Fokker DC.I Omega Models¹ resin kit
Biplane fighter-reconnaissance
Scale 1:72

The Fokker DC.I was a lighter version of the C.IV reconnaissance plane with a slightly better performance. Major difference between the two was the smaller span. The DC.I carried heavier armament and was only sold with the more powerful 450 hp Napier Lion XI engine. Consequently, its performance was better than that of the C.IV at the expense of a smaller range. The DC.I has been demonstrated for the Dutch Army Air Department (LVA), which did not buy it, but decided a couple of years later to buy the Fokker C.V.

The DC.I was sold to the Dutch East Indies Air Department (KNIL LA), and according to Vliegwereld (ref. 4) to Argentina. The DC.I has been used extensively as a demonstrator.

The kit includes decals and documentation for two versions. The first one is the “civil” version H-NABW, which was flown in 1923 at the Air Display and Air Competition at Gothenburg, Sweden. With registration number 28 it won first price in acrobatics and ended as second in the race from Gothenburg to Rotterdam. The airplane has also been demonstrated in Spain, which resulted in the sales of a number of C.IV’s to that country. Later it has been sold to the Dutch East Indies Army Air Department (KNIL LA), and served there as FD-401. Decals for the second version in the kit are for the FD-403, also delivered to the KNIL LA. There is a slight difference in configuration between the two versions; the prototype has a thin N-shaped fuel line running from the top wing to a protrusion on top of the nose, while the series production aircraft for the KNIL LA has a straight tube running between wing and nose. This is illustrated in the drawings on the box cover, but is incorrect in the drawing of the KNIL version in the instruction sheet (there the fuel line still goes to the protrusion, and not directly to the engine cover.

The kit comes in a sturdy box containing the resin parts, a length of 0.5 mm (?) copper wire for producing the stabilizer support struts, a piece of transparent plastic for the windscreen, decals for the two versions and an instruction sheet. The decals include one for the instrument panel.

The instruction sheets contain a short introduction of the aircraft, a picture identifying the parts in the kit, an exploded view indicating their location, a couple of photographs of the original airplane and a two and a half view of both versions. There is a list of (AGAMA/Humbrol) paints to be used, but painting instructions, other than the colour print in the instruction sheet and on the box cover, are missing.
The side radiators (parts number 26 in the exploded view) are missing in the kit. The eight exhaust pipes have to be cut from a strip (part 22). The kit comes with a solid axle, and not with a profile one, as indicated in the exploded view. Both options are incorrect for prototype as well as the KNIL LA version. They have a configuration with a main axle and two parallel bars, as with the C.IV and the early C.V’s. A streamline body is absent. Possibly the two parts 16 in the kit are intended to serve as these bars, as they have the same length as the inner part of the axle. Part 20 on the picture of the kit contents is the protrusion on the top engine cover where for the demonstrator version the fuel lines lead. In a drawing of the C.1Ve (see below) and pictures of the KNIL DC.I such a protrusion appears at the lower side of the upper wing. No parts are included for the fuel lines themselves. There is an unnumbered part (a small rod) in the kit between the propeller (part 25) and the pilot seat (part 1), of which the purpose and location is not clear. The pilot’s rudder pedals are moulded already in the fuselage inside, so part 4 is not needed, as well as the small WW I-style instrument panel next to it, unless you decide to equip the observer’s cockpit with dual control some interior (which would be historically incorrect, as the DC.I was not used as a dual control trainer). The use of the two unnumbered parts between parts 14 and 16 is not clear; they may be intended as tail plane bracing struts.

There are two holes in the top front of the engine covers simulating the fixed machine guns. They should be deepened to show up in the finished model. The observer’s machine gun is missing in the kit. This is acceptable for the demonstrator version, but is doubtful for the KNIL version, as the function of the DC.I was supposed to be that of a heavily armed fighter. An excuse may be that photographs of the armed DC.I are scarce, and the literature (ref. 6) mentions that it took quite a while before the DC.I’s were provided with well-functioning machine guns. The picture at the right shows the resin parts after cleaning.

Hegener (ref.1), Hooftman (ref. 2), Wesselink (ref.3), Vliegwereld (ref. 4), Fokker Bulletin (ref.5) and Casius (ref. 6) and Hoogschagen (ref. 7) report the dimensions of the DC.I, while Postma (ref. 8) and Hoogschagen present a three-view drawing. Only Hegener, Hooftman (ref.2), Fokker Bulletin, Casius and Vredeling contain pictures of the KNIL LA version of the DC.I. I have not been able to locate an official Fokker drawing, but in my collection I have three unnumbered drawings of a C.IV with a Napier engine. Assuming that only the wingspan is different and the fuselage remains unchanged, I have used two of them as a reference for details. Parts of these drawings are included in this report (reproduced on scale 1:72).

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<thead>
<tr>
<th></th>
<th>Ref.</th>
<th>1:72</th>
<th>model</th>
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<tbody>
<tr>
<td>Span upper wing</td>
<td>11.46-11.75 m</td>
<td>159.2-163.2 mm</td>
<td>157.5&quot; mm</td>
</tr>
<tr>
<td>lower wing</td>
<td>9.86 m</td>
<td>136.9 mm</td>
<td>139.5&quot; mm</td>
</tr>
<tr>
<td>Length</td>
<td>9.10-9.144 m</td>
<td>126.4-126.9 mm</td>
<td>126.9 mm</td>
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<tr>
<td>Height</td>
<td>3.40 m</td>
<td>47.2 mm</td>
<td>45.6 mm</td>
</tr>
<tr>
<td>Engine</td>
<td>Napier Lion XI, 450 hp</td>
<td>126.4-126.9 mm</td>
<td>126.9 mm</td>
</tr>
<tr>
<td>Crew</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Armament</td>
<td>2 machine guns 7.7 mm, 1 machine gun 7.7 mm movable</td>
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</tbody>
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The model is well to scale (except for the fuselage width, see below), which is not a big surprise as I have provided Jan Pala of Omega Models with a copy of my documentation.

Painting scheme

De Groot (ref. 15) is my one and trusted reference for the military painting scheme. For the “28” there is no reference, but it is likely that this demonstration aircraft would be painted LVA khaki (Olive Drab/Khaki Humbrol 66 + 163). There is no evidence that the lower surfaces were LVA blue (Humbrol 115). The engine compart-
ment is aluminium (except for lower part and the bubble on the top). Option: top surface of fuselage: also alu-
mminium finish (early prototype finish). The KNIL LA aircraft were finished LVA khaki overall, and certainly
no LVA blue lower surfaces. From the few pictures I have found it appears that also the engine compartment
was painted LVA khaki.

General

Assuming that the fuse-
lage of the DC.I is the
same as that of the C.IV I
will use a drawing of a
C.IV equipped with the
same Napier Lion engine
for construction details,
reproduced here on scale
1:72. Details on the for-
ward fuselage are taken
from a drawing of the
C.IVc5, shown at the
right. It should be noted,
that there is a slight difference in the inter-wing and fuselage-wing strut
configuration in these drawings. I will rely for these on the C.IV draw-
ing, as the C.IVc shows a configuration with three cockpits. For overall
dimensions I will refer to the three-view drawing of the DC.I in
Hoogschagen (ref.7), reproduced at the end of this report.

I will build the model with individual control surfaces. So the first job is
to separate rudder, elevator and ailerons from tail planes and upper wing.
It appeared that left and right ailerons have a slightly different span and
cord, so some correction of wing and ailerons is necessary. Also the ele-
vator has to be corrected slightly, as it does not leave sufficient place for
the rudder. Rudder and vertical tail plane are modeled flat in contrast
with photographs of the real plane, where the tube frame shows up very
clearly. So prior to separating the rudder I have made some “profile” in them using different shapes of files.
Rudder and stabilizer have been sanded down a bit afterwards.

Cockpit

According to both the C.IV and the DC.I drawing the cock-
pit openings are located too much to the rear in the model;
they should be moved 5.5 mm forwards. This means the
cockpit interior (rudder pedals and mid console) must be
removed. I have removed also the cockpit floor and pro-
duced a new one accommodating all floor mounted cockpit
equipment. I have shortened the upper decking by removing
5.5 at the (constant cross-section) front end. The rear side of
the decking does not fit anymore now, but that can be corrected at the same time as the other fuselage modifica-
tions. Also the circular cockpit openings should be enlarged; they measure 8.0 to 8.5 mm on the model, while
the drawings indicate 9 to 10 mm. On both drawings the diameter of the observer cockpit opening is 0.5 mm
larger than that of the pilot’s. Finally, the dimensions of the hori-
zontal tail plane and the elevator are not correct (see below the sec-
tion Tail surfaces).

The cockpit interior has been produced from scratch, as its location
in the model is too far backward. The instrument panel (part 3)
needs some rework to make it fit in the fuselage. As the instru-
ments are reproduced in relief, it should be painted with gloss paint
and the decal will have to be supplied with ample use of “Set” and
“Sol”. Based on the pictures of C.I, C.IV and C.V in my references I have derived the following “schematic” cockpit interior:

- Instrument panel, control stick and pilot seat according to the kit,
- Rudder controls as in the Fokker C.V and C.X (custom made from 0.25 mm plastic strip, so not the WW I thingy in the kit),
- Trim wheel for the horizontal stabilizer adjustment at the left side of the pilot’s cockpit (4 mm engraved disc from 0.25 mm strip),
- WWI instrument panel for the observer and tube frame directly behind the pilot seat (0.5 mm diameter strip),
- Some “boxes” on the tube frame (0.25 mm strip, marked up with dots and small circles),
- Two times three ammunition magazines (diameter 3 mm) at the back of the fuselage made out of 0.25 mm strip,
- Observer seat from the kit,
- Seat belts from the scrap box,
- At the left and right of the observer’s compartment still some 0.5 mm diameter plastic strips to simulate the fuselage frame.

The pilot seat has been leaned a bit backwards and the ammunition magazines are mounted on a “plate” between the fuselage longerons. Hardly more is visible through the openings in the upper deck. The picture at the bottom shows the cockpit interior as mounted in the fuselage. I will mount later a Scharff ring with a Lewis machine gun of Aeroclub Models.

**Fuselage**

The fuselage is slightly skewed in cross section and needs quite some sanding to obtain a straight and flat underside. When comparing the model’s fuselage with the C.IV Napier Lion drawing scaled 1:72, which should have the same fuselage as the DC.I, it appeared that the side view is correct, also the lower nose profile. The width of the fuselage is not correct as can be seen from the 1:72 scale drawing below; the fuselage of the kit has a width of 12.2 mm, that of the C.IV 13.8 mm and on the drawing of the DC.I in Hoogschagen it has a width of 13.3 mm. So the fuselage should be enlarged by 1.1 to 1.6 mm to be representative. This also allows for making the nose a bit rounder. The enlargement should continue up till the horizontal stabilizer.

I have done this by applying a sheet of Evergreen 0.5 mm polystyrene at both fuselage sides, obtaining the correct double curved surfaces by applying putty and sanding. This means that also the slots for the two cylinder banks must be modified, as well as the top decking of the fuselage, the slits above the engine banks and new panel engravings on the engine covers (which are rather characteristic for the Fokker aircraft with a Napier Lion engine of that period) must be made. At the left the doublers are glued on with an additional layer at the front to obtain a well-rounded nose section. In the middle the fuselage after rough sanding, and at the right after the first layer of putty has been applied. After sanding the fuselage in shape, I have opened up the slots for the cylinder banks as can be seen at the right. The cylinder banks themselves also need to be doubled by a piece of 0.5 mm plastic to keep the proportions correct. The rear cockpit opening has been enlarged to fit the Scharff machine
gun ring. The rear of the fuselage has been covered with a piece of 1 mm plastic, fitting the enlarged horizontal tail plane and filled up with putty. After sanding the fuselage again, I have applied a first layer of grey primer to better reveal the deficiencies.

The shape of the fuselage now seems all right, and fits the top and side view of the C.IV drawing.

When these have been repaired, new panel edges have been engraved based on the documentation available, and gun and piping openings have been drilled.

I have constructed the side radiators from a piece of scrap resin of the kit and covered the front and back with leftover WW I machine gun covers.

**Machine guns**

On one of the pictures the ammunition guides on top of the fuselage are clearly visible; the DC.I had apparently no built-in machine guns, as suggested in the Omega kit. So we will have to construct them from scrap. First I have filled the machine gun openings in the nose with putty and fitted the machine guns (two white metal Vickers guns of Aeroclub Models from my small parts box). One of the guns is missing a piece, but that is easily corrected with a bit of plastic rod.

The streamlined body under the fuselage (shortened part 20 from the kit); has been glued in place. The ammunition guides have been cut from 0.5 x 1.0 mm plastic strip and bent in shape.

**Wing**

As often the locations of wing struts in Omega kits are inaccurate, I routinely check them, first on symmetry, and if I have drawings available also on the dimensions. Also in this kit they are asymmetrical and have incorrect locations. In the three-view drawing the fuselage-wing strut location at the upper wing should be 13.5 mm from the centerline, and the N-styles 59.5 mm from the centerline. The side view of the C.IV shows that the upper wing spars are separated by 11.5 mm, those of the lower wing by 8.5 mm. The forward spar of the upper wing is 5.5 mm from the leading edge; in the lower wing that distance is 4.5 mm. I have marked those positions with a pencil on the wings and drilled superficial holes of 1.0 mm at these locations. The old holes have been filled with putty. From the side views it appears that the fuselage-wing struts have a diameter of 0.8 mm, the inter-wing struts of 1.0 mm. Based on these measurements the inter-wing struts of the kit cannot be used. Also, the legs of the fuselage-wing struts appear to be separated some 2 mm too much, so they will have to be custom produced also.

Both upper and lower wing have been shortened at each tip by 1.3 mm to obtain the correct span. This allows also making the wing tips a bit more rectangular, as they are too much rounded in the model. In addition the lower wing halves must be shortened at the wing root by 0.5 mm to compensate for the larger fuselage width. It has been joined to the fuselage using the top-view of the DC.I as a template, keeping the rear of the fuselage as reference (trailing edge 63 mm from the rear of the fuselage). Both wings have a dihedral of about 1.5 mm at the location of the N inter-wing struts, but this is due to wing taper, the top surface of both wings being perfectly horizontal. Wing taper of
the upper wing in the kit is 0.75 mm, of the lower wing 0.7 mm. The upper wing has a flat lower surface, so this has to be corrected in a hot bath. The wing taper has been left unmodified, and the wings have been assembled showing a dihedral of 0.5 mm (a compromise). The chord of both wings is correct.

The lower wing has been attached to the fuselage using the top view of the C.IV fuselage as an assembly jig. Dihedral has been achieved by gluing two strips of 0.5 mm plastic on the drawing at the wing tips. As I have made the fuselage wider, I have checked whether the holes drilled for the N-struts in the lower wing still corresponded well with those in the upper wing. The measured difference of 0.5 mm is acceptable (and in any case difficult to correct). Fuselage, lower and upper wing have been painted LVA khaki and finished with a coat of satin transparent varnish. In the following the findings of the section Detailing are used.

The upper wing has been joined to the model using the Aeroclub Models assembly rig. Stagger of the wings is 13.5 mm, while separation between the wings is 24.0 mm (both side views correspond well in this respect). I have adjusted the jig such that the horizontal supports were located outside the position of the inter-wing N-styles.

The inter-wing styles have been mounted, custom fitting three individual 1.0 mm diameter plastic rods. As the room between the upper wing and the fuselage became very limited, I have decided to glue the machine guns next in place. It was quite a job to manoeuvre them with a pair of tweezers. It is better to mount them before assembling the top wing.

Now the model can be removed carefully from the jig. Between fuselage and upper wing also the two aileron cables, the electrical lines for the navigation lights and the fuel tubing have to be fitted, which all are part of the custom detailing of the model, so no part of the basic kit. The order of assembly is therefore of importance.

The aileron cables are made of 0.08 mm fishing line, coloured with grey Marabu Briljant Painter gloss lacker crayon. They are fed through the 0.3 mm holes in the upper wing and fixed with a drop of superglue in the 0.3 mm holes next to the machine guns. They are tensioned with a piece of tape and secured with a drop of glue in the upper wing holes. Now the 0.8 mm
diameter rear wing styles can be fitted and glued in place.

At the starboard side also the forward wing styles can be made on size and glued in place. At the left side that cannot be done yet, because there will run the lines for the navigation lights. However, the rear short style still must be placed, as it may interfere with these lines.

The electricity cables are bend from 0.25 mm metal wire are have been glued in the three 0.3 mm holes at the left upper side of the front fuselage. When the joints were dry, I have bend the wires towards the streamlined body under the upper wing and fixed them to it with a drop of cyano glue. They will be painted khaki later on.

The two remaining wing struts can now be fitted and glued in place, as well as the two fuel pipes from the upper wing to the engine compartment. I have painted the pipes black. The final result is shown at the right. Unfortunately the ammunition guides do not fit exactly to the machine guns. I have tried to bend the guides towards the guns, but they are too stiff to move.

Next I have mounted the side radiators in fully deployed configuration and the two cylinder banks. From 0.25 mm metal strand I have formed the tubes running from the streamlined body under the nose to the fuselage and glued them in place. I will mount the undercarriage and small items, like exhaust pipes, Venturi tubes, navigation light, gun mount and control surfaces, later.

While painting the cables for the navigation lights, it appeared to be difficult not to hit other parts of the model, so now one of the aileron cables has a black spot and a drop of paint hanging on it. Removing it means starting all over again, and that’s too much. So they should be painted immediately after mounting them. The paintwork of struts, wing, fuselage and cylinder banks and the coat of satin varnish have been retouched.

**Tail surfaces and control surfaces**

The horizontal tail plane and the elevator surfaces are too small, again according to both the C.IV and D.C.I drawings. To correct that I have glued a plastic strip of 1 mm thick and 2.5 mm wide to the leading edge of the tail plane and two strips of 0.6 mm thick and 1.5 mm wide to the trailing edge of the elevator surfaces. With sand paper and a small file the shape has been corrected and a smooth transition with the original tail surfaces has been made. I have modified the control surfaces to receive the “brackets” attached to tail surfaces and upper wing. The picture shows the configuration before shortening the brackets.
Decals
Cutting out the Omega decals was not a success. The coloured layer damages easily, also at the edges, and then the white ground layer becomes visible. It is a pity that Omega still does not deliver better quality decals. So I will use again the rosettes from the decal sets of Dutch Profile and Dutch Decals.

For the registration number I have used the original Omega decal, because for the long KNIL LA registration number it is impossible to cut out the individual characters and too assemble them again to a correct number on the kit. In close-up virtually no colour difference is visible between my LVA khaki paint and the khaki of the decals. I have engraved the separation between horizontal tail plane and fuselage, as for the DC.I the angle of incidence of the tail plane could be adjusted. I have used some small lettering to produce the angle markings on the fuselage.

Undercarriage
Comparing the wheel axle in the kit with the DC.I scale drawings at the end of the report learns that the axle in the kit is too short: 27.5 mm, while it should be 32 mm. It is also a bit too thick. So I have made a new axle from 1.2 mm diameter strip with 2.4 mm diameter hubs to join it with the undercarriage struts. Thee "auxiliary axles" will be made of the 1.0 mm diameter strip shown at the bottom of the picture. The undercarriage legs I have worked with needle files to make them thinner and round.

The picture at the left illustrates well the configuration of the axle assembly. The picture at the right shows the assembled undercarriage of the model. It still needs a last coat of dark grey paint.

Detailing
For the detailing (cables, tubing, etc.) I have used a number of photographs of the KNIL LA DC.I and a couple of drawings of the C.IV.

Under the front fuselage sits a streamlined body, from which a tube is leading upward at the front side and two bent tubes that go backwards to the fuselage. I don’t think the body is an oil cooler, as it seems to have a completely flat surface.

In the middle of the upper wing a tube is going vertically up. A bit to the back sits again a (smaller) streamlined body, from which three lines depart to the fuselage. From the wing leading edge a tube runs to the front of the engine compartment.

At the left side of the fuselage just below the pilot’s cockpit sits a venturi tube; probably one is also located at the right side. Under the fuselage some triangles made from tubes, possibly to attach a bomb rack. From the picture it appears that the cylinder banks are shorter than those of the Omega model.

The picture at the left confirms the details. The streamlined body is located very much to the left, almost next to the forward fuselage-wing strut. Vaguely the aileron cable can be seen running from the
fuselage to the rear strut of the inner wing. Most likely this cable is mirrored at the right side.

Also the three wheel “axles” can be seen and the bracing of the forward undercarriage struts. In the middle of the upper wing a navigation light seems present. The picture shows well the half deployed side radiators; apparently always a guiding part is sticking out at top and bottom.

In the picture at the right the routing of the tubing under the forward fuselage can be seen clearly, as well as the location of the venturi tube and the navigation light above the wing tip.

Note the lines from the upper wing to the fuselage. They are strangely curved. Possibly they are the electrical cables for the navigation lights on top of the upper wing (note the one in the middle). Also the left aileron cable can be seen here. The location of the control horns of the aileron is clearly visible. On top of the engine compartment sit some undefined bits. The radiators are fully deployed. There is hardly any colour difference with the fuselage, so probably they are also painted LVA khaki.

The picture at the right shows all details very well: electrical lines, aileron cable, piping to the upper wing (apparently the DC.I had a fuel tank in the wing), the venturi tube and the ammunition guides. Also the cockpit step below the fuselage and to the left of the “F” can be seen clearly.

The photograph at the left, taken during unpacking of the aircraft upon arrival in the Dutch East Indies, shows the three electrical cables, the venturi and some detail of the body under the nose. Also, the lower elevator cable appears to leave the fuselage behind the rosette. Note the adjustable horizontal tail plane.

The picture at the left illustrates the three navigation lights on the wing. The photograph below gives a good overview of all details: tubing and lines to the upper wing, venturi tube, cockpit steps, aileron cable (possibly even a double one). It also shows well where the upper elevator cable leaves the fuselage. It seems there is a cable running over the rosette (or is it a scratch on the picture); its purpose is not clear, anyhow.

Finally at the left a close-up of the nose of the DC.I prototype is shown. Apparently the louver on top of the nose have been deleted on the aircraft for the KNIL LA. Of the two openings in the front of the upper nose cover only the left one has been maintained. Although they are not clearly visible on the photographs of the KNIL LA aircraft, it is a fair assumption that the curved, rearward pointing ex-
haust pipes have been maintained on the series aircraft. I will engrave the access hatch on the cowling just before the radiators and will mount the downward-pointing exhaust tubes, although they are more flush mounted on the KNIL aircraft.

The pictures show well the linen covering of the rear part of the fuselage, which makes the frame tubes appear very clearly. This aspect is missing from the Omega model. Contrary to the pictures on the box and in the instruction sheet both cockpits were equipped with wind screens.

The first drawing below shows a C.IV S (S for Spain) with a Liberty engine. It gives some more information about the location of the electrical cables and the ammunition guides. It also shows a vague representation of a fuel tank in the upper wing. In view of the similarity between C.IV and DC.I, I expect that also holds for this last plane. It would explain the function of the two pipes between upper wing and engine compartment. The routing of the elevator cables is clearly different from that of the DC.I on the pictures.

The second drawing is of the C.IV C, a three seat aircraft with a Napier engine. It shows the tubes between upper wing and motor compartment, which do not appear to be part of the wing bracing (the bend in the forward tube proves this). On this second drawing an interrupted line (= control cable) runs upwards to the rear spar of the upper wing. This is probably the aileron cable. The drawing shows clearly the attachment of the cable to the aileron. The streamlined body under the upper wing of this C.IV sits further backwards than on the DC.I.

The last drawing is of an unidentified C.IV with Napier engine. Next to the electrical cables here also some other lines run from the upper wing to the top of the fuselage. Again the control cable routing is different from that of the DC.I. Similar to the first drawing a streamline body (with carburetor?) is located on top of the forward fuselage. This is useful information, if one decides to build the prototype DC.I form the kit.

So now we can produce some of the small parts needed and prepare the model for the final assembly:

- The streamline body under the upper wing made from flattened plastic profile of 1.5 mm diameter.
- 0.3 mm holes for the electrical cables in the engine compartment.
- One 0.3 mm hole in the front and two in the back of the streamlined body under the fuselage.
- 0.3 mm holes for the short 0.25 mm diameter lines in the bottom of the engine compartment.
- The electrical wires and small tubes are made from 0.25 mm metal strand.
- Holes of 0.8 mm in the upper wing leading edge and underside of the upper wing for the larger tubes.
- Three navigation lights from 1.5 mm diameter profile plus attachment.
- Cockpit stairs from 0.4 mm brass wire.
- 0.3 mm holes for control cables.
Fokker DC.I 1923

- upper elevator cable 39.5 mm before the rear end of the fuselage and 13.5 mm above the underside of the fuselage
- lower elevator cable 19 and 6 mm respectively
- rudder 13 and 5 mm (in reality the cable is redundant)
- ailerons both left and right side in the fuselage at the location of the rear fuselage-wing strut, in the wing behind the rear inner wing strut and 4 mm before the middle aileron hinges.

- Venturi tubes from 1.5 mm diameter profile.
- Control horns for all control surfaces from 0.25 mm plastic strip.
- Downward pointing exhaust pipes of 1.2 mm diameter rod with a 0.9 mm hole in it.
- Eight exhaust tubes bent from 1.0 mm diameter plastic rod with a 0.6 mm holes drilled in the.
- Four triangular bomb rack supports cut from 0.25 mm plastic strip.

I have made the attachment of the navigation lights and the venturi tubes of 0.4 mm brass wire and attached it with cyano to the parts. The positions of the control horns have been derived from the pictures.

Final assembly

As most of the parts still to be assembled are rather fragile, the assembly order has to be established carefully. First thing to add are the two venturi tubes. I have drilled a 0.5 mm hole about 4 mm behind the rear cabane strut just below the top fuselage stringer, cut the brass wire to size and fitted them in place. A small drop of cyano secures them. Next the rudder is glued in place. I have chosen to mount it in a neutral position.

0.3 mm holes have been drilled in the forward undercarriage struts for the bracing cables, made of grey painted 0.08 mm fishing line, and the wheels have been mounted. The elevator halves follow and are hinged slightly downwards. I have then mounted the control cables for rudder and elevator, again made of 0.08 fishing line. Next in line are the ailerons, left down and right up, and their control cables. The cabin stairs have been bent of 0.25 mm metal strand and mounted under the left fuselage side below the observer’s cockpit in 0.3 mm holes. The triangular supports for the bomb rack have been cut from 0.25 mm plastic strip and glued at the location of the lower wing spars.

The Scharff ring has been glued in the observer’s cockpit, the machine gun pointing backwards, but left free to swivel in its mounting.

I have cut the two windshields from clear plastic and bent them in shape. They have been glued in place with white glue. Finally the propeller, painted
dark grey (no evidence could be found that it was left unpainted) has been mounted in place. Below some pictures of the finished model are shown.
References


Summary of reference contents

Hegener, *Fokker* (ref. 1) shows the prototype “28” painting scheme: Uniform drab olive surfaces, except the engine compartment and the top of the fuselage (probably silver).

Hooftman, *Van Glenn Martins en Mustangs* (ref. 2) shows a picture of a DC.I of the KNIL LA. The DC.I’s entered service in March 1926. In the text it is stated that in 1934 only two out of the 10 aircraft were still in service; it is unlikely they have ever flown with orange triangles. Registration numbers were F.D.401 through F.D.410. No metal finishing of the engine compartment. The picture shows a different texture for the middle part of the upper wing; this might be aluminium finishing, but Bouko de Groot does not confirm this. Hooftman states that the span was 11.75 m; personally I trust better the value given by Hegener and Vliegwereld of 11.45 m.
Wesselink & Postma, De Nederlandse Vliegtuigen (ref. 3) contains a front view picture of the prototype of the DC.I prior to the marking up to “28”. Details of the rigging, the fuel lines and the aileron cabling are well visible. The text states that the KNIL LA DC.I’s were taken out of service in 1934 ruling out the marking with orange triangles, which has only been introduced in 1939.

Vliegwereld (ref. 4), is an “official” 40-year Fokker anniversary issue, and states that the DC.I has been sold to the KNIL LA (Royal Dutch East Indies Army Air Arm) and to Argentina. Armament is stated to be 3 machine guns (2 fixed and one moveable at the observer position) and a bomb rack. The engine is a Napier Lion XI of 450 hp. Dimensions and performance data are roughly consistent with those given by Hegener and Wesselink & Postma.

Casius, 40 Jaar Luchtvaart in Indië (ref.6), contains some pictures of the DC.I. They seem to indicate that they were painted khaki overall. Interesting are some pictures of the C.IV modified for passenger transport in that reference; these aircraft registered as F.C.4--.T carried up to four passengers in addition to the pilot.

Alting, Fokkers in Uniform (ref. 9) states that 10 aircraft were sold to the KNIL and 20 were license built by Spain. Hoofman, Van Brik tot Starfighter, part I, states however that these were C.IV’s, built by Carabrandel Alto in Madrid.

Hoofman, Fokker, (ref. 10) contains a picture of the “28” giving good details of the radiator, as flown by Bertus Grasé in Gotenburg. It is not clear from this picture whether the lower surfaces of the airplane were painted light blue; it seems to have had a one colour finish (which might be justified for a demonstration plane.

Hoofman, Nederlandse Vliegtuig Encyclopedie, Burgerluchtvaart in Nederland, Part I (ref. 11) contains a couple of nice pictures of the “28”, H-NABZ. Especially the inspection hatches can be clearly seen (worthwhile to detail in the model). Only one of the pictures clearly shows the number 28 under the left top wing. It seems that the underside of the engine platting was sometimes bare metal, sometimes painted.

Hoofman, Van Brik tot Starfighter, part I (ref. 12) shows a photograph of the “28” demonstration plane/prototype. In the text he states that the fuselage of the C.IV was “very large”, compromising the performance figures. Whether this is true also for the DC.I is not clear, but it is likely that it had the same fuselage as the C.IV. He also states that the LVA (Dutch Air Arm) C.IV was armed with one or two fixed machine guns and a double machine gun for the observer; again it is not clear whether this applies also for the DC.I.

Postma, Fokker (ref. 13) reproduces the same (but better quality) picture of the “28” as Hoofman, Van Brik tot Starfighter, part I.

Scale drawing of the DC.I (source Hoogschagen, ref. 7)

The drawing below is reproduced scale 1:72, when this document is printed on A4 paper. Note that the actual aircraft did not have the spinner. Also the shape of the nose is quite different, so these drawings should only be used for the front and top view. The strut from the upper wing forward to the engine compartment is not representative for both of the DC.I versions addressed in this kit. This drawing was not available to the kit producer, which explains some of the inaccuracies in the kit.
1 www.omega-models.com
2 Excluding ailerons; span including ailerons 165.0 mm. Span excluding ailerons reduced to 156.0 on the finished model.
3 Reduced to 134.5 mm on the finished model (a bit over-compensated).
4 Hooftman (ref. 2) gives a length of 8.85 m.
5 The configuration on this drawing is different from that made to the KNIL LA C.IV T(ransport) version, which managed to transport five people. This modification, made by the KNIL technical department, resulted in vigorous discussions between Fokker and the KNIL LA about the certification status of the modified aircraft.
6 I have tried to “form” the plastic doublers by applying heat, hoping to reduce that way the amount of putty I had to apply, but it was too difficult to apply the heat locally without deforming the resin and obtaining the desired shape. So in the end I applied putty in all gaps.
7 This three-view drawing of the DC.I was not available at Omega Models at the time of preparing the model, so positions had to be estimated based on photographs.
8 The photographs of the KNIL LA DC.I of Vredeling (ref. 14) clearly show ammunition guides for two machine guns.