Super Sweet Stik - .60

Assembly Instructions

Congratulations on your purchase of the Super Sweet Stik. We at Midwest Products hope that you enjoy building and flying the Super Sweet Stik as much as we have enjoyed bringing it to you.

You will find that aerobatics come automatically with the Super Sweet Stik. The design will simply perform the maneuvers by itself, when the proper control is applied; it does not have to be flown through maneuvers. The Super Sweet Stik is capable of performing all of the maneuvers on a par with the best of the pattern types. You will find the Super Sweet Stik offers you relaxing flight with the ability to "go stunting" when the inclination strikes you.

Study the plans and illustrations thoroughly before starting to build the model. For the more experienced modeler, there should be no problems at all, as the model has been designed for rapid assembly.

All construction is straightforward and you will find the model to be an extremely strong aircraft. We have tried to use the strongest materials available to give you an airplane to withstand the rigors of everyday flying and also be competitive in Fun Flies.

Read the instructions and make sure the parts that are being glued in place are the correct ones. Well, it's time to go to work on the Super Sweet Stik.

Wing Assembly - Left Wing

- ☐ 1. Start by tacking waxed paper over the wing portion of the plans. Glue the balsa trailing edge stock to the 1/8" x 2" balsa trailing edge. Do this now for the right wing also. Lay a strip of 3/16" x 3/16" bass over the spar on the plan and then put your 1/4" x 1/2" spruce spar on top of it, securing it in place with masking tape.
- ☐ 2. Carefully remove the ribs from the die cut sheets. Mark the ribs top & bottom. The bottom of the ribs are flat towards the trailing edge, whereas the tops are curved. Refer to the rib drawing on the plan. Cement them in place on the bottom main spar and on the trailing edge sheeting butted against the tapered trailing edge. Apply glue sparingly on the spar/rib joints because the shear webs will later be glued to the ribs and spars.
- ☐ 3. The center rib is glued in place using the dihedral gauge supplied in the kit. Follow the sketch on the plans for using the dihedral gauge.
- ☐ 4. Glue on the top spar and the leading edge. Again, make sure you have the correct angle for the center rib.
- ☐ 5. The next step is a boring one, but also a very important one. Glue all the balsa shear webs to the rear of the spars and the ribs. Note that the grain runs vertical. When these are done, glue the shear webs to the front of the spars between the first 3 ribs. These shear webs add a tremendous amount of strength to the wing. Do not forget them.
- ☐ 6. After the glue has dried on the shear webs, the wing can now be sheeted. Glue on the top trailing edge sheet. To glue the 1/8" leading edge sheets into place the wood will have to be wet on the outside. Once the wood is wet, it will start to take a curve by itself and help to glue it to the ribs and the leading edges. Pins will help to hold the wood down. The leading edge sheets are glued to the front half of the main spar. The rear half is for the cap strips which can be glued on now. After the cap strips, the center section sheeting can be glued into place.
- ☐ 7. Remove the wing from the building board and add bottom leading edge sheeting, center section sheeting and bottom cap strips.
- ☐ 8. After the glue has dried, take your sanding block and sand smooth the center of the wing where the other wing panel will butt against it.
- ☐ 9. The final step for this wing panel is to cut out the balsa rib material between the spars on the first 2 ribs. This is easily accomplished with an X-acto knife and a small file. When this is done you will have a cavity for the main spar dihedral brace to slip into. Don't worry if the brace is loose in the cavity. It's supposed to be this way.

Right Wing

- ☐ 1. Build the right wing the same way you built the left wing, except the dihedral angle will be opposite on this wing panel.
- ☐ 2. Now it's time to join the two wing panels together. Block up each tip 1-1/2", to make sure that you have a good close joint in the center. Now mix up a good batch of slow curing epoxy. Coat the inside of the cavity for the brace and slip it in. The brace is a loose fit in the cavity so you can get epoxy all around it. Coat the center rib on both wing panels and the cavity on the opposite wing. Slip the two panels together on the brace and wipe off all excess epoxy. Set the wing down on waxed paper, block up each tip rib 1-1/2", and wait for the epoxy to cure. You now have one of the strongest wings in the world.
- ☐ 3. When this has dried, sand the leading edge to a nice round shape, glue on the wing tips, cut the slots for your favorite hinges, and fit your ailerons.
- ☐ 4. Next, fiberglass the center section with the 6" fiberglass cloth supplied in the kit. Once this has dried, give your wing a final light sanding and your wing is now ready for covering.

Stab

☐ 1. Cover the stab plan with waxed paper, and build the frame work directly over the plan. Make sure the 3/16" center piece is located correctly.
☐ 2. Once the frame has dried, glue it to the 1/16" top and bottom sheeting supplied in the kit. This makes a very strong warp-free structure. Now, that was easy.
☐ 3. Cut your slots for hinges and fit your elevator. Sand a bevel on the elevator. Set it aside for now.

Fin & Rudder

☐ 1. This is too easy. Glue the two fin pieces together. Cut your hinge slots and fit the rudder to the fin. When this is done, lightly sand the fin & rudder, and round the outside edges.
☐ 2. Sand a bevel on the rudder, and this part is finished.

Fuselage

☐ 1. Remove the fuselage side from the die cut sheet and lightly sand the edges with a sanding block. Mark the locations for firewall, bulkheads, and all internal parts. Using the firewall pattern on the plans, locate and drill holes for the motor mount, nose gear block, throttle exit hole, and the hole for the steering pushrod. Please note that the bearing block provided in the kit is not the same as shown on the plan. Use bearing block provided as a template for drilling holes. Drill the holes in bulkheads #2 & #3 for the throttle and steering pushrods, and in bulkheads #4 & #5 for the elevator & rudder pushrods.
☐ 2. Glue the 3/8" triangle stock, wing saddle doublers, landing gear side blocks, 3mm ply dowel supports, and 1/8" x 1/4" tail doublers to fuselage sides. Make absolutely certain that you make a left and right side, and that the slots in the landing gear side blocks are staggered as indicated on the plans.
☐ 3. Cut a hole in F-2 for fuel tank access. Pin formers 1, 2, 3, & 4 to the top view of the plan. Make sure they are 90 degrees vertical to the plans.Glue the fuselage side to the formers. Make sure that the sides are 90 degrees vertical to the plans. When this has dried, glue former 5 and F-6 3mm ply fin locator into fuselage.
☐ 4. Glue the fin to the fuselage between the two sides at the tail and the front into F-6. Make sure the fin is vertical and it sits flush with the top of the stab opening.
☐ 5. Glue the die cut top sheet to the aft end of the fuselage. Glue the 3/8" maple landing gear mount to the bottom of the fuselage. This fits flush with the bottom of the sides.
☐ 6. Now is the time to install your radio equipment. It's much easier to do this now, with the top and bottom open to line up the pushrods and anchor the nylon tubing for the pushrod wires.
☐ 7. The top and bottom aft end is now sheeted with 1/8" balsa cross-grained. The bottom sheeting overlaps the landing gear mount by 1/8".
☐ 8. The forward bottom 1/8" ply is now glued on also, overlapping the landing gear block by 1/8".
☐ 9. Make up your fuel tank. Make sure there are no leaks. Wrap it in foam rubber, to eliminate foaming in the tank. Now the 1/4" hatch piece is installed.
☐10. Drill 5/16" holes through the fuselage sides at the punch marks for the dowel rods.
☐11. Pin the stabilizer down to your work bench. Place the fuselage on top of the stabilizer and check to be sure it is 90 degrees to the fuselage. Once you are sure it is square to the fuselage, mark its location on the stabilizer and glue it securely. The 1/4" cove molding is now glued to the stab-fuse joint for added support.
☐12. Drill 2 staggered 3/16" holes through the landing gear mount to line up with holes in the side blocks. Trial fit landing gear in place.The landing gear is held in place by the 1/8" ply plate with four sheet metal screws.
☐13. The last step is to give the fuselage a good sanding prior to covering. Round the corners and fill in dings or dents with vinyl spackle. Remember that the finish will only look good if the airplane is sanded properly, since the covering will not hide your mistakes.
☐14. Former #4 should be relieved at the top edge to clear the aileron torque rods.

Covering

The airplane can now be covered. The framework is strong enough for all the mylar coverings such as Monokote, etc.

Flying

Make sure the model balances at the C.G. called for on the plans. Have someone with R/C experience check out your radio installation, and have this person put in the first flight to make sure the plane is trimmed out properly. Set up the control throws as indicated on the plans.

The Super Sweet Stik -.60 is as aerobatic as you can make it. It will do every maneuver in the book. When it comes time to land, the thick wing will slow the airplane down to a crawl, which will be beneficial for spot landings.

Happy landings, and we at Midwest Products wish you the best of luck flying your Super Sweet Stik -.60.

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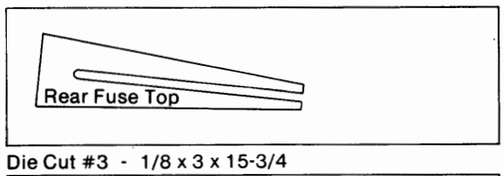
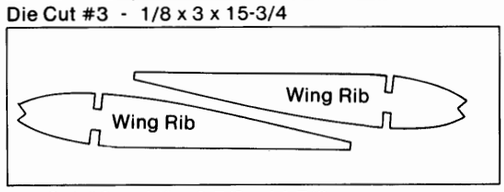
WOOD PARTS LIST

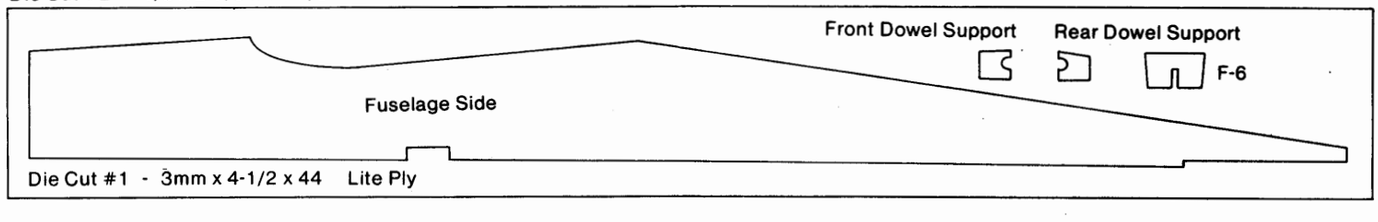
2	Top & Bottom Stab Trailing Edge Sheeting	1/16 x 2-7/8 x 22	
2	Top & Bottom Stab Leading Edge Sheeting	1/16 x 2-7/8 x 20-3/4	
1	Rear Fuse Top	1/8 x 3 x 15-3/4	Die-Cut
9	Wing Ribs	1/8 x 2-7/8 x 14-7/8	Die-Cut
13	Aft Fuse Top & Bottom. Planking	1/8 x 3 x 4	
4	Trailing Edge Sheeting	1/8 x 2 x 27-7/8	
4	Leading Edge Sheeting	1/8 x 3 x 27-7/8	
10	Center Section Planking	1/8 x 3 x 5-3/4	
2	Shear Webs	1/8 x 3 x 20	
6	Cap Strips & Tail Doublers	1/8 x 1/4 x 36	
1	Stab Center Piece	3/16 x 2 x 4-7/32	
1	Stab Leading Edge	3/16 x 3/4 x 19-3/4	
1	Stab Trailing Edge	3/16 x 3/4 x 22	
2	Stab Tip	3/16 x 3/4 x 4-5/16	
8	Stab Diagonal	3/16 x 1/8 x 4-3/4	
2	Wing Saddles	1/4 x 1-9/32 x 12-1/2	
1	Hatch	1/4 x 3-3/4 x 7-1/4	
1	Former F-2	1/4 x 3-1/2 x 3-7/8	
1	Former F-3	1/4 x 3-1/2 x 2-1/2	
1	Former F-4	1/4 x 3-1/2 x 3-13/16	
1	Former F-5	1/4 x 3 x 2-21/32	
1	Elevator	1/4 x 2 x 22-7/8	
1	Rudder	1/4 x 4 x 8-3/8	
1	Fin Leading Edge	1/4 x 4 x 7-13/16	
1	Fin Trailing Edge	1/4 x 3-3/4 x 8-5/8	
2	Wing Tips	1/4 x 3 x 13-1/2	
2	Ailerons	1/4 x 1-7/16 x 24-9/16	
1	Dihedral Gauge	1/4 x 2-7/16 x 2-1/4	
2	Wing Trailing Edge	1TTE x 27-7/8	
2	Leading Edge	3/8 x 3/8 x 27-7/8	
4	Fuse Side Rails	3/8 triangle x 36	
4	Firewall Reinforcing	3/4 triangle x 3-3/8	
4	Wing Spars	1/4 x 1/2 x 27-7/8	Spruce
1	Wing Jig	3/16 x 3/16 x 27-7/8	Bass
2	Stab Gusset	1/4 cove x 5-1/2	Bass
2	Aileron Servo Mount	3/8 x 3/8 x 2	Bass
2	Servo Rails	3/8 x 1/2 x 3-1/2	Maple
1	Landing Gear Block	3/8 x 1-3/8 x 3-3/4	Maple
2	Landing Gear Side Block	3/8 x 1-3/8 x 1-1/2	Maple
2	Wing Hold Down	5/16 x 5-1/4	Dowel
2	Fuse Sides	3mm x 4-1/2 x 44	Lite Ply - Die-Cut
1	Forward Fuse Bottom	3mm x 3-3/4 x 12-1/4	Lite Ply
1	Landing Gear Mount Plate	1/8 x 1-1/8 x 3-3/4	Plywood
1	Dihedral Brace	1/4 x 5/8 x 10-7/8	Plywood
1	Former F-1	1/4 x 3-1/2 x 3-7/16	Plywood



Die Cut #3 - 1/8 x 3 x 15-3/4



Die Cut #2 - 1/8 x 2-7/8 x 14-7/8



Die Cut #1 - 3mm x 4-1/2 x 44 Lite Ply