

Cyril Mayes

IN last season's important C/L stunt contests Tycoon had many successes, including the following:—S.E. C/L Championships, Dover, 1st and 2nd; British Nationals, Gold Trophy, 2nd, 3rd and 5th;

All-Herts Rally, 1st.

Nicely made, this model can be guaranteed to flatter any non-expert stunt pilot with its smooth manoevures. Recommended motors are Elfin 2.49 Mills 2.4, E.D. III, E.D. IV, Falcon 2.5, Amco 3.5, Motor-mount shown is for E.D. III, line length 57-62 ft. .011 diameter. Weight of E.D. III version is 14 oz. Area 260 sq. in. Span 37 in.

Construction

As the majority of the construction is quite straightforward, only the more difficult parts are described.

Tank

Make the tank from an old cocoa tin or shim brass or copper. Cut the top and bottom in one piece and bend to shape. Solder the single joint; then add all three tubes, soldering the ends of the tubes to the tank for security. Solder oversize sides on, trim with snips (or scissors!) and then resolder. Use Baker's Fluid throughout. Test the tank by immersing in water, blocking two tubes and blowing hard into the third. Some fuel tubing as an extension greatly Mount the tank with helps this performance. Durofix, making sure the feed-pipe is exactly level with the jet.

Wings

Construction of the wings is greatly facilitated by placing a length of \(\frac{1}{4}\)-in. square balsa on the plan about 1/3 chord forward from and parallel with the T.E. Mount the lead weight in the outer tip with Durofix. On no account omit this weight—it is one of the secrets of success.

THE DESIGNER . . .

Age 23 years . . . Electrical engineer . . . Member of the West Essex Aeromodellers . . . Spent three years in Wales as a Bevin Boy and whilst there became keen on slope soaring . . . A versatile modellerbuilds anything and everything, except jet models and kits.

Controls

Watch that the lead-outs are exactly equal in length and do not foul the holes in the fuselage.

Covering

Use either Jap or Burmese tissue for covering. Apply at least two coats of full-strength glider dope. For brightness use a single thin coat of French enamel varnish. This gives a very even colouring without the addition of weight. Yellow is by far the best colour to use, with black for trimming, these being the colours of the original Tycoon.

Of utmost importance in competition stunt flying is the use of a fuel (and engine) which will give high power and consistently smooth running at between 8,000 and 9,000 r.p.m. "Screaming" revolutions of 11,000 p.m. and more are not only difficult to manipulate, but greedy on fuel and often damaging to lightweight airframes.

Fuels used in the various Tycoons are :-

(a) Gas oil 40 per cent.; Castrol Grand Prix 30 per cent.; ether 30 per cent. To this add ½-1 per cent. Amyl nitrite.

(b) Paraffin 50 per cent.; Esso Racer 20 per cent.; ether 30 per cent. To this add 2-5 per cent. amyl nitrite.

(c) Mercury No. 3.

Propellers

The E.D. III original used 10-in. × 6-in. home carved wood propellers similar to the "Tekni-Flo" variety. Of the new plastic propellers, a 10-in. × 8-in. "Truflex" (green), cut to 9 in. diameter, gives the best performance.

Flying

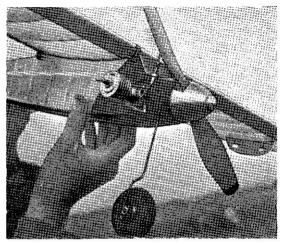
Always set your motor by first trimming to maximum revolutions and then slightly increasing compression and fuel richness shortly before take-off. Allow a couple of reasonable circuits before attempting

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more violent manoeuvres, to make sure the motor is running correctly. Perform all manoeuvres smoothly, trying to keep the flying speed as high up as possible. Do not apply full "up" or "down" for any manoeuvres, but follow the model with your arm. Only exception is that most difficult of all manoeuvres, the truly square loop. If you are unacquainted with inverted flight, the best approach to learning the art of opposite control is to constantly practise consecutive horizontal eights, gradually lengthening and lowering the inverted "down" part of the manoeuvre until you can complete a whole circuit. If in the initial stages you remember that full "down" will bring you back to safety, you will soon be "lapping up the old low level inverted," as a distinguished member of our club would remark. As this model flies at between 56 and 58 m.p.h. with an E.D. III 10 × 6 propeller combination, it is quite possible to recover from inverted flight with a dead motor so long as the wings are not stalled in a high speed condition.

Good luck with your Tycoon—it can casily win a contest for you!



The model illustrated above is one of the early prototypes which were fitted with sing!e leg undercarts.