Simon's Pilot Build Blog Part 2 – Fuselage

Years ago when I was learning to fly RC, one of my oft-crashed slope soarers developed a distinct curve in in its fuselage following several hurried repairs. Even so, it seemed to fly perfectly well. However, for good performance there's no doubt that a straight model is desirable. I don't have a jig, so I used two clamps to ensure that the main formers were at right-angles to the fuselage side, and then glued the other side in place on top. That seemed to work.



To line up the remaining formers, I carefully marked the centre of each one top and bottom and then make sure that all the marks align. I was fairly certain that I'd built it straight but, once the glue dried, it was clear that things hadn't gone as planned. The nose section was misaligned, as I hope you can see in the picture despite the blurred front former. Time to boil the kettle! Steaming the nose section, physically bending it into shape, and letting it dry did the trick, and my sight markers were soon nicely aligned.





The sheet parts that covered the top and bottom of the nose section didn't fit properly; both were about 0.5mm too large. On older kits, this would have been quite normal; sanding and reshaping parts was par for the course. In this case, the parts normally fit together very precisely and I was worried that I had made a mistake somewhere. Everything seemed OK, so I simply trimmed the parts to fit. I also noticed that there was a hole in the balsa on the lower nose sheet; no problem, but perhaps it indicates poorer quality wood – possibly another downside to purchasing a Factory Seconds kit.



Once the structure was complete, I sanded the aft section of the fuselage as recommended in the instruction manual. I like the way that the nose block is constructed from layers of sheet; I find carving and sanding nose blocks to be a tedious business, and this method of construction certainly takes much of the hard work out of it. For the windscreen frame, I've probably gone a little OTT but I like to achieve a smooth finish on the joint between the acetate and the balsa. I do this by scoring the frame along its length to the depth of the acetate, and then using a small file to make a recess into which the acetate, hopefully, fits. It's time consuming and unnecessary, but I think the finished article looks better once covered.





For covering, I started with the top and bottom, used some silver tissue for the side windows rather than the paper ones supplied with the kit. After sanding the aft part of the fuselage as recommended, I covered the sides and gave the entire assembly a single coat of non-shrinking dope.



Building the tail was quite straightforward. I sanded the parts as recommended in the instructions before assembling it, noting that the tailplane was made of heavy ''medium' balsa with a knot-hole in it. Frankly, it was more like oak and it added weight in just the wrong place. As I mentioned earlier, lower-quality wood might be a drawback with 'Factory Seconds' kits. The fins were made from much lighter balsa, so care had to be taken not to sand off too much. Before fitting, I covered the entire empennage, thus negating any weight saved by sanding. Of course, this makes the model more resilient and it probably looks better, so it's a trade-off.

With the wheels, pegs and prop added, the fuselage was complete. Time to add the finishing touches.



Ready to fly, ie with ballast, rubber and fixings, my Pilot weighs a disappointing 38g, of which 9g is ballast. Chris B tells me that it flies well perfectly well with the balance point 10mm aft of the main spar so, hopefully, I'll be able to lighten it a little. Another thing to try might be packing under the wing training edge mount. We'll see.....

