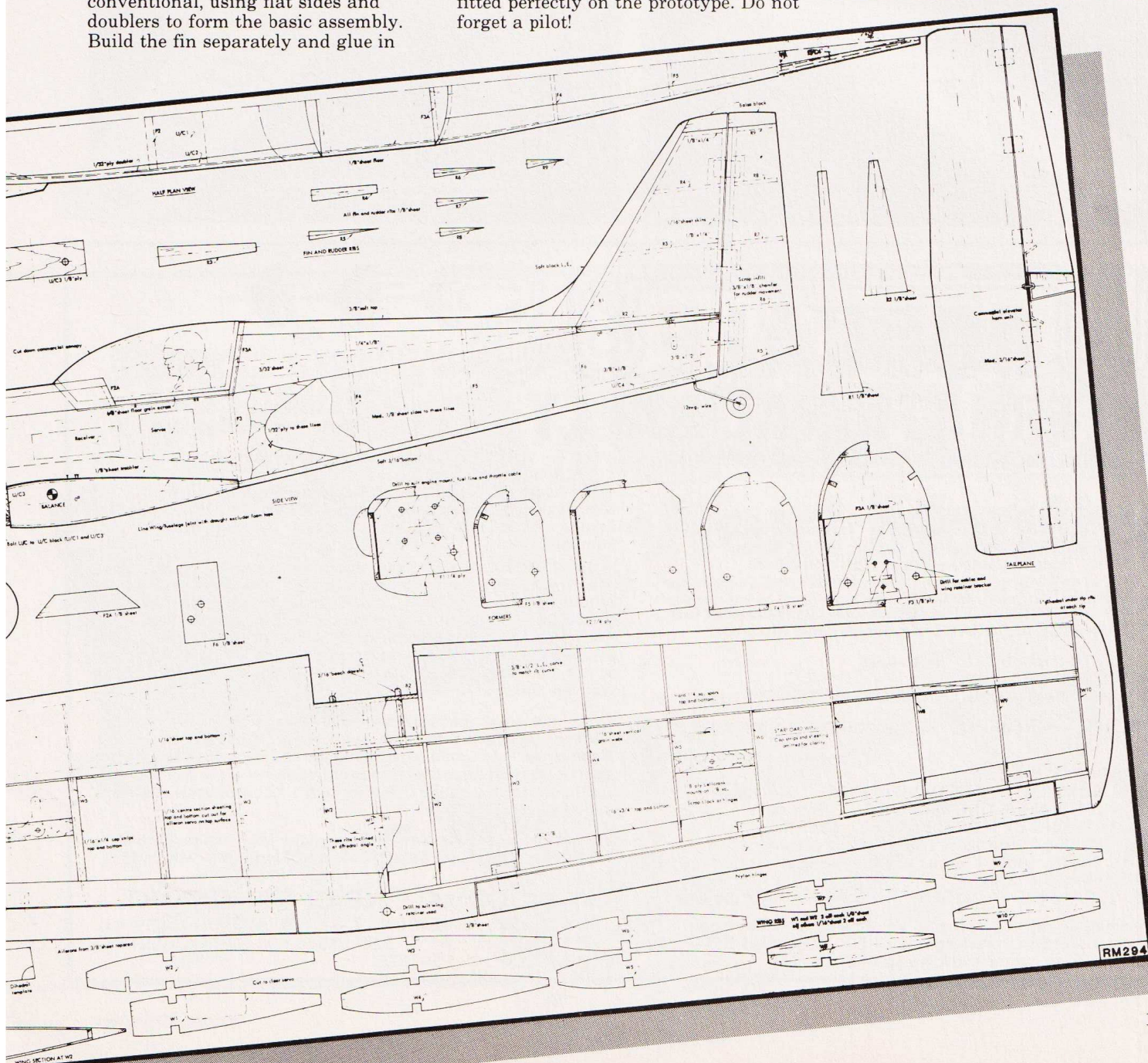
Any type of finish is acceptable, silk, nylon, tissue or plastic film. Do try for a good bright racer style colour scheme as this adds tremendously to the overall effect, but don't overdo the amount of paint as this adds weight very quickly. The prototype had heavyweight tissue

Putting it together

The construction of the fuselage is conventional, using flat sides and doublers to form the basic assembly. Build the fin separately and glue in

position after the tailplane has been fitted. The leading edge and upper decking blocks can then be carved to make the fin integral with the fuselage lines.

A Veron 'Fournier' canopy, cut-down, fitted perfectly on the prototype. Do not forget a pilot!

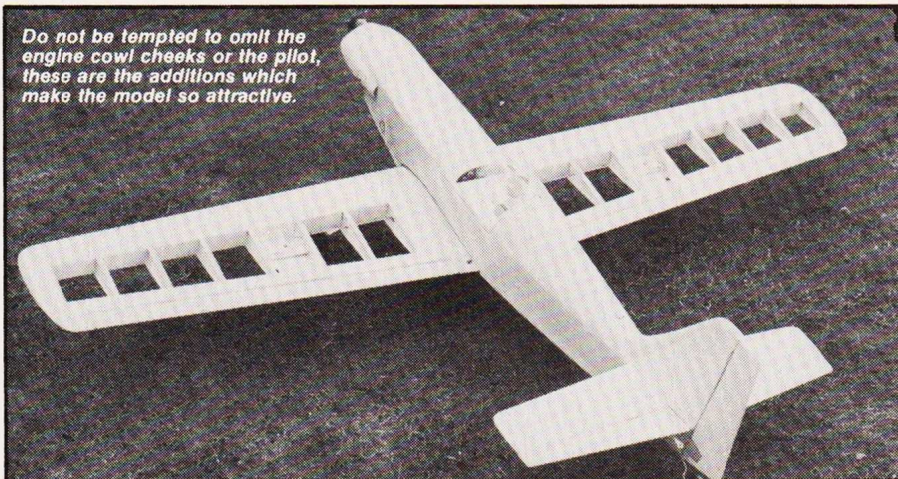


on the wings, with lightweight tissue on the remainder and was spray finished with cellulose and fuel-proofer.

The prototype handled very well, all normal aerobatics being possible although prolonged vertical manoeuvres are more difficult with low powered models. The airframe is capable of taking a .25 engine if you want a really hot ship, but this is not necessary, and the smaller motor will give adequate performance for the average sport flyer.

Finally, the designer is always pleased to see photos of any models built from his plans and to receive comments on the models, both good and bad! These can be sent c/o the Editor.

Do not be tempted to omit the engine cowl cheeks or the pilot, these are the additions which make the model so attractive.



Conventional construction methods are well illustrated in these photographs. Little more effort is required compared with the more ordinary 'slab-sider' but the appearance is vastly improved.



Note Clive's attention to detail with plywood inserts for control horn and cowl firings.