

R.C.M.&E. Kit Review No. 51

VERON FOKKER DVIII

By Jack Barnard

HERE we have what I consider to be the perfect partnership, both for the beginner and for general sport flying, plus, of course, those who may wish to enter competition in Class 2 scale.

As soon as I saw this model advertised I picked up the phone to ask your editor for the privilege of building and testing it. Shortly after building had started I saw the first announcement of the Horizon H.S.-2L R/C system and right away booked my set, but very much doubt if even then I was first in line for this lightweight two channel set of proportional gear with full trim, at an almost unbelievably low price. I was perhaps lucky in that I did not have to see a set before making up my mind, as I had called in at the Horizon works some weeks before when trying to make up my mind on which new type of gear to use next season, and after seeing their gear in its various stages of construction, trying a set for myself, and enjoying a lengthy non-sales-type chat which included a lot of useful tips from obvious experts, my mind was very quickly made up, it was to be Horizon for me. So I knew the quality and performance to expect in the H.S.2L, and the set has indeed proved by expectations to be correct.

The Veron Fokker DVIII is a Class 2, near to scale model, designed for rudder only, or lightweight two channel proportional gear. The model has a wing span of 46 in., overall length 31 in. Power is from 1.5 c.c. to 2.5 c.c.

Those among our readers who have already seen this kit will note that I have used the area ahead of the cockpit for an access hatch, though the model is in fact planned to incorporate a hatch in the floor between the undercarriage struts. My first reason for mak-

ing this change is that I do not like a hatch in a position where all the goo from the inverted engine is bound to collect, secondly, I intended to fit a larger tank than the 15 c.c. unit which came in the kit, and, in fact, fitted a 3 oz. clunk tank, which was obviously more suitable for the O.S. 15 engine which I intended to use. With this tank fitted in its correct position in relation to the engine spray bar there remained insufficient room to get my hand inside for the fitting of the radio gear. The top hatch is quite easy to construct, and, as can be seen in the photographs, makes the installation of gear and batteries much simpler.

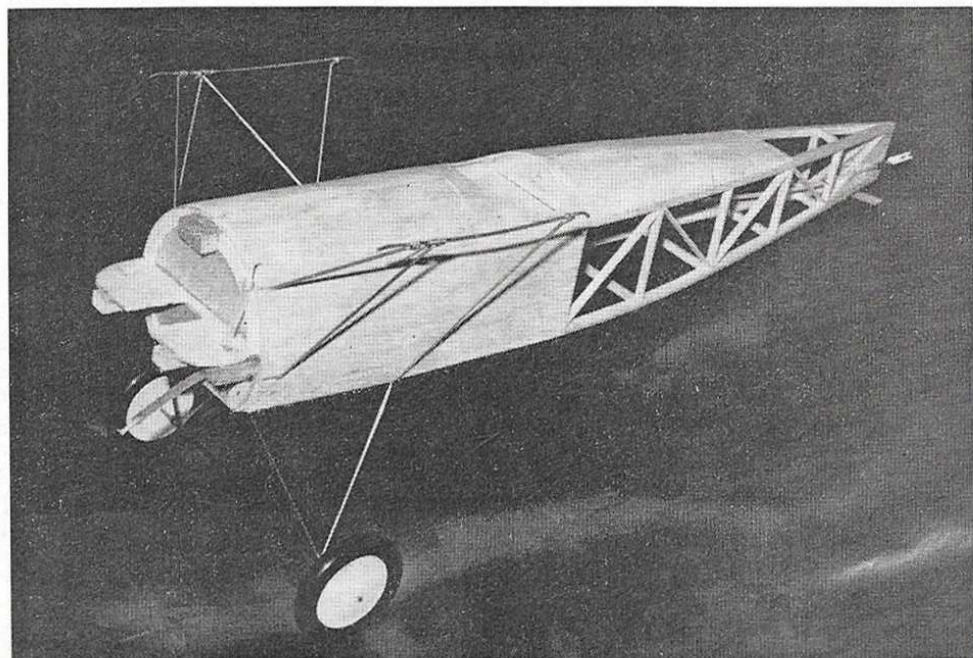
I cannot praise too highly the accurate cutting of all parts of this kit. The wood is all of good quality, and no replacements were required. The die cutting could not be faulted, all parts came away cleanly with just a slight push.

The kit is very complete, with plastic cowl, ready shaped cabane and undercarriage struts, vintage wheels, ready

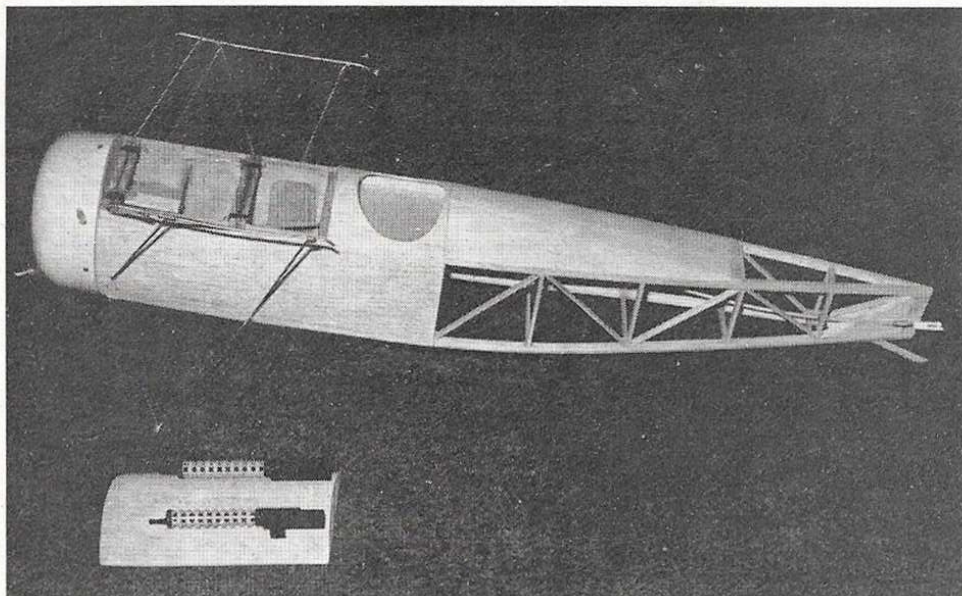
shaped parts for rudder, undercarriage fairing, crossbeams and formers and all wing ribs are die cut. The model was constructed over the highly detailed plan using the step by step instruction leaflet provided. Building is quite fast, and remarkably easy, a beginner would find little difficulty in building this for a first radio control model, providing accuracy of building is checked carefully throughout. The high degree of inherent stability present in the real DVIII has been increased in this model with the inclusion of wing dihedral plus a slight lengthening of the fuselage and enlargement of the tail area beyond true scale, all of which should produce a really 'forgiving' model for the learners.

I built the wing first. This is put together in three sections, which are then joined with ply dihedral formers. A diagrammatic building instruction sheet is also included in the kit and this shows, with good clear diagrams, the correct building sequence step by step.

Placing the wing to one side, carefully positioned to avoid warping whilst



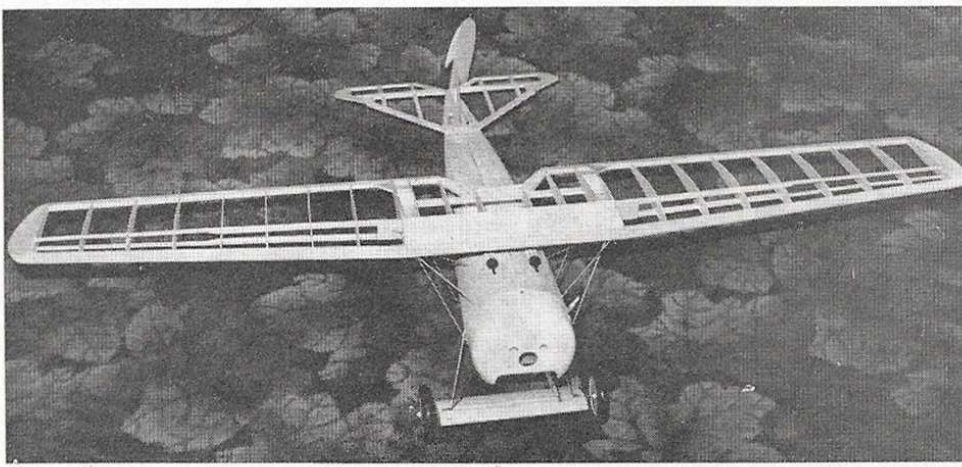
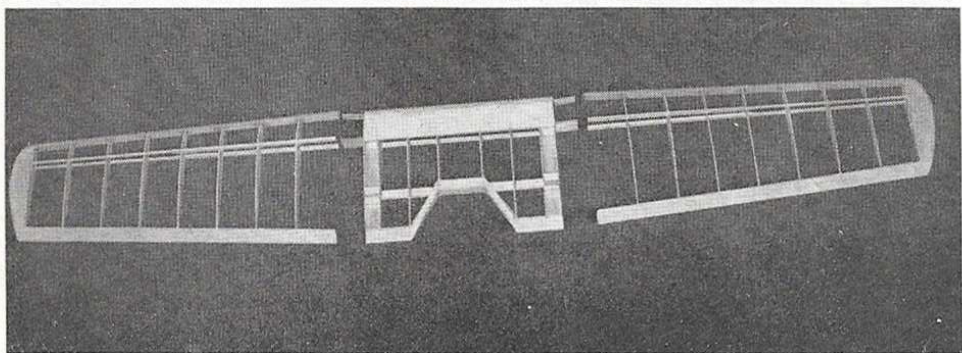
Right: basic fuselage structure here complete, including wing cabane struts and undercarriage members, which are ready formed in the kit. Motor mount is also installed, together with cowl retainer blocks.



Top left: another view of the basic, uncovered fuselage, here with engine cowl in place. Jack Barnard built in the hatch to allow accessibility to R/C gear and fuel tank. Note dummy guns, made from hair curlers.

Second left: the three basic wing panels prior to joining.

Third left and bottom: two views of the completed, uncovered airframe. Structure is fairly simple, yet rugged.



all glues harden, we proceed to the fuselage. Two basic sides are built up on the plan, and carefully checked for accurate matching before joining with the formers and cross piece strut supports. When the glue on these is quite dry the rear ends of the two sides are brought together and fixed. External formers are now added to the forward sides of the fuselage and these are covered with 1/16 in. balsa sheeting to produce the 'from round to square' effect of the fuselage. Formers are also fitted to the top of the fuselage, and again, these are sheet covered. The cockpit aperture is cut out when the glue is dry.

If you wish to build with the hatch on top, do not fit the two formers ahead of the cockpit, as these will be built into the hatch. I will not proceed further with this description of the building sequence, it is so completely shown with word and diagram on the plan and instruction leaflets that any comment from me would merely be repetitive. I will therefore merely pick out those points in the building which may be of some assistance to intending builders, going from front to rear.

The engine is fixed to a ply plate. A cut-out in this shows the average amount of side thrust required. I used 5 deg. for the O.S. 15. The engine fixing plate is mounted in turn to two hardwood bearers which pass through the main bulkhead to approximately 1½ in. inside the main fuselage. No down-thrust is built in, as this will again vary with engine power, I used 3 deg., using a couple of Micro-Mold nylon wedges. Three small hardwood formers are glued in position around the main bulkhead to support the plastic cowling, and this is firmly held by small wood screws. I fixed my fuel tank well forward in the fuselage, on the right hand side, bearing on the floor and fuselage side and held in position with rubber bands to two small hooks, one on the floor and one on the fuselage side, well epoxied in position.

Three silicone rubber tubes from the tank pass through holes drilled in the main bulkhead, sealed with silicone bath sealant. The filler tube then passes up through the engine plate and emerges at the top right hand side of the cowling. On to the Cabane struts, these are ready cut and shaped, and their fitting is so easy I will pass them by. The same applies to the undercarriage struts and

Right: detail of the fuselage front end, with radio hatch removed to show installation of the Horizon HS-2L 'Big L' system, for which there is plenty of room.

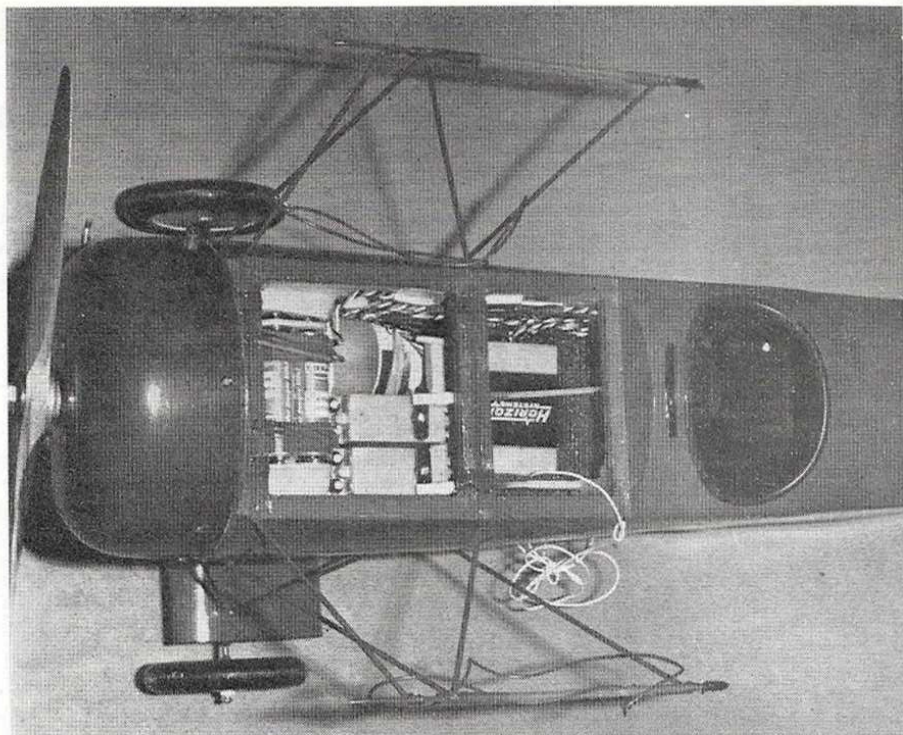
wheels, but note that the undercarriage fairing has a surface area of over 20 sq. in. and has a high lift section, so make certain when fitting that the chord of the fairing is parallel with the wing chord. Parts for making up the dummy guns are included in the kit, detail has to be painted on these and quite frankly I did not relish the job of detailing the cooling barrels, so that any resemblance of mine to a pair of ladies plastic hair curlers is purely intentional, and I'll bet that only a well-married man who has had to retrieve these highly dangerous objects from every corner of the bedroom, would recognise their possible application here. I enlarged on this in case someone thought they were mine!

A length of split black rubber fuel tubing makes a nice cockpit cowling, a template for the tiny windscreen is on the plan, and transparent material for making it is provided. I fitted a dummy cockpit floor, as I intended mounting the radio switch there.

All stabilisers and elevators are built up on the plan. The tail skid is optional, but I would suggest that it should be fitted in order to avoid damage to the base of the rudder during landings. The rudder is made up of three pieces of balsa, two of these are ready cut to shape. I used nylon hinges for the rudder, and nylon strip for the elevator, but one could use tape, or sew them on.

The completed airframe is now tissue covered, doped, then finished to whichever colour scheme you prefer. I used two coats of clear shrinking dope on the fuselage and tail surfaces, at full strength, and three coats on the wing, the third coat on the wing being 50/50 dope/thinners. For colours, I copied the scheme shown on the box, i.e. red fuselage, horizontal stab, and elevator, struts and undercarriage fairing plus white rudder with rudder line on the fin in white and front of fin in red. The wings, cowling, and area ahead of the cockpit at the top of the fuselage are olive green. Take a good look at the black cross transfers before applying them. On the paper backing they at first appear identical, but in fact the ones which go on the rudder have no white edging. The transfers are applied after fuelproofing.

Short nosed models, such as this one, normally produce balance problems, and one should endeavour to keep the tail end as light as possible. Positioning of radio gear should be carefully planned in advance and placed as far forward as possible. I found that my model, when completed less only the radio gear, balanced exactly level at the balance position shown on the plan. Veron advise that the model should balance slightly nose down, so I fitted the gear with the battery pack and two servos in front of the C. of G. and the receiver just to the rear, the model now balances as advised. The rear ends of the engine plate bearers proved to be a useful position on which to mount a ply battery tray. A word on the installation. I have taken several photos of my installation in the DVIII, and have removed padding around the battery pack and from the top of the receiver for clarity. I always wrap the battery box well with P.V.C. tape to make sure the batteries remain in place. I have positioned the pack to make it easy to get at, and it is held tightly against the bulkhead with rubber bands. If a DEAC



were used there is plenty of room in front of the servos at the side of the tank for a 500 mA AH pack. The receiver is shown in the bottom half of its foam box. The aerial is lead out through a rubber grommet at the side of one of the dummy guns and goes to the tip of the horizontal stabiliser, while the servos are mounted on hardwood bearers supplied with the model kit.

An idea you may wish to copy for a tidy installation is one which I always use to support the cable runs. I use Evoxstik 'Twinstik' double sided adhesive film along the sides of the fuselage where the harness wires run (sticks well, even on dusty balsa wood) and then use short pieces of ordinary P.V.C. tape to hold the wires and fly leads in place against this adhesive film. The P.V.C. holds firm on the film, but will pull away in the event of a crash. I mount

Short nosed models, such as this one, normally produce balance problems, and one should endeavour to keep the tail end as light as possible. Positioning of radio gear should be carefully planned in advance and placed as far



Kit Review Fokker DVIII

the plugs, after wrapping with P.V.C. tape, on short lengths of double sided servo tape.

Flying the DVIII

The flying conditions were ideal for the model's first flight, with light winds. Carburation trouble persisted and the model was eventually launched without the right needle setting. The low power resulted in a realistic speed and showed the model's nice low speed capability.

The DVIII climbed nicely away after a hand launch. I do not know what the

real DVIII's engine sounded like, but the O.S. 15 certainly sounded old fashioned, stuttering away with odd bursts of full power. After climbing to height and flying around for a couple of minutes, the model was brought gently down for a couple of low passes. After about five minutes the engine cut. The glide was good, quite slow and with a slow rate of descent. Controls were fully effective at low speeds and the model was brought to a nice three point landing at its point of departure, and before anyone gets the idea that I am boasting I will add that a clubmate, Tom Barnard, no relation, flew the model on its test flight, and my son Richard took any photos that come out. My contribution? I flicked the prop, I hand launched the model, I got oil up my sleeve!

The 3 deg. of down thrust on the engine appeared to be about right, but the fluctuating power resulting from the uneven needle setting made it difficult to judge the accuracy of the right thrust. I would say, though, that the 5 deg. used would be about right as a starter. Neither of these were critical settings, of course, with the trimmable proportional gear used.

I would advise, having seen the model's performance with the low power my engine produced, that a 1.5 c.c. running at full power would suit the model nicely. To sum up, the model is a nice stable flyer, with good handling characteristics, the gear, well, what can one say apart from the fact that it worked as perfectly as expected. One can say so much more when gear does not work, or stops working at awkward moments!