

LANIER - **Giles 202 - 17.5%** - INSTRUCTIONS

Additional Parts Required

Formula 560 or Zap-a-Dap-a-Goo for mounting canopy

(4) or more channel radio with 4 servos.
.25 - .36 two stroke or .40 - .52 four stroke engine
Appropriate Master Airscrew prop and Hayes mount for your engine.
2-1/2" Tru-Turn spinner and adapter
Slimline Muffler
6 oz Sullivan tank
2 rolls Monokote covering
(1) pack medium fuel tubing (Dubro #222)

Tail wheel assembly (Ohio size M)
(2) 2" Skylite Wheels
(2) 1/8" x 1-1/4" axles (Dubro #246)
(4) 1/8" Wheel collars (Dubro #139)
(2) 1/16" Wheel collars (Dubro #137)

Throttle Cable (Dubro #165)
(1) EZ connector (Dubro #121)
(3) pairs control horns (Dubro #716)
(1) pair fiberglass control rods (Dave Brown #PRDS-5400)

(1) 2-1/2" Nylon tape (Goldberg #451)
(1) 3/4" Nylon tape (Goldberg #450)

(17) Kwik hinges (Dubro #537)

(4) 2-56 x 3/4" screws (Dubro #311)

(2) 4-40 x 3/8 Socket head screws (Dubro #570)
(2) #4 washers (Dubro #323)
(4) 4-40 blind nuts (Dubro #606)
(2) Engine mount bolt set (Dubro #129)

(2) 6-32 x 1" Socket head screws (Dubro #315)
(2) 6-32 Blind nuts (Dubro #136)
(2) #6 or #8 fender washers

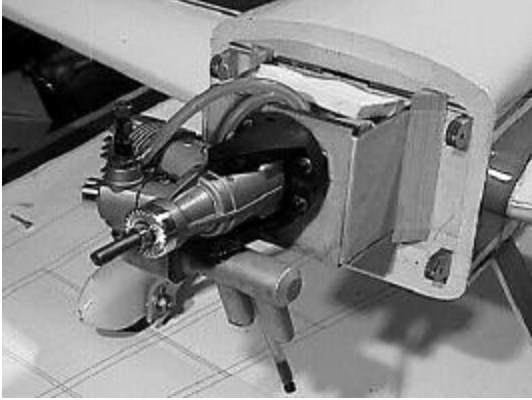
(7) Kwik links (Dubro #122)
(9) 2-56 control rods (Dubro #172)

(1) 3/4" tail wheel (Dubro #75tw)
(1) bolt set (Dubro #129)
(1) Aileron ball link (Dubro #183)
(1) Bell crank set (Dubro #167)
(3) #6 sheet metal screws (Dubro #530)
(1) Aileron Bearing (Great Planes #4270)

Glue

Pink Zap
Green Zap
30 Minute Z-poxy

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13. Trim (4) pieces of $\frac{1}{2}$ triangle stock the length of the engine rails and glue in the (4) corners of the motor box as shown above. Cut a piece of the nylon cloth (Goldberg #451) to wrap around the firewall and terminate on formers "F1". Apply with super 77 and CA as was done with the wing center joint. Fuel proof the front of the fuse with thinned epoxy or polyurethane.
14. Use a Dubro throttle cable (Dubro #165) and ez connector (Dubro #121).
15. Install the elevator and rudder push rods (Dave Brown #PRDS 5400) with 2-56 control rods (Dubro #172) and kwik link (Dubro#122). Use (1) push rod and a "Y" connector to connect (2) rods to the separate elevator halves.
16. Connect the ailerons by installing the Dubro ball link included with the aileron set on the aileron servo and snap the ball onto the linkage. Screw (2) kwik links (Dubro #122) onto the aileron control rods protruding from the wing. Adjust them so the ailerons center even with the wing.
17. Assemble your fuel tank (Sullivan SS6) per manufacturers instructions, then install in the front of the fuse, wrapping the tank in $\frac{1}{4}$ atex foam. Run the fuel tubing (Dubro#222) from the tank to the carburetor and muffler pressure fitting.
18. Trim the cockpit as desired with a cockpit floor, dashboard and pilot, if desired.
19. Trim the canopy along the lines scribed in the part, then glue in place with Zap canopy cement or goo. Run a piece of striping tape around the edge of the canopy.
20. Install an appropriate balanced Master Airscrew prop and TruTurn 2-1/2" spinner on your engine.
21. Install your battery and receiver, wrapped in foam, in the inside of the fuse.
22. Install the wing with the 6-32 bolts and servo connectors.
23. Check the balance of the plane. It should balance 6-1/8" from the trailing edge of the wing. Shift

the receiver and battery in the fuselage to help balance the plane.

24. Fasten the battery and receiver inside the fuse with rubber bands or nylon zip ties to hold them in place.

Control throws for initial flights

Recommended control throws for your Giles 202 are measured from the point furthest from the hinge line of the surface.

Rudder:	Low rate - 3/4" each way High rate - all you can get
Elevator:	Low rate - 1/2" each way High rate - 1" each way
Ailerons:	Low rate - 1/4" each way High rate - 1/2" each way

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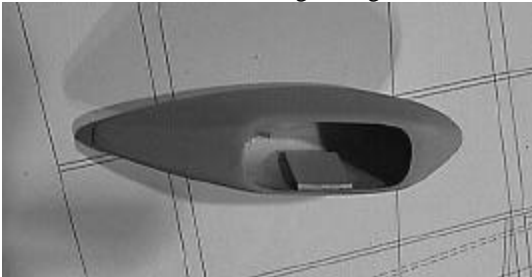
7. Install the two ailerons as was done before, with (4) kwik hinges (Dubro #537) per side and thin CA.



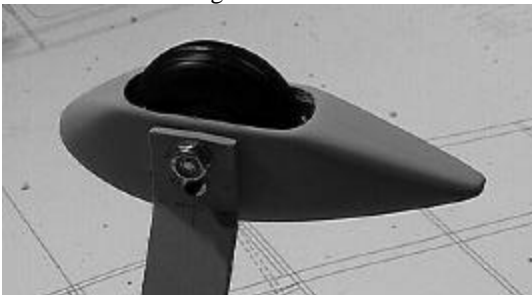
8. Install the control horns (Dubro#716) on the elevator halves and rudder at the locations shown on the plans.



9. Install the control horns (Dubro#716) on the ailerons as shown on the plans, but use longer 2-56 screws, 3/4" (Dubro #311), to fasten, the included screws are not long enough.

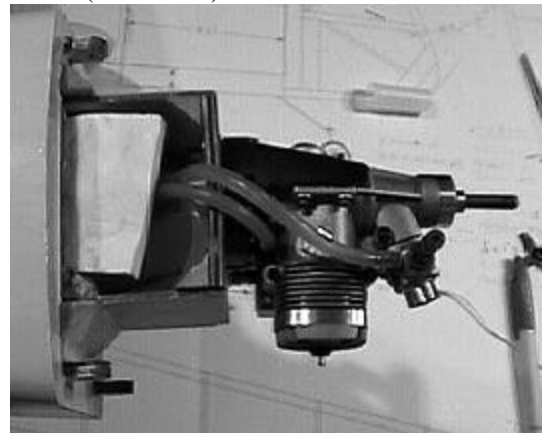


10. Sand, then fill in the seam of the wheel pants and cowl with bondo or similar filler. Paint them to match your covered plane with fuel proof paint. Glue the (2) wheel pant plates WP in the sides of the pants as shown above, with CA. Make sure to make a left and right side.



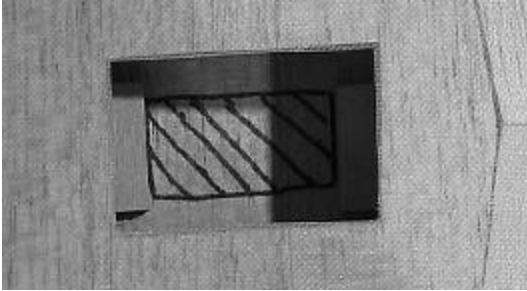
11. Mount the wheels and pants on the landing gear. Use the plans and gear as a guide for hole locations. Drill a 1/8" hole in the upper location

of the wheel pant, then install a 4-40 blind nut (Dubro#606), 3/8 4-40 screw (Dubro#570), and #4 washer (Dubro#323) in the plywood mount. Drill a 3/8 hole in the lower location for the axle to fit through. Use a Dremel tool to cut 3/16" off the axle (Dubro #246). **WEAR SAFTY GLASSES WHILE USING ALL POWER TOOLS!** Bolt the axles to the large holes of the landing gear. Slide a 1/8" wheel collar (Dubro#139) on the axle, then the wheel pant, then the 2" wheel (Sullivan skylite), then another 1/8" collar. Tighten the set screws included with the collars, being careful to not bind the wheel. Install the 3/4 tail wheel (Dubro#75TW) on the wire with (2) 1/16" wheel collars (Dubro#137).

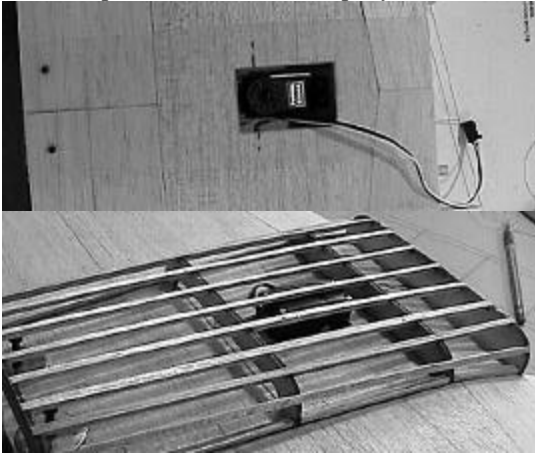


12. Mount your engine to the engine mount per the manufacturers instructions. Find the vertical center of the 1/4' birch firewall, then mark a line 1/8" to the right of center. Mark a horizontal line 1-1/16" down from the top of the firewall. Center and mount your engine and mount on these marks, then fasten with a Dubro 129 engine mount set. Measure the length of your cowl from the back edge to the front where the spinner ring matches. We'll call this dimension "A". Now carefully locate your mounted engine and firewall between the engine mount rails. Carefully measure so the prop back plate is 1/8" further from former "F1" than dimension "A". Mark the location of the firewall on the engine rails, making sure its square to the former "F1". Trim the engine rails at the lines marked, then glue the firewall to the rails with CA. Trim the remaining MB1 plate to fit between formers "F1" and the firewall.

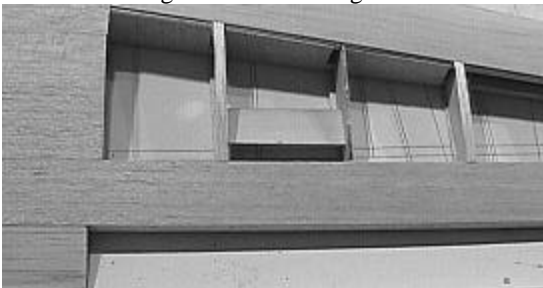
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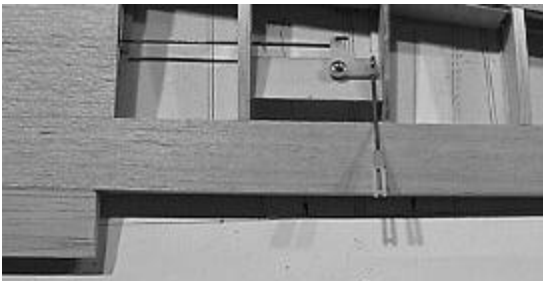
3. Cut an opening in the bottom of the wing large enough for the bottom of the servo to extend through, leaving space against the spar brace to glue in the $\frac{1}{2} \times \frac{3}{8} \times 1$ " servo blocks. Glue the blocks in place with 30 minute z poxy.



4. Run the wires back out the top of the wing. A standard servo should fit through the wing without rubbing the bottom stringers.



5. Glue the ply wing aileron blocks in the slots of ribs R4 and R5.



6. Make a "z" bend in (2) 2-56 rods (Dubro#172) approximately 10-1/4" long and (2) 2-56 rods (Dubro#172) 2-1/2" long, as shown on the plans. Put the "z" bend onto the last holes of the bell

crank. Screw the long control rods on the plastic linkage of a Dubro aileron linkage set (Dubro#183). You can also install the aileron servo now. Align the bell crank (Dubro#167) as shown on the plans and fasten per the manufacturers instructions.



7. Use some scrap 1/16 sheeting, cut a piece $\frac{3}{4}$ " wide, then cut a notch to allow the aileron rod to exit the sheet.

FINAL ASSEMBLY

1. Cover your Giles with the colors of your choice. Several scale color schemes are available if you would like to model an existing plane.



2. Center the aluminum landing gear on the landing gear block, then drill (3) holes $\frac{3}{32}$ " diameter, then install (3) #6 sheet metal screws (Dubro #530).
3. Bend the included 1/16 music wire to the shape shown on the plans. Bend the bottom wheel portion first, then install the 1/16 collar (Dubro #137), then the nylon bearing, then make the last 90 degree bend.
4. Install the tail wheel on the rear of the fuse as shown on the plans. Glue the bearing in the fuse with z poxy.
5. Install the rudder with (3) kwik hinges (Dubro #537) and thin CA. Put a little z poxy in the hole for the tail wheel.
6. Install the two elevator halves as was done with the rudder, using (3) kwik hinges (Dubro #537) per side, and thin CA.



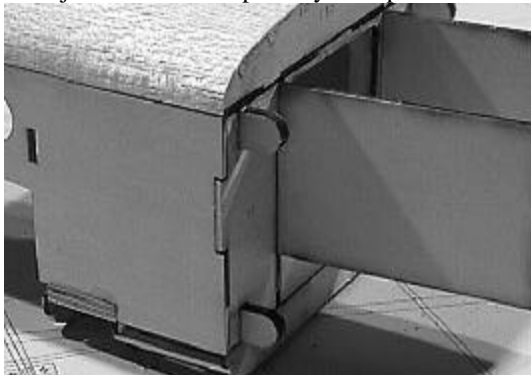
6. Tape the halves of the cowl together, then remove the indicated portion of the cowl, and the opening for the prop shaft.



7. Laminate the (4) pairs of CW1 cowl mounts together, then glue the (4) cowl mounts (CW1) to the inside of the cowl ring at the indicated marks with CA.



8. Align the cowl ring to the inside of the cowl, then glue in place with CA. Re-enforce the wood and cowl joints with 1/2 strips of nylon tape and CA.

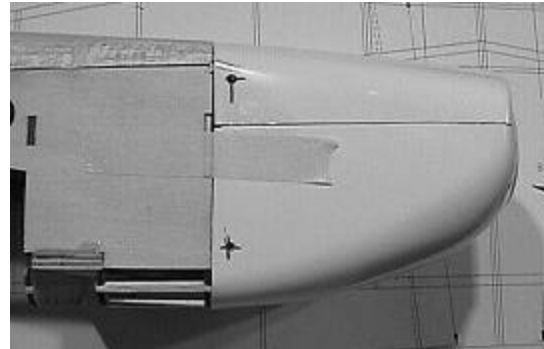


9. Laminate the pairs of CW2 fuse mounts together, then glue the (4) corresponding mounts in the

front slots of the fuse.

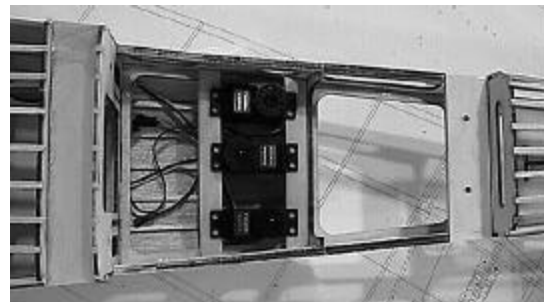


10. Mark the center location of the cowl mounts on the outside of the cowl.



11. Tape the cowl in position on the front of the fuse, then drill (4) 1/16" holes for the 4-40 allen head screws. Drill the plastic only with a 3/16" drill to allow the head to be recessed. Tap the holes with a 4-40 tap, then test fit the screws. If you like, take the cowl off the fuse and drop some thin CA in the hole, then re-tap the holes when the CA has cured.

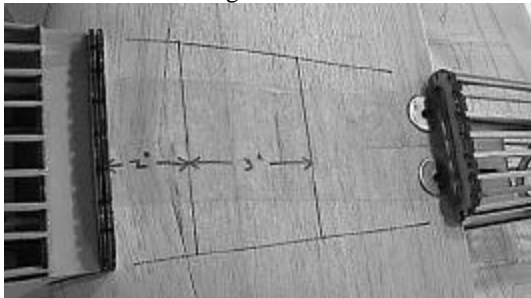
RADIO INSTALLATION



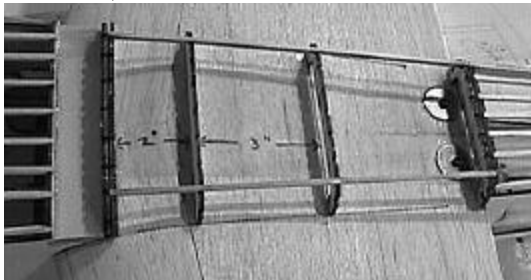
1. Cut (2) pieces of the 1/2 x 3/8" x 12" ply servo rail to fit as shown above.
2. Using your servos as a guide, position the rails in the fuse, then glue in place with 30 minute z poxy. When dry, mount your servos per manufacturers directions.

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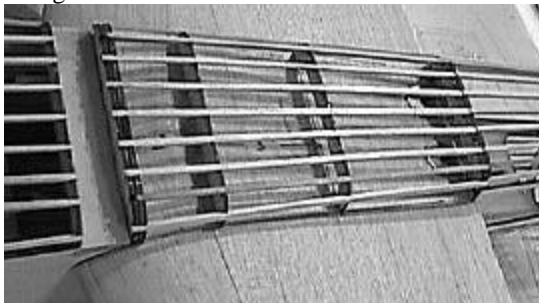
LE and TE of the wing.



43. Remount the wing on the fuse. Mark the bottom of the wing as shown, using a straight edge and the fuse sides as guides. Also mark (2) parallel lines at 2", then 3" from that one.



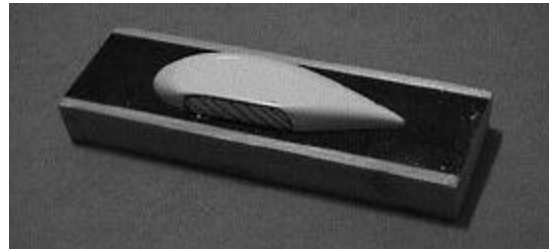
44. Glue the formers F3B, F5B, F6, and F7B on the bottom of the wing, located as shown on the plans. Be careful to not glue the wing to the fuselage. Use a piece of 1/16" balsa scrap to space formers F3B and F7B from the formers on the wing joint. Cut then glue (2) 1/8" sqr stringers in the locations shown above.



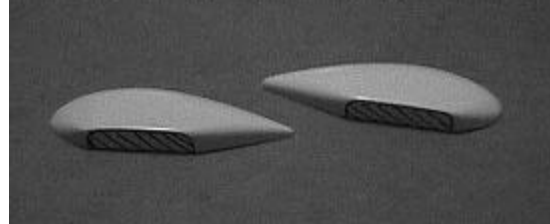
45. Fill the rest of the notches in the wing base in with 1/8" sqr balsa, then glue in place with CA.



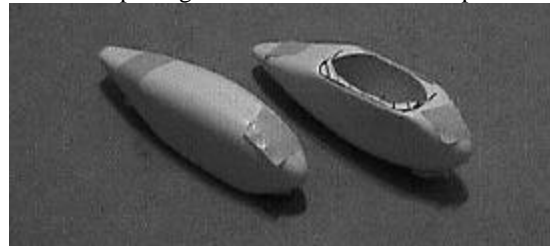
46. Use some scrap 1/8" sqr balsa and glue pieces along the lines you drew on the wing. Use some scrap sheeting material to glue between the stringers above the wing bolt heads. Cut a 1/4" hole above the bolts to provide access.



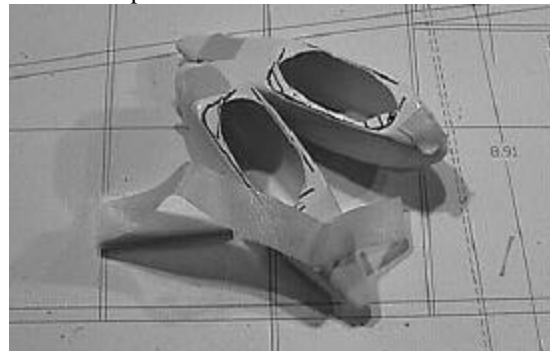
1. Sand the edges of the wheel pants flat on a large piece of sand paper.



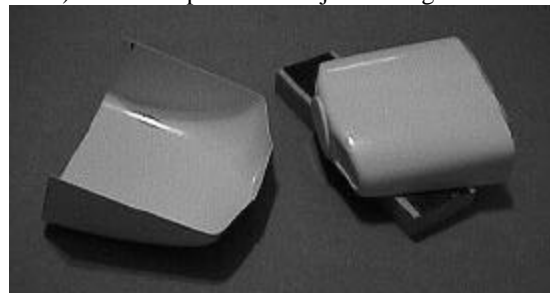
2. Trim the openings for the wheels from the pants.



3. Tape the wheel pant halves together, then glue inside with plastic cement or CA.



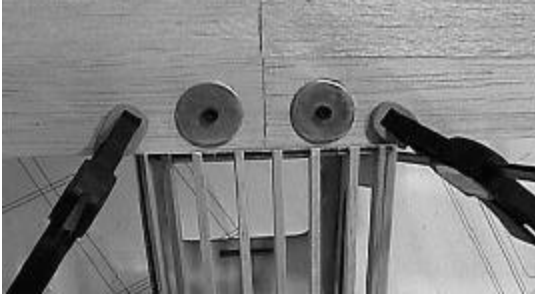
4. Glue some strips of 1/2 fiberglass cloth (Goldberg #450) inside the pants on the joint using CA.



5. Sand the edges of the cowl halves as was done with the wheel pants.

ASSEMBLE THE WHEEL PANTS AND COWL

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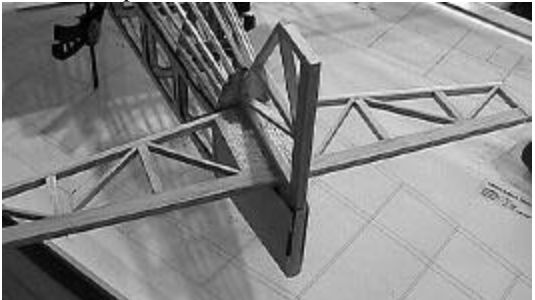
35. Drill (2) holes at the marks, both 5/32". Insert (2) 6-32 x 1" (Dubro#315) and #6 fender washers into the holes.



36. Insert (2) 6-32 blind nuts (Dubro#136) on the inside of the fuse, on the ends of the wing bolts. Tighten the bolts to pull them into the wing blocks. Put a few drops of CA on the blind nuts to secure them in place.



37. Glue the horizontal stabilizer on the rear of the fuse with 30 minute z-poxy. Align the stab to be parallel to the wing and the trailing edges of both to be parallel. See the alignment diagram, detail "a", on the plans.



38. Glue the vertical stabilizer on the stabilizer, keeping it parallel to the center line of the plane,

and 90 degrees to the stabilizer.



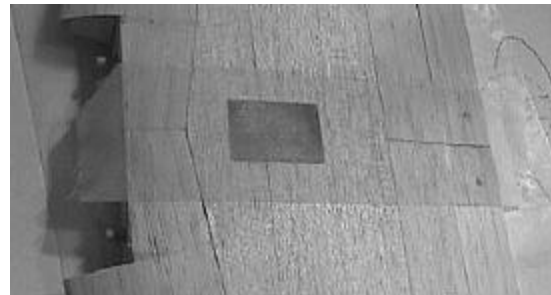
39. Glue the (2) tail filler blocks in place with CA.



40. Glue (2) scraps of 1/4" sqr balsa at the rear of the fuse. Sand the blocks flush with the sides and rear of the fuse.



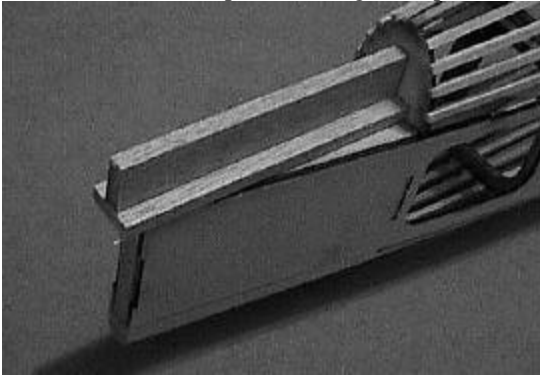
41. Remove the wing from the fuse. Reinforce the center section of the wing with nylon tape (Goldberg #451) and CA. We like to use 3M super 77, and lightly mist the tape, press into position on the wing, then glue in place. Do this in a well ventilated area or outside.



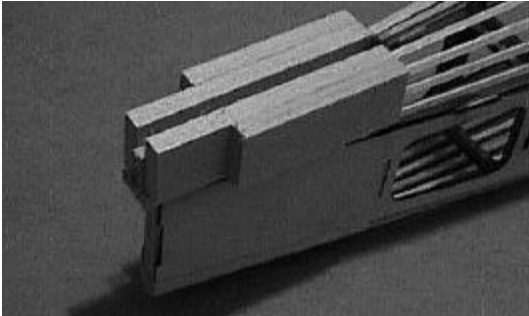
42. Repeat the last step for the other side of the wing. Trim the edges of the tape flush with the

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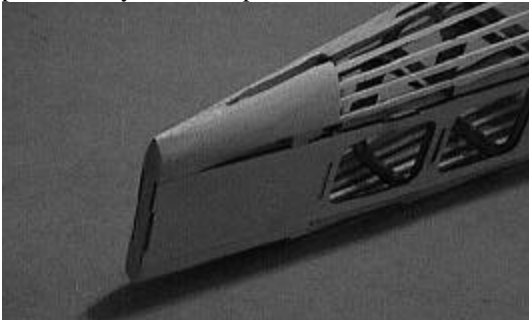
to fit over the fuse top tabs, then glue in place.



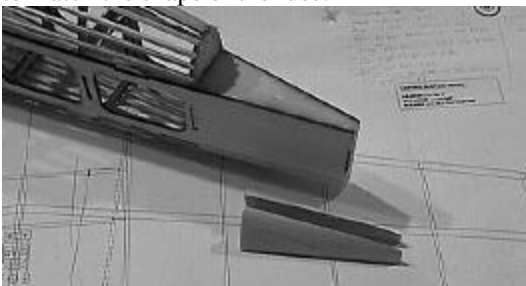
27. Locate the $\frac{1}{4}$ " x 1" balsa and cut (2) pieces 4" long. Glue one piece on the center line of the other, as shown above. Tack glue this assembly on the tail of the fuselage, lining the top piece straight on the fuse centerline, as you would the vertical stabilizer.



28. Cut (2) pieces of $\frac{3}{8}$ " x $1\frac{1}{2}$ " balsa to 4- $\frac{1}{2}$ " and (2) to 3"s. Tack glue the long pieces to the tail mockup block. Glue the short piece in place, butted against the former F10. Glue this piece permanently, to the 4" piece.



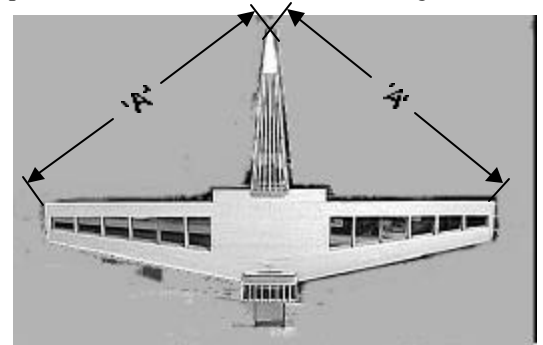
29. Using the razor plane, trim the balsa blocks down to match the shape of the fuse.



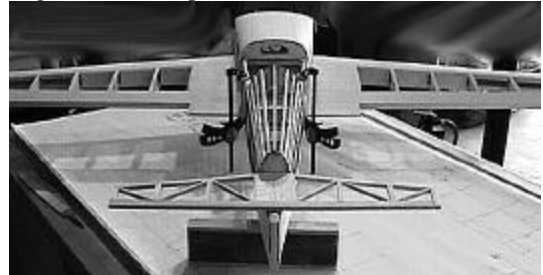
30. Break the assembly off the rear of the fuse, being careful to not damage the blocks. Break the blocks off the $\frac{1}{4}$ " temporary tail.



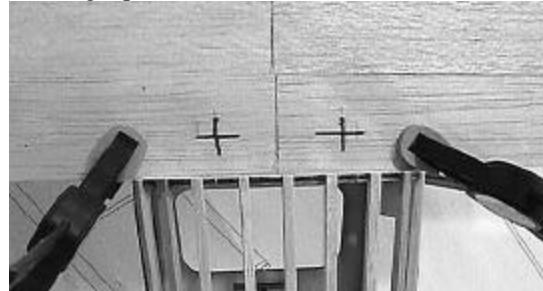
31. Locate the $\frac{1}{4}$ " x 6" hardwood dowel and cut it in half. Use 30 minute z-poxy to glue the (2) $\frac{1}{4}$ " pieces of dowel in the holes of the wing.



32. After the z-poxy has cured, mount the wing on the fuselage. Check the alignment of the fuse to the wing with a ruler or tape measure. Mark the alignment with a pencil.

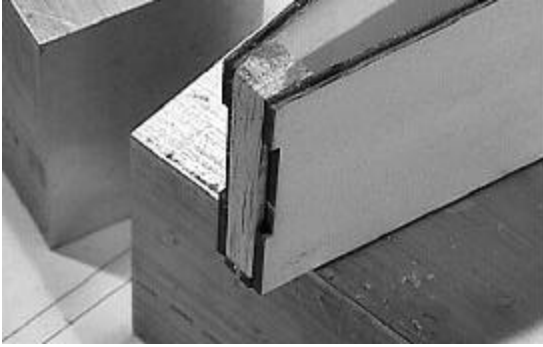


33. Clamp the wing in place with wood clamps or masking tape.



34. Mark (2) holes, 1" from the centerline of the wing, and $\frac{9}{16}$ " from the TE of the wing.

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21. Locate the 3/8" x 3" balsa block and sand the sides to a taper, to fit between the rear of the fuse sides. Glue in place with CA then sand all the edges flush.

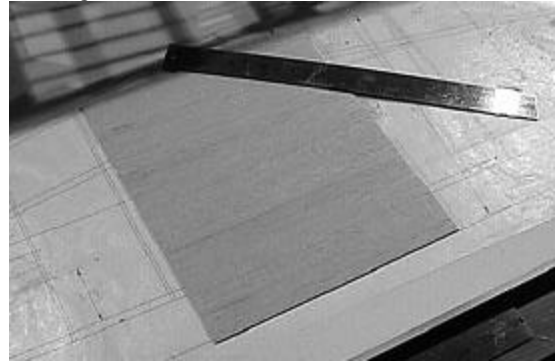


22. Use some scrap 1/4 square balsa to brace the fuse sides to the fuse top.

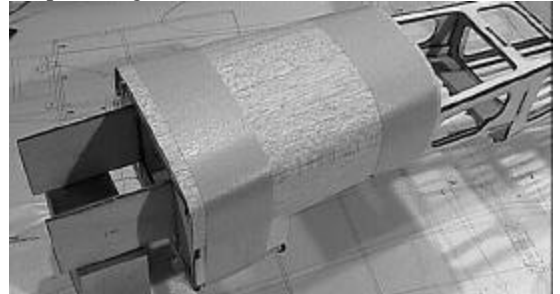


23. Cut (2) 3/8 x 1-1/2 pieces of balsa to a length of 4-1/2" and laminate the (2) into one block. Glue the balsa block in place at the rear, bottom side of the fuse. Use a razor saw to roughly trim the block to shape. Use a razor plane to shape the block to match the stringers, then finish sand with the

sanding block.



24. Edge glue (3) pieces of 1/16 sheet, 9" long to sheet the front top side of the fuselage. Sand the sheet on both sides using the sanding bar to keep the edges smooth.



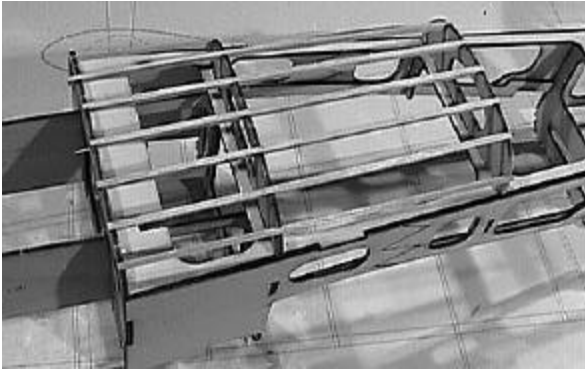
25. Use water to dampen the sheet to ease bending it around the front of the fuse. Tape the wood around the fuse and allow to dry. Do not glue yet.



26. Trim the ends of the sheet flush with the tops of the fuse sides. You may need to notch the sheet

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of F10A.



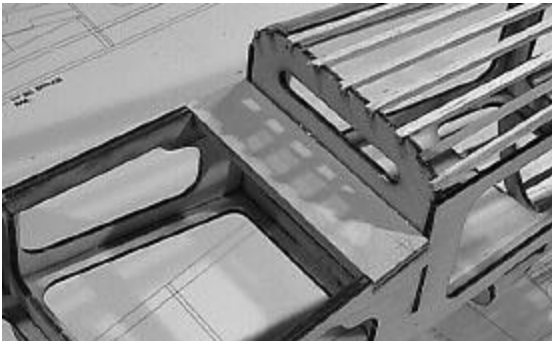
14. Cut to length, then glue in place the front stringers using 1/8 x 1/8 balsa. When all stringers are installed, sand the stringers flush with the front of F1A and the back of F5A.



15. Cut to length (2) pieces of 1/8 x 1/8 spruce stringer and glue in place as indicated on the plans, two notches up from the fuselage side.

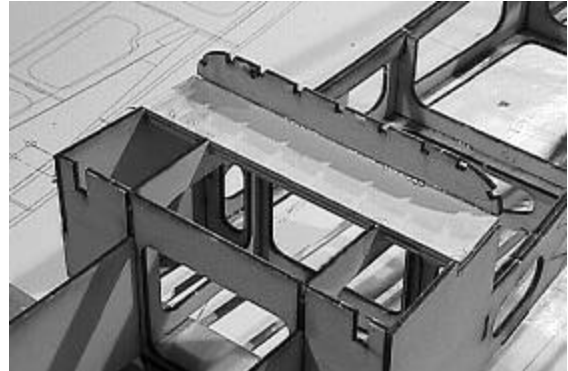


16. Fill the other notches in with 1/8 x 1/8 balsa.

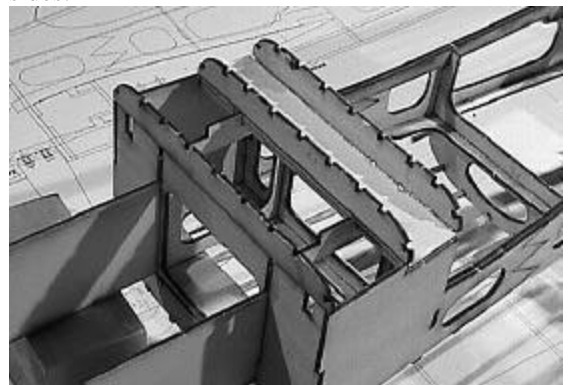


17. Glue in the 1" x 4-1/4" plywood block in the wing saddle, using 30 minute z poxy, then trim the

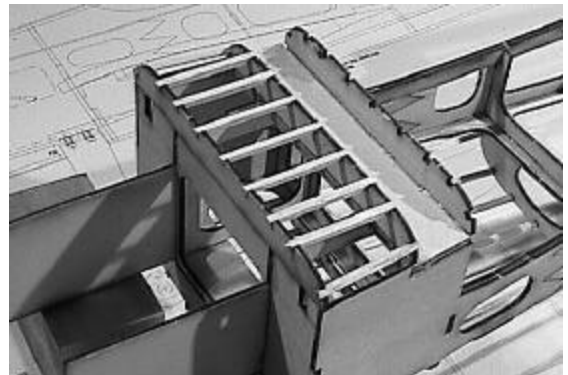
ends flush with the fuselage sides.



18. Glue in the 1-1/8" x 6" plywood landing gear block on the front of the fuselage in the landing gear notch, then trim the ends flush with the fuselage sides.



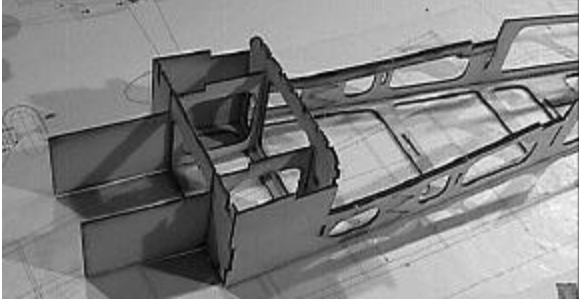
19. Glue former F2 in place, on the edge of the landing gear block, and former F1B on the edge of F1.



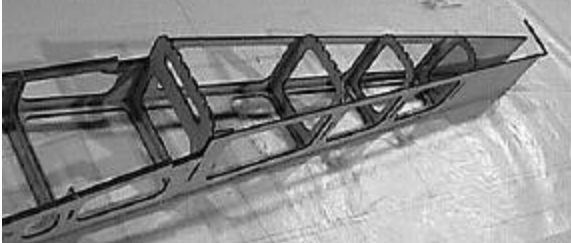
20. Using 1/8 x 1/8 balsa, glue in all the stringers between formers F1B and F2.

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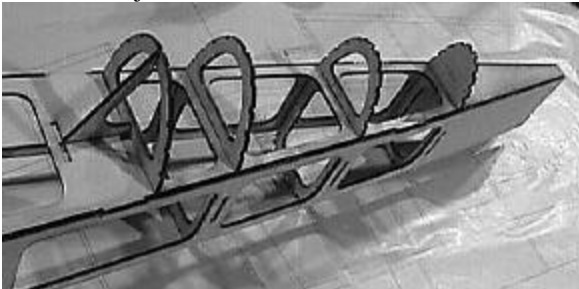
5. Align the top of the engine box to the fuse top then glue in place.



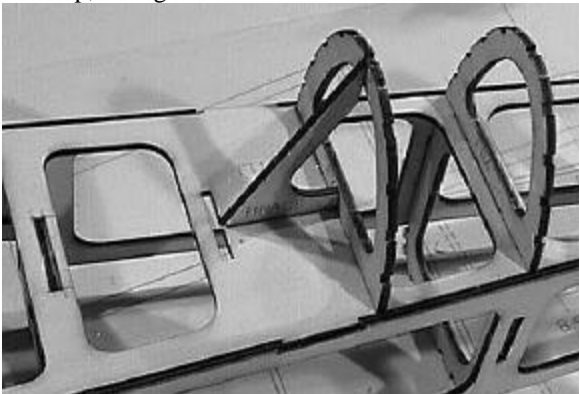
6. Using some tape, align the (2) fuse sides on the fuse top and engine box. Do not glue yet.



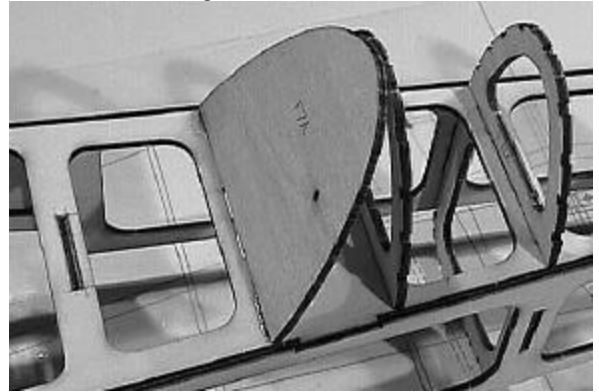
7. Align the formers F5, F7, F8, F9 and F10 in the fuse notches. Use a square to check alignment, then glue the formers and fuse side together with CA. When the CA is dry, run a second bead of CA over the joints to reinforce them.



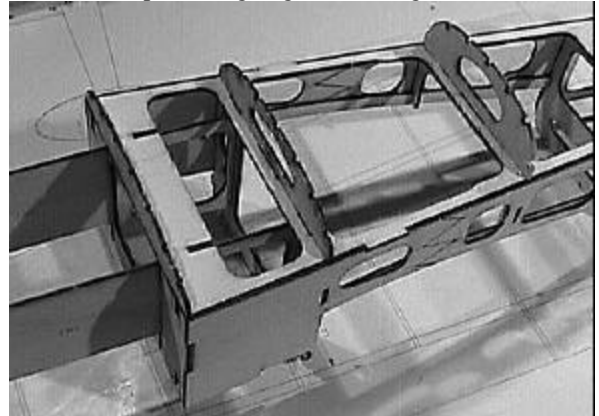
8. Turn the fuse assembly over on your building surface, then insert the deck formers F7A, F8A, F9A, F10A, and F7C. Align at 90 degrees to the fuse top, then glue.



9. As shown, F7C aligns the former F7D.



10. Glue F7D in place, aligning it to the angle of F7C.



11. Install, then glue at 90 degrees, the formers F1A, F3A, and F5A.



12. Cut to length (1) 1/8 sq. spruce stringer, then glue in place on the center position on the rear deck of the fuse.



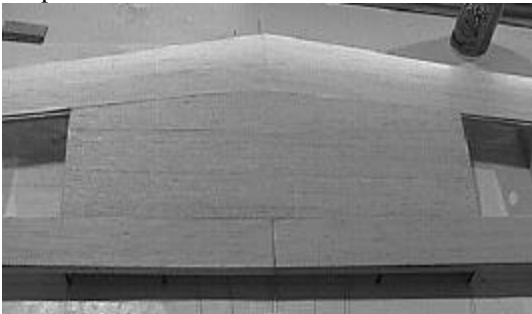
13. Cut to length, then glue in place the rear stringers using 1/8 x 1/8 balsa. When all stringers are installed, sand the stringers flush with the back

LANIER - Giles 202 - 17.5% - INSTRUCTIONS

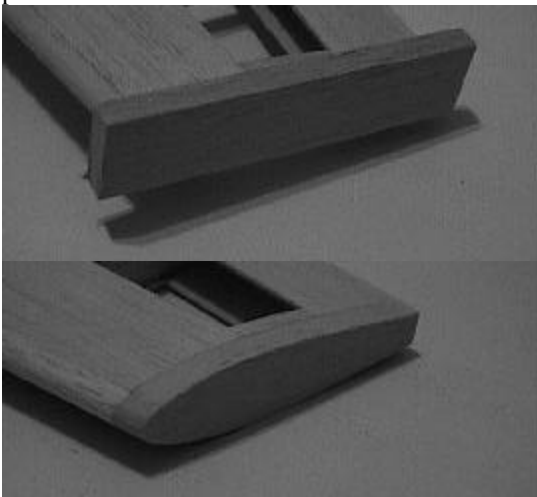
41. Trim the $\frac{1}{4}$ " x $\frac{3}{4}$ " x 24" LE stock to length, then glue in place on the LE of the wing.



42. Sand the LE stock to match the profile shown on the plans.

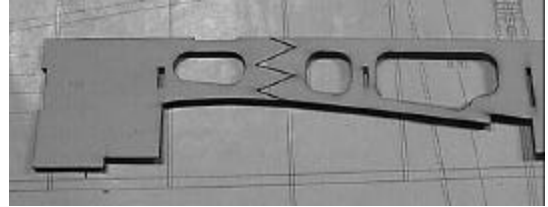


43. Using another 12" piece of $\frac{1}{16}$ " x 3" sheeting, trim a triangular piece to fill the space between the center sheet and the LE sheeting. Glue in place.



44. Cut (2) pieces of $\frac{3}{8}$ " x $1\frac{1}{2}$ " balsa to $4\frac{1}{2}$ " long. Glue the pieces to the wing tips, then trim to match the shape of the wing.

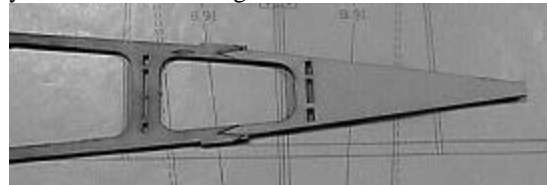
FUSE ASSEMBLY



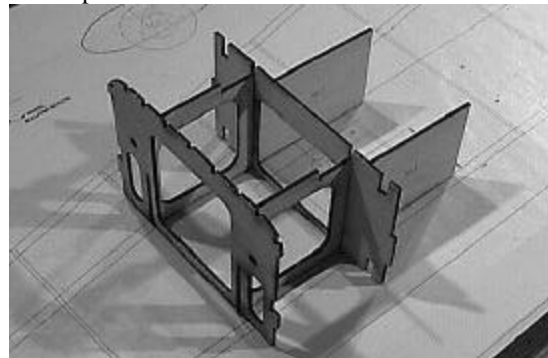
1. Laminate the two finger jointed fuse sections FS1 and FS2 together with CA. Make both sides, left and right.



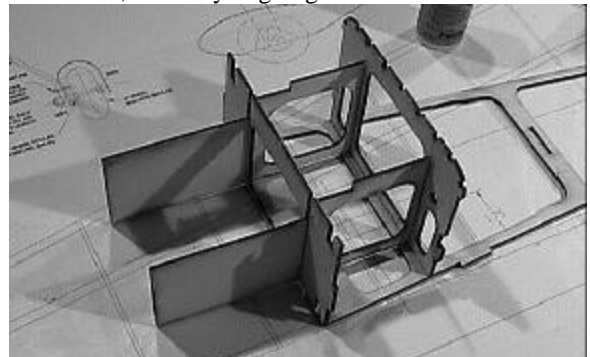
2. Make sure you have one side opposite of the other side, then glue the wing saddle doublers WSD on the inside of the fuse side. Make sure you have a left and right side.



3. Glue the parts FT1 and FT2 together to make the fuse top.



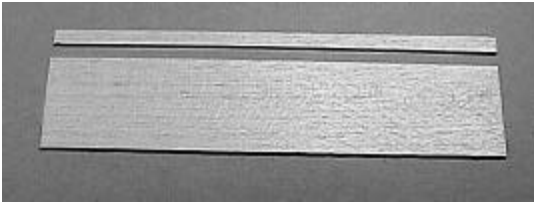
4. Assemble the engine box and firewall by sliding the (2) EM1's, F1 and F3 together. Use a square to align everything then glue with CA. Also glue the (2) F3C wing dowel doublers in place on the back of F3, carefully aligning the holes.



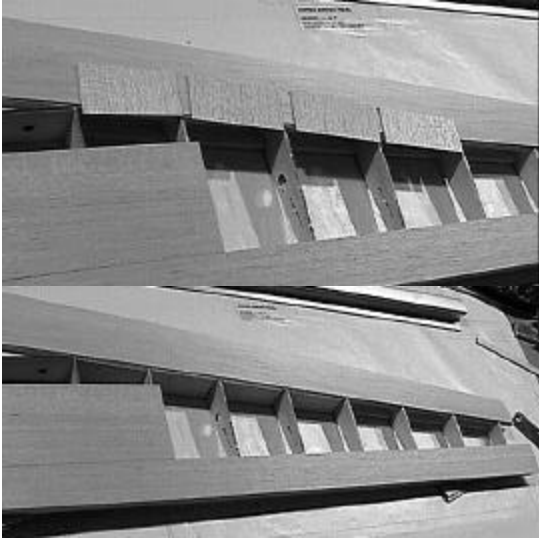
LANIER - Giles 202 - 17.5% - INSTRUCTIONS



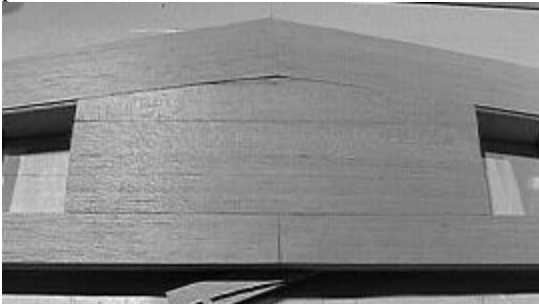
31. Cut a piece of 1/16" x 3" balsa to 12". Glue in place in the center of the wing, against the TE sheet.



32. Trim 1/2" from a 12" piece of a 1/16" sheet.



33. Use the spars as a guide to mark, then trim 4 shear webs for each side of the wing, then glue in place.



34. Trim another 12" piece of 1/16" sheet to fit the space above the center sheet. You should be able to use the piece left over from sheeting the

other side.



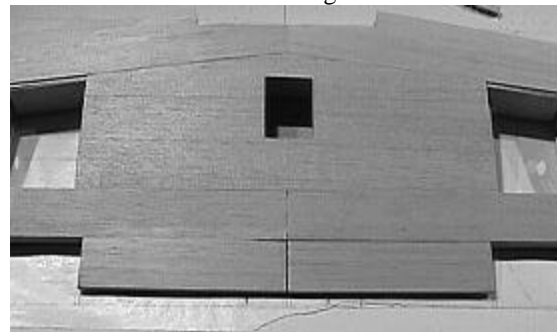
35. Cut the 1/16" x 1/4" balsa cap strip material to length, then glue in place.



36. Use a razor saw to trim the wing tip flush with the last rib, then sand flush with the sanding bar.



37. Cut (1) piece of aileron stock 5-3/4" long from each piece of aileron stock, then glue in place centered on the TE of the wing.



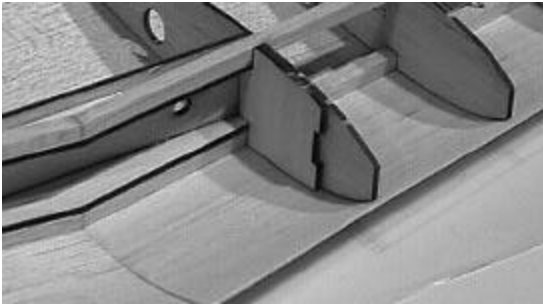
38. Trim out a rectangle over the servo hole for servo installation if needed, or a 1/2" diameter hole for servo wires if using 2 wing mounted servos.

39. Remove the wing from the building board.

40. Sand the LE sheeting flush with the tips of the ribs using a 24" sanding bar.



LANIER - *Giles 202* - 17.5% - INSTRUCTIONS



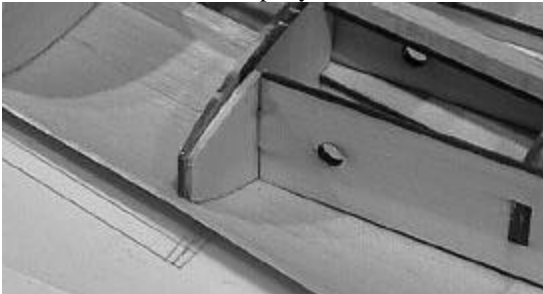
22. Glue the (2) ribs R2A in place on the insides of ribs R2 with CA.



23. Glue the laminated rib section R1A in the center of the wing.

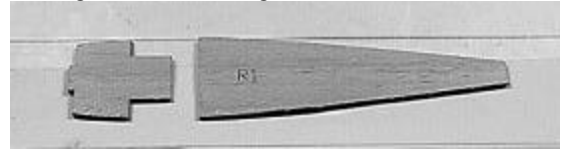


24. Glue the second center brace B3 in place with slow CA or 30 minute Z-poxy.

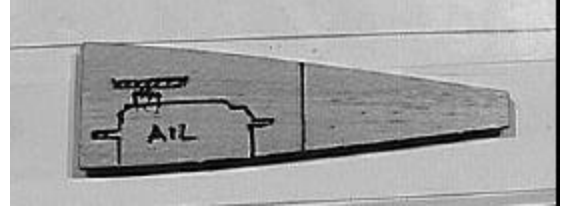


25. Glue the (2) ribs R2B in place, angled from the front center brace, to the tip of rib R2, matching

the angles of the fuselage sides.



26. Laminate (2) ribs R1 and glue in place in the center of the wing.



27. If you are going to use (1) aileron servo in the center of the wing, remove the dotted section of the ribs R1 to make room for the servo. If you are using 2 micro servos in the wing panels, glue the dotted sections with CA.



28. If using a center aileron servo, cut a hole in the bottom sheeting just large enough to hold the servo.



29. Cut (2) more 1/16" x 3" LE sheets as done earlier, and glue in place with CA.



30. Cut (1) more 1/16" x 3" sheet in half lengthwise, and glue in place for the bottom TE.

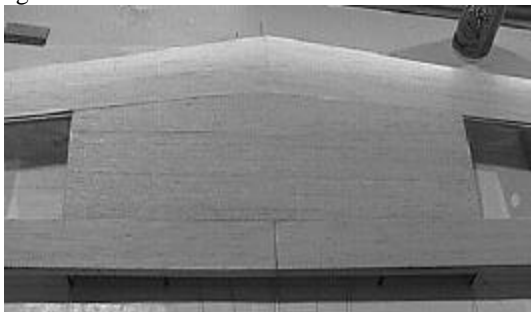
LANIER - Giles 202 - 17.5% - INSTRUCTIONS



10. Cut a 1/16" x 3" balsa sheet in half lengthwise, to make (2) 1-1/2" x 24" TE sheets. Trim to length then glue in place.



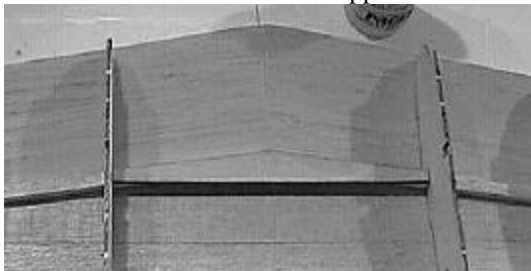
11. Trim a piece of 1/16" x 3" x 24" balsa in half to make (2) 12" long pieces then glue in place against the TE sheet.



12. Trim the other 12" piece to fill in the space between the LE sheet and the other center sheet.



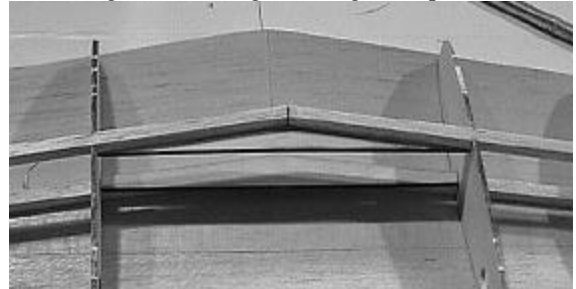
13. Remove you pins, then turn the wing over and pin the spar flat to your building board.
14. Shim the TE of the wing with leftover material from the ribs so that the TE is supported.



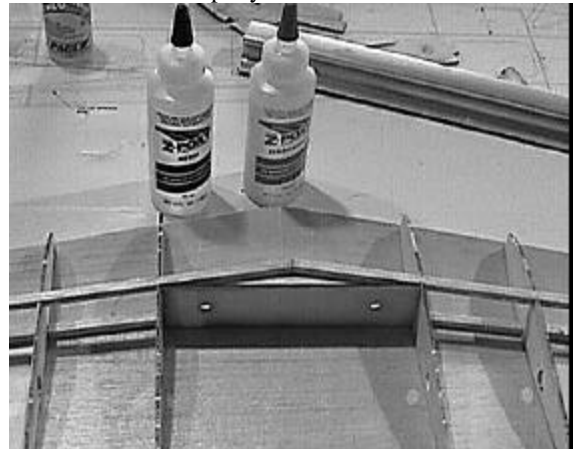
15. Glue the center brace B1 in place with slow CA or 30 min Z-poxy.



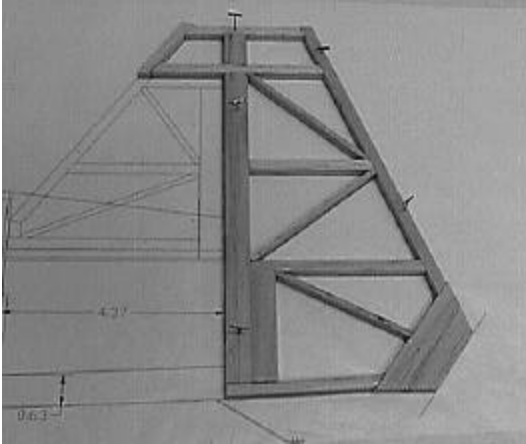
16. Cut (2) more 1/4" balsa spars with the correct center angle and to length, then glue in place.



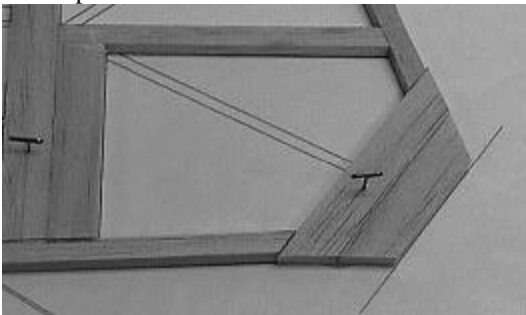
17. Glue second center brace B1 in place with slow CA or 30 minute Z-poxy.



18. Use 30 minute Z-poxy to glue center brace B2 to the back of the (2) B1 braces. Clamp in place until cured.
19. Remove building tabs from wing ribs and sand off and leftovers
20. Sand the TE stock to match the rib profile.
21. Cut another sheet of 3" balsa in half lengthwise for (2) 1-1/2" x 24" TE sheets. Trim to length then glue in place.



4. Cut, pin, then glue the $\frac{1}{4}$ " x $\frac{1}{8}$ " balsa as shown on the plans.



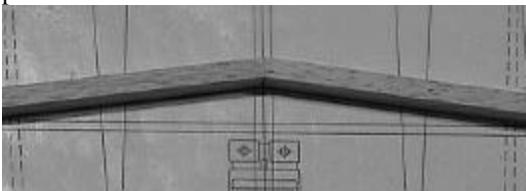
5. Cut, pin, then glue the $\frac{1}{4}$ " x $\frac{1}{2}$ " balsa as shown on the plans.
6. Remove the pins from the rudder, and then the part from the board. Use the sanding bar to sand both sides of the rudder flat.

WING

1. Lay wax paper over wing portion of plan.
2. Cut out all ribs using a thin blade.



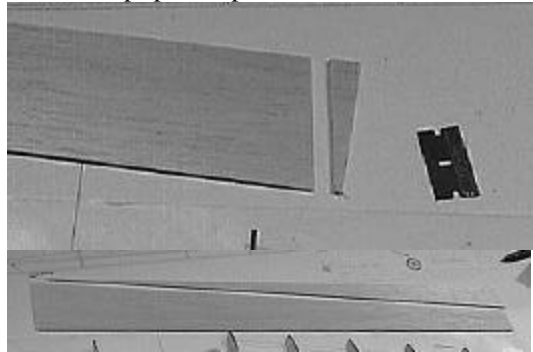
3. Pin the ribs R2 -R9 in place as indicated on the plans, 90° to your building board. Do both left and right wing panels



4. Cut (2) $\frac{1}{4}$ " balsa spars to length as indicated on the plans, trimming the center angle to match.



5. Glue the top spars in place.



6. Trim (2) sheets of $\frac{1}{16}$ " x 3" balsa LE sheet to match the center angle, then trim to length.

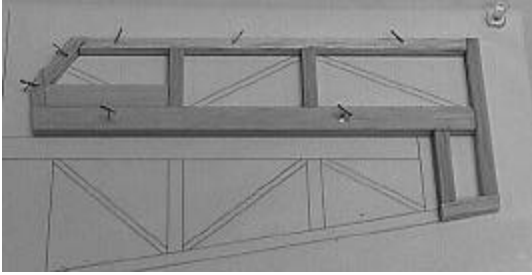


7. Use Med or Slow CA to glue the sheeting to the spar and front half of the ribs. Hold in place until set.

8. Trim and glue the $\frac{1}{4}$ " x $\frac{1}{2}$ " x 24" TE stock to the rear of the ribs, resting on the TE tabs on the ribs.



9. Sand the top of the TE to match the profile of the ribs.



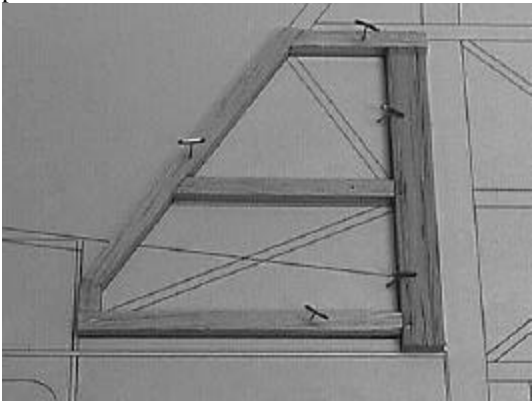
3. Cut, then glue in place the $\frac{1}{4}$ " square balsa as shown on the plan.



4. Cut, then glue in place the $\frac{1}{4}$ " x $\frac{1}{8}$ " balsa as shown on the plan.
5. Remove the pins from the elevator half, and then the part from the board. Use the sanding bar to sand both sides of the stab flat.
6. Draw a center line down the length of the LE, then sand to a 45 degree "V".
7. Make a second elevator half as you made the first.

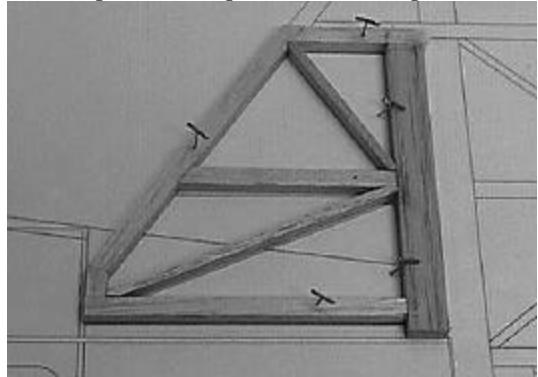
FIN

1. Place wax paper over the elevator portion of the plan.



2. Cut and pin the $\frac{1}{4}$ " x $\frac{1}{2}$ " balsa in place.

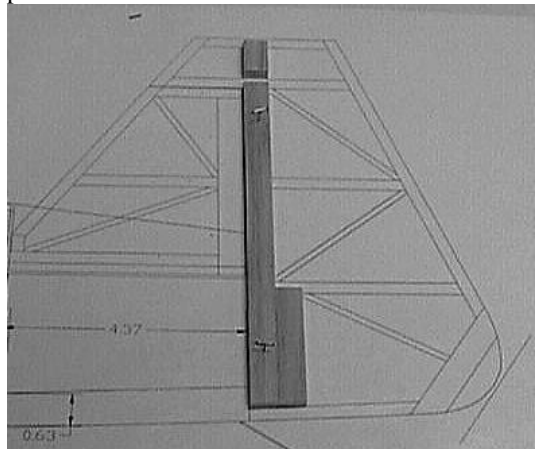
3. Cut and pin the $\frac{1}{4}$ " square balsa TE in place.



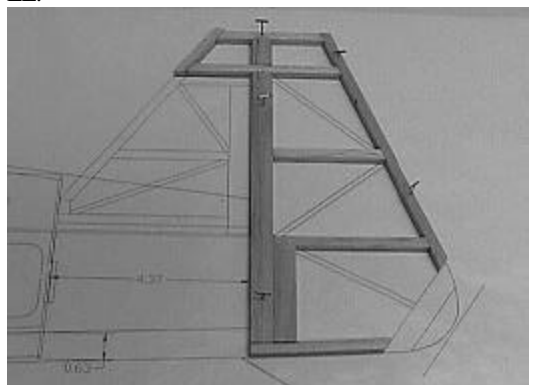
4. Cut and pin the $\frac{1}{4}$ " x $\frac{1}{8}$ " balsa in place.
5. Remove the pins from the fin, and then the part from the board. Use the sanding bar to sand both sides of the fin flat.

RUDDER

1. Place wax paper over the rudder portion of the plan.



2. Cut, pin, then glue the $\frac{1}{4}$ " x $\frac{1}{2}$ " balsa for the rudder LE.



3. Cut, pin, then glue the $\frac{1}{4}$ " square balsa as shown on the plans.

Before starting to build this kit, we urge you to read through these instruction while reviewing the plans. They contain some important building sequences as well as instructions and warnings concerning the assembly and use of the model.

We expect that you have some building experience to take on a built-up model. However, every minute detail is not covered. This is not a basic trainer. The plans and instructions together with the laser cut parts, and the simplicity of this kit will allow you to produce a first class Giles 202.

BUILDING SUPPLIES NEEDED

Single edge razor blades

24" Sanding Tee w/ 80 grit paper

12" Sanding Tee w/200 grit paper

Exacto knife w/ #11 blade

Razor Saw

Small Clamps (clothes pins)

Thin Zap CA

Medium Zap CA

Slow - Thick Zap CA

Zip Kicker/Kicker for plastic

30 Minute Z-poxy

Thread Lock (Loctite)

Tee pins

Wax paper

Wire cutters

Pliers

4-40 tap and handle

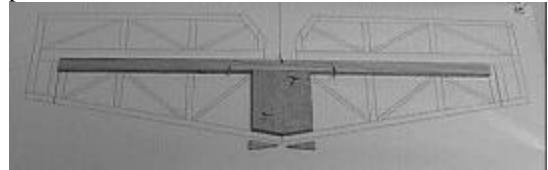
Drill with bits: 1/16", 1/8", 3/16", 5/32", 3/8"

See the list at the end of the instruction book for a list of additional R/C equipment you will need to complete the Giles 202.

*Use medium CA (Green Zap) on all steps, unless otherwise instructed.

STABILIZER

1. Lay wax paper over the stabilizer portion of the plans.



2. Cut and pin the 1/4" x 1/2" balsa stabilizer TE in place. Trim the 1/4" x 2" x 3" balsa stab center to match the outline on the plans, then glue in place.



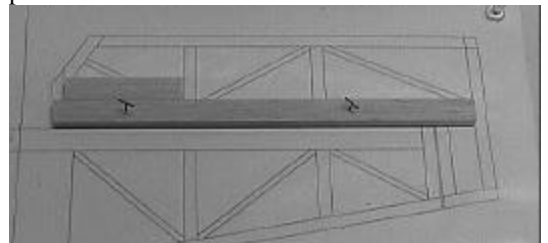
3. Cut, then glue in place the 1/4" square balsa as shown on the plan.



4. Cut, then glue in place the 1/4" x 1/8" balsa as shown on the plan.
5. Remove the pins from the stab., and then the part from the board. Use the sanding bar to sand both sides of the stab flat.
6. Draw a center line down the length of the TE for hinging later.

ELEVATOR HALVES

1. Place wax paper over the elevator portion of the plan.



2. Cut and pin the 1/4" x 1/2" balsa LE in place.

Lanier R/C

Giles 202

17.5%

Designed and Instructions
by John Helgesen

WARNING! THIS IS NOT A TOY!

THIS IS NOT A BEGINNERS AIRPLANE

This R/C kit and the model you will build from it is not a toy! It is capable of serious bodily harm and property damage. It is your responsibility, and yours alone - to build this kit correctly, properly install all R/C components and flying gear (engine, tank, radio, pushrods, etc. and to test the model and fly it only with experienced, competent help, using commonsense and in accordance with all safety standards as set forth in the Academy of Model Aeronautics Safety Code. It is suggested that you join the AMA and become properly insured before attempting to fly this model. If you are just starting R/C modeling, consult your local hobby dealer or write to the Academy of Model Aeronautics to find an experienced instructor in your area.

Write to: Academy of Model Aeronautics, 5151 Memorial Dr. Muncie, IN 47302

LIMITED WARRANTY

Lanier R/C is proud of the care and attention that goes into the manufacture of parts for its model kits. The company warrants that for a period of 90 days, it will replace, at the buyers request, any part or material shown to the company's satisfaction to have been defective in workmanship or material at the time of purchase.

No other warranty of any kind, expressed or implied, is made with respect to the merchandise sold by the company. The buyer acknowledges and understands that he is purchasing only a component kit from which the buyer will himself construct a finished flying model airplane. The company is neither the manufacturer of such a flying model airplane, nor a seller of it. The buyer hereby assumes the risk and all liability for personal or property damage or injury arising out of the buyers use of the components or the finished flying model airplane, whenever any such damage or injury shall occur.

Any action brought forth against the company, based on the breach of the contract of sale to the buyer, or on any alleged warranty thereunder, must be brought within one year of the date of such sale, or there after be barred. This one year limitation is imposed by agreement of the parties as permitted by the laws of the state of Georgia.