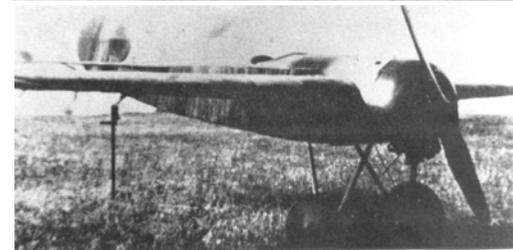


Fokker V.17 Omega Models¹ resin kit

Monoplane fighter prototype

Scale 1:72

The V.17 was a monoplane mid-winged fighter prototype constructed at the same time as the prototype of the successful Fokker D.VII. It was Fokker's return to the monoplanes, this time with a cantilever, plywood covered wing without bracing. There exist little documentation on the aircraft and I could find only four photographs in my references. Two of them show V.17 from the back and both are included in the kit. On one of the pictures (ref. 1) the airplane has a streamlined axel, on the other just a simple axel (ref. 2). A third one (ref. 2) shows it next to an AEG G.V bomber. On this last picture the V.17 has wheels with spokes, a simple axel, the streaked camouflage pattern and carries straight German crosses on the wings and fuselage. I have taken this version as a basis for the model. The fourth picture in ref. 4 is probably taken at the same time as that in ref. 1; it is of poor quality.



The kit contains resin parts, some metal wire, an instruction sheet and a decal set with the camouflage patterns. The resin parts are well detailed and need few rework. Especially the tail planes are very thin (0.7 mm, quite an achievement for a resin model) and control horn locations and control cable holes are very nicely detailed. The ailerons are well detailed with a deep separation between wing and aileron. The undercarriage struts are too thick compare to those shown on the photographs. The kit contains a streamlined axel analogue to that of the Dr.I, but this is only shown on one of the pictures, which happens to be of very poor quality. The wheels for the alternative undercarriage, the seat belts and control horns were taken from a HR Model detailing set (*String Wheels + details W.W. I*). The decals are leftover from a Roden kit. The instructions are ample; they show two photographs of the aircraft and one of the parts contained in the kit, exploded views and an assembly drawing of the kit, on which the parts are indicated, summary instructions for decals and painting, and a three view scale drawing of the V.17. As shown in the table below, dimensions of the model are near perfect for the dimensions given by Grosz.

| | <i>Grosz (ref. 2)</i> | <i>Weyl (ref. 1)</i> | 1:72 | model |
|-----------------|---|----------------------|----------------|----------------------|
| <i>Span</i> | 8.38 | 9.50 m | 116.3-131.9 mm | 116.1 mm |
| <i>Length</i> | 5.80 | -- | 80.6 mm | 80.0 mm |
| <i>Height</i> | 2.80 | -- | 38.8 mm | 38.8 ² mm |
| <i>Engine</i> | Oberursel Ur II, 110 hp | | | |
| <i>Crew</i> | 1 | | | |
| <i>Armament</i> | 2 x 7.92 mm MG Spandau LMG08/15 (not shown on any photograph) | | | |

Fuselage assembly

First the cockpit interior is cleaned and painted. All control elements have been painted dark grey (Humbrol 87), the seat aluminium, the two instrument dials black. The interior walls have been painted the same olive drab (Humbrol 116) as the basic exterior colour. I have drilled holes on the spots where the control stick and the rudder pedals were to be placed. The seat did not fit well; the base had to be cut in the same rounded shape as the cockpit back floor. After that the top cockpit cover has been fitted and glued in place.

The engine

The engine must be mounted before the engine cover of the Dr.I type is put in place; it won't pass otherwise. The engine included in the kit has been detailed to resemble the Oberursel Ur II by gluing a small piece of 0.4 mm slightly bent brass wire at the right side of each of the nine cylinders. The engine has been painted black, as this seems the correct colour from a number of Fokker Dr.I pictures, which had the same engine. The inner side of cowling and firewall have been painted olive drab and the propeller has been painted in a sandwiched dark and light wood colour with aluminium fixation bolts. Propeller and engine have been glued to an axis made of 1.5 mm plastic rod passing through the middle hole of the cowling and fitting in a hole drilled in the firewall. This way the engine rotates with the propeller as in "real life".



The cowling has the correct diameter and fits smoothly with the fuselage. However, the lower side is slightly too low to fit the fuselage underside, and that can only be corrected well after mounting the engine-cum-cowling. Finally the joints between top fuselage covering, cowling and the fuselage have been filled with putty and sanded flush after drying.



The Oberursel Ur II rotation engine; the real one (top, ref. 5) and the model

Wing-fuselage assembly

The kit instructions indicate the vertical and horizontal position to mount the wings to the fuselage and I have marked the location with pencil on the unpainted fuselage. However, when the wings were test fitted, the wing leading edge did not straight, but angled backwards. To achieve a better fit I have sanded the wing root, taking into account that the fuselage broadens out to the front. I guess this sanding has contributed to the very accurate scaled span of the model, but that was really accidental. Vertical alignment of the wings has been achieved as usual "on view". Filling up the gap between wings and fuselage required quite some rework with putty and sanding. At the same time the horizontal tail plane has been mounted, and the joint with the fuselage top finished with putty and subsequent sanding. After assembly the panel edges have been engraved between cowling and fuselage and on the front top panelling of the fuselage.

Undercarriage

I have produced new landing gear struts from 0.75 mm plastic rod material and a bracket to fit the axel in from slices of 2.35 mm plastic tube. The angle between the two struts has been copied from the original ones. It is larger than the one shown in the three-view drawing, but this seems to be correct when examining the photographs.

The diameter of the hole has been enlarged to receive the 1.05 mm diameter axel. The wheels have been assembled, painting the spokes and inner rims of the parts grey (Humbrol 126) prior to assembly. Also the other struts, including the tail plane support struts and the tail strut have been painted that colour.



When assembling the undercarriage it appeared the forward struts had too small a diameter to drill the 0.3 mm holes for the bracing cables in and take at the same time the loads during assembly (or better: they just broke); they have been replaced by 0.9 mm diameter struts. Also the axel bent very easily and did not leave enough space for the wheels (they need more axel length than the wheels included in the kit). I have replaced the plastic axel by a 0.6 mm steel one. The modified parts have been painted after mounting them to the fuselage and the 0.3 mm holes in the forward undercarriage struts have been drilled.

Machine guns

I have mounted machine guns to the model, although there are no known photographs showing the aircraft equipped with guns. The ammunition feeds moulded on the front fuselage are too big; when fitting the machine guns to it, they obscure the rear view mirror and are located asymmetrically on the fuselage. This applies also for Spandau machine guns from other sources.



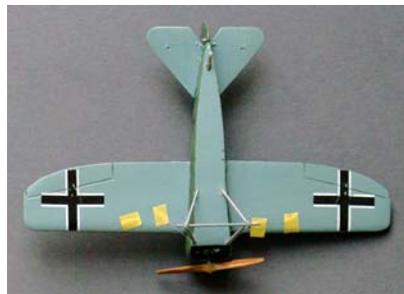
From my scrap box I have selected the guns with the smallest diameter and added a short length of 0.4 mm plastic rod as barrel. I have produced the ammunition feeds from thin plasticard strip that I have bent in shape. The machine guns have been painted gun metal (Humbrol 56) and I have painted the feeds the same colour as the motor compartment plating, as pictures of other Fokker aircraft from the time show clearly that the feed covering is part of that plating.

Finishing the model

Prior to painting I have drilled 0.3 mm holes on the location where the control cables leave the structure of wing and fuselage or pass through the tail plane.

I have not used the original decals; the camouflage pattern has been achieved by passing a dry brush with light green (Humbrol 131) over the olive drab coat. The cowling and the top of the front fuselage decking have been left free of camouflage streaks. After that a coat of glossy clear varnish has been applied on the location of the German cross insignias and the decals have been applied with Microscale Industries Micro Set and Micro Sol. I have finished the model with a coat of satin clear varnish.

Next I have glued the machine guns in place and glued



the undercarriage in place and added the undercarriage bracing wires. The picture at the left shows the tensioning of the undercarriage bracing wires

The control horns contained in the HR Model detailing set have been mounted and the control cables (0.08 mm nylon fishing line) have been added. Finally the wheels have been mounted and the cockpit steps and the hold-down handles at the lower rear part of the fuselage, all custom produced from 0.4 mm brass wire, have been added. A last bit of touch up to be done and it is finished. The pictures show the completed model. It is a nice model, although the two machine guns ruin a bit the sleek appearance of the aircraft showing in photographs of the time.



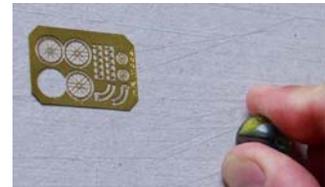
The painted fuselage after removal of the ammunition feeds

How to prepare the wheels with spokes

The WW I style wheels with spokes of HR Model are composed from three parts: the resin rim and tyre

and two photo-etched spokes assemblies. These last ones are flat and have to be shaped by rolling a 10 to 12 mm glass marble over the parts, while they are on a moderately soft support and while applying pressure in the roller ball.

I use some 3.0 mm thick carton for it. The resin parts are cleaned up, and the inner diameter is adjusted until the spokes fit smoothly in it. Then rim and spokes are painted and the spokes glued in the rim, sparsely applying glue. Finally the tyre is painted matt black. The pictures show some steps in the process.





References

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¹ www.omega-models.com

² The height has been measured when the aircraft is in flying position. When it is resting on all wheels the height is only 29.6 mm.