Fokker D.XIV Omega Models\(^1\) resin kit

Monoplane fighter prototype

Scale 1:72

The Fokker D.XIV was a return to the low wing monoplane prototypes of the end of the First World War and it had a very modern outlook for its time. Apparently because of the higher velocities (274 km/hr) and the thinner wing that went with it, the wing needed to be braced again. The aircraft did not go into series production, although most flight reports were positive and the aircraft’s flying qualities were generally praised, probably because no customers could be found for it. The sweep back of the wing did not have anything to do with the aerodynamics; it only helped to improve the downward visibility for the pilot, the lack of which had been one of the main objections against the earlier low wing monoplanes. On the available photographs two different engine cowlings configurations and two different rudder shapes are shown, which seem randomly combined. There are no indications, which was the preferred configuration.

The kit contains resin parts, a length of 0.6 mm metal wire to produce the stabilizer struts (TBC), a piece of clear plastic for the windscreen, another piece of clear plastic with the instrument panel printed on it, decals (Dutch roundels and red-white-blue strips to cover the rudder) and an instruction sheet. Most parts do not need rework; only the tail surfaces and rudder are rather “flat”, they really need some work to provide them with a leading and trailing edge.

The instruction sheet is rather rudimentary. It shows two photographs, an exploded view (without parts numbering) and a three-view drawing on scale of the model. This is important, because it can be used to position the wings in the correct position.

Alting (ref. 1), Wesselink (ref. 2), Vliegwereld (ref. 3) and Vredeling (ref. 4) give dimensions of the D.XIV, while Vredeling and Weyl (ref. 5) present a three-view drawing. As shown in the table below, the model is quite well to scale.

<table>
<thead>
<tr>
<th>Ref.</th>
<th>(1:72)</th>
<th>model</th>
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</thead>
<tbody>
<tr>
<td>Span</td>
<td>10.76-10.80 m</td>
<td>149.4-150.0 mm</td>
</tr>
<tr>
<td>Length</td>
<td>7.90 m</td>
<td>109.7 mm</td>
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<tr>
<td>Height</td>
<td>3.25 m</td>
<td>45.1 mm</td>
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<tr>
<td>Engine(^3)</td>
<td>Hispano-Suiza 12 Hb, 590 hp</td>
<td></td>
</tr>
<tr>
<td>Crew</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Armament</td>
<td>2 machine guns 7.92 mm⁴</td>
<td></td>
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</tbody>
</table>
Building the model

There exist no pictures of the aircraft with Dutch Army air corps roundels, only pictures with the “Fokker” advertisement text. Also, none of the references mentions that the plane actually flew with Dutch markings. So I have built the plane in the same configuration as the available photographs. The box illustration suggests that the underside of the wings is grey, aluminium or light blue coloured. Also on this aspect there is no evidence in literature that it ever was, so I have painted the aircraft Matt Olive Drab (Humbrol 66) all over except for the aluminium engine covers and the aluminium coloured ailerons (see the picture taken from Wesselink below).

The picture to the right shows the cleaned parts of the kit. It is not very clear, how the axle should be assembled.

Cockpit

The cockpit parts have been painted dark grey (Humbrol 127) and the inside of the fuselage and the cockpit floor light grey (Humbrol 126). The rear side of the printed control panel has been painted white (Humbrol 22) to make the instrument dials appear. Next I have assembled the cockpit interior and mounted the photo-etched seat belts (selected from my collection of useful bits) to the pilot’s seat, and glued the two “units” in the fuselage. In the finishes model it looks quite all right.

Fuselage

To assemble and finish the fuselage is straightforward (gluing the cockpit cover in place, filling the joints with putty and sanding). The tail planes have been glued in place, and again the joints finished properly. The only adaptation I have made to the fuselage is the mounting of “real” engine exhausts. The holes in the engine cover were enlarged to 1.1 mm and painted black and small bits of plastic rod of 0.7 mm, painted rust brown (Humbrol 113) before assembly, have been fitted in them. After assembly 0.3 mm holes were drilled in each exhaust pipe and painted black. The final result is rather convincing. The radiator has been painted black.

Wing

Major problem in assembling the wings is to get the correct sweep back and V shape. Sanding the wing root and fitting it trial-and-error on the exact scale top view of the instruction sheet back have achieved the correct sweep. For the V-shape I have constructed a jig giving the correct angle as indicated in the front view (9.5 mm at 72.5 mm from the wing root).

The picture at the right shows the assembly jig, which has to be put over the top-view plan, which is exactly to scale. The wings have been assembled and let to dry...
thoroughly.

The wing is mounted at the very forward part of the fuselage. When it is glued in place, the fairing with the fuselage is not correct. I have corrected the fairing after assembly of the wing with Tamyia putty and sanded it in shape in two stages.

**Undercarriage**

As usual the undercarriage struts are slightly coarse, when comparing them to those on the photographs. I have however left them as they were, except for the rear outward bracing struts; these have been made of 1.1 mm diameter plastic rod. I have painted all struts dark grey.

**Final assembly**

I have produced the tail bracing struts from 0.7 mm diameter plastic rod. Bracing wires have been added to the rear undercarriage struts. It is slightly surprising that they were still considered necessary with this rather heavy undercarriage structure. Control cables of 0.08 mm fishing line and control horns of scrap plastic material have been added for rudder and elevator. I have produced the aileron controls from 0.25 mm metal strands. The propeller has been painted wood colour with dark brown stripes to simulate the sandwiched structure, the spinner aluminium. Looking at the pictures I could have done a better job there.

The 16 mm high letters “FOKKER” on top and bottom of the wing were taken from commercially available decal sheets. From scrap black decal material a cockpit step has been cut and applied to the left side of the fuselage. The edge has been very carefully painted white. The rims of the cockpit and the front of the head support have been painted matt leather (Humbrol 62). Below some pictures of the finished model are shown.
References


2. T. Wesselink & T. Postma, *De Nederlandse Vliegtuigen, Alle vliegtuigen ooit in Nederland ontworpen en gebouwd*, p. 58, Unieboek B.V., Bussum, 1982


9. T. Postma, *Fokker, Bouwer aan de Wereldluchtvaart*, p. 64, Fibula - Van Dishoeck, Haarlem, 1979


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1. www.omega-models.com

2. In flight attitude.

3. Vredeling (ref. 4) presents a Fokker drawing for the D.XIV with a Bristol Jupiter engine of 400 hp.
Intended to be flown; no pictures are available of the aircraft with the armament clearly visible.