

**THE
WIK**

Super Tiger

This 1500mm span aerobat for .60 two-strokes, distributed by Powerplanes International, is reviewed by ALEC BARBER

For a kit which builds into quite a large model the box of the Super Tiger is quite a modest size. The contents were well packed and had easily withstood the rigours of a journey spanning the length and breadth of England in the hands of the messengers of Her Majesty's Royal Mail. Joking apart, the box is a good compromise between the glossy display items, which must cost about half the price of the contents and the plain brown cardboard coffin used by mail order specialists.

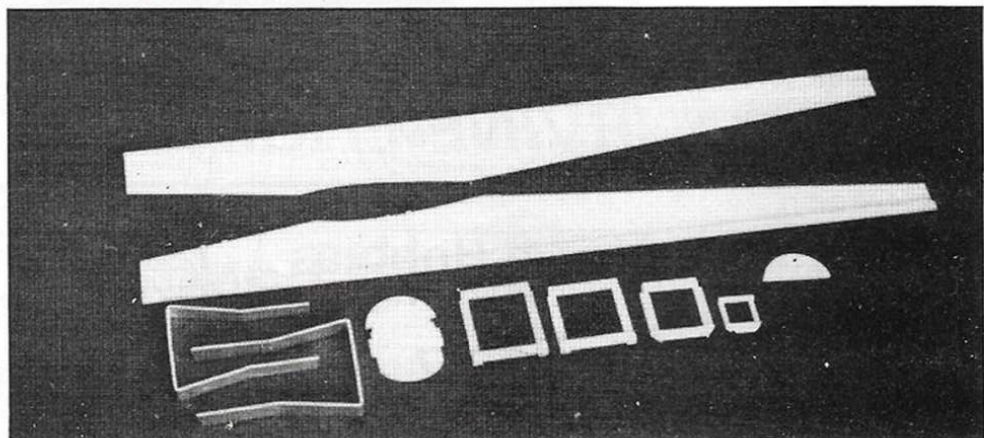
Inspection of the contents revealed numerous die-cut sheets of balsa, lengths of strip and sheet balsa, ply, a moulded fuselage top deck, a sturdy dural undercarriage, two huge aluminium brackets which turned out to be the top wing supports, various packets of fittings, a two sheet plan, a set of German instructions and a rather stilted but adequate set of translation sheets. A translation by an English modeller who understands German would probably have been more precise but then we would lose little gems such as 'glue the ribs to the side wall of the fuselage' ribs mean formers, a piece of dowel is referred to as a 'clamping bolt' and a phrase I have not yet worked out, 'The sudden stopping tendencies are harmless'. I hope this last statement is true, the only models that stop suddenly on our flying field are the ones that land on the wrong side of the dry stone boundary walls which are more often than

not far from harmless.

Building the model commences with the fuselage and follows the logical pattern of taking part No. 1 and gluing Part No. 2 to it. The model is not difficult to build and because of its aerobatic capabilities would not, I suspect, be attempted as a first model. Rather than give a step by step construction sequence, which after all you will get if you buy the kit, I will confine myself to the unusual features of the model.

The method of mounting the engine was new to me in that a hard dural plate is provided, drilled out for four bolts in the corners which fit into captive nuts in the front former. The plate has four slots cut in it

which accept the back plate bolts of the motor chosen. A packing piece is fitted between the plate and the former which can be sanded to a taper until the right amount of offset is achieved. It was this method of mounting that presented me with my first problem. I had intended using my H.B.61 (Pumper) in the review model but the pump prevented the use of the mount provided. A dry run with a commercial beam mount proved impossible due to the extra length the pump and the back of the mount added to the engine. The propeller would have been 1 1/4 in. forward of the cowl. The model is designed round a Webra 61 though it is not clear whether a

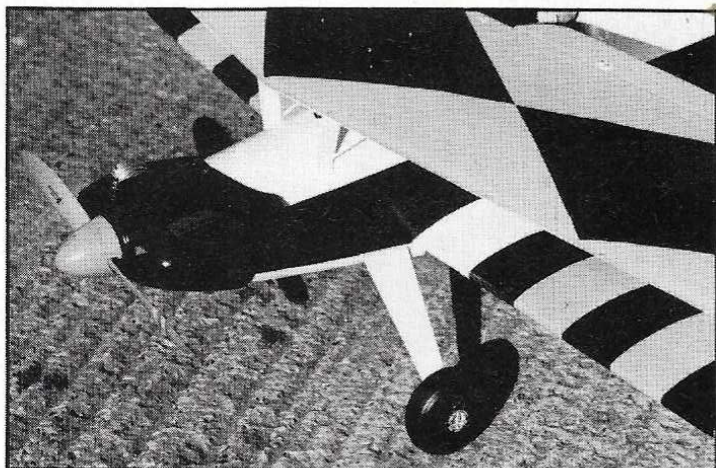


Most identifiable part in the kit spread, below, is the moulded ABS fuselage top decking. Above, basic fuselage components laid out. Note the pre-formed aluminium sheet centre section struts.



'Blackhead' or 'Speed' motor is intended. A Webra not being immediately available at my local model shop I splashed out on a good old British Merco 61. This fitted the backplate mount without modifications and also left the propeller in the correct position.

The plastic top deck of the fuselage presents no difficulty. It fits very nicely into a rebate in the balsa fuselage sides and is glued in place with an unknown German adhesive. I found R/C Modellers Glue, as supplied by my local model shop, to be ideal, in that it adheres well to plastic and balsa. Holes are cut in the plastic for the aluminium wing support brackets which, when pushed through, slide down a previously prepared groove in the fuselage sides. The front bracket is correctly positioned when both feet sit on the bottom of the fuselage, the rear bracket is correctly fitted when the feet reach the lower wing seating. Before any glue is applied check by a number of dry runs that you can fit and align these parts properly because once set I can see no way of rectifying a mistake without damaging the fuselage. I must add that there is no real difficulty in carrying out this step, just that the fitting of the brackets governs the top wing inci-



The engine installation is unusual in many ways in that the engine is angled above the horizontal rather than a true sidewinder.

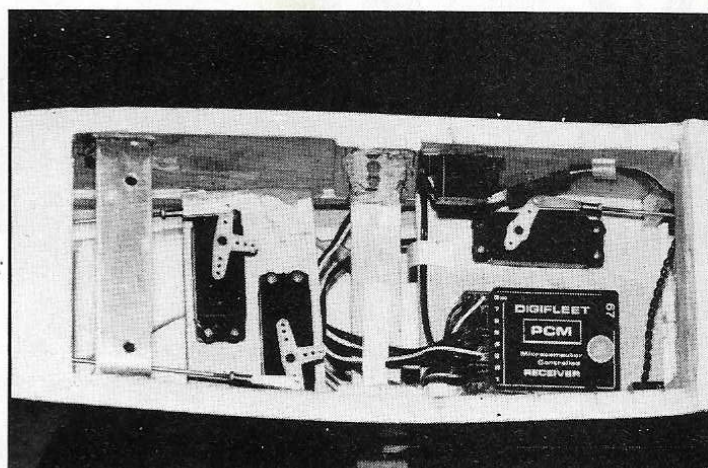
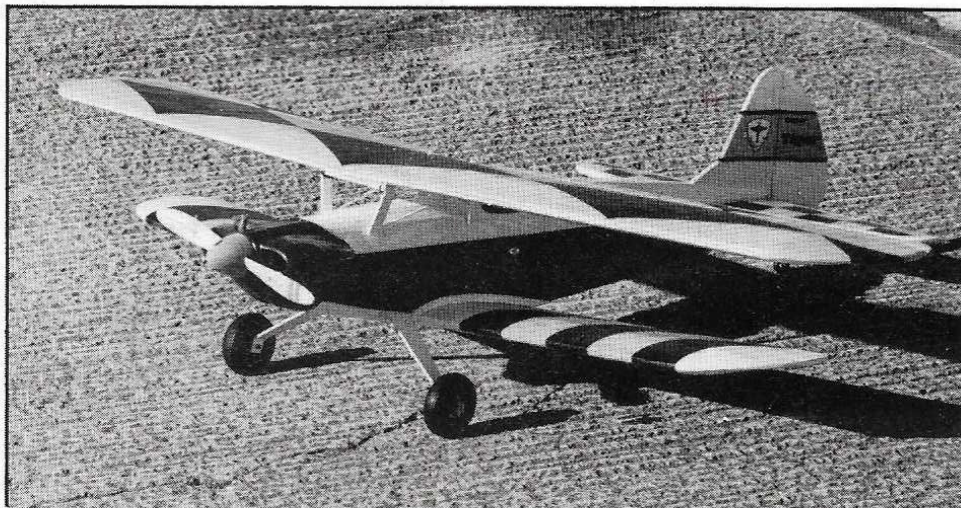
dence and to some extent its alignment.

The wings are simplicity themselves, being built from excellent quality balsa die-cut ribs with break off levelling tabs in order that they can be built warp free. The bottom wing has a small amount of dihedral referred to as 'V-shape' in the instructions. The top wing is said to be 'flat' but has quite a pronounced sweepback which isn't mentioned though this is obvious on the plan.

As the top wing has no dihedral and one is instructed to build through the centre section completing the wing as one piece, I would have preferred that the plan showed both halves of the wing. I solved the problem by getting a reverse print run off and sellotaping it to the plan. A cheaper alternative would be to mark out the opposite wing on white lining paper or drawing paper.

Wik have adopted a new twist to mounting the wings. The lower wing is almost standard in that a dowel locates in a socket in the lower part of the former immediately in front of the wing. Nylon bolts, however, hold the trailing edge to an aluminium bracket built into the fuselage. The wing has to be drilled for the bolts and also the bracket has to be drilled and tapped for an M5 thread. The trailing edge of the upper wing is held in the same way. The leading edge is fitted with hooks (pre-formed steel rods), which locate very neatly over the front support bracket. There is no great problem in this method of fitting the wings other than the requirement for an appropriate tap. A further tap, size M4, will be required to thread the holes which must be

The sturdy, wide track undercarriage on the Super Tiger makes it an ideal grass field model.



Spacious radio bay will accept any radio.

drilled in the undercarriage which take the axles. Whilst talking of bolt sizes etc., anyone else using a Merco 61 will require slightly longer back plate bolts to carry the mounting plate. These are 1/8in. Whitworth.

Fitting the radio is very straightforward, there being plenty of room for the largest equipment. An extension lead will be required for the ailerons which are carried in the top wing. A bowden cable is provided for aileron operation. No push rods are supplied for rudder and elevator though this is undoubtedly the method of control linkage you are expected to use.

Everybody has their own methods of finishing a model, mine being to cover the whole airframe in white Polytex and then re-covering in coloured pieces of the same material. Finally I gave the whole thing two coats of 'Aerokote' fuel proofer.

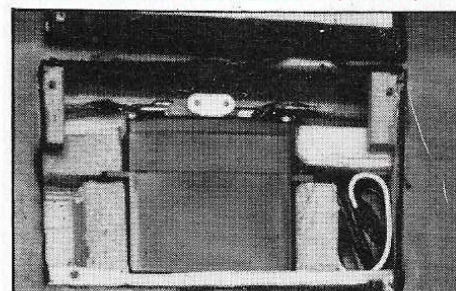
First Flights

July brought the first reasonable flying weekend this summer and therefore a massive turnout of Huddersfield M.A.C. members to witness the inaugural flight of the Super Tiger. The new model plus new radio (Fleet PCM) did nothing for my nerves. Choosing action rather than inaction as the best cure I started the motor.

Being midweek the grass on our strip was a bit long and wet, so the Super Tiger was reluctant to accelerate uphill into the light breeze. A downhill, downwind take off was tried. A nice fast run with just a touch of right rudder was all that was needed to hold it straight. Lift off, over the two foot high grass, was perfect and the climb out smooth. A touch of down trim and right

aileron was easily fed in, resulting in a very smooth level flight. Elevator response is exceptional without being twitchy. Loops can be as large as you like, the model showing no tendency whatsoever to screw out. Outside loops would be just as easily achieved if it wasn't for this pilot's tendency to progressively push in more and more down elevator as the model rushes earthward. However, I perform a very neat outside figure six.

In contrast to the elevator the aileron response is somewhat slow, a roll taking between two and three seconds to complete. The aileron servo I am using is a linear type and being coupled to a short moment arm at the horn I don't see how I could increase the throw to speed up the



A linear servo was used for the ailerons, to produce a simple connection for the pushrods.

roll response. Perhaps the fact that the ailerons are only on the top wing has something to do with the steady though positive responses. Landings are very predictable and the use of rudder with aileron is a help at low speeds. I, of course, forgot the coupled aileron and rudder switch on my fancy new radio.

Conclusion

A biplane that will perform like an aerobically low wing model whilst looking far more attractive. At full power, even on a sport .60, it should do well in club pylon races. Very satisfying indeed, both to build and fly.

There is one point however that really requires clarification. Where is the C. of G. supposed to be? There is no mention of it in the instructions and no sign of it on the plan. At 6oz my model weighed two ounces less than the recommended weight and as the radio was installed as indicated on the plan, I can only assume that at half chord in the centre section of the top wing was approximately correct.

All in all a super Super Tiger. Distributed by Powerplanes Internatioal at Unit 6, Cwmtillery Industrial Estate, Abertillery, Gwent NP3 1LZ, the Super Tiger costs £67.50.