Fancy a spot of small-scale pylon racing fun? Then try David Boddington's

MINI-TA

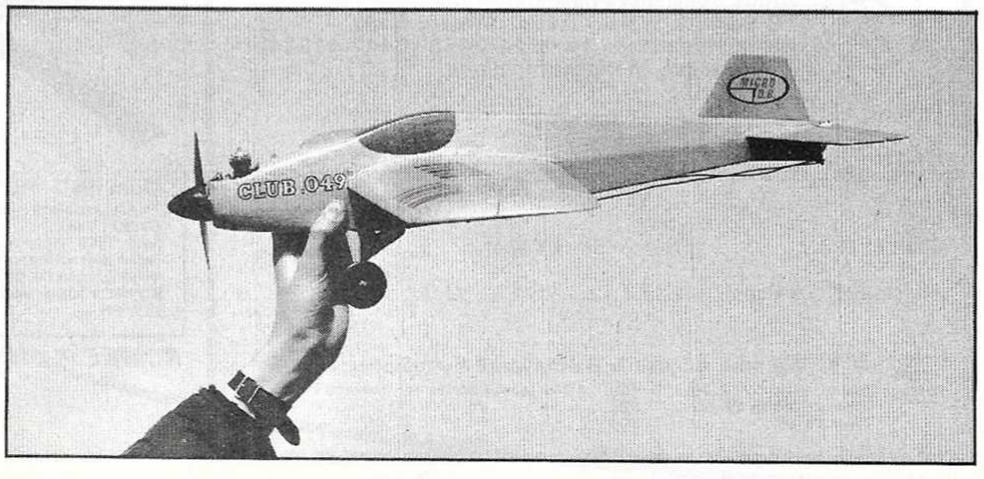
It all started as a joke! Having recently introduced Club 20 pylon racing, which 'caught on' right from the beginning, I was being barracked by the 1/2A pylon enthusiasts. These lads had been struggling along with the .049 powered pylon models and were at the stage of modifying the engines to gain a few hundred extra rpm. The results of these mods were to have unreliability in engine runs and, not infequently, bent con-rods. In an effort to get a 'non-engine tuners' class, that could be afforded by any modeller, I decided to promote the Club 20 class - what has happened to this racing in the intervening years is another story.

With the criticisms that I had 'killed' their 1/2A racing (although most of them took readily to Club 20), I decided to turn up at one of the races with a 1/2A type model. "What the b..... h... is that?". "I thought you didn't like 1/2A racing?" I had to admit that it wasn't a serious racer - just a fun machine, and that is exactly what it is.

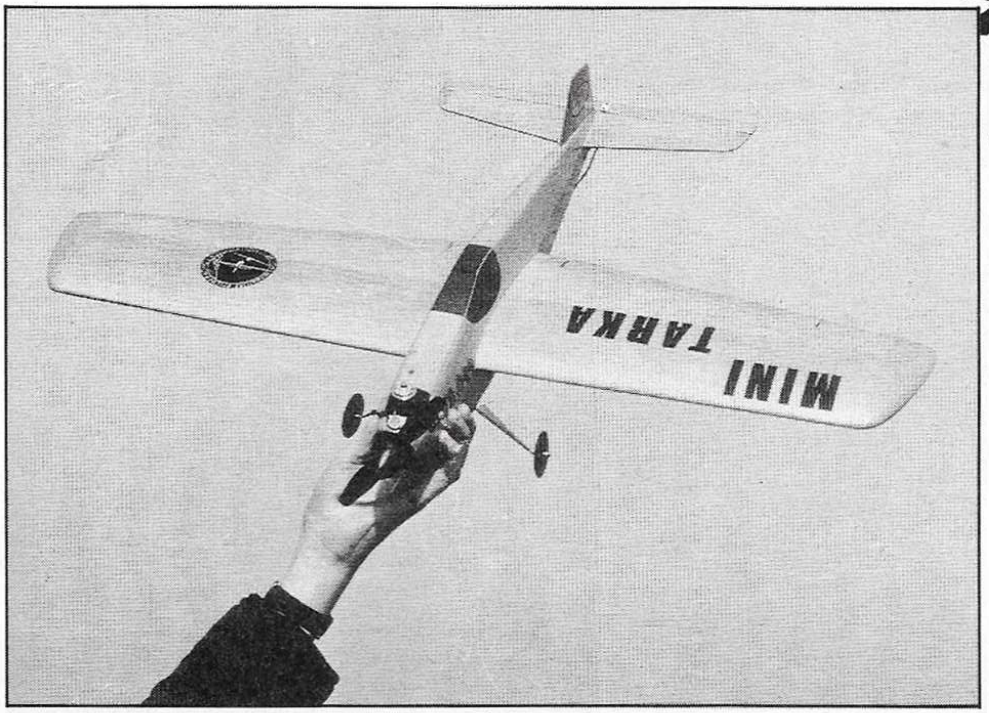
For you-ou?

Any good .049 engine will power the 'Mini Tarka'; if you want to fit a radial mounted Cox engine the bearers should be omitted and the front bulkhead position adjusted to suit the length of the motor. The front cowling will have to be made separately. You could use a P.A.W. 80 diesel, spacing the hardwood engine bearer to the required width.

Designed for two-function radio only, you will need to use miniature equipment, but it is not necessary to go to sub-miniature servos. A 225 mAh or 150mAh nicad should be used. This is a one-piece model and access to the radio equipment is via a bottom fuselage hatch. Draw the position of equipment



YOUR FULL-SIZE PLAN



Turn to the centre of this issue for your full-size **Mini-Tarka** *plans and get started! Model is a convenient "one-piece" design so put that R/C gear and switch behind an easily opened hatch.*

KA

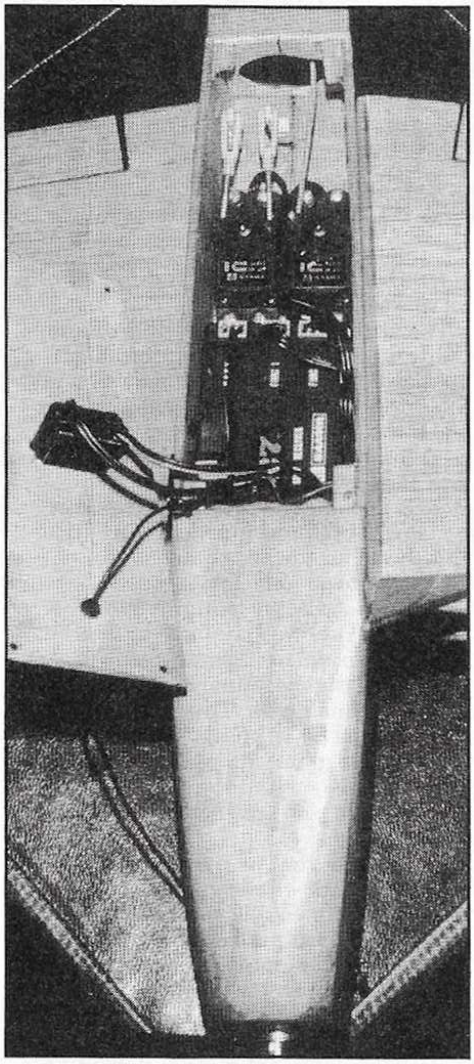
and servo bearers on the plan.

The undercarriage is optional and not, in truth, too functional (no rudder control for take-offs). It just looks nicer with a pair of wheels, particularly when spatted.

Cutting and sticking

Start by building the wings. These are constructed flat on the building board, over the lower 1/32in. sheeting. Add the leading edge, with false leading edge glued in position, mainspar and trailing edge. Glue ribs in position; the root ribs should be spaced to suit servos (but do not go beyond the fuselage width). Sheet the top surface and, when dry, remove from the board. Glue the trailing edge. Note that the control horns are situated at the centre and one side to give clearance for the elevator pushrod. Add the tip sheeting and sand the whole wing. Remove ailerons, chamfer leading edge and prepare for hinges.

Build the lower half of the fuselage with the reinforced fuselage sides and formers. Now fit the predrilled engine bearers then add the front and rear fuselage lower sheeting to make the structure rigid. The wing is glued in position at this stage - *make sure it is square and true.* Glue former C1 to the top of the wing centre and add the top rear sheeting (to F6).



Clean lines, diminutive dimensions and miniature radio gear make **Mini-Tarka** *an exciting 1/2A handful; fly it for pure sport or, better still, get your pals to build one too and try some racing!*

Unless you can find a suitable control-line tank - or are using a rapid tank type engine - you will have to solder your own fuel tank. Have a go, it's not too difficult, just use an iron with plenty of heat and keep everything clean. With the tank fitted you can glue the forward top sheeting to the formers and fuselage sides. Sand the whole of the fuselage (being careful not to sand through the wing sheeting). Cut out the front top cowling to allow the fitting of the engine.

Make up the elevator pushrod and fit in the fuselage. Sand the sheet tailplane and fin and glue to the fuselage. Fair the fin and fuselage junction with scrap block. Covering can be doped tissue or heat shrink film. Finally, fit the radio equipment; because the hatch is easily accessible you can eliminate the switch and plug the battery into the receiver before each flight.

Flying

Don't ask me what the all-up weight of the model was, it was too long ago - and anyway, my son Andrew built it. My job was to fly the model! Note that the balance point is quite well forward; keep it there for the first flights - you can ease it rearwards later until the 'Mini Tarka' becomes a little too twitchy. Control movements should be about 1/4in. up and down for the elevator and 1/8in. each way for ailerons (more up than down is preferable).

Hand launch the model flat and fairly fast, get ready for a little right aileron, to counteract torque, and let her build up speed in a shallow climb. Once 'motoring' the 'Mini Tarka' will loop and roll, fly inverted (for a limited period) and give a really sporty performance. The glide is fairly fast and shallow but she can be slowed up for landing without being vicious - don't make tight turns close to the ground.

Of course, having demonstrated the 'MT' to your club mates, you could always start a new class of pylon racing!