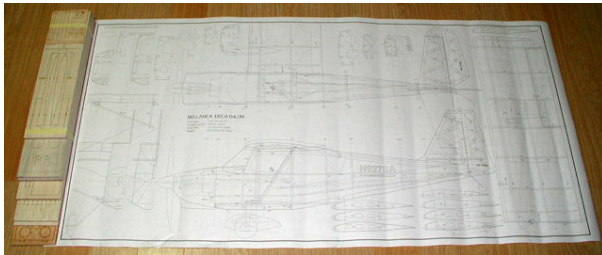


SUPER DECATHLON INSTRUCTIONS

www.estarmodels.com

● KIT INCLUDES



Full size plan

Laser-cut parts

- 1.5mm(1/16")xL600mm(24") balsa : 1sheet
- 1.5mm(1/16")xL500mm(20") balsa : 2sheets
- 1.5mm(1/16")xL430mm(17") balsa : 2sheets
- 3.0mm(1/8")xL560mm(22.4") balsa : 1sheet
- 3.0mm(1/8")xL465mm(18.6") balsa : 6sheets
- 3.0mm(1/8")xL370mm(14.8") balsa : 1sheet
- 5.0mm(3/16") xL520mm(20.5") balsa stick : 2ea
- 5.0mm(3/16") xL410mm(16.1") balsa wing jig : 1ea
- 1.8mm(5/64")xL150mm(6") plywood :1sheet
- 3.0mm(1/8")xL600mm(24") plywood :2sheets



Vacuum formed Cowl & Wheel pants.

Motor mount 10x10x75mm

Landing gears(2ea)

3mm screws(4ea), 2mm screws(20ea)

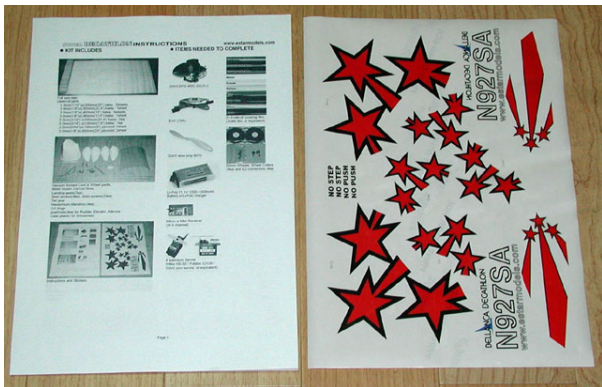
Tail gear

Neodymium Magnets (4ea)

CA hinge

Pushrods(4ea) for Rudder, Elevator, Ailerons

Clear plastic for Windshield



Instructions and Stickers.

● ITEMS NEEDED TO COMPLETE



GWS EPS-400C-DS(3:1) or BL motor (4~5.33:1 geared, 10~13A)



ESC (15A)



GWS slow prop 9070



Li-Poly 11.1V 1500~1800mAh Battery w/Li-Poly charger



Micro or Mini Receiver (4~6 channel)



4 submicro Servos (Hitec HS-55 / Futaba S3108 / GWS pico servos, or equivalent) & servo extension cords.

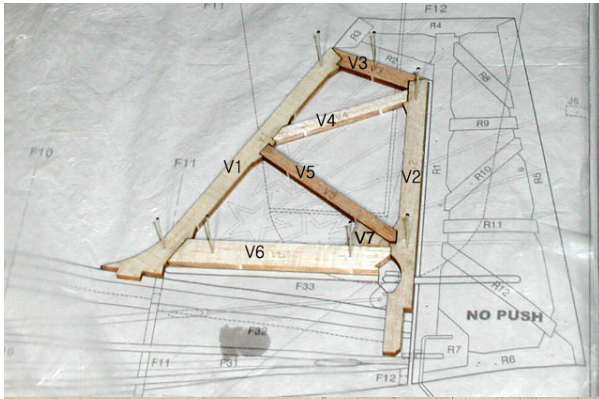


2~3 rolls of covering film. (Solite film, or equivalent)

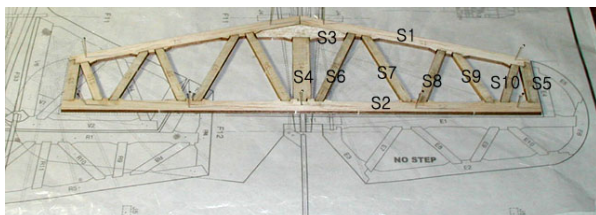
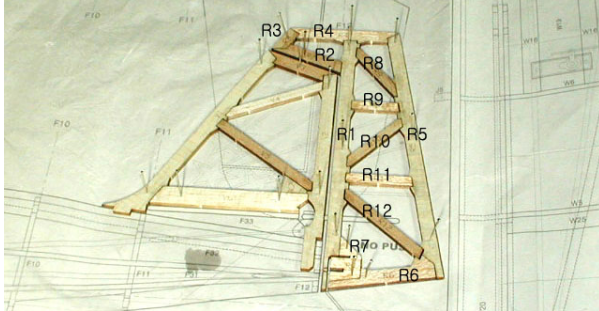


50mm Wheels, Wheel Collars (4ea) and EZ connectors (4ea)

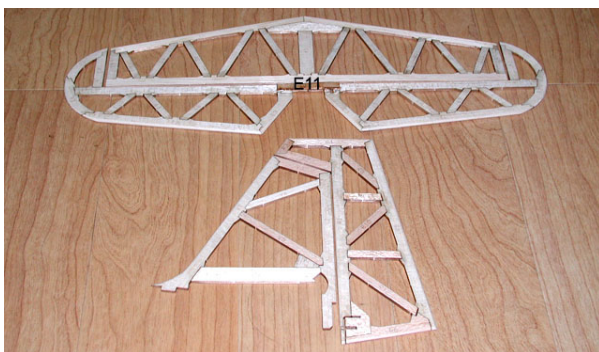
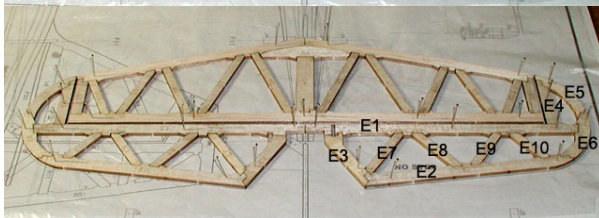
● TAIL CONSTRUCTION



1. Lay the waxed paper or PVC film over the plan. Pin the Vertical Fin parts(V1-V7) and Rudder parts(R1-R12) on the plan. Glue the parts with thin CA.

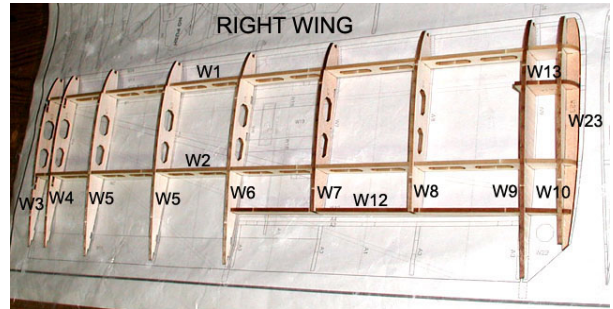


2. Pin the Stabilizer parts(S1-S10) and Elevator parts(E1-E10) on the plan. Glue the parts with thin CA.

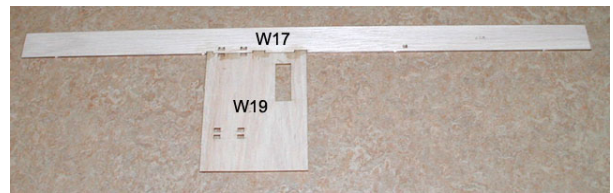


3. Join Elevators with the plywood part(E11). Remove tail from the plan and **apply thick CA glue at each joints for reinforcing.**

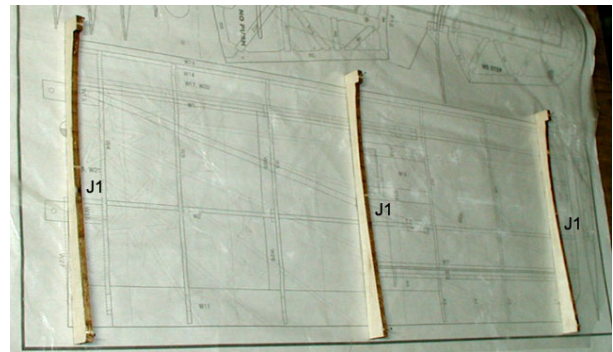
● WING CONSTRUCTION



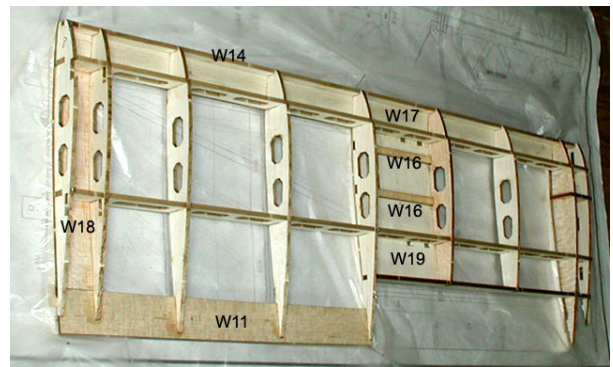
1. Temporary assemble ribs(W3-W10), spars(W1,W2), trailing edge(W12) and wingtip parts(W13, W23) on the plan. Pins and glues are not required in this step.



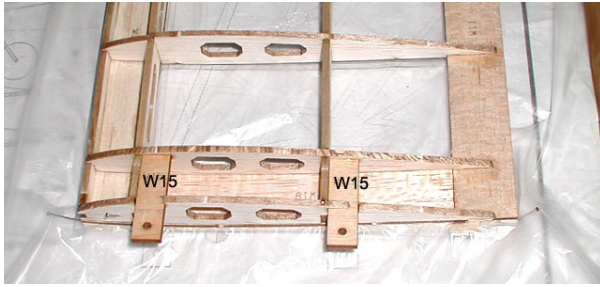
2. Glue lower sheets(W17, W19) together.



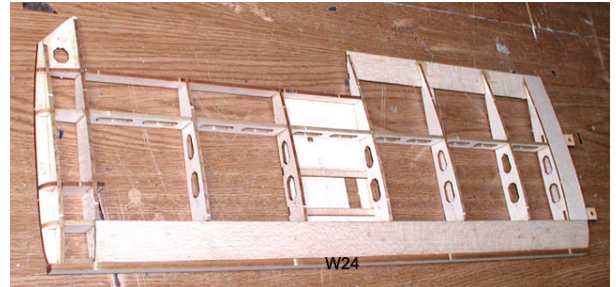
3. Pin the wing jig(J1) on the plan.



4. Lay trailing edge(W11), sub leading edge(W14), pre-assembled lower sheets(W17, W19), servo trays(W16), lower wingroot sheet(W18) and pre-assembled parts on the jig. After fix with pins, glue each other with **thick CA.**



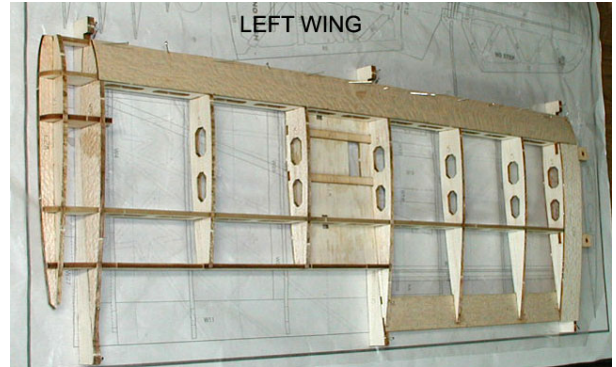
5. Glue wing joiners(W15) with thin CA, then **apply thick CA glue**.



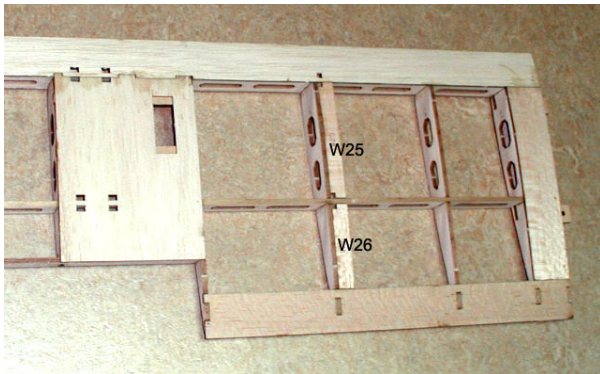
9. Glue leading edge(W24). **apply thick CA glue at each joints for reinforcing**.



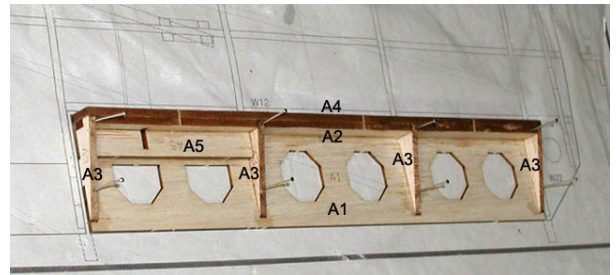
6. Glue upper sheets(W20, W21) with **thick CA**.



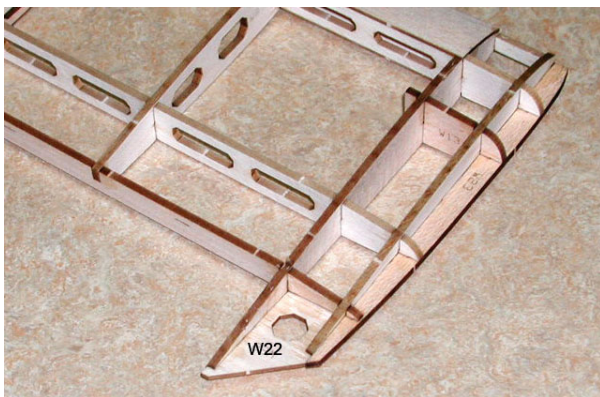
10. Assemble the other side wing.



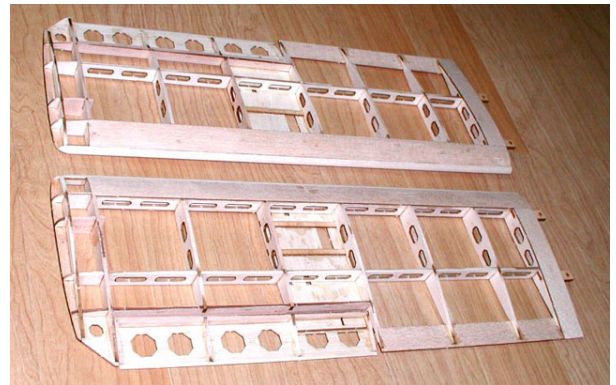
7. Remove wing from the wing jig, glue the lower sheets(W25, W26).



11. Pin the aileron parts(A1-A5) on the plan and glue each other.

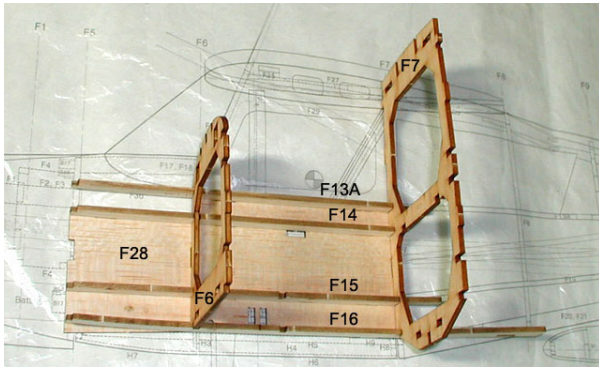


8. Glue wingtip part(W22).

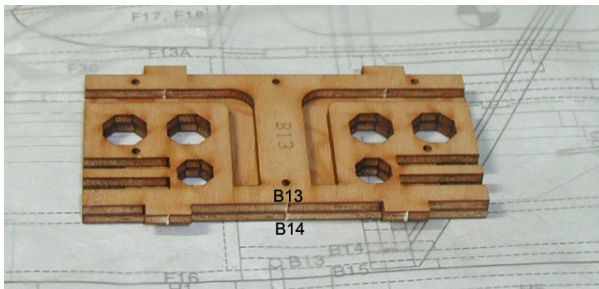


12. Carefully sand surfaces.

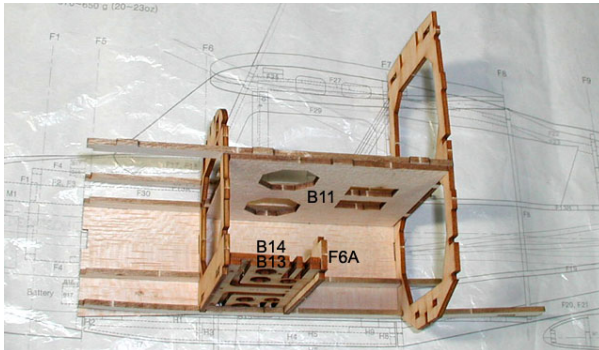
● FUSELAGE CONSTRUCTION



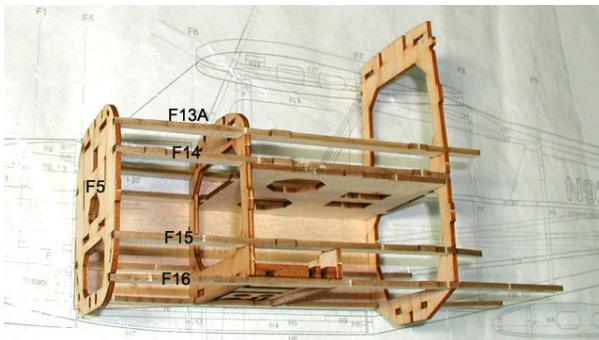
1. Lay right side panel(F28) on the plan and temporary assemble longerons(F13A-F16) and bulkheads(F6, F7). Pins and glues are not required in this step.



2. Glue landing gear mounts(B13, B14) together.

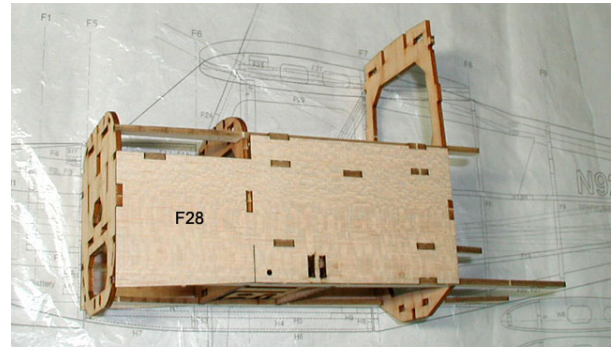


3. assemble landing gear mounts, bulkhead(F6A) and servo bed(B11).

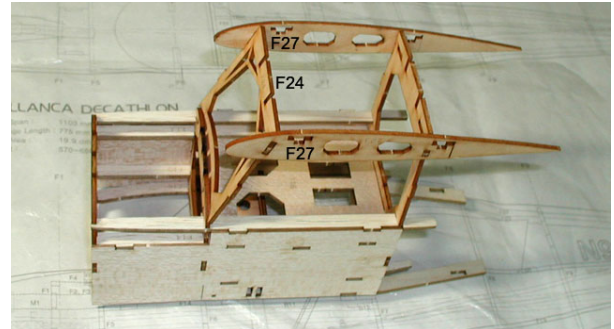


4. Temporary assemble longerons(F13A-F16) and firewall(F5).

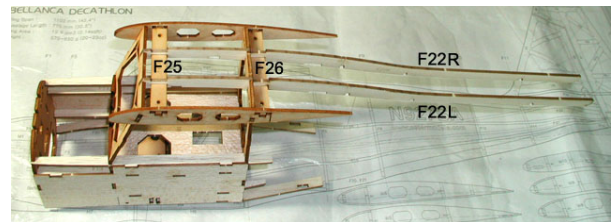
Make sure to pay attention to all bulkheads, the numbers should be facing forward.



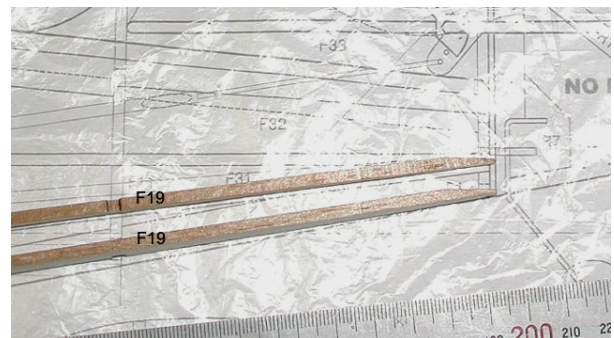
5. Assemble left side panel(F28).and glue with thin CA. Apply thick CA glue at each joints for reinforcing.



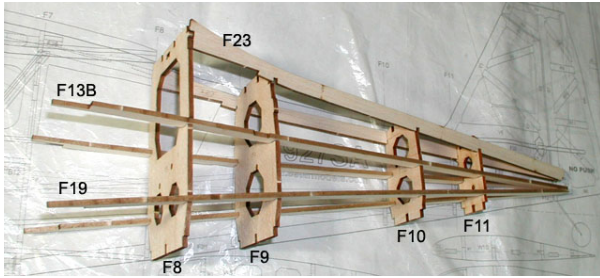
6. Temporary assemble cockpit post(F24) and wing attachments(F27).



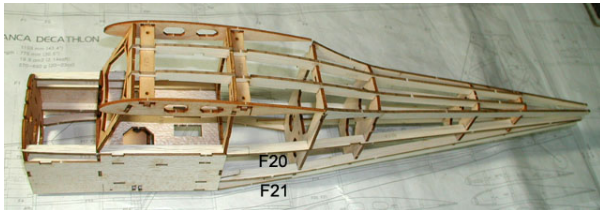
7. Assemble wing joiner bracket(F25, F26) and upper fuselage longerones(F22R, F22L) and glue with thick CA.



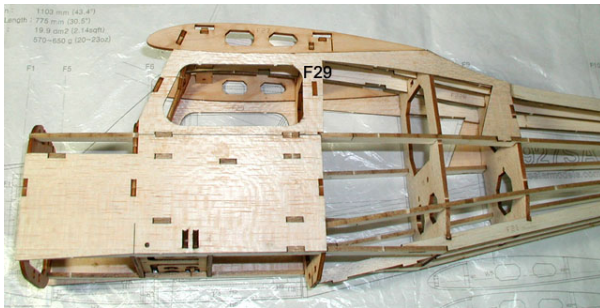
8. Cut longerons ends as shown on the drawing.



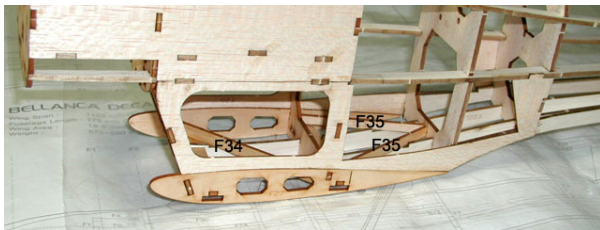
9. Temporary assemble rear fuselage bulkheads(F8-F11) and longerons(F23, F13B, F19).



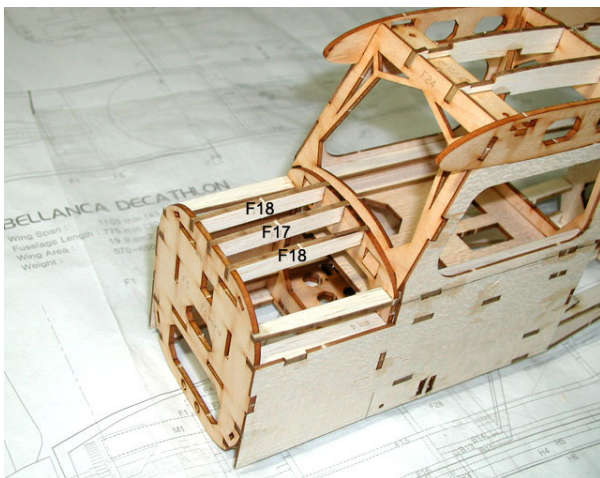
10. Glue fore and rear fuselage together.



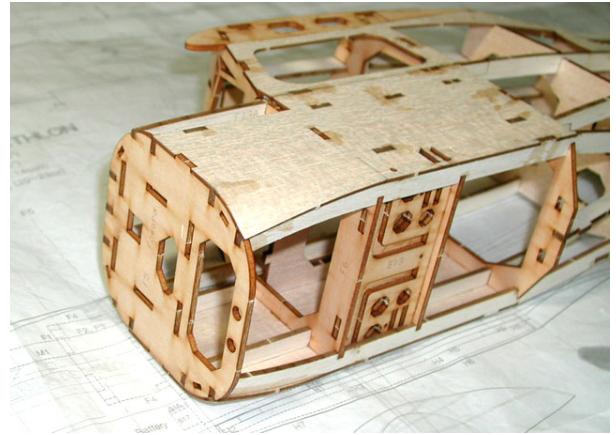
11. Glue window frame(F29).
After sight check down the fuselage to insure against twist, then apply **thick CA at each joints for reinforcing**.



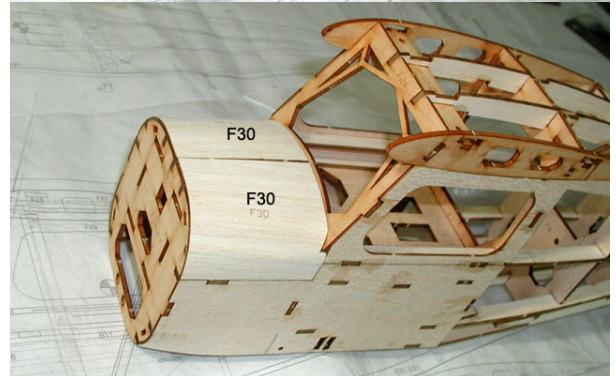
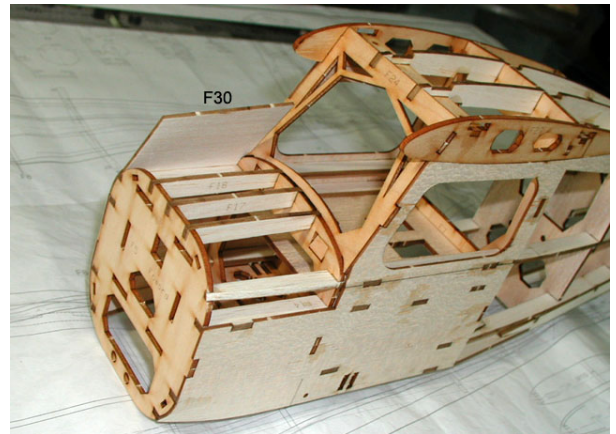
12. Glue cockpit diagonal parts(F34, F35).



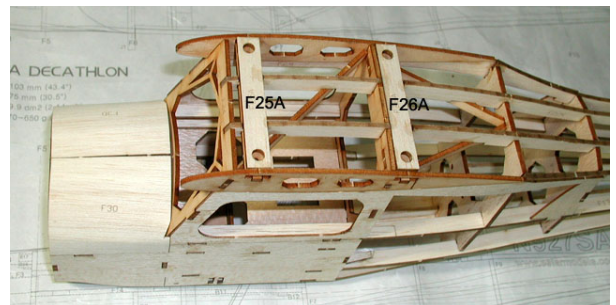
13. Glue turtle deck frame(F17, F18).



14. Wrap and glue side panels(F28).



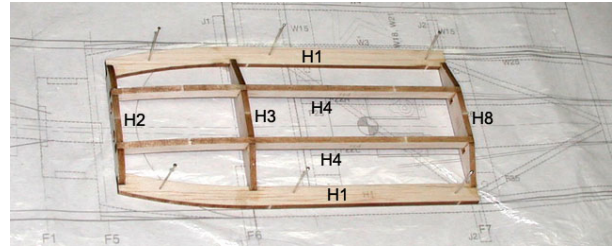
15. Wrap and glue turtle deck(F30).



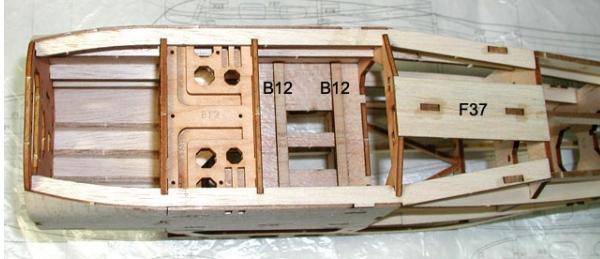
16. Glue wing joiner bracket cover(F25A, F26A).



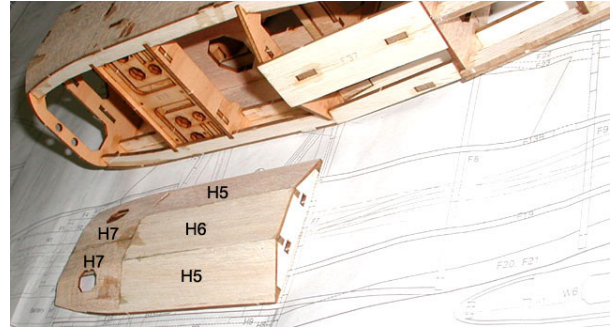
17. Glue bulkhead(F12) and panels for pushrod exit(F31, F32).



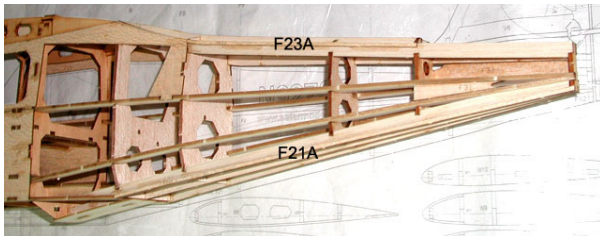
22. Assemble hatch parts(H1-H4, H8) on the plan and glue them.



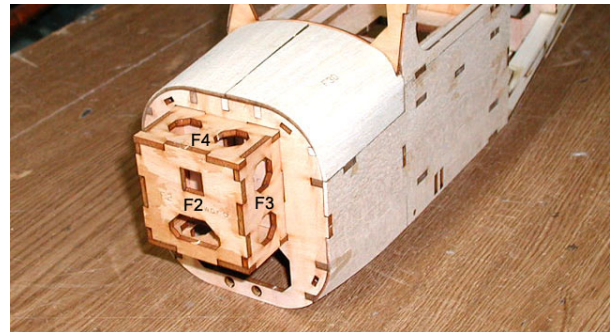
18. Glue servo tray(B12) and fuselage bottom(F37).



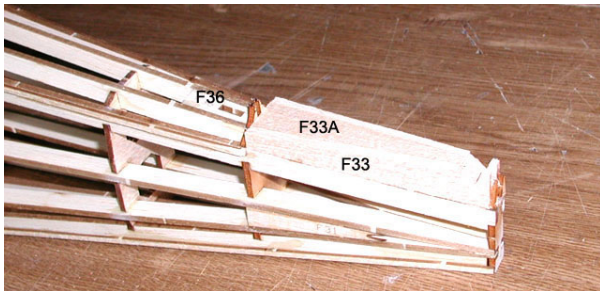
23. Finish hatch parts(H5-H7).



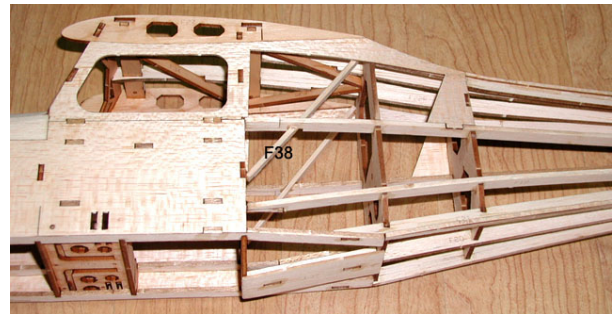
19. Glue sub longerons(F21A, F23A).



24. Assemble motor mount box(F2-F4).



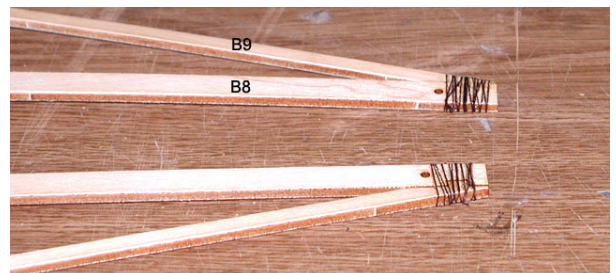
20. Assemble stabilizer bed(F33, F33A).



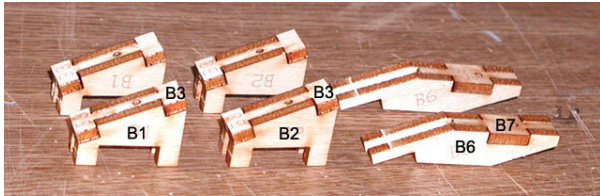
25. Glue rear window brace(F38).



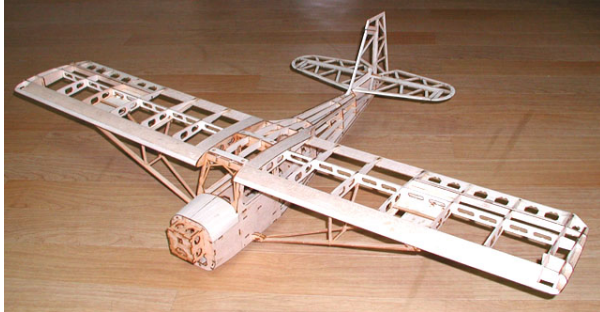
21. Shape and sand stabilizer bed.



26. Glue fore and rear stut (B8, B9). Tie with thread and reinforce with thin CA.



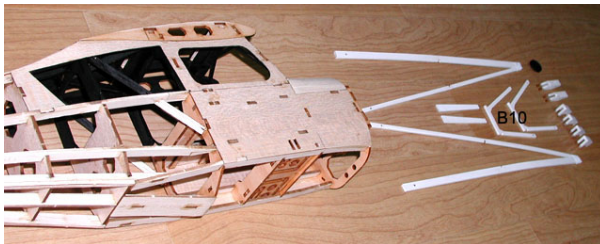
27. Assemble and glue strut mounts(B1-B3, B6-B7).



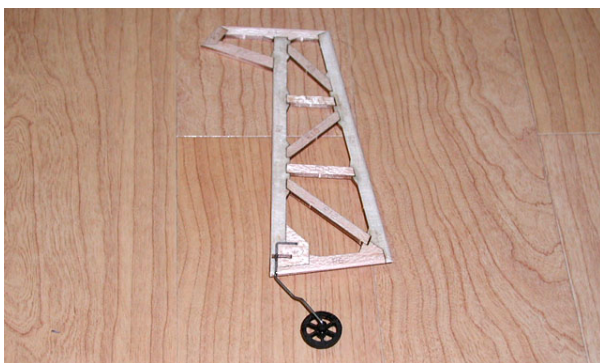
28. Test assemble airframe. (This step is for your pleasure in looking.)



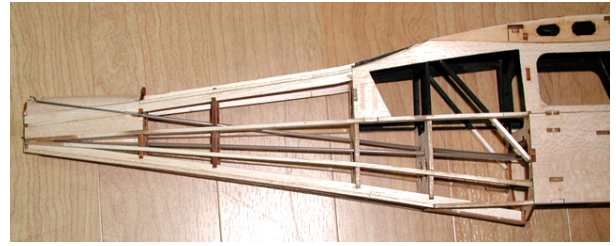
29. Assemble plywood tail wheel.



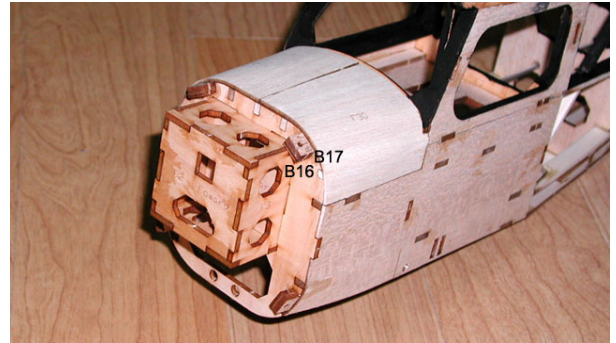
30. Paint cockpit area, strut parts, landing gear and tail wheel.



31. Fix tail gear and wheel.

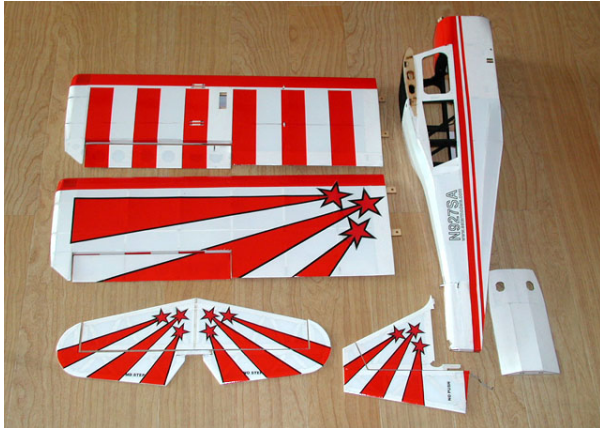


32. Insert and glue plastic pipes for elevator and rudder pushrods.

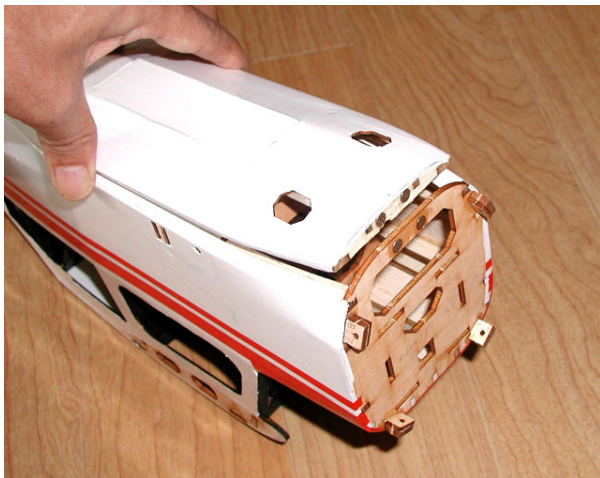


33. Glue cowl mount(B16-B17).

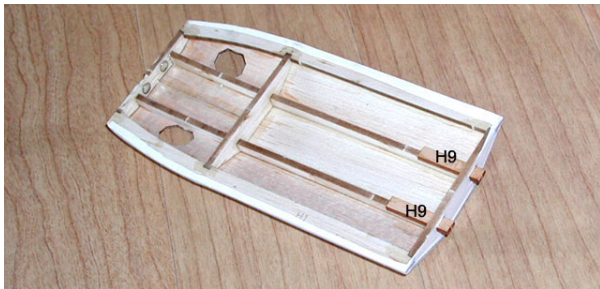
● COVERING AND EQUIPMENT INSTALLATION



1. Cover Decathlon with your trim choice.



2. Install and glue neodymium magnetics with thin CA.



3. Glue the plywood dowel of hatch(H9).

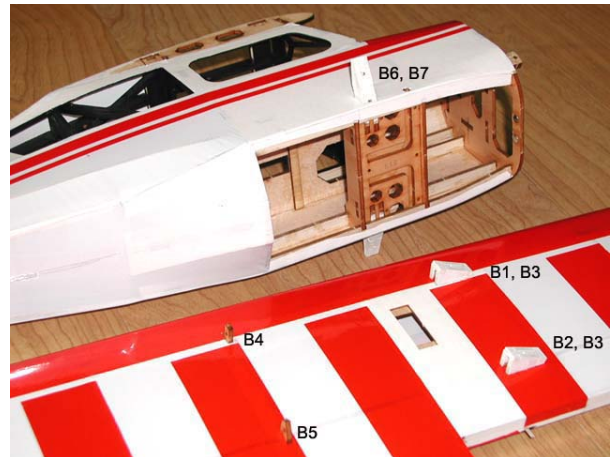


4. Cut CA hinges as shown above.

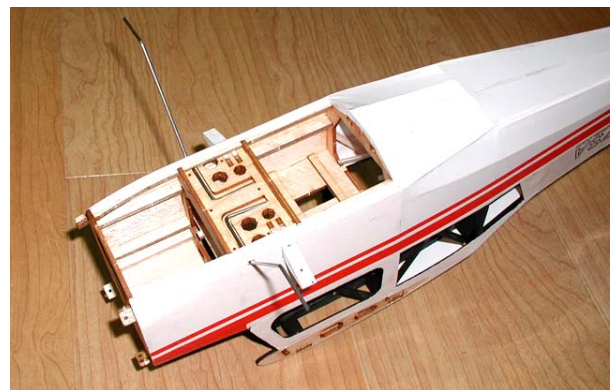


5. Install and glue aileron and rudder plywood horns. **(Do not glue elevator horn in this step.)**

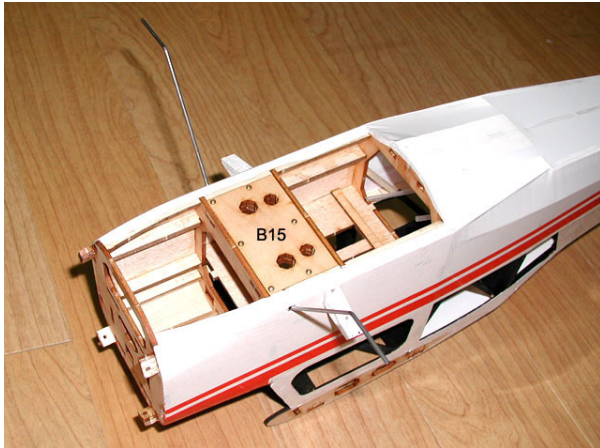
Apply thin CA to the horns for reinforcing.
Make hinge slots and pre-install hinges. **(Do not glue hinges in this step.)**



6. Insert and glue strut mounts(B1-B7) with thick CA.



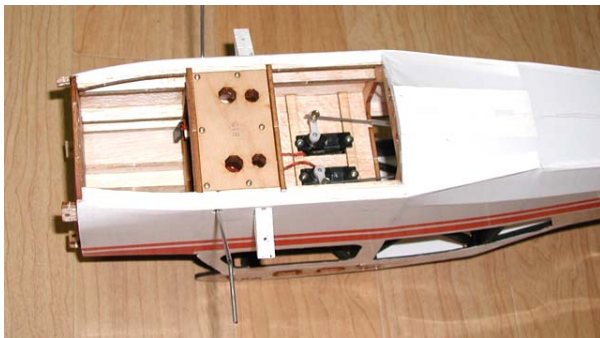
7. Insert landing gear.



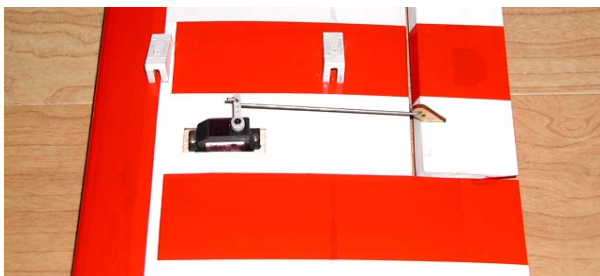
8. Cover landing gear retainer(B15) and fix with screws.



9. Glue stabilizer and vertical fin to the fuselage with thick CA. **(Horizontal tail must be paralleled with wing and vertical fin must be at right angle to horizontal tail. Wings must be installed temporarily to align them.)** Insert elevator pushrod to the horn and then glue hinges with small amount of thin CA. Insert rudder pushrod to the horn and then glue hinges with small amount of thin CA.



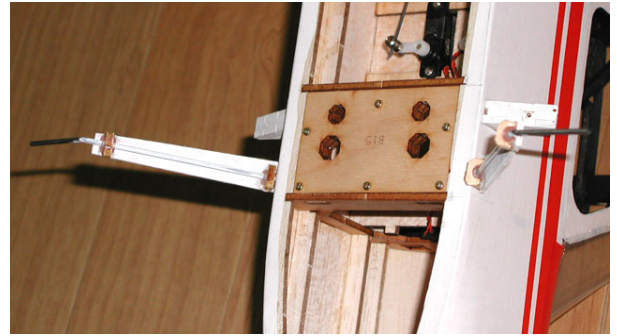
10. Install elevator and rudder servos.



11. Install aileron servos and connect pushrods.



12. Cut clear plastic windshield and glue.(refer to template on the drawing). Cover side windows with clear film.



13. Assemble dummy landing gear.



14. Draw cutting line. (4mm above from the bottom)



15. Cut wheel pants.



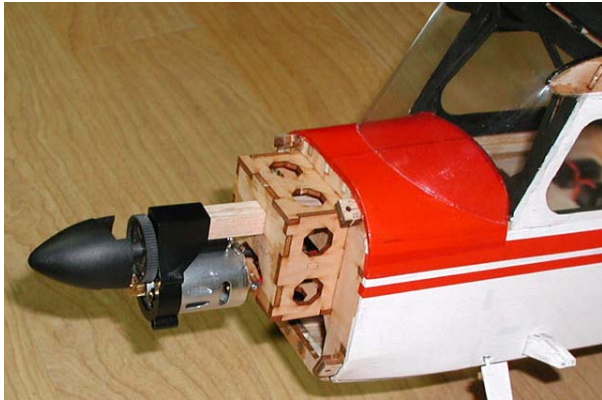
16. Bond together with thin CA.



17. Glue Plywood rings with thin CA and put color stickers on.



18. Install wheelpants and wheels to the landing gear.



19. Glue motor mount stick and install motor.



20. Draw cutting line (4mm above from the bottom) and cut cowl.



21. Assemble cowl with screws.



22. Paint or cover film after shape and glue F39 parts.



23. Insert and fix struts to the wings with screws.



24. Assemble wing and fix with screws. Enjoy flying!

Control Throws

The following control throws are recommended starting points. After you are familiar with this plane, you may increase, or decrease.

Ailerons : 16mm(5/8") up, 12mm(3/8") down.

Elevator : 14mm(9/16") up and down.

Rudder : 19mm(3/4") right and left.