HANRIOT

RENE HANRIOT AND EMIL Dupont were responsible for this lovely little rotary powered fighter which first appeared in the summer of 1916. Eventually it found its way into the Belgian and Italian Air Forces and a small number went to America where they were modified and served with the US Navy. These latter were designated HD-2 but as far as I can see the only visible difference to the HD1 was an enlarged rudder and fin. Of the many colour schemes the US Navy seemed the simplest, so I covered the model in silver Polytex and only had to paint wing insignia rudder stripes and fuselage numbers.

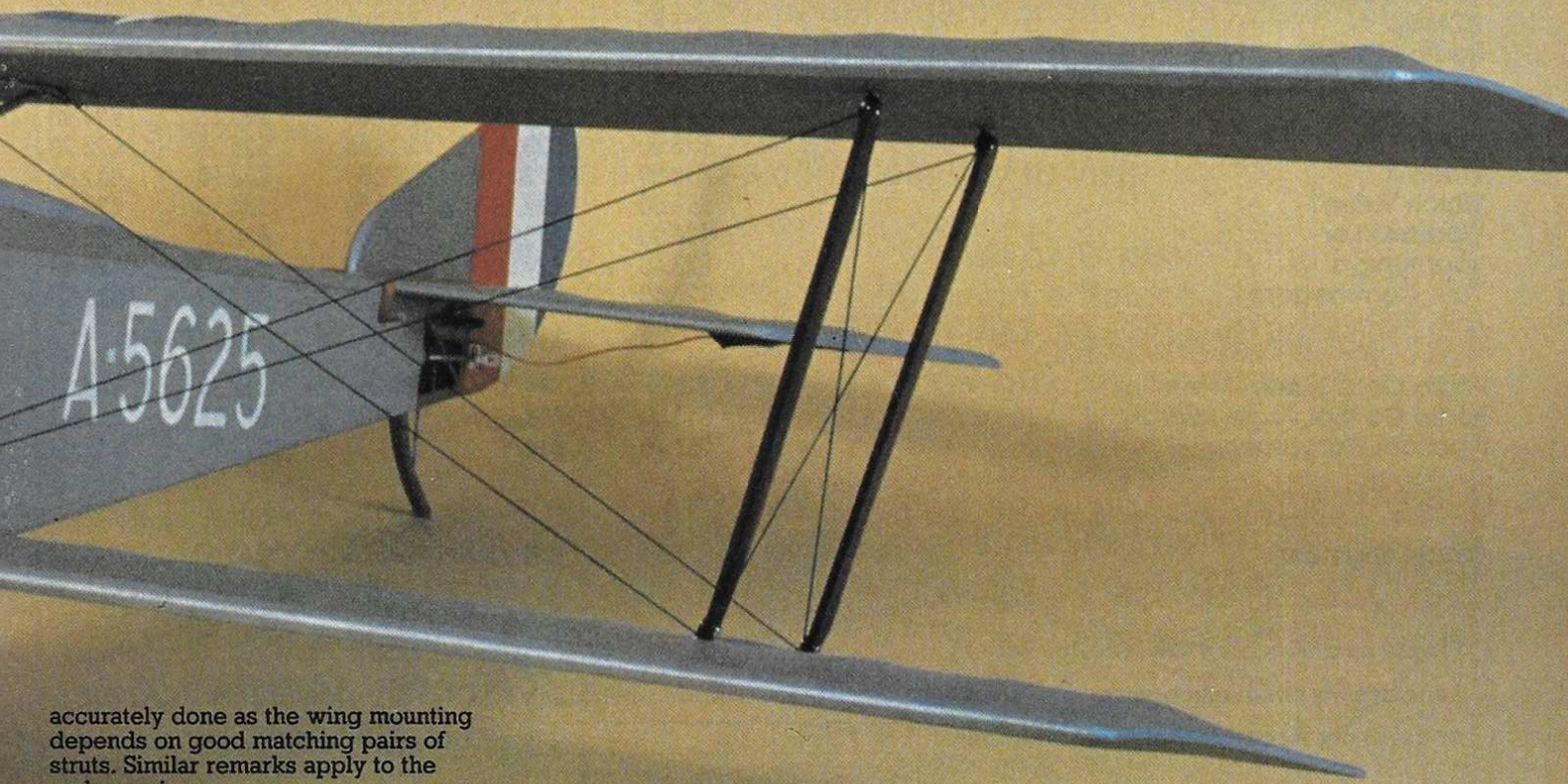
Over the years I have had success in scale model flying by following my motto of, "built light and trim for free flight." Of course it follows that to achieve the 'light' part, one uses the minimum of radio gear, a modest engine and as little paint as possible. My Hanriot, to 2in. scale, weighs just 3lb 12oz ready for take-off and this gives a realistic flying speed. The engine is an Irvine 25 Blackhead with 'dustbin' type silencer which fits into the Flair cowling well. The model is of simple construction. The drawing and the various notes on it should enable the modeller to produce an interesting and good looking 'sports scale' model. However, a few additional notes may be helpful.

Cut out the pair of 1/4in. sheet sides which form the front fuselage and also the associated formers. Drill all the necessary holes for engine mount, fuel lines and so on. Don't forget to cut the grooves into which the centre section wires fit. Put these parts together and glue up checking all is square. Make up a pair of rear fuselage frames and carefully mate them to the front fuselage 'box.'

Now you have something to look at and if it is all square you will be encouraged to go on to the next stage. It is best now to do all the wire cutting and bending. Be sure to get it

HD1

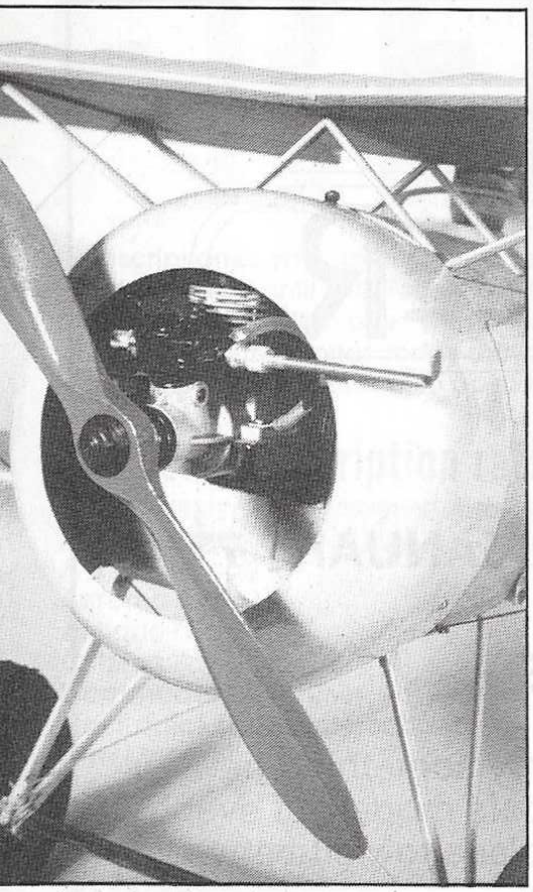
Famous French WWI biplane design developed into a fine flying model by Bob Wright. 56in. wingspan, one sixth scale model for 25 to 40 engines and two to four function radio

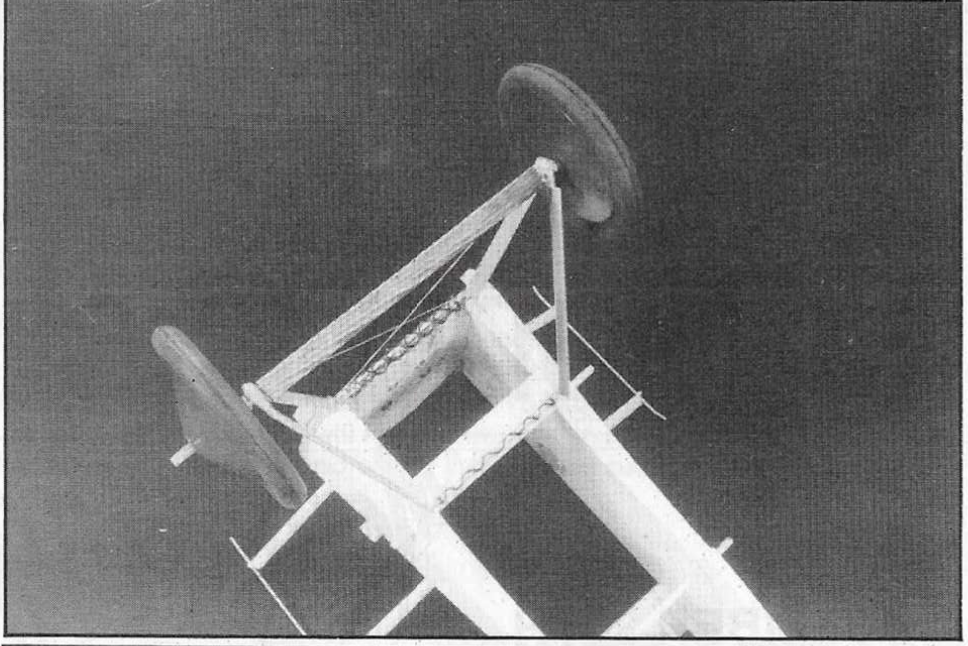


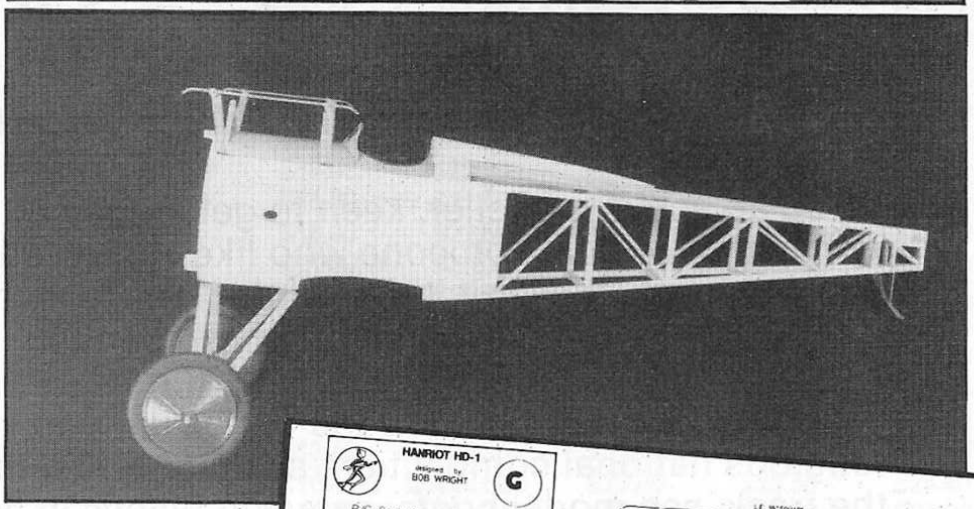
accurately done as the wing mounting depends on good matching pairs of struts. Similar remarks apply to the undercarriage.

The wings and tail unit are very conventional in construction except perhaps for the wingtips. The method shown on the drawing is my favourite which has proved satisfactory over a good many years and the end result gives an illusion of a heavily undercambered wing section so typical of the period. As a means of attaching the interplane struts to the wings I use Flair rigging plates cut to length and then glued to a reinforced wing rib. The plates are quite flexible and bend naturally to the angles formed by the struts. Attach the struts to the plates with small self tapping screws. Two tailplanes are shown on the drawing. My 'guided free flight version' is the larger of the two. I expect most people will go for the one with elevators and no doubt others will install 'full house.' The only thing to remember is that this

Bob has an affinity with WWI biplanes (he's not the only one) and prefers to build them light and fly them with rudder and engine control only. This may seem strange to newcomers to our hobby, where foam and four function radio are the norm, but it results in a delightful flying machine for calm weather. Should you wish, you can add elevator – and even aileron control.







Keep the weight down and a "25" engine will suffice, an Irvine 25 was used on the prototype model. Cooling slots are positioned at the top rear of the cowl to give a good airflow over the cylinder head.

HANRIOT HD1

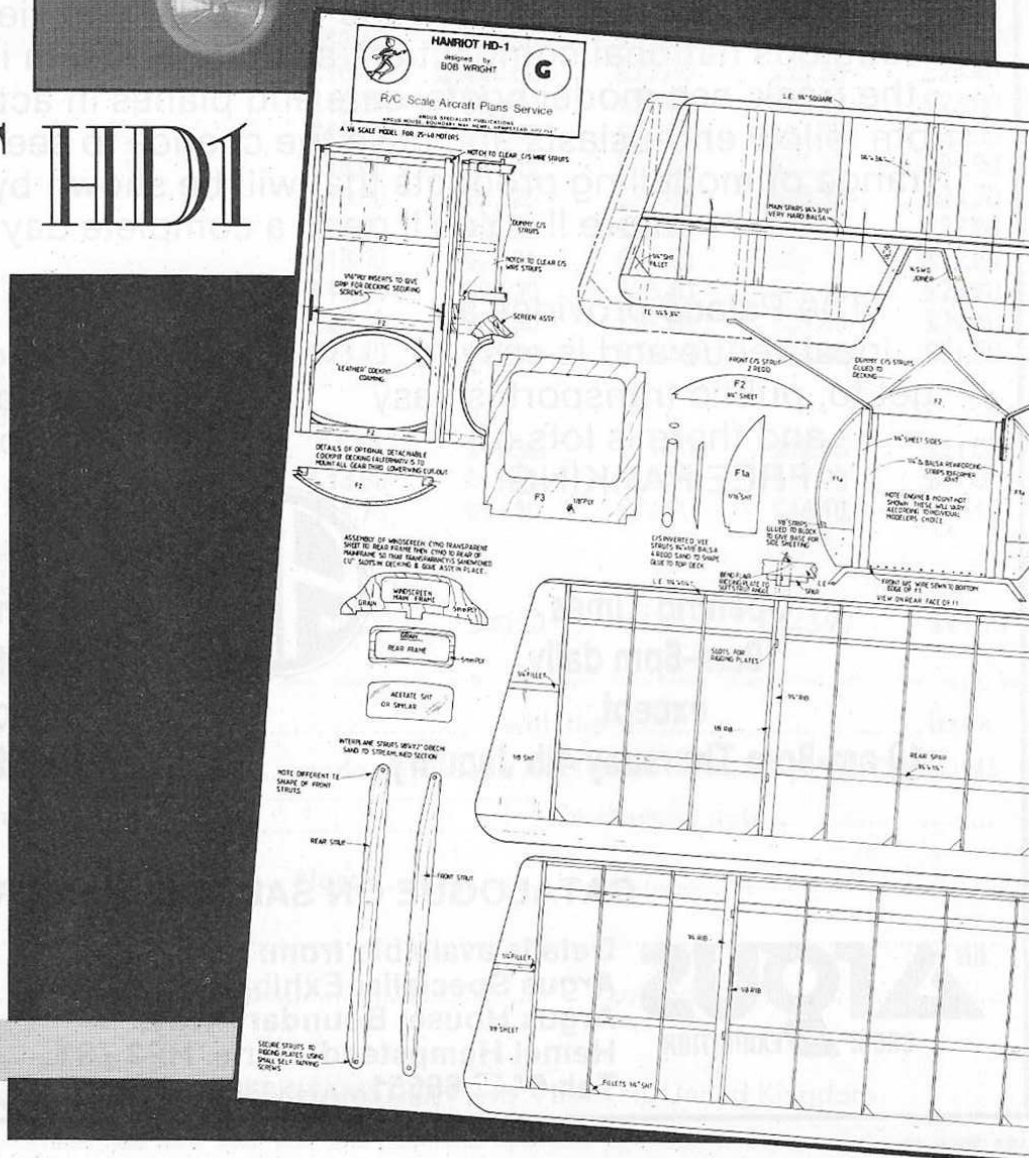
model is designed for gentle flying in light winds so the addition of extra controls must be compensated by beefing-up the main structure.

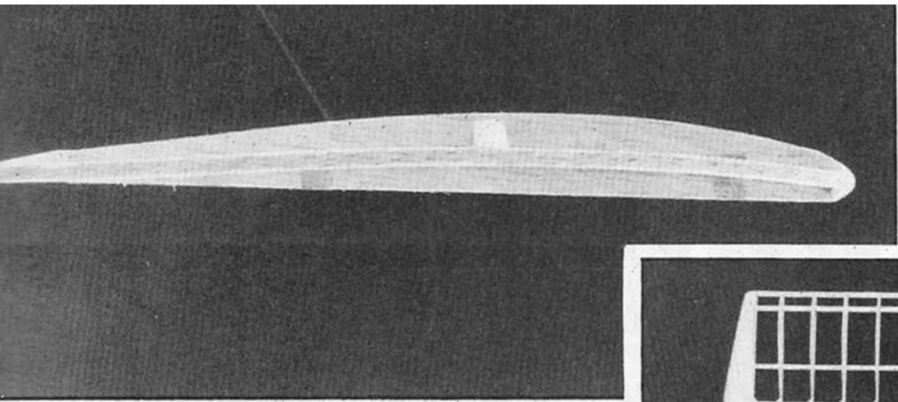
As for details it is worth putting a bit of effort into the windscreen, struts and axle. Also remember the air intakes were oval shaped, not circular. Shirring elastic can be used for the bracing wires.

When it comes to the flying you must first make sure the CG is as shown. Then proceed slowly and step by step through engine runs, taxiing trials to see that the model runs straight, then a longish ground hop to assess the state of trim. If all is well it's up and away! Good luck with your Hanriot.

More about the full size aeroplane can be gleaned from:-

Windsock Datafiles No. 12.
Aviation News, Vol. 18, No. 6, 4th-17th August 1989.
Aeromodeller November 1958 and May 1963.
Fighters 1914-1918 by Kenneth Munson.
Air International, November 1981.





Wings are fixed with rubber bands on the lightweight design, although you could modify for hidden fixings. Commercial cowl and wheels are employed – and don't forget a pilot. Note the scale style open framework at the rear of the fuselage and the simple structure of all components.