

Dynaflite™

84" Fun Scale™ Fly Baby

- REALISTIC FUN SCALE MODEL
- HUGE, 84" WINGSPAN (IMAA Legal)
- 1/4 SCALE MODEL • BUILDS QUICKLY

READ THROUGH THIS INSTRUCTION MANUAL FIRST. IT CONTAINS IMPORTANT INSTRUCTIONS AND WARNINGS CONCERNING THE ASSEMBLY AND USE OF THIS MODEL.



WARRANTY

Dynaflite guarantees this kit to be free from defects in both material and workmanship at the date of purchase. This warranty does not cover any component parts damaged by use or modification. In no case shall Dynaflite's liability exceed the original cost of the purchased kit. Further, Dynaflite reserves the right to change or modify this warranty without notice. In that Dynaflite has no control over the final assembly or material used for final assembly, no liability shall be assumed nor accepted for any damage resulting from the use by the user of the final user-assembled product. By the act of using the user-assembled product, the user accepts all resulting liability. If you are not prepared to accept the liability associated with the use of this product, return this kit immediately in new and unused condition to the place of purchase.



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INTRODUCTION

Congratulations on your choice of this kit for your next project. The Fly Baby is a Fun Scale™ model of a true classic aircraft. It has the presence that only a big model can carry off. The full scale Fly Baby was actually derived from a model aircraft. This kit is a model of that full scale aircraft.

The Dynaflyte Fly Baby was designed to allow the modeler a wide selection of power plants from a .75 two stroke to a 25 cc gas engine. With an airplane this large and a power plant selection this broad, there are a few problems that may come up. If you use a light .75 two stroke you will need to add weight to the nose. A .91 4 stroke will balance very closely. With a gas motor like the US Engines 25cc you will need to add weight in the tail.

At Dynaflyte we take pride in offering kits that are simple and straightforward to build and provide value for your modeling dollar. Because of the size and cost of this model, we assume you have built several models and have a general working knowledge of modeling and its terms.

If you HAVE NOT built and flown several kits, do yourself a favor - back up and get some experience before beginning this kit.

Please inventory and inspect all parts carefully before starting to build! If any parts are missing, broken or defective or if you have any questions about building or flying this model, please call us at (217) 398-8970 and we'll be glad to help. If you are calling for replacement parts, please look up the part numbers and have them ready when calling.

**PROTECT YOUR MODEL,
YOURSELF & OTHERS...
FOLLOW THIS IMPORTANT
SAFETY PRECAUTION**

Your Fly Baby is not a toy, but a sophisticated working model that functions like a full-size airplane. Because of its performance, if you do not assemble and operate the Fly Baby correctly, you could possibly injure yourself or spectators and damage property. **To make your R/C modeling experience totally enjoyable, we recommend that you get assistance with assembly and your first flights from an experienced, knowledgeable modeler.** You'll learn faster and avoid risk to your model before you're truly ready to solo. Your local hobby shop has information about flying clubs in your area whose membership includes qualified instructors.

You can also contact the national Academy of Model Aeronautics (AMA), which has more than 2,500 chartered clubs across the country. We recommend you join the AMA which will provide you with insurance coverage at AMA club sites and events. AMA Membership is required at chartered club fields where qualified flight instructors are available. Contact the AMA at the address or toll-free phone number below.

Academy of Model Aeronautics
5151 East Memorial Drive
Muncie, IN 47302
(800) 435-9262
Fax (765) 741-0057



PRECAUTIONS

1. You must assemble the plane according to the instructions. Do not alter or modify the model, as doing so may result in an unsafe or unflyable model. In a few cases the instructions may differ slightly from the photos or plan. In those instances the text should be taken as correct.
2. You must take time to build straight, true and strong.
3. You must install all R/C and other components so that the model operates properly on the ground and in the air.
4. You must test the operation of the model before the first and each successive flight to insure that all equipment operates correctly. You must also make certain that the model has remained structurally sound.

NOTE: We, as the kit manufacturer, provide you with a quality kit and great instructions, but ultimately the quality and flyability of your finished model depends on how you assemble it; therefore, we cannot in any way guarantee the performance of your completed model and no representations are expressed or implied as to the performance or safety of your completed model.

PREPARATIONS

REQUIRED ITEMS

These are the items "not included" with your kit; you will need to purchase them separately. Items in parentheses (GPMQ4107) are suggested part numbers recognized by distributors and hobby shops and are listed for your ordering convenience. **GPM** is the Great Planes® brand, **TOP** is the Top Flite® brand and **HCA** is the Hobbico® brand.

- 4 channel radio with 6 servos
(5 high torque to be IMAA legal)
- Engine - .75 to .90 2-stroke
.91 to 1.20 4-stroke or 25cc gas
- Engine mount and mounting hardware
- 16 oz. Fuel tank, 2 or 4-stroke (GPMQ4107)
- 20 oz. Fuel tank, gas (DUBQ0220)
- Gas stopper (DUBQ0675)
- Standard fuel tubing, 2 or 4-stroke (GPMQ4131)
- Tygon fuel tubing, gas (AERQ2125)
- (2) 4-1/2" Main wheels (DUBQ0846)
- (1) 1-1/2" Tail wheel (GPMQ4243)
- (4) 1/4" Wheel collars (DUBQ1200)
- (2) 3/32" Wheel collars (GPMQ4302)
- Coverite™ Fabric covering – Main color one 15' roll – Trim colors one 6' roll per color
- Paint for fuelproofing and engine cowl
- (1) 1/4 Scale pilot (DGAQ2110)
- 1/4" Latex Foam Rubber (HCAQ1000)
- (2) 12" Servo extension wires (ailerons)
- (2) 'Y' Connectors (ailerons, elevators)
- (2) 24" Servo extension wires (gas only)

OPTIONAL ITEMS

- Cockpit and Accessory Kit (DYFQ8110)

SUGGESTED SUPPLIES

We recommend Great Planes Pro™ CA and Epoxy

- 4 oz. Thin CA Adhesive - (GPMR6004)
- 4 oz. Medium CA Adhesive (GPMR6010)
- 2 oz. Thick CA Adhesive - (GPMR6015)
- CA Accelerator - (GPMR6035)
- CA Applicator Tips - (HCAR3780)
- 6-Minute Epoxy - (GPMR6045)
- 30-Minute Epoxy - (GPMR6047)
- 4 oz. Aliphatic Resin Glue (GPMR6161)
- 4 oz. Milled Fiberglass (GPMR6165)
- Microballoon Filler (TOPR1090)
- J & Z Products RC/56 Canopy Glue (JOZR5007)
- Great Planes Plan Protector (GPMR6167)



A flat, durable, easy-to-handle sanding tool is a necessity for building model airplanes. Great Planes makes a complete range of Easy-Touch™ Bar Sanders and replaceable Easy-Touch adhesive-backed sandpaper. For future reference, here's a list of Easy-Touch Bar Sanders and adhesive-backed sandpaper:

5-1/2"	Bar Sander (GPMR6169)
11"	Bar Sander (GPMR6170)
22"	Bar Sander (GPMR6172)
33"	Bar Sander (GPMR6174)
44"	Bar Sander (GPMR6176)

Assortment pack of 5-1/2" strips (GPMR6189)

Adhesive-backed 12' roll of:

- 80-grit (GPMR6180)
- 150-grit (GPMR6183)
- 180-grit (GPMR6184)
- 220-grit (GPMR6185)

Use 320-grit wet-or-dry sandpaper for finish sanding.

BUILDING NOTES

- When you see the term “**cut and fit**” in the instructions, it means you should first position the part on the assembly **without using any glue**. Slightly modify or shape the part as necessary for the best fit.
- Whenever just “**epoxy**” is called for, you may use **either** 30-minute epoxy **or** 6-minute epoxy. When 30-minute epoxy is **specified**, it is **highly recommended** that you use only 30-minute epoxy because you will need either the working time or the additional strength.
- During construction you will be using a number of balsa sticks to frame various assemblies. Ample material is included but you should study the plans, then make an effort to cut the longest pieces you will need first. Label the pieces for later reference as you cut them. By doing this now, you won't have to splice pieces together later.
- **Do not throw away any leftover material** until after you have completed your model. Some small pieces of leftover balsa or plywood are used during construction.
- This kit is built with three types of glue.

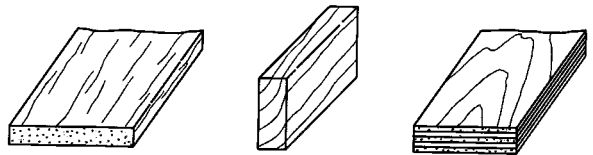
Cyanoacrylate - CA glues cure almost instantly and are moderately strong. There are three common types used: thin, medium and thick. Thin cures the fastest but will not span gaps between parts. Medium and thick are used where parts do not fit perfectly. CA glue does not bond well to most plywoods and hardwoods. CA glues are also brittle.

Aliphatic Resin - Resin glues require that parts be pinned or clamped together while the glue dries—typically 15 - 30 minutes. Resin glues are very strong and work well with balsa and plywoods.

Epoxy - 6-minute epoxy cures the fastest; it sets within six minutes but is not fully cured for one hour or more. 30-minute epoxy is the strongest as it allows the epoxy to soak into the wood thoroughly. While it sets within 30 minutes, it is not fully cured for two or more hours.

Throughout the assembly of this model, THIN CA should be used unless the step calls for another type of adhesive. If your parts do not fit well, substitute MEDIUM or THICK CA.

TYPES OF WOOD



BALSA

BASSWOOD

PLYWOOD

METRIC CONVERSIONS

1" = 25.4mm (conversion factor)

1/64" = .4mm

1/32" = .8mm

1/16" = 1.6mm

3/32" = 2.4mm

1/8" = 3.2mm

5/32" = 4mm

3/16" = 4.8mm

1/4" = 6.4mm

3/8" = 9.5mm

1/2" = 12.7mm

5/8" = 15.9mm

3/4" = 19mm

1" = 25.4mm

2" = 50.8mm

3" = 76.2mm

6" = 152.4mm

12" = 304.8mm

15" = 381mm

18" = 457.2mm

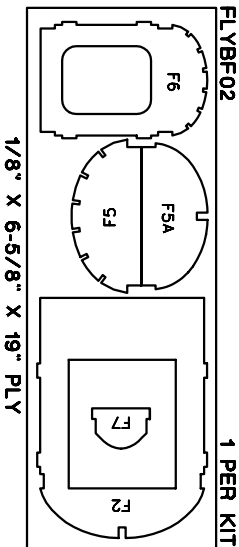
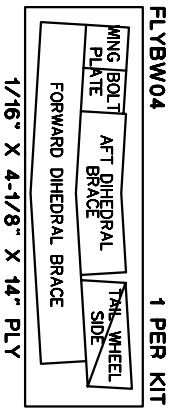
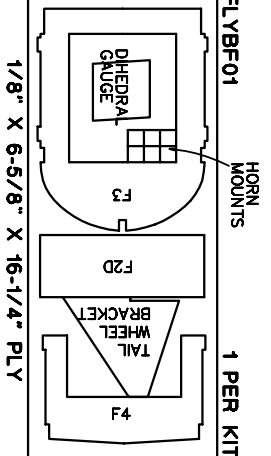
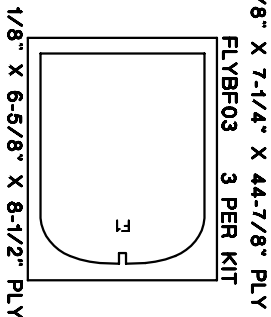
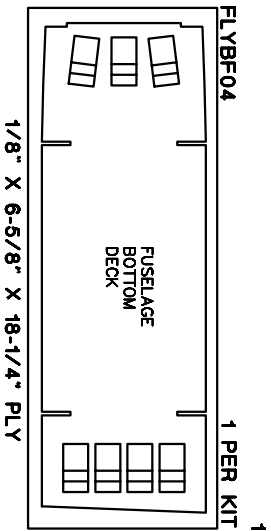
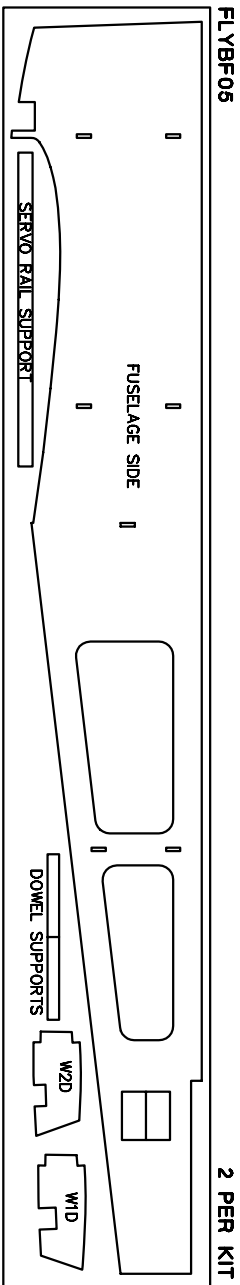
21" = 533.4mm

24" = 609.6mm

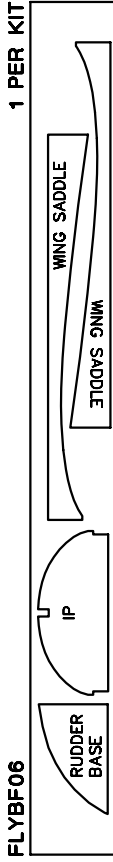
30" = 762mm

36" = 914.4mm

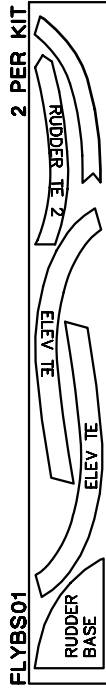
DIE-PATTERNS



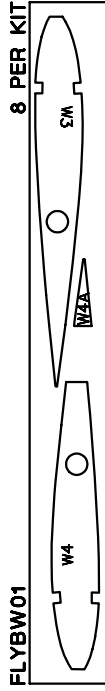
DIE-PATTERNS



1/8" X 3" X 29-7/8" Balsa



1/8" X 2-3/4" X 23-7/8" Balsa



3/32" X 2-3/4" X 23-7/8" Balsa



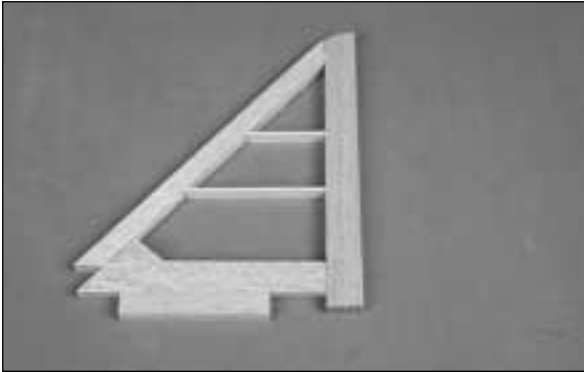
3/32" X 2-3/4" X 23-7/8" Balsa



3/32" X 2-3/4" X 23-7/8" Balsa

BUILD THE TAIL GROUP

BUILD THE FIN



1. Place the fin and rudder plan on your work surface and cover it with wax paper.
2. From the 3/8"x 15/16"x 36" balsa stick cut, fit and glue the fin TE and fin upper bottom piece (shaded area on plan).
3. From a 3/8"x 5/8"x 30" balsa stick cut, fit and glue the fin lower bottom piece (shaded area on plans).
4. From a 3/8"x 5/8"x 30" balsa stick cut, fit and glue the fin LE.
5. From a 1/8" x 3/8" x 24" balsa stick cut, fit and glue the fin ribs in place.

NOTE: It is important that the ribs fit the LE and TE well. It is not important that each rib fit the exact location shown on the plan.

6. Use leftover 3/8" x 15/16" balsa to cut and glue the gusset between the Fin LE and Fin Bottom.
7. Sand both sides of the fin flat. Radius the LE as shown on the plan.

BUILD THE RUDDER

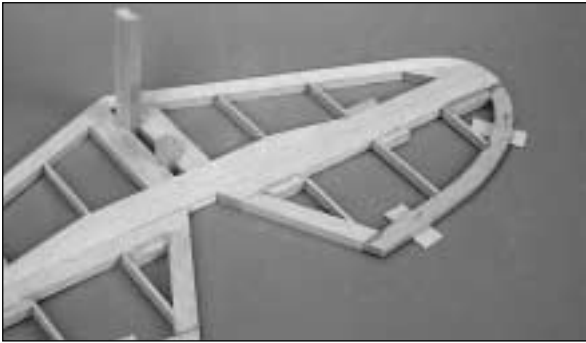


1. Laminate the two 1/8" die-cut rudder TE1 pieces together. Do the same for the TE2 pieces. Glue the TE1 and TE2 pieces together over the plan. After they are dry remove them from the plan.
2. Laminate three 1/8" die-cut rudder base pieces together.
3. Pin three 1/16" balsa shims in place over the plans.
4. From a 3/8"x 5/8"x 30" balsa stick, cut and pin the rudder leading edge in place. Glue the rudder base to the LE.
5. Making sure to keep the TE against the 1/16" shims, glue it to the rudder base and the LE.
6. From the remainder of the 1/8"x 3/8"x 24" balsa stick, cut, fit and glue the rudder ribs in place.

NOTE: It is important that the ribs fit the LE and TE well. It is not important that each rib fit the exact location shown on the plan.

7. From the 3/8"x 3/8"x 24" balsa stick, fit and glue the three hinge blocks in place.
8. Sand this assembly to the airfoil shown in the cross section on the plan.

BUILD THE STABILIZER

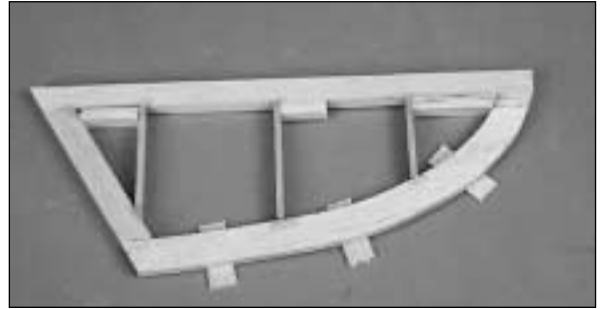


- ❑ 1. Place the stab and elevator plan on your work surface and cover it with wax paper.
- ❑ 2. From the 3/8"x 5/8"x 36" balsa stick, cut and glue the stab TE and sub TE together. Pin it in place on the plan.
- ❑ 3. From the remainder of the 3/8" x 15/16" balsa stick used for the fin, make two stab center pieces. Glue them in place making sure to use two 3/8" shims so that the fin bottom will fit into the stab center.
- ❑ 4. From a 3/8"x 5/8"x 30" balsa stick, cut and glue the stab LE in place.
- ❑ 5. Using a leftover piece of 3/8"x 15/16" balsa stick, fit and glue the stab tip gussets in place.
- ❑ 6. From a 1/8"x 3/8"x 24" balsa stick, cut, fit and glue the stab ribs in place.

NOTE: It is important that the ribs fit the LE and TE well. It is not important that each rib fit the exact location shown on the plan.

- ❑ 7. Using the remainder of the 3/8"x 3/8" balsa stick, cut and glue the hinge blocks in place.
- ❑ 8. Sand both sides of the stab flat. Radius the LE as shown on the plan.

BUILD THE ELEVATORS



- ❑ 1. Laminate two of the 1/8" die-cut balsa elevator trailing edge pieces together for each elevator.
- ❑ 2. From a 3/8"x 5/8"x 30" balsa stick, cut the elevator leading edge and also the root end of the elevator. Glue these pieces together over the plan.
- ❑ 3. Holding the laminated TE down on the 1/16" balsa shims, glue it to the TE and root.
- ❑ 4. From a 1/8"x 3/8"x 24" balsa stick, cut, fit and glue the elevator ribs in place.

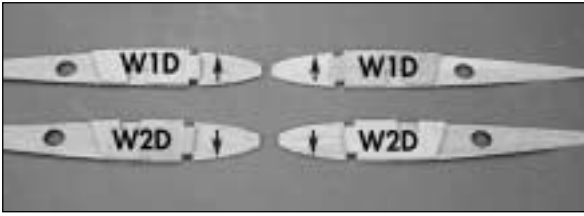
NOTE: It is important that the ribs fit the LE and TE well. It is not important that each rib fit the exact location shown on the plan.

- ❑ 5. From the remainder of the 3/8" x 3/8" balsa stick, cut and glue the hinge blocks into place.
- ❑ 6. Sand this assembly to the airfoil shown in the cross section on the plan.

BUILD THE WING

NOTE: This is a semi symmetrical wing. Make sure you mark the top of the ribs so that you get them all correctly positioned.

- ❑ 1. Remove the ribs from the die sheets. Mark the top of the ribs with a pen.

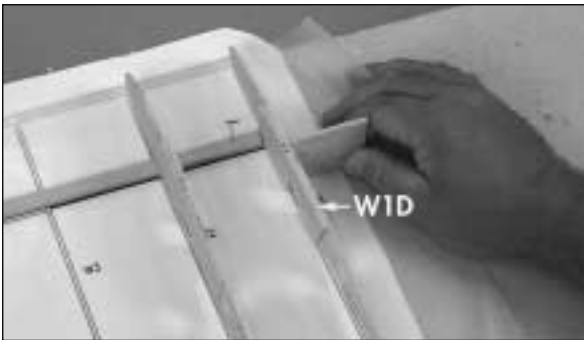


❑ 2. Glue the die-cut 1/8" ply W1D and W2D doublers to four W3 ribs with 6-minute epoxy as shown in the photo.

NOTE: The W1D landing gear notch is deeper than the notch in W2D.

❑ 3. Cover the left wing plan with wax paper. Pin the 1/4" x 3/8" x 36" basswood bottom spar into place. Pin the 1/4" x 3/8" x 36" balsa building jig into place with the 1/4" side against the plan.

NOTE: In the following steps pin the rear of each rib to the 1/4" x 3/8" building jig as they are glued to the spar.



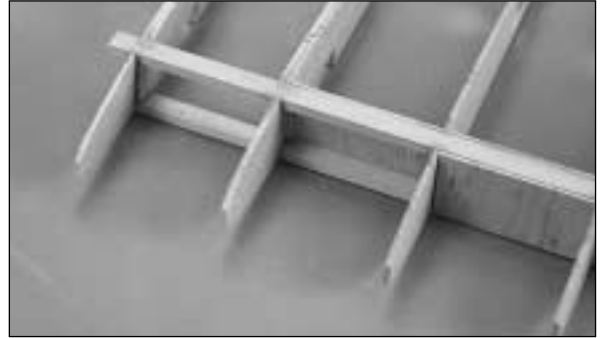
❑ 4. Glue the center rib into place using the dihedral gauge to set the angle. Make sure the W1D doubler is toward the tip of the wing.

❑ 5. Glue the rib with the W2D rib doubler onto the bottom spar. Make sure the W2D doubler is toward the **root** of the wing.

❑ 6. Glue the remaining W3 and W4 ribs to the spar keeping them 90 degrees to the work surface and aligned over the ribs on the plans.

NOTE: Do not glue ribs W5 and W6 at this time.

❑ 7. Glue the 1/4" x 3/8" x 36" basswood top spar into place.



❑ 8. From a sheet of 3/32" x 4" x 36" balsa cut and glue the shear webs into place.

IMPORTANT: Do not put shear webs between ribs W1 and W2 or between W2 and the first W3 on the front of the spars.



❑ 9. Fit together but do not glue W5, W6, WTR1, and WTR2

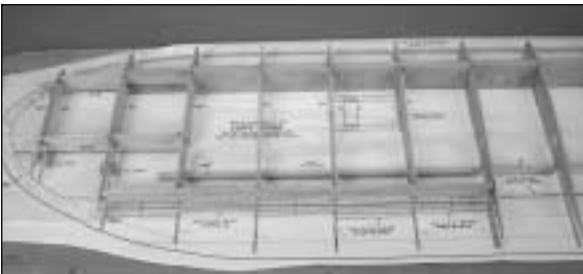
❑ 10. Cut and pin two 1/2" shims and one 3/4" shim in place.

❑ 11. Trim the top and bottom spars even with the tip side of W5.

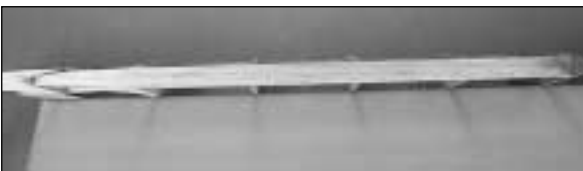


☐☐ 12. Glue WTR1 and W5 to the spars keeping WTR1 down against the 1/2" shim. It will be necessary to squeeze and hold the spars together until the glue cures.

☐☐ 13. Glue WTR1 to rib W6 and WTR2 to ribs W4, W5 and W6, making sure to keep the wing tip down against the shims.



☐☐ 14. Cut a 18-5/8" long piece from a 1/4" x 3/4" x 24" balsa stick and glue it to the last W3 rib, W4 ribs and the W5 rib. Keep rib W5 centered on the TE.



☐☐ 15. Sand the TE to the shape shown on the plan. Remove the wing from the building surface to shape the bottom of the TE.

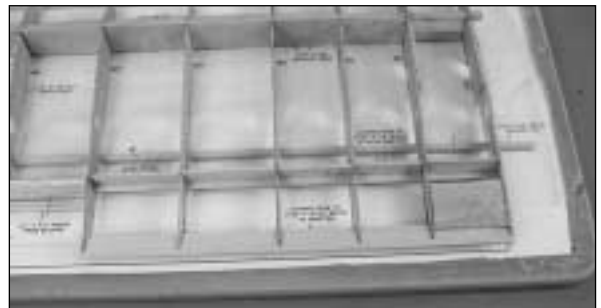
☐☐ 16. Pin the wing back onto the plan.



☐☐ 17. Fit and glue the 3/32" x 1/2" x 36" balsa TE spar sheeting onto the **bottom** of the ribs from W1 to W5.

☐☐ 18. Cut, fit and glue the 3/32" x 15/16" x 36" balsa TE sheeting onto the bottom of the TE of the ribs from rib W1 to the last W3.

NOTE: The sheeting extends 3/8" past the rear of the ribs.



☐☐ 19. From the 3/32" x 3/4" x 36" balsa sheet, cut, fit and glue the TE spar webs in place. Make sure to keep the top of the webs flush with the top of the ribs.

NOTE: The grain of the webs is **horizontal**.

☐☐ 20. Cut the wing bolt filler block from 1/2" x 2" x 6" balsa stock. Glue it between W1 and W2. Sand the block so that it is flush with the tops of the ribs.



21. Fit and glue the $3/32$ " x $1/2$ " x 36" balsa TE spar sheeting onto the top of the ribs and the rear webs from rib W1 to rib W5 using medium CA.

22. Taper the lower TE sheeting to the contour of the top of the ribs. Fit and glue the $3/32$ " x $15/16$ " x 36" balsa TE sheeting onto the top of the TE of the ribs from ribs W1 to the last W3 using medium CA.



23. Fit and glue a $1/8$ " x $1/2$ " x 36" LE edge stick onto the front of the ribs. Fit and glue a second $1/8$ " x $1/2$ " x 36" balsa LE stick onto the first.

24. Sand the top of the LE to match the airfoil shape of the ribs.

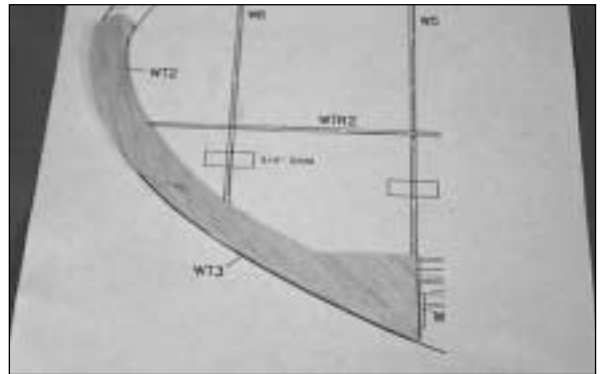


25. Glue the $3/32$ " x 3" x 36" LE sheeting onto the spar, ribs and leading edge using medium CA. Sand the tip edge flush with the tip side of W5 and the root flush with W1.



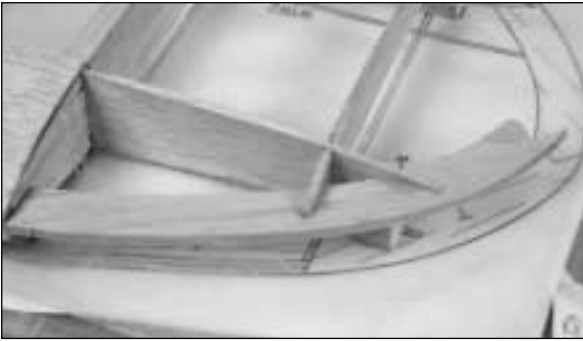
26. Using a $3/32$ " x 3" x 24" balsa sheet, glue the center sheeting from the W1 rib to the first W3 rib.

27. From $3/32$ " x $3/8$ " x 30" balsa sticks, fit and glue the cap strips to the tops of ribs W3 to W5. **Do not** cap strip rib W6.



28. Do **not** laminate WT2 or WT3 together. Glue the $3/32$ " die-cut balsa WT2 to WT3 over the plans. Make two of these for each wing tip.

29. Laminate two of the $3/32$ " die-cut balsa WT1's. Make one of these for each wing tip.



□ □ 30. Fit and glue the laminated WT1 to the center of rib W5 and in the notches of W6 and WTR1.



□ □ 31. Fit and glue one of the rear wing tip pieces WT2 and WT3 that you glued together in step 28 to the bottom of ribs W5, W6, WTR2, and to the bottom lamination of WT1.



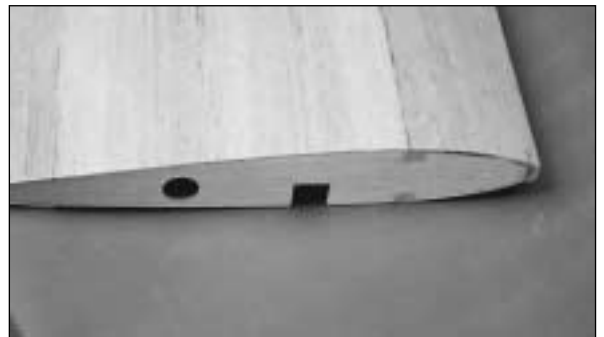
□ □ 32. Fit and glue the top rear wing tip pieces WT2 and WT3 in place. Pinch them together along the outside edge.



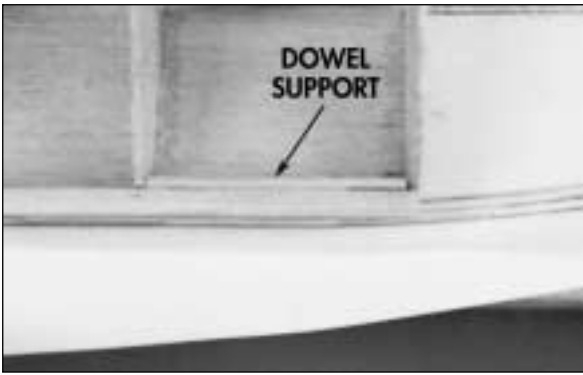
□ □ 33. From a $\frac{3}{32}$ " x $\frac{3}{8}$ " x 30" balsa stick, cut, fit and glue the cap strips to rib W6 and WTR1 between ribs W5 and W6.



□ □ 34. Unpin the wing from the building board. Cut slots $\frac{1}{16}$ " wide in front of and behind the spars in rib W1. Being careful not to damage the sheeting, make a $\frac{1}{16}$ " wide slot in front of the spars in rib W2.



□ □ 35. Sand the spars, LE, TE and sheeting flush with root rib W1.

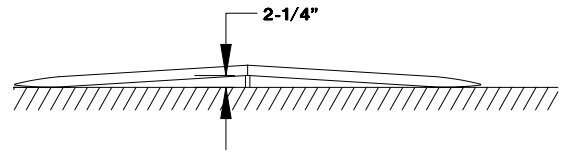


- □ 36. Glue the 1/8" die-cut ply dowel support in place to the back of the leading edge between ribs W1 and W2. Sand the top of the LE to the airfoil shape of the ribs.

Return to step 3 and build the right wing panel. Use the other half of the wing plan. Remember - build a right and left wing panel.

JOIN THE WING HALVES

- 1. Mark a centerline on both the forward and aft dihedral braces. Trial fit the dihedral braces into each wing half and make adjustments if needed.
- 2. Make a block to support the wing halves while they are being joined. A balsa or pine block 2-1/4" high works well.



- 3. Without using any glue, join the wing halves with the dihedral braces. Place the wing on the support block upside down. The tops of the W5 ribs should just touch the building board. Make adjustments as necessary.

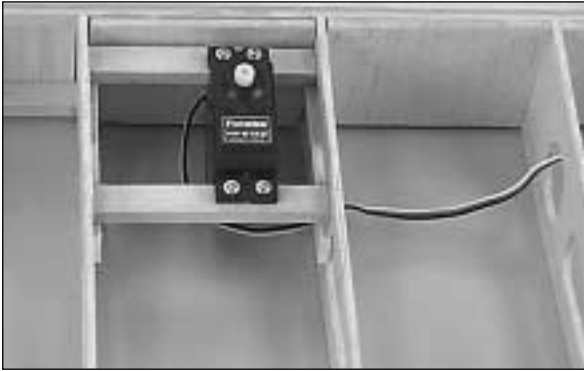
NOTE: The dihedral angle is 3-1/2 degrees for each wing half, but this is not at all critical. It is, however, important that the joint at the root ribs fits well and that the dihedral braces are solidly joined.

- 4. Cover your building board with wax paper. Coat the dihedral braces, root ribs and spars with 30-minute epoxy wherever they will touch each other. Fit the wing halves together and securely clamp the dihedral braces to the spars. Place the wing on the support block and make any final adjustments. Have a cup of coffee while you wait for the epoxy to cure.



- 5. Glue the 3/32" x 3" x 36" balsa Bottom LE Sheeting onto the spar, ribs and leading edge using medium CA or Aliphatic Resin. The photo shows just one side being sheeted but you will be sheeting both sides of your joined wing. Place the wing back on the support block while the glue dries and check that it is straight.

- ❑ 6. Use two 21" x 4" pieces of paper to roll into paper tubes. Slip these into the holes in the wing ribs to form a conduit for the servo wires.



- ❑ 7. Make two 2-3/4" long servo rail supports from the die-cut 1/8" x 1/2" x 11" ply strips. Make two 3-5/8" long servo rails from a 1/4" x 3/8" x 36" basswood stick. Glue the rails and supports where shown on the plan with the rails spaced as needed to fit your servo. Mount the servo to the rails with the screws included with your servo.



- ❑ 8. Sheet the area around the servo using leftover 3/32" balsa so the covering has something to adhere to. Support the sheeting on the bottom with strips of 3/32" balsa.

Repeat the above two steps for the second wing half.



- ❑ 9. Glue the hardwood landing gear block into place with 6-minute epoxy.

- ❑ 10. Cut 1/8" holes through the top wing sheeting from the bottom side, directly above the servo lead tubes. From the top of the wing enlarge the holes in the sheeting to 1/2" diameter centering the holes above the paper tubes. Cut matching 1/2" holes in the servo lead tubes.

- ❑ 11. Use a 3/32" x 3" x 24" balsa sheet to cut, fit and glue the center sheeting between ribs W1 and the first W3 on both wing halves. Cut a 3/4" wide strip in the sheeting above the landing gear block from the root rib to the end of the landing gear block.

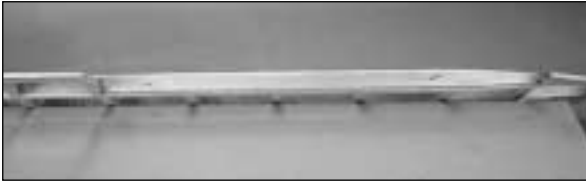
- ❑ 12. Using the 3/4" strip, as well as leftover 3/32" sheeting, cut and glue filler strips to the landing gear block so that the strips will be level with the center sheeting. Cut a groove in these strips for the 3/16" landing gear wire.

- ❑ 13. From the 3/32" x 3/8" x 30" balsa sticks, cut, fit and glue the cap strips to the tops of ribs W3 to W6 and the wing tip pieces as you did on the top of the wing.

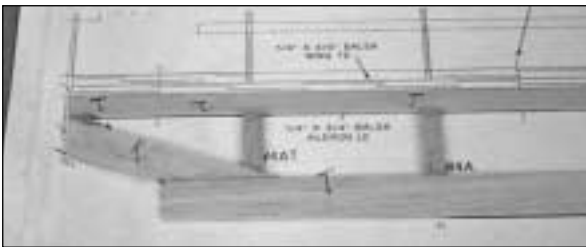
- ❑ 14. Sand the LE to the shape shown on plan. Rough sand the rest of the wing.

- ❑ 15. Reinforce the wing center joint using 3" fiberglass tape and epoxy. Apply the fiberglass to the top and bottom of the wing.

BUILD THE AILERONS

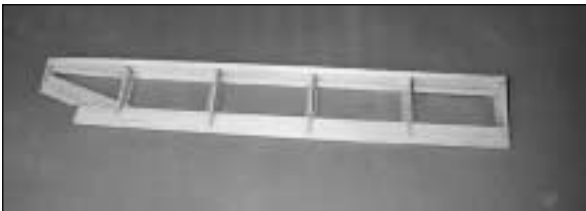


1. Shape the LE of the aileron from a 1/4" x 3/4" x 24" balsa stick using the TE of the wing as a guide. Shape the aileron LE to the shape of the TE of the wing **without** the 3/32" sheeting on it.



2. Cut the aileron LE sheeting from a piece of 3/32" x 1/2" x 24" balsa. Do the same with the TE from the remainder of the piece of 3/32" x 15/16" x 36". Pin and glue these pieces together over the plan. Using the leftover pieces of cap strip from the wing, fit and glue cap strips in place on the aileron.

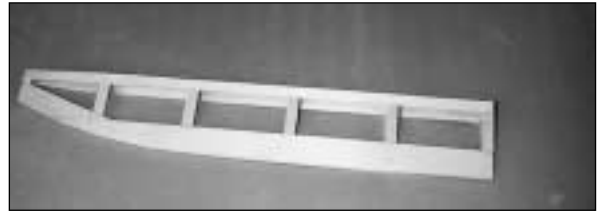
This is a good time to build the other 3 aileron frames using the same steps.



3. Glue the LE piece you made in step one on the frame work. You will have to unpin the tip end of the frame work and glue it up against the LE. Glue the ribs in position on the cap strips.

NOTE: Rib W5A is too small to die-cut to the correct length. Cut it to length before gluing it in position.

4. Fit and glue the hinge blocks in place using leftover 1/4" x 3/4" balsa.



5. Glue the frame made in step 2, to the top of the aileron, aligning the TE of the frames to each other.

6. Remove the aileron from the plan.

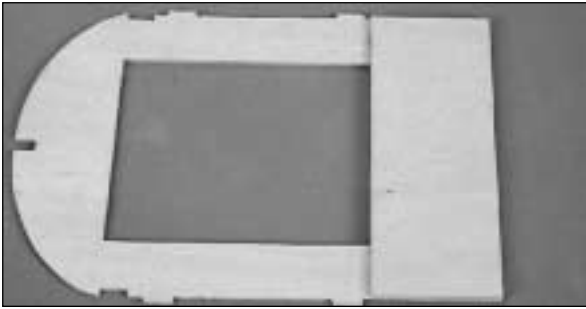
7. Sand the assembly to the airfoil shown in the cross section on the plan.

8. Build the other aileron by repeating steps 3-7.

BUILD THE FUSELAGE

NOTE: Before beginning construction of the fuselage you should determine where you will mount the servos. There are cutouts for mounting the servos in the fuselage bottom deck and the rear of the fuselage sides. If you are installing a gas engine you should mount the servos in the rear of the fuselage to improve the balance. The cutouts in the bottom deck can be used if you are installing a lighter 2-stroke or 4-stroke engine. Punch out the locations you plan to use and glue the other cutouts that you will not use into place.

1. Place the fuselage plan on your building board and cover it with wax paper.



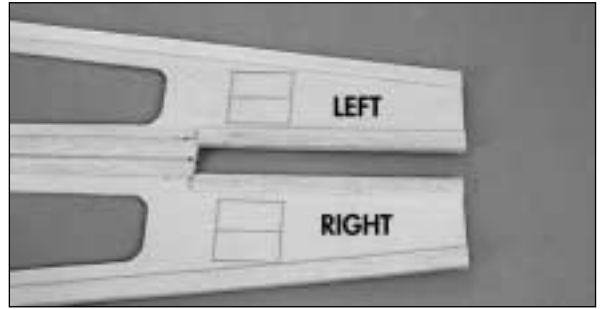
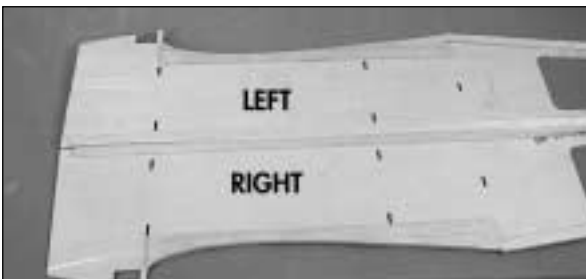
❑ 2. Glue **F2D** to **F2** with medium CA.

❑ 3. Laminate the three **F1** firewalls with 30-minute epoxy.



❑ 4. Lay the 1/8" die-cut **right fuselage side** over the plan. Mark the location of formers **IP**, **F5**, **F5A**, and **F7** on the inside of the right fuse side. Place the **left fuselage side** above the right side as shown in the photo and transfer the marks to the top of the left side.

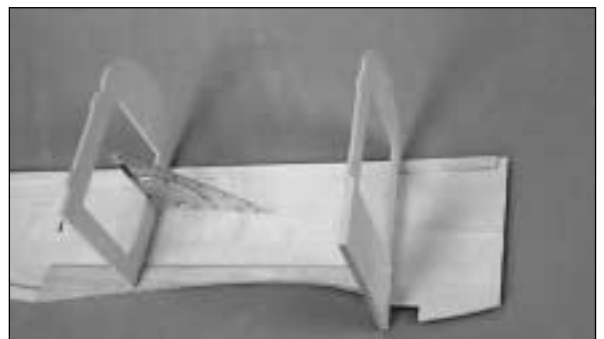
NOTE: There are notches in the fuselage sides to locate formers **F2**, **F3**, **F4** and **F6**.



❑ 5. Locate the two 1/8" x 1/2" x 42" balsa **top longerons**. Glue one to the inside of the left fuse side along the top edge beginning 3/8" back from the front. Cut the longeron at the notch for the stabilizer and glue the remainder of the 1/8" x 1/2" stick along the stab cutout. Glue the other longeron to the inside of right fuse side beginning 19/32" back from the front.

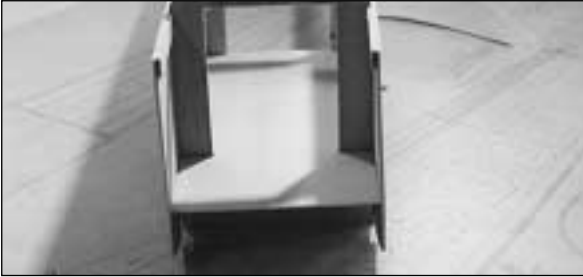
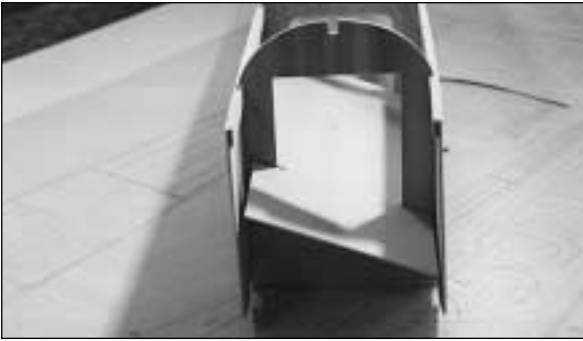
❑ 6. Glue the two 1/8" die-cut balsa **wing saddle doublers** to the inside of the fuselage sides. Align them with the wing saddle.

❑ 7. Locate the two 1/8" x 1/2" x 24" balsa **bottom longerons**. Glue one to the inside of the left fuse side along the bottom edge, aligning it at the aft edge of the wing saddle doubler. Glue the other to the inside of the right fuse side.



❑ 8. Glue formers **F2** and **F3** to the inside of the left fuse side. Use a triangle to insure that the formers are perpendicular to the fuse side.

❑ 9. Fit the right fuse side to **F2** and **F3**, sighting across the top of both sides to align them. When satisfied with the alignment, glue the right fuse side in place.



- ❑ 10. Slip the 1/8" die-cut ply **fuselage bottom deck** through F2 and F3 at a diagonal and rotate into place, but **do not glue**.

NOTE: The bottom deck is used to set the right thrust for the engine. The shorter side of the bottom deck **must** be along the right fuselage side. When satisfied with the fit, glue the bottom deck to F2, F3 and the fuse sides.



- ❑ 11. Fit the laminated ply firewall **F1** into place. The firewall should fit tightly against the bottom deck and the two upper longerons. The front of the left fuselage side should be even with the front face of the firewall. The right fuselage side should extend about 1/4" past the firewall. When satisfied with the fit glue the firewall into position with 30-minute epoxy.

- ❑ 12. From the 1/4" x 3/8" x 36" basswood stick, cut and glue doublers in place behind the firewall using 30-minute epoxy. After the epoxy has cured you may want to pin the firewall to the fuselage with small dowels or toothpicks for additional security. Drill several small holes through the sides and into the firewall. Glue toothpicks into these holes with epoxy.

- ❑ 13. Trim the right fuselage side flush with the firewall.

IMPORTANT: During the following three steps place the fuselage over the top view of the plan to aid in keeping the fuselage straight and square.



- ❑ 14. Place the triangular **tail wheel bracket** between the rear of the fuse sides and pull the fuse together. You may have to trim and sand the longerons for a good fit. The notch in the bracket extends from the bottom of the fuselage. After checking to make sure the fuse is straight and square, glue the tail wheel bracket into place. Cut shims from the 1/4" x 3/8" x 36" balsa stick and glue them into place as shown on the plan.



- ❑ 15. Glue formers **F5** and **F5A** together. Using the notches in the fuse sides and the marks you made

earlier, glue formers **F4**, **F5**, **F6** and **F7** into place. Check to insure that the fuselage remains straight and square.

- ❑ 16. Note the angle of the **instrument panel** on the plan and glue it into place.



- ❑ 17. Use the $\frac{3}{32}$ " x 3" x 36" balsa sheet to sheet across the fuselage bottom from the wing saddle to the tail. Sheet around the tail wheel bracket as shown in the photo. Trim the sheeting flush with the sides of the fuselage.



- ❑ 18. Using the remainder of the $\frac{1}{4}$ " x $\frac{3}{8}$ " x 36" balsa stick, glue the top stringer between F1, F2 and the instrument panel. Sand it flush with the front of F1 and the rear of the instrument panel.

- ❑ 19. Glue the $\frac{1}{4}$ " x $\frac{3}{8}$ " top stringer between F3 and F5A, sanding it flush with the front of F3.

- ❑ 20. Now is a good time to install the control pushrods of your choice.



- ❑ 21. Using the $\frac{1}{8}$ " x 3" x 24" balsa sheets, sheet the front top of the fuselage as shown in the photo.

NOTE: You can trim the cockpit opening now or at step 23.



- ❑ 22. Sheet the top of the fuselage rear from the center of the cockpit to F5A.

- ❑ 23. Trim the sheeting flush with F1 and F5A. Use the cockpit cutout pattern on the plan to cut the cockpit opening.

- ❑ 24. Glue the $\frac{1}{8}$ " x $\frac{1}{4}$ " basswood stringers into position between F5 and F7.

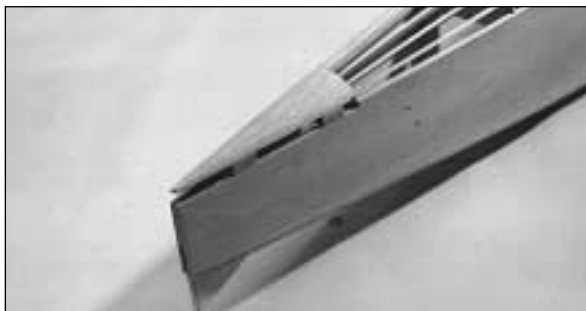


- ❑ 25. Glue the $\frac{1}{4}$ " x 1" x 4" ply wing mount blocks into place, one on each side of the fuselage, with

30-minute epoxy. Glue some doublers to the blocks and fuselage sides using leftover 1/4" x 3/8" basswood.

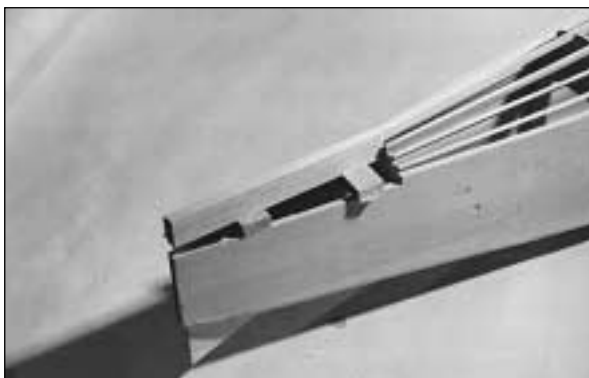
26. Two 1/8" x 1/4" x 36" balsa sticks are included with the kit. If desired, these can be glued to the flat fuselage sides as stringers so that the covering will give the fuselage a more rounded appearance.

27. Sand the fuselage and set aside.



FINAL ASSEMBLY

Before mounting the stab to the fuselage you should first carve the stab to fin fairing blocks.



1. The photo above shows some shim blocks that have been tack glued into position. The lower shims are from the leftover 3/8" x 15/16" stick used for the fin post. The top shim can be cut from the leftover 3/8" x 15/16" stick. These shim blocks will properly space the fairing blocks.

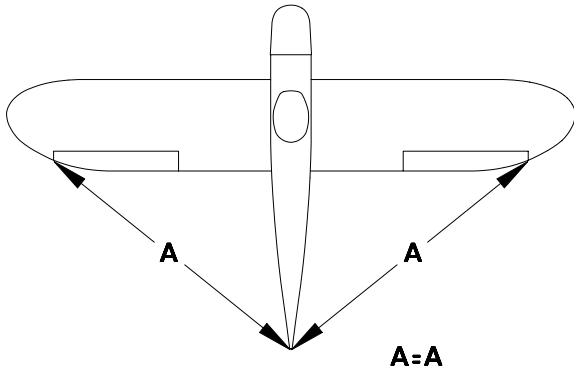
2. Locate the two 3/4" x 1" x 8" tail fairing blocks. Tack glue them into position on the shims and carve the assembly to shape. When you are satisfied with your work, remove the fairing blocks and shims from the fuselage. Clean up the stab mounting area.

Before gluing the stab and fin to the fuselage you should first mount the wing to the fuselage. This will allow you to more accurately align the tail section.

3. Fit the wing to the wing saddle in the fuselage. Lightly sand the saddle if needed for a good fit.

4. Center the wing and mark the location for the dowels on former F2. While carefully holding the wing in position, drill 1/4" holes through F2 and into the wing leading edge. Remove the wing and finish drilling the 1/4" holes into the wing. The holes should extend into the front ply dihedral brace.

5. Put the dowels into the wing and fit the wing back onto the fuselage. Make any adjustments needed to get the dowels to fit properly in the holes in former F2. When satisfied with the fit, glue the dowels into the wing with 6-minute epoxy. Use caution not to get any epoxy on the fuselage.



❑ 6. Align the wing squarely on the fuselage. This is easily done using a piece of string as a guide. Put a pin in the tail of the fuselage at the centerline. Tie a loop in the end of the string and place it over the pin. Move the other end of the string to one wing tip and put some masking tape around the string. Draw an arrow on the tape where it reaches the wing tip. Now swing the string over to the other wing tip. If the tip aligns with the arrow the wing is properly aligned. If not, adjust the wing's position and try again. Continue to adjust the wing until both wing tips are aligned with the arrow on the tape.

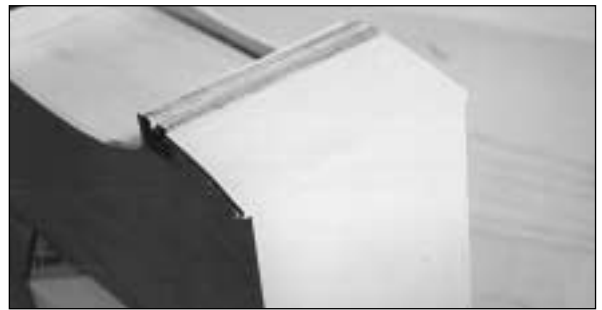
❑ 7. Secure the wing exactly in this position. Drill the two $13/64$ " tap holes for the 1/4-20 wing bolts. Drill the holes through the wing and into the ply wing bolt plates so that the holes will be centered fore/aft in the plates.

❑ 8. Remove the wing from the fuselage. Tap the holes in the ply plates for the bolts. Apply thin CA to harden the threads and tap the holes again.

❑ 9. Locate the two $1/16$ " die-cut ply wing bolt plates. Glue these into position over the wing bolt holes with 6-minute epoxy. Enlarge the wing bolt holes in the wing with a $1/4$ " drill, drilling through the $1/16$ " ply plates.



❑ 10. Glue the $3/4$ " x 1" x 6" basswood **landing gear block** into place with 30-minute epoxy. Make sure it is glued to former F2.



❑ 11. Use a $1/8$ " x $2-3/4$ " x 6" ply sheet to sheet the area between the landing gear block and firewall. **NOTE:** If you will be mounting any servos in the nose area you will need to fabricate a hatch instead of sheeting this area.

❑ 12. Drill a $1/4$ " hole into the landing gear block to clear the wing dowels. Do not drill all the way through the block. (Refer to the side view of the fuse plan)

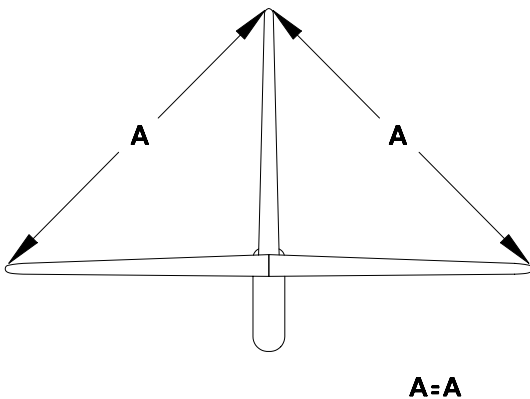


❑ 13. Mount the wing to the fuselage and bolt it into place. Place some wax paper between the leading edge and former F2.

❑ 14. Use the remainder of the 3/8" x 15/16" stick to make a fairing between the bottom of the wing and former F2.

❑ 15. You can now glue the stab and fin to the fuselage. To increase the gluing area, glue some leftover 3/8" stick to the inside of the fuselage sides at the stab saddle.

❑ 16. Place the stab on the fuselage and align with the wing and center line of the fuselage. Use the same string technique that you used for aligning the wing. Be sure that the stab aligns with the wing horizontally as well. When satisfied with the fit and alignment, glue the stab to the fuselage with 30-minute epoxy.



❑ 17. Glue the fin to the stab with 30-minute epoxy using a 90 degree triangle for alignment. Be sure that the fin is aligned with the centerline of the fuselage.

❑ 18. When the fin is secure, glue the fairing blocks into place.

❑ 19. Fill in the area behind and in front of the stab with leftover balsa. This area extends from the fuse to the fin and from the fuse to the stab.



❑ 20. Locate the tailwheel assembly. Attach the assembly to the fuselage using CA. Use thin glass cloth to glass the tube to the 1/8" die-cut ply tailwheel bracket. Glue the 1/16" ply sides into place. One goes on each side, sandwiching the core and tube between them. Sand to final shape.

NOTE: If you plan to fly on grass you may want to reinforce the mounting of the tailwheel tube by wrapping it with a brass or aluminum sheet.



❑ 21. Bring the rudder up to the fuse and mark the protruding part of the tail wheel wire onto the rudder. Drill a 3/32" hole into the rudder at this mark.

❑ 22. While the wing is still on, build the landing gear. The front wire is 1/4", the rear is 3/16". Mount the front wire into the front block using the nylon straps and screw it into place.



☐ 23. Mount the rear wire into the wing block. You will need to notch the landing gear block so the wire can rotate forward.



☐ 24. Bring the ends of the wire together by the axle. If they don't match as shown in the above photo, bend the rear wire to fit. Clean off any manufacturing oil with alcohol. Sand the wires so they are clean and shiny. Wrap the joint area with wire. Coat the area with an acid flux to prepare the joint. Solder the joint with silver solder and a propane torch.

NOTE: To improve ground handling, it is recommended that you bend the 1/4" main wire to impart 2P of toe-in to the landing gear wheel.



☐ 25. Remove the landing gear from the airplane to finish. Add the basswood airfoil fairing to the legs

using CA to hold them in place. Apply glass cloth to glass the fairings to the wire and to each other as shown. Use Bondo® filler to blend the assembly. The gear should be ready to prime and paint but hold off until the cowl is ready.

NOTE: To remove the wing when the Fly Baby is done, unlatch the rear wire and rotate the gear forward, then remove the wing. When transporting, the gear will keep the fuselage upright.



☐ 26. Mount your engine using the mounting system you have chosen. The photo shows our installation of the US Engines 25cc engine on our vibration dampening mount system.

☐ 27. Glue the 3/4" x 3/4" x 3/4" basswood cowl mount blocks into place. Sand them to the contour of the fuselage.

☐ 28. Draw a line on the fuselage where the cowl should end. Draw lines from the cowl mount blocks back to this line. Measure from the cowl rear line to the center of the mount blocks and write down this dimension for each block for later reference.



☐ 29. Fit the cowl. The plastic cowl comes in halves and needs to be glued together. The kit includes a

strip of plastic that is used to reinforce the joint on the inside. Thin CA works well for this. Fill in the joints with Bondo® or a similar filler. When you have glued the cowl together, cut a small hole where the prop shaft needs to exit. Slip the cowl onto the fuselage and see how close you are. Enlarge the hole as needed to clear the engine thrust washer. As you continue to fit the cowl to the fuselage and engine you may need to remove and reinstall the engine several times. We have found that using a piece of cardboard taped to the side of the fuselage is the easiest way to locate the cutout for the engine. Tape the cardboard to the fuselage and cut an opening in it to fit your engine, remove the engine, install the cowl and transfer the cutout to the cowl. If you go slowly and remove a little material each time from the cowl, you will be rewarded with a good looking cowl.

❑ 30. To drill the mounting holes in the cowl, extend the reference lines you drew earlier forward. Use the dimensions you wrote down earlier to locate the position of each hole. Drill the holes with a 1/16" bit and mount the cowl with #6 x 1/2" sheet metal screws. Enlarge the holes in the cowl only to 3/32"

❑ 31. Now is a good time to install your fuel system. As this will vary widely with the type of engine used we will offer only a few guidelines. If you are installing a Gasoline fuel system and are not familiar with them be sure to use a fuel tank, fuel lines and other components designed for gasoline. Install the engine kill switch away from the prop and hot exhaust. And be sure to carry a fire extinguisher whenever you fly. As the fuel system is completely enclosed you will need a refueling valve. You will need to build a tank floor to mount the tank. The kit includes a 1/4" x 3/8" x 36" basswood stick to make rails for the tank floor and for servo rails. The floor can be made from leftover 1/8" ply material.

❑ 32. With the engine and cowl still mounted, let's do a quick C.G. estimate. Tape the elevators and rudder into place. Mount the wing. If you are using a gas engine you will be nose heavy. Put three servos on the stab and your radio on the trailing edge of the wing. This should get you close to

balance. If not you may want to consider putting the radio in the tail. With other engines place the servos and radio forward until the balance is close.



❑ 33. Mounting holes for the servos have been provided in the aft fuselage sides, in the fuselage bottom deck at the aft edge of the wing and in the fuselage bottom deck aft of the firewall. The photo shows servos in the tail. You can also install servo rails cut from 1/4" x 3/8" x 36" basswood, which is provided in the kit. If using a small 2 or 4-stroke engine, the servos should be installed just behind the firewall.

FINISHING

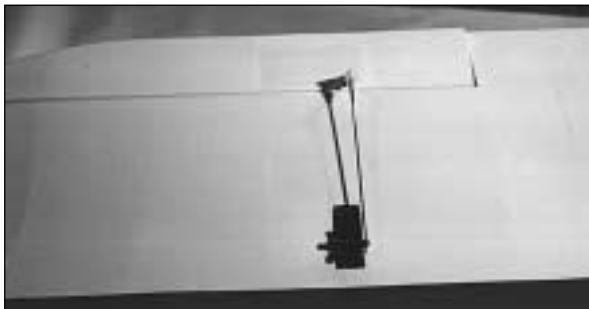
❑ 1. Cover the model. The original Fly Baby was covered in fabric and then painted. Coverite 21st Century pre-painted Fabric was designed for models of this type and looks great on this airplane. To duplicate the color scheme on the box you will need one 15 foot roll of White (COVQ0401), and one six foot roll of Blue (COVQ0312), Dark Red (COVQ0303), Orange (COVQ0307) and Cub Yellow (COVQ0304). There are also many other color schemes available as well.

❑ 2. To install your windshield, cut it from the butyrate strip using the pattern on the plan. Fit it to the fuselage. Cut the covering where it will be glued to the fuselage so that the windshield can be adhered to the wood.

❑ 3. Don't forget to fuelproof the engine and tank area.

❑ 4. Paint the cowl and landing gear.

- 5. Mount the wheels.
- 6. Hinge the rudder, elevators and ailerons with the heavy-duty hinges you have chosen.
- 7. Mount the control horns onto the rudder, elevator, and ailerons.
- 8. Install the radio system. Our radio installation consisted of the following:
 - A. We used one hi-torque servo for each aileron.
 - B. We used one hi-torque servo for each elevator, with a separate pushrod for each.
 - C. We used one hi-torque servo for the rudder.
 - D. We used a standard servo for the throttle.
 - E. We used a 1200 Mah battery pack to allow for the additional servo drain.



- 9. Install hi-torque aileron servos in the wing and connect the linkages. We recommend the following hardware for this purpose:

- 4-40 x 12" rod, threaded on one end (2)
- 4-40 threaded metal clevis (2)
- 4-40 lock nut (2)
- Metal solder clevis (2)

- 10. Fit and install the servos for the elevators and rudder. Connect the linkages to the servos. If the servos are mounted in the rear of the fuselage we recommend the following hardware for this purpose:

- 4-40 x 12" rod, threaded on one end (3)
- 4-40 threaded metal clevis (3)
- 4-40 lock nut (3)
- Metal solder clevis (3)

If the servos are mounted just aft of the firewall, you will need a pushrod system 42" long. If the servos are mounted at the TE of the wing, you will need a pushrod system 28" long. In either case, Great Planes solid wire pushrods or Accu-Glide™ Nylon Pushrods would work well.

- 11. Install the throttle servo and connect the linkage to the engine.
- 12. Finish the cockpit. The cockpit area was designed to be structure free so you can add as much detail as desired. An optional cockpit kit is available for this model and can be installed at any time. Details in the cockpit area will really dress up the appearance of your model.

SET THE CONTROL THROWS

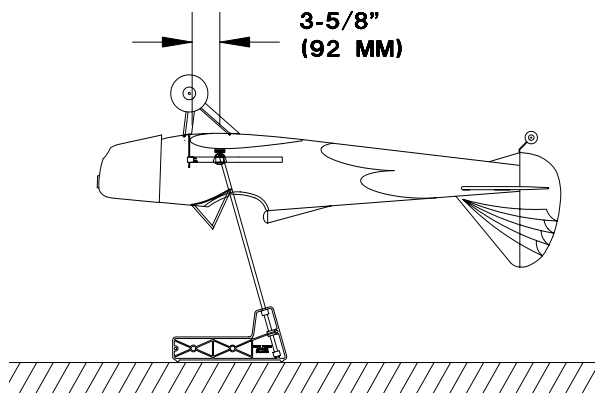
Measure the throws at the widest part of the trailing edge of the rudder, ailerons and elevators. After a few flights you may change the throws to suit your flying style.

We recommend the following control surface throws:		
	HI	LOW
Elevator	1-1/16" Up 1-1/16" Down	7/8" Up 7/8" Down
Rudder	1-3/4" Left 1-3/4" Right	1-1/2" Left 1-1/2" Right
Ailerons	1-1/8" Up 15/16" Down	13/16" Up 11/16" Down
<p>Throttle: Set the throttle so that at "high stick" the carburetor barrel is fully open and at "low stick" with full to half throttle trim, the carburetor barrel is nearly closed. At this position the engine should run reliably at a low RPM (idle). To shut the engine off, decrease the throttle trim tab.</p>		

BALANCE THE MODEL

This section is **important** and must **not** be omitted. A model that is not properly balanced will be **unstable** and **possibly unflyable**.

1. Check the balance point with all components installed in the model and the fuel tank **empty**. Attach the wing to the fuselage, then accurately mark the balance point on the top of both wing halves **next to the fuselage**. The balance point is shown on the plan and is 3-5/8" (92 mm) aft of the leading edge.



2. Lift the model with your fingers at the balance point or use the Great Planes CG Machine™ (GPMR2400). If the tail drops, shift the receiver and/or battery forward (if possible) to balance the model. If the nose drops, shift the receiver and/or battery pack aft. If possible arrange the battery pack and receiver to achieve balance but make sure they remain secure in the fuselage so they cannot shift during flight or a rough landing. If you must add additional weight to the nose or tail of the Fly Baby to achieve balance, use Great Planes adhesive lead weight (GPMQ4485). An alternative to stick-on nose weight (if your model is tail heavy) is a Great Planes brass spinner nut (GPMQ4640). It has 1/4-28 threads so it will fit most engines.

PREFLIGHT

AT HOME

Balance Your Propellers

Balancing the propeller seems like one of those things that you can skip, but many problems are the result of vibration caused by an unbalanced propeller. Nuts and bolts can vibrate loose and vibration can damage delicate radio components inside your receiver and servos. Vibration can even damage the delicate glow plug element which could result in an engine that is difficult or impossible to start. Purchase a Top Flite Precision Magnetic Balancer™ (TOPO5700) or a Great Planes Fingertip Prop Balancer (GPMQ5000) to accurately balance your propellers.

Charge Your Batteries

Follow the battery charging instructions in the instruction manual that came with your radio control system. You should **always** charge your batteries the night before you fly.

Ground Check Your Model

Inspect all nuts, screws and wheel collars. **Make sure you install the screw that holds the servo arm onto the servos** and the servo cords are securely connected to the receiver. If you are not thoroughly familiar with R/C models, ask an experienced modeler to inspect your radio installation and make sure the control surfaces respond correctly. The engine must be "broken-in" according to the engine manufacturer's recommendations for break-in. Refer to the **Engine Safety Precautions** on the next page before you start your engine. After you run the engine on the model make sure all screws remain tight, the hinges are secure and the prop is on tight.

AT THE FLYING SITE

Range Check Your Radio

Check the operational range of the radio before the first flight. **Before you turn your radio on, the first**

thing you always must do is make sure no one else is on your frequency (channel). Most model flying fields utilize frequency control so familiarize yourself with their system. Collapse your transmitter antenna and turn on the transmitter first, then the receiver (preferably the receiver should never be on by itself). You should be able to walk at least 100 feet away from the model and still have control. Have an assistant stand by your model and tell you what the control surfaces are doing while you operate them from the transmitter. Repeat this test with an assistant holding the model and **the engine running at various speeds.** If the control surfaces do not always respond correctly, **don't fly!** Find and correct the problem first. Look for loose servo connections or corrosion, loose fasteners that may cause vibration, a defective on/off switch, low battery voltage or a defective cell, a damaged receiver antenna or a receiver crystal that may have been damaged from a previous crash.

Keep loose clothing, shirt sleeves, ties, scarfs, long hair or loose objects away from the prop. Be conscious of pencils, screwdrivers or other objects that may fall out of your shirt or jacket pockets.

Use a "chicken stick" or electric starter and follow the instructions to start your engine.

Ask an assistant to hold the model from the rear while you start the engine and operate the controls.

Make all engine adjustments from **behind** the rotating propeller.

The engine gets hot! Do not touch the engine during or immediately after you operate it. Make sure fuel lines are in good condition so fuel will not leak onto a hot engine and cause a fire.

To stop the engine, close the carburetor barrel (rotor) or pinch the fuel line to discontinue the fuel flow. Do not use your hands, fingers or any body part to stop the engine. Never throw anything into the prop of a running engine.

ENGINE SAFETY PRECAUTIONS

NOTE: Failure to follow these safety precautions may cause severe injury to yourself and others.

Store model fuel in a safe place away from high heat, sparks or flames. Do not smoke near the engine or fuel as it is very flammable. Engine exhaust gives off a great deal of deadly carbon monoxide so **do not run the engine in a closed room or garage.**

Get help from an experienced modeler when you learn to operate engines.

Use safety glasses when you operate model engines.

Do not run the engine near loose gravel or sand; the propeller may throw loose material in your face or eyes.

When you start and run the engine keep your face and body as well as all spectators away from the plane of rotation of the propeller.

FLIGHT

FIND A SAFE PLACE TO FLY

The best place to fly your R/C model is at an AMA (Academy of Model Aeronautics) chartered club field. Ask your hobby dealer or the AMA if there is a club in your area and join it (the address and telephone number for the AMA is listed on page 3 of this instruction book). Club fields exist to make your R/C flying safe and enjoyable. We recommend that you join the AMA and a local club so you may have a safe place to fly and insurance in case of a flying accident.

If a club flying site is not available, find a large, grassy area at least 6 miles away from houses, buildings, streets and other R/C activity like boats and cars. Avoid flying R/C models near traffic or areas such as

parks, school yards, office building lawns, etc. that may attract unrestrained observers (wild kids). If you are a beginner, you are busy enough concentrating on your model without having to answer lots of questions and performing crowd control.

We highly recommend that you get an experienced modeler to assist you with your flight training. An experienced modeler can take your Fly Baby up for the first time and make sure it performs correctly, then give you valuable flight instruction. He can hand you the transmitter when the Fly Baby has climbed to a safe altitude or connect your transmitter to his if both of your systems have a trainer cord or "buddy box" capability. Assistance from an experienced modeler will make your modeling "career" progress faster (and cheaper). We do, however realize that some modelers are determined to learn on their own or are not in a location where an instructor or flying club is available. Therefore, we have provided the following information to give you an idea of what to expect on your first flight with your Fly Baby. Both flyers who plan to set out on their own **and** fliers who will have the help of an instructor should carefully read the following information.

TAKEOFF

First flight attempts should be reserved for calm days when the wind speed is less than five mph. Always takeoff (and land) into the wind. Check the operation of all controls just before takeoff. This will eliminate the possibility of overlooking reversed or disconnected controls (it happens).

As you apply power on takeoff you will need to apply a slight amount of right rudder to compensate for engine torque. Be ready for this and correct its heading immediately to avoid an "exciting" take off roll. The tail will rise almost immediately, indicating that the tail surfaces have gained effectiveness. Allow the model to continue to accelerate until it has reached flying speed. Use as much of the available runway as you can. Then, gently apply some up elevator. Your Fly Baby should slowly lift from the runway. Continue straight ahead until you have accelerated to a safe flying speed.

FLYING

The design of the Fly Baby aircraft originated in model aviation of the early 1930's, an era when aviation was in it's infancy. The Fly Baby model was a high wing airplane that looked very much like the later full scale Fly Baby, except for the placement of the wing. The full scale Fly Baby was designed for an EAA (Experimental Aircraft Association) contest that had as it's goal the development of easy to build, inexpensive, towable homebuilt aircraft. The Fly Baby was an all wood aircraft that could be typically built in 750 to 1000 hours.

The Fly Baby is a "sport" airplane. It's not a Piper Cub type aircraft, and it's not an aerobatic Citabria either. It is a fun, easy to fly, forgiving aircraft that is ideal for a Sunday flier to have a great day of open cockpit flying. The Fly Baby will perform scale aerobatics such as loops, rolls, spins and stall turns. We encourage you to fly your Fly Baby in a scale manner – slow and smoothly, like the real thing. Avoid unrealistic "hot dog" maneuvers that could over-stress the structure. It will be easier on your model and lot more enjoyable for you!

LANDING

Before attempting your first landing you should first try some slow flight and stalls to become familiar with the Fly Baby's slow speed characteristics. You will probably find the model slows down quicker and requires more power on landing than you are used to. Remember that aircraft of the Fly Baby's era had high drag and limited low speed control effectiveness, especially the ailerons. The rudder is very effective however.

On landings, you will need to continue to carry power and speed until you initiate the flare, then reduce power and allow the model to gently settle to the ground. If you must go around, add power and accelerate straight ahead. Do not attempt to climb or turn until you have accelerated to a safe flying speed.

We hope you enjoy the realistic looks and performance of your Fly Baby.