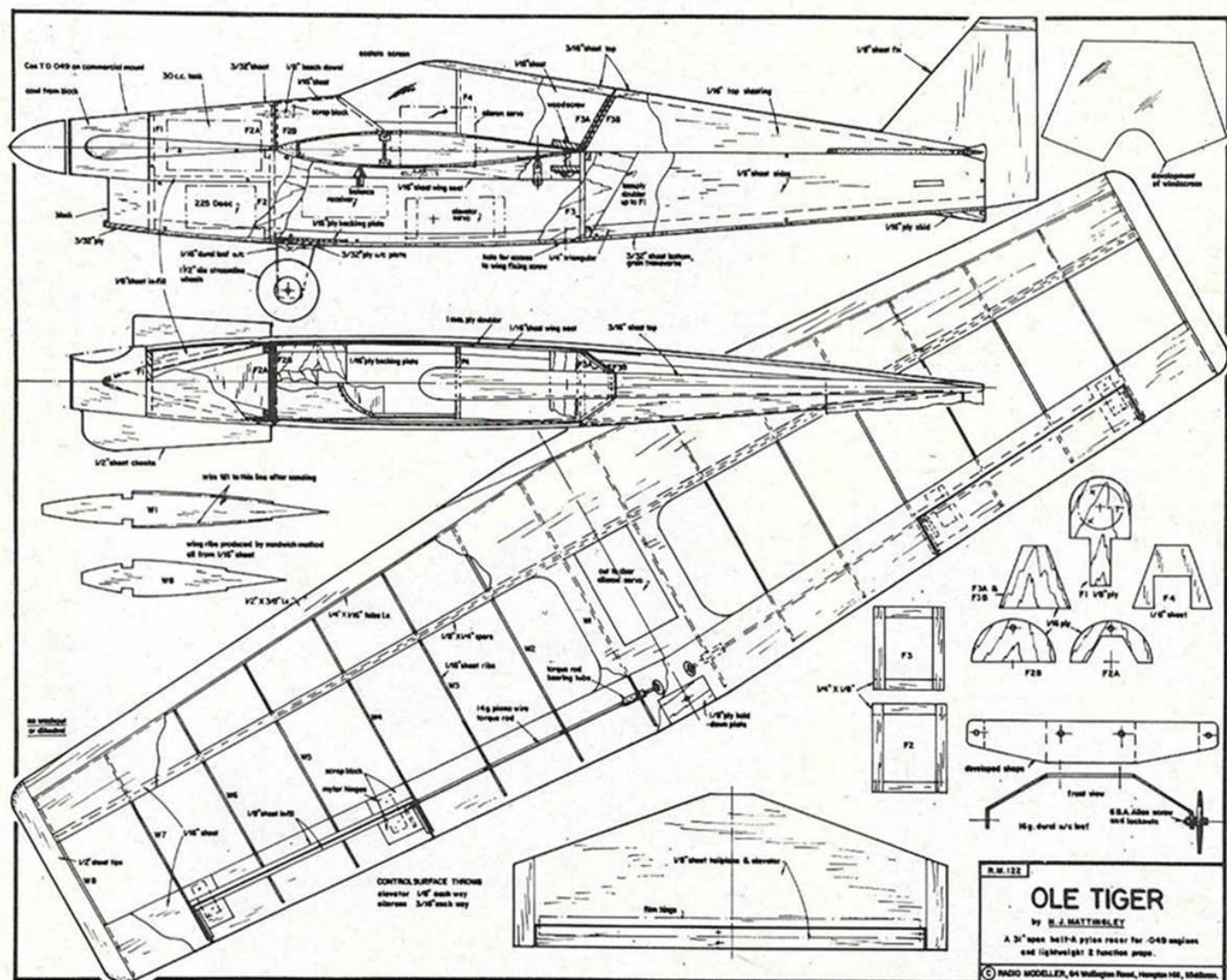
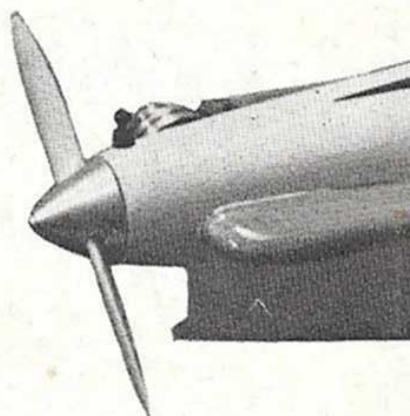


NEVILLE MATTINGLEY'S

# 'OLE TIGER'

*a delightful little  
½ A pylon racer*

*for small field and club events*





**two-function  
T.D. 049  
power  
31" span**

ON SEEING an *Ole Tiger* many years ago, it was love at first sight, for me; ever since then I have wanted to produce my own version of this pretty little Good-year design. Now, with the increasing popularity of  $\frac{1}{2}$ A racers as an incentive, here it is. As many of you will know, the full-size aircraft is really the Miller *Little Gem*—what a superb name for a really good little racer—which was purchased by Bob Downey under a part-exchange agreement with the previous owner. Under this agreement, Bob traded in his *Miss Cosmic Wind* plus \$5,000 for the *Little Gem*, and retained his *Ole Tiger* motif.

I expect that many of those who read this will be very sceptical of the flying qualities of these small  $\frac{1}{2}$ A racers, so I will quote fellow club member Mick Joyce, who built the second prototype  $\frac{1}{2}$ A

*Ole Tiger*. His words were: "It's a fantastic little model!" He had built and flown his, from my drawings, without ever having seen my original fly.

The model has been designed as a "minimum" one—in other words, it only *just* fits all the rules for  $\frac{1}{2}$ A racing. None of the specified measurements is exceeded by more than  $\frac{1}{16}$  in. so please be careful with the sanding block!

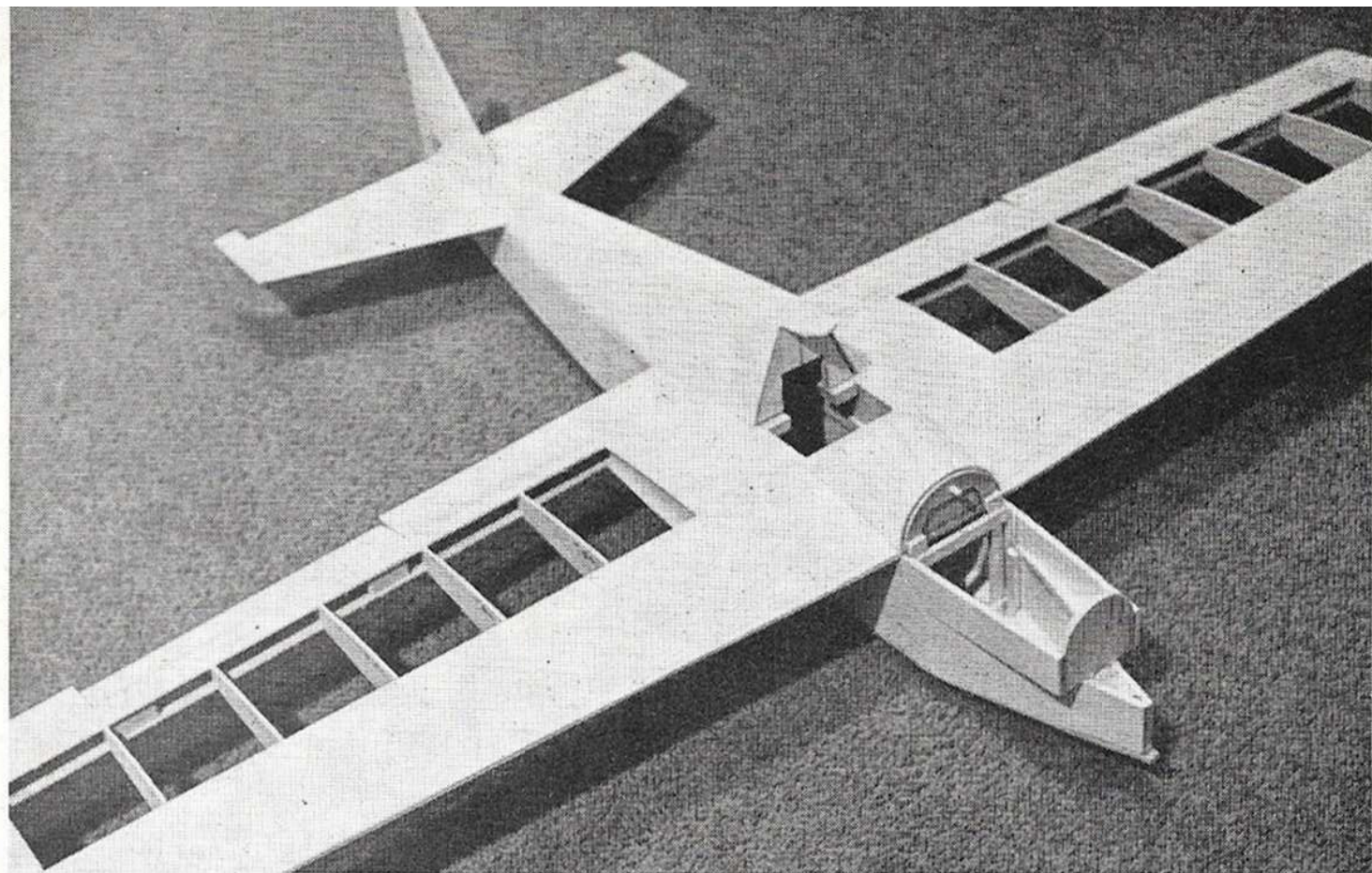
#### Rules for $\frac{1}{2}$ A racing

The model specifications for this  $\frac{1}{2}$ A racing business are really very basic, and I give them here, for those who may have joined the ranks of r/c modellers since they were given by John Ralph

in his "Full Chat" column.

1. The model shall be semi-scale.
2. Wing area (total projected) min. 200sq.in.
3. Minimum wing thickness  $\frac{3}{8}$  in. except for last 2 in. on each tip.
4. Minimum fuselage height  $4\frac{1}{2}$  in.
5. Minimum fuselage width  $2\frac{1}{4}$  in.
6. Minimum all-up weight 20 ounces.
7. The model shall have 2  $\times$   $1\frac{1}{2}$  in. diameter wheels.

As you can see from the foregoing, and a quick check of the plan, the *Ole Tiger* meets all the requirements and, as well as this, it *looks* right, both on the ground and in the air. For those of you who are still reading this, we will

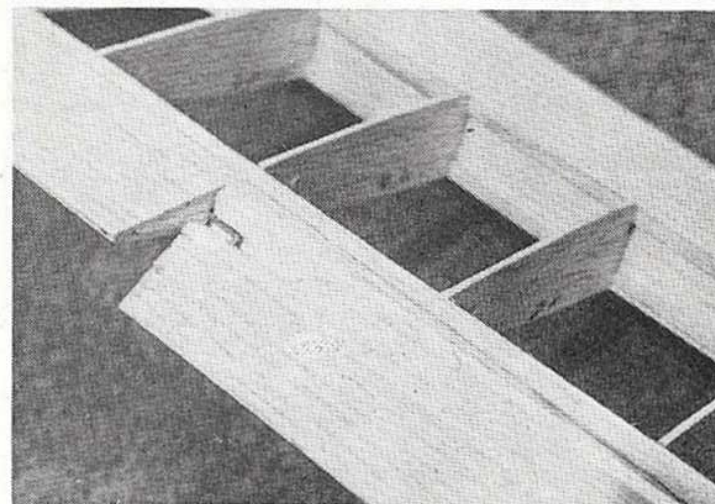


now go quickly through the construction (which may appear to be more like a boat than an aeroplane at times).

### Construction

The wing is built first, flat on the plan. The ribs are produced by the "sandwich" method, using root and tip templates, and balsa rectangle "blanks" sandwiched between them and carved and sanded to shape. The whole structure is built complete, and the ailerons cut out afterwards. The area around the aileron cut-out is strengthened with scrap block, and the torque rod inserted in position. (The ailerons were centre-hinged on the original).

Below: ailerons are centre-hinged—torque-rod may be seen emerging from rib at left. Right: nose, during construction, resembles galleon!



Sheet the top and bottom leading edges and centre panels, as indicated.

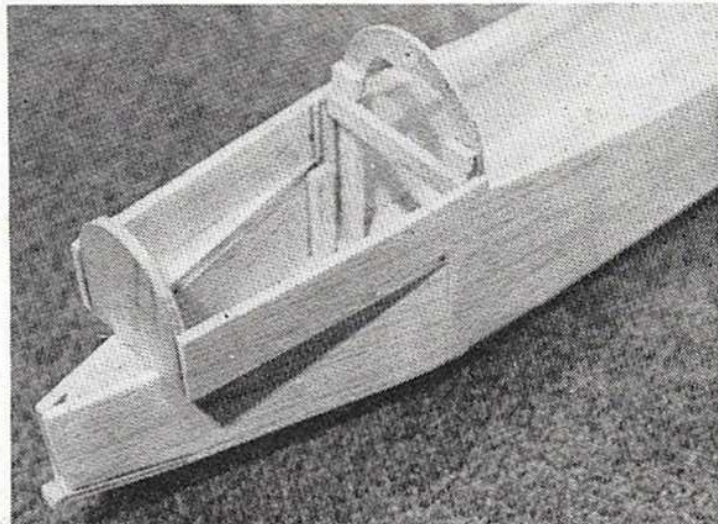
The fuselage is started by building the basic sides and bottom panels up, until something approaching the shape of a galleon is achieved. The wing is then pinned into position and the whole of the top decking is built on. The tailplane and fin are also mounted in position at this stage. The wing, now complete with its cockpit and fore-decking, is removed from the fuselage by cutting through the top spine and sheeting between the two sets of formers, 2a and 2b—and 3a and 3b.

The engine is now bolted into

position and the cowling is built up from scrap balsa. The cheek cowls are next added, and the wing location dowel is fixed in position, former 2a having been drilled to accept it. Finally fit the ply wing hold-down plates in position; the wing is bolted through from below. The screw should be retained by using a short piece of fuel tubing, so that it does not drop out when the wing is removed.

### Finishing

On the original model I used Format finishing resin and filler, on the fuselage, and covered the wings and tailplane with iron-on film. The fuselage was painted with enamel and the whole model



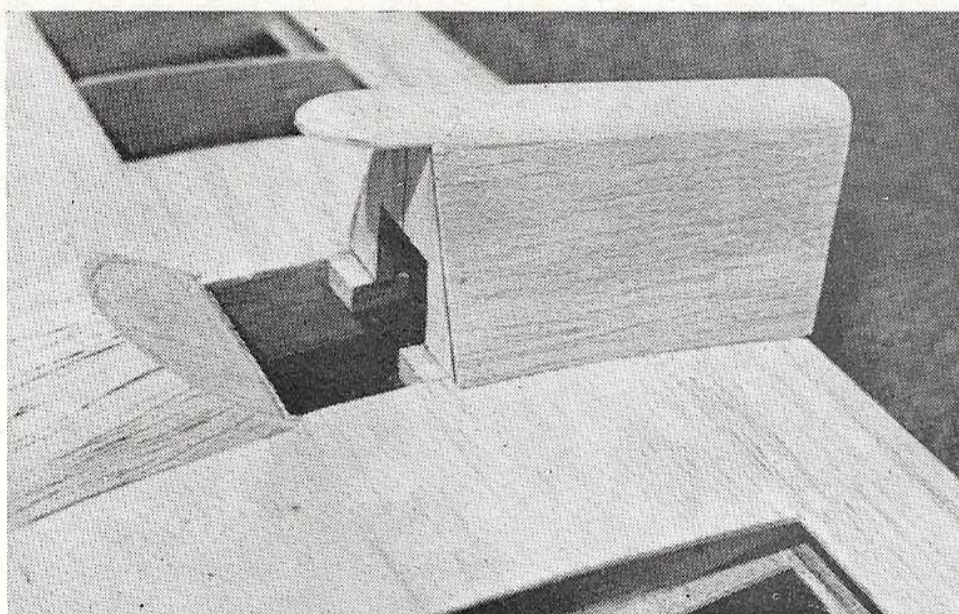
was proofed with TufKote fuel-proofer. The finished weight of the airframe and engine was 100z. It is important to watch the weight of the rear end of the fuselage, as weight build-up now will be detrimental to performance.

## Installation

The model is large enough, despite its appearance, to be able to accommodate most digital equipment. The original used OS SP.260 servos, and the second one Remcon servos. The main point to remember about the installation is to get it as far forward as possible. The control movements on the original model are: *elevator*  $\frac{1}{4}$  in. total movement at trailing edge. *Ailerons*:  $\frac{3}{8}$  in. total movement at trailing edge.

## Flying

If you are starting with a completely new motor, it is advisable to run a couple of tanks of fuel through it before attempting to fly the model. Both models so far produced have flown straight from the board, without any adjustments. The two really



Part of the top decking, fore and aft of the cockpit, is built onto the wing, as is seen from this close-up. Below are shown the motor installations on the two prototypes so far built. Both use metal radial/beam mounts—TD.049's.

important points to remember are: 1. The c.g. must not be any farther back than shown on the plan, but may be farther forward without any detrimental effects. 2. Make sure the motor is really singing, and that you give the model a good hard throw when you launch it.

The *Ole Tiger* really grooves when flying fast, and has proved in competition that it is as fast as any of the opposition. These little racers are really good clubman

machines—two or three up at the same time provides really exciting fun flying. My club has now run its first meeting especially for these little racers (see last month's "Full Chat") which proved they are not toys but can provide wonderful fun racing—something which is difficult to find in today's rather specialised and cut-throat model contests. Should you actually get as far as building an *Ole Tiger* I am sure you will find it a really rewarding model to fly.

