VFW-Fokker 614 Airmodel¹ vacuum kit
Monoplane passenger
Scale 1:72

The VFW 614 is not really a Fokker product, but as it was developed and produced in a period when Fokker and VFW formed a merged company, I judged it still could fit in my collection of “Dutch designed and built” airplanes.

The VFW-Fokker 614² was a twin-engine jetliner designed and was the first jet powered passenger plane built in West Germany. It was produced in small numbers by VFW-Fokker in the early- to mid-1970s. It was originally intended as a DC-3 replacement. The VFW 614 was originally proposed in 1961 by the Entwicklungsring Nord (ERNO) group, comprising Focke-Wulf, Hamburger Flugzeugbau (HFB) and Weser as the E.614, a 36-40 seat aircraft powered by two Lycoming PLF1B-2 turbofans. West German industry was subsequently reorganised and Vereinigte Flugtechnische Werke (VFW) was established at Bremen. Development of what was now the VFW 614 continued. Although Lycoming abandoned the PLF1, development continued using the Rolls-Royce/SNECMA M45H turbofan, which was developed specially for the VFW 614.

In 1968, the project was given the go-ahead, with 80 per cent funding by the West German Government. Full-scale production was approved in 1970. Also risk-sharing agreements had been concluded with SIAT in Germany, Fairey and SABCA in Belgium and Shorts in the UK. Since the merger between Fokker and VFW the Dutch Institute for Aircraft Development (Nederlands Instituut voor Vliegtuigontwikkeling – NIV) subsidized the VFW 614 project too. Final assembly of the aircraft would be done in Bremen. The first of three prototypes flew on July 14, 1971.

The aircraft had an unconventional configuration, with the two M45H turbofans mounted on pylons above the wing. This arrangement was used to avoid the structural weight penalty of rear-mounted engines and the potential ingestion problems of engines mounted under the wings. It allowed a short and sturdy undercarriage, specially suited for operations from poorly prepared runways.

Development of the aircraft was protracted and orders slow to materialise, despite a strong marketing campaign. The situation was not helped by Rolls Royce's bankruptcy in 1971, which threatened the supply of engines. Also, the first prototype, the D-BABA, was lost during flutter testing on 1 February 1972 due to elevator flutter, worsening the order situation. By February 1975 only ten aircraft had been ordered. The first production VFW-614 flew in April 1975 and was delivered to Denmark’s Cimber Air four months later. Other VFW 614s have flown with Touraine Air Transport, Air Alsace and the German Air Force.

The aircraft was initially prone to engine problems, and it was too expensive for the small regional airlines whose needs it was designed for. Moreover, it had to compete with the F.27 Friendship and F.28 Fellowship³, the two other airliners of the Fokker-VFW stable being offered by the same sales team. Three aircraft were flown but never delivered, and four airframes were broken up before completion. The VFW 614 programme was officially cancelled in 1977, and the last unsold aircraft flew in July 1978.

In 1980 the merger between Fokker and VFW was ended. Most 614s had been disposed of by 1981, with the manufacturer buying back the aircraft and simultaneously ending support of it. Thereafter, only the German Air Force aircraft remained in service, the last being retired in 1999. The last airworthy VFW 614 was in use with DLR for the Advanced Technologies Testing Aircraft System (ATTAS) project. After being based with DLR in Braunschweig, Germany for many years, this aircraft (registered D-ADAM) was retired in December 2012 to the Deutsches Museum Flugwerft in Oberschleissheim, Germany. I have added a list of all VFW614s produced, taken from ref. 2, in the appendix.

The kit is delivered in a plastic bag and contains three sheets with the vacform plastic parts, a clear plastic vacform part for the windscreen and cockpit roof, a title sheet with a short description of the aircraft and general painting and building instructions and a double

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¹ VFW-Fokker
² VFW 614
³ Fokker F.27 Friendship and F.28 Fellowship

Rob Hamann; 15-05-2016 - 1
sided A3 instruction sheet. The blue bits on the plastic in the picture are try-outs for the decals I have drawn.

Airmodel also carries a selection of resin detailing parts for cockpit, engines, undercarriage, and flap track fairings, which may be purchased in combination with the vacform parts or separately, and decals for the prototype, Luftwaffe and Cimber Air versions. The decals can only be bought in combination with the vacform parts.

The instruction sheet contains ample information for detailing the model and also gives indications, which parts (floor, bulkheads and wing spars) should be scratch build to obtain a sturdy model. It also specifies the colours to be used for the Luftwaffe version in FS, Methuen and Humbrol codes.

I am going to build the third prototype, the D-BABC in its test configuration. There exist several pictures of the aircraft, showing on one side typical markings as used during test flights, which were, however, not always there (cf. the B&W picture on the first page). The picture of the other side of the aircraft that I have found does not show test markings.

I have drawn the decals with CorelDraw (for details see the appendix). As there is white in some of them, they cannot be printed on an inkjet printer. Examination of the original version of the decal sheet by my
regular decal printer revealed that the blue, blue grey and grey objects would not print well on an ALPS printer. So I have separated the logos and walk paths out, which I have printed on my inkjet printer. When applied in two layers it result in a perfectly opaque surface.

Most information on the VFW 614 is given in references 1 and 2. On Internet I have found a three-view drawing, which I have included in the appendix.

<table>
<thead>
<tr>
<th>Ref.</th>
<th>1:72</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Span</td>
<td>21.50 m</td>
<td>298.6 mm</td>
</tr>
<tr>
<td>Length</td>
<td>20.60 m</td>
<td>286.1 mm</td>
</tr>
<tr>
<td>Height</td>
<td>7.84 m</td>
<td>108.9 mm</td>
</tr>
<tr>
<td>Engine</td>
<td>Rolls Royce/SNECMA M45H Mk 501; 2 x 33.2 kN</td>
<td></td>
</tr>
<tr>
<td>Crew/passengers</td>
<td>3/40</td>
<td></td>
</tr>
</tbody>
</table>

As can be seen from the table the main dimensions of the model are …… to scale 6.

**Parts**

A number of parts, mainly cockpit furniture, bulkheads, floors and all passenger seats, have to be scratch produced from styrene sheet as indicated in the instruction sheet. The resin parts include the cockpit floor and rear wall (b through e) and the pilot seats, instrument panel and controls, so these parts do not need to be made. All 40 passenger seats, however, must be produced, not a very agreeable job.

The instruction sheet includes a scale drawing for the parts to be produced. I have glued a copy of these on 1 mm plastic sheet with Microscale Kristal Klear diluted with water. The walls of the toilet are not drawn in the instruction sheet, so have to be made from scratch, and fitted trial and error.

The pattern for the mounting points of the passenger seats in the floor I have continued until the place of the toilet, and transferred to the floor by marking them with pin pricks 7.

I have marked the outline of the ten parts, which have to be removed from the plastic sheets, with a black felt pen and the tedious work of endless sanding could begin.

The first fuselage half I have removed from the plastic sheet in the orthodox way by rubbing I on a sheet of sandpaper glued on a piece of flat wood. This took almost two hours (and a lot of dirt).

There were quite a lot of bubbles on the surface (traces of the air tracks), which sometimes were transformed in small holes when removed.
From a fellow modeller I got the tip to use a sander, clamped to a workbench instead of the usual plank with sandpaper and manual labour. So I tried that for the second half of the fuselage and the other parts. Next to the fact that the process was some weird massage for the hands and very noisy, some results were not excellent, as this picture shows. Exerting too much pressure on the wing caused a hole at the thinnest part, and control on the speed of the process is lacking a bit. I have completed the sanding in the old-fashioned way: by hand.

The fuselage halves fitted quite decently together with only minor gapping at the nose and tail section. I have dry fitted them and also one of the wings. The wing was not fitting well to the fairing moulded to the fuselage; both in chord and thickness were too small. I have solved that by gluing an oversized “rib” of 0.5 to 1.0 mm thickness to both fuselage and wing root, which has been combined with a construction to stiffen the fuselage-wing connection.

All other parts have also been removed from the plastic sheet and the edges of the parts have been carefully cleaned and adjusted.

Fitting wing and tail upper and lower parts together showed another reason to do something to the tail and wing root. There was considerable gapping between both parts of the tail surface and a bit less of the parts of the wing surface also.

I have cut the “custom” parts from the 1 mm plastic sheet and have temporarily glued the aft bulkheads in place to make dry fitting of the cabin interior easier.

I have also cleaned the resin parts. I general they are of good quality and well detailed, but some parts still have air bubbles, some on very awkward places, for example in the white circle around one of the pilot seats.

**Fuselage**

In order to assemble the fuselage easier, I have glued strips of 0.25 mm thick plastic inside both fuselage halves on the joints, alternating between left and right.

The three wing centre section parts have been glued to the cabin floor, measuring their correct position from the drawing in the instruction sheet. To fit the cabin floor easier in the fuselage halves and to hide the recess in the fuselage half at the location of the wing root, I have attached a 5 mm wide, 0.25 mm thick strip at both side inside the fuselage, against which the floor will be mounted. The height above the fuselage bottom I have determined by dry fitting the cabin floor in the fuselage halves. I had to remove two millimetre from the height of the under floor “spars” to fit these parts correctly in the recesses of the wing roots.
However, when fitting the floor later on, there appeared an unacceptably large gap at both sides between floor and fuselage walls and, even worse, the two “spars” under the floor did not touch the wing root. To correct this, I have made new floor and spars, scaling them up in width. I have also made the new floor wider at the place of the wing root recesses. The picture shows the old floor at the right and the new one at the left.

Repeating the dry fit the forward part of the floor still appeared a bit to narrow. Gluing a small strip to the edge of the floor and sanding it to the correct width have repaired this.

Fitting the floor in both fuselage halves showed that I had to compress the fuselage quite a bit in height to make the under floor spars touch the fuselage bottom. So again a correction had to be devised. I have glued a 3 mm wide to the under floor parts and have sanded that trial and error to a profile such that they touched the fuselage parts smoothly. I have also added a partial under-floor bulkhead at the front to create a compartment for lead to prevent tail sitting. A template for cabin floor and centre sector wing spars with the correct dimensions is included in the appendix. I have also stiffened the floor with some beams of plastic, as the fuselage halves have hardly any stiffness of themselves.

I have also cut out the 31 cabin windows in the fuselage walls. The correct size of the windows I have checked with a template made of a carton copy of the Airmodel decals. The engraving of the first window of the starboard side and the cargo door at that side have been removed to reflect reality and to fit the Airmodel decals. I have removed the passenger door and the logistics door at the back of the cabin, which will be mounted in open position to allow at least some visibility of the cabin interior.

After completion of the cabin interior and the cockpit parts I have dry-fitted cabin, cockpit, fuselage halves and transparent cockpit roof together and secured them temporarily with tape. The cockpit roof was larger than the fuselage, and I have corrected that somewhat by dipping it in hot water. This gave me a slight scare, because the material got very weak, so I removed it quickly from the water luckily without too much damage.

Fitting the roof again, it became clear that quite some work had to be done to get an approximate correct matching of fuselage and roof. I have made the fuselage wider by adding several layers of 0.25 mm plastic strip until an acceptable fit had been achieved.

I have covered the strips with several layers of Revell putty and sanded it smooth, fitting continuously the cockpit roof on the fuselage to check shape and width. When that had been done, I have separated both fuselage halves again, sawing them apart at the nose. In this rough process all handles disappeared (without trace) from the cockpit, so I had to make a complete new set.
Next I have glued the cabin interior to the right fuselage half and cockpit interior to the cabin forward bulkhead, taking care that all was arranged symmetrically, which was not an easy job. When that had dried I have glued both fuselage halves together. In spite of all the careful dry-fitting, there appeared a considerable gap at the bottom joint, which I have filled with some trips of plastic.

After sanding these strips flush I have also opened up the nose wheel bay.

**Cabin**

I had marked the cabin floor plan according to the kit manufacturer’s instructions, but on Internet I found ref. 8, containing an original drawing of the cabin layout, both for a 40- and for a 44-passenger layout, that was different. Main differences are the arrangement of the pantry and toilet and the presence of a freight and luggage compartment in the cabin. Also the pitch of the passengers seats was different, as well as the width of the seats. On the same website two cross-sections were given, one at the access door with integrated stairs, a second one of the cabin itself. I have reworked these drawings to match the scale of the model and will use them to detail the cabin (access door stairs, luggage bins, seat pitch, cabin length and forward and rear bulkhead details). I will implement the 40-seat arrangement, replacing the three seat rows behind the emergency hatches by instrumentation racks, as are usually mounted in prototypes.

The passenger seat production process has been detailed in the appendices. The picture shows the different seat variants, from left to right prototype double seat, series double seat (widened as the prototype seat was too narrow for the new cabin floor), two test operator seats, one repaired resin pilot seat (air bubbles) and the other pilot seat.

The full set of 14 pairs of seats (six at the right side and eight at the left side of the cabin, the remaining seats being sacrificed for the test equipment racks and test engineer seats) has been produced in real “series production” style.

I have assembled the freight compartment and the pantry/toilet bulkhead to the cabin floor and have dry fitted them in the fuselage halves. It gave the right appearance, but there also appeared a large gap between the aft bulkhead and the fuselage walls. I have corrected this by gluing 0.5 mm thick strips around the circumference of the aft bulkhead.

According to a picture in *Flight* magazine the VFW 614 had no closed luggage bins, but open racks, as many aircraft in the late 60’s and early 70’s. I
I have modelled some test equipment racks to be mounted in the mid cabin section from 0.5 mm sheet. Dimensions have been derived from standard 19" rack specifications. Details for these racks have been made by means of decals drawn in CorelDraw and Microsoft Visio (see appendix). I have mounted rack supports cut from 0.25 mm thick plastic sheet and have painted the racks and the part of the cabin ceiling above them light grey (Humbrol 129), the colour I have selected for all cabin and cockpit walls and ceiling. During this paintwork I have taken care to tape the parts where parts have to be glued together.

I have mounted rack supports cut from 0.25 mm thick plastic sheet and have painted the racks and the part of the cabin ceiling above them light grey (Humbrol 129), the colour I have selected for all cabin and cockpit walls and ceiling. During this paintwork I have taken care to tape the parts where parts have to be glued together.

I have glued the rack in place with normal plastic cement, except for the supports to the ceiling, which have been fixed with cyanoacrylate glue to the already painted ceiling.

I have finished the painting of the cabin walls and the floor, for which I have chosen a blue colour, according to aircraft descriptions and the instruction sheet. I have also glued the “spar” against the forward centre section bulkhead.

Next I have applied the decals for the cabin interior: the toilet lights, the exit signs above doors and emergency exits, the pantry details, screen for the cabin attendant, the test equipment racks and the luggage rack details (buttons, lights and oxygen mask hatches). The pantry equipment decals reflected too much light, showing all irregularities, but that disappeared with a layer of satin varnish.

I have glued the seats and the instrument racks on the cabin floor on the marks indicated by scratched lines beforehand. The cables on the rear of the racks have been modelled with white painted 0.2 mm metal wire.

The aisle was rather large; in retrospect I could have made the seats a couple of millimetres wider.

The folding tables at the back of the seats I have modelled by means of dark grey pieces of decal.

In dry-fitting the furnished floor in the fuselage halves I noticed that the test equipment racks were touching the cabin walls, preventing the fuselage to close. I have broken the racks loose from the floor and glued them in a position 3 mm closer to the middle of the fuselage. To fit the floor well in the fuselage I also had to adjust the top of the holes for the spar in the wing roots. I did not notice this beforehand, because
without the seats and racks the floor was considerably less stiff.

**Cockpit**

The canopy in the kit is vacuum formed from rather thick and very hard plastic, which could not be worked with a knife as I normally do. So I have sawed it in gross shape and sanded the remaining plastic off to the perimeter vaguely engraved in the plastic. Especially cutting along the lower, curved edge was quite a job; I used a piece of tape as a guide during the process.

When fitting the “finished” canopy to the fuselage it appeared to be rather oversized and quite a bit too wide compared to the fuselage. In final assembly I will try to correct this.

From strip material I have made various bits to decorate the cockpit: control sticks, rudder pedals, trim wheels and a number of handles.

Dry-fitting the cockpit revealed a major problem: the cockpit floor was far too wide to fit inside the fuselage. Decreasing its width by sanding off the edges improved the situation a bit, but still the fuselage halves would not close. So in the end I have removed the forward cabin bulkhead and the cargo hold, have taken 2 mm off the cabin floor and the cargo hold wall and pasted the cabin parts together again. As the cockpit floor could now move more to the back, the fuselage halves would close with the application of appropriate force.

However, the instrument panel would still not fit over the central console, so it has received the same sanding treatment. In the end an acceptable arrangement of the office was the result.

As the cockpit floor was now lying deeper in the fuselage, there appeared a rather large wedge shaped gap between the wall of the cargo compartment and the cockpit wall, when fitting cabin and cockpit in the fuselage. Also there was a gap between the cockpit bulkhead and the top of the fuselage, ranging from zero at the location of the side consoles to almost 2 mm at the top. I have repaired that by adding a 0.5 mm thick wedge to the cargo compartment wall and increasing the bulkhead diameter with a number of 0.5 mm thick plastic strips.

Now the cockpit part fitted nicely. I have glued the black painted rudder panels in place and have painted the dials of some instruments light blue, and accentuated others with black paint.

I have glued the trim wheels in place and have produced handles for throttles and other controls from 0.4 x 0.25 mm strip and 0.5 mm rod and have glued them on the central console. Dry fitting the pilot seats gave a decent impression of the office.

On fitting the cockpit interior in the fuselage it appeared that the outboard rudder panels interfered with the fuselage walls; one disappeared with a jump to unknown places. I have solved this by cutting the remaining pedal in two and mounting them on the original place. Now it fitted well, and it will not be visible once the dashboard is mounted.

I have mounted the instrument panel, adjusting slightly the attachment to the central console and adding another support directly to the rear of the console and the cockpit floor. A new set of han-
dles has been mounted also, as the old ones had not survived the extensive sanding. Gluing the control columns in place has finished the cockpit interior. Fitting the transparent cockpit roof on the fuselage offers a last view on the complete cockpit interior.

**Wing and tail planes**

The instructions recommend reinforcing the wing-fuselage connection with a balsa strip. I have opted for a plastic profile of 2 x 4 mm for that function, which provides better strength and is easier to assemble. The strip will be glued to the front side of the centre section forward wing spar. I have cut corresponding holes in the (reinforced) wing roots of the fuselage halves. The strip has been tapered to match the dihedral of the wings.

The wing halves have been glued together and cut outs in the wing root have been made to match the “spar”. I have mounted the fairing for the flap extension mechanism in place. There appeared a rather big jump between the wing top surface and the top surface of the fairings, which I have filled up with small pieces of plastic. I have also sanded the wing trailing edge to a sharper profile. All panel lines have been engraved anew.

To position the wings in the correct dihedral I have made a jig in carton, copying the correct dimensions from the instruction sheet. Fitting wings and fuselage together, it appeared that the fin was not straight. I have tried to correct that by dipping it in hot water and keeping it straight during cooling. This only worked partly; the tip of the fin was o the correct position, but the fin itself was bent. So in the end I have opened up the joint and glued it again in the correct position.

The position of the elevator halves was indicated by a relief in the plastic of the aft fuselage. I have not followed the advice in the instruction sheet to use a tab to connect the elevator halves, but have glued them in place using a template cut from a carton copy of the front view in the instructions. I have reinforced the joint at the upper side with thick cyanoacrylate glue. The root of the elevator halves did not fit nicely the curvature of the aft fuselage, so I have filled the gap with wedges cut from 0.25 mm plastic sheet.

In front view the model had the right aspect, but the bottom view showed a slight surprise. As I had aligned both wings in length direction, which implied reshaping the hole in the one of the roots for the spar, the wheel bays were severely misaligned. So some serious cosmetic surgery was required. At the same time I have covered several gaps in the wheel bays and have inserted a strip of 1 x 1 mm to bridge the height difference between the wing roots and the fuselage fairings.

I have made a cut out in the leading edge of both wings to accommodate the landing lights and finished it with pieces of 0.25 mm plastic sheet.
**Fuselage and wing finishing**

Finishing the joints between the fuselage halves and between wing and fuselage has taken many putty- and-sanding cycles, a common problem with vacform kits. Major problem there was to create a “natural” curvature of the topside of the aft fuselage. On the underside of the fuselage a number of hatch outlines had to be inscribed again.

The gap between the door openings and the cabin floor have been closed with small strips of 0.5 mm thick plastic sheet.

I have masked the cockpit windows in the clear cockpit roof part and have glued it in place with two-component epoxy glue to obtain a strong joint, even when the part is under tension. Quite a lot of sanding has been required to obtain a smooth transition between the transparent cockpit roof and the fuselage, and even then the characteristic straight nose profile of the VFW 614 could not be reproduced. Also, quite some dust collected in the cockpit interior, which attached itself by preference on the windows.

**Engines**

On the Internet I have found a good picture of the turbofan engine of the VFW 614. It shows “exhausts” on the engine pylon, a large one, which according to the drawing in Flight is part of the air treatment system, and a smaller one, which is the drain for pylon and engine. There is something rudimentary modelled on the resin part, but this certainly needs improvement.

From the picture I could derive the scaled dimensions of the exhausts, and I have selected tubes from my materials box that came closest to these dimensions. It appeared that the thickness of the pylon was too small to accommodate the diameter of the large exhaust, so I have selected smaller diameter tubes to model it.

I have made the large exhaust from a 1.0 x 0.8 mm aluminium tube, mounted in a 2 mm aluminium tube, of which the inner diameter had been widened to 1.6 mm. I have sawed slits in the pylon trailing edge and have glued the exhausts in it.

Even now the (undersized) 2 mm tube was too wide for the pylon, so I have filed one end down to the pylon thickness.

I have glued engine fan and forward part of the engine to the rear part, as the fans were rather vulnerable due to a couple of air bubbles. The diameter of the rear part was quite a bit larger than that of the rear part and also not really cylindrical, which required a bit of sanding to adjust it.

I have painted the engine fans and casings aluminium and the pylon light grey (Humbrol 128). However, the joint between the forward and middle resin parts showed up rather badly, and also some joints in the pylon had not been finished neatly, so I went over both engines with putty, and have repainted them after sanding.
The exhaust cones have been painted Vallejo metallic black. I have given the fans a wash with black water paint to bring out depth in the engine and have painted the inner side of the small exhausts black and the outer side of the heat exchanger exhausts aluminium. The forward segment of the nacelle has been painted Vallejo chrome to obtain a slightly different metallic colour. I have inserted 0.4 mm brass pins in the pylons and have drilled corresponding holes in the fuselage to make a strong connection to the wing.

**Undercarriage**

On the pictures of the aircraft on the ground only a narrow undercarriage door attached to the main leg can be seen, so it is not clear whether there is a door covering the wheel well with extended or retracted landing gear. Luckily some pictures on Internet resolved this issue: there are no doors. The picture below comes from ref. 9.

I have cut out the cylindrical opening in the wing centre section of the fuselage for the wheels, fitted the wing to the fuselage and cut out the corresponding part of the wheel bay in the wing. When dry fitting the resin main undercarriage it appeared that the wheel bays in the wing were too narrow, so I have widened them.

The room between the under floor spars is rather big for a wheel bay, so I have made walls from 0.5 mm plastic surrounding just the round opening in the fuselage bottom, and sanded the edges in the same contour as the fuselage. The picture shows that there is some misalignment of the forward spar, but this will not show up in the finished model, I expect.

The wheel bay for the nose wheel also has been made from 0.5 mm plastic sheet. I have dimensioned that according to the engravings of the nose wheel doors such that the bay is about 1mm wider that the doors. I have fitted it trial and error in the nose, and while doing that, it appeared that the resin cockpit floor was far too large for the fuselage; it could not close. So I have sanded quite some material off to fit the resin part more or less appropriate in the nose.

The inner walls of the wheel bays have been painted mid grey (Humbrol 165). The shape of the wheel bay openings had to be adjusted after wing-fuselage assembly, and at the same time the remaining openings into wing and fuselage have been closed with small pieces of plastic.

I have made wheel bay doors from 0.5 mm plastic, fitting the dimensions of the wheel bay openings. Hinges have been simulated with pieces of 0.25 x 0.4 mm strip.
The hydraulic cylinders have been made from aluminium and brass tubes of different diameters; the rings around the 2 mm diameter main undercarriage retraction cylinders I have made of slices of 2.25 mm plastic tube, hollowed to 1.95 mm. The picture below shows all parts of the undercarriage and their mounting in the wheel bays. The nose wheel mounting still needed a slight correction by separating it a bit more from the aft bulkhead to fit nicely in the wheel bay.

When I had glued the wheel to the undercarriage legs, only the right wheel did not touch the ground. This I have corrected by removing the wheel again and regluing them in a slightly different position.

**Final assembly**

**Painting**

I have chosen to paint the top of the fuselage and the fin white, and the wings, horizontal tail plane and lower side of the fuselage mid grey. To simulate the main joints between fuselage centre section, cockpit, tail section and fuselage components I have painted these in separate steps. Even during these painting steps the shape of the nose section still needed correction.

The lower side of the fuselage has been treated the same. Wing and tail plane leading edges have been masked already in this phase. When this had been finished I have masked the cockpit window styles and painted them white. The major paint job has been finished by painting the wing and tail plane leading edges black.

**Wing alignment and fuselage correction**

After mounting the undercarriage and dry fitting the wheels on it the right wing tip was quite a bit lower than the left one. To correct this 1.75 mm of plastic under the wheel was required. I have chosen to take the left undercarriage leg out again and to make it 1.75 mm shorter. This also improved the low-on-wheels profile of the 614 a bit.

When fitting a copy of the red window decal on the left fuselage, it appeared to have one window more than was engraved (and opened) in the fuselage. A check with the original drawings from the VFW 614 handbook showed that the decal was right, so some repair was necessary. I have marked the window on the fuselage by means of the carton template I had made before and have removed the material by drilling holes along the outline and cleaning it with the knife.

**Decal application**
I had noticed already that the door to the luggage compartment at the right side of the fuselage was placed too far forward; it ended up at the cockpit side of the cockpit-fuselage joint, so had to be separately applied. Worse, when attempting to place the red decal around the windows I had a nasty surprise: the spacing between the windows and the fuselage did not fit at all the spacing on the decal. Next to a certain amount of irregularity, there was a systematic difference: the windows on the decal were spaced wider than those engraved in the fuselage.

As a consequence these decals have to be cut in pieces of two or three windows wide, and applied separately, covering gaps with small pieces of (a spare part of) red decal. In the end I have managed to do this, but the result does not deserve a medal.

I have applied the decal with the luggage compartment door on a place that seemed logical to me and have dry-fitted the part of the decal intended to cover the nose section up till the cockpit windows. This again showed a serious mismatch between the model and the decal: the decal covered part of the cockpit windows at the cabin side, but was far too narrow to reach up to the windows at the front.

I have chosen to cut off the excess decal material at the rear side and to have a smooth line to the forward part. After applying both left and right side, I have removed the overlap in the middle with a sharp, new knife blade. However, this does not show very nice, so I have later painted the white part under the cockpit windows red (Vallejo dark vermillion matched the decal colour quite nicely).

At the tail the red decal also showed some unexplainable configuration; both sides did not meet, and the general form did not seem logical. Also here some paint helped out.

The other decals on the fuselage did not pose any problems. I have used the decals from the Airmodel sheet, except those for the black and white visual marking, the “11” and the luggage hatches, which I had drawn myself and have been ALPS printed by Fireball Models. I lost one of the small decals before the wing leading edge on the aircraft belly.

The decals outlining the different hatches were not present on the Airmodel decal sheet, so the came from my own sheet.

I have covered the white part under the cockpit windows with Vallejo dark vermillion, which matched the decal colour quite well. I have also corrected the tail section the same way.

The decals on the wings were also my own decals. The narrow lines were a bit difficult to apply in one piece; next time I will compose such decals from several individual pieces.
Next I have removed with a new, sharp #11 scalpel the parts of the decals covering the window openings, at the same time removing excess plastic, adjusting the openings to the decal image. I have given the window decals a layer of Humbrol gloss varnish to ensure a good adherence to the underground, needed when I will make the cabin windows from Microscale Kristal Klear.

Around the cabin door and the service door a grey line should be applied. I have cut that from the door decals in the Airmodel decal sheet. The cabin one fitted nicely around the door, but the one for the servicing door was too narrow and too short. I have solved this by sacrificing the lower part of the decal, using it to make up the missing length at the top part. This is hardly noticeable, as the light grey decal is very transparent, and does almost not show up on the grey lower fuselage.

For the last decal, the exhaust of the APU, this was a major problem, as the red stripe really showed through the supposedly metal plate around the exhaust. I have solved this by applying the decal on a piece of aluminium painted 0.13 mm thick plastic sheet, cutting it around the decal outline, curving it a bit to fit the fuselage and fixing it with cyanoacrylate glue to the fuselage.

I have sealed the decals first with a layer of Vallejo gloss varnish, mainly to protect the ALPS printed decals from the aggressive solvent of enamel varnish. As a final finish this became to matt, so I have applied a layer of Humbrol gloss varnish over it. This gives the model an unrealistically shiny appearance, so I have given it another coat of Humbrol satin varnish.

**Finishing the model**

I still had to construct the integrated stairs on the cabin door. When I fitted the door cut out from the fuselage on the model standing on its wheels it did not reach the ground at all. Apparently the engraving of the door in the fuselage was not correct. A check with the drawing of the fuselage cross-section showed that the door was some seven millimetres short. Also, it is hinged considerably lower than the cabin floor.

I have cut away a piece of the cabin floor with the depth of one step of the stairs and lowered the bottom of the door by the height of one step and I have enlarged the door opening at the top to the height of the door as measured on the drawing. I had to take out some of the balancing weight from under the floor.

The new door has been made from 0.5 mm plastic sheet, cut to the correct width and curved over a metal rod. After cutting this to the required length and rounding the corners I have sandwiched it with a piece of 0.25 mm sheet to keep it in the correct curvature.

I have constructed the step in the cabin floor with small pieces of 0.5 and 0.25 mm plastic sheet. Remaining gaps have been closed with thick cyanoacrylate glue.

At the top of the door I have glued a piece of half round 1 mm strip as a support on the ground and at the bottom side of the door a small strip of 0.13 mm plastic to provide a (temporary) hold to the bottom of the door opening.

From the fuselage cross-section I have measured the size of the steps; they were 3.5 mm wide and 3.5 mm high. I have cut pieces of 2.5 mm and 4.5 mm wide from a 8 mm strip of 0.5 mm thick plastic and have glued them together. I have also cut a circle of 45 mm diameter from 0.25 mm thick plastic, sections of which will be used to make the...
I have first glued the sides to the steps, which goes very easy by just wetting the joints with vary thin Tamiya glue, and then the completed the stairs by gluing the back of the assembly to the door. I have also added an extra step at the bottom of the stairs, at the first step was far too high.

Next thing to consider are the handrails of the stairs. From the drawing it is not clear whether they are at one side only or at both sides. A picture of the Luftwaffe aircraft clarifies this.

I have produced the handrails from 0.5 mm brass rod, and soldered both copies over the cross-section view, protected with sellotape. I have painted the stairs light grey and the outside of the door white and grey as the fuselage. The handrails I have painted dark grey.

Another thing to be sorted out is how the aft service door was opening. On the Internet I only found one picture of the aircraft with an open door, but there the whole door had been removed, but a fellow modeller provided me with a picture showing that the door - seen from the inside - swings to the left, staying parallel to the fuselage surface, so in open position it should be forward of the door opening (ref. 10). I have painted the inside of the service door the same light grey as the cabin walls.

I have painted the outside of the doors white and grey, taking care that this corresponded with the fuselage painting. I have applied the decal for the red band and the remnants of the Airmodel door decals on the outside.

The steps of the cabin door I have covered with gauze taken from a tea bag, painted with Vallejo metallic black, to simulate the anti-slip layer. I have glued the gauze on the steps with Humbrol clear varnish, preserving this way the structure of it.

I have mounted the service door, modelling the upper support rod by a piece of white painted 0.4 mm brass wire. The last things to complete the cabin door was to remove the strip at the bottom, except on the place of the hinges and to mount the door opening handle, made of a sliver of grey painted plastic.

In this phase I have produced the cabin windows with Microscale Kristal Klear. This was quite difficult, because the small windows are close together, so there a quite some risk of damaging neighbouring windows when applying the Kristal Klear. After drying the windows are transparent, but the view through them is severely distorted.

When the windows had dried, I have mounted the engines on the wings and have applied the Rolls-Royce logos on the cowling. Thanks to the pin-hole connection this was straight forward, although the connection to the wing remains rather fragile.

Next I have mounted hydraulic lines, made from 0.2 mm metal wire painted dark grey, along the undercarriage legs for the brakes and along the retraction cylinders and I have glued the landing gear doors. I have not pursued further detailing.
Pictures from a walk-around on the Internet (ref. 11) showed that still some elements were missing: two landings lights and wheel door actuators in the nose wheel bay. I have produced the landing lights from 2 mm 0.25 mm thick discs, painted grey at the back and the cover glass simulated by a drop of Kristal Klear. The hydraulic cylinders I have made from 0.3 x 0.1 brass tube, glued in a tube of 0.8 x 0.3 mm. Also, there should be a link connecting the main landing gear leg to the landing gear door, which I have made from a piece of 0.4 mm brass wire. As it was difficult to make these additions while the wheel doors were in place, I have removed them from the model and mounted brackets and landings lights to the separated doors. When the glue was dry, I have mounted the doors in place. I have also glued small ends of 0.2 mm metal wire as links between main undercarriage leg and main wheel doors.

I have produced the ADF antennae from 0.5 mm brass wire and 0.5 x 1.0 mm copper strip from my scrap box. As with the handrails, I have soldered them directly over a drawing with dimensions taken from the instruction sheet, covered with sellotape. After rinsing the parts and removing the access solder, I have cut the supports to the required length. The other two antennae I have cut from 1 mm thick plastic sheet, filed them in profile and glued them to a 0.25 mm thick plastic foot. From a piece of sprue I have made the navigation light to go on the top of the fin.

I have painted the navigation lights on the wing tips. The compartments for the landing lights I have painted light grey and have mounted 2 mm discs covered with aluminium foil as reflectors in them. I have closed the cavities with covers bent from x.x mm thick transparent plastic foil.

Next I have mounted the details on the fuselage in a specific order in order not to damage the model. I have started with the belly mounted navigation light and antenna, then the stub antenna and a 0.4 mm metallic mounting pole for the wire antenna on top of the fuselage and the navigation light on the fin.

I have made the landing lights in the wing leading edge from 2.5 mm discs of thin plastic, covered with aluminium adhesive foil. The cover glass has been made of warm deformed transparent plastic foil, as cold deformation clouded the plastic too much.

Next I have mounted the wire antenna, made from 0.06 black-painted fishing line. The isolation devices at both ends have been simulated.
by tiny drops of white paint.

I still had to remove the dust from the inside of the cockpit windows. I have used a can of compressed air for it and have produced a tool from 1.5 x 0.8 mm aluminium tube, bent in a curve with a 0.5 mm plastic rod in it, to reach the left cockpit windows through the cabin and cockpit doors. This operation has been successful, as the picture shows.

On the left side of the fuselage top behind the location of the aft bulkhead a small fairing is located. I have produced this from a piece of 2 mm plastic tube with slightly widened inner diameter.

To mount the ADF antennae on the fuselage top I have made a cardboard template with holes on the four corners where the antennae had to be mounted. After mounting the template at the correct location, I have drilled these 0.4 mm holes also in the fuselage; this way the antennae will be more firmly attached, when glued in place. On the prototype there is a second fin shaped antenna located behind the ADF antennae. I have produced that the same way as the one on top of the cockpit, painted it white and glued it in place. Finally there is an antenna located on both sides of the fin. I have cut these from 0.5 mm plastic sheet, painted them white and glued them in place.

The photographs of the VFW 614 show an angle of attack sensor at the left side of the fuselage under the cockpit windows. I have produced this with a small circular decal left over from my Koolhoven F.K.56 model and a small piece of 0.25 mm thick plastic. I have also painted the nose radome black; pictures show that for the prototype the black overlaps quite a bit with the red band.

Neither on pictures, nor on drawings did I find a pitot tube. As there certainly has been one, I have modelled one from a 0.3 x 0.1 mm tube and a piece of plastic and have mounted it on the right side of the nose.

I have produced two window wipers from 0.2 x 0.5 mm strip and 0.2 mm metal wire. They have been painted dark grey and black and I have glued them under the windshield.

Next I have mounted the stairs. Gluing the door with the two hinges to the fuselage made already a quite firm connection. Attaching the handrails was not easy, but once glued the stairs were very well secured.

On drawings static dischargers were mounted on ailerons/wingtips (three each), the elevator halves (two each) and the rudder (three). On photographs they were generally badly visible. I have however mounted static discharge devices made of 0.2 mm metal wire in this configuration, attaching them in pre-drilled holes or in small saw cuts.

Finally I have given the model a wash with the yellow variant of the Modelbrouwers water based fluid, which can be removed simply with a humid brush. And I have here and their accentuated dirty spots with Tamyia weathering stuff.
Summary

The Airmodel VFW 614 is not an easy kit to build; it shows quite some inaccuracies, and even when you accept these, it remains a difficult kit. Major shortcomings are the ill fitting of the transparent cockpit roof and the fuselage, the incorrect shape of the nose section\textsuperscript{13}, the incompatibility of the resin cockpit interior with the vacform fuselage, the discrepancy between the decal set and the engravings in the fuselage and the inaccuracy of some engravings. The fuselage cross section is about 10\% too large, which gives the model a rather plump appearance, when shown next to e.g. a Fokker F.27, which has also a four abreast cabin, as in my show case. The nose profile, which should have been straight until the radome, is not right; to correct this the nose should have been made at least 5 mm longer.

It is a pity that the resin set does not include more parts, for example hydraulic cylinders for the undercarriage and a set of antennae. A sheet of painting instructions for the different versions would also be appreciated (only details for the Luftwaffe version are included).

Nevertheless, once the model is completed it shows a nice picture of a very unusual aircraft, which was an early exercise for the later successful Airbus programme.

Below some pictures of the completed model are shown.
References
2. www.vfw614.de/die_vfw_614_e.html
8. www.generalaviation.de/aircrafts/vfw614/datasheets.shtml
9. www.airvectors.net/avbc111.html
11. www.primeportal.net/hangar/ulrich_wrede/vfw-614_d-axdb/

Appendix VFW 614 documentation

Modifications & corrections

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<th>Location/part</th>
<th>Modification or correction</th>
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<td>C01</td>
<td>Cabin</td>
<td>Rear bulkhead/ toilet and pantry wall</td>
</tr>
<tr>
<td>C02</td>
<td>Cabin</td>
<td>Cabin floor width</td>
</tr>
<tr>
<td>M01</td>
<td>Cabin</td>
<td>19” test equipment racks</td>
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<tr>
<td>M02</td>
<td>Cabin</td>
<td>Freight compartment</td>
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<tr>
<td>M03</td>
<td>Cabin</td>
<td>Luggage racks</td>
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<tr>
<td>M04</td>
<td>Cabin</td>
<td>Passenger seats</td>
</tr>
<tr>
<td>M05</td>
<td>Cabin</td>
<td>Cabin attendant seat</td>
</tr>
<tr>
<td>M06</td>
<td>Cabin</td>
<td>Rear cabin door opened</td>
</tr>
<tr>
<td>C03</td>
<td>Cockpit</td>
<td>Cockpit door height</td>
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<td>M07</td>
<td>Cockpit</td>
<td>Window wipers</td>
</tr>
<tr>
<td>M04</td>
<td>Fuselage</td>
<td>Height, width and shape of underfloor wing centre section spars</td>
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<tr>
<td>C05</td>
<td>Fuselage</td>
<td>Dimensions door cabin freight compartment</td>
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<tr>
<td>C06</td>
<td>Fuselage</td>
<td>Height, width and shape of underfloor wing centre section spars</td>
</tr>
<tr>
<td>C07</td>
<td>Fuselage</td>
<td>Dimensions door cabin freight compartment</td>
</tr>
<tr>
<td>C08</td>
<td>Fuselage</td>
<td>Shape and width of nose section and cockpit roof</td>
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<tr>
<td>C09</td>
<td>Fuselage</td>
<td>Addition of rear cabin window</td>
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<td>Position of luggage compartment door decal</td>
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<td>Position of window decals</td>
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<td>Red decal under cockpit windows and at tail cone</td>
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<tr>
<td>C13</td>
<td>Fuselage</td>
<td>Cabin door height</td>
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<td>Fuselage</td>
<td>Service door decal</td>
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<td>Fuselage</td>
<td>Passenger door and stairs</td>
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<tr>
<td>M09</td>
<td>Fuselage</td>
<td>Wheel bay walls</td>
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<td>Fuselage</td>
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<td>Antennae</td>
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<td>Angle of attack sensor</td>
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<td>Undercarriage</td>
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<td>Change</td>
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<td>Modification or correction</td>
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</tr>
<tr>
<td>C17</td>
<td>Wing</td>
<td>Position and width of wheel bays</td>
</tr>
<tr>
<td>M20</td>
<td>Wing</td>
<td>Additional root fairing profile</td>
</tr>
<tr>
<td>M21</td>
<td>Wing</td>
<td>Landing lights</td>
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**Paint table**

H = Humbrol, R = Revell Aqua, V = Vallejo, M = Marabu paint stick

<table>
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<tr>
<th>Code</th>
<th>Colour</th>
<th>Where</th>
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<tr>
<td>H2</td>
<td>Emerald</td>
<td>Instrument dial</td>
</tr>
<tr>
<td>H22</td>
<td>White</td>
<td>Upper surfaces fuselage, fin and tail surfaces; controls; synchronisation rod service door; antennae fuselage top</td>
</tr>
<tr>
<td>H47</td>
<td>Sea (light) blue</td>
<td>Instrument dials</td>
</tr>
<tr>
<td>H48</td>
<td>Mediterranean (medium) blue</td>
<td>Engine &amp; other controls</td>
</tr>
<tr>
<td>H85</td>
<td>Black</td>
<td>Wing and tail leading edge; rudder pedals &amp; control stick; instrument buttons &amp; dials; tires; nose cone; pitot tube; angle of attack sensor</td>
</tr>
<tr>
<td>H125</td>
<td>Medium grey</td>
<td>Instrument panels</td>
</tr>
<tr>
<td>H128</td>
<td>US compass (light) grey</td>
<td>Wing surfaces, lower surface fuselage; engine pylons; antenna below fuselage; cabin stairs handrails</td>
</tr>
<tr>
<td>H129</td>
<td>US gull grey</td>
<td>Cabin &amp; cockpit walls; luggage racks; seat belts; undercarriage legs, wheel hubs, door stairs; landing light casings; retraction cylinders</td>
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<tr>
<td>H164</td>
<td>Dark sea grey</td>
<td>Cockpit floor; seat arm rests</td>
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<tr>
<td>H165</td>
<td>Medium sea grey</td>
<td>Instrument racks; passenger seat backs, arm rests &amp; legs; wheel bays</td>
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<tr>
<td>H</td>
<td>Transparent red</td>
<td>Navigation lights on top of fin, under fuselage &amp; right wing tip</td>
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<tr>
<td>H</td>
<td>Transparent green</td>
<td>Navigation light left wing tip</td>
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<td>V71.062</td>
<td>Aluminium</td>
<td>Engine casings; undercarriage legs; seat belt buckles</td>
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<td>V71.073</td>
<td>Metallic black</td>
<td>Engine exhaust cones; gauze on cabin stair steps</td>
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<tr>
<td>V71.113</td>
<td>US intermediate blue</td>
<td>Cabin floor, seat cushions</td>
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<tr>
<td>V</td>
<td>Dark vermillion</td>
<td>Red band at nose and tail section</td>
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<tr>
<td>--</td>
<td>Black wash</td>
<td>Instrument panel; engine fans</td>
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**Decal production**

As Airmodel does not sell the decal sheets for the VFW 614 separately, and as the prototype version of these decals anyhow did not contain the typical test details, I had to draw them myself. As a basis I used a side view drawing and a side view photograph of the prototypes D-BABB and D-DABC, which I found on the Internet.

I have imported the drawing in a blank CorelDraw sheet and have drawn over it the VFW Fokker logo, the text, the German flag and the registration, matching the colours as well as possible.

The test markings on the tail and fuselage I have drawn by hand using the photograph to approximate the correct size.

I have then sized these drawings to the fuselage side in the kit, time and again making a print on paper, cutting it out, fitting it on the fuselage side and correcting its size when it did not fit well. The dimensions of doors and hatches I have measured from the fuselage sides.

For the lines on the wings I have used the upper side of one wing half, on which I have accentuated the panel lines with a soft pencil, before making a scan of it.

I have made a print of the drawing and fitted it on the wing to check that it had the correct dimensions.
The escape route drawn was not correct; it does not take into account the engines mounted on top of the wing and the route should lead to the wing leading edge.

Basically all elements, also the letters and numbers, on the decal sheets have been built up from polygons and ellipses, and no outlines have been used, as lines often pose a problem when ALPS printing is used (required when white or light colours are present in the drawings). In the rare cases that I have used fonts, these texts have been converted into curves. The picture below shows the first version of the set of decals drawn.

As there was white in my decals, I have sent a copy of the CorelDraw file to my regular (ALPS) printer in the USA to ask his advice on the feasibility of the print. He told me that the grey, blue-grey and light blue would probably not print well (“would have a blotched appearance”), so I had to find another solution for these parts.

The door and hatch outlines did not pose a problem; I have simply converted them to black. I have printed the VFW Fokker logo on my inkjet printer on transparent decal paper, both as a complete decal and as text and figure separately.

I have test mounted them on a piece of plastic sheet painted white to investigate the transparency of the elements. It appeared that two decals on top of each other gave almost perfect covering blue and greys and that the yellow text placed separately over the blue did not show up well. So the solution was to use two decals with yellow text placed on top of each other.

I was, however, not really satisfied with the door and hatch handles, as I had drawn them. Looking at the picture of the VFW 614 passenger door with built-in stairs, I have remodelled the handle, or better the symbols around it. The handle itself I will make of a bit of plastic; it is clearly sticking out, even in closed condition.

For the handles of the cargo hatches I have redrawn the top picture below, including the text.

The handles of the two other doors, the service door at the rear of the cabin and the door to the freight compartment in the forward part of the fuselage, I have drawn using the bottom picture at the right.

The picture below shows the drawing for the final ALPS printed decal (top) and the one for the inkjet printed one on clear decal paper (bottom).

Finally I have ended up with this “home produced and USA printed” set of decals plus the set produced by Airmodel itself, which I could in the end purchase separately.

There are some doublings in the decal sheets; from case to case I have selected decals from each of the sheets.

The decals for the test equipment racks in the cabin I have drawn with Microsoft Office Visio using the Network/Rack diagram template. The basic elements have been rotated and mirrored to get sufficient variation in the racks. Visio itself does not allow to scale the (vector) drawing sufficiently, so I have copy-pasted it as a Microsoft drawing in CorelDraw, and then scaled it to the right size.

I have decided to model the details for the underside of the luggage racks (lights, hatches for oxygen equipment and switches) also by means of a decal and I have drawn some other cabin details, like the exit and toilet signs, fronts of pantry units and a panel for the cabin attendant.
These decals have been printed on white decal paper, as the light grey would not show up sufficiently, when printed on clear decal paper and a white surface.

**Passenger seat production**

I have started seat production from strips of plastic sheet material. From top to bottom on the picture: 1mm thick strip for the bottom of the seats, 0.5 mm doubler for the bottom, 1 mm strip for the headrests, 1 mm strip for the back of the seat and a 4 mm wide 0.5 mm strip for the legs. I had marked 11 mm wide sections on the strips, being the width of the seats based on the information in the instruction sheet.

I have sanded the trip for the headrests half round and glued to the backrest strip and have glued the bottom trips on each other and when well dry, glued also backrest and bottom together.

I then have sawed off a section of 11 mm wide, have made the support legs from the 0.5 mm strip and arm rests from 0.5 x 1.0 mm strip.

However, fitting the prototype on the cabin floor showed that they were not wide enough, leaving a sea of space for the aisle, which is not realistic. This was confirmed by the cabin layout drawing, that I found only later. So in the final version the seat width has been increased to 13 mm.

Based on the experience in making the prototype seat, I have developed the following production sequence for the 15 seats.

First step is to cut off 13 mm sections from the assembled seat and backrest strip with a razor blade saw. I have made this sections with a little margin, because sawing really rectangular in the plastic is quite difficult, and that way the small deviations can be removed by sanding.

Next, with a slightly thicker saw, I have made a cut halfway in the back rest to a depth corresponding to the bottom of a 1 mm high arm rest. I have widened this cut with a narrow scalpel blade to 0.5 mm and tested the width with the 1.0 x 0.5 mm strip of which the arm rests are going to be made.

I have tapered the headrests slightly with my standard scalpel.
The armrests have been cut to the required length and glued in place and the a hole of 1.2 mm has been drilled in 5 mm wide sections of the 4 mm wide and 0.5 mm thick plastic, which had been prepared for the seat support.

I have enlarged these holes with a 2.5 mm drill bit.

Sometimes this went wrong in the thin plastic, but a new one was fast made. Next the sections have been separated with a scalpel, and a connection between the hole and the bottom has been made.

Then I have glued the support under the seats, taking into account the asymmetry between seats at the right and the left side of the aisle.

Next I have painted the seat cushions US Intermediate blue and the frame, legs, armrests and backs light grey. I have given the top of the armrests a coat of dark grey and have finished the seats with the seat belts, cut from Tamiya tape stuck to aluminium foil and painted light grey (Humbrol 129). The buckles have been simulated by small spots of aluminium paint.

Pictures
If no source is mentioned, pictures have been copied from various Internet sites.
Modified cabin floor and wing centre section template (scale 1:72)
As shape and dimensions of the cabin floor and the “spars” of the wing centre section is quite different from the one drawn in the instruction sheet I have given below the 1:1 plan of the parts as they have been made fitting for the model.

Overview of VFW 614s produced

<table>
<thead>
<tr>
<th>Serial Number</th>
<th>Last Registration</th>
<th>First Flight</th>
<th>Operator</th>
<th>End Of Operation</th>
<th>Flight Hours / Landings</th>
</tr>
</thead>
<tbody>
<tr>
<td>G01</td>
<td>D-BABA</td>
<td>14.07.1971</td>
<td>VFW-Fokker Prototype</td>
<td>01.02.1972</td>
<td>30:36</td>
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<td>G02</td>
<td>D-BABB</td>
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<td>VFW-Fokker Prototype</td>
<td>02.02.1979</td>
<td>1227:46 / 1888</td>
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<td>G03</td>
<td>D-BABC</td>
<td>10.10.1972</td>
<td>VFW-Fokker Prototype</td>
<td>12.01.1977</td>
<td>1562:00 / 1638</td>
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<td>G04</td>
<td>OY-TOR</td>
<td>28.04.1975</td>
<td>Cimber Air</td>
<td>31.08.1979</td>
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</table>
Three view drawing

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1 www.airmodel.de
2 Most of this introduction has been taken from Wikipedia.
3 The 65 seat Fokker F.28 was announced in 1962 and made its maiden flight in 1967. This aircraft was no a very great success either. Although more than 240 copies were produced and sold, the program never reached its break-even point.
4 See the appendix for more details.
5 As I bought the kit before resin parts or decals were available, I have purchased the resin parts separately later and have drawn the decals myself; although I managed to purchase the decal sheet of Airmodel separately.
6 The fuselage diameter is quite a bit too large; it measures almost 45 mm instead of the scaled 39.7 mm it should be. This cannot be corrected.
7 Note that I changed the cabin layout when I found more accurate information on the Internet (ref. 8).
8 Some pictures exist of VFW 614 cabin with closed luggage bins, but they are apparently of a modernized version of the aircraft.
9 The engraved lines in the wing did not correspond to the engravings in the fuselage, but can have been caused by an incorrect positioning of the spar slots in the wings.
10 This is very likely incorrect; the prototype shows on many photographs an overall white finish, and only on some pictures the lower side seems to be a light grey.
11 The drawing also showed that the last two seats at the left side of the cabin had no view through a cabin window. Probably this contributed also to the lack of passenger appeal of the 614.
12 If you build the model with the cabin windows opened up, it is advised to paint the red stripe and not to use the decals. That way the mismatch between fuselage engravings and decal is eliminated. If you build the model with closed windows it is advised to fill the engraved windows with putty, to paint the red stripe and use the separate window decals, which are also included in the Airmodel decal sheet. The emergency exit and door decals can be carefully cut form the original decal.
13 This was also confirmed by the sized of the door decal in the Airmodel decal sheet; it would have been convenient if a warning would have been included in the instruction sheet.
14 To correct this the whole nose section should be rebuilt. It should be lengthened by at least 8 mm to exhibit the straight profile, typical of the VFW 614.
15 These restrictions do not apply when you are printing decals on your inkjet printer, as then the WYSIWYG principle holds quite well.

16 The Airmodel decal sheet contained a couple of surprises. It confirmed that the first window on the starboard side should be closed, as it gives on the cargo compartment (all pictures of the VFW 614 show this), and even in the 44-seat arrangement without cargo compartment no seats are located at that place. Also, the cargo door is considerably larger than the one embossed in the fuselage, so also that one has to be removed (and engraved again). The same applies for the decal of the cabin door.