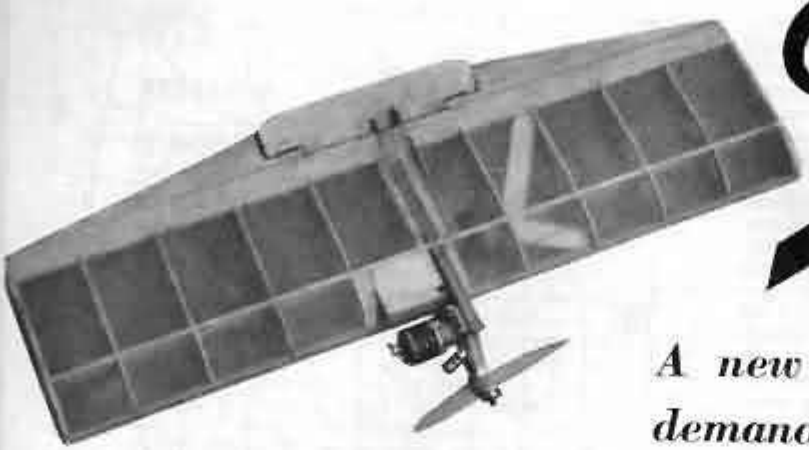


Splatt!!

designed by M. J. PLATTS

A new design to meet growing demand for club competitions, 7 ounces of zippy Combat model for the ½A (1.5 c.c) Class

DURING THE PAST YEAR there has been a great increase in ½A team racing, and this class is now commonly included in contest programmes. With the introduction of kits to suit the class, ½A combat has also jumped in popularity, especially among the juniors and this category will soon be included in the Rally programmes. Anyone who is a regular follower of *Club News* cannot have failed to notice the regular mention in those columns of ½A (or 1·5 c.c.) combat from many of the go-ahead clubs. The designer of Splatt tells us that in his locality this size of combat has been preferred to the larger class, due probably to the all-round inexpensiveness and the large proportion of juniors among local Sheffield flyers. Many designs have been tried, some original, some scaled down, and all the teething troubles have been overcome.

Splatt is the latest and fastest of the series having done 83 m.p.h. (without a streamer) and having promise of yet more speed to come. Its airfoil is rather thick, but trouble was experienced with earlier models shuddering round loops and almost causing loss of control. It could probably be thinned slightly but this is not really recommended. Construction is simple and light, the model weighing 7 oz. ready to fly, its balance point is well forward, making the model most stable yet very agile.

Should anyone shrink at the thought of an apparently "weak" combat model, this design buried itself to the hilt vertically in solid earth, sustaining only split tissue and a broken leading edge where it hit a stone!

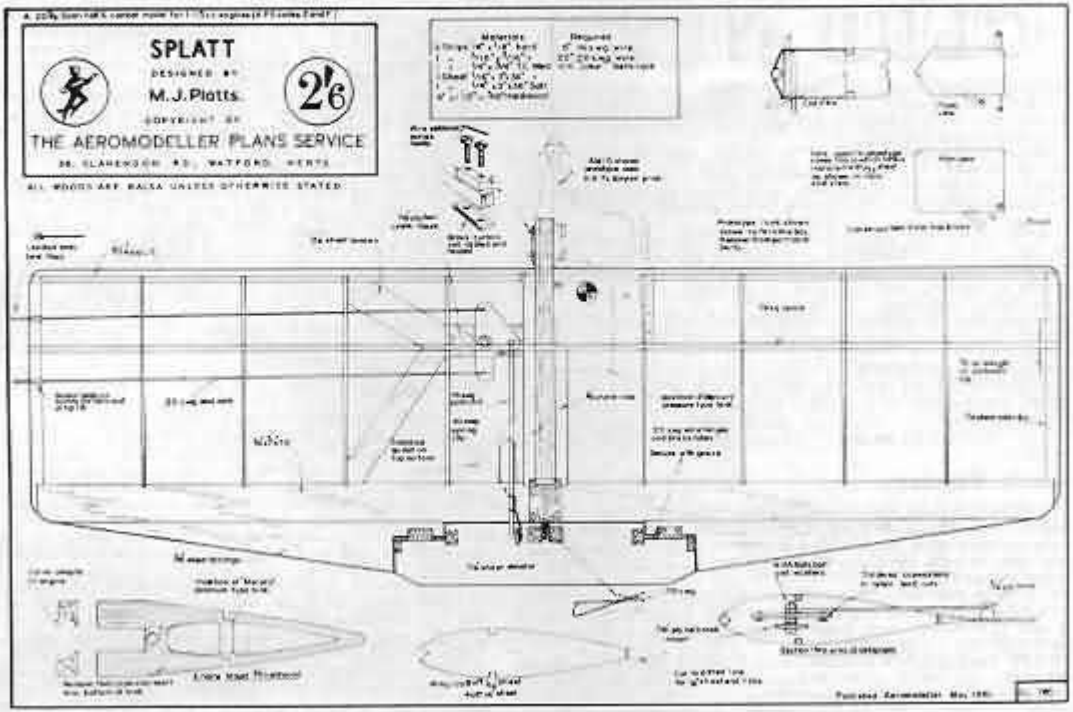
Construction

The "fuselage", cut from ⅛ in. hardwood, is the first part to be prepared. This *can* be left solid if a built-up tank is used, but must be cut away at least for the vents if a Mercury pressure tank is fitted, for simplicity, but the bearer shape at the front must be maintained. The extra fillet (*see front view*) round the crankcase makes the bearers almost indestructible. A $\frac{1}{16}$ in. sq. leading edge is cemented centrally in place at 90 deg. to the fuselage. The ¼ x ⅛ in. trailing edge (with 20 g. wire elevator bearing) is cemented and taped to the fuselage. All the ribs should now be added, making any necessary adjustments to avoid warps. Take frequent sightings along leading and trailing edges (which should be preslotted for rib positions before assembly) so that they are in line. Use plenty of pins and finally line-up with the ¼ in. tip and root ribs. Spars, which can be spruce if preferred, are now fitted and cemented to form a final security against warps, then leave whilst drying so that joints set solid. Now add the $\frac{1}{16}$ in. ply bell crank mount (drilled) firm between the port root rib and its neighbour, followed by the $\frac{1}{16}$ in. x ⅛ in. braces. Fit the tank and wing-tip balance weights (outboard tip only) making certain they are firmly fixed (a commercial tank is shown on the plan for those who do not wish to make their own). It is easier to attach the pushrod to the bell-crank before installing the controls, leave the elevator end of the pushrod overlength, but the leadouts must be fitted after the bellcrank is in position. Add the $\frac{1}{16}$ in. sheet trailing edge fairings and cut the elevator to shape. It is critical that the two brass tubes bound to the fairings are directly in line with one another. Loosely fit the three 20 g. wire hinge bars to the elevator then rig in position. When satisfied that all three points of hingeing are in line and not binding, secure the outer hinges with gauze. Add the control horn and when the bellcrank is neutral and elevator pegged neutral, make the final pushrod bend to connect the controls. Add the celluloid gusset around the pushrod at the trailing edge. The centre wire hinge should be secured afterwards and must be free, as it is only present to stop the elevator bending. The model is now ready for covering after the brass tubes are added to the lead-out holes in the port tip and the model is well sandpapered.

The original was covered with lightweight Modelspan, given two coats of dope with a few drops of castor oil in it, one coat of Aerolac, and one of fuelproofer. This has withstood most handling, the castor oil making the tissue more pliable. As an alternative, heavyweight Modelspan or a double covering of Jap tissue with the grain going in opposite directions would be suitable.

For flying, 40 ft. - 45 ft. lines are advisable as the speed is likely to be high (depending on the power unit). Single strand lines give an extra turn of speed, but must be well cared for. Experiments will soon find the best propeller and fuel for ultimate performance — as a start try a 7 x 6 nylon prop and get a helper to handlaunch using an underarm throw from wing tip and port trailing edge.

Now get yourself a length of crepe paper, cut it into 2 in. wide strips and you'll be ready for streamer cutting with fellow "splatters".



FULL SIZE DIE-LINE PRINTS OF THIS ¼ SCALE REPRODUCTION ARE AVAILABLE AS PLAN CL 785 FROM *AEROMODELLER* PLANS SERVICE PRICE 3/- INCLUDING POSTAGE