

The Gambler-AG Instruction Manual

Wright Brothers R/C



13 Furber Drive
Lee, NH 03824
603-659-9688

<http://www.wrightbrothersrc.com>

Rev: 08/08/2007

Thank you for purchasing The Gambler-AG Discus-launch Glider kit. This kit is designed to be easy to build and easy to fly. It also is designed to be able to be discus-launched while still being constructed mostly of built-up balsa construction that provides an affordable entry point into this exciting and growing hobby. I hope you enjoy your Gambler-AG as much as I have enjoyed designing and flying it myself.

Allan Wright Jr.
Wright Brothers R/C
aw@wrightbrothersrc.com

Table of Contents

Specifications.....	2
Kit Contents.....	2
Required Materials.....	2
Suggested Electronics.....	2
General Assembly Information.....	3
Assembly Instructions.....	3-9
Flying Instructions.....	10-11

Specifications

Wingspan: 48"/1.25 Meter
Chord: 6" At Center

Wing Area: 256 sq. in.
Weight: 6.3-6.9 oz

Wing Loading: ~3.7 oz/sq. ft.
Channels: 2

Kit Contents

1 – full-sized plan	2 – 2-1/4"x1/8" CF rods
1 – instruction manual	1 – 4-40 nylon bolt and 4-40 blind nut
3 – 1/16" balsa sheets with laser cut parts	1 – carbon fiber boom
2 – 3/16" balsa sheet with laser cut parts	1 – 6"x15-1/2" 2 oz. fiberglass cloth
1 – 1/8" lite-ply sheet with laser cut parts	1 – 4"x4" Kevlar cloth
2 – 1/64" lite-ply laser cut parts	2 – 1/32"x27" piano wire pushrods
2 – 1/32"x19"x2" balsa sheets	1 – pkg. Du-Bro Mini E/Z connectors
4 – 1/32"x17"x2" balsa sheets	2 – Du-Bro Micro E/Z Link pushrod connectors
1 – 1/32"x4"x2" balsa sheet	2 – Du-Bro Micro control horns
3 – 1/8"x18" hardwood dowel LE stock	1 – 1"x50" carbon fiber ribbon in 1/8" segments
2 – 1/16"x2-1/8x3" balsa sheeting	2 – 10" pieces of Kevlar thread
1 – 1/4"x1/2"x2-1/4" balsa stick	

Required Materials

1 – Roll of lightweight covering material. (Recommended Oracover Light or So-Lite/Nelson Litefilm)
Thin C/A and Medium or Thick C/A glue
Epoxy finishing resin, preferably 30-minute on longer cure
3-M Super 77 spray adhesive, or similar
Clear packing tape

Suggested Electronics

Berg Microstamp (single conversion) or FMA M5 or HiTech Electron 6 (dual conversion)
Two micro-servos. Hitec HS-50 highly recommended. Similar may be used (GWS Pico, Cirrus CS-10).
Receiver battery. Can be 3x50mAh Nicad or 4x110 or 280 mAh NiMh or 1x4.2V Lithium Ion. Lithium Polymer packs are not recommended as they are too light to properly balance the model.

General Assembly Information

Please thoroughly read these instructions carefully before starting construction. Those who have built balsa models before will find the construction sequence quite straightforward. For those who have not, I hope to have provided sufficient detail at each step to make the instructions clear. If you have any questions, e-mail info@wrightbrothersrc.com for assistance. A PDF version of this manual is available on our website which you can print out on your printer with color illustrations.

This kit contains laser-cut parts that may have light charring on the cut surfaces. If you use Ambroid or aliphatic resin glues, you may want to lightly sand the edges of these parts with 220-grit sandpaper to allow for better glue bonding. I recommend thin CA (cyanoacrylate a.k.a. ‘super glue’) for assembly of this kit. It speeds assembly and does not require additional sanding of the laser-cut parts. Except where indicated, parts can be first held together, then thin CA can be “wicked” into the joints. The laser-cut parts are held onto the balsa sheets by small, uncut spots on each part. Remove the parts from the sheet by carefully cutting these spots with a sharp hobby knife as the parts are needed.

Besides the required materials listed above, you should have the following building supplies: 220-grit sandpaper; a hobby knife; small clamps; straight edge, ruler and right-angle gauges; and a flat work surface with reference lines on it.

Skilled builders should be able to assemble this kit in three to four evening building sessions. Beginners should allow four to five evening sessions to comfortably assemble this kit. Both will take an additional evening to cover the wing and pod with covering. Take your time and enjoy the experience!

Carbon Fiber Ribbon Information

The carbon fiber ribbon provided in this kit is 50” long and approximately 1” wide. You will note that it is made up of eight (8) 1/8” smaller segments held together with a thermo-plastic cross stitching. In order to be used to build this kit, this ribbon must be carefully separated into four (4) separate ribbons each containing two (2) of the 1/8” wide segments. It is tempting to quickly run your hobby knife between the segments to separate them, but this is not the recommended method for separating the segments as such a technique is **VERY LIKELY TO DAMAGE ONE OR MORE SEGMENTS** of the carbon fiber. Instead it is recommended that the segments be carefully separated a small bit at a time, periodically checking that the hobby knife remains between the segments and doesn’t drift into one. If you do partially fray one of your four pieces, you may use that one to cut up into the smaller pieces used on the fuselage and tail surfaces.

In all cases where the carbon fiber ribbon is to be applied to balsa, the best method for doing this is to lightly spray one side of the ribbon with spray adhesive such as 3-M Super 77 or similar and immediately apply the adhesive side of the ribbon to the balsa. The spray adhesive is just to temporarily locate the ribbon and allows for easy repositioning. Once you are happy with the location of the ribbon and are sure that it is fully adhered to the balsa, saturate the carbon a section at a time with thin CA, rubbing the saturated section with waxed paper. Be careful to do this in a very well ventilated area, as the CA will ‘kick’ quickly and aggressively when applied to the carbon fiber and will produce copious fumes which are quite irritating and can cause allergies over prolonged exposure. Odorless or foam safe CA can be used for this process, but it is not recommended. Everywhere else in the kit construction either regular or odorless CA may be used.

In all areas where the carbon fiber ribbon is applied, it will be desirable to sand the ribbon smooth until the thermo-plastic cross stitching is no longer visible and does not produce any noticeable texture. When doing this 220-grit sandpaper is recommended. Be sure to always sand in the direction of the carbon fibers, never sand across the carbon fibers as it will unnecessarily weaken them. The provided carbon is

thick enough to have a portion of it's thickness, up to 25%, sanded off in order to get a smooth finish, without adversely effecting it's strength.

Assembly Instructions

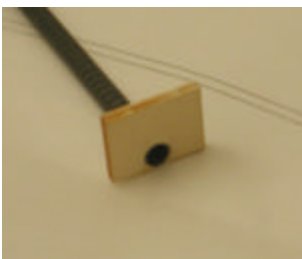
Step 1: Locate the fuselage pod bottom on the 1/16" laser cut sheet. It is the only part not completely cut out with the laser. Carefully cut out the part, making sure to leave at least 1/2" of extra wood outside of the drawn lines. You will trim this panel to size later. Once you have the part cut out, you may cut/sand the nose side and tail side (the two shortest sides) flush with the drawn outline, leaving the other sides oversized.

If you have a building board, cover it with wax paper, and pin the pod bottom onto the board with the pod centerline aligned with one of your board's reference lines. If you're not using a board, draw a straight line with a long straightedge on the back of the plan, cover that with wax paper and pin down the pod bottom aligned with the drawn reference line.

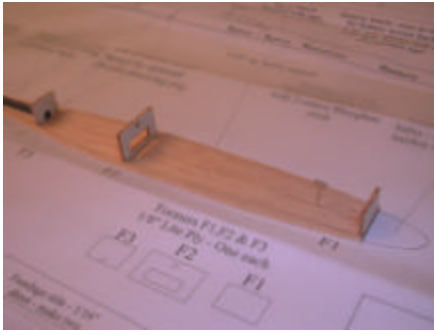
Step 2: If your tail boom doesn't have a slot cut in one end (scratch builders), cut a slot 1/16" wide into one end 2-1/16" long. At the end of the slot wrap the boom with Kevlar thread and soak with thin CA. This will strengthen the boom and prevent it from splitting when launched. Four to six wraps will be sufficient. The provided Kevlar thread is much longer than you will require. If you wish you may color the Kevlar thread with permanent black magic marker after it has been glued into place.



Locate former F3 on the lite-ply part sheet. Remove it and check the fit of the boom to the hole. Insure that the non-slotted end of the carbon fiber (CF) boom fits snugly and will align with pod bottom when glued. Enlarge the hole in F3, if necessary. Lightly sand the area of the boom that will be glued with 220-grit sandpaper to allow the glue to bond well. Slide the former onto the boom but do not glue yet. Using pins, secure the boom to the building board -- making absolutely sure that the tail end of the boom is aligned with the centerline of the pod and the front end of the boom is located at the front reference line of F3 as drawn on the pod floor. **Shim the tail end of the boom with a scrap of 1/16" balsa to insure it is level.** Using a scrap of balsa temporarily inserted into the slot in the boom, insure that the slot is perpendicular to the building board. Once you're sure everything is on the centerline, and F3 is located over the drawn location on the pod floor, secure the assembly to the pod floor with thin CA.



Step 3: Glue formers F2 and F1 to the pod floor with thin CA where the location lines are drawn. Make sure that they are at right angles to the pod floor.



Step 4: Remove the two laser-cut fuselage pod sides from their sheet and glue to the pod bottom as drawn on the part. Secure the sides to the formers with thin CA. Note: For now, the tail ends of the sides are glued against the CF boom at the rear of the pod. Since the boom is tapered the sides may not fit exactly where drawn on the floor part. This is OK.

Step 5: Find the three wing hold down pieces on the 1/8" plywood sheet. They are keystone shaped and marked top, middle and bottom. Press the blind nut into the one marked top. This should be done firmly so that the prongs in the nut fully penetrate the wood and secure the nut in place. Glue the middle and bottom pieces on top of the flat portion of the blind nut to make the assembly shown in the left photo below.



Step 6: Test fit the assembly created in step 5 into the rear of the two fuselage sides as shown in the photo to the right above. Once you are happy with the fit glue the assembly with medium CA or wood glue. There will be a gap at the rear of the fuselage between the hold down block and the boom. This gap can be filled with scrap and sanded flush. Be careful not to block the area below the blind nut as the hold down screw will protrude there.

Step 7: You will need to sheet the top of the front of the pod. To balance the plane, one or both of the servos are located directly in front of former F2. To make installation and removal of this servo easier, a semi-permanent hatch is used. Glue a 1/4" strip of 1/16" sheet (taken from one of the 1/16" sheets provided) directly over former F2, making sure the extra width protrudes over the forward servo area.

Glue in the 3/16"x 3/16" hatch support as indicated on the plans, and glue a 1/4" wide strip of 1/16" sheet over the support making the extra width protrudes back towards the servo area. Cut a piece of 1/16" sheet to cover the servo opening, and temporarily secure in place with tape.



Cut a small piece of 1/16" sheet to glue over the most forward section of the pod as shown on the plans and glue in place. The opening left will be the main battery compartment hatch. Size the remaining piece of 1/16" sheet to fit. You may reinforce the underside of the hatch with the 1/32" lite ply reinforcer provided on the laser cut sheet; I like to have a small tab of the lite ply reinforcer protruding from the forward edge of the hatch. Later when this hatch is hinged with tape at the front edge, the tab will provide additional support. Secure the hatch in place temporarily with tape.

Step 8: Cut the pod bottom sheeting flush with the pod sides and remove from the building board.



Step 9: Locate D-shaped laser-cut nose block pieces on the 3/32" sheet. Laminate them all together to form the nose block. Glue the block to the front of the pod. Thick CA, aliphatic resin or epoxy is best. Carve and sand the nose block to the shape shown on the plans. Try to achieve a bullet-shaped cross section. It may be desirable to harden the nose block after shaping by wicking thin CA into the end-grain and re-sanding the nose smooth. Using 220-grit sandpaper, round all the corners of the pod slightly making sure not to remove too much material, which may compromise the pod's strength. Having the two hatches temporarily secured with tape allows them to be sanded to a contour that matches the rest of the pod.

Step 10 (optional): If you want to make your fuselage pod much more durable, cover it with the supplied 2-ounce fiberglass cloth and epoxy resin. Epoxy finishing resin can be purchased at your local R/C hobby store. It is thinner than normal epoxy and specifically suited for applying fiberglass cloth without adding too much weight. This will add approximately 3 grams of weight to the total weight of your glider, which is quite acceptable for the amount of strength it adds. If you choose not to do this, apply a full-weight covering such as MonoKote to the pod to increase the pod's durability.



To glass the fuselage, spray a slightly oversized piece of the 2-ounce fiberglass cloth with 3-M Super 77 spray adhesive. Stretch the cloth around the curves of the pod, allowing the adhesive to secure it in place. Smooth out any wrinkles to achieve a good bond to the wood. When you are happy with the location of the cloth, apply epoxy resin soaking the cloth, then squeegee out as much resin as possible with a rubber squeegee, spatula or old credit card. You can use a rag or paper towel to blot the resin

from the cloth as well. If you've done this correctly, this will add approximately 3 grams or less weight. Allow the epoxy to dry and lightly sand.

Alternatively or additionally you may reinforce the pod sides with some of the provided CF ribbon as shown below. Be sure to set aside enough CF ribbon to reinforce the wing (three – 1/4" x 50" pieces) and rudder (two – 1/4" x 6-3/4" pieces) first. If you apply both CF and fiberglass do the CF first then cover with the fiberglass. The photo below shows the older non-segmented carbon fiber, but the location with the kit-provided carbon is the same.



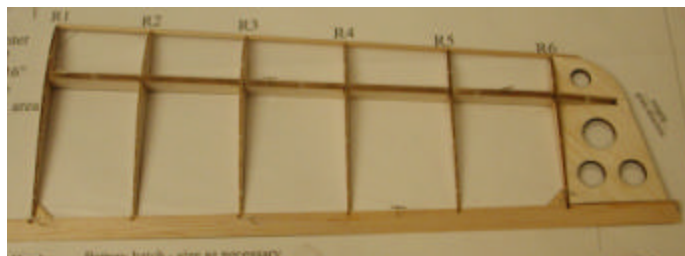
Step 11: Cover the glassed pod with covering to prevent the texture of the applied cloth from picking up dirt and debris when landing. I prefer a full-strength covering for the pod such as MonoKote for added resistance to abrasion on landing, but lightweight coverings also are acceptable.



We will now begin building the wing. Since this is a polyhedral wing, it will be built in three sections: the center panel and each tip panel. The technique for all three is similar with a couple additional steps on the center panel.

Step 12: Remove the center section spar from the 3/16" sheet. Note: The ends that meet at the dihedral breaks are angled to accommodate the dihedral angle when the panels are assembled into the completed wing. Locate the laser-cut trailing edge that matches the center section. Be sure that you use the correct trailing edge piece by checking that the spar cutouts and part lengths match on both pieces. Locate the 1/32" x 4" x 2" balsa sheet included in the kit. Cut this piece into 7 smaller pieces that will be used as shims for the main spar in step 14. These will be re-used for each wing panel.

Step 13: Cover the plans with wax paper and pin the spar and trailing edge to the plans. **It is important that you put the 1/32" shims under the main spar between the rib bays before pinning the spar to the building board.** Glue in the ribs making sure that they are fully against the building board at the trailing edge and at the main spar. Be careful not to glue the shims to the spar in this step. **Note:** The trailing edge is thicker than the ends of the ribs and will be sanded later.



Step 14: Dry fit the leading edge hardwood dowel. Note that the center wing section uses the longest of the 3 provided dowels, the two shorter dowels are for the outer panels. Using thick or medium CA or

PVA wood glue, glue in one of the leading edge hardwood dowels and pin in place until the glue sets. Glue in the laser-cut gussets as indicated on the plan. Note that two of the gussets are cut at a different angle. These go on the outer panels between the innermost rib and the leading edge. Glue in the wingtip panel LE doublers as shown on the plan.

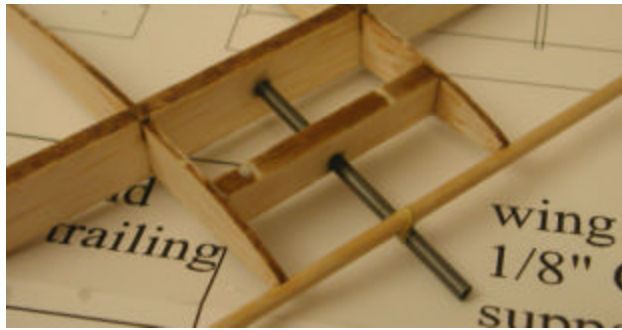


Step 15: Trim the LE and TE to length and sand to match the dihedral angle.

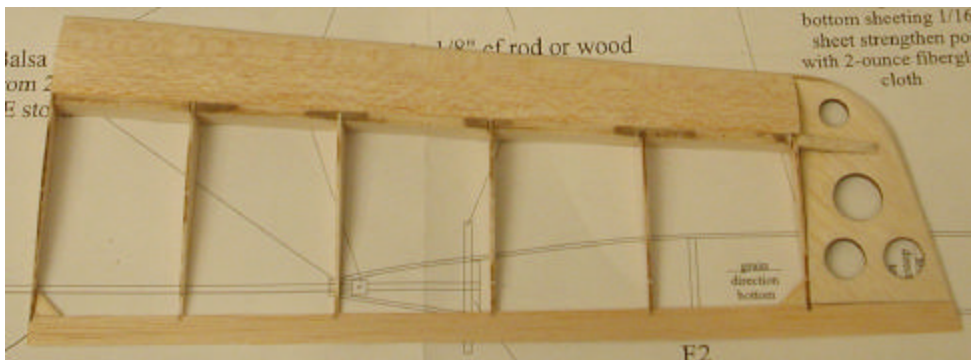
Step 16: Repeat the procedure in steps 13-16 for each wingtip panel. Note: Only the inner rib is angled for dihedral; the other smaller end rib meets the wingtip panel. The wingtip panel is pinned to the building board with the TE and spar in step 14. Glue the LE wingtip doublers in place as shown on the plans and sand them to also match the shape of the outer rib's airfoil, tapering to the wingtip. Note that the wingtip panel is intentionally cut to extend beyond the LE, and when dry-fitting the LE you will probably have to file a trough into the panel with a 1/8" round file to accommodate the LE. Once the doublers are glued in place the underside of the forward section of this panel is sanded to match the R6 rib.



Step 17: **In this step, before gluing, dry-fit the parts until you're satisfied with the fit of the center panel of the wing to the fuselage.** Locate the second 1/8" CF rod and the wing locator dowel support. The rod will be glued to the wing LE, through the locator support and attached to the spar. **Remember that after this dowel is attached there will be a 1/32" thick D-tube added to the wing from the spar to the LE.** To insure proper fit, the support most likely will be glued in a position that will protrude a little below the bottom of the ribs and then it will be sanded flush later. Every wing is a little different so trial fitting the wing is important. Once you're happy, glue the parts in place. The second small piece of Kevlar thread should be wrapped around the locator dowel and the LE and CA can be applied for additional support.



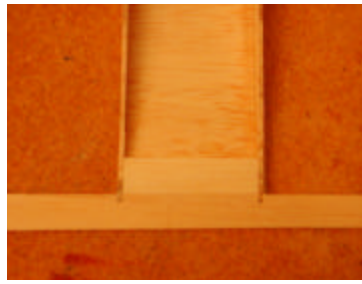
Step 18: Glue the 1/32" sheeting to each of the wing panels to form a D-tube. Note: The ribs are notched so that the sheeting covers the spar, but you may allow the sheeting to cap the LE, then sand the sheeting at the LE to shape. Two of the pieces of 1/32" sheeting are longer and are used on the center panel. The shorter pieces of sheeting are used for the outer panels. Thick CA or other slower setting glues are best for this step. Sand the sheeting flush with the rib at each dihedral break.



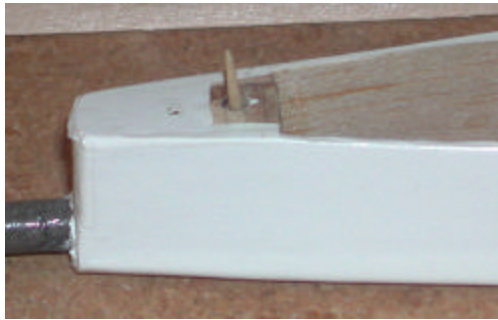
Step 19: Pin the center section to the building board. Glue each wingtip panel to the center section, insuring that each tip is raised off the building board 4" at the wingtip TE. Be careful not to introduce any twisting in the wingtip panels during this step.



Step 20: Using the laser-cut 1/16" center sheeting panel, sheet the bottom of the center bay of the wing center section. This sheeting will go between the center ribs and should be flush to the bottom of the ribs. Using some scrap from the 3/32" sheet put a filler block between the two inner ribs where the wing hold-down bolt will go as shown in the photo below. This will support the hold-down bolt. Sand to match the ribs and then sheet the top with one of the 6" wide pieces of 1/16" sheeting. This sheeting will go over the ribs between the trailing edge and the main spar. Again, sand the leading and trailing edges to the appropriate shape.



Step 21: Locate the laser cut 1/32" plywood wing hold down reinforcement panel. Put a toothpick or pin in the hold down block temporarily and insert the wing to mark the underside of the wing where the hold-down bolt will pass through the wing. Drill a hole in the wing at that mark, then glue the reinforcement panel to the top of the wing with the hole in the reinforcement panel over the hole in the wing. Trim the reinforcement panel to length at the trailing edge. Bolt the wing to the fuselage to check the fit. Sand the fuselage sides and wing center section until you get a good fit. The wing must not be able to rock or twist.



Step 22: One at a time, spray two of the 1/4"x50" carbon fiber ribbons with spray adhesive and apply to the spar. One strip goes on the underside of the trailing edge, one on the topside of the spar and one on the underside of the spar. Overlap at the wingtips to reinforce them as shown below. If you have extra CF, reinforce the dihedral joints at the wing LE but be sure to leave enough CF for the tail reinforcement in Step 24. Soak all the CF ribbon with just enough thin CA to saturate the ribbon. If you gently rub the CA soaked ribbon with some wax paper it will help the CA absorb and improve the bond to the balsa. Sand any irregularities out of the CF ribbon, and using a sanding block, carefully sand the topside of the TE to a taper that matches the ribs.

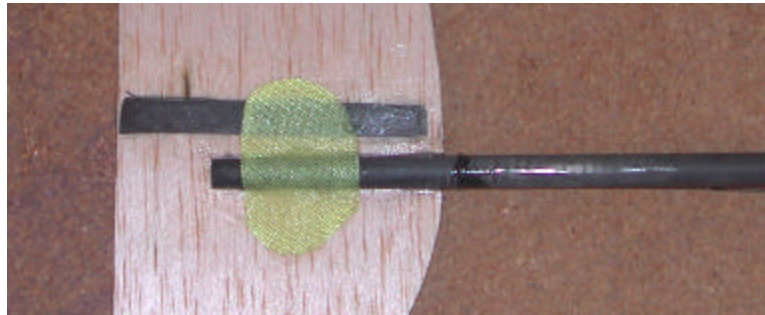


Step 23: Remove the rudder and elevator pieces from the sheet and reinforce where indicated with CF ribbon soaked with CA. When applying the CF, be sure not to introduce any warping in the surfaces. It may help to mark the elevator where it will attach to the boom beforehand to help in locating the CF. Lightly sand the CF to remove any high or rough spots being sure not to remove any of the balsa wood. Lightly sand the LE of each surface to an elliptical shape. Although the stabilizer shown has lightening holes cut in it, the current kit no longer uses them. You may, if you wish, add your own if you prefer.

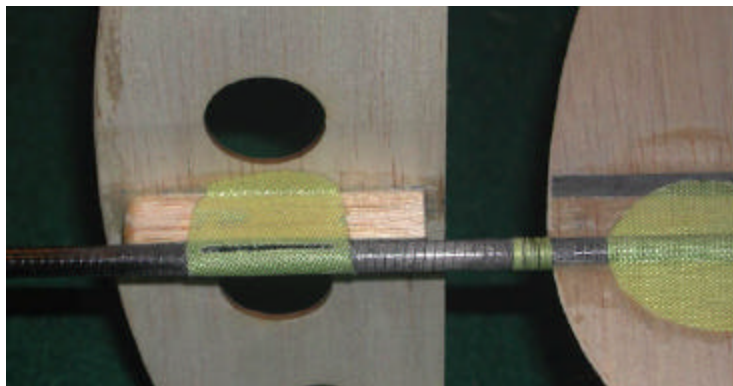


Step 24: Insert the rudder into the slot in the boom and while clamped, glue with thin CA. Cut two patches of Kevlar fabric and lightly spray with 3-M Super 77 adhesive and apply to each side of the rudder overlapping the boom. Saturate with thin CA to reinforce the joint. Cutting the Kevlar will be very difficult with regular scissors. For information on modifying an inexpensive pair of scissors for cutting Kevlar, see this web page:

<http://www.rcgroups.com/forums/showpost.php?p=5391099&postcount=64>



Step 25: Shape the 1/4"x 1/2"x 2-1/4" balsa stick into the stabilizer pylon by rounding each short end and sanding one thin side to match the shape of the boom. Draw a centerline on the underside of the stabilizer, and glue the pylon to the stabilizer. Lightly sand the boom where the pylon will be attached with 220- grit sandpaper. Temporarily tape the elevator to the stabilizer with masking tape, and clamp the assembly to the pod insuring that there is enough clearance for the elevator to function without hitting the rudder. With the wing bolted to the pod, insure that the stabilizer is parallel to the wing and perpendicular to the rudder. Glue the pylon to the boom with thin CA. Reinforce the boom/pylon connection with Kevlar fabric using the same method as with the rudder wrapping a single patch down one side of the pylon, around the boom and up the other side. It is best if the reinforcement wraps up onto the stabilizer about 1/8" as shown below.



Step 26: Bevel one edge of the rudder and elevator so that when they are attached, they will be able to deflect +/- 30 degrees. Cover the mounted portions of the tailfeathers as well as the rudder and elevator. Attach the rudder and elevator with clear packing tape.



Step 27: Using a Dremel with an abrasive cutting wheel, cut a slot in the boom through this patch to allow the elevator pushrod to exit the boom. Make the slot on the left side if you are right-handed, reverse for left-handed launching.



Step 28: Bend a 1/4" 90-degree angle in the end of each of the supplied pushrods. Slide the unbent end of one of the pushrods into the boom from the tail end. This will go on the right-hand side of the rudder for right-handed pilots, left-hand side for left-handed pilots. For now do not trim the pushrod to length. Remove a small section of covering from the rudder, and glue one of the Du-Bro control horns to the rudder. Test fit the pushrod. It will probably be necessary to bend a slight bend in the pushrod as it exits the boom for it to work freely. Once you are satisfied with the fit, secure the pushrod by clipping on the provided Du-Bro Micro E/Z link clips as shown in the diagram below.

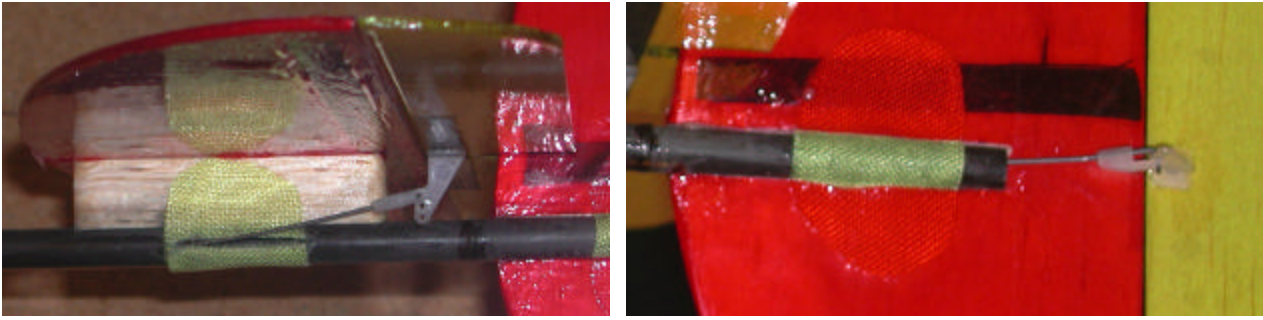


Figure 7 – Du-Bro Micro E/Z Link Installation

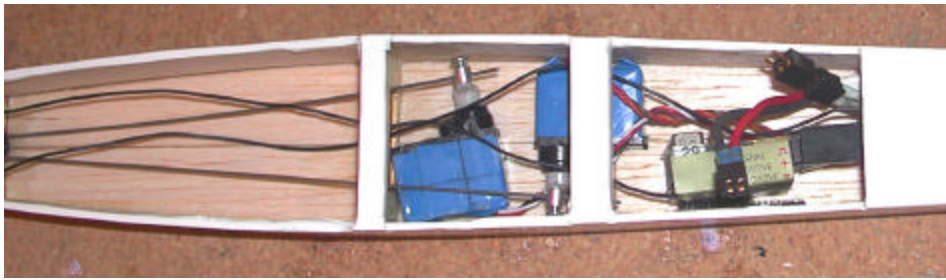
Repeat this procedure for the elevator pushrod, using the exit slot created in Step 28.

Step 29: Equipment installation: Connect your servos to your radio, zero your trims on your transmitter. Wrap each servo with electrical tape or shrink-wrap. It will be helpful if you remove the servo's mounting lugs. Install the provided Du-Bro EZ-Link connectors on your servo arms, and slide a pushrod through the connector without tightening the locking screw. Mark the position of the pushrod and location of the servo. Disconnect the pushrod from the control surface, and slide it forward to allow you

to tighten the locking screw. Re-connect the pushrod and locate the servo so that the control surface is centered. When you're happy with the fit, secure the servo to the pod floor with thin CA.



The tape or shrink wrap can be removed from the servo later to extract the servo from the pod. Repeat this procedure for the second servo. If you're using a lighter receiver like the GWS R-4P, both servos should be located ahead of F2. If you're using a larger receiver, one servo can be mounted behind F2 below the wing. Once your servos are mounted, secure the rear hatch permanently with clear tape.



Step 30: Install your radio and receiver battery in the forward compartment. Adjust their location to balance the model at the main spar. Once trimmed you can fly with the CG up to 3/8" behind the spar for optimal maneuverability and glide. After your equipment is secured, use clear tape to hinge the forward portion of the main hatch. When flying I use electrical tape to secure the rear portion of the hatch. It works well for opening up the hatch several times before it needs to be replaced and doesn't leave residue on the covering. If you prefer you could install a charging jack and close the forward hatch permanently with tape.



Step 31: Drill a 1/8" hole in one wingtip for the throwing peg. The location is showed on the plans. The hole should be drilled perpendicular to the ground when the wing's **CENTER SECTION** is parallel to the ground. The hole should be in the middle of the CF reinforcement of the wingtip as far inboard as possible while still providing a comfortable grip. For right-handed pilots the peg goes in the left wingtip. Round each end of one of the CF tubes with sandpaper, and insert the tube in the hole. Once you are happy with the location of the pin, secure it by wicking thin CA into the joint from each side. It may be

preferable to fill each end of the tube with some balsa and CA before rounding the tips to provide a smooth end.

First flights: Glide test the plane starting with gentle tosses into tall grass or some other soft surface. Continue to work up to harder overhand/javelin throws until you're satisfied with the trim of the plane and are getting 30-second flights or more. If you're new to hand launch gliders, you may want to take several sessions of overhand launching to get used to the flight characteristics of gliders with extremely light wing loading.

The Discus Launch: Once you have your model flying nicely with overhand launches, you can proceed to discus-launching. Begin with very gentle launches and work up to stronger launches. The proper grip is with the index finger on top of the wing, palm forward, with the remaining fingers below. Do not attempt to hold the plane level by the wingtip and peg. This will only weaken the wing and possibly damage it significantly. Instead let the plane dangle and while you rotate, the wing's lift will raise the plane level. Do not throw with your arm, rather keep your arm straight and allow the spinning motion of your body to propel the plane. Many people find taking a step or two forward during the launch helpful as well as spinning on only one foot during the final rotation. For more information on discus launching, there are many good guides on the Internet, including the Lift-Zone's HLG discussion groups.

Once you release the plane it should start to climb and immediately straighten out. If the plane doesn't leave straight away from you you're probably releasing too early or late. When the climb slows, nose the plane over the top to carry some velocity into your initial level flight. Once you've made the transition, you're ready to start grabbing those thermals. If your Gambler-AG stalls right after you push over the top, then you are not transitioning to level flight soon enough. If it wants to balloon, then you've pushed over too early.

You can trim your Gambler-AG for maximum lift by adjusting your up trim until the plane just starts to porpoise, then adjust with a couple clicks of down. If you want to cover more ground and carry more energy, apply a couple of additional clicks of down. I find this is also a good idea in windy conditions to aid in penetration. With winds of 5-10 mph, the Gambler-AG can get slope lift off of the smallest of terrain and penetrates well. If you would like to ballast the Gambler-AG, a single R/C lead weight, or 2-3 quarters, may be taped to the servo under the wing with electrical tape.

Congratulations on completing your Gambler-AG, and may you always find light air! I'm always happy to hear from people who are enjoying their kits. If you would like to send digital photos or movies of your Gambler-AG for our web gallery, they can be submitted to: info@wrightbrothersrc.com.

Thank you!

Allan Wright Jr.