



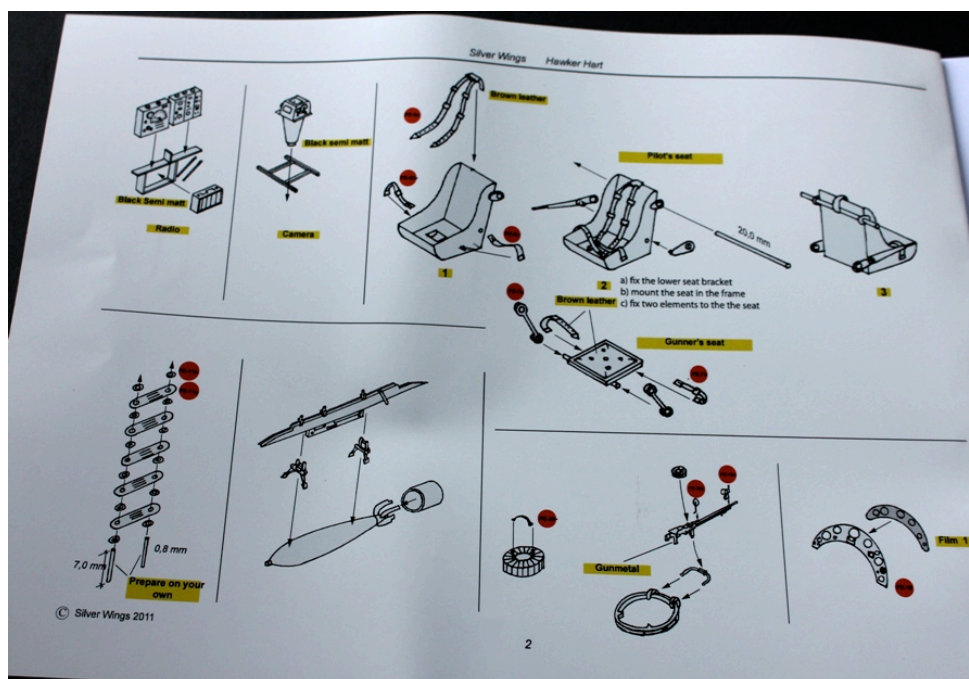
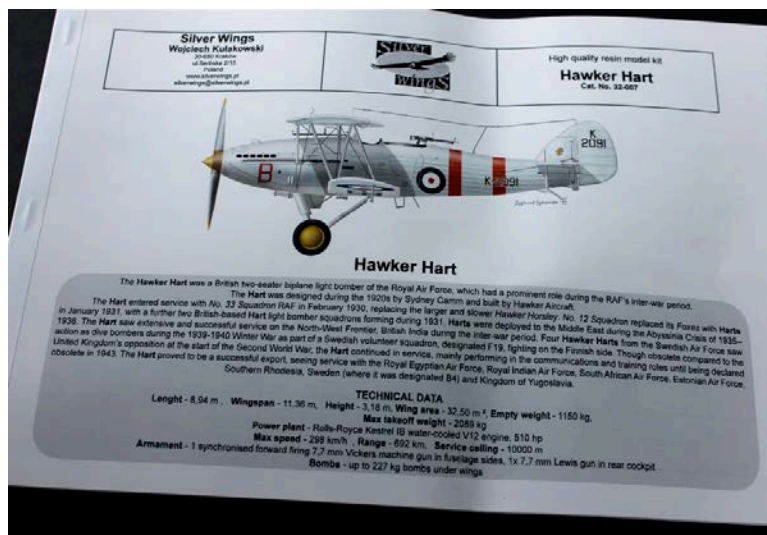
SILVER WINGS 1:32 HAWKER HART BUILD REVIEW

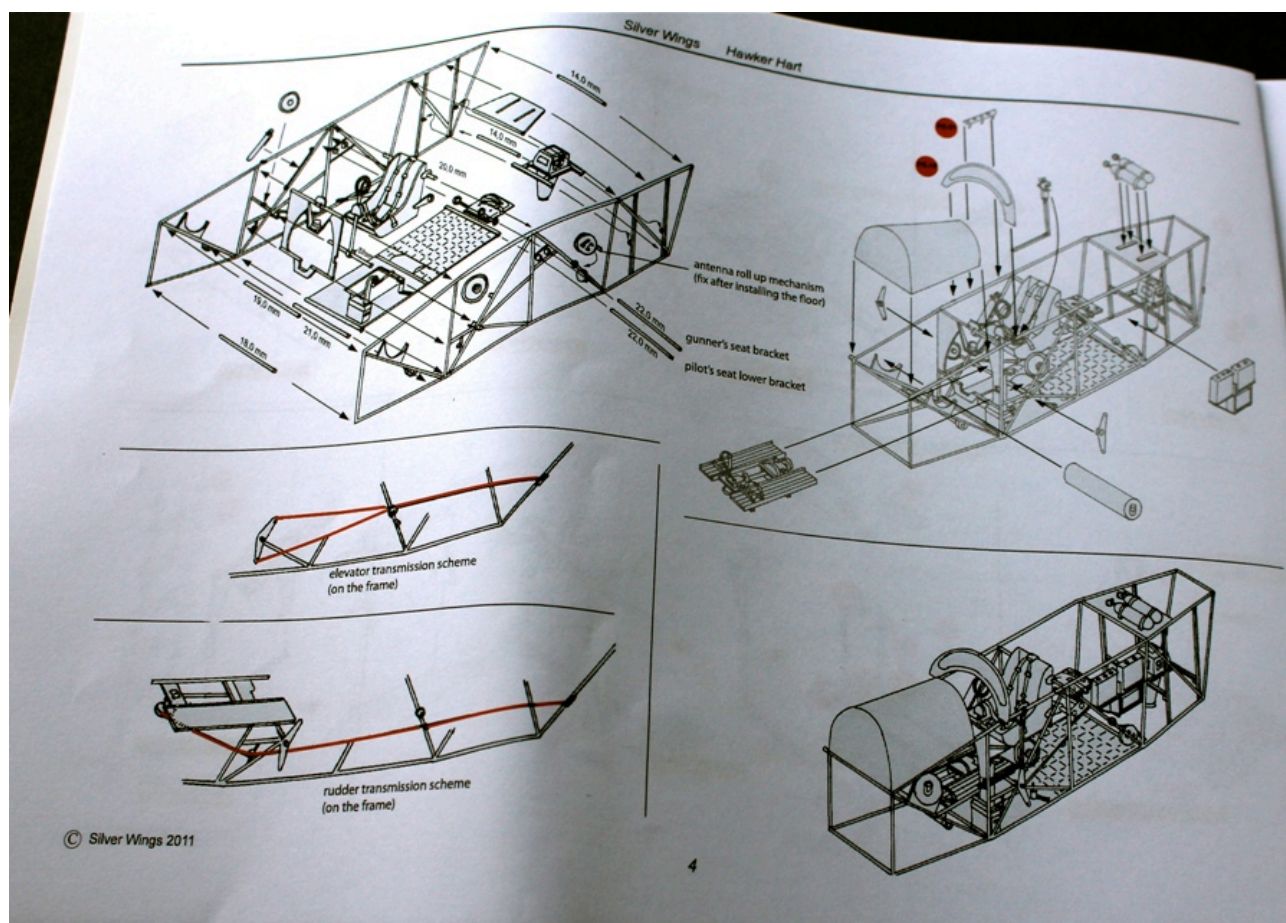
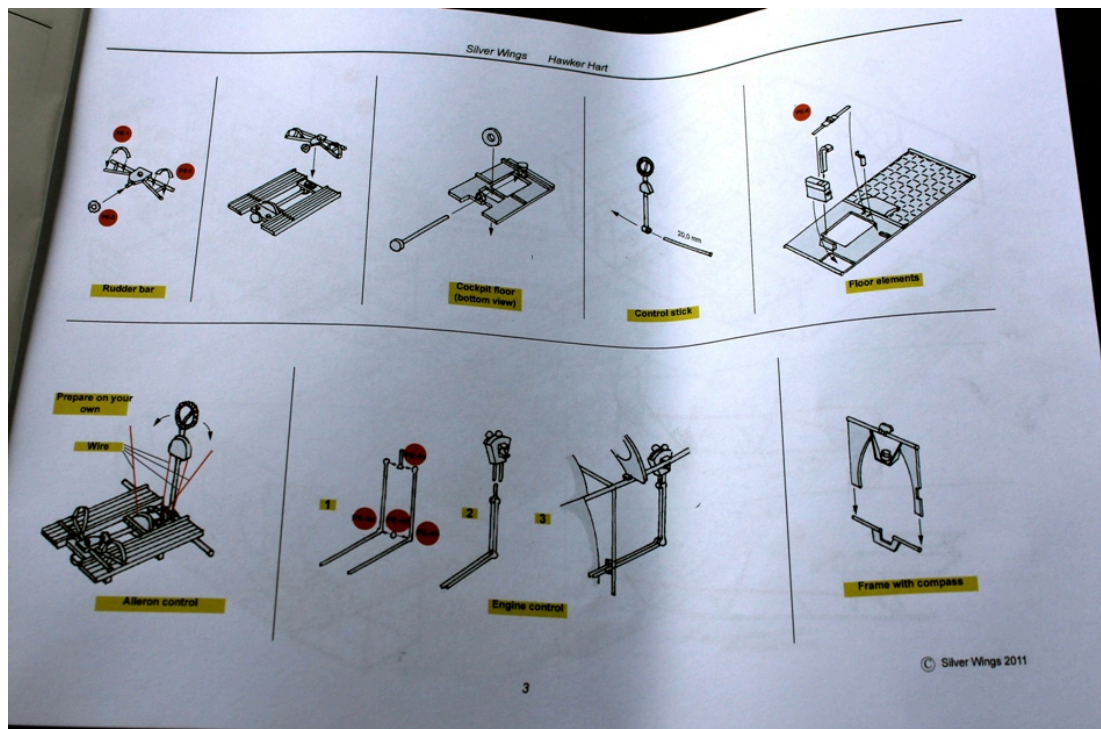


Let's see if my in box review was perceptive!



Firstly the instructions...



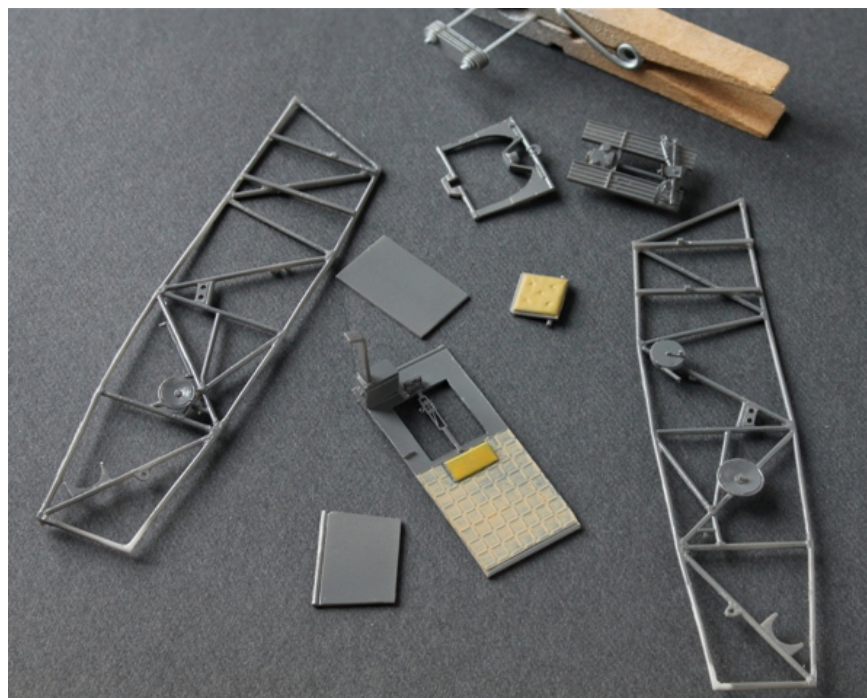
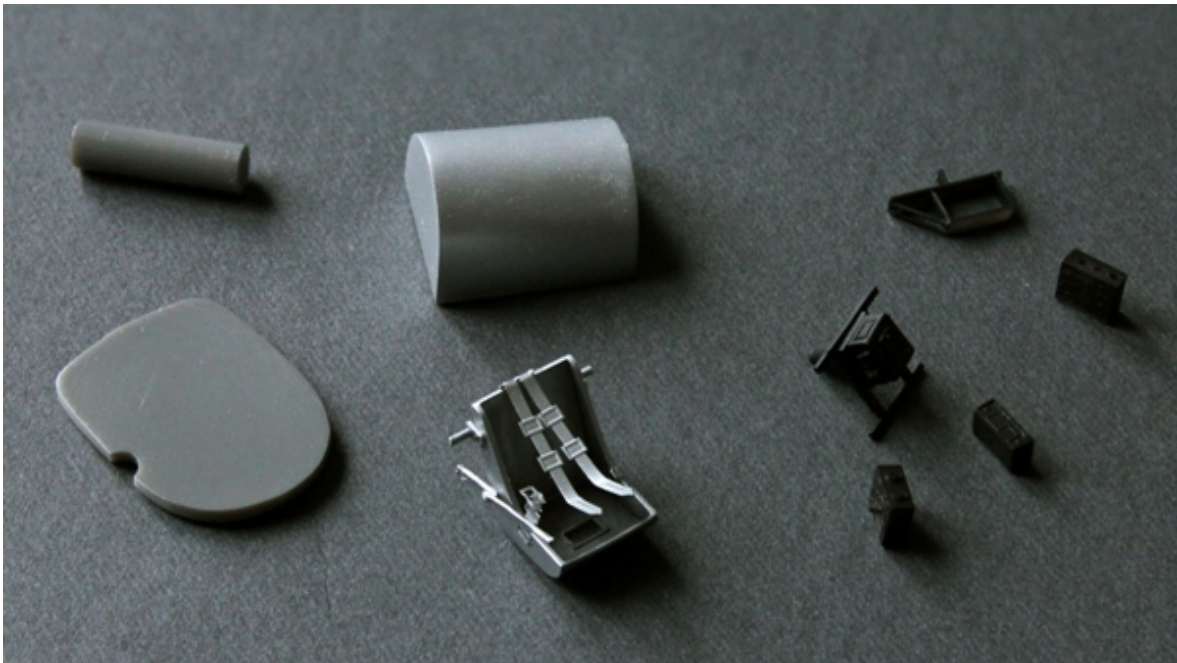


The front gives you background on the aircraft and trace its service with the RAF in the interwar years. In fact it spawned a large family of aircraft (incl. the Hind and Demon amongst others) serving with other air forces around the world.

From page 2 the construction illustrations start. I choose this word carefully as they are just that and you have to figure them out!

None of the resin parts are numbered so very careful identification is necessary. Because they are illustrations they do not really show the positioning of the parts very accurately.

However, I started construction on the cockpit interior by painting up the parts just to get used to seeing them and giving time to figure out where on earth they went.



I am using the very good mushroom publications on the “Hart Family” by Alex Crawford.



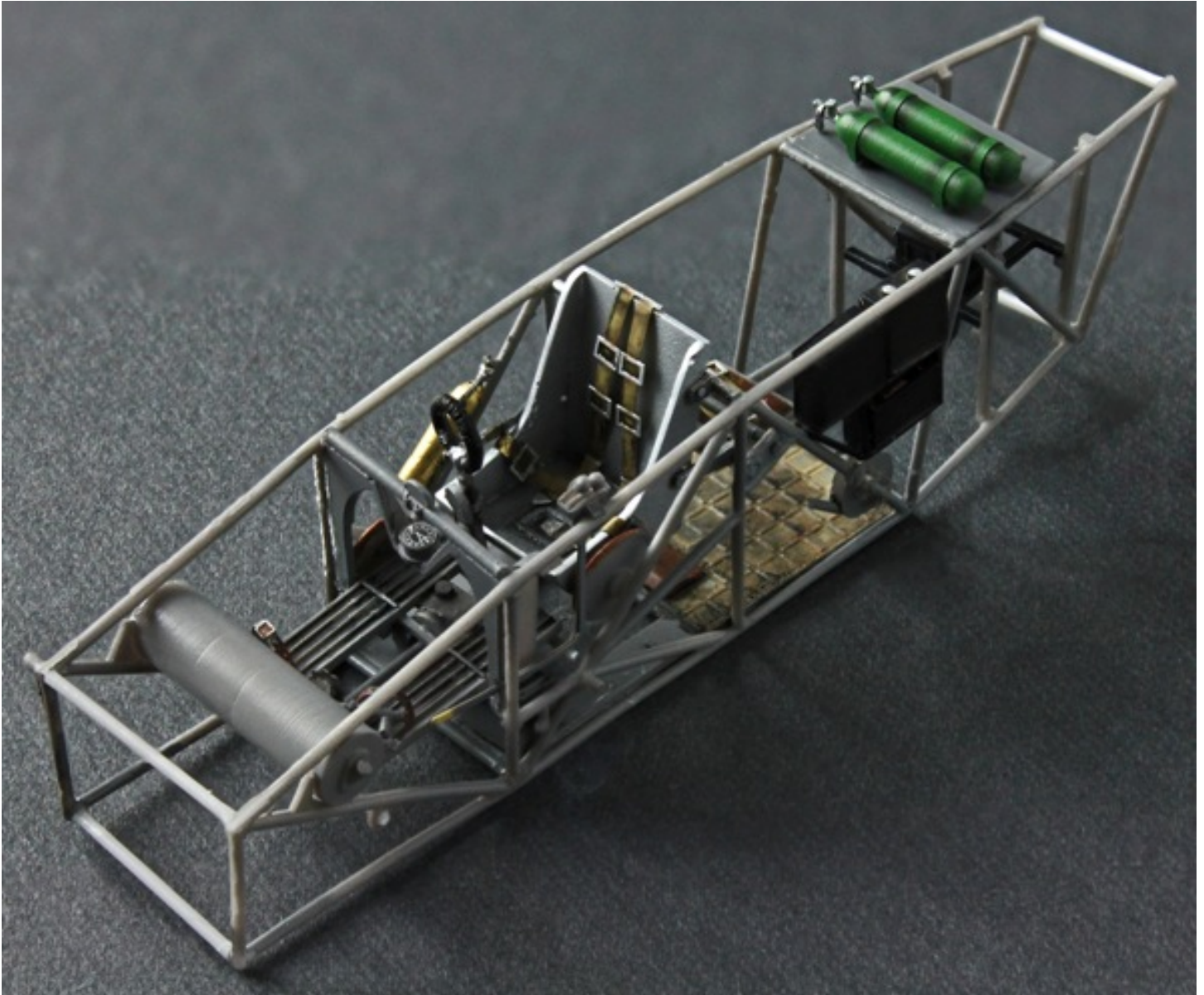
This has many pages of the whole family of the Hart but not many on the Hart itself. In fact I was struggling to find good reference at all. Luckily in hunting round the internet and finally looking at Silver Wings site I found Doug Nelson's unpainted build – very helpful indeed.

It won't have escaped anyone familiar with the Hart that it is a metal/fabric construction the metal (usually pretty shiny) covers the engine compartment and up to the pilot's area, the rest is metal frame covered with fabric. I polished the metal area as indicated and put some rivets where shown in photo references.



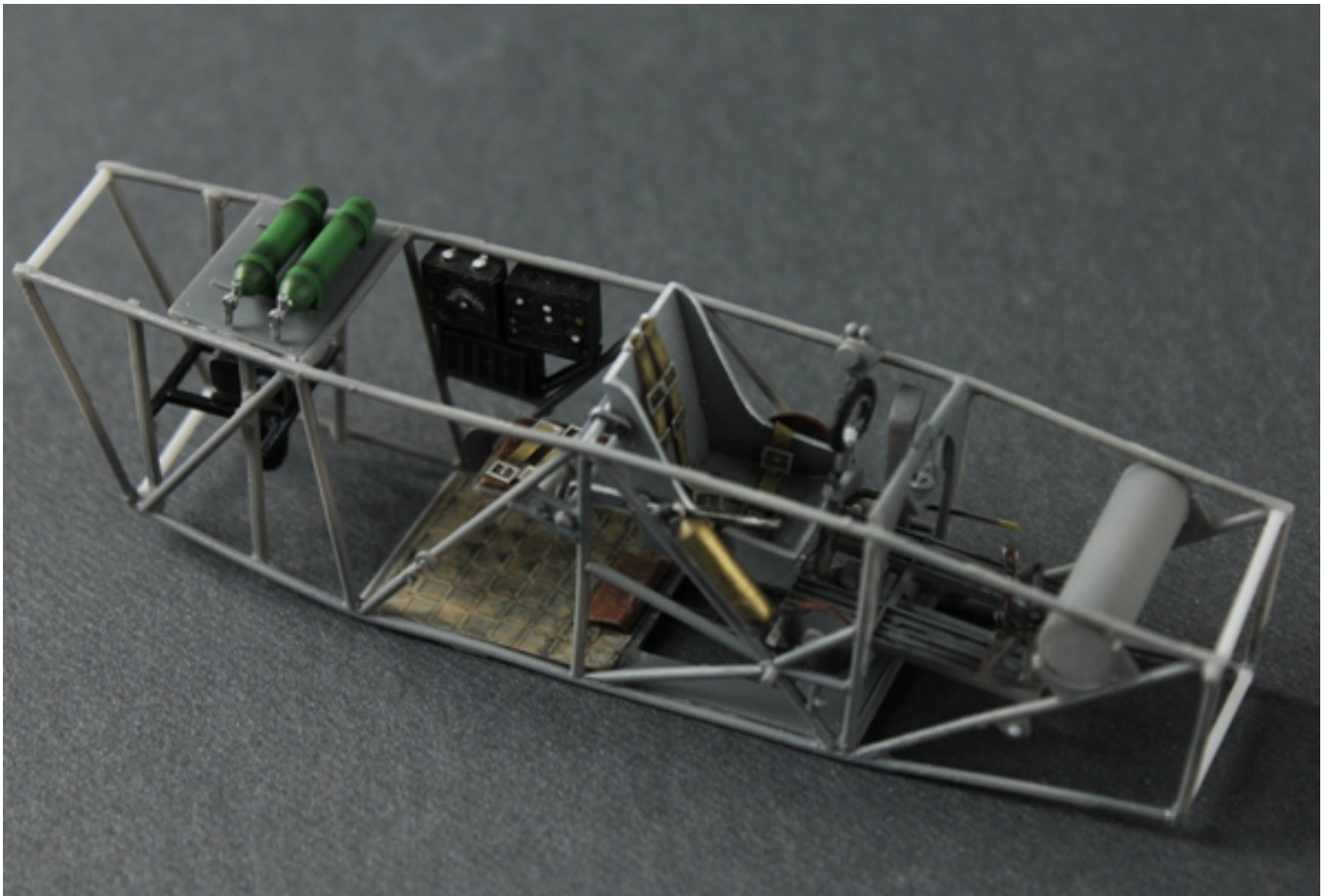
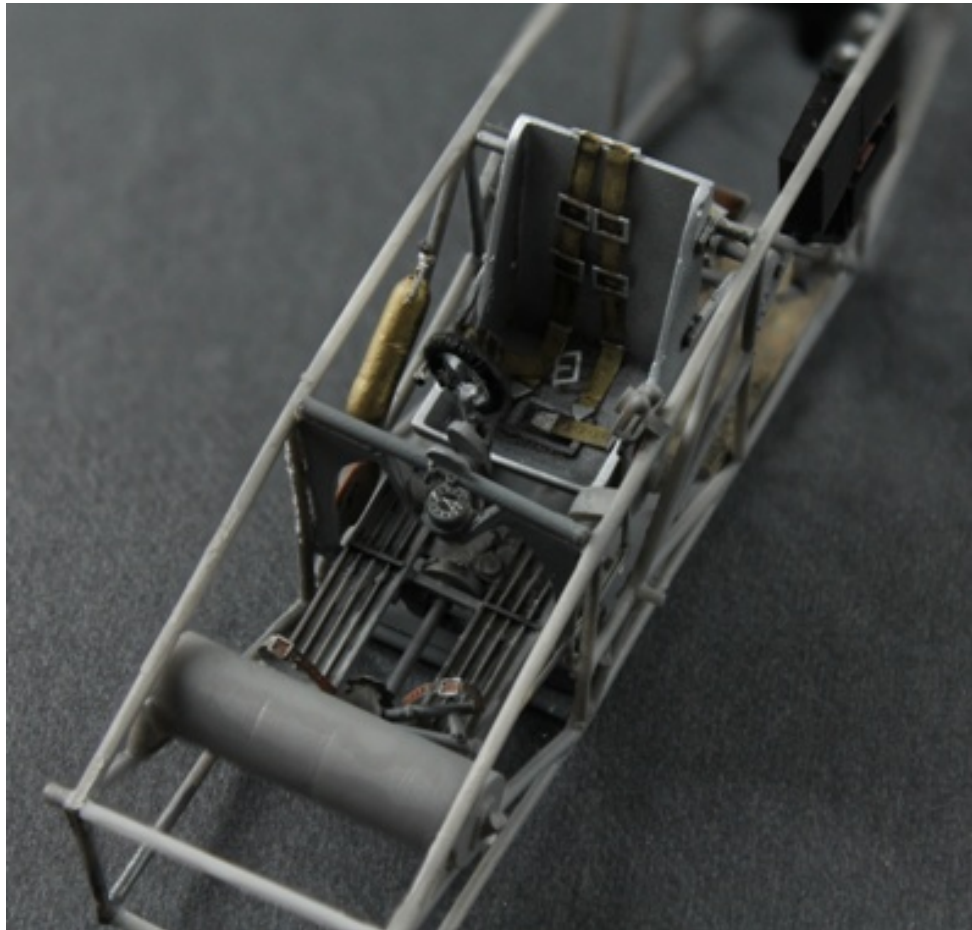
So to the cockpit...

The first thing to bear in mind is that almost none of this is going to show when the fuselage is joined up. The second is that there are all sorts of unidentified rods of various lengths that put together or keep apart the cockpit frame and its contents. These all must be measured to establish which goes where (definitely not a Tamiya kit!). Thirdly it seems to be very easy to construct this with a barber shop twist in it. Careful line-up is essential.

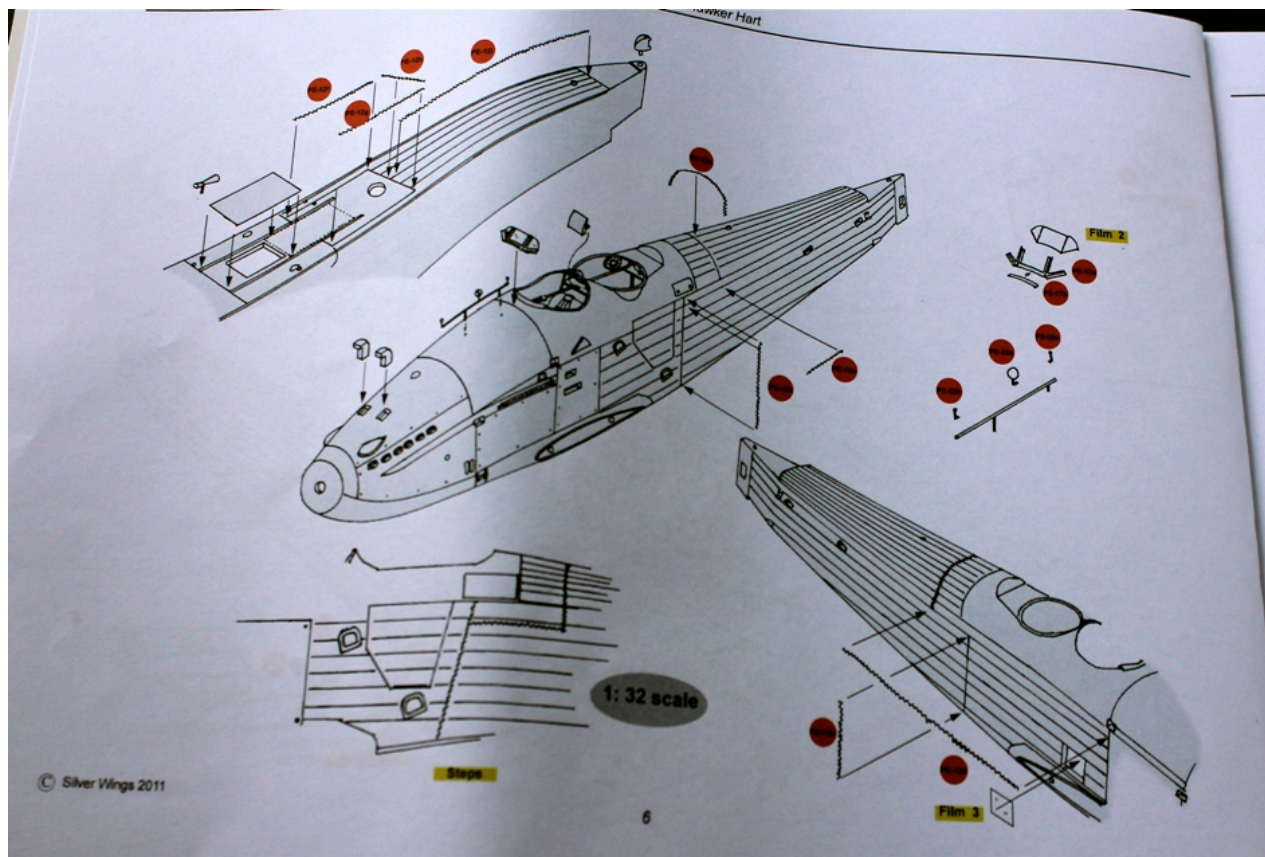
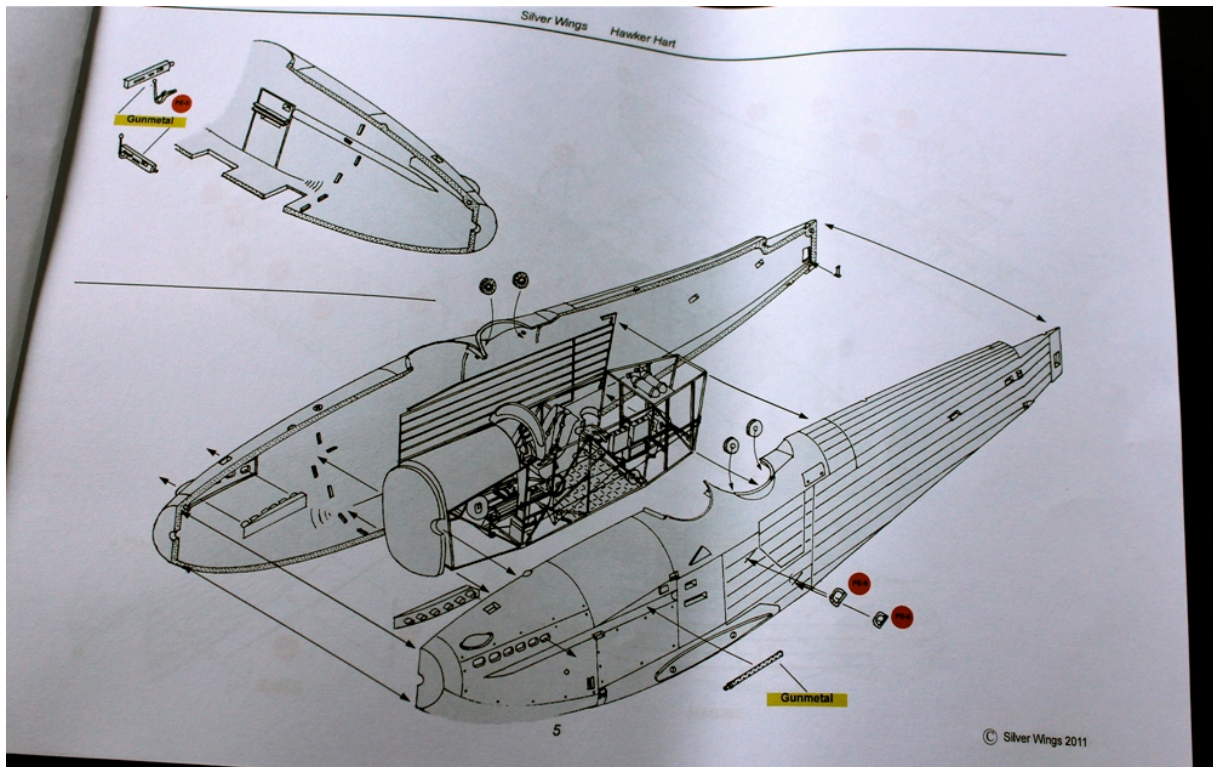


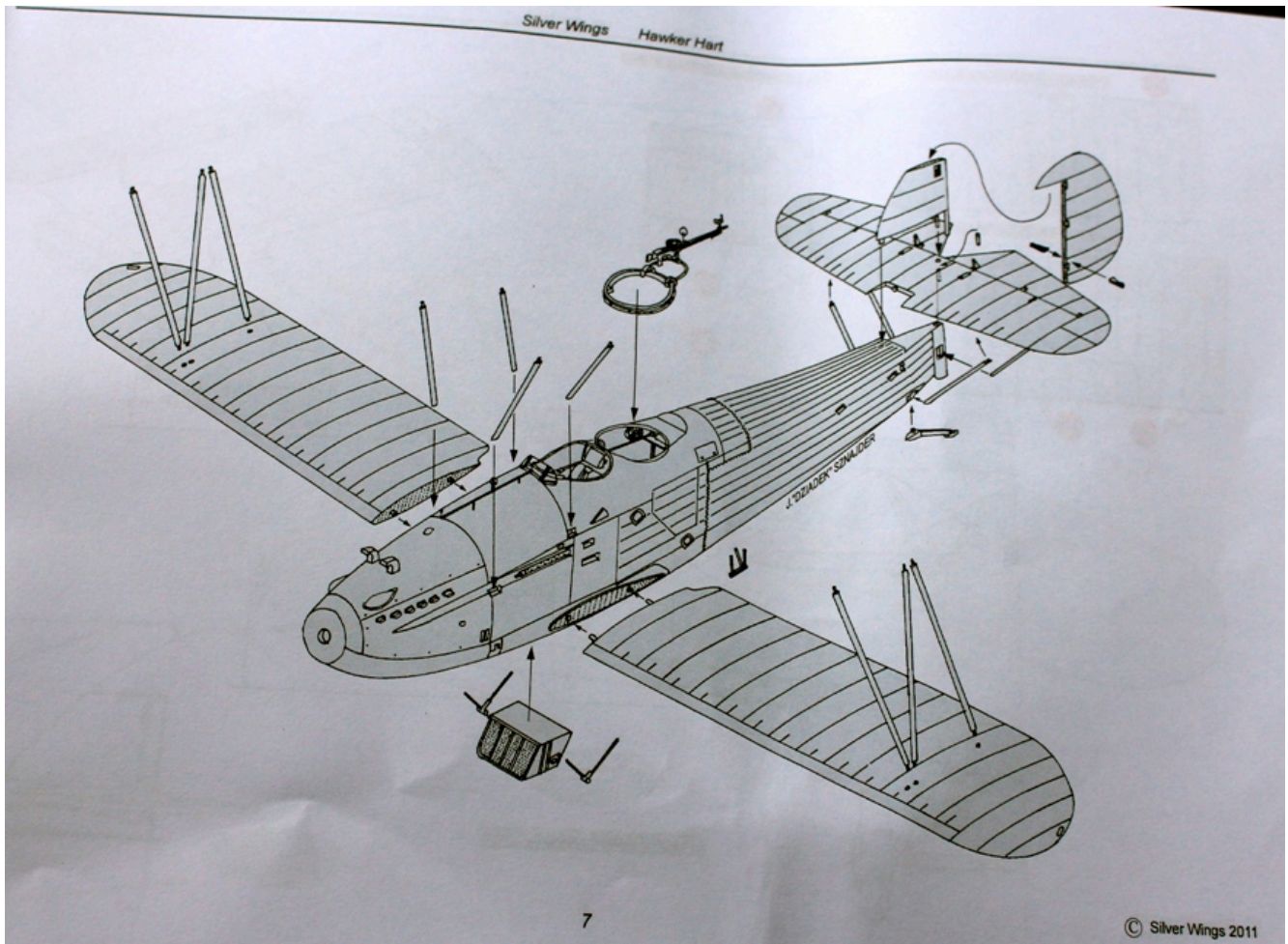
This pic shows most of the contents in place and unpainted. In the end I used my own plastic rod to join the two frames together. The area forward of the compass and aft of the radios is not visible later. Nor for that matter is the compass (luckily!!).

Two more pics show the positions of the parts and how they are mounted.

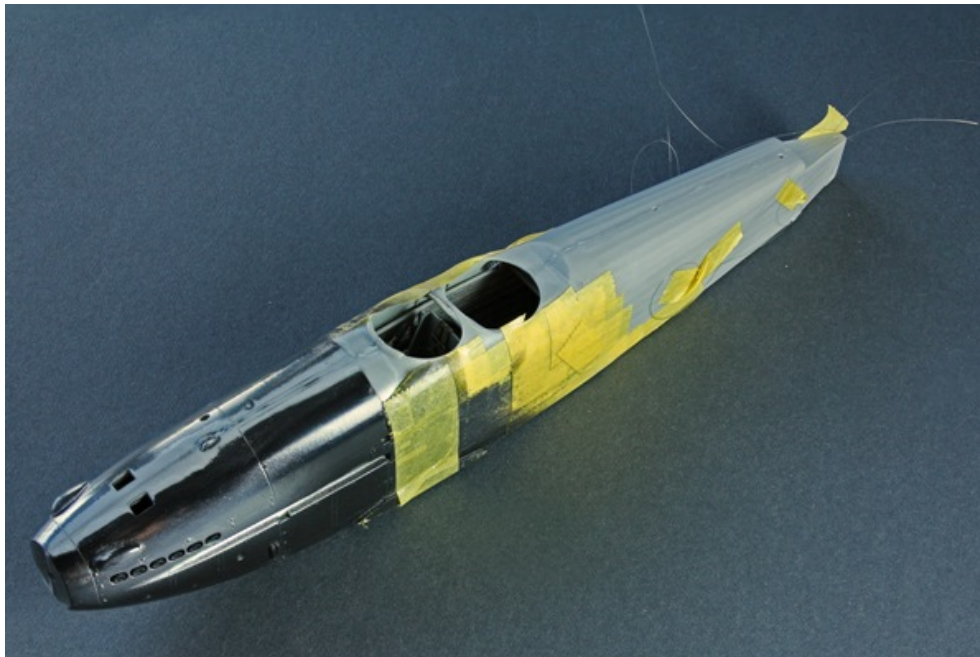


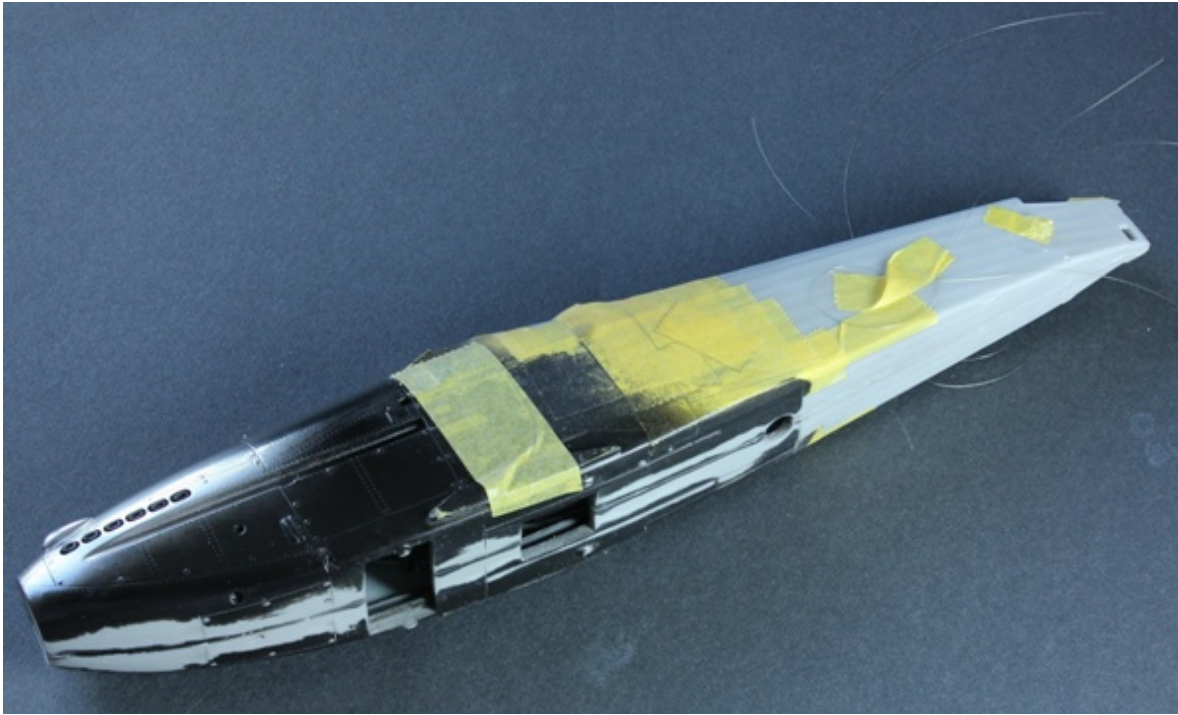
This time the fuselage is buttoned up... Here are the instructions:



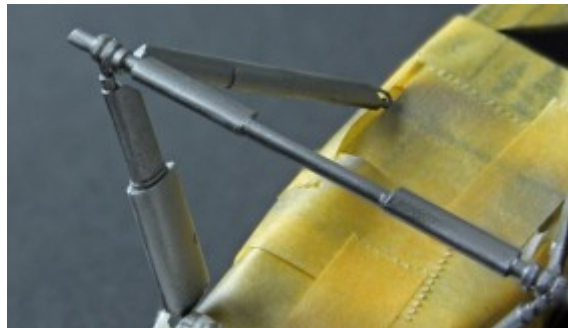


As I said before the concern with this is whether you have managed to build the framework straight. The fuselage has 2 fixing plugs to guide you. After you have put the exhausts in place and the machine gun in the cockpit you are ready to go. It took me about 20 minutes to line it up properly but it worked well and all is now concealed!

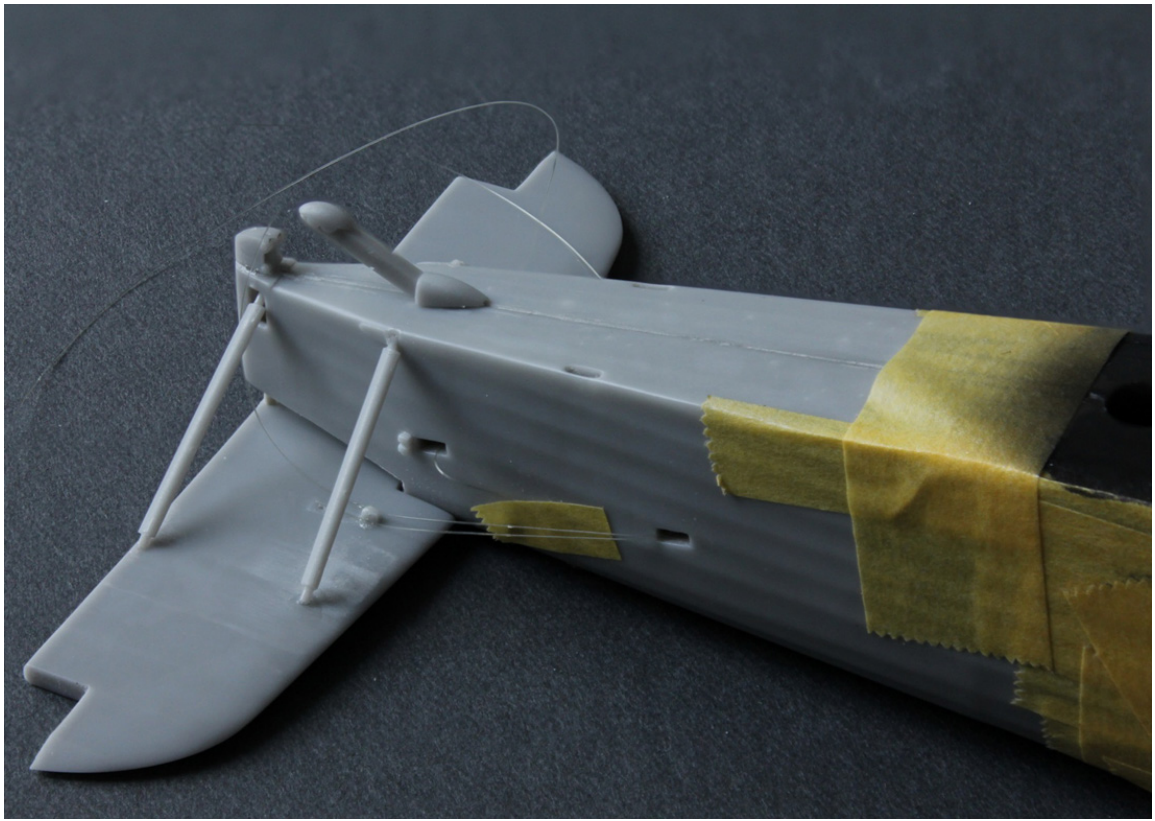




I had painted the area around the exhausts Alclad Chrome before fixing the exhausts as I thought that it would be difficult to mask them later. They are flush with the engine panel. The first real problem for me was the undercarriage fixing.



There are no definite fixing points for these parts and nothing much to get a drill into. Reference shows the vertical legs engaged forward of the axle. I opened up the gap just by the wheel fixing and left the copper centre of the strut so that it nestled into the position. Doug Nelson in his build (on the Silver Wings site) points to the necessity of drilling a new hole for the rear struts about 4mm forward of the bump/blister in its position on the underside of the fuselage. I drilled it about 6mm ahead and found that to be good. Superglued together the joint is really quite strong.



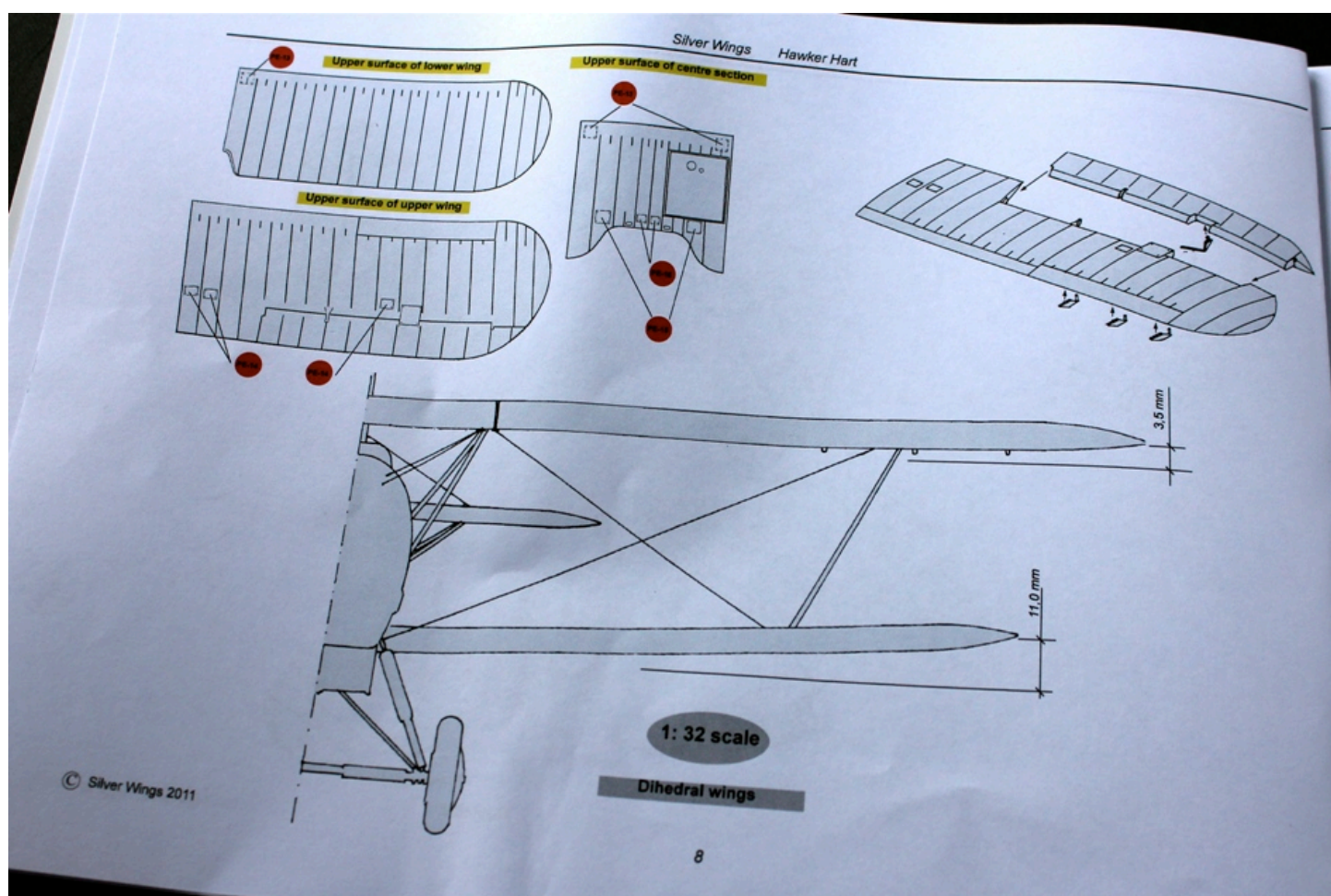
Once again there are no real fixing points for the tailplane parts and those that are there seem to need drilling out. With a little patience all can be solved and once again the final assembly is quite robust.

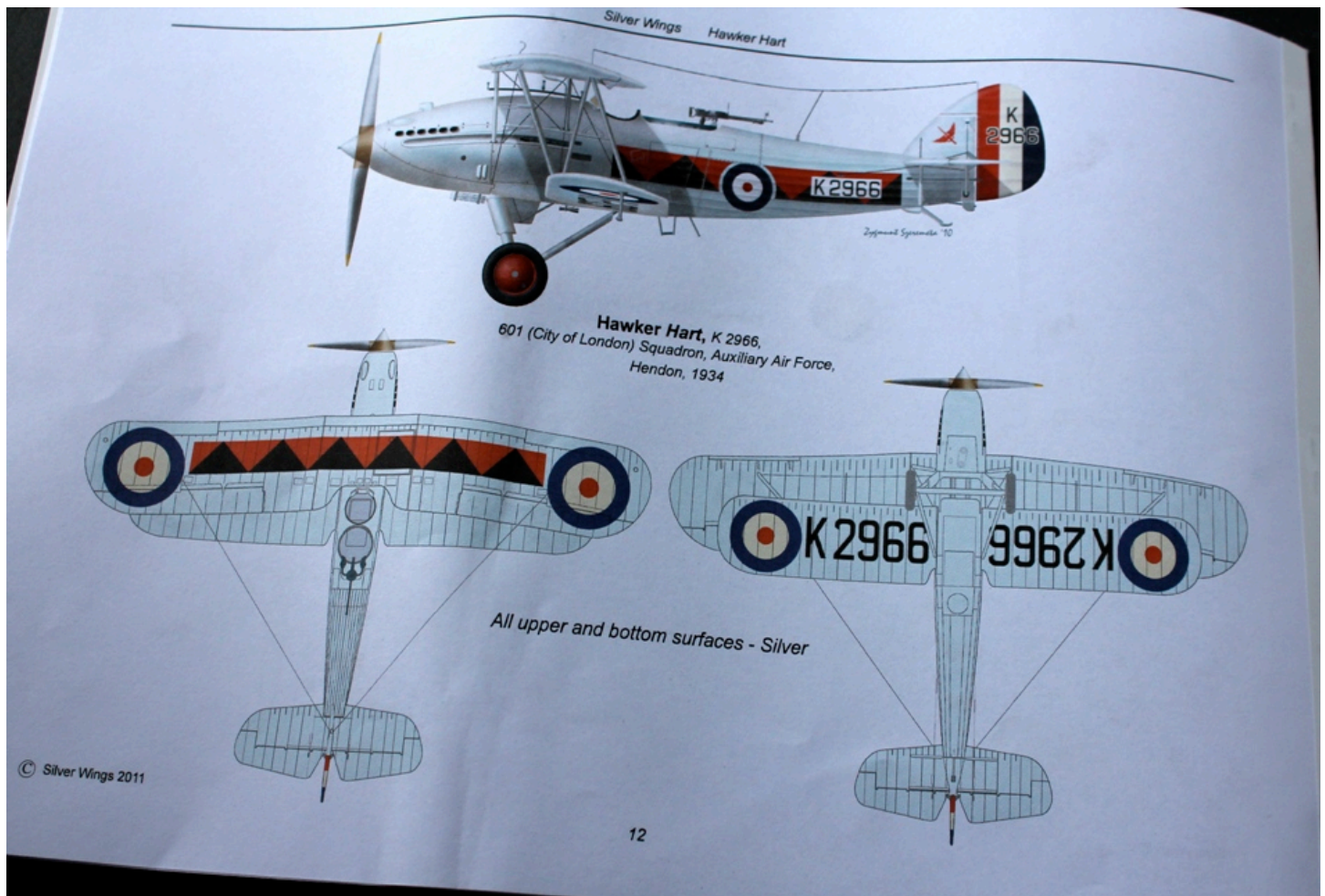
I painted the metal parts at this stage using Alclad Chrome. At the show at Telford, this year, I spoke to the people at the Alclad stand and they showed me their new gloss coats; one is, I guess, a lacquer or whatever they use, the other is acrylic. I was shown an example of it having been sprayed over the Chrome. It looked very good and was useful in their opinion to enable the chrome to be handled. I don't know if I did something amiss but the acrylic flattened the lustre of the chrome, unacceptably in my opinion. I will later attack it again with polishes to see if I can bring it back.

The thing that attracts me to the Hart is that wonderful shiny metal on the nose!
I will paint the whole fuselage before installing the wings in the next part.

We now move on to a part of the construction where I had the most problems.

The instructions for the fixing of the wings are below.





The difference between my build and that of Doug Nelson (DN) is that, because I am rigging and painting the aircraft I am handling it much more than, I guess, he did.

If you look at the instructions you will see that the angle of dihedral is included in them on page 8. I used the suggestion of DN to make a simple rig that excluded the undercarriage touching a surface. Then cut an eleven mm piece of card and placed it under the wing you are fixing, glue it in place.



Now, in this close up of the wing there is a small problem.



You can see that the fixing lugs on the end of the wing are very short (c. 3 mm). Good for locating not so good for a solid bind. The problem arises later!

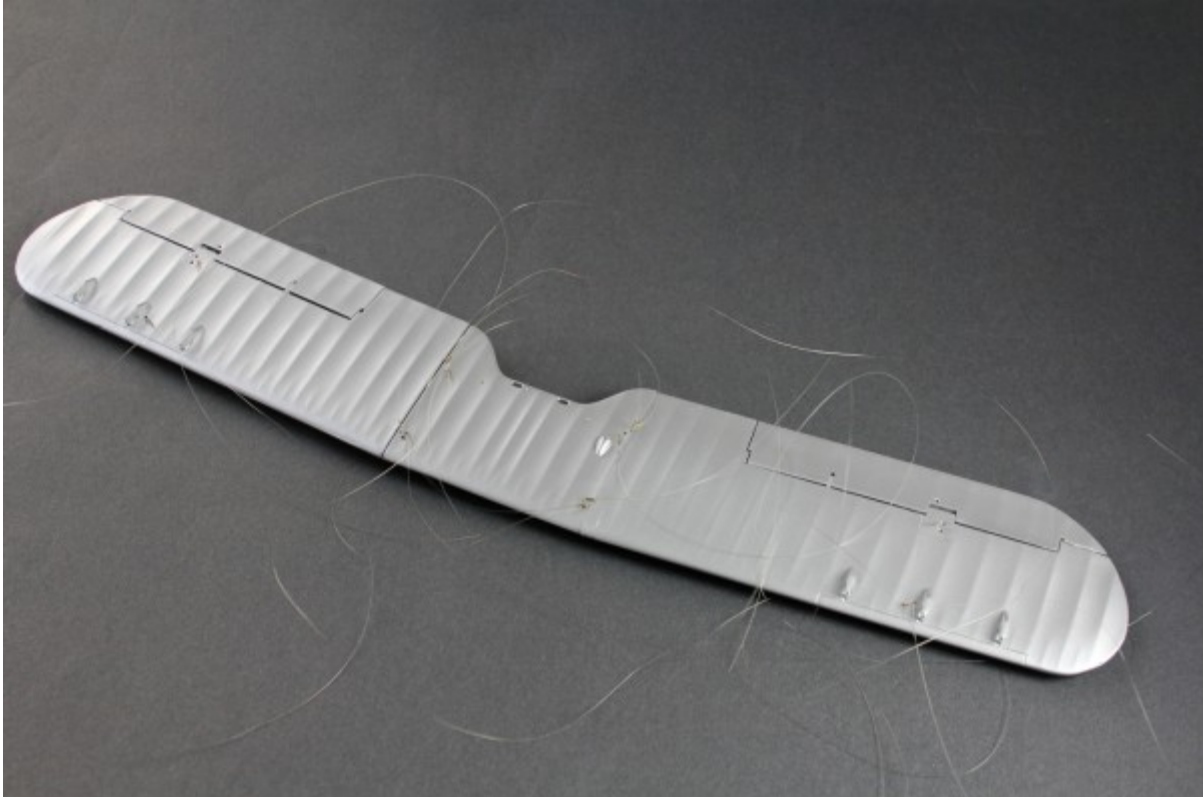
Before fixing the wings I drilled out the small holes that take Bob's buckles; you can see these on the upper surface of the lower wings.

I then glued the upper wings to the centre section using a similar system to the lower wings (this time the dihedral) that is a card 3.5 mm high under each wing.



Then I started to drill the holes for the buckles, mistake! Although I wasn't applying much pressure the port wing snapped off leaving the locating lugs in the fuselage. I drilled out the lugs and replaced them with longer lengths of cocktail sticks. That worked, but I wonder whether super glue is right for this? There is going to be some movement in the wings as one fits the struts and superglue is not good where there is lateral pressure. Once that was finished I drilled the buckle holes in the upper wing. This time I did not put pressure on the wing joints but eventually they broke off just as a result of the handling. This time I used plastic plugs. Incidentally the actuators for the forward slats are not shown correctly in the plans they should have the longer pin forward. DN has copied the error on to his build.

Anyhow all is ready now for installation...



My next error was entirely down to me. I was chatting to a friend as I was putting the fuselage decals on and despite having carefully sorted out which ones go where I placed each on the wrong side.



By this time it was too late to sand them off as I had placed all the etch stitching on the side, so the only solution was to paint over them. It is a credit to the quality of the decals that this was successful with no impression left of them at all – that is truly thin! I e-mailed Wojtek at Silverwings and he promptly promised to send me a new set thank you!

Here finally the wings are installed. Like DN I left the wires protruding out of the struts for added strength (in pic 22 of his review he sets out the struts and their positions). The cabane struts that support the centre of the upper wing section are very strong and easily hold the wing in position whilst installing the outer struts (which will be shown in Pt 4).

There is not a lot more in the instructions to do. The rigging seems to have been taken off a later member of the Hart family, perhaps the Demon, but it is a fairly representative rendition of the wires.

There are no real painting instructions. I painted the interior grey and aluminium. The outside as I have said before is Alclad over the metal parts and I put Humbrol 11 over the fabric.

Rigging...

This is new to me and I had to hunt around the internet to learn the basic principles. I had already used Bob's buckles for aerals on aircraft so I continued to use what seems to be the best product on the market for this.

I drilled the lower halves of the upper wings and the upper parts of the lower wings. I used the Mushroom book as a guide. I can see from that, that I should have pre drilled the engine covers. The rigging there is obviously directly onto the frame internally. Not this time!



I used .03mm fishing line.

I followed the instructions on Bob's website except that I threaded one end into the buckle and tube. I pulled the short length of the fishing line tight by pushing down the tube towards the buckle to jam it and then glued it. I fixed this completed end into the pre drilled holes with super glue and let it set overnight. (I did more than one at a time!!)

The other end... I threaded and left them running free before fixing the end into the holes at the opposite end. I just glued the buckle into the fuselage (in the pic) and let it dry. Using tweezers, pulling the loose end and pushing the tube down tight onto the buckle and applied superglue. The lines were taught.

On the underside I rigged the tail controls and applied the decals - all straightforward stuff.





Here it is just before the last bit of rigging is complete. Time for all the small parts to be fixed, machine gun, steps etc. For weathering (see Gallery) I sprayed a light coat of dust and shaded in some of the dips in the fabric areas of the plane. I like the lines of the Hart and remember the pictures of them at the pre war air displays and as a result did not want to mess it up too much.



Overall comments...

This is a brilliant subject.

The kit is beautifully produced. The metal engine covers need smoothing out and polishing to achieve the lovely shine that all Harts have in that area.

The mounting of the wings is fiddly and I did not really know how much of the metal to cut off the struts. In the end I guessed and with a bit of persuasion it all fell into place.

The decals are great and it helped that they were so thin when I had to reapply the fuselage ones over those already fixed wrongly. Oh well, each model I make has a unforced error, my invective is becoming more creative when these happen!

The rigging in the instructions is not strictly correct but who am I to speak as I have not been entirely accurate myself. There is enough reference to get it absolutely right.

One thing that I could do nothing about was the disappearance of the starboard exhausts. I thought that I had glued them in for life but a nasty rattle told me that I had not! The fuselage was inaccessible at this stage so there it will stay in perpetuity!







by Julian Seddon (February 2012)

