

MINI SUPER



A 45ins. Wing Span version of the classic K.K. 'Super Sixty' for free flight, single channel, two or three channel radio and 1.3 to 2.5cc engines adapted from the original Ernie Webster design by DAVID BODDINGTON.

T's an old story, but I'll tell it once again. Many years ago, when Ford Anglia cars had rearward sloping back windows, I had just 'cracked' single channel flying and would travel some thirty miles to meet my brother, Charles, and show off my new found skills. Unfortunately the combination of a one piece 'Super Sixty' wing (sometimes two) and my wife, in the limited interior space of the Ford Anglia, was not too good. The wing had to extend from the rear seat over the front passengers head, which meant that my wife was in a constantly crouching position! Jill now claims that she never uttered those famous words 'It's either me or the models', but I know differently.

To maintain harmony in the household I decided on some radical action. Buying a new car was out of the question on grounds of expense, training a new wife into my wicked ways would be even more expensive, so the only alternative was to do something about the models. I could have modified the 'Super Sixty' wings to two piece affairs, but that would still have left the bulky fuselages to cope with - plus family. The obvious solution was to build a smaller model.

Thirty years ago single

channel, non-proportional, radio equipment was just beginning to get to the reliable stage and the airborne components to a reasonable size and weight. Therefore, a model smaller than the 'Super Sixty' was a practical proposition, but this model was such a good flier that it seemed a pity to go away from the design. Again, the solution was obvious, build a smaller version of the proven design. I decided on a 3/4 (75%) replica as the wood sizes worked out well, 3/16in. for 1/4in. and 3/32in. for 1/8in. etc and the size of the model would still be adequate for carrying the transistorised receivers, Elmic rubber driven escapements and 3.6 volt 225 mAh DEAC battery.

Results exceeded expectations and the Mills 1.3cc powered model flew with all the excellent flying characteristics of the '60' design. Dyed nylon was used for the covering and radio equipment was the MacGregor Terrytone Mk 2 receiver, All-transistor Transmitter (with Silicon Planar Epitaxial Output Transistor - as used in guided missiles and



Heading picture shows John Toyer, (right) who built the Mini-Super shown here, his son David who flew both the Mini and Maxi Super and the editor with his Micro-Super one of about 57 varieties! Main picture shows John's mini-Super with authentic banded-on wing and tailplane but using three channel radio equipment. Far right, big fleas have little fleas.....

space probes!) and Elmic Conquest escapement. I always preferred the sequential escapement (left, right, left rudder etc) as it was faster and you could quickly 'blip' through an unwanted signal - but you had to remember the last command.

Christened the 'Mini-Super', the model won a number of Spot landing/Nominated time competitions, I was even banned from one club after winning their contest two years running - against expensive multi radio equipped opposition. With the Mills 1.3cc diesel it was certainly not overpowered, but highly consistent and reliable, you could calculate the engine run to a few seconds, without a timer. It was not long before the original 'Mini-Super' was joined by a second example powered by an ED Super Fury 1.49 diesel, the extra power making the model much more sporty but retaining its impeccable manners.

WE MADE THIS ONE EARLIER

As presented here the 'Mini-Super' is in its original form, taken from the original tracings and, would you believe, the prototype model is still in existence! You could fly the model free flight, it has quite generous dihedral, or single channel, rudder only control. However, I guess that most modellers will opt to fly it three channel. The elevator extension is shown and is large enough for the type of flying intended with the original design i.e. more of a guided free flight aeroplane. We have shown modern radio equipment on the drawing, but if you want to bring it to a more 21st century design you are on your own. Is nothing sacred!

Having a paxolin engine

plate allows you to make thrust adjustments to the engine, or to substitute one engine for another. A metal, non-clunk fuel tank is quite suitable as you won't be doing any sustained inverted flying - will you. A metal tank can be built-in, providing it has been fully tested. Wheel sizes might seem a little generous by modern standards, you will find them ideal when flying from less than 'bowling green' grass surfaces.

'Mini-Supers' have been flown off skis and floats, for the latter adaption you will need at least a good '15'. I promise not to mention the biplane version if you don't!

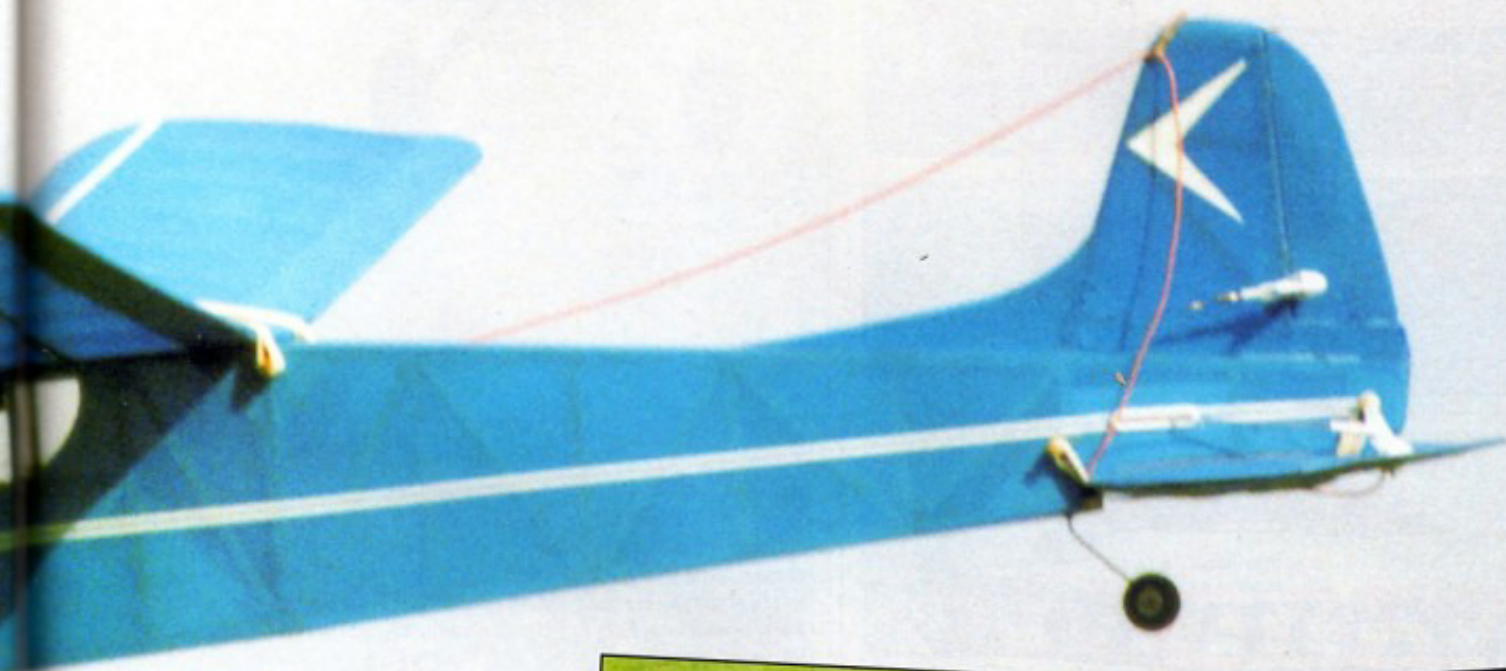
GET OUT THE STICKS AND SHEET

Construction really is too basic to go into any detail of

structure. The fuselage is a build two sides and joint job. Top longerons at the wing seating are doubled, as are two of the uprights. The 3/32ins. lower fuselage braces are fitted internally.

Wings are constructed in three panels and then joined, note that the top spars extend on the outer panels and are glued to the centre section when joining. Again, there are no deviations to the original structures.

The tailplane construction may look odd, but that's the way it was done and it certainly stood the test of time - and many hundreds of flights. Tailplanes were banded-on in earlier days, it allowed for packing pieces to be inserted for trimming adjustments.



Flying the 'Mini-Supers' gave me such pleasure that I sent details and drawings to Keil Kraft suggesting that they might wish to kit the design. They decided to go ahead with the project, I received a payment of 15 shillings (75p) my first ever commercial reward for aeromodelling and KK proceeded to 'modernise' the design by making it tricycle undercarriage and widening the fuselage.

