



EParrot got the fuselage halves.

I have decided to use the balsa wood for the fuselage and the rest of the model.

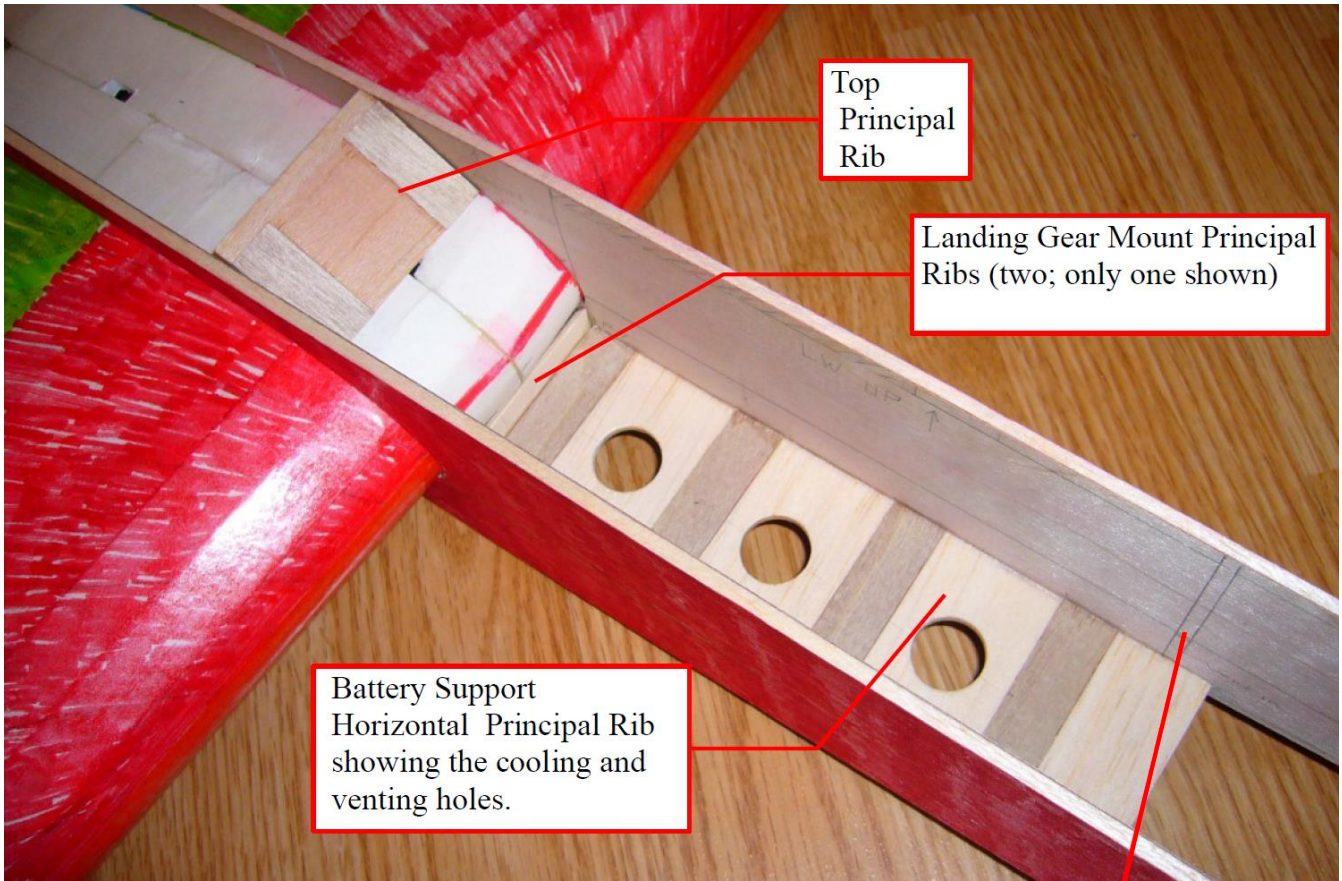
Each one has been made using the 1/8", 5.2 lbs./cu.ft. balsa. In addition, 1/64 ply doubler has been added to the inside faces of both fuselage halves. The ply doublers are needed for strength and stiffness and also to protect the inside fuselage faces against damage when the batteries are moved in and out.

The total weight of both fuselage halves with the ply doublers glued using the aliphatic resin is 49 grams ( 1.73 oz.). I have considered the alternate fuselage construction involving 3/32" balsa ( 6-6.2 lbs./cu.ft ) with 1/64 ply doublers but decided to go with 1/8" thickness, providing better torsional stiffness of the aft part of the fuselage.

I have also decided to build this semi monocoque fuselage using the wings as the fixture. The fuselage sides will be glued to the wings using carefully sized **four Principal Ribs** shown on the next page. The fuselage will be completed by gluing more ribs, formers, bottom and top enclosures and adding the necessary bracing.

The battery cavity can accommodate 4S 2500 and 2200 LiPo providing plenty of power for Cobra 2820/12 motor, turning 11"x 5.25" propeller.

The front part of the fuselage will stay uncut until the entire model is finished and then I will select the position of the firewall to which the motor is mounted. This method allows for a very precise selection of the CG and, hopefully, no extra weight will be needed anywhere to properly balance EParrot.



Four **Principal Ribs** allowing to glue the fuselage properly.

Theoretically calculated position of the firewall

*To be continued*