

# Fokker F.VIIa/3m modified Valom injection kit

## Passenger plane

Scale 1:72

The Fokker F.VII/3m has been designed by Reinhold Platz in July 1925 on request by Anthony Fokker, primarily for participation in the Ford Reliability Tour of 1925, although initial work on a three-engine version of the single engine F.VIIa probably was already underway before, as there exists a drawing dated the 20<sup>th</sup> of June 1925 of this version.

Originally it was planned to participate with the first series machine of the single engine F.VIIa to the tour, but this aircraft was severely damaged in an emergency landing in the USA. The F.VIIa/3m was a modification of the second series F.VII, which was built in six weeks and made its first flight on September 5<sup>th</sup> 1925. After a demonstration for the KLM on September 7<sup>th</sup> the aircraft was crated and departed the next evening with the steamer Veendam for the New York. It arrived there the 26<sup>th</sup>. After assembly Fokker flew it to Detroit, in time for the start of the tour on the 28<sup>th</sup>.

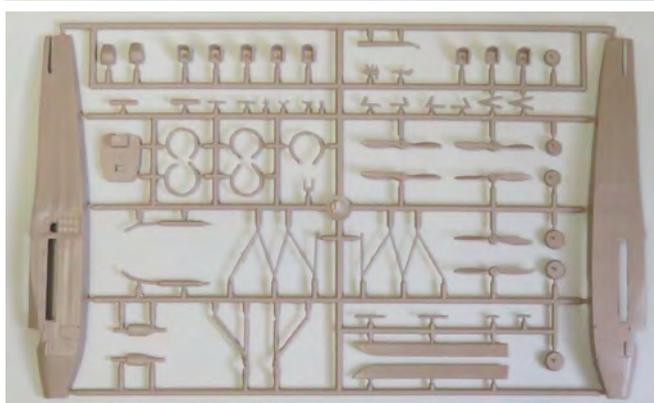
As the original F.VIIa (and most other Fokkers of that time) the three engine version was of mixed construction, a wooden cantilever wing with a steel tube fuselage covered with linen and aluminium sheeting. One engine was mounted on the nose, the two other engines to pods under the wing above the main landing gear. Mounting on the wing leading edge was avoided to prevent problems with the airflow over the wing. For the Tour the aircraft was carrying no registration, the text "Fokker" on the fuselage, the port wing leading edge and under and above the wing. It carried number 20 on the fin and rudder and under the cabin windows the test Fokker Aircraft Company and the FAC logo, strongly resembling the KLM logo, but without the crown. Forward of the cabin windows the Fokker logo and the type name were painted and behind the port wing trailing edge a text block with probably the weights, engine type, fuel and oil capacity.

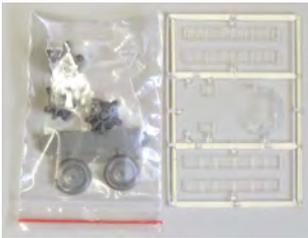
Cabin capacity was the same as that of the F.VIIa, eight persons with a crew of two. During the Tour seat capacity was reduced to four to accommodate spare parts and a table for navigation purposes.

As a basis for the F.VIIa/3m I have used the Valom kit for the Fokker F.VIIb/3m in KLM paint scheme. The kit comes in a large box and contains two sprues of grey-brown plastic, one sprue with glass parts, resin parts for the three Wasp engines and the wheels, a fret with PE detailing parts, a decal sheet and instruction sheets.



The decal sheet allows the building of two aircraft in KLM outfit.





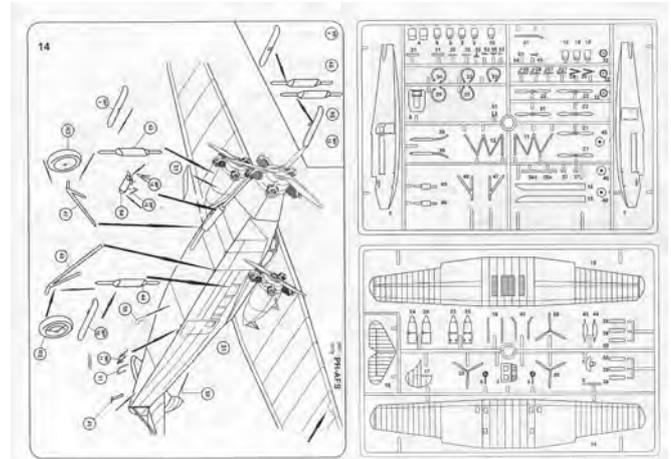
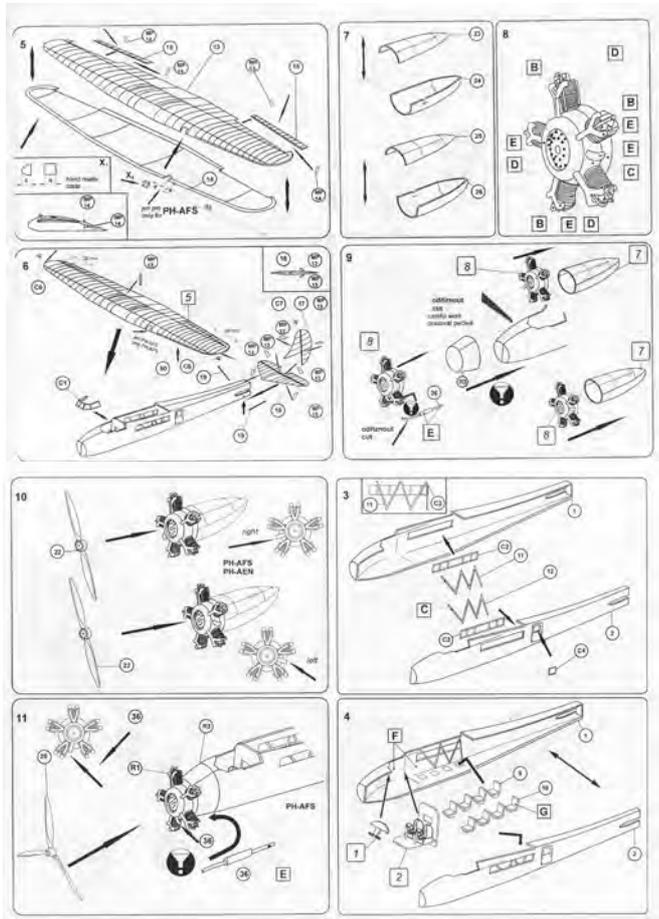
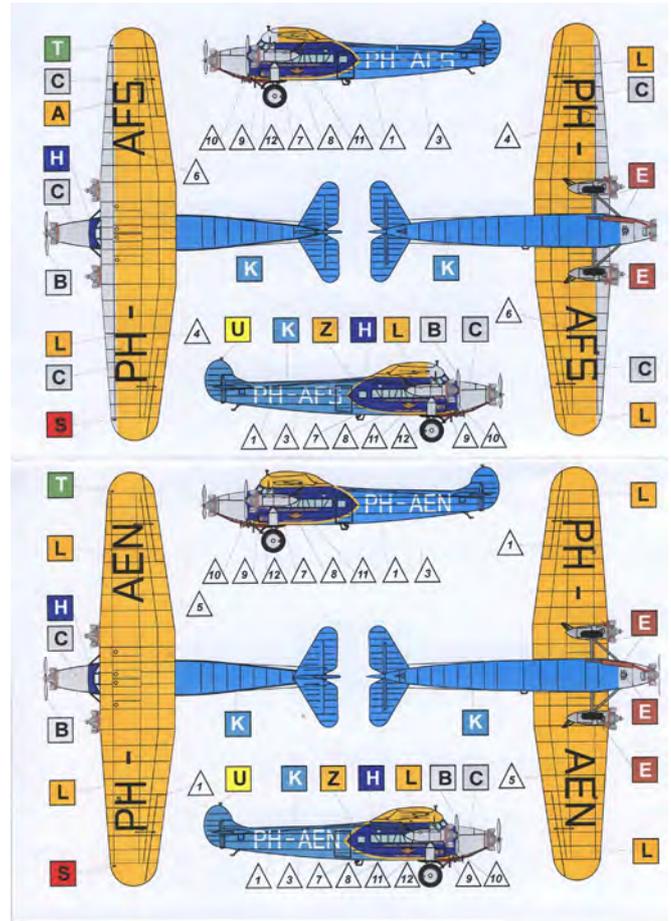
One of the instruction sheets is printed in colour with a short description of the aircraft and its history and painting instructions.

Letter	Part Name	Quantity	Material	Model Number	Part Number	Notes
A	Body	33	BT	1949	F. 3, 2920	
B	Wing	11	OSMa	1546	1918	
C	Motor	56	4546	1786	17173	
D	Propeller	128	A40	1725	H238	18081
E	Engine	113	54	1406	H244	30111
F	Wing Tube	32	84	1730	H205	26440
G	Wing	82	12	1736	H46	30213
H	Wing	25	09	1510	—	13180
I	Wing	47	A41	1308	H45	13000
J	Wing	157	B13	2048	H203	26430
K	Wing	18	A48	1395	H84	13855
L	Wing	88	C61	1540	H47	20045
M	Wing	182	30	1592	H77	27006
N	Wing	72	A31	—	H81	34007
O	Wing	150	33	1728	—	30206
P	Wing	54	4546	1782	—	17043
Q	Wing	174	17	1705	H60	14227
R	Wing	208	19	1524	H84	14227
S	Wing	154	15	1708	H91	12891
T	Wing	34	A27	1758	H11	23715
U	Wing	18	1046	2722	H19	17043
V	Wing	—	—	—	—	—
W	Wing	—	—	—	—	—
X	Wing	—	—	—	—	—
Y	Wing	—	—	—	—	—
Z	Wing	—	—	—	—	—

**Fokker F.VIII/3m**

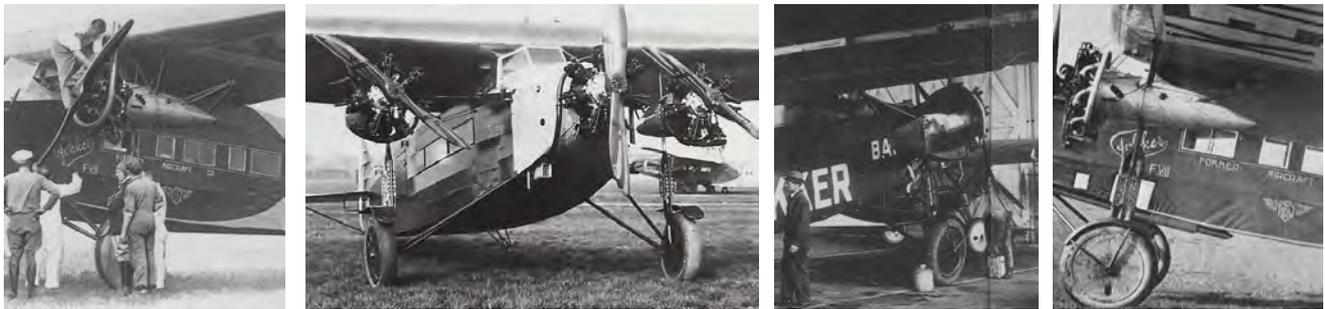
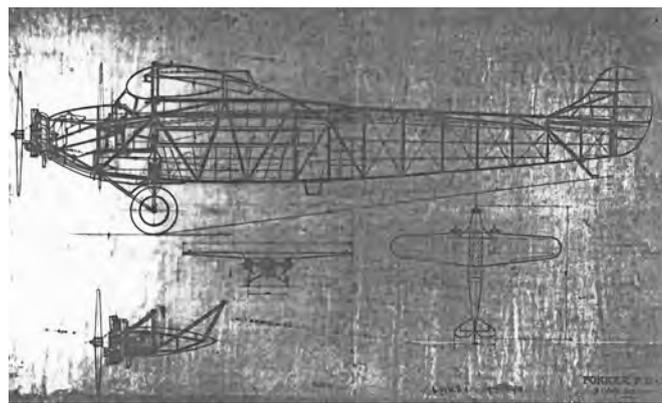
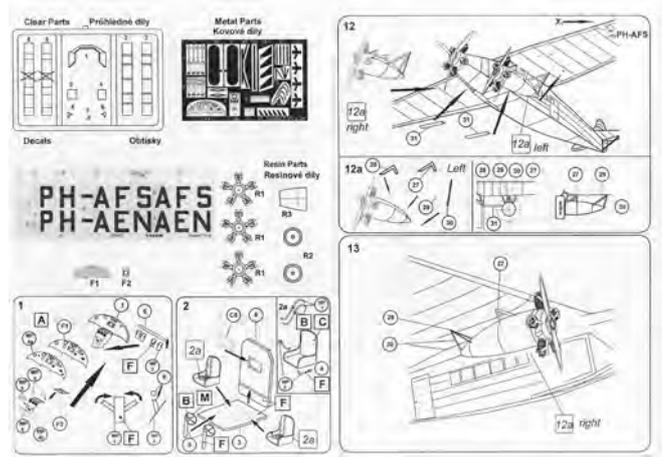
The other black and white sheets illustrate the parts in the kits and show the assembly order in fourteen steps.

In my collection Fokker drawings, which originally came from Willem Vredeling, I found one, rather bad drawing of the F.VIIa/3m. From the references I selected those photographs that could be related to the aircraft that participated in the Reliability Tour.



On first inspection the F.VIIIb/3m Valom kit has to be adapted on the following points to represent a F.VIIa/3m.

- The wing span has to be reduced from 301,4 to 268,1 mm. This can be done by removing 16,7 mm at both sides of the fuselage.
- The engines of the F.VIIa/3m were Armstrong-Siddeley Lynxes. In the kit of the F.VIIIb/3m Wright Whirlwind engines are included. Resin Lynx engines have been obtained from Owl Models.
- The cabin door of the F.VIIa/3m is wider, rectangular and has a larger window. From pictures it seems to have a steel tube frame, covered with linen. Also on the Fokker drawing this is indicated. This can be adapted on the styrene fuselage part<sup>1</sup>.
- The suspension of the nacelles is clearly different for the F.VIIa/3m. The main undercarriage leg is directly passing through the nacelle to the wing spar slightly inboard from the nacelle centreline. The forward outboard suspension is not a V-strut<sup>2</sup>, but a single vertical strut, running from the bottom to the top of the main undercarriage strut. The rear suspension is correct.



In the pictures above at the left and right the F.VIIa/3m, which participated in the Ford Reliability Tour, in the middle right this same aircraft, but as it has flown for admiral Byrd during its North Pole expedition, and in the middle left the ex-KLM F.VIIa/3m of the Dutch Army Air Department (LVA).

In some references it is stated that the fuselage of the F.VIIa/3m was 0.8 m longer than that of the single engine F.VIIa, but in the technical data no proof of this could be found.

The references contain photographs and data, but no (dimensioned) drawings; the (unnumbered) drawing at the right is the only one in my possession.

	<i>Ref.</i>	<i>1:72</i>	<i>model</i>
<i>Span</i>	19.30 m	268.1 mm	267.0 mm
<i>Length</i>	14.60 m	202.8 mm	202.0 mm
<i>Height</i>	4.20 m	58.3 mm	55.7 mm
<i>Engine</i>	3 x Armstrong Siddeley Lynx, 220 hp		
<i>Crew/passengers</i>	2/15		

The model is quite accurate to scale.

**Wing**

I have marked on the wing trailing edge the places, where the cuts have to be made. The attachment points for the en-



gine suspension, indicated by a 4 x 6 mm rectangle on the wing lower surface, must be moved also by 16.7 mm outboard. I have drilled 1 mm new superficial holes at the correct places, have produced new rectangles from 0.13 mm styrene sheet and have glued them in place.

Next I have marked the sawing lines on upper and lower surface of the wings with tape, carefully placing it parallel to the panel lines.

As the top of the wing should be straight (this is also the way the Fokker wings have been build, yielding the desired dihedral), I have started the sawing from the lower wing surface, trying to keep the saw as much as possible vertical. This was not completely successful, that is the saw cut ended not up exactly at the edge of the tape on the wing top surface. I have corrected the mismatch as much as possible with a couple of layers of 0.5 mm styrene sheet. The remaining small gaps I have filled with putty.

The assembled wing appeared to have some sweep, the panel lines of the spars were not straight. Apparently my sawing was not straight enough and an error of one tenth of a millimeter shows up as a sweep of one millimeter at the wing tip. So I broke the wing apart again and have sanded the pieces carefully until I had a straight wing. After gluing the three parts together, I have applied putty to the joints and have sanded the wing and scribed the panels lines again.



A colleague modeller pointed out, that on some photographs an opening in the lower wing surface above the cockpit was visible, and that on the front spar some equipment was mounted. I have made an opening in the finished wing, but it is in this stage not possible any more to add detail, which would not be visible on the finished model anyhow.



## Fuselage

I have cut away the cabin door from the fuselage half. It shows that only X mm height is available to accommodate the text block above the door.

I have made a rear cabin wall from 1 mm styrene, fitted it trial and error and have glued it in place. From the same material I have made the walls of the toilet, which will be located opposite the cabin door. The door is a piece of 0.25 mm styrene sheet.

According to the photographs the alternative set of cabin windows is needed for the F.VIIa/3m (parts 8 and 9 instead of 2 and 3). I have cleaned up the window openings and have lightly sanded the cabin windows. They fitted exactly, no glue needed, but to secure them I have glued them with sparingly applied Revell Contacta Clear. I



have also glued small ends of styrene strip on the location where the control cables will be fixed. This way it will be possible to glue the cables in place without gluing them to the fuselage sides itself.



After gluing the cockpit and cabin interior in place I have glued the two fuselage halves together. Some drastic effort with tape and clamps was required for that. Afterwards the joints needed quite some work with putty and sanding to obtain a smooth surface.



There was still one troubling issue. On the photographs of the first F.VIIa/3m reproduced at the right the control cables for rudder and elevator were running just above the cabin windows, hence also just above the cabin door, while on the model they were running just under the wing and the top of the fuselage.



I took the drastic decision to go for the version of the photographs, so I have removed the cable attachment points on the fuselage sides, have cut the door just above the window and glued a piece of 1 mm styrene to adjust the door opening. The aft attachment point is right in the middle of the



FOKKER text on the fuselage side, so this attachment point will be placed only after the decal application.

The kit contains a piece of PE for the frame of the step under the cabin door, which according to the instruction sheet should be combined with part 51 for the step itself. However the step is then vertical, so I have replaced it with a piece of styrene, glued horizontally. Also, the frame leg are not vertical, but wider at the top.

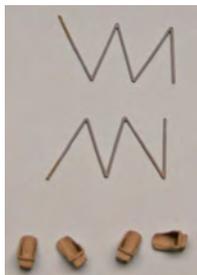


**Cabin**

Ref. 10 contains a picture of the cabin interior of the aircraft with the spare equipment as it was during the Reliability Tour. It shows that only the aft four seats were present plus a working table. I will use some parts from my spare box to furnish the cabin, even if this will be hardly visible.



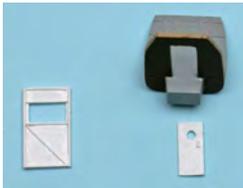
A rear wall and the toilet is missing in the cabin. I have produced the walls from 1 mm styrene. I have cleaned four cabin seats and applied putty to the sink marks. The frame work has been painted light grey.



Contrary to the building instructions, the photograph shows that the frame work is not visible in the cabin; it only shows up in front of the windows. So some panelling will have to be made which is painted in a light shade, probably light grey, as well as the ceiling. The front (and probably back) wall and a strip above the windows is dark, probably mahogany, as was usually the interior of the KLM aircraft<sup>3</sup>.

I have painted the ceiling part of the wing underside and the part of the cabin walls above and under the windows light grey, the forward and back cabin walls, the wall of the toilet and the side wall part under the wing mahogany, first a layer of Vallejo Model Colour, then a streaky layer of Model Air, simulating the wood structure. The floor I have painted dark vermilion, as it was done also for the Fokker F.VIII of KLM. This shows up as a light shade of grey in black and white photographs of the time.





I have glued the tube frame work to the fuselage sides with cyanoacrylate glue, as they had to be fixed on already painted surface. The cabin door and the door to the cockpit I have made from 0.5 mm styrene sheet and the former I have “stiffened” with a framework of styrene strip.



The cabin seats have been painted leather with a light grey base. I have used seat belts from the C-47 photo etch set by Eduard for the cabin seats. Other parts still to go in the cabin are a (folding) table, a stool, the spare wheel and a cylindrical structure, the use of which is unknown.



**Decals**

The decals in the kit were only partially useful for the F.VIIa/3m I was building. Below the cabin windows the text Fokker Aircraft Corporation was painted with a strange combination of a KLM-style A and a “normal” A and accompany logo resembling the KLM style logo without the crown and the letters F, A and C in it (as far as I can read it). This is probably the result of a very fast conversion of the aircraft from the KLM configuration on September 7<sup>th</sup> and its departure to the U.S. Also, behind the wing trailing edge a text block is present, which probably lists the allowable weights and fuel and oil capacity. I assume these texts are all painted in gold.



I have drawn the text under the cabin windows as much as possible with the KLM-style characters. The “FAC” logo I have made from a background of the KLM logo without crown and the FAC characters and the type name F.VII I have made from modified normal characters. The Fokker signature is a scan of the original signature.



For the text block I had to improvise. Next to the aircraft weights I have included the seating capacity and (assumed) fuel and oil weights. I have assumed the text block was in Dutch.



The FOKKER text was placed on the lower wing surface, on both sides of the fuselage and on the port leading edge of the wing between the fuselage and the nacelle, not on the wing upper surface. I have copied the text from a side view picture and have selected a best fitting font in CorelDraw to draw it. Sizing has been done on the model.

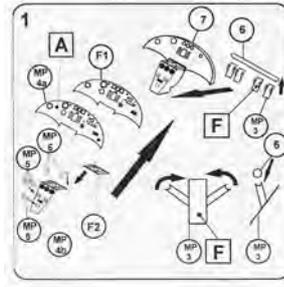
I have printed the decals on papier and have cut them out and fitted them on the fuselage and wing. The Fokker signature, although copied from the side view picture, appeared a bit too large. Also the tour number “20” on the tail was a bit too large, but this was also caused because the fin of the model is a bit too small and the stabilizer is placed a bit too low. The height of the text block with aircraft data would have had to be halved, but thanks to the decreased cabin door height it could keep its original size. The decal drawing is shown at the right; the yellow decals will be printed metallic gold and will be printed by Arctic Models, the black decals I will print on the inkjet printer on white decal paper.



I have sent the decal design to my regular decal printer Mika Jernfors of Arctic Decals. He found on the photographs still traces of type marking, which I hadn’t seen. The picture at the left shows the ALPS printed gold and white decals, the inkjet printed black decals and paint masks for the curved gold line, also produced by Arctic decals.

**Cockpit**

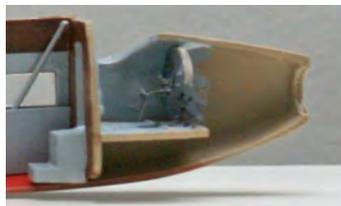
I have painted the cockpit walls light grey and the photo etched parts of instrument panel and mid console, the vertical bar of the control wheel and the rudder bar dark grey. The pilot seats will be painted aluminium, as well as the spokes of the control wheel. The control wheel edge will be painted leather. The background of the instrument panel and the mid console, where instrument dials will be placed, have been painted white.



When fitting the parts of the mid console together, it appeared that the instruction sheet was wrong. The PE part must not be folded along a single line, but in a Z-shape, otherwise it will interfere with the cabin floor and will not fit nicely on the styrene part. As a consequence also part of the paint work had to be redone.



The seatbelts have been painted light grey with aluminium buckles and the pilot seats dark grey for better contrast, although they are lighter colored on the photograph.



After attaching the rudder pedals to the cockpit floor and the center console to the instrument panel I have glued the cockpit wall-floor assembly and the instrument panel in the left fuselage half. The instrument panel was fitting very badly; I had to use Kristal Klear to attach it in the nose. Also, the step from cabin to cockpit ended up far above the cabin floor, so I have attached another step under it. Next I have glued the two control columns in place. Again there was hardly any room to do so, they cannot be moved forward, as they are touching the cockpit walls. Gluing the two pilot seats to the cockpit floor completed the cockpit interior.



**Engines, propellers and nacelles**

I have prepared the two halves of both nacelles and have glued them together. The joints showed up quite a lot, so some putty will be required. Before applying that I have drilled a 2 mm hole for the main undercarriage strut through the top and bottom surface of each nacelle. I have lengthened the undercarriage main leg of the kit with a piece of 2 x 1 streamline profile, which passes through the hole to the wing lower surface. The legs will be cut to the correct length just before mounting them to the model.



The first F.VIIa/3m had no Wasp engines, but Armstrong-Siddeley Lynx engines. I have bought resin Lynx engines from Owl Models. They are very finely modeled, the valve rods are only 0.2 mm thick. To keep this detail I will have airbrush them.



The Valom kit contains three different propeller models, two two-blade and one three-blade type. One two-blade type has the right shape as shown in the photographs. I have mounted a piece of 1.2 mm styrene rod in them and enlarged also the hole in the engines. I have finished the propellers with a streaky layer of much diluted burned sienna oil paint to simulate the wood grain and have painted the bolts aluminium.



Next I have started to model the exhaust. I did not want to model the vertical exhausts as shown in ref. 10, but have chosen the configuration as can be seen on the other pictures of the aircraft during the Ford tour.



I have shaped a 360° rings from 1 mm diameter solder around a wooden rod of 10



mm diameter and bent one end downwards and backwards to form the main exhaust. I have glued this ring to the back of the cylinders. Small pieces of 0.5 mm solder bent in a hook shape have been used to connect the cylinder exhaust ports to the main exhaust. I have glue a small piece of 1.3 mm brass tube to the main exhaust of the nose engine to make the connection to the exhaust under the fuselage. This part from the kit I have modified with a piece of 1 mm solder to connect it to the nose engine.



I have lengthened the exhaust for the middle engine with a piece of 1 mm diameter solder and have painted the engines first with a layer of gloss black and finished them with aluminium. The cylinders have got a thin wash of black, the exhaust have been painted gun metal, dry brushed with rust.

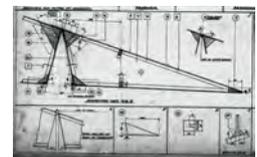


**Tail surfaces**

I want to mount the control surfaces in deflected position, even if this does not correspond to the attitude of the control column and the rudder bar (these are fixed parts in the kit. The ailerons are already separate parts in the kit, the rudder and elevator halves I have removed from the tail planes.



I have attached the PE control horns to ailerons, elevator halves and rudder. The control horns on the ailerons had to be placed quite far from the leading edge to allow sufficient aileron deflection upwards and downwards. On the model it is attached between upper and lower wing skin, contrary to the real aircraft, where it is hinged on the wing top surface. I have glued the control surfaces to wing and tail in a deflected position.



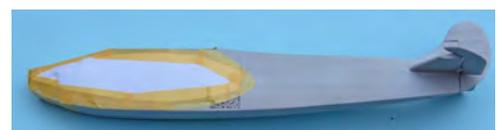
**Painting fuselage, wing and tail surfaces**

I have covered the openings in the fuselage and the cabin windows with tape and have put a piece of foam in the door opening. I have drilled a hole in the cabin ceiling part of the wing and have glued a piece of 1.5 mm brass rod in it to make handling during the painting easier, and have covered the grey part also with tape. The paint scheme is identical to the one I have used for the KLM Fokker F.VIII.

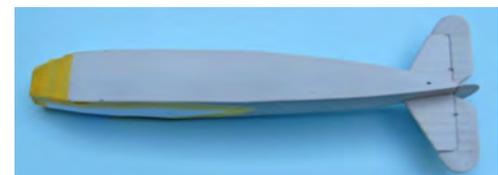


I have airbrushed the fuselage and the engine nacelles with a coat of Vallejo grey primer and the wing with a coat of Vallejo green brown (RAL 8000) primer. The engines themselves I have painted black and have given them a layer of gloss varnish when the paint had dried.

Next I have applied the outer pair of the paint masks for the curved golden cheat line and have covered the forward part of the fuselage with paper and tape.



The aft part and the bottom of the fuselage have been painted dark mediterranean blue, the wing radome tan. In the process I lost one of the control



horns; I have remade one of 0.25 mm styrene.

After removing the paper, tape and paint masks the dark blue rear fuselage needed only minor corrections and I could apply the other paint masks to the curved cheat line and protect the rest with tape, paper and a plastic bag.



I have sprayed the forward fuselage with a mixture of four parts black and one part steel blue, which gives a black with a slight tinge of blue. I have also airbrushed the nose, as it is a good base for the aluminium, which has to be applied over it. After removal of the shielding the fuselage looked good.



To simulate the wood structure of the wing I have applied dots of raw sienna oil paint and spread these out with a brush wetted slightly with painters medium and applying as little pressure as possible. The fuel tank cover I have painted light grey; on the photographs it shows a clearly different colour.



Initially I have varnished fuselage and wing with Vallejo gloss varnish, applied with the airbrush. However, the airbrush sputtered quite a lot, so after wiping off the drops it caused I stopped doing this and have switched to Microscale gloss varnish applied with a soft, wide brush. This leaves a stripe less surface.



I have treated the aluminium of the nose with Vallejo Model Air silver, dots sparingly applied with an extra fine microbrush of Modelbrouwers, which gives it the right appearance of worked aluminium.

**Decal application**

During the application of the decals printed on white decal paper with the inkjet a problem occurred, which I had never met before. As shown in the picture folds appeared when applying the decal on the well-varnished surface. The horizontal folds disappeared after treatment with Microscale SET and SOL, but the small one under the black lettering did not, even when applying the stronger DACO decal fluid. It seems that the decal paper

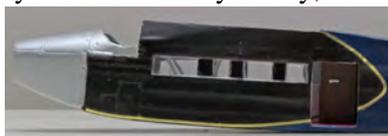


under the black lettering shrinks more than the white paper. Also part of the decal was damaged beyond recovery. The decals on the wing did show this phenomenon a lot less, and reacted better on the treatment with SOL.

As a solution to this problem I have prepared blank white decal paper decals<sup>4</sup> of the required size and have printed the FOKKER text on clear decal paper. Application went without a problem.



Next I have cut out all ALPS printed decals. Applying the golden cheat line between the black and dark blue part of the fuselage was a tricky job. Not only is the decal very flimsy, but also at the port side of the fuselage it has to be applied over the door opening without destroying the smooth shape of it. Also, it runs over one of the attachment points for the tail plane control cables. In the end the result was satisfactory.



Application of the remaining decals did not pose any problems. Two small pieces of white decal paper served to simulate the white pieces on the forward fuselage, the purpose of which is unknown to me. The position I have derived from the photo-



graphs. I have not separated the tour number 20 that runs over the hinge line of the rudder in two parts.

The ALPS tire decals printed by Arctic decals were not easy to cut out, as the small white lettering is difficult to see, and also application was not easy. But they even show the tire size.



**Undercarriage**



The picture at the left shows the remaining parts of the kit and some other items that still have to be used. Left row shows the two control horns located at the cockpit for the elevator (PE glued to a piece of 0.5 mm brass rod) the spare wheel from the scrap box which has the right diameter. The row next to it the cabin steps, the air driven fuel generator and the tail skid, the two lengthened main landing struts, the wheels and PE mud guards and their scratch build attachments, and at the right the two stabilizer struts, a Venturi tube, the toilet exhaust and the air relief of the fuel tank. The other parts are not needed or still have to be scratch build, for example the undercarriage V-struts, as the ones in the kit do not fit any more as a consequence of the moved engine location.



The mud guards of the aircraft are different from those shown in the kit; they are curved around the wheels and attached to the end of the wheel axles. The attachment structure I have built from slices of 2.4 mm plastic tube and pieces 0.35 x 0.5 mm styrene strip.



The V-struts between fuselage and main undercarriage strut in the kit did not fit any more, because the span wise position of the undercarriage had been modified. I have produced a new rear undercarriage strut from 1 mm brass rod with a "tail" of a styrene streamline strut, cut in half over length. This will give the undercarriage some additional strength. The forward streamline strut will be produced cut-to-fit from styrene streamline strut, once the undercarriage has been glued in place. The picture shows the dry-fitted components of one undercarriage leg.



**Cabin arrangement and wing assembly**

I have first glued the door to the cockpit in open position and have placed the four seats the folding table, the stool, the spare wheel and the cylinder in the cabin. The seats are a bit close to each other, as the cabin width is decreased by the frame work and the paneling under the windows. It would have been better, if I had cut the framework under the windows. On the other hand, a top view as on the picture at the left won't be possible once the wing is glued on the fuselage.



All equipment having been placed in the cabin, the wing could be glued in place, carefully aligning it on the fuselage. As the wing has been painted completely, I have used thick cyanoacrylate glue. It fitted perfectly, leaving no gap at all. I have glued the control horns for the elevator next to the



cockpit. I have also glued two small strips of styrene on the white rectangle around the FOKKER text, where the control cables will be attached

**Undercarriage and nacelle assembly**

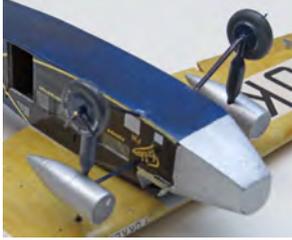
I have cut the main undercarriage struts to the correct length according to the Fokker three-view drawing and have glued them in the nacelles. I have glued a length of 2 mm chord streamline profile in the inboard opening in the nacelles. This forms the connection between nacelle and fuselage, where the motor controls and instrumentation links are housed.



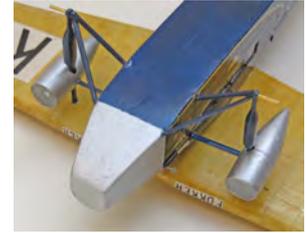
After dry-fitting and adjusting the length of the nacelle-wing strut, I have glued the top of the



main strut in the predrilled hole in the wing and the aft member of what will be the V-strut in the predrilled hole in the fuselage, aligning them well in a vertical plane. Again, I have used thick cyanoacrylate glue to attach them well. The angle of the brass axles still had to be adjusted a bit to be well aligned. I have also glued the tail skid in place.



I have dry-fitted the wheels and the mud guards to the axle and have cut the axles to the correct length. Next I have fitted trial and error the forward members of the V-struts between the main strut and the fuselage and have glued the struts in place. This I had to repeat for one strut, because one of the undercarriage legs became misaligned in the process and was not any more vertical.



I have made all struts between nacelle and wing from 0.65 mm styrene rod and they have been made to size trial and error. The first ones to be placed were the vertical strut next to the main undercarriage strut and the strut between the rear end of the nacelle and the wing. Then I have placed the small strut between the two forward nacelle struts. As can be seen on the photographs, the two struts running forward from the vertical struts to the front part of the nacelle were not present on the first F.VIIa/3m.



Next I have placed the two struts from the nacelle to the aft attachment point of the aft strut, making them trial and error to the correct size.

After application of the tail plane control cables I have glued the wheels to the axles.

### Control cables

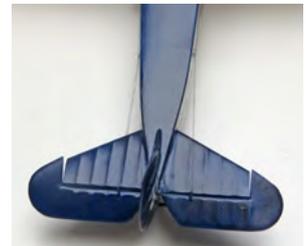
I have first applied two small pieces of white styrene on the FOKKER decal as support for the control cables of rudder and elevator. The control cables have been made from 0.06 mm black lacquered fishing line. Applying them was not easy, as the undercarriage struts and the nacelles obstructed the working area. Especially inserting the rudder cable in the fairing under the cockpit was difficult. Also I tried to apply, tension and glue the three cables at the same time. As the rudder cable makes an angle at the support above the cabin windows, that did not work, so in the end I did not fix the cables to the cabin windows at the port fuselage side. Luckily that is hardly visible on the black background. In the process even the decal with the FOKKER text separated from the white decal due to the frequent handling. I repaired that by using a left-over white decal with FOKKER text.



support. This worked much better (and with a lot less frustration).

Nevertheless, it would have been better and faster to apply the control cables before assembling the undercarriage and nacelles, even with the resulting increased risk of damaging the control cable afterwards. I have also mounted the control cables of the ailerons, which was a simple job. The pictures at the right shows the final result.

For the starboard side I have changed the procedure a bit. I have first applied the rudder cable, tensioning and gluing it from support to support and attaching it to the control horn of the rudder. Next I have applied the two elevator control cables, again from support to support.

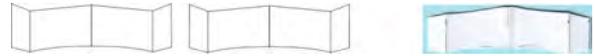


**Windshield**

The two front window windshield configuration of the first F.VIIa//3m, shown in the left photograph, was different from the single front window of the later F.VIIa/3m's, shown in the right photograph. This later configuration is also the one of the F.VIIb/3m, as contained in the kit. So a new windshield had to be constructed.



I have measured the gross dimensions and have cut a new windshield from carton. Trial and error the shape and size has been adjusted, and a scan of the windshield has been copied into CorelDraw and the outline has been drawn. After a number of iterations a sufficiently accurate drawing has been produced.



**Final assembly**

I have glued the cabin steps under the open cabin door and the "exhaust pipe for the toilet under the fuselage lower surface. The Venturi tube has been glued to the port side of the fuselage under the cockpit. The front and rear side of the tubes I have darkened.



The kit contained one venting tube for the fuel tank, but it is rather crude. I have formed two tubes from 0.5 mm brass wire, drilled 0.5 mm holes in the tank and have glued them in place. The tank lids I have first painted aluminium, but this did not have the right effect, so I have replaced them with thin slices of styrene rod.

I have glued the pattern for the windscreen on a sheet of clear plastic with Kristal Klear and after scoring the folding lines with a sharp knife, have cut out the windscreen, removed the rest of the Kristal Klear with a humid cotton stick and folded the windscreen in the required shape. I have removed, however, the small side windows; they were not visible on any of the photographs.



I have painted the window frame aluminium and have glued the windscreen under the wing and on top of the nose with Kristal Klear. Finally I have retouched the paint on wing and windshield.



I have glued one PE support to the air driven pump/generator. I could not figure out how to mount the second PE support included in the kit. It interfered in any possible configuration with the body and fluid lines of the pump.

Next I have mounted the engines, gluing them with Kristal Klear to nose and nacelles, adjusting them such that one cylinder was vertical at the top and the exhaust was pointing sideways down. I have also dry fitted the propellers on the engines.



The long exhaust has been cut to the required length according to the photographs of the original and the pipe has been bent in the correct curve. I have also glued two small supports to the exhaust damper.



The cyanoacrylate glue left white spots on the dark blue surfaces of the fuselage. I have retouched these with the Vallejo paint and varnished the spots again. It was not possible to get rid of all remnants of the whitish spots.



Last bits to do were the propellers and the navigation light on top of the rudder; navigation lights on the wings were not present on the photographs. I finished the propellers by tipping each of the mount-

ing bolts with Vallejo steel. The small navigation light has been painted light grey and the lamp got a layer of Vallejo silver. I finished the lamp with Revell red transparent paint.

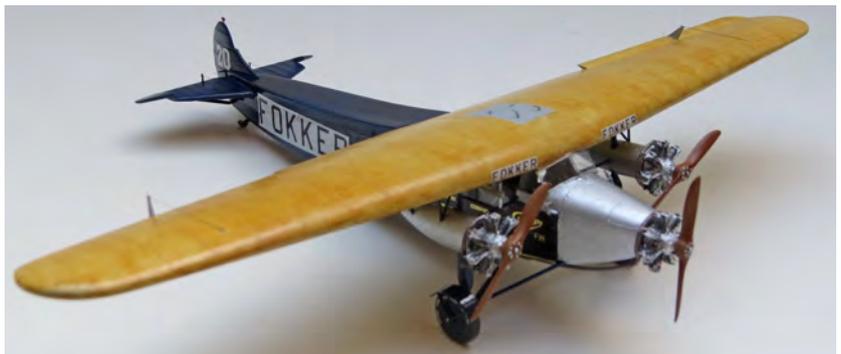


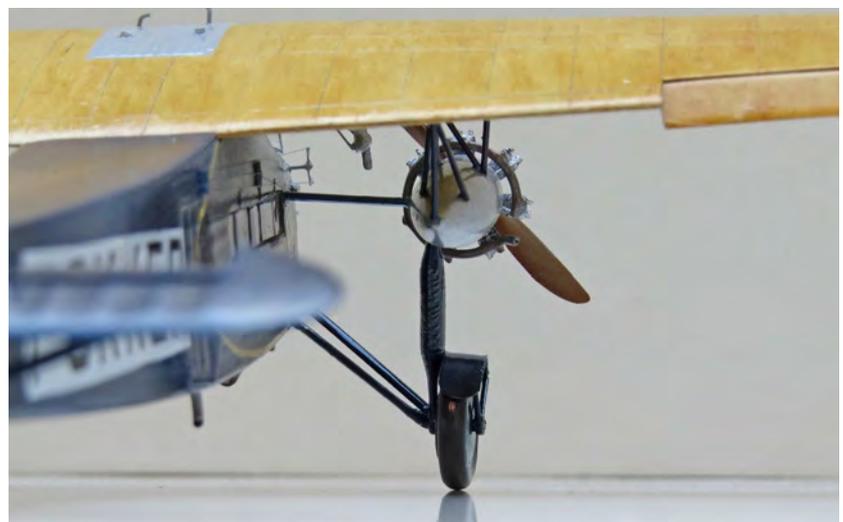
### Summary

The modification of the Valom Fokker F.VIIIb/3m into the first F.VIIa/3m was not too difficult. Span reduction is straight forward, increasing the cabin door size also, and producing a new windscreen is also rather simple, but requires some trial and error work. Changing the nacelle – undercarriage configuration is a bit more completed, but very well doable. Most work is to scratch-build new exhausts for the Lynx engines. Modifying the control cable routing ( and generally applying the control cables) has to be done when they still can be easily reached, so before assembling the nacelles and undercarriage legs. Other problems encountered had nothing to do with the modification, and could have occurred while building any other model. In the end a convincing Fokker F.VIIa/3m model as has participated in the Ford Reliability Tour in 1926 resulted.

Below some pictures of the finished model are shown.







## References

1. H.P. Alting, *Van Spin tot Fokker 100*, p. 23, Rebo Producties, Sassenheim, 1988
2. R.A. Arnken, *De Ontwikkeling van het Vliegtuig*, p.202, Gottmer, Haarlem, 1946
3. M. Dierikx, *Fokker, A Transatlantic Biography*, p. 86+17, Smithsonian Institution Press, Washington, 1997
4. H.J. Hazewinkel, L. Kuipers, H-W van Overbeek, R. Soupart & P. Staal, *Een eeuw Fokker, Verhalen en anekdotes uit 100 jaar Fokker geschiedenis*, p. 53, ISBN 978-90-808868-0-3, 2011
5. H. Hegener, *Fokker, The Man and the Aircraft*, pp. 55, 63 64, 189, 220, ISBN 0-8168-6370-9, 1961
6. H. Hooftman, *Alles over de Fokker Friendship, Fokker Verkeersvliegtuigen van F.1 tot F.28*, p. 32a, L.J. Veen's Uitgeversmij N.V., Amsterdam, 1963
7. H. Hooftman, *Fokker, Bekende en onbekende vliegtuigtypes van A.H.G. Fokker, Neerlands grootste vliegtuigbouwer*, p. 52, ARTI beeld encyclopedie 36, Alkmaar, 1959
8. H. Hooftman, *Nederlandse Vliegtuig Encyclopedie, Burgerluchtvaart in Nederland, Deel 1; Van H-NABA tot PH-AEZ*, pp. 97, 99, 101, 112, 130-131, 158, Cockpit-Uitgeverij, Bennekom, 1979
9. B. van der Klaauw, *Fokker verkeersvliegtuigen 1920-1940, Avia reeks Nr. 1*, pp. 28, 30, 78, Uitgevers Wyt, Rotterdam, 1978
10. R. de Leeuw, *Fokker Verkeersvliegtuigen, Van de F.I uit 1918 tot de Fokker 100 van nu*, pp. 50-56, 182, 207, ISBN 90 269 4074 2, 1989
11. *Luchtvaart Historisch Tijdschrift, Luchtvaartkennis, Jaargang 57, no. 2*, p. 67, ISSN 1381-9100, 2008
12. *Luchtvaart Historisch Tijdschrift, Luchtvaartkennis, Jaargang 59, no. 2*, p. 55, ISSN 1381-9100, 2010
13. *Luchtvaart Historisch Tijdschrift, Luchtvaartkennis, Jaargang 65, no. 2*, p. 62, ISSN 1381-9100, 2016
14. T. Postma, *Fameuze Fokker Vliegtuigen, Luchtvaart in Beeld nr. 1*, pp. 38-39, Omniboek, Kampen, 1978
15. T. Postma, *Fokker, Bouwer aan de Wereldluchtvaart*, pp. 67, 68, 75, Fibula - Van Dishoeck, Haarlem, 1979
16. F. Troost, S. van der Zee & W. van Zoetendaal, *Salto Mortale - Fokker in bedrijf 1911-1996*, pp. 102, 113, ISBN 907557410X, 1998
17. *Vliegwereld, Het Dertigjarige Bestaan van de Nederlandse Fokkerfabriek 1929 – 1949, Jaargang 15, No. 29*, p. 270, 1949
18. T. Wesselink & T. Postma, *De Nederlandse Vliegtuigen, Alle vliegtuigen ooit in Nederland ontworpen en gebouwd*, pp. 42, 44, Unieboek B.V., Bussum, 1982

## Appendix Model modifications and corrections; pictures, drawings and other documentation of the Fokker F.VIII

### Modifications & corrections

M = modification, C = correction

Change	Location/part	Modification or correction
M01	Cabin	Walls and floor, toilet
M02	Cabin	Door shape
M03	Cabin	Cabin door
C01	Cabin	Stairs to cockpit
C02	Cabin	Frame and wall covers
M04	Cabin	Table and spare parts
C03	Cockpit	Shape of photo etched part of mid console
M05	Cockpit	Cockpit door
M06	Cockpit	Windshield
M07	Engine	Armstrong-Siddeley Lynx
M08	Engine	Exhausts
C04	Fuselage	Control cable supports and cable routing
C05	Fuselage	Cabin steps
M09	Wing	Reduced span
M10	Wing	Lower surface above cockpit re-

Change	Location/part	Modification or correction
		moved
C06	Undercarriage	Position of main undercarriage leg

### Paint table

H = Humbrol, M = Marabu (Brilliant Painter), MI = Microscale, O = oil paint (Van Gogh), RA = Revell Aqua, RE = Revell Enamel, V = Vallejo

Code	Colour	Where
H15	Midnight blue	Stabilizer struts, undercarriage and engine suspension struts
H22	White	Instrument panel base
H62	Leather	Cabin seats, edge of control wheel
H85	Black	Panels between cabin windows
H110	Natural wood	Propellers, cabin table, tail skid
H113	Rust	Exhausts (dry brushed)
H125	Dark grey	Instrument panel, rudder bar, mid console
H127	Light grey	Cabin walls, ceiling, lower part

Code	Colour	Where
		of mid wing section, pilot seat belts, cabin door inside, cockpit door, fuel tank cover
M012132	Black	Control cables
MI Micro Gloss	Clear varnish	All surfaces prior to and after decal application
O234	Raw sienna	Wood structure wing & ailerons
O411	Burnt sienna	Wood structure propellers
RA36178	Tank grey	Wheels
RE731	Transparent red	Navigation light
V70.846	Mahogany	Forward and rear cabin wall, top part of cabin walls, cockpit door
V70.908	Carmine red	Cabin floor
V71.036	Mahogany	Forward and rear cabin wall, top part of cabin walls, cockpit door
V71.062	Aluminium	Nose section, nacelles, pilot seat belt buckles, door handles
V71.063	Silver	Rudder navigation light
V71.065	Steel	Propeller bolts
V71.072	Gun metal	Engine exhausts
V71.074	Radome tan	Wings
V71.087, A.MIG-046	1/5 RAL5013, 4/5 black	Forward part fuselage (except nose)
V71.313	Dark Mediterranean blue	Rear part of fuselage, tail planes
V71.601	Grey primer	Fuselage and tail surfaces
V71.606	Green-brown primer	Wing

**Documents, photographs and drawings**

If no source is mentioned, the documents have been taken from the Internet.



[Source: ref. 10]



[Source: ref. 10]



[Source: ref. 4]



[Source: ref. 10]



[Source: ref. 4]



[Source: ref. 10]



[Source: ref. 4]



[Source: ref. 7?]



[Source: ref. 18]



[Source: ref. 15?]



[Source: ref. 15]



[Source: ref. 15]



[Source: ref. 9]



[Source: ref. 1]

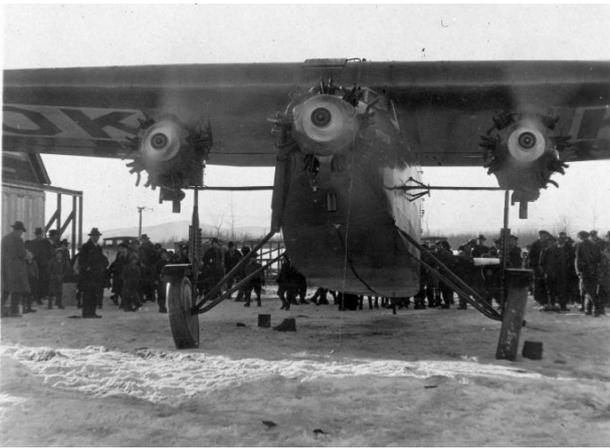


[Source: ref. 5]



[Source: ref. 5]





[Source: ref. 4]

<sup>1</sup> I have chosen to open up de door, so have made a new door from styrene.

<sup>2</sup> In the drawing and on photographs of later F.VIIa/3m aircraft, e.g. the 803 of the LVA, the outboard single strut is replaced by a V-strut.

<sup>3</sup> The instruction sheet indicates light grey cabin walls, which is not correct. Also for the F.VIIb/3m version the framework should be paneled in.

<sup>4</sup> In a first attempt I did not varnish the blank decals. This was a mistake, because the decal paper is covered with a gluing top layer to fix the inkjet prints better, and without a layer of varnish reduces very fast in a shapeless blob during application.