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RCM AND E

RADIO CONTROL MODELS AND ELECTRONICS

MICRO-SUPER

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- 25 in span
- Full size plans

Schiffermuller

Sports Master with a Vintage Pedigree

NUREMBURG TOY FAIR

Latest from the Greatest

AN ARGUS SPECIALIST PUBLICATION

MY INTEREST IN SCHIFFERMULLER'S DESIGN started two weeks before the 1983 Old Warden Vintage Day, when thumbing through a 1948 Aeromodeller Annual my eye was taken by his perky little 29in. span low wing free flighter which fitted my idea of 'something different' for the big day. The original model was powered by 'Dart' diesel in my first 'Schiffermuller' which has given me hours of exciting flying fun (R.O.Gs at different engine speeds are magic).

Eventually I decided to produce an enlarge R/C version (2.5 times) which followed the shape, used the same wing construction (Gottingen 436) and general construction of my small version. Mr. Schiffermuller's original design was monocoque fuselage with fixed wing, but I opted for slab sides with turtle decking and a split, removable wing.

The resulting model has proved to be easy to build and is easy to transport.

Before starting construction study the plan then decide where and how you will site engine, fuel tank (plan shows a P.A.W. 35 and a smallish plastic tank, a larger capacity custom made one makes better use of space) throttle linkage and radio gear, etc.

After studying the plans you will notice that there is a lot of aeroplane behind the C of G, that's why I chose the P.A.W. 35 arrangement because I was able to cram all the engine gubbins including fuel tank into the engine bay, which meant I could have the flight batteries up to F.1. well in front of the C of G.

Fuselage Construction

The fuselage is a simple box construction with added formers and stringers, the whole covered by sheet balsa. A description of the building sequence may help, so off we go.

Don't forget to wax or cover the plan with a clear film.

Cut out all formers, etc., gussetts, stern posts, pushrod exit panel (1 off) then cut to length uprights and cross pieces (I mark and tape each pair together).

To build the two side panels pin 1/4in. × 1/4in. space longerons to plan, glue into place the various components (I used P.V.A. glue). Build second side over first (separate by using a sheet of 'cling film' over first side) then leave to set well.

Remove sides from plan, glue into place F.23 and servo rails then shape the stern ends to the taper as shown on plan.

Next pin the inverted sides to plan view after applying glue to stern post areas and add cross pieces, taking great care to keep structure vertically square. bottom formers, underfin, stringers, undercarriage blocks and 1/4in. sheet bottom can be added.

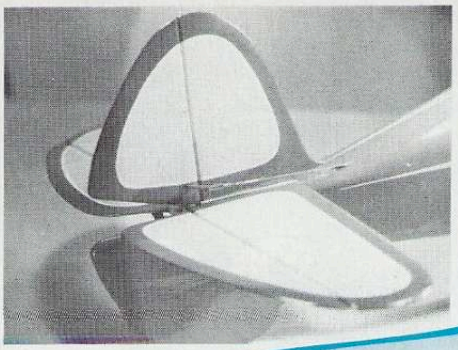
Remove from plan when set and epoxy

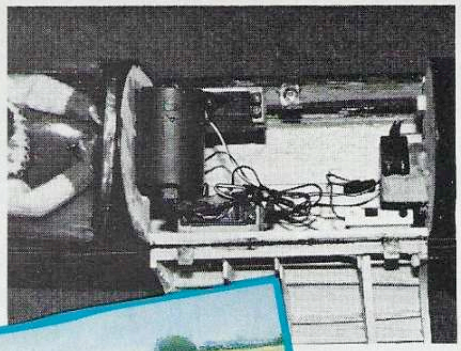
SCH...

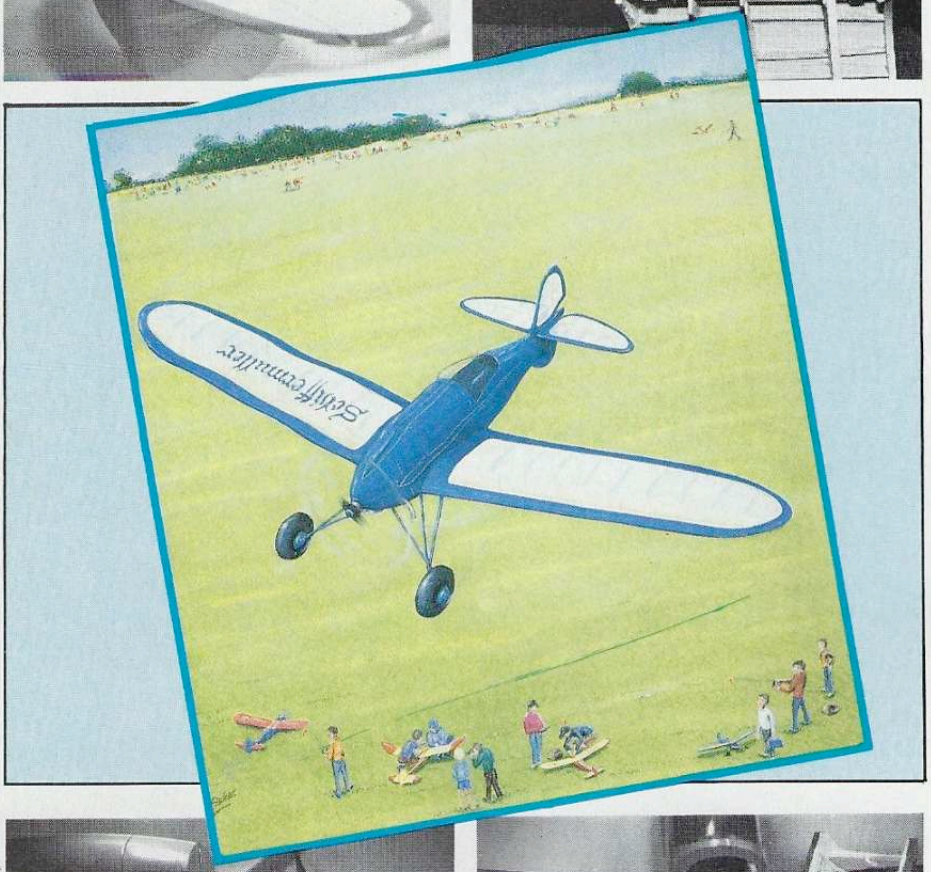
You know who!

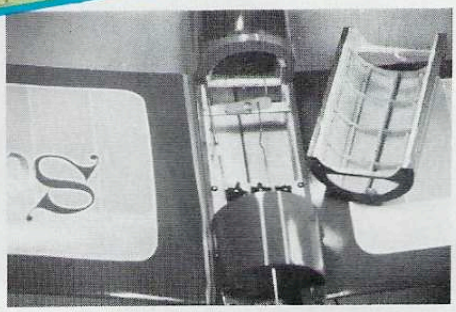
Schiffermuller might have had R/C sports enthusiasts in mind when he designed his dainty free-flighter in 1946. Ken Fisher carried out the enlargement and conversions for this great sportster.

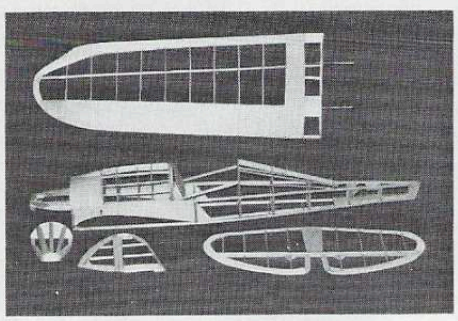
Ken swings the PAW diesel into life at the memorable 1986 ASP Old Warden Vintage Days. Original size free-flight versions is on the right - another great flyer.

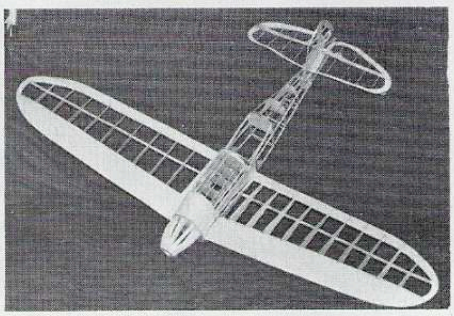












Curvaceous tail surfaces of the original are faithfully reproduced in the R/C version. Top right shows the installation in Bob Binley's model, Ken's installation is above right. Top and lower engine cowls are removable on Ken's model, above left, to reveal a very neat engine/fueltank installations. Diesels are ideal for the Schiffermuller, they swing large props at low rpm and, these days, give reliable throttle operation. General lines and method of construction are well illustrated in the construction photographs. With the fuselage sheeted and the model covered in nylon you have a rugged lightweight aircraft ideal for regular weekend flying. Centre panel is Ken Fisher's own evocative painting of the Schiffermuller climbing skywards over Old Warden - shades of Rupert Moore.

Schuffermuller

Wingspan	*72ins.*
Length	*47ins.*
Engine sizes	*'35' Diesel*
	'40-45' four strokes
	'30-40' two strokes
Radio	*3 function*

Based on a 27in. free-flight design featured in the 1947 Aeromodeller Annual.

into place F.1. and F.3. make up engine plate and screw to bearers before fitting them to formers (use epoxy) using a square to ensure accuracy.

The wing platform is fitted now between bottom longerons and resting on F.23. Now the six 1/4in. sheet gussetts can be epoxied into place against F.1.

F.2. and F.9. to F.14. can go into place followed by spines and stringers, etc.

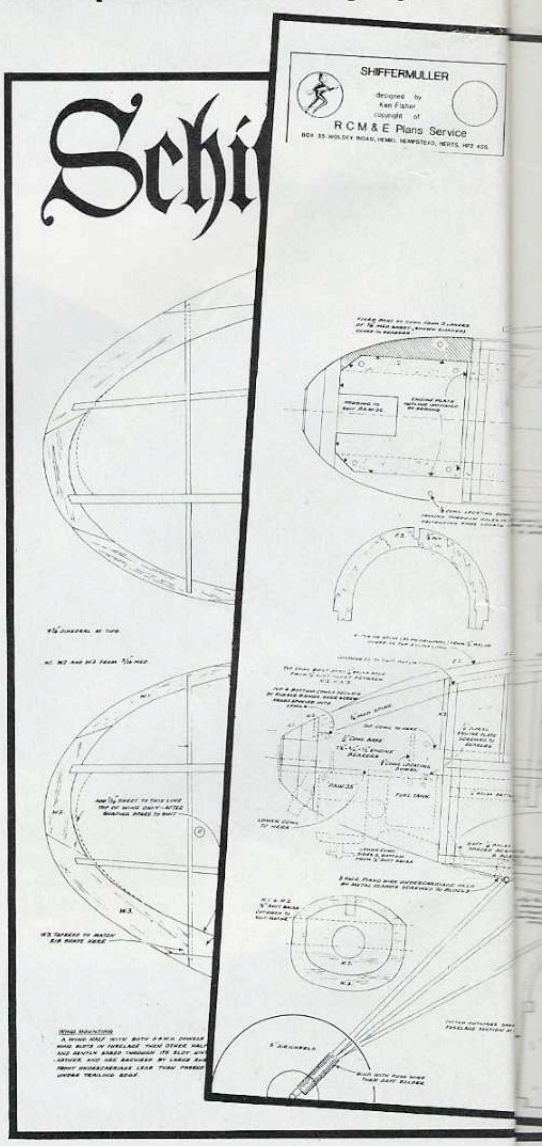
The radio hatch cover is built *in situ* using a double layer of cling film to prevent sticking, followed by 1/16in. planking of complete top front end.

Next stage is 1/16in. sheet covering as per plan, (try out or install push rods, wires, etc., first) cut out cockpit area then build cowlings.

Finally sand whole airframe but go easy on the 1/16in. sheet areas, make up undercarriage (screw into place before soldering legs together).

Wing Construction

First make up wing tips by pinning over plan, remove when set then pin bottom spars and bottom trailing edges



after shaping them to suit dihedral angle, next add wing ribs number 3 to 11. Add wing tips, fit top spars and leading edges.

Next set out as per plan 1/16in. sheet spacers (a piece of cling film will prevent them sticking to wings) then fit ribs number 2. Using angle templates, set ribs number 1.

The dihedral braces are added now with dotted lines coinciding exactly with break lines. Top 1/8in. trailing edges, vertical-grain webs and gussets are glued into place and leave to set.

Prop up wing tips over plan to 9 1/2in. using a square to ensure correct alignment (make sure wings cannot move) then build centre sections completely, apart from top spars (ribs at dihedral break should be well glued together).

Next stage is epoxying in the aluminium tubes. My method is to bring wings together after feeding two double lengths of tube 8 5/8in. into place, in wings with small pieces 1/8in. sheet between end ribs, (this will give clearance for cap ribs) check alignment, etc., then apply epoxy generously, fit top spar and allow to set. Next saw tubes through 1/8in. gap to part wings.

All that remains is to apply 1/16in. sheet then sand all down before covering.

Tailplane construction is so straightforward that the only comments I need to make are about whether you prefer to glue it in place or use rubber bands, (more trouble, but they do reduce damage in bad landings) and to ensure that it is warp free.

Covering and Finishing

The first and very important job is to fill all those little holes and dents. My method is to use a thickish paste made by stirring talcum powder into clear dope. I apply the paste quickly with an old 'Stanley blade' in a scraping action, five minutes' drying then sand complete airframe with fine glass paper, followed by 00 grade 'flour paper'.

Whole model was covered with Solartex (first using 'Balsaloc') which has sealed with a coat of polyurethane based clear varnish. Two slightly thinned coats of coloured paint (I always use 'Jap lacquer') well brushed out, followed by a coat of fuel proofer.

Flying

Forget about the fact this is a vintage design — it is not the type of model that is restricted to climbing for excessive height, sauntering around and slowly gliding back to earth. Schiffermuller is a fun machine, it can be flown close to the ground in tight, predictable turns and has a modest aerobatic performance that will prevent you becoming bored with the model. All we ask is that you become accustomed to the flying characteristics of the model before you start to 'horse around' with it and, when you do start to have fun, do ensure that it is not at the expense of the safety and consideration of other flyers.

Perhaps you thought vintage models were only for the 'fuddy-duddy' modellers, barely capable of steering a barge! Try the 'Schiffermuller' and you will realise that it need not be simply up and down stuff — and that goes for a number of other vintage designs too.

Copies of these drawings (RC1540) are available from ASP Plans Service, PO Box 35, Wolsey House, Wolsey Road, Hemel Hempstead, Herts. HP2 4SS. Price £6.25 plus 65p postage.