

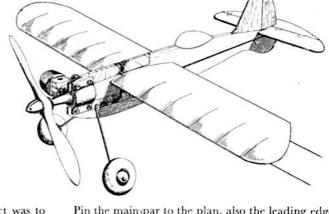
SKYLINER

AN IDEAL BEGINNER'S STUNT MODEL

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and

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WHEN designing this model our object was to produce a tough, easily constructed plane which would be capable of performing any stunt in the S.M.A.E. Aerobatic schedule. The "Skyliner" has certainly fulfilled our expectations, having proved itself to be a really rugged job, well able to stand plenty of hard knocks without serious damage and to have a performance well above the average for stunt machines using class "A" engines. It makes an ideal beginner's stunt model and can easily be made in two evenings.

In the original model we have used a Mills Mk. II 1.3 c.c. diesel mounted sidewinder fashion, but any good diesel engine of a similar capacity could be used with equal success.

Fuselage

Select a hard straight-grained piece of $\frac{1}{4}$ in. sheet balsa and trace the outline of the fuselage on to it. Cut to shape with a fretsaw. Cut out the slots in the fuselage for the wing spars and the engine bearers. The latter are made from $\frac{1}{4}$ in. $\times \frac{1}{2}$ in. hardwood. Next bend the undercarriage to shape from 14 gauge piano wire and bind it securely to the engine bearers with strong thread, liberally coating the binding with cement. Drill the bearers for the mounting bolts and bolt the engine into position. The engine bearers are now cemented securely into the fuselage; leave until quite dry, then remove the engine and sand the fuselage smooth with fine glasspaper.

Wings

This is made in two parts and joined through the fuselage. The first step is to cut out the wing ribs, trailing edge and wing tips from $\frac{1}{8}$ in. sheet and the mainspar from hard $\frac{1}{4}$ in. sheet.

Pin the mainspar to the plan, also the leading edge and trailing edges which must be packed up with scrap to align with the ribs. Cement the ribs into position and add the wing-tips. When dry, remove the wing halves from the plan and sand them carefully to shape where necessary. Next cement the secondary spars into the slot in the fuselage. When dry, cement and bind the wing halves into position on the fuselage.

Tailplane and Fin

Trace the outline of these on to $\frac{1}{8}$ in. balsa and cut to shape. Bend the control horn from 18 gauge piano wire to the shape shown on the plan and cement to the elevator, covering the joint with a small piece of silk or tape. Join the elevator to the tailplane with tape hinges in the usual way. Sand to shape and cement to the fuselage. Note that the fin is offset $\frac{1}{8}$ in.

Finishing and Flying

On the original model a "Bat" tank was used. this was bolted to the fuselage underneath the starboard wing. Any similar type of stunt tank could be used instead. The wings are covered with Burmese tissue or its nearest equivalent. Two coats of clear dope are given to the whole model, followed by coloured dope to suit the individual taste. The "cockpit" is painted white. The model was usually flown on 40 ft. lines and with the Mills engine a 8 in. × 8 in. paddle-bladed propeller was found to give the best results. A q in. × 6 in. C/L propeller could be used if desired. Flying the "Skyliner" does not call for any special comment; it is, as we have said, an ideal beginner's job with no vices, but a really snappy performance which amply repays the very few hours' work involved in its construction.