

A PLEASING MODEL FOR
0.5-1 c.c. ENGINES FROM
A CHINESE ENTHUSIAST

MK Sportster



BY
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INTRIGUED by the name of this model? Designer Hoh Fang Chiun explains it as follows: M.K. = Middle Kingdom and the Chinese call China the Middle Kingdom or Middle Land. Designed for the popular 0.5 c.c.- 1 c.c. engines, it has a most realistic and stable flight and the large diameter wheels should provide safe take-offs and landings from any reasonable flying field. So if you are interested in precision events such as the Bowden Trophy, or just like a model that can get off the ground in a realistic manner, then this design can be recommended.

Fuselage

Start by building the cabin frame. The frame sides should be built directly over the plan and the cabin uprights should be of hardwood. Now cement the frame sides to fuselage sides, which are of $\frac{1}{16}$ in. sheet. After they are dry, join the two fuselage sides with F2 and F3. Note that the U/C must be fixed to F2 before joining the sides. Add the remaining spacers and cover top and bottom of fuselage with $\frac{1}{16}$ in. sheet. The fuselage bottom should be covered with the grain crossed. Add

engine bearers and cement the bolts in place to suit engine. Add nose blocks and sand to shape. The fuel tank can be placed in this compartment. Leave the cabin uncovered at this stage.

Wing

Pin down the L.E., T.E. and lower spar over the plan. Add ribs, which are cut from $\frac{1}{16}$ in. sheet, then cement the upper spar and the tip in place. The centre section of the wing is covered top and bottom with sheet and the dihedral is $2\frac{3}{4}$ in. measured at each wing tip.

Fin and Tailplane

The fin is made cut from three pieces of $\frac{1}{32}$ in. sheet cemented together

with grain crossed. Cut the lightening hole and the trim-tab. Now cement the fin to the fuselage and be sure that there is a space for the tailplane. The tailplane has a flat plate section, so the construction is straightforward. Use hard strips for L.E. and mainspar. The T.E. is shaped before building.

Finishing

The wings and the tailplane can be covered either with lightweight or heavyweight Modelspan. I myself used lightweight Modelspan on my original model. Waterspray and give four coats of clear dope. The wings should have about $\frac{1}{8}$ in. to $\frac{3}{16}$ in. washout at each tip. Cover the fin with heavyweight Modelspan, also four coats of clear dope. Before covering the fuselage with lightweight Modelspan, it is a good idea to give it a coat of thinned clear dope. Now cover the cabin with thin sheet celluloid. After covering, the original model was given two coats of sanding-sealer, followed by one coat of normal clear dope and two coats of 25 per cent. thinned colour dope. The fuselage should be sanded smooth with fine grained sandpaper after each coat. The original model is finished in a blue and white colour scheme.

Trimming and Flying

With the trim-tab at about $\frac{3}{8}$ in. to starboard, the model should have a smooth, flat glide when hand launched in still air. No alterations to tailplane incidence were necessary on my original model. Make the first power flight with a 7 in. \times 4 in. prop. No alterations to engine thrust line were necessary on the original Dart-powered model. If a 0.8 c.c. or bigger engine is used, then some downthrust will be necessary. The original model, using a 6 in. \times 4 in. Tru-Flex airscrew, has left-hand power and right-hand glide.



The pleasing semi-scale lines and neat construction of the original Sportster are clearly shown in this photo.