



Feature Build No.5
Downloadable Content



Fokker D.XXI

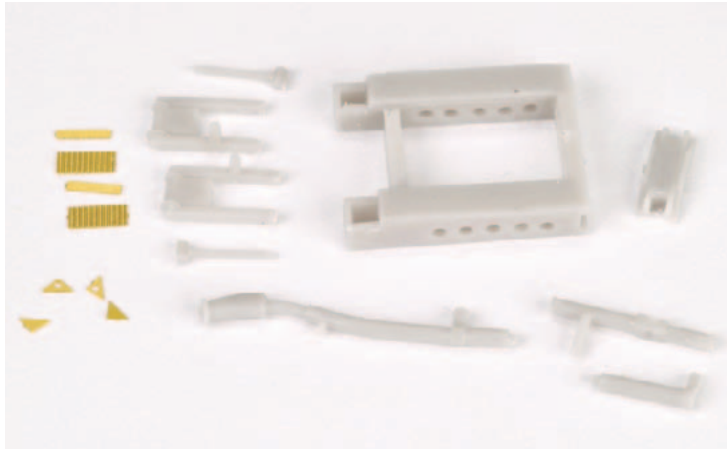


by Steve A. Evans



The new-look box from Silver Wings is nothing short of gorgeous! The contents look good to

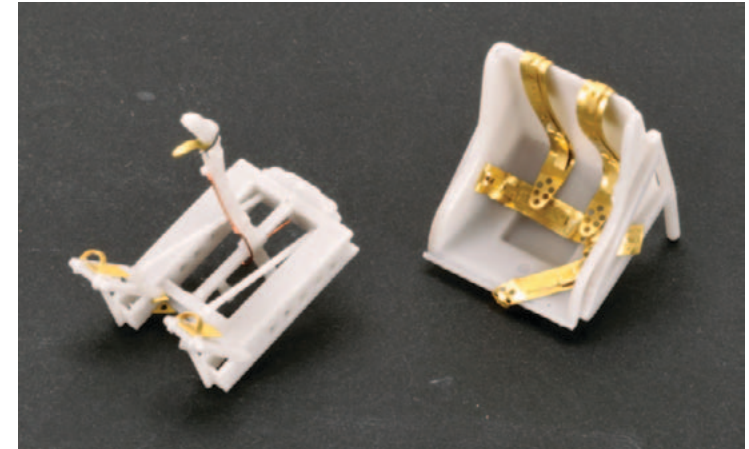
Technical Data
Spec: Fokker D.XXI
Scale: 1/32nd
Manufacturer: Silver Wings (www.silverwings.pl)
Kit No: 32-017
Material: R, PE
UK Importer: Hannants (www.hannants.co.uk)
Price: £116.99



The mix of resin main sections and additional details from the photo etch aren't going to be to everyone's taste but it works



The PE seat belts are a little difficult to accurately position due to their thickness, but with perseverance they can be made to look pretty good



There's not much to complain about when it looks this neat

The Fokker company has been with us for a long time, it's name associated with some of the finest aircraft from the First World War. It suffered under the restrictions put on it by the Treaty of Versailles, as did most of the German industry but Anthony Fokker, the chief designer, took his designs back to his native Holland to produce some very interesting types. Not least amongst them is the Fokker D.XXI. Caught between old and new design theories, this fixed undercarriage monoplane was a good interim type but even by the first flight in 1936 it was close to being obsolete. Having served in the Air Forces of the Spanish Republic, the Netherlands, Finland and Denmark, it certainly deserves its place in history but at this time when so much change was going on in the aviation world, the older aspects of its design were a real handicap. At least it used a large amount of non-strategic

materials in its construction. This reliance on wood and fabric made it cheap to build and repair, as well as hard wearing in combat. The German campaign against Holland lasted only five days, so the Fokkers didn't have to last too long but while they were in service, they made the invading forces feel their presence. This was doubly true of the Finnish Air Force who had 97 of them in service to face off against the Russian forces that threatened to overrun their country. Licence production kept them in service right up until 1944, by which time they were well and truly out-classed by more modern Russian fighters.

The Kit

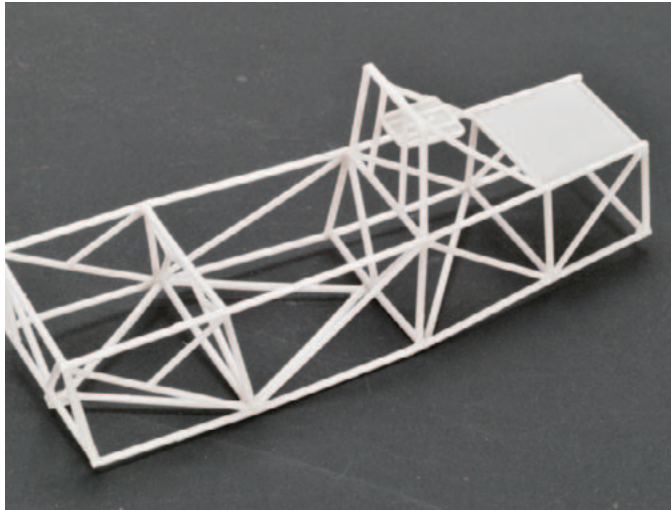
We've been given kits of this curious machine before of course, most notably in 1/72nd from Special Hobby but who would have thought we'd get one in 1/32nd scale to play with? Silver Wings, that's who! Starting with the box you get a lovely looking thing

indeed, although surprisingly small. The art on the top and sides is exceptional and really sets the tone for the build. It may be a little flimsy but does its job of keeping all the bits together. Inside you get lots of individual bags of resin components, all cast in a very pale grey, all with the minimum of flash or casting blocks to deal with. The main sections of the hollow cast fuselage and the solid wings are neatly done with very few pin-holes to worry about and all the components are beautifully straight. This last bit shows that Silver Wings are paying attention to the casting process and giving the resin time to set properly in the moulds; that's quality over quantity. You also get a small photo-etched fret, which contains the instrument panels, seat belts and some small detail pieces to scatter about the airframe. There is also a single decal sheet that is well printed with vibrant colours and there's the 12-page instruction sheet. The instructions have the beautifully rendered art

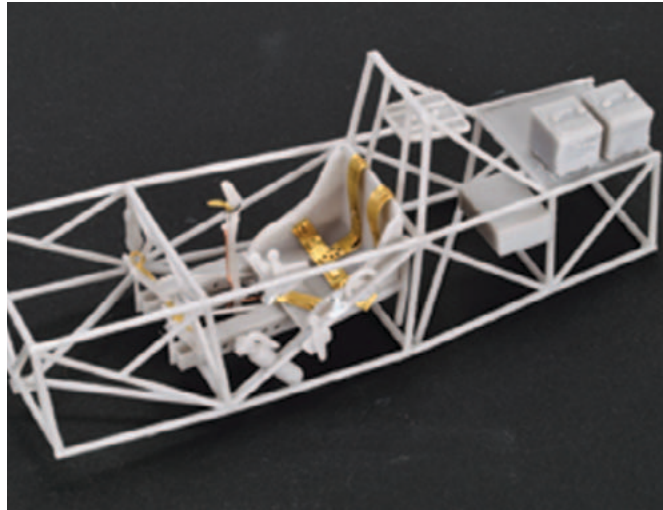
for the painting and marking guide as well as a little bit of useful history and technical specs. The build process is taken up on the remaining eight pages. It's not all good however because the actual construction stages are muddled and poorly designed to identify the parts in the box and tell you exactly which bit goes where. As an example, the engine is shown being detailed and fitted on page 2 but it is actually built on page 8. The cockpit is modelled to the Danish pattern interior and not the Dutch one, so modification to the control column is needed and the painting guides, although pretty, are only 3-view drawings, so you have no idea what the right hand camouflage demarcation is.

Construction

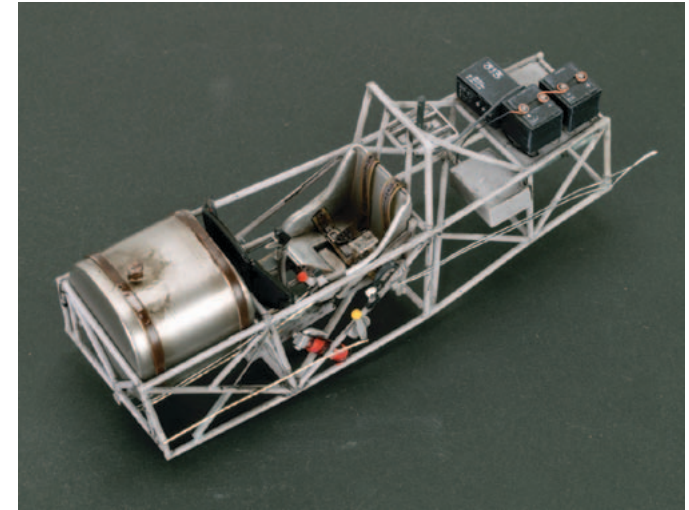
Not to worry, all of that is just me having a moan and there is nothing too serious to worry about really. The only thing to be careful of is the assembly of the main cockpit



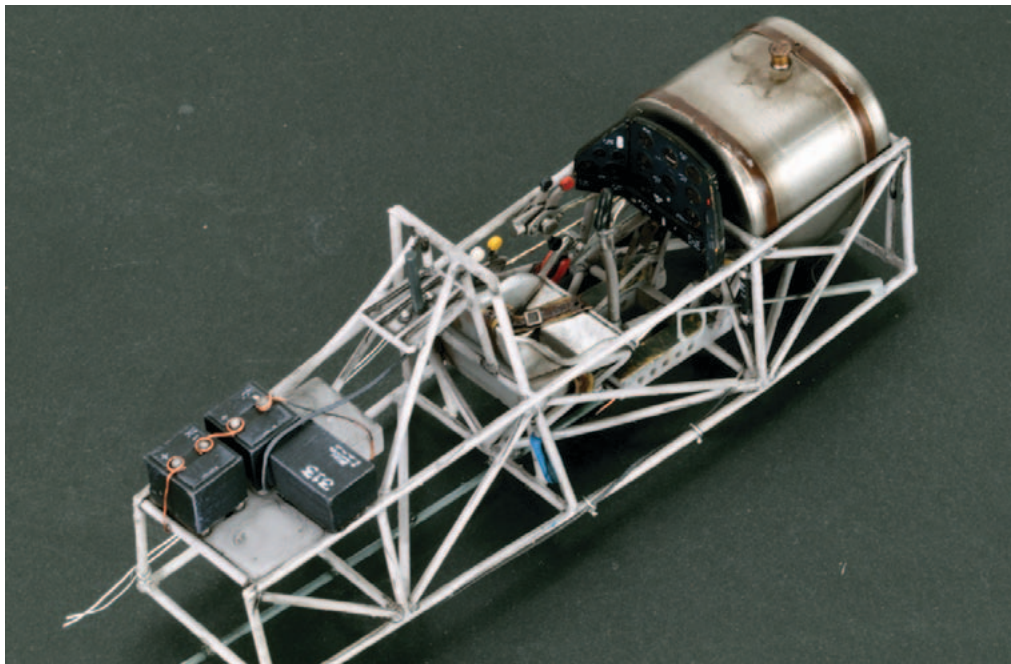
The framework interior is all resin strut work, careful planning is the secret to getting it all lined up properly



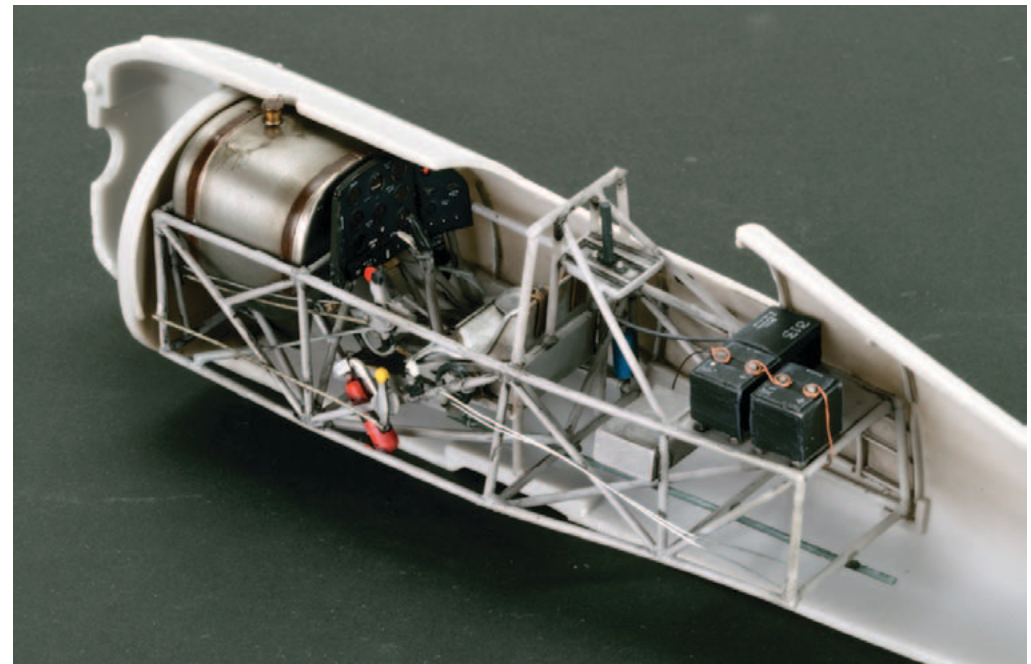
It's a good starting point but all that resin needs a lot of additional bits to be scratch-built into place to make it all more believable



Painted and detailed with the simple things like wire and stretched sprue it all makes a fine interior



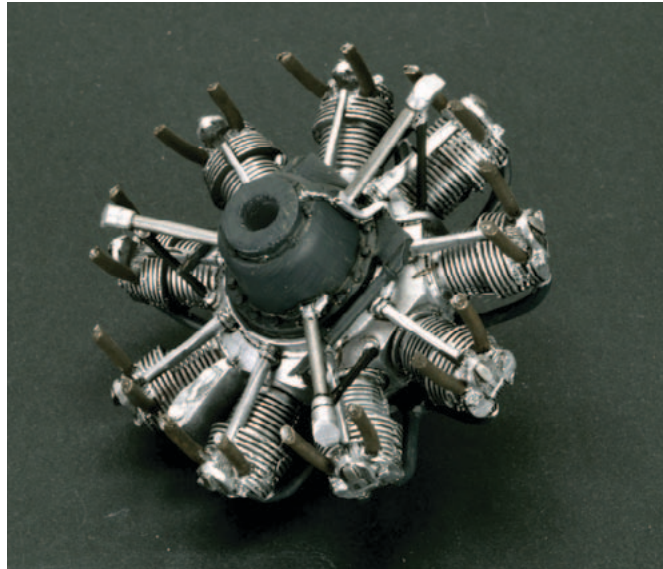
The main instrument panel is PE with an acetate backing, my favourite way of doing it



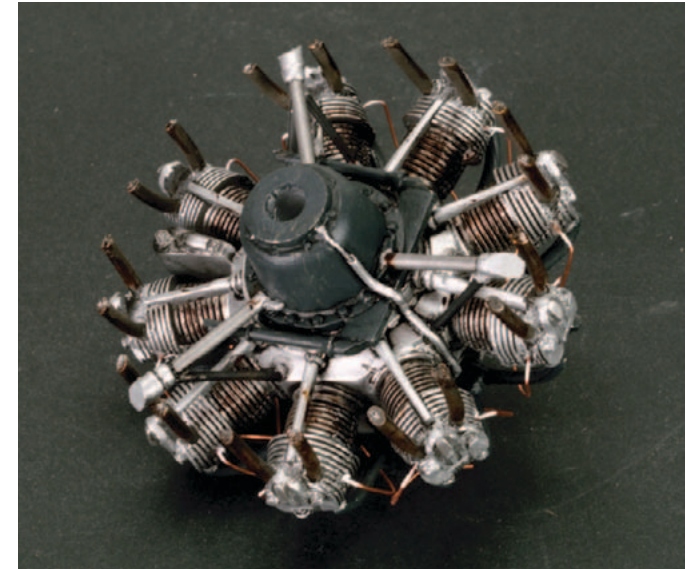
The fit of this delicate latticework good have been a nightmare but Silver Wings seem to have got the geometry about right because it slots into place quite well



The basic resin engine looks pretty much like the Bristol Mercury should; it is a bit tricky to build though



A bit of paint does it the world of good. Alclad 2 for the cylinders with dark grey acrylic for the reduction gear housing



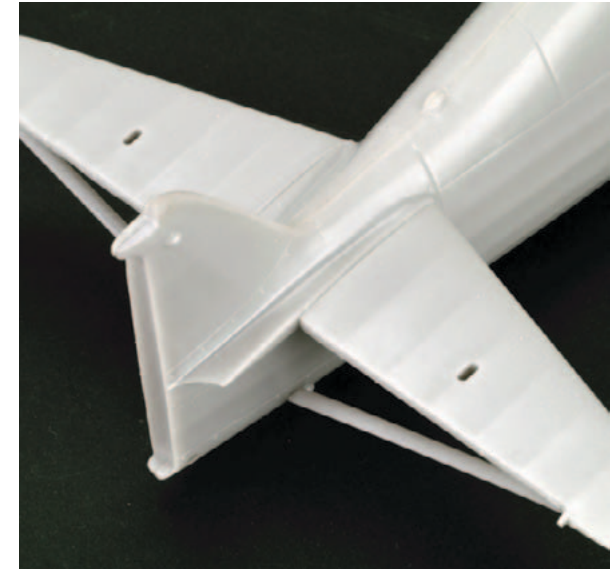
Weathering with pastels and the plug leads are fuse wire, two to each cylinder

framework. You need to pay very careful attention to the instructions and lay all the resin struts out and do lots and lots of trial fits and rearrangements of the parts. It does work, there's no doubting the casting prowess of Silver Wings here, because the pieces are straight, strong and almost flash-free. Clean up is minimal and with a good quality cyanoacrylate it doesn't take too long to get it all in place. There is plenty of scope for adding much more detail, as with all 1/32nd kits really, control runs and additional levers being the most obvious. The parts supplied are nicely detailed and fit together quite well. As I say, you do need to modify the control column to make the Dutch version with the spring loaded gun trigger and not the button on top. The instrument panels are also to the Danish pattern but there is very little real difference between them, so I left them alone. One serious omission as far as I was concerned is the gun cocking handles, one

either side of the cockpit. These 'D' shaped handles are quite prominent, so they need to be scratchbuilt. The seat belts are neat, although tough, but once painted they look good on the seat, which was left in natural metal on the Dutch machines. The radio gear and the batteries just about fit onto the shelving at the back, although I am a little dubious about the radio positioning, I think it should be almost directly behind the pilot's seat? One bit of advice from me is to leave off the rollover framework behind the pilot because that needs to line up with the canopy sections later and it's much easier to position once the fuselage has been closed up. I actually ended up cutting it off and repositioning it later. Talking about the fuselage, the detail on the outside is not bad, especially the excellent fabric effect. The panels are a bit soft, with over-size Dzus fasteners, but the shapes are spot on as it's immediately captures the 'look' of this machine. All of which is also true of

the wings. These are large single castings and very well done too. Just a couple of pinholes along the leading edge to fill in, but apart from that there is almost no cleaning up. They locate into the fuselage with two resin pins and one metal pin, which makes a superbly strong joint. The receiving holes for them need opening out a little but it does keep everything nicely in line. I had a bit of trouble getting the starboard wing to fit just right, no such trouble on the port wing, which makes me think it was probably my handling of it as much as it was the cast parts. All the joints for this one can be fixed with any kind of cyanoacrylate or epoxy cements, but I opted to mix a little talc into some very thin cyanoacrylate, which acts as a glue and filler all in one. It also makes a much stronger joint than just plain CA. You'll need that strength as well because this kit is surprisingly heavy; there's a lot of resin here. The remaining airframe parts all fit very

well indeed, with the tail and spatted wheels slotting into place with barely a seam on show. The parts need some prep work of course with removal of casting blocks and sanding the joints smooth (remember the breathing mask and don't be tempted to ever use a motor tool on resin!) but it's all easy stuff. The engine cowling is a bit delicate mind you; it's cast as a short tube with the exhaust collector ring to fit at the front. The joint is in the wrong place here and it needs to be filled in and moved forward by about 3mm. If you leave it where it is the collector ring metallic section will appear much too wide and destroy the look of the nose. The engine to go in there is quite complicated, with over 35 bits to get in position, just remember that the build starts on page 8 and then jumps back to page 2. The cylinders are very neatly cast with the cooling fins not too overdone and even though it will all take a bit of adjustment to get it into the cowling,



The fit of the main parts isn't the best but it's not that bad either and nothing a bit of filler can't cope with

That's a lot of resin right there and not a twisted bit in sight; good casting work from Silver Wings

The fit of the horizontal tails and their struts is perfect

it does fit in the end and looks good doing it. The Bristol Mercury was one of the icons of this era, being used in a million and one projects, so there's plenty of reference material out there. All I added were the plug wires, two to each cylinder and luckily they feed backwards into the engine and show very little if you don't fancy doing them.

Just before the painting began I fitted the canopy sections. This was a bit of a pain as they are brittle but clear and need some filler around most of the edges to get them blended in; the broken section didn't help of course. The canopy framework is well defined, so they are relatively easy to mask and the odd opening section was just tacked into place with some PVA for later removal.

Colour

In the box you get three versions, any one of which would look stunning. The Dutch chose to use a very strange set of colours and an

even stranger way of making a camouflage scheme out of them. I mean, who would of thought of using a dark red/brown as an underside colour? Madness. But it does make for a unique style. You get the standard Netherlands markings of tri-colour roundels, the high visibility orange and black triangles and a captured Luftwaffe version with a massively oversized swastika on the tail. I just had to do the orange triangle version of course as this is a classically Dutch look and really pins down the time line. October 1939 is the date in question for the change-over to the new orange and black markings, just so that all the other combatants at the time knew whose aircraft they were dealing with so as not to get shot down by friendly(ish) forces. You have to remember that the Netherlands Air Force were pretty much on their own at this time with a very aggressive Germany right on their doorstep. Paint begins with primer and on resin kits this is vitally important. You need it

to key the surface for the following paints but far more importantly it allows you to see all the joints and messy bits that need smoothing out first. You'll undoubtedly notice more pinholes and blemishes that require filling and sanding. Once that lot is done it's on with the colours. I opted to do the red/brown first and went originally with Gunze-Sangyo H47 Red Brown. As you can see, this is just too red and I toned it down with a thin overspray of Tamiya XF-64 Red Brown, which looks great in this scale. The green was next and after a bit of masking off with White-tac worms Tamiya XF70 IJN Dark Green is applied. More masking, with worms and Maskol to protect the rest and it was on with the problematical Tan. I say it was a problem because the instructions give the paint colours in FS codes, very nice but it all depends on whose references you believe as to what FS paint you use. In the end I opted to mix my own version made from roughly 50% Gunze-Sangyo H79 Sandy

Yellow, 40% Tamiya XF12 IJN Grey and 10% Tamiya XF25 Light Sea Grey. That sounds like a disaster waiting to happen but thin it all out with Gunze-Sangyo Mr Color Levelling Thinner and they spray superbly. The little bit of XF25 is in there to tone down the colour and fade it in a bit but from the photo of the raw colours you can see that it's still quite harsh, before the weathering that is of course.

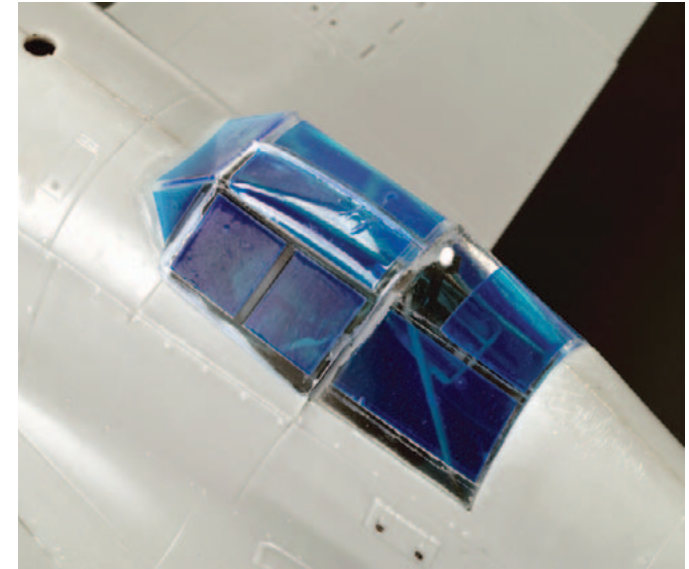
Weathering is the make or break of just about any kit for me and it usually follows the same pattern. Pastel dust is applied to all the mucky areas and around the panel lines, sealed in with some Tamiya X19 Smoke, then metal chips are applied with a silver pencil, whilst in this case there are also plenty of wood and fabric areas that need a few chips as well. These bits were done with a medium brown paint and a fine brush, but keep it all to a minimum as they were relatively clean in service. The whole thing was then very lightly sprayed with the Tamiya Smoke, to blend all



Good and bad here: good being the excellent fabric effect and the accuracy of the shapes; the bad being the crude hinges and the solid moulding for the formation lights on the fin



Sturdy spatted undercarriage is easy to build and fits very well indeed

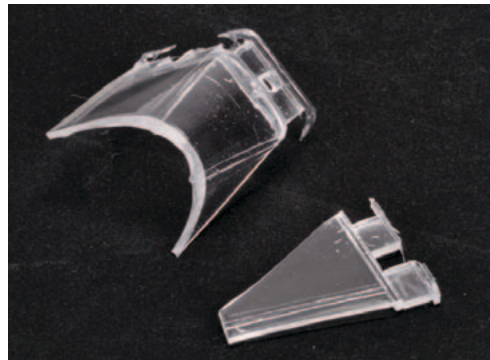


The clear resin is easy enough to work with and is ripple free, the fit is not that great though, meaning more filler and sanding down

the colours together, like a filter coat of sorts, then the Johnson's Klear was applied in readiness for the decals.

Decals

The markings on the single sheet comprise all the national and specialist markings for all three aircraft, including the big swastika, which is nice to see as it's left off of so many sheets these days. I believe these decals are printed in-house by Silver Wings and they've done a fine job, with good dense colours, just about perfect register and only a few tiny scruffy bits on some of the black areas. There are quite large bits of carrier film to remove but this is very thin and easily conforms to all the surface detail in use, so there is almost no silvering to speak of. They release quickly from the backing paper, move around well enough on the model and settle down very nicely. They react well with Microscale setting solutions so all in all it's top marks for these.



The hazards of the delicate and brittle resin; a cracked side window...drat!

There are no stencils on the sheet though and I have no idea if that's right or wrong because there is very little of that kind of thing on show on the real aircraft. You do get two sets of the Fokker label and load tables to go on the tail, but some sources say that should be applied on the left side only. I used it on both

because I like the look of it and it adds a little bit of detail. Once dry and settled down, I blended the large orange areas in with a light brush of pastel dust and a bit more of that Tamiya Smoke, before a quick flash of Klear to seal them in.

Finishing

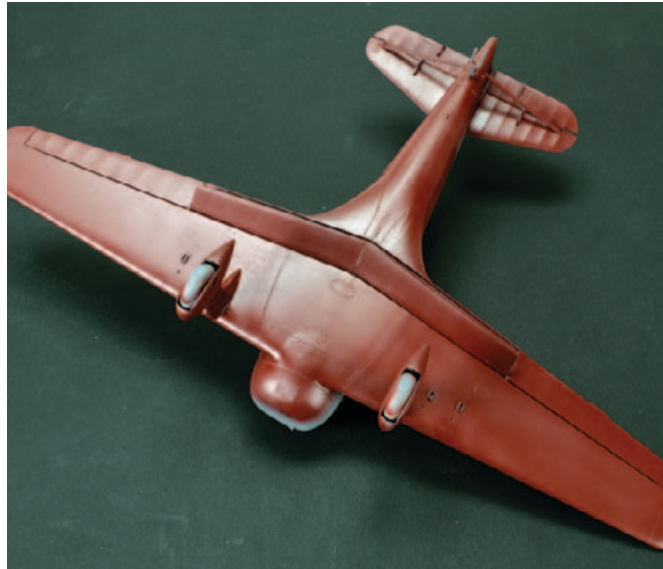
As you can imagine, there's lots to do at the end of this one, with plenty of detail work left. The engine and cowlings slot into place without drama and then it's getting on with all the tiny bits around it. The aerial masts, on fuselage and tail, are both resin, so a little delicate. The same is true of the tailwheel strut and with things like the rigging wires and control rods at the tail needing to be fitted it's all beginning to get very delicate indeed; one wrong finger position now and it'll be broken bits all over the carpet! The machine gun barrels are hollow cast but have the wrong style of cooling jacket fitted; they

should have elongated holes and not the round ones as supplied, but that's just a bit of nit-picking on my part. The gunsight to go with them is a bit of a pain though as the ring section at the rear cannot be fitted without splitting the PE part, or cutting the resin strut. I opted for splitting the PE ring, as it's easier to reposition once done. The propeller is an eight-part assembly and looks good when it's done, but you have to make sure you get the angles between them spot on and the pitch of each blade has to be set by you as well because there is no help in the kit. The dropped flaps are also excellent. I had built them with the little PE sections fitted a lot earlier in the build, as they are all painted red/brown. I left out the little resin hinges until now though, just to keep them safe and they fitted very well, so no worries there.

Final finish is Alclad 2 Klear Kote Flat, mixed with about 5% Humbrol 29 Dark Earth to make a filter coat at the end to tie it all



Primer is definitely needed on this one, not only to key the resin surface but also to highlight the bits that need more tidying up before the paint is applied



The oddest undersurface colour ever! This maroon/brown shade will need some toning down for a good scale effect



The odd colour carries onto the upper surface as well; there's no doubting the unique look to the Netherlands machines



Green applied and masking worms of white tack make for some interesting looks during the spraying process



All the colours applied and look at how 'stark' they appear in their raw forms...not for long



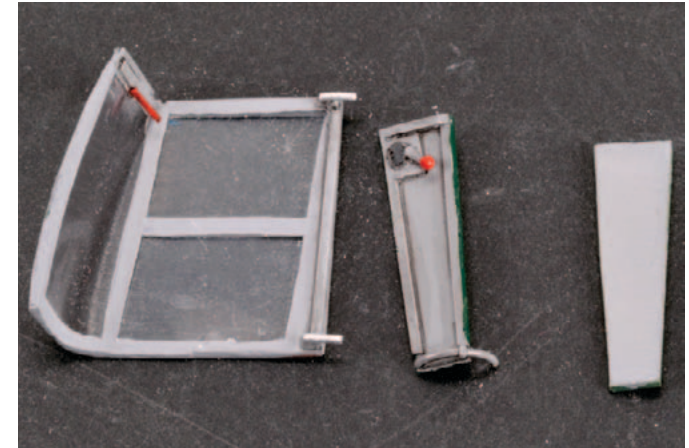
There, that's better. Weathering by pastels and Tamiya X19 Smoke, glossy stuff by Johnson's Klear (Yes, I still have some of that left!)



The decals are really good, being thin and easy to use. The colours are pretty good too and it all adds to that 'unique' presentation



The engine and cowling in place, Alclad 2 once again doing the metallics but careful alignment is needed to get everything squared away



The last bit of additional work from me was to replace part of the odd-looking cockpit access door; handles and hinges are the order of the day. The kit part, on the right, went straight into the bin

together. Once that was dry the fishing line aerial wire was fixed into place and a quick spray of dark brown paint around the exhaust was added just to make it look a little grubby, then it's on to the last bit; the canopy. The masking was removed from the clear parts and all the frame edges were cleaned up while the access door section was removed. The little drop down section of the fuselage is sadly lacking in any detail whatsoever, which is a pity as it will be on full show with this odd-looking side door open. I basically just knocked up a new one out of some plasticard, added the hinge and locking struts and threw the kit-supplied bit in the bin. Harsh but true! With that painted, matt coated and carefully put into position, that's the Fokker D.XXI ready for inspection.

Verdict

This is not a kit for the novice; that much is clear the moment you open the box. There

are a lot of unidentified resin bits in there that you are left to your own devices to sort out. But you know what? I loved it like that! It's all part of the experience of doing a kit of this nature. The parts themselves are beautifully produced with obvious love and care, there are no 'green' resin bits here, prised from their moulds before they were ready, everything is clean and straight and perfectly formed. OK so there is plenty of scope for adding more detail, while some of the smaller parts are a little clumsy and the instructions, although beautifully printed with that artwork, are jumbled and not really up to the standard of the rest of the kit.

In the end though I really enjoyed it, it's as simple as that. It looks good and the build was not really any more difficult than a complicated injection moulded kit. And just look at what you get; a 1/32nd Fokker, glorious!

Paints Used
Alclad 2 lacquers:
ALC111 Magnesium
ALC120 Gunmetal
ALC121 Burnt iron
ALC314 Klear Kote Flat
Gunze-Sangyo Mr Aqueous Hobby Color acrylic:
H47 Red Brown
H79 Sandy Yellow
LifeColor acrylic:
UA135 FS16231 Dark Gull Grey (Interior)
Tamiya acrylic:
XF12 IJN Grey
XF19 Smoke
XF25 Light Sea Grey
XF64 Red Brown
XF70 IJN Dark green
References
• Finnish Air Force 1939-1945 by K. Keskinen & K. Stenman (Squadron/Signal Publications 1998 ISBN: 0-89747-387-6)

- Fokker D.XXI by G.H. Kamphuis, Profile No.63 (Profile Publications 1966)
- Fokker D.XXI by K. Keskinen, K. Stenman & K. Niska, Suomen Ilmavoimien Historia 3 (Tietoteos 1977 ISBN: 951-9035-15-X)
- Fokker D.XXI [Mercury] by K. Keskinen & K. Stenman, Suomen Ilmavoimien Historia 3A (Hobby-Kustannus 2000 ISBN: 952-5334-02-3)
- Fokker D.XXI [Wasp] by K. Keskinen & K. Stenman, Suomen Ilmavoimien Historia 3B (Hobby-Kustannus 2000 ISBN: 952-5334-03-1)
- Fokker D.XXI: Dutch & Danish Service by W. Eberspacher, Monograph No.1 (Phalanx Publishing Co., Ltd 1995 ISBN: 1-883809-05-3)
- Fokker D.21 by P. Skulski, Seria Pod Lupa No.10 (Ace Publications 1999 ISBN: 83-86153-79-2)
- Fokker D.XXI by F. Gerdessen & L. Boerman, Dutch Profile (Dutch Profile Publications 2007)
- Le Fokker D.21 by P De Jong, Profils Avions No.9 (Lela Presse 2005, ISBN: 2-914017-26-X)





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