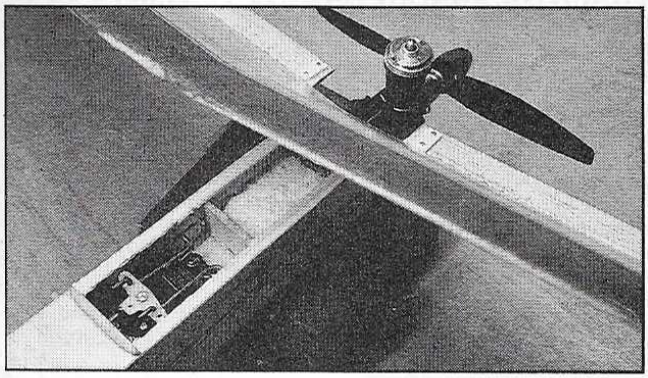

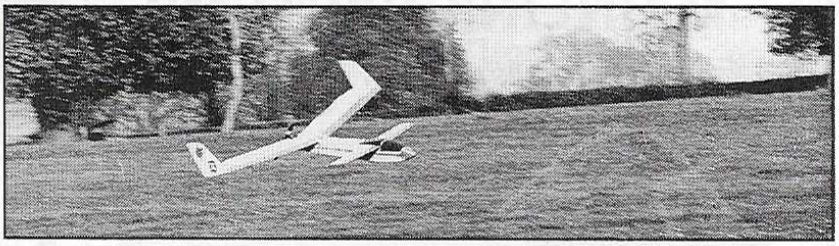

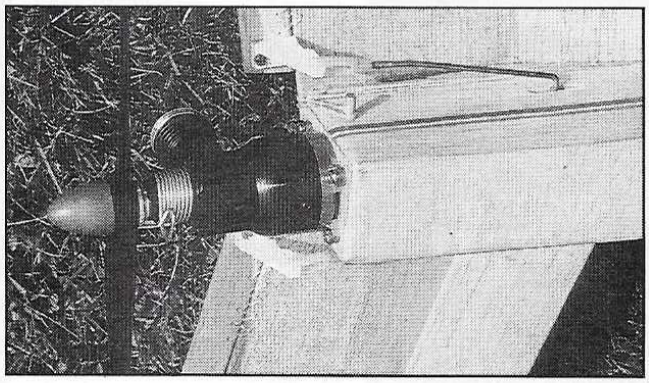

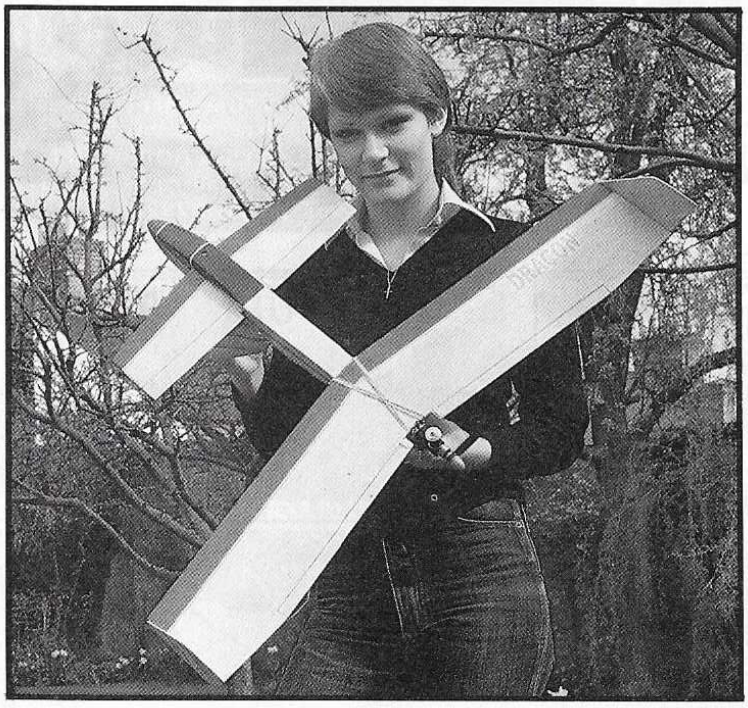

Dra

Canards fascinated me and somewhat terrified me at the same time! I knew that models could be made to fly the 'Wright' way round but could you really get away with a c. of g. position in front of the wing? In the end, of course, you find yourself doodling out a design just to see whether the theory is backed up by practice.

My first effort was of modest dimensions, designed for a Cox .049 reed valve engine (they will run in either direction) and utilising all balsa sheet construction with a Jedelsky type wing. Fortunately, my son Andrew (he was keen on modelling then - he's discovered women since!) took a fancy to the doodle and put it into three-dimensional form. The wing was originally designed to have only chordwise ribs but, as the wing seemed over-flexible, cross ribs were also added. Construction is certainly simple - no point in going mad for a design that was definitely in the realms of fantasy.

First flights were approached, particularly in view of the sceptical expressions of fellow club members, with some trepidation. As it happened, it was almost an anti-climax, the 'Dracon' went away as if it didn't realise that it was a back-to-front baby! Control response movements were smooth and positive and the little canard had a fair turn of speed. Indeed, the only problem encountered was in relation to the wing construction. Adding the cross ribs certainly stiffened the structure but it also seemed to have the effect of allowing the stresses to be routed to the wing centre; as we had not fitted dihedral braces or reinforced the centre joint (it was literally a butt joint), the inevitable happened. The clean break was quickly repaired and some nylon applied over the centre joint and the 'Dracon' was on its way again. Do, however, remember to reinforce the centre section; I would suggest some lightweight glass cloth and resin.

If you have built any sheet balsa models then this one should not present

YOUR FULL-SIZE PLAN

David Boddington, Editor of our sister title Radio Control Models & Electronics, makes a guest appearance in RM with this simple to build, easy to fly, all-sheet back-to-front-baby!

Dracon

any difficulties. It is about as basic as you can get with an R/C model despite its unusual configuration.

The prototype used Futaba mini servos and a 250 m.a.h. nicad pack. With a model of this size you will need smaller than average servos since it is important to keep the weight to a reasonable minimum. Sketch on the position of the radio equipment before you start building and remember that down elevator on the foreplane gives up and vice versa. The ailerons work in the normal sense, of course.

Finishing was limited to sanding sealer and clear dope for the main areas with coloured tissue applied in Andrew's immaculate manner (he didn't get it from me!) for decoration. The whole airframe was fuel-proofed although, theoretically, only the rear end is likely to be affected. A Cox .049 Black Widow was used on the prototype as this has a larger tank than some of the Cox engines. You can fit an auxiliary metal tank to the side of the fuselage - it works fine.

Keep to the balance point shown and you shouldn't have any trim problems; she really is a sweetie to fly. I had intended to build a larger version for camera carrying (in the unused space adjacent to the c. of g.) and one day I might just get round to doing that!

Andrew Boddington was so taken with dad's doddlings that he took it upon himself to put theory into practice and built the prototype **Dracon** *from David's drawings. Construction couldn't really be more basic - you'll be finished and flying this one in no time at all! Any .049 capacity engine will suit (the prototype had a reed valve Cox running clockwise with prop reversed and you'll need a pusher prop for a more conventional power unit) and smaller than average servos are required. Integral fuel tank on Cox power unit in the prototype gave short but adequate flights; for anything longer, a tinplate tank can simply be installed between formers F7 and F8 as suggested on the plan (see centre pages). Keep the construction and finish as light as possible and you'll achieve a fast flying, smooth handling tail-first conversation-stopper!*