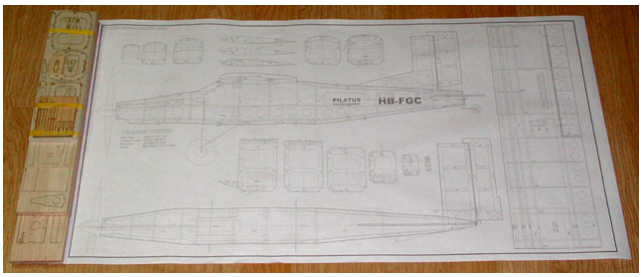
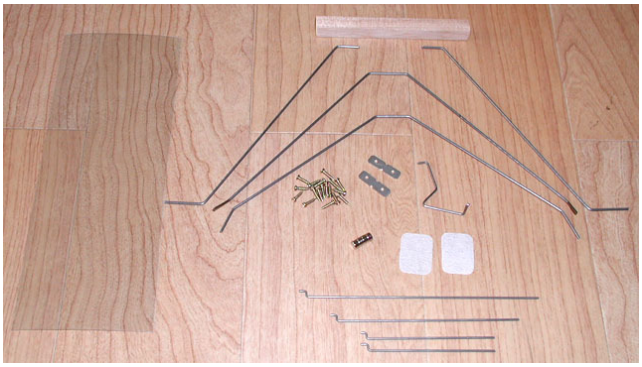
PILATUS TURBO PORTER INSTRUCTIONS www.estarmodels.com

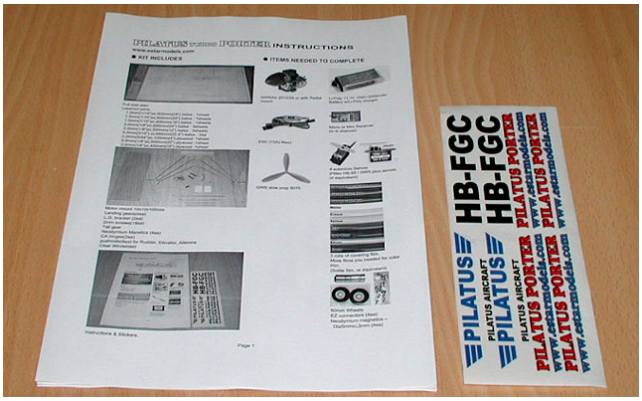
● KIT INCLUDES



Full size plan
Lasercut parts
1.5mm(1/16")xL570mm(22.4") balsa : 5sheets
1.5mm(1/16")xL360mm(14.2") balsa : 5sheets
3.0mm(1/8")xL600mm(24") balsa : 3sheets
3.0mm(1/8")xL330mm(13") balsa : 3sheets
5.0mm(3/16") xL600mm(24") balsa : 2ea
1.8mm(5/64")xL100mm(4") plywood :1sheet
3.0mm(1/8")xL300mm(12") plywood :1sheet
3.0mm(1/8")xL600mm(24") plywood :1sheet



Motor mount 10x10x100mm
Landing gears(4ea)
3mm screws(4ea), 2mm screws(14ea)
Landing gear bracket (plywood lasercut)
Tail gear (plywood lasercut)
Neodymium Manetics (4ea)
CA hinge
pushrods(4ea) for Rudder, Elevator, Ailerons
Clear plastic for Windshield



Instructions
Stickers.

● ITEMS NEEDED TO COMPLETE

GWS EPS-400C-DS(3:1) or BL motor (100~150W)

ESC (15A) or ESC for BL motor

Propeller 9070 (2-blades or 3-blades)

Li-Poly 11.1V 1700~1800mAh Battery w/Li-Poly charger

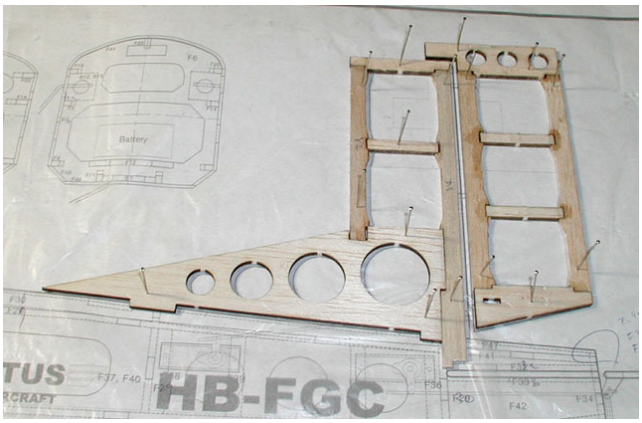
Micro or Mini Receiver (4~6 channel)

4 submicro Servos
(Hitec HS-55 / Futaba S3108 / GWS pico servos,
or equivalant)

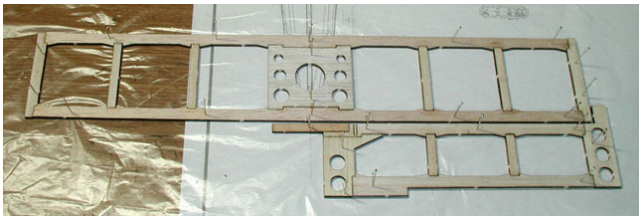
3 rolls of covering film.
More films you needed for color trim.
(Solite film, or equivalant)

55mm Wheels & wheel Collars
EZ connectors (4ea)

● TAIL CONSTRUCTION



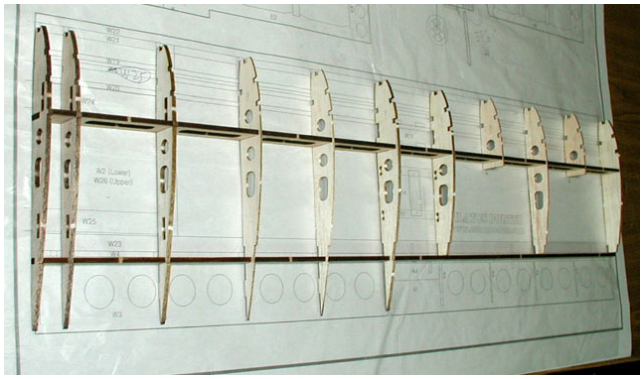
1. Lay the waxed paper or PVC film over the plan. Pin the Vertical Fin parts(V1-V5) and Rudder parts(R1-R6)on the plan.
Glue the parts with thin CA.



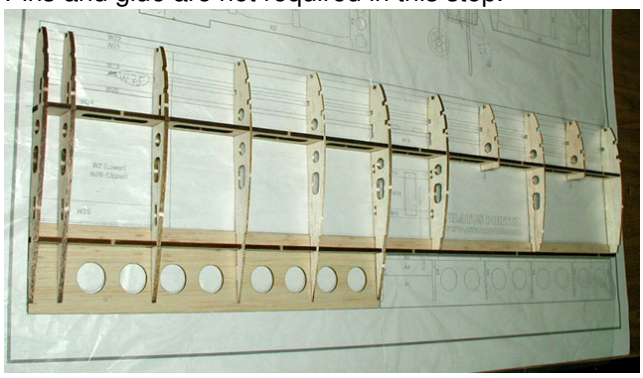
2. Pin the Stabilizer parts(S1-S5) and Elevator parts(E1-E6) on the plan. Glue the parts with thin CA.

3. Remove tail from the plan and **apply thick CA glue at each joints for reinforcing.**

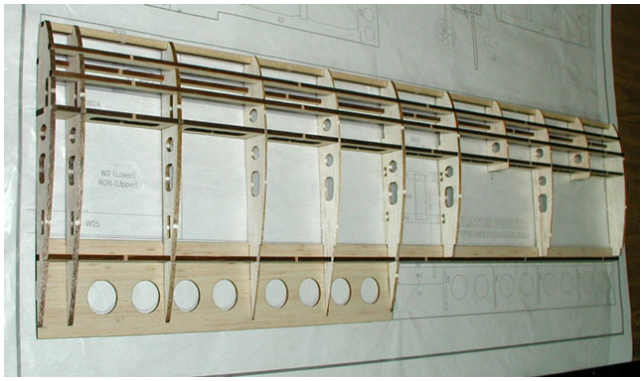
● WING CONSTRUCTION



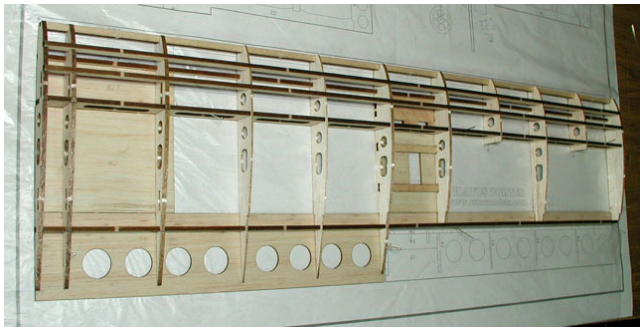
1. Temporary assemble ribs(W6-W12, W16-W18), spars(W1) and tailing edge(W4) on the plan.
Pins and glue are not required in this step.



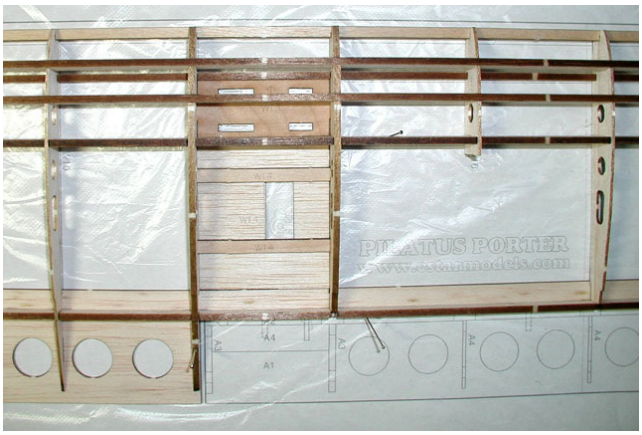
2. Temporary assemble lower trailing sheet(W3).



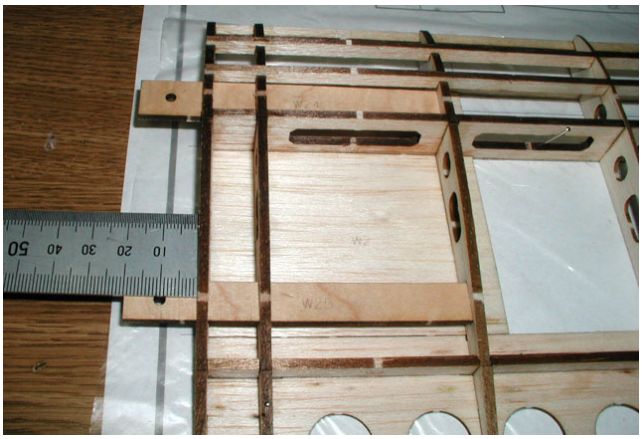
3. Temporary assemble spars(W5, W19, W20) and sub leading edge(W21).



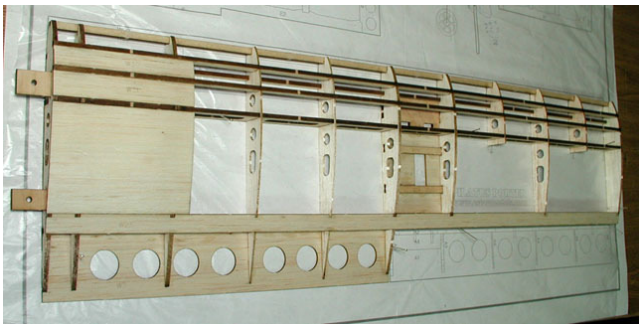
4. Temporary assemble lower wingroot sheets(W2, W27-W28) and strut mount(W13).



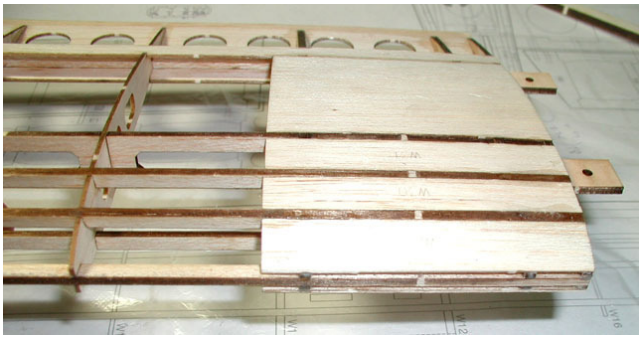
5. Assemble strut mount(W13) and servo trays(W14, W15). Pin on the plan and glue all the parts with thin CA.



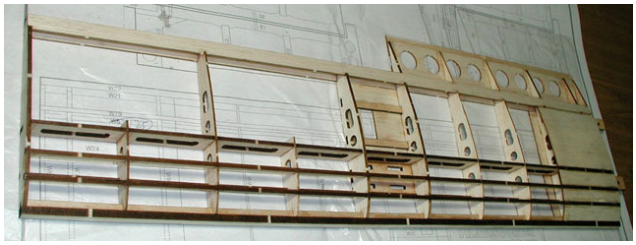
6. Glue wing joiners(W24-W25). Location of ribs are marked on the joiners.



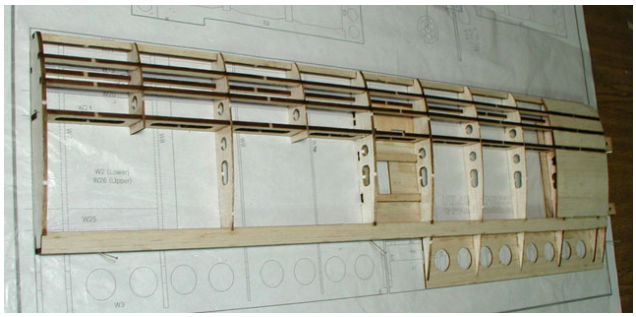
7. Glue upper trailing sheet(W23) and upper wingroot sheets(W26, W30-W31).



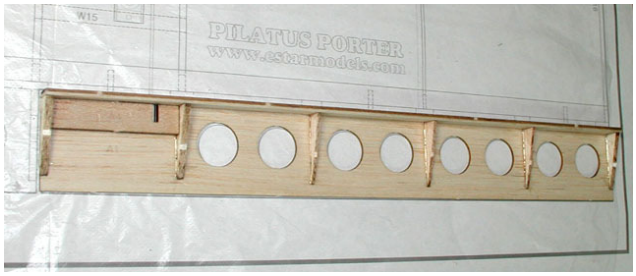
8. Glue upper wingroot sheet(W29).



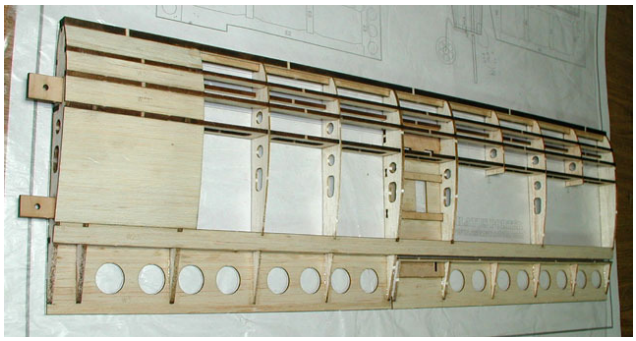
9. Glue leading edge(W22). Remove pins and **apply thick CA glue at each joints for reinforcing.**



10. Assemble the other side wing.

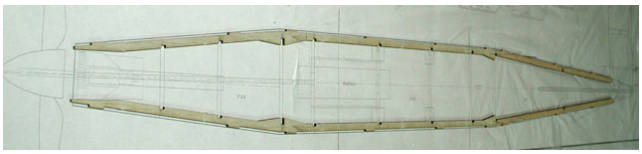


11. Pin the aileron parts(A1-A5) on the plan and glue them.

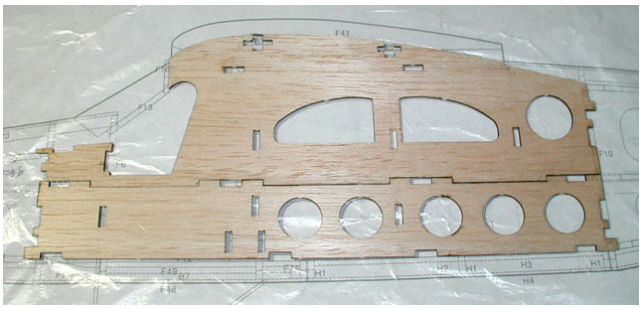


12. Carefully sand surfaces.

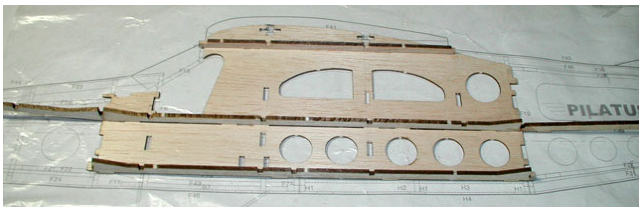
● FUSELAGE CONSTRUCTION



1. Pin the longerons(F3, F14, F26)on the plan and glue each other.

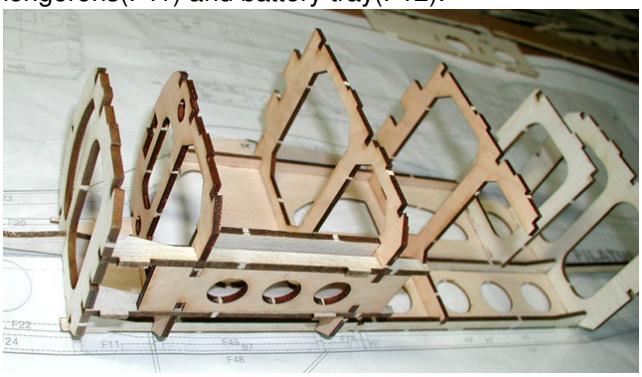


2. Lay right side panel(F1a-F1c) on the plan.

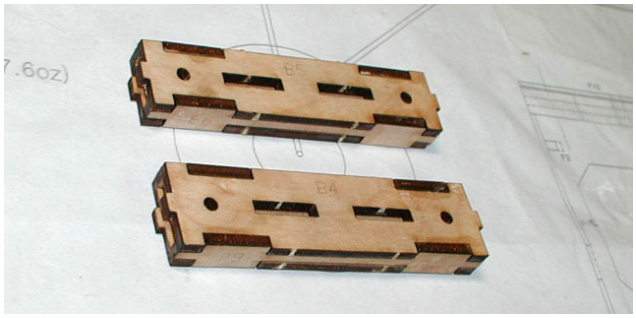


3. Temporary assemble right longerons(F2, F3&F26, F4).

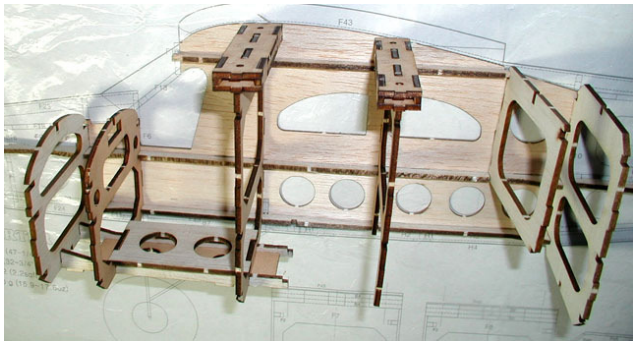
4. Temporary assemble bulkheads(F5-F10), lower longerons(F11) and battery tray(F12).



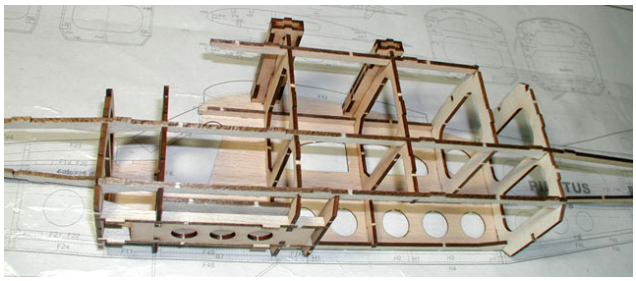
5. Temporary assemble landing gear mount(B7).



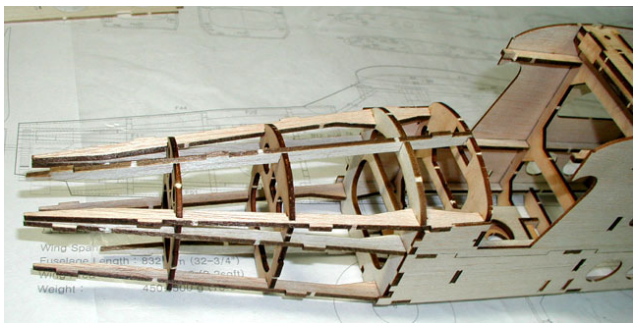
6. Assemble and glue wing joiner sockets(B4-B6). Shape rear socket(B5) with sanding block as shown on the drawings.



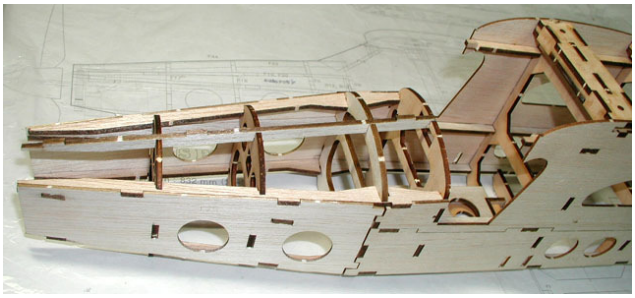
7. Temporary assemble wing joiner sockets to the bulkheads F7, F8.



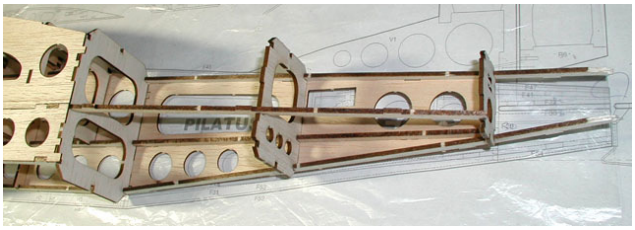
8. Temporary assemble left longerons(F2, F14, F4). Cover the left side panel(F1a-F1c).



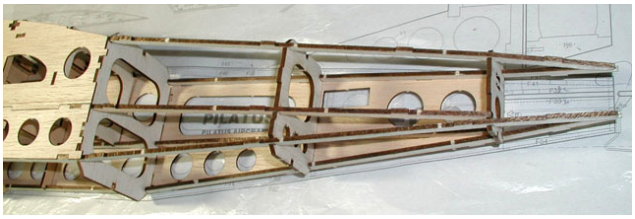
9. Temporary assemble fore longerons(F19-F23). Make sure to pay attention to bulkheads F17, F18 the numbers should be facing forward.



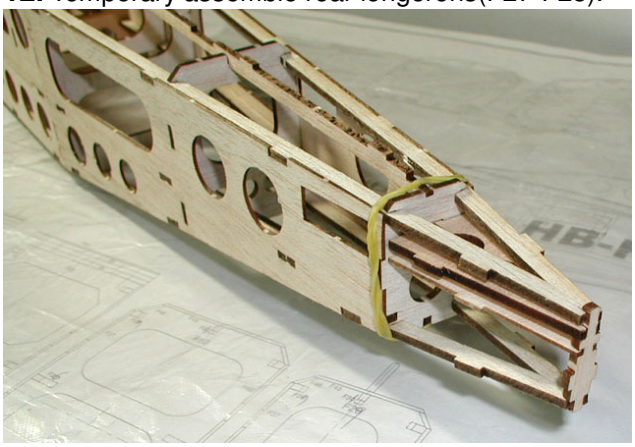
10. Cover the fore side panel(F25a-right, F25b-left).



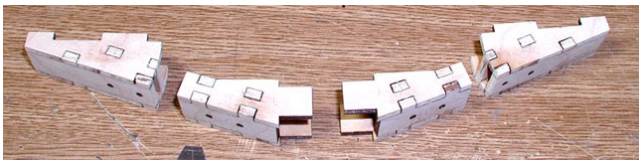
11. Temporary assemble rear right side panel(F37), rear longerons(F27-F28) and bulkheads(F29-F30).



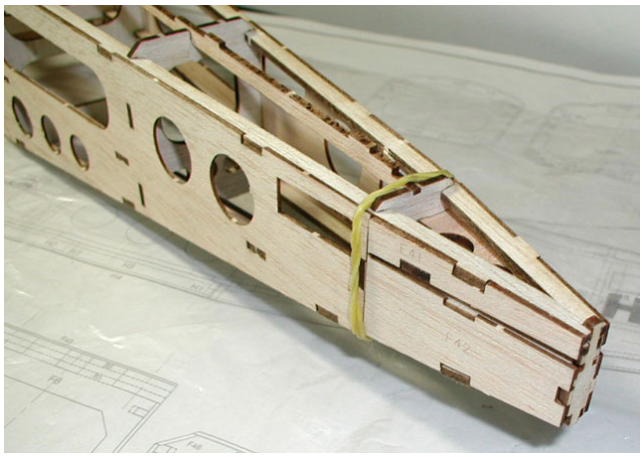
12. Temporary assemble rear longerons(F27-F28).



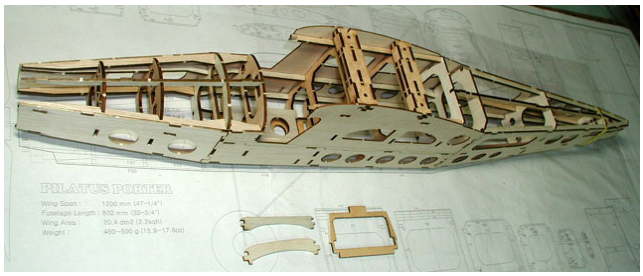
13. Temporary assemble rear left side panel(F37), top & bottom longerons(F31-F32).
Install bulkhead(F34), servo trays(F35-F36, F38-F39) and Stabilazer holder(F32-F33).



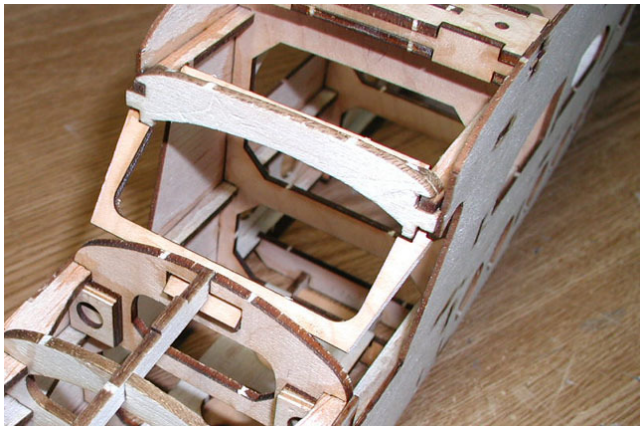
14. Assemble and glue strut mounts(B1-B3, B8-B10).



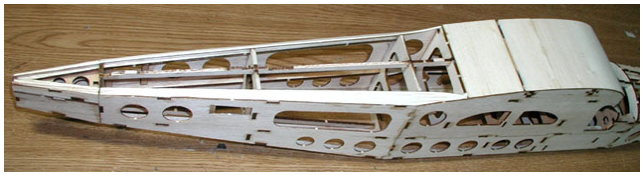
15. Sight check down the fuselage to insure against twist.



16. Now apply thin CA to fix fuselage and **thick CA at each joints for reinforcing**.

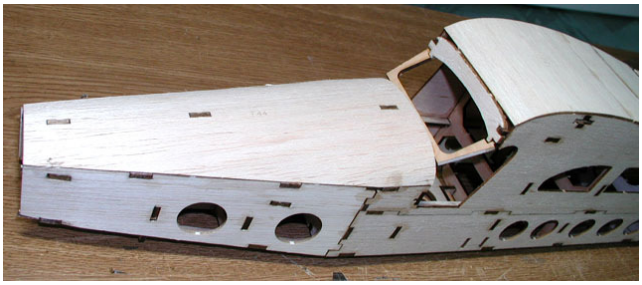


17. Glue Landing gear mounts(B12, B13) and windshield frames(F13, F15-F16).

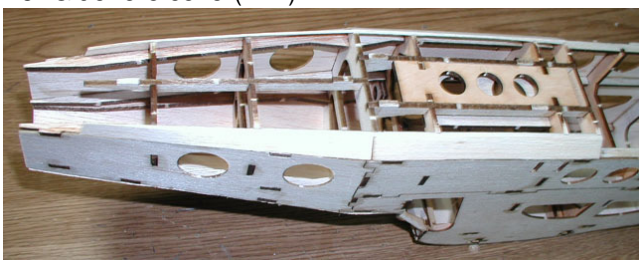


18. Glue fuselage top cover(F43, F46).

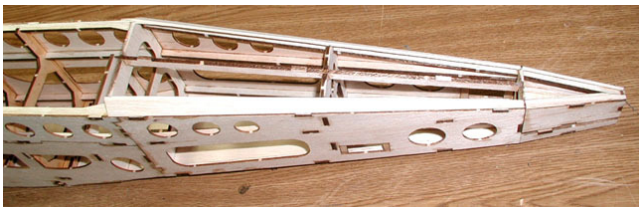
19. After sanding glue rear fuselage top cover(F45).



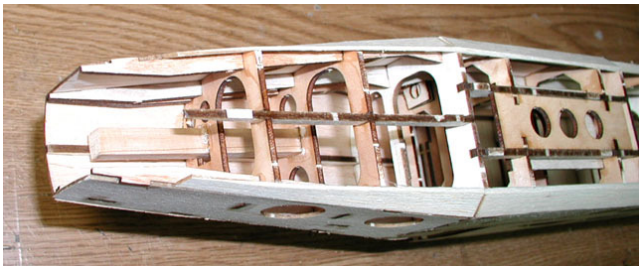
20. Glue fore cover(F44).



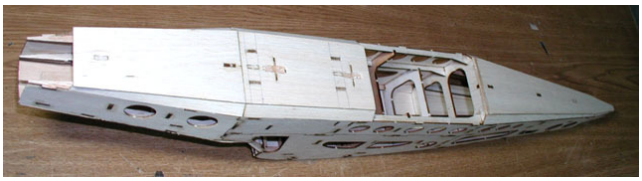
21. Glue fore bottom cover(F49, F51).



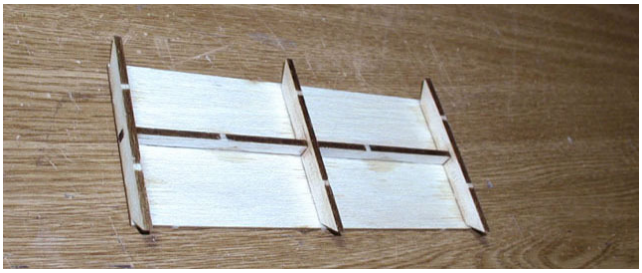
22. Glue rear bottom cover(F53).



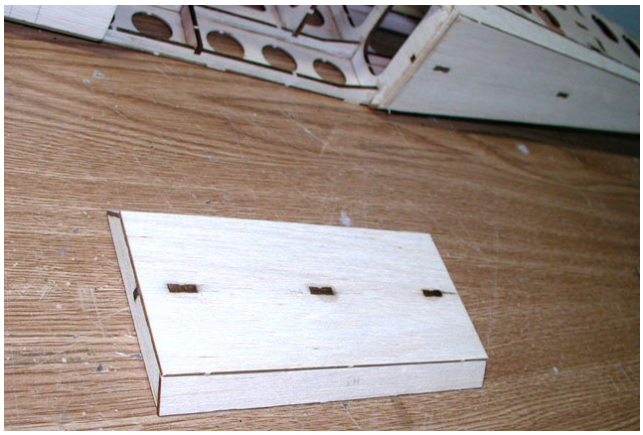
23. Install motor mount stick.



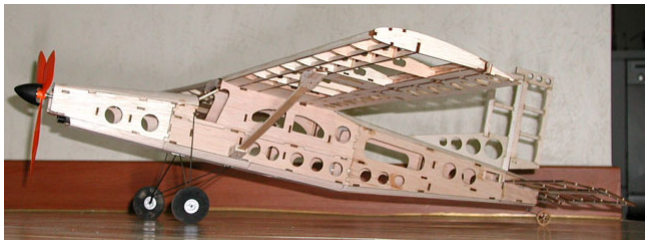
24. Finish covering(F48, F50, F52) and glue inner nose parts(F25c).



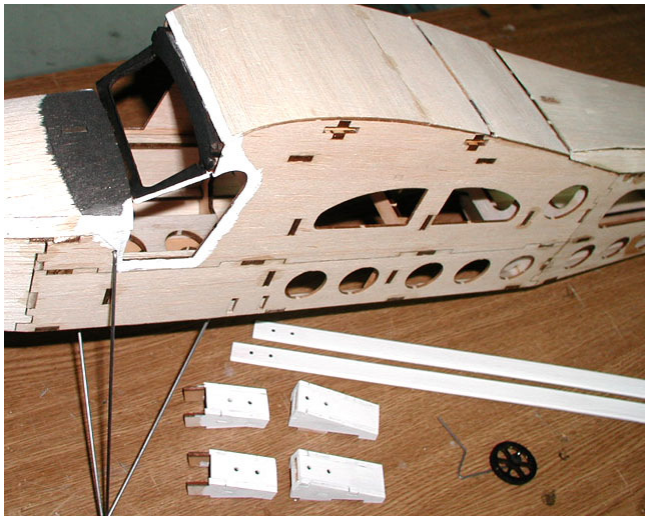
25. Assemble hatch parts(H1A-H1C, H2).



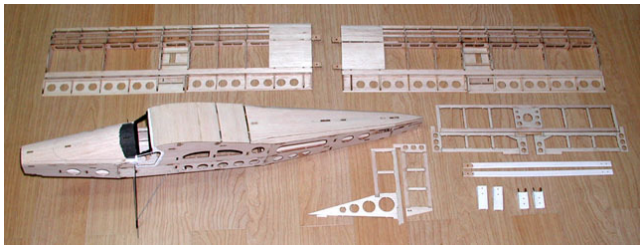
26. Finish hatch parts(H3-H4).



27. Test assemble airframe.
Make hinge slots and pre-install hinges. (Do not glue hinges in this step.)



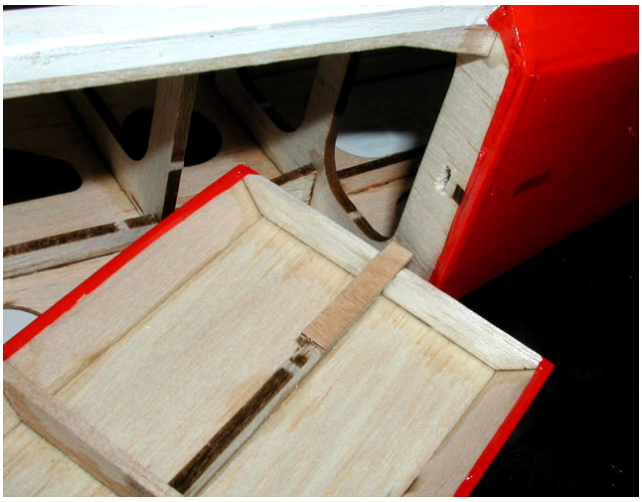
28. Paint cockpit area and strut parts.



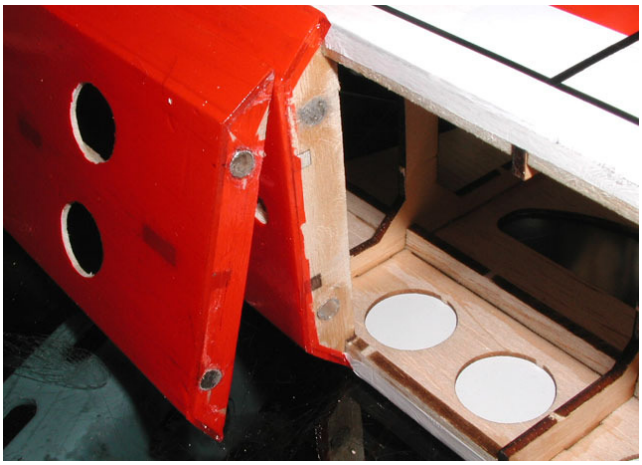
29. Ready to cover.

● COVERING AND EQUIPMENT INSTALLATION

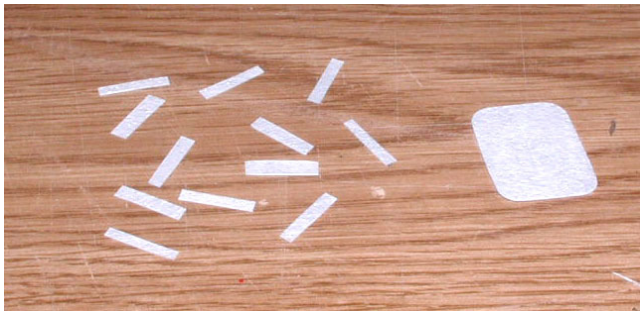
1. Cover PILATUS with your trim choice.



2. Glue the plywood dowel of hatch(H5).

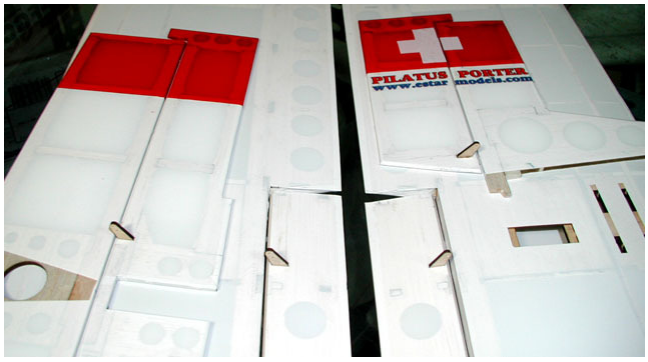


3. Install and glue Neodymium magnetics with thin CA.



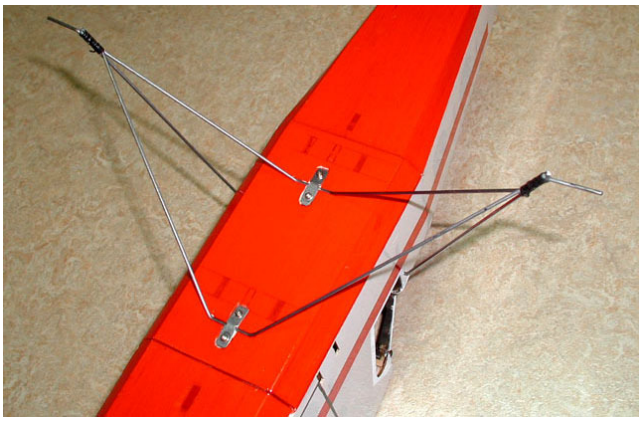
4. Cut CA hinges as shown above.

5. Prepare control horns. Drill 1.2mm holes. Apply thin CA for reinforcing.



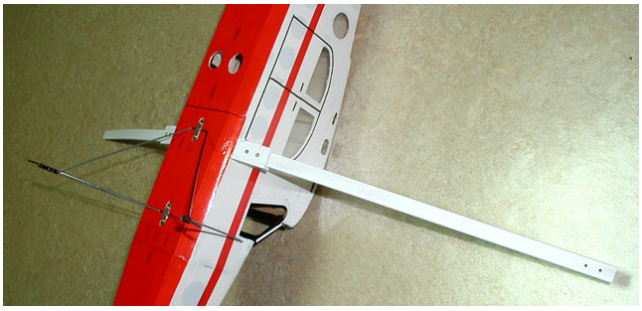
6. Install and glue plywood horns to control surfaces. Refer to drawings for control horn locations.

7. Install landing gear and apply thick CA.

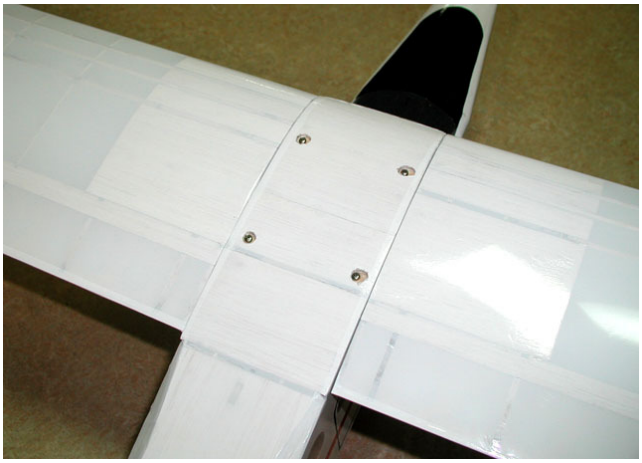


8. Install landing gear with brackets and screws.
Tie wires with thread and reinforce with thin CA.

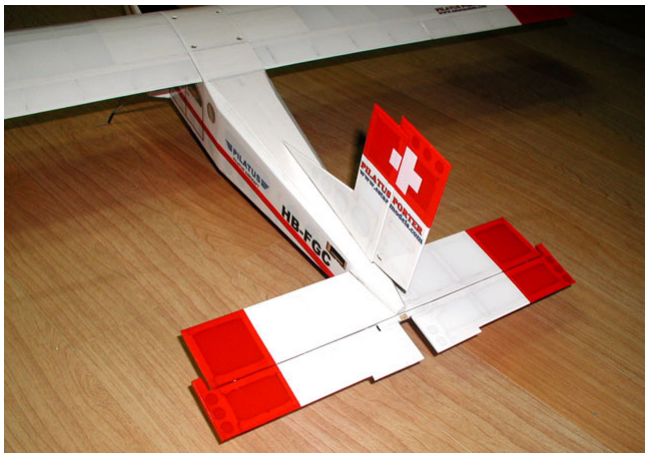
9. Insert and glue strut mounts.



10. Insert and fix struts with screws.



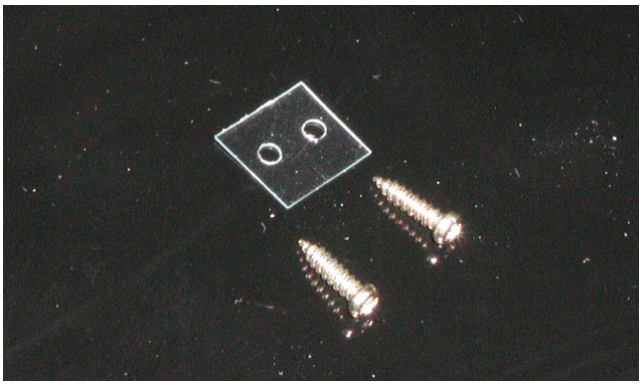
11. Assemble wing and fix with screws.



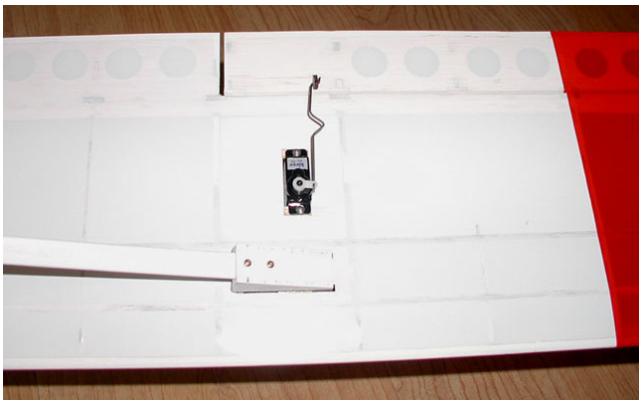
12. Glue Tail to the fuselage with thick CA. (Horizontal Tail must be paralleled with wing and Vertical Fin must be at right angle to Hozizontal Tail.)
Install Rudder and Elevator, and then glue hinges with small amount of thin CA.

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

14. Install rudder servo and insert pushrods.



15. Install elevator servo and insert pushrods.
Fix tail gear. (Use scrap of clear plastic.)



16. Install aileron servos and insert pushrods.

17. Install motor and fix with screw.

18. Install wheels. Congulatulations. 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 : 13mm(1/2”) up, 10mm(3/8”) down.
Elevator : 19mm(3/4”) up and down.
Rudder : 25mm(1”) right and left.