

SPITFIRE - MAIN PARTS AND FRAMES BUILDING SCHEDULE

THE FUSELAGE

This is built by building one half over the plan on top of a central keel using half formers which along with 1.6mm square strip 'stringers' provide the fuselage shape. It is then lifted from the plan before the other half formers and stringers are added to complete it. NB. Some parts of the fuselage are added after covering as indicated on the plan.

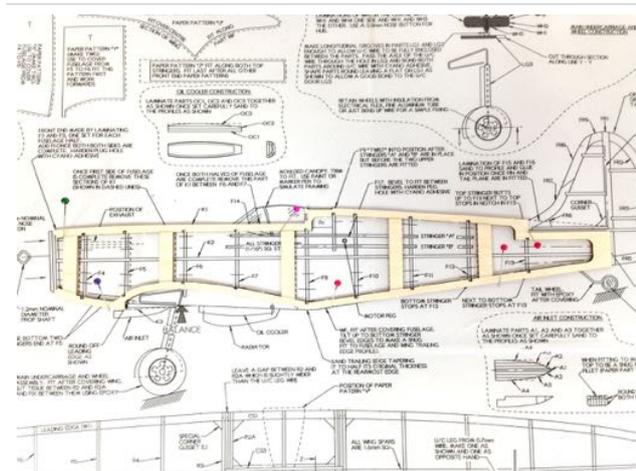
To build the left hand fuselage side:



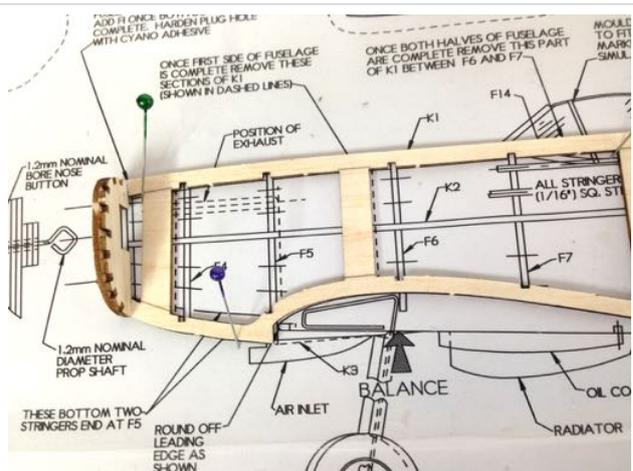
1) Identify and remove parts in the following quantities from the laser cut sheets: 1 off each: F4-F13, K2, and K4, plus: 2 off F2 and F3, and 1 off K1. Note that part K1 is quite delicate and large so carefully cut it from the sheets and handle it with care.



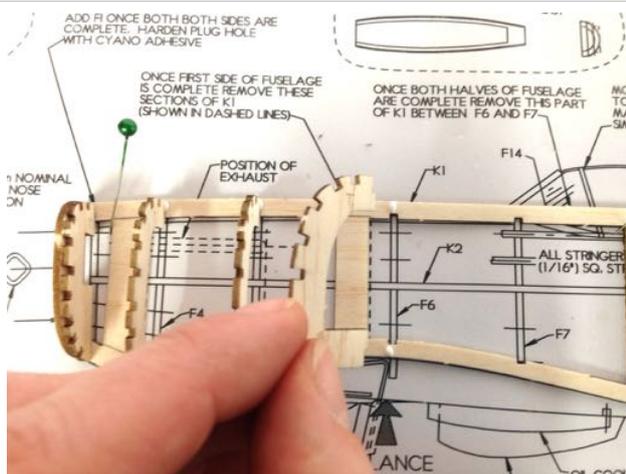
2) Make two opposite hand (ie one left hand, one right hand) laminations from parts F2 and F3, pinning them to the board to keep them flat and aligned. Ensure that the parts are orientated correctly by referring to the 'T' markings and that the rectangular cut out in each part lines up perfectly. Ensure any excess glue is removed from the slots in F3, otherwise the stringers added later may not fit. Leave the parts to dry thoroughly and remove from the board before proceeding.



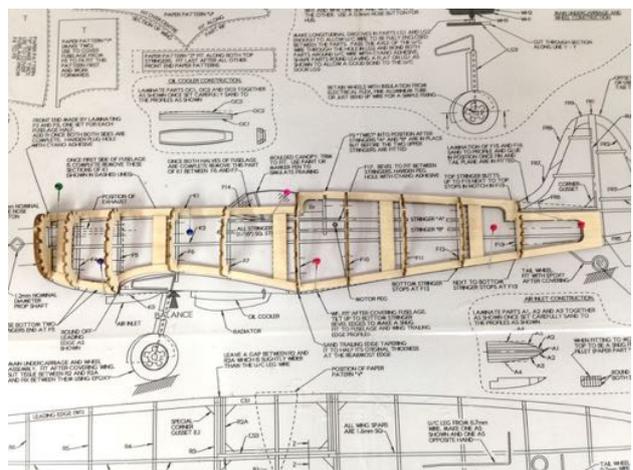
3) Carefully pin down part K1 over the profile on the plan, aligning it carefully to the profile and the slot positions. Avoid placing pins where they will get in the way of other pieces to be added later on.



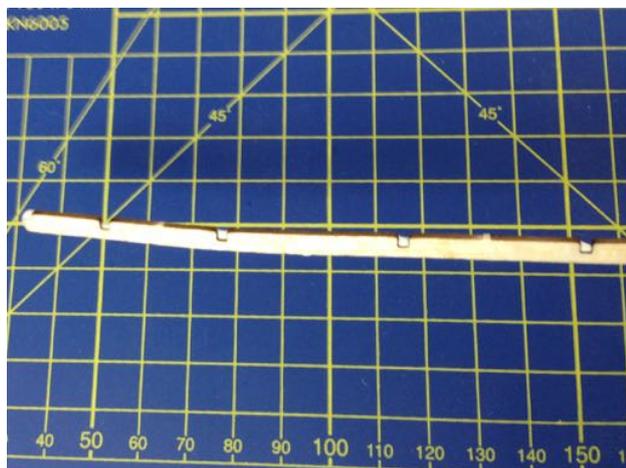
4) Glue in position the F2/F3 lamination, making sure that the 'T' is at the top. You must make sure that it is accurately located and that it is perfectly at right angles to the board using your square. Allow it to dry before proceeding.



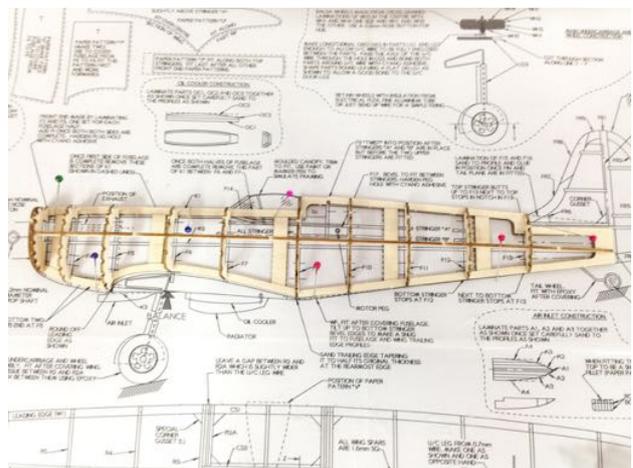
5) Trial fit the formers F4 to F13 in the relevant notch in the side keel K2 referring to the positions of the notches on the plan. These should be a snug, but not overly tight fit. Also check their fit in the notches of main keel K1.



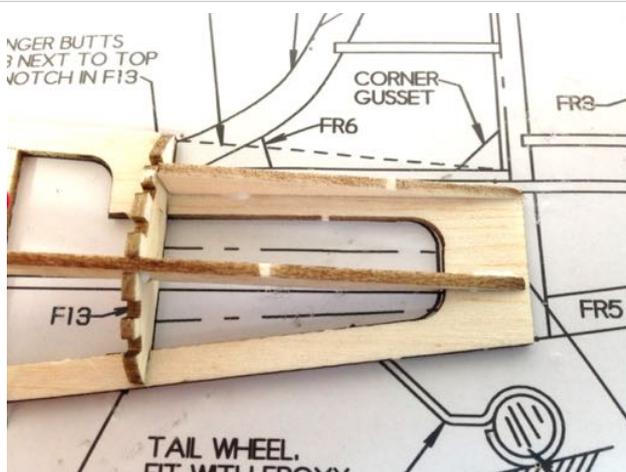
6) Apply a stripe of glue on K1 adjacent to each notch (but not in the notch) for the formers F4 to F13 but not F9, then position each one of the formers in the notches, with the 'T' letter towards the top. Make sure that the front end of K2 is properly located in the F2/F3 notch, and check again that F2/F3 has remained upright. Use extra pins if required to make sure that everything stays flat. Leave the glue to set for a while.



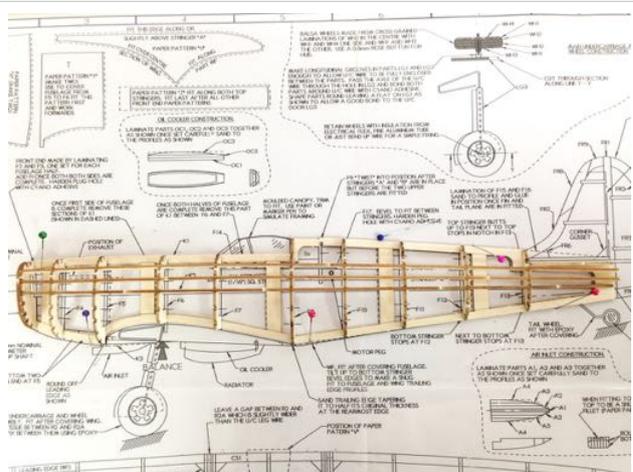
6) Continued: Then without hesitation, apply glue to the notches and ends of the side keel K2 and fit it carefully to the formers, being careful not to crush them.



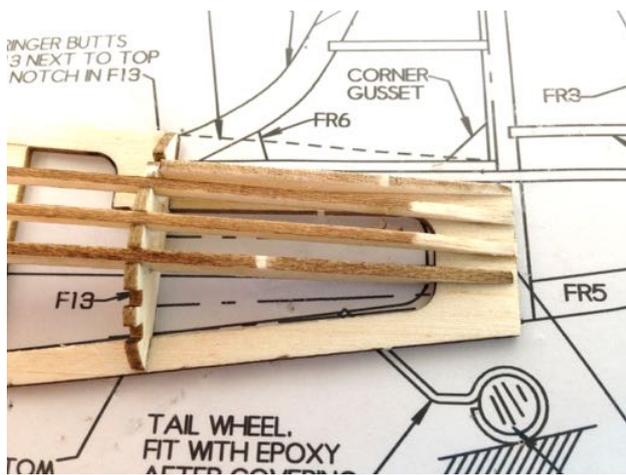
6) Continued: Make sure that the front end of K2 is properly located in the F2/F3 notch, and check again that F2/F3 has remained upright. Use extra pins if required to make sure that everything stays flat. Leave the glue to set for a while.



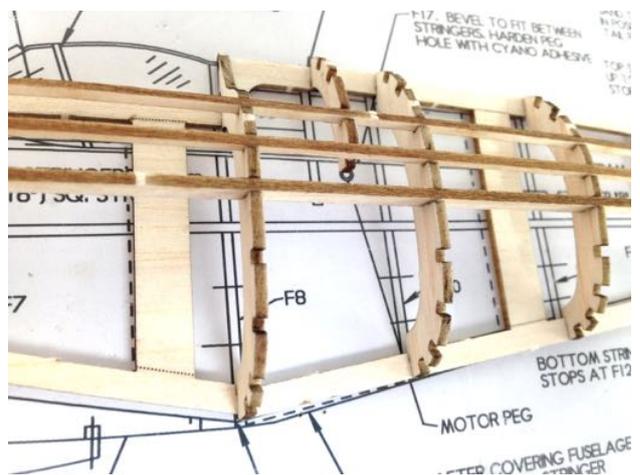
7) Fit part K4 ensuring its top edge is flush with the edge of K1. This forms the seat for the tail plane later.



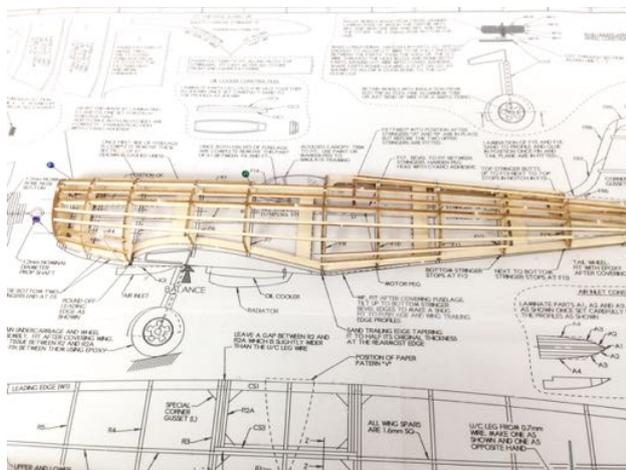
8) Add stringers in the notches from 1.6mm square strip. Use stiff strip for the two stringers 'A' and 'B' (each side of where part K17 will fit), the two lower front stringers that run from the nose to F5 and the two uppermost stringers that run from the nose to F7.



8) Continued: Taper to fit those stringers that meet the stern post at the rear of the main keel.



9) Fit part F9 by carefully twisting it in place. Ensure it is well glued and leave to set for a while.

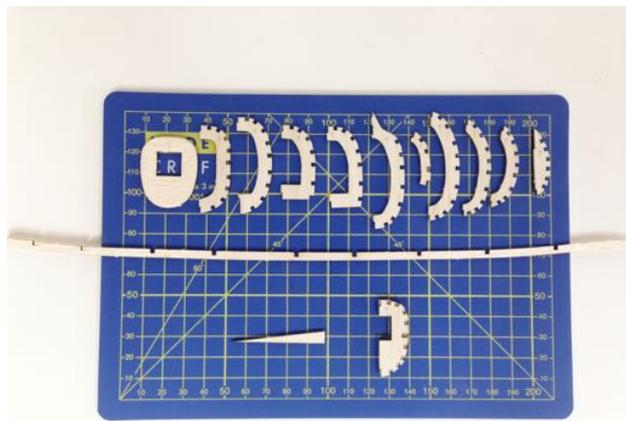


10) Fit all remaining stringers using the light 1.6mm square strip.

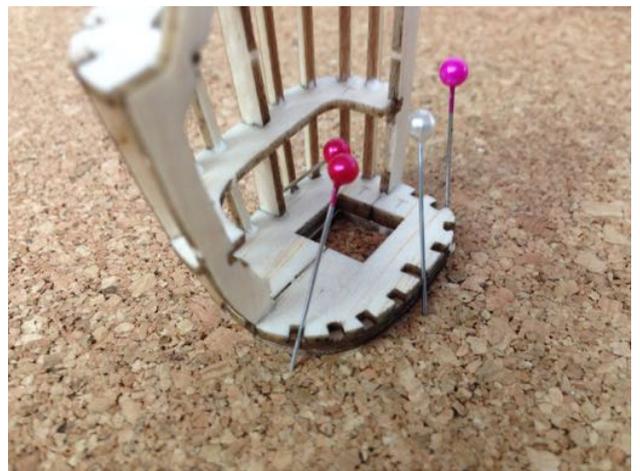


11) Allow everything to dry for as long as possible, then remove it from the board. Carefully cut out the five temporary crosspieces from the main keel.

To build the right hand fuselage side:



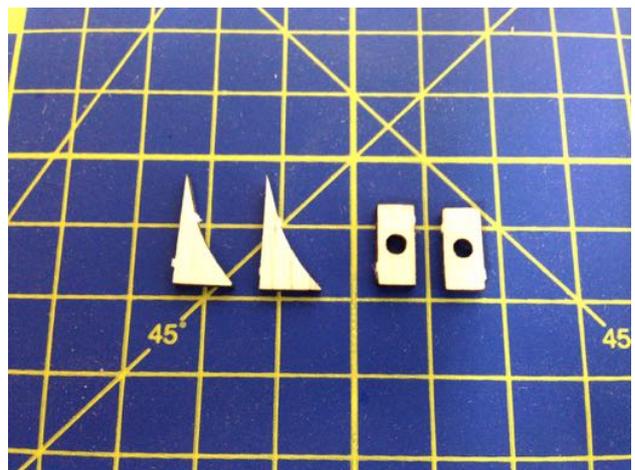
12) Identify and remove parts in the following quantities from the laser cut sheets: 1 off each: F1, F4-F13, K2, and K4, plus the F2/F3 lamination from step 2.



13) Glue in position the F2/F3 lamination, making sure that the 'T' is at the top, then add former F1 aligning the square hole. Pin the assembly nose down on to the board to ensure all is flat square and true. Allow this to dry before proceeding.



14) Now follow previous steps 5 -10 for this side, checking at each stage of adding a stringer that the fuselage is staying straight and true.



15) Remove parts in the following quantities from the laser cut sheets: 2 off F14, and 2 off F17.



16) Starting with the left hand side, fit F14 tilting it to match the fuselage and former profile.



16) Continued: Then trial fit F17 bevelling the edges to meet the stringers each side to ensure a snug and flush fit to the outer profile. Glue it in position.

17) Repeat step 14 for the right hand side. Set the fuselage aside and complete the nose block.