Wingnut Wings 1/32 scale RE8.

Well, you're probably reading this because you have this kit in your hot little hands (or wish you did) and are wondering about the pitfalls and potential snags with the build. Well, there aren't too many so get out the sprue cutters and get cracking!

I'll go through the build as per the instructions which detail a pretty good sequence to follow.

Ok, I lied, if you are anything like me, you want to get stuck into building that neat little engine so turn to page 8 and go for it.

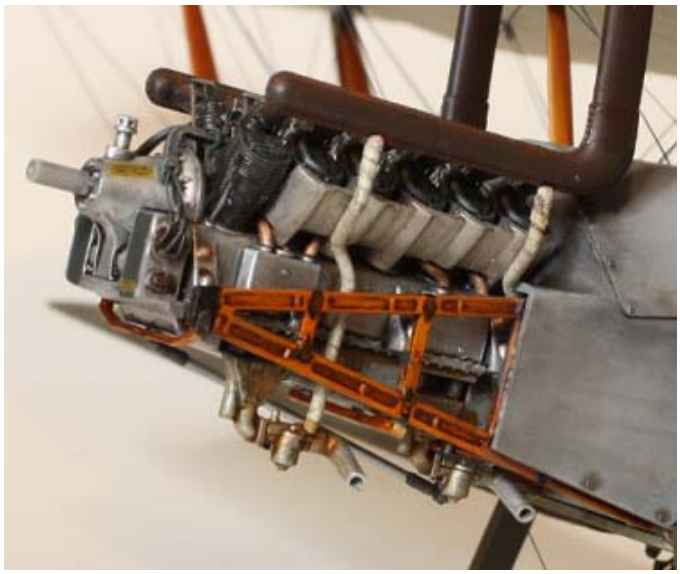
Now before you go crazy and super-detail this little gem, ask yourself whether or not you are going to fit the engine cowls. If so you probably realise that a great deal of this isn't visible once the engine cowls go on. You can save a lot of work by fitting the cowls to the finished model - it's up to you!

Let's take a look at some of the things worth doing with the engine.

Wingnuts have made provision for the valve push rods - even for the induction valves but only the exhaust valves will really be visible. I drilled into the engine block to accommodate these, cut them from a metal guitar string and a fixed them to the rocker arms with a little superglue. Just a note on the upper cowl or cooling trunk; this piece has holes in it to take any push rods you may care to fit. I wish I had used sprue for my push rods as these could then be fitted after the cowl is fitted so that I didn't have to cut slots in the bottom of this piece to accept the metal ones I fitted. Sprue 'rods' will let you fit these into place as they are more flexible than metal ones.

When fitting the cylinders, use the exhausts (parts A8 and A9) to set up the correct spacing. Otherwise it means your exhausts just won't line up.

The side plates (A44 and A43) or the baffles surrounding the last five cylinders on each side are a little flat looking - take a look at the pictures at the bottom of page 9 of the instruction booklet and you will see what I mean. Take to these with a file and emery board and shape away. There is plenty of material to get the result you need. I wonder if these will feature in a photo-etched fret anywhere? By the way, don't panic if one looks like it has been mis-cast, the 'missing' material is to allow for the induction trunking.



For the piping leading from the exhaust to the carburettors (D4) I used thin strips of Tamiya masking tape to represent asbestos lagging.

For general painting of the engine, use the colour guides in the instruction if you like but there are plenty of pictures of RAF 4a engines online and you will see that there are a few variations on the suggested theme.

Concerning the ignition harness, you can wire up the magnetos but these won't be visible if the cowls are going on. Given that I wired mine and then decided to fit the cowls, I had to scrape out the upper engine cowls around where the magneto's sit.

It's not too hard to drill out the spark plugs and add the leads in pairs. Just drill a hole behind each of the bands on part E12 and insert 2 wires, gluing the free end of each into a spark plug.

Now we can return to your regularly scheduled programming and head back to step one in the instruction manual. This thing goes together very neatly and the tolerances are just perfect. Follow the steps as detailed and you won't go too far wrong.

If you have your favourite wood grain mixes then ignore mine. If you haven't tackled wood grain before then here is the recipe I used. Paint all the wooden structures with a light cream colour. I use Vallejo Sand but any light cream colour will do. The instructions call for light wood which I represent with a mix of Burnt Sienna and Yellow Ochre oil paints. Artist's oil paints give you the working time and viscosity required to render wood grain. Don't use too much paint, with a broad stiff brush just apply enough in a thin smear so that the grain is just visible. For the Dark wood, I use straight burnt sienna over the base coat of cream. Experiment with other colours to get a result that looks right to you. If you want all of your light wood to look the same, paint everything with a single mix of oils. Mixing paint to just the same hue is always a little difficult but this means that if you want, you will have a more natural variety to the colours of your wooden pieces which to me is a little more natural.

There are quite a lot of metal fittings in this kit which are to be painted black. Stay clear of flat black but find a very dark grey instead. With these items, a wash of thin flat black will fill in the shadows and a light dry brush with white will pick out the highlights.

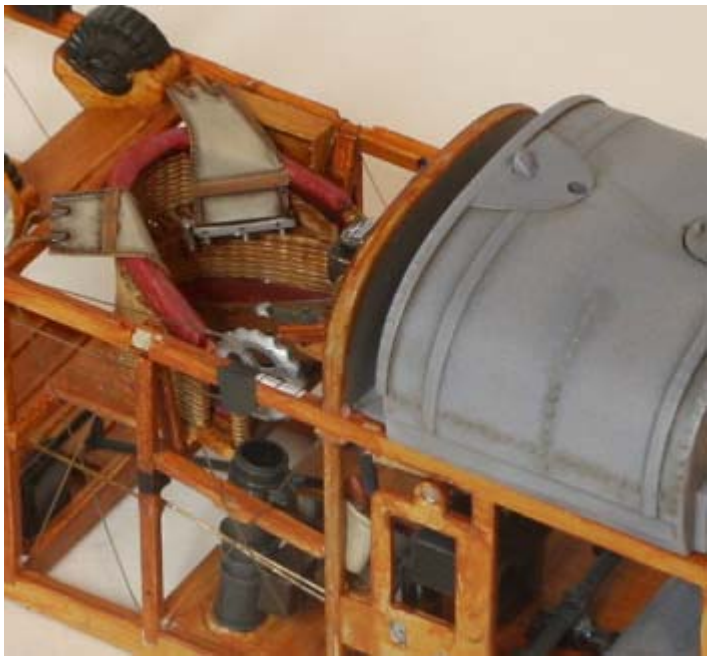
Now the most difficult parts of building the interior structures are the bracing and control wires. Pre-drill holes for these before you start any assembly and it will be so much easier. The instructions make these details very clear but just be careful around the upper longerons adjacent to the pilot's seat. You will see a small cut-out in these designed to take the lower end of the aft cabane strut. It is tempting to use this cut out as a securing point for the bracing wires. Don't let your wires obstruct these or you will have a devil of a time fitting these struts – the tolerances are very close!

The wicker seat is a lovely thing although the cross woven strip running across the centre of the back rest is a victim of the limits of injection moulding techniques. If you visit the Wingnuts Wings website, you will find some hints and tips on finishing these.

If you look at the details of the RE8 Model on their website there is some information specifically related to the RE8. There are several amendments to the instruction sheet relating to the bottom fin near the tail skid, engine mounts and other small details. Check these out to make sure the model you are building is correctly configured.

The instrument panel is a real treat and the decals dress this up very nicely. The most difficult aspect of this panel is the electrical loom which supplies the instrument lighting. I chose to paint these thinking that I would not be able to find wire thin enough to make these. The result is a little underwhelming but if I need to do something like this again, I will use 2 thou thick wire from inside an IDE hard drive

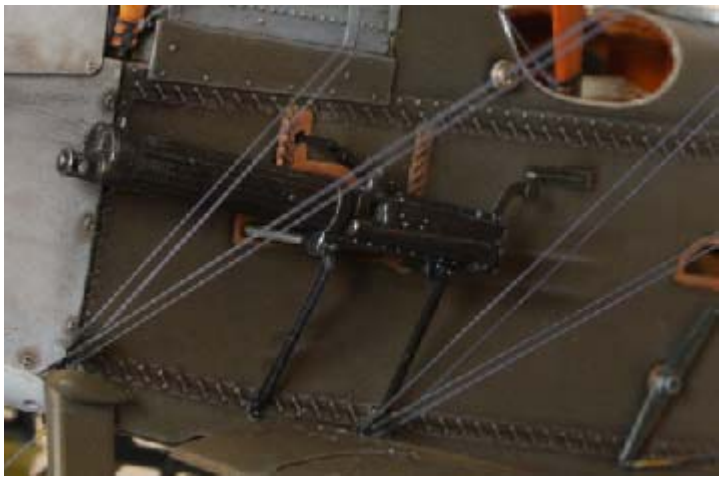
ribbon. (There are two types of ribbon used to attach IDE devices – use the thinner type.) This wire has other uses and I have employed it during the rigging stage to make small eyelets - more on that later.



Once the interior is together, anneal the seat belts (as suggested by the instructions) and bend them to shape before you paint them so you don't crack or scratch the finished pieces as you fit them.

It might be tempting to leave the engine aside until the end, but before you close the fuselage halves together, the engine needs to go on. If not, you won't be able to fit the structures at the back of the engine inside the fuselage. Wingnuts Wings have definitely done their product testing here as the instructions tell you to do just this. Another must do before gluing the fuselage halves together is to paint the forward firewall and the area around the fwd upper fuselage - if you have already glued on the engine exhausts they will get in the way. One last thing to consider before closing the fuselage, I post-shaded the areas where the longerons and uprights sit with a dark brown which gives the interior the impression of a little more depth.

The machine guns are very nice features but can always stand a little improvement. Replace the end of the barrel on the Lewis gun with brass tube or, as I did, use a 25G syringe needle. For the scarff ring, if you wish to use elastic as a bungee, leave approximately 0.5mm between the pullies and the side brackets (P4 and P6) otherwise the bungee won't sit neatly. I didn't bother with the extra swivel joint (R25) as it looks a little chunky.



The Vickers just needs the barrel drilling out (#80 drill bit will look the part) and the flash suppressor needs opening up to and bottom to match the left and right sides. A small drill bit and a modelling knife can be used for the latter.

There was one other anomaly that I detected after the build was complete. I took a photograph of the model in an attempt to duplicate the photo of the aircraft in the instructions. In doing so I noticed that the Holt flare dispensers appear to be located approximately one wing rib too close to the fuselage. Before building your model, determine what you think to be the best position for these components and prepare the lower wing as applicable before painting.

Given that the kit goes together so well, there are very few surprises worth mentioning so I will discuss how I went about filling the acres of PC10 that cover this aircraft. The key areas which will need attention if your model isn't to be a vast wasteland of greenish brown are the wrinkles, the turtle deck and the rib tapes.

For areas that will be in shade eg. under the tail and the fuselage below the upper wing, apply a base coat of black. Then paint the fuselage overall with your chosen mix of PC10. I used a 50:50 mix of olive drab and Vallejo's Dark Earth. (I will use a greater amount of Dark Earth next time - say 3:2). When dry you can turn your attention to the turtle deck and the wrinkles. I use sepia ink to colour along one side of each rib on the turtle deck and on the underside of the wrinkles. Make sure you blend this out into the surrounding PC10, but don't be afraid to leave a hard edge of colour against the ribs or wrinkles. While you are at it, wash the sepia ink along the lines of lacing. Let this dry. Then mix some Yellow Ochre and Black artist's oils to an olive drab sort of mix and then add a whole lot of white. With a soft broad fine bristled brush, dry brush over the entire fuselage. Make sure the brush is very dry - you want this to be a subtle effect! This will pick out all the raised details such as the lacing, raised edges of ribs and the high spots on wrinkles.

The wing rib tapes will receive a similar treatment to the fuselage, but we will start with the underside first. I masked off each individual rib with a 1.25mm strip of masking tape. Do this on both sides as you will need to do this for the Clear Doped Linin (CDL) as well as the PC10.

On both sides of the wing, spray a band of black green along each rib so that there is a feathered edge on both sides of the rib tape. Spray the lower surface with CDL - I se 50:50 Vallejo Sand and White. The black green pre-shading will give the lower wing some shape and depth. This same technique is used for all fight controls and stabilisers. Depending on the model you are building, you can use a similar technique for the under side of the fuselage.

On the upper surface of the wings, I wanted to increase the contrast between the 'valleys' between the ribs and the edges of the rib tapes. I sprayed a band of white between each pair of ribs. Remove all the masking tape and you have all the pre shading done. Spray overall with PC10 and dry brush with the Yellow Ochre, Black and White mix.

It is always a good idea to do this sort of work in one hit so that you get a consistent looking final result.

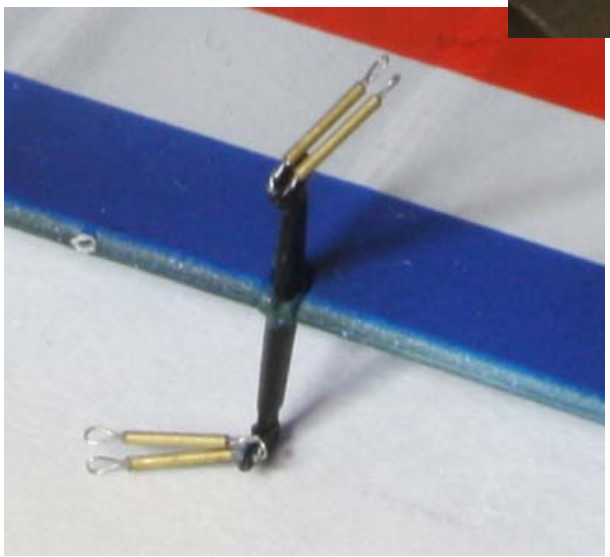
Rigging can be done in many different ways but I am just going to discuss what I did and why. Firstly I decided to use EZ line - it is flat in cross section like RAF wire and will resist 'rough' handling. My biggest concern was stabilising all that weight up top. The RE8 is a single bay aircraft and another four struts might have been nice (what was the RAF thinking when they designed this thing? Obviously not about the model maker!) Anyway, I have used a few strands of monofilament nylon to give it some extra support - these appear between the interplane struts. Credit to Wingnuts, all of the struts, and particularly the forward cabane struts are very well anchored.

I wanted to use 0.4mm tube to represent the ferrules that the RAF wire screws into. Albion Alloys in the UK make this stuff and the internet will provide any number of suppliers of the stuff. Make yourself up a jig so you can cut piece after piece the same length. All you need to do to cut this stuff is score around the outside of the tube with a modelling knife and
getting them threaded on. Now EZ-line is not of consistent thickness all the way along, so find a thin spot and cut it at a sharp angle to get a nice pointy tip. Start

threading these onto the EZ-line. Once on, you can stretch the elastic to encourage them further down the line. Once I had a couple of dozen on the line, I painted them with a very dark grey. Fix one end of the EZ-line in a hole on the wing, pick the two ferrules on the end and cut the rigging line about 1cm shorter than the required gap. Use a heavy set of self closing tweezers to give you some slack and glue the remaining end in place as required. Don't forget to untwist the line before you fix it in place. Slide the ferrules to each end of the rigging line and fix in place with a little thin superglue. Repeat this until the aircraft is rigged! (Simple as that he says.)

Before assembling the control surfaces etc, pre drill the holes for the cables/turn buckles on the surfaces and on the various control horns.

For the control cables, you will probably want to make some turnbuckles. This is where the 2 thou wire from the hard drive ribbon comes in handy again. Simply twist a loop of this wire using a #80 drill bit to form the loop and glue this into a piece of 0.4mm tube about 3mm long. Attach the rigging wire to the loop before installing the turn-barrel onto the control horn. You will need to make the other loop directly on the control horn. Glue the other end of the brass turn barrel onto the second loop and



voila! All that's left to do is to anchor the rigging wire, which, if you were paying attention, you have pre-installed in the case of the rudder and tail skid. The rudder has double control lines and hence double turnbarrels. To set this up neatly, thread a short piece of twisted wire through the control horn and glue two brass turn barrels on either end. Then glue on the remaining loops which will then take the control wires.

Decals are something that many modellers apply but do not weather or shade as per the rest of the model. Don't be afraid to apply decals as you go, weathering with pastels or light dustings of colour from the airbrush. I have used pastel chalks to highlight the wing ribs. Mask them just like you would when airbrushing and dust over with some dark grey. This is easier to do once a layer of matt varnish has been applied.

Here are some recommendations which I wish someone had made to me before I started:

Regarding the two forward wires between the cabane struts: The upper wing centre section could be pre routed with monofilament nylon to enable it to be drawn through the inter-wing gap, tightened and glued in place. The idea is to glue the lower end of the rigging wire in place to the hole on the forward fuselage while the mono is loosely threaded through the upper wing centre section. Put a little tension on the free end and then glue it to the upper wing section. Using monofilament for these two wires would provide some real lateral stability to the upper wing. I gained a little extra stability by replacing the plastic supports between the top wing and the exhaust uprights with brass wire.

It would be worth using mono to brace the landing gear too.

The fairings surrounding the scarff ring are not correctly tapered; they are scooped out rather than a straight taper. Photo's will let you see what I am referring to. Some well placed putty will sort this out – I didn't discover this until too late and I wasn't prepared to strip and rebuild this area.

If you are considering making a build with the clear triplex glass, consider how the tabs from the upper wings will interfere with the clear panes and how to paint this up. I didn't go this way but I figure by bringing this up here you can make a decision you are happy with, not have to make a decision you are not when your model is half built!

And that just about wraps it up for the build. I haven't gone over this thing as a piece by piece saga, because the instructions are so good. Hopefully I have provided some food for thought and answered some questions you didn't know you were going to ask!

Happy building!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