Build Instructions

SkyBuggy (100)

By Stevens AeroModel

Length 16 inches | Span 19.5 inches | Area: 100 inches^2 | Flying Weight 2 oz.

Version 10/26/2010

WARRANTY

Stevens AeroModel 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 Stevens AeroModel's liability exceed the original cost of the purchased kit. Further, Stevens AeroModel reserves the right to change or modify this warranty without notice.

LIABILITY RELEASE

In that Stevens AeroModel 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 the buyer is not prepared to accept the liability associated with the use of this product, the buyer is advised to return this kit immediately in new and unused condition to the place of purchase.

THIS PRODUCT IS NOT INTENDED FOR CHILDREN 12 YEARS OF AGE OR YOUNGER

WARNING: This product may contain chemicals known to the State of California to cause cancer and or birth defects or other reproductive harm.

PRODUCT SUPPORT

This product has been engineered to function properly and perform as advertised with the suggested power system and supporting electronics as outlined within this product manual. Product support cannot be provided nor can Stevens AeroModel assist in determining the suitability or use of electronics, hardware, or power systems not explicitly recommended by Stevens AeroModel.

For product assembly support, replacement parts, hardware, and electronics to complete this model please contact Stevens AeroModel on-line at www.stevensaero.com.

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Build Instructions

Project Checklist

Kit Contents

- ☐ Laser cut wood (5 Sheets)
- ☐ Build Instructions
- ☐ Computer drawn plan set (2 Pages)

Taped to back of wood brick:

- ☐ 1 - 1/32 in. x 12 in. wire
- ☐ 2 - 0.015 in. x 12 in. wire

- ☐ Hardware Bag
  - 1 - 1-1/2 in. length of 1/16 in. heat shrink tube
  - 1 - 4 in. length of 1/8 in. dia. hardwood dowel
  - 1 - Basswood elevator joiner “E6”
  - 6 - #16 Rubber Bands

Suggested Electronics (Available at StevensAero.com)

- ☐ Spektrum DSM2 2.4ghz transmitter with at least 3 channels
- ☐ Parkzone or Spektrum ultra micro receiver/esc/servo “brick” [PKZ3351] or [SPMAR6400]*
- ☐ Parkzone motor and gearbox [PKZ3624]
- ☐ 130mm x 70mm Propeller [EFL9051]
- ☐ 3.7V 120-160mAh LiPo compatible with Parkzone / Spektrum “brick”

Optional Brushless Electronics (Available at StevensAero.com

- ☐ Spektrum DSM2 2.4ghz computer programable transmitter
- ☐ SA Sport Park BL180 (2200KV)
- ☐ 5 x 3 GWS HD Propeller
- ☐ Spektrum ultra micro receiver/esc/servo “brick” [SPMAR6400LBL]*
- ☐ 7.4V 120-160mAh LiPo compatible with Spektrum “brick”

*Requires computer radio with available custom channel mixing function.

Required Building Supplies and Tools

- ☐ 1/2 oz. Medium CA Glue
- ☐ 1/2 oz. Thin CA Glue
- ☐ CA glue applicator tips
- ☐ CA glue accelerator (kicker)
- ☐ Balsa filler
- ☐ Hobby Knife with ample supply of #11 blades
- ☐ Sanding block with 400 and 600 grit paper
- ☐ Heat Gun and Covering Iron
- ☐ Small Needle Nose Pliers
- ☐ 1/2 in. x 1 in. length sticky back velcro
- ☐ 1/2 in. wide clear tape
- ☐ Servo mounting tape

Optional Building Supplies and Tools

- ☐ 1/2 oz. Thick CA Glue
- ☐ Modeling Clay for Ballast
- ☐ CA glue de-bonder
- ☐ Long sanding bar
- ☐ Masking Tape (Low tack painters tape)
- ☐ Soldering Iron

Build Instructions

General Assembly Instructions

Thank you, for purchasing this Stevens SkyBuggy™ (100). A micro indoor flyer based upon the park flyer version of this model. This product has been developed and manufactured using state of the art CAD/CAM systems and features a unique interlocking construction process that, when compared to traditional methods found in other model aircraft kits, save countless hours of measuring, cutting, sanding, and fitting. We are certain that you'll find our kit to offer a truly exceptional build experience. As this kit is recommended for the novice model builder and pilot; we invite beginners who have purchased this kit to seek the help of a seasoned builder and pilot. At any time should one run across a term or technique that is foreign please don't hesitate to contact our staff with your questions.

READ THIS!

Please READ and RE-READ these instructions along with any other included documentation prior to starting your build and/or contacting our staff for builder support.

Pre-sanding

Do not skip this step. Prior to removing any parts from the laser cut sheet wood use a sanding block loaded with 250-400 grit paper and lightly sand the back side of each sheet of wood. This step removes any residue produced as a result of the laser cutting process and, as we have found that most stock wood sizes run several thousandths of an inch over sized, slightly reduces the thickness of each sheet.

Leave your pre-sanded parts in the sheet until required in the assembly process.

Protecting your worktable

Use the poly tube that this kit was shipped in as a non-stick barrier between your worktable and the product assembly. Promptly clean up any epoxy spills with rubbing alcohol and a disposable towel.

Bonding the assembly

As this product tabs, notches, and otherwise interlocks like a 3D puzzle we suggest that when fitting parts you dry fit (use no glue) the parts together first. It's advised to work 1-2 steps ahead in the instructions using this dry-fit technique which allows ample opportunity to inspect the fit and location of assembled components and realizes a benefit as each successive part contributes to pulling the entire assembly square. Once you arrive at the end of a major assembly sequence square your work on top of a flat building table and revisit the dry fit joints with glue. Using the dry-fit process you'll be able to recover from a minor build mistake and will ultimately end up with a more square and true assembly.

Unless otherwise noted in the instructions we find it easier to tack glue part (temporarily bonding parts in assembly using a small dot of glue) using medium CA glue applied with a fine-tip CA glue applicator tip. Tight fitting joints should be bonded using thin CA glue applied, sparingly, with a CA glue applicator tip.

Never force the fit!

Remember this is a precision cut kit our machines cut to within 5 thousandth of an inch in accuracy. Yet the wood stock supplied by the mill may vary in thickness by up to 20 thousandths. This variance in the wood stock can cause some tabs/notches to fit very tight. With this in mind, consider lightly sanding, or lightly pinching, a tight fitting tab rather than crushing and forcing your parts together. You'll break fewer parts in assembly and will end up with a more square and true airframe.

Manual Updates

Please check our web-site for updates to these instructions prior to commencing the build.

While not required for proper assembly of this model, full-color photos following the build sequence given in this instruction manual are available to download at www.stevensaero.com

To obtain downloads and updates relative to this model aircraft kit, please visit the corresponding product page at StevensAero.com

Build Instructions

Empennage

The empennage consists of the horizontal stabilizer, elevator, vertical stabilizer and rudder. Assemble parts required for each component of the empennage over top of your plan set. Dry fit components together then bond all parts while holding assembly flat against your work table.

1. Fit and bond the vertical stabilizer from 3/32 in. balsa parts V1, V2, and V3.

2. Fit and bond the rudder from 3/32 in. balsa parts R1, R2, R3, R4, and R5.

3. Fit and bond the horizontal stabilizer from 3/32 in. balsa parts H1, H2, H3, H4, and H5.

4. Fit and bond one elevator half from 3/32 in. balsa parts E1, E2, E3, E4, and E5. Repeat for second elevator halve.

5. Align leading edge (hinge line) of elevator parts against a straight edge or ruler. Use medium CA glue to bond 3/32 in. bass wood part E6 (included in your hardware bag) between elevator halves as indicated on the plan set.

6. Lightly sand all empennage parts using 400 grit sand paper and a sanding block. Lightly radius the leading edge of the horizontal and vertical stabilizes leaving the trailing edge of parts square.

7. Follow sanding instructions given on the plan set under "Tape Hinge Diagram" for preparing surfaces for hinging.

8. Cover empennage parts using a high quality light weight covering film. We suggest AeroLITE by Stevens AeroModel. Note that the plan set contains a trim guide for the scalloped covering scheme represented on the product packaging.

9. Once again, following the "Tape Hinge Diagram" instruction given on the plan set, leave a 1/32 in. gap between surfaces at hinge line then, apply tape hinges to join the horizontal stabilizer to elevator and vertical stabilizer to rudder. Note: we prefer clear tape or covering film for tape hinges.

   Tip: Use a low-tack painters masking tape to tape the parts to be hinged to your work table. This will make it much easier to retain part alignment and hinge gap distances while applying your tape hinges.

Set empennage parts aside until final assembly.

Wing

The wing is composed of two spars (main and sub), leading edge, trailing edge, ribs and sub ribs. Wing parts are designated with a "W" followed by a numeric. Parts have been numbered so that the wing assembly and required parts follows in numeric order from W1 to W12.

The wing is assembled in one panel and is composed of a right and left side. Assembly begins at the wing center section and works out to the wing tips. When a part is required in the build sequence (for instance "W3") refer to the plan set for part placement and to determine if you must also install a second mirror of that part to the opposite wing panel.

You will dry fit the majority of this wing assembly together only gluing at the final instructional steps. When parts cannot easily be retained with friction, use a single tiny drop of medium CA glue applied sparingly through a CA glue applicator tip to "tack glue" the part in place. Should you commit an error in assembly it will be easier to recover from the mistake and remove or correct the part fit in error if you do not slather the assembly in glue after each step! Further this method of assembly will allow our interlocking design to do it's job as each successive part installed within the wing will help pull the entire structure square and true.

10. Locate parts W1 (main spar), W2 (sub spar), and W3 (two each center section ribs). Using the plan set as a guide, dry fit ribs W3 to slots within spars W2 and W3. Note: The bottoms of ribs should seat flush with bottom of spars.

11. Locate leading edge webbing W4 at leading edge of wing with tabs facing forward and notches facing aft. Use plan set as a placement guide. Fit W4 flush with bottom of ribs W3 at leading edge. Ensure that W4 is properly seated to rib assembly and retain using tack glue method described previously.

12. Assemble W5 trailing edge over plan set from parts W5a, W5b, and W5c. Tack glue parts W5b and W5c to W5a to retain parts within assembly.

13. Fit assembled W5 trailing edge to notches in center section ribs W3 at rib trailing edge.

14. Fit left and right sub rib W6 spanning W1 main spar and W4 leading edge webbing. Tack glue part at W4 and W1 to retain.

15. Fit left and right rib W7 to assembly spanning trailing edge W5, sub spar W2, main spar W1, and leading edge webbing W4.

16. Fit left and right sub rib W8 spanning W1 main spar and W4 leading edge webbing. Tack glue part at W4 and W1 to retain.

17. Fit left and right tip rib W9 to assembly spanning trailing edge W5, sub spar W2, main spar W1, and leading edge webbing W4. Tack glue W9 to assembly at leading edge, spar, and trailing edge.

18. Fit notches in W10 leading edge over tabs in W4 at leading edge of wing. Retain W10 by tack gluing at each rib and sub rib interface.

19. Assemble a right and left W11 wing tip from parts W11a and W11b. Fit and bond parts over a flat work surface.

20. Fit W11 wing tip to assembly aligning tabs in spars W1 and W2 with notches in W11. Bond wing tip first at tab locations along and in-between spars at tip rib.

    Now wrap W11 wing tip aft to trailing edge following contour of tip rib W9 and nesting tabs within corresponding notches to rib. Bond from sub spar aft to trailing edge along tip rib.

    Complete wing tip by wrapping forward to leading edge following contour of tip rib W9 and nesting tabs within corresponding notches to rib. Bond from main spar forward to leading edge. Wing tip should come to rest flush with leading edge part W10. Bond wing tip at W10.

    Repeat process for opposite wing tip.

21. Hold wing assembly flat against your work table and fit right and left W12 truss ribs where indicated on plan set. W12 should fit flush with bottom of wing and taper in width as it approaches the leading edge.

    With both left and right W12 installed, and your wing held flat to your building table, thoroughly bond all parts within the wing assembly.

22. Using 400 grit sand paper and a sanding block, lightly sand exterior edges of wing in preparation for covering. Use the plan set as a guide to shape leading edge.

23. Cover wing using a high quality light weight covering film. We suggest AeroLITE by Stevens AeroModel. Note that the plan set contains a trim guide for the scalloped covering scheme represented on the product packaging.

Set wing aside until final assembly.

Fuselage

Fuselage parts are designated with a “F” followed by a numeric. Parts have been numbered so that the fuselage assembly and required parts follows in numeric order from F1 to F18.

The fuselage is of traditional sheet side with central crutch assembly. Many of the formers will need to be installed in a forward and top orientation. Unless otherwise specified, formers should be installed with the etched part number facing the front of the assembly and any top or bottom designations followed.

You will dry fit the majority of this fuselage assembly together only gluing at the final instructional steps. When parts cannot easily be retained with friction, use a single tiny drop of medium CA glue applied sparingly through a CA glue applicator tip to “tack glue” the part in place. Should you commit an error in assembly it will be easier to recover from the mistake and remove or correct the part fit in error if you do not slather the assembly in glue after each step! Further this method of assembly will allow our interlocking design to do it’s job as each successive part installed within the fuselage will help pull the entire structure square and true.

24. Build the center crutch. Locate the ply firewall F1, central crutch F2, and rear former F3. Orient parts F1/F3 so that etched part numbers face forward and observe “top” designation. Former F2 should be installed so that etched receiver placement guidelines will be visible from the bottom of the fuselage assembly. Reference parts over plan set and retain by tack gluing.

25. Place F4 fuselage side on work table with etched part number facing up. Now, dry fit completed center crutch to fuselage side F4

aligning tabs in crutch with corresponding notches in F4.

26. Interlock ply motor mount parts F5b within F5a to create F5 motor mount. Use plan set to reference part orientation. Attention: when fitting parts please observe top and forward orientation, F5a has etch lines to reference motor right thrust angles that must be visible from top of fuselage assembly.

27. Dry fit F5 motor mount assembly to F4 fuselage side aligning tabs in motor mount with notches in fuselage side.

28. Dry fit F6 instrument panel to F4 fuselage side aligning tabs in panel with notches in fuselage side.

29. Create F7 windscreen frame. Use a slow set medium or thick CA glue to bond balsa part F7b on top of ply part F7a. Match edges of parts carefully prior to bonding.

30. Dry fit F7 windscreen frame to F4 fuselage side with balsa side facing outside of assembly. Align tabs of F7 windscreen frame with notches in fuselage side. Tack glue windscreen frame to fuselage side at top of front window cut-out on fuselage side.

31. Fit opposite fuselage side F8 to assembly capturing formers, motor mount, central crutch, and windscreen frame within fuselage.

32. Check to ensure that all dry fit parts are properly seated within assembly. Square assembly to your work table and tack glue parts at tab and notch locations.

33. Bond F9 within notches spanning fuselage sides and F7 wind screen frame at nose of model.

34. Bond F10 on top of F9 spanning F7 windscreen and fuselage sides.

35. Fit top former F11 spanning F7 windscreen frame and fuselage sides match tabs and notches. Bond F11 within assembly from F7 windscreen aft to rear former F3.

36. Fit ply landing gear pocket F12 within fuselage behind F1 and interlocking with F2 center crutch. Bond pocket within assembly around perimeter. Do not fill pocket area with glue.

37. Fit ply landing gear pocket cover F13 within fuselage assembly behind F12 and interlocking with F2 center crutch. Bond F13 to retain part. Attention: be careful not to allow glue to enter landing gear pocket.

38. Matching tabs and notches, fit bottom former F14 to underside of fuselage assembly spanning fuselage sides and rear former F3. Bond F14 within assembly from rear former F3 forward.

39. Matching tabs and notches, fit bottom former F15 within fuselage assembly behind landing gear pocket and spanning fuselage sides. Bond F15 to retain. Attention: be careful not to allow glue to enter landing gear pocket.

40. Fit and bond F16 nose sheeting spanning fuselage sides forward of landing gear pocket.

41. Complete fuselage assembly by squaring work to work table. Pinch aft end of fuselage sides together and retain with masking tape. Ensure sides come together perpendicular at tail then fit and bond top former F11 and bottom former F14 spanning fuselage sides. Remove tape from tail of fuselage and bond fuselage sides where they come together at aft end of assembly.

    Revisit all interior formers previously dry fit or tack glued, with CA glue to thoroughly bond parts.

42. Sand fuselage with sanding block and 400 grit paper. Remove steps formed by F9 / F10 at nose of fuselage. Remove protrusion of F11 forward of F7 windscreen. Lightly radius corners of fuselage.

43. Cover fuselage using a high quality light weight covering film. We suggest AeroLITE by Stevens AeroModel. Note that the plan set contains a trim guide for the scalloped covering scheme represented on the product packaging. Windows may be left open or covered using clear AeroLITE or acetate. Some modelers may choose to use an opaque black or silver covering to represent the windows instead of leaving them clear or open.

Set fuselage aside until final assembly.

Build Instructions

Final Assembly

44. Following “Landing Gear Detail” on plan set accurately bend landing gear using needle nose pliers and included 1/32 in. wire.

45. Trim covering on fuselage to expose landing gear pocket. Test fit landing gear within gear pocket of fuselage. Remove.

46. Install wheels of your choosing to landing gear. We suggest Du-Bro 1-1/2 in. mini lite wheels [DUB150MW] available at stevensaero.com. Retain wheels by making a 90 degree bend in gear axle and trimming excess wire as illustrated on plan set.

47. Install landing gear within fuselage and retain with 1/32 ply part F17 as illustrated on plan set. Friction alone should be sufficient to retain F17 allowing easy removal of landing gear. If desired, retain F17 and landing gear within fuselage using CA glue.

48. Paint F18 tail skid to match trim scheme of model. Open covering in fuselage where tail skid installs. Fit and bond F18 to fuselage using medium CA glue.

49. Cut the provided 4 in. length of 1/8 in. hardwood dowel to 1 and 2 in. lengths forming front and rear wing retention dowels. If desired, paint these dowels to match your trim scheme.

50. Use a hot soldering iron or knife to open oval pocket at top/center of wind screen to allow for installation of previously cut 1 in. length of dowel (step 49). Reference plan set for installation of forward wing retention dowel. Bond within fuselage assembly from behind wind screen and underneath top former F11.

51. Use a hot soldering iron or knife to open circular pockets immediately aft of rear former F3 to allow for installation of previously cut 2 in. length of dowel (step 49). Center 2 in. dowel between fuselage sides through holes behind rear former F3. Make certain equal amounts of dowel protrude beyond fuselage sides on both right and left of fuselage. Once centered, bond dowel with thin CA glue to secure rear wing retention dowel.

52. Remove covering from slot in aft of fuselage to allow installation of horizontal stabilizer and elevator. Dry fit stabilizer within slot and center within fuselage.

53. Center wing over fuselage and retain using two #16 rubber bands looped across front and rear wing retention dowels. Square wing to fuselage.

54. Check and adjust square of horizontal stabilizer relative to wing until identical measurements can be obtained from identical reference points at wing trailing edge and outside point of hinge line at stabilizer on both right and left sides of model. When in doubt, stand back from model and trust your eye it’s far more accurate than you give it credit. With stabilizer squared to wing and fuselage, retain by tack gluing with medium CA glue at several points along slot in fuselage.

55. Remove covering from tab on bottom of vertical stabilizer where it will insert through fuselage. Remove covering over notch in top/aft deck of fuselage to receive vertical stabilizer. Fit vertical stabilizer to fuselage and square perpendicular to wing and horizontal stabilizer. Retain stabilizer with medium CA glue. After glue cures, apply a length of clear tape to extend tape hinge to span fuselage and rudder beneath elevator assembly as indicated on plan set.

56. Open up slot on left side of elevator to receive one laser cut control horn. Additionally, open up top push-rod exit slot on left side of fuselage to allow elevator push-rod to exit. Fit and bond control horn as illustrated on plan.

57. Open up slot on right side of rudder to receive one laser cut control horn. Additionally, open up lower push-rod exit slot on right side of fuselage to allow rudder push-rod to exit. Fit and bond control horn as illustrated on plan.

58. Mount PKZ3351 receiver/esc/servo unit exactly as illustrated on plan set using Du-Bro RC double sided servo tape [DUB634].

59. Follow instructional given on plan set for creating rudder and elevator push-rods. Route push-rods through proper slots in fuselage sides and holes / slots provided in F2 and F3. It may be helpful to trim covering from the lightening hole in F14 at bottom of fuselage assembly aft of former F3 to allow better access to push-rod routing (make a covering patch after installation of push-rods).

    Connect push-rods to servos on PKZ3351 and control horns at control surfaces. Prior to setting final length of push-rods (by securing

parts “A” and “B” with heat shrink), power up your radio equipment and center the trims for channels controlling elevator and rudder. Once centered at transmitter, mechanically center the rudder and elevator. Finally use a soldering iron to shrink tubing joining overlap of push-rod parts “A” and “B” then secure with a drop of medium CA glue.

60. Route motor wire from PKZ3624 through opening in former F1 and down through hole behind receiver mounting in F2. Connect motor to receiver. Set motor and gearbox on top of F5a and align outside edge of gearbox “ears” with etch lines engraved on top side of motor mount F5a. Secure gearbox with a drop of medium CA glue under each “ear” to retain proper right offset to thrust line.

61. Install 120-160 mAh 3.7V li-po battery within fuselage behind landing gear pocket on top of former F15 using a small patch of velcro (not supplied). Alternatively, battery may be passed through opening in landing gear pocket into cavity forward of gear to adjust balance of model forward.

62. Adjust balance of model by moving battery or adding a bit of modeling clay within nose of model. Model should balance on or just forward of the spar or 1-5/8 in. to 1-3/4 in. from the leading edge of the wing.

Flight Control Setup

☐ Inspect wing for any warps that may have worked their way in when covering, or while the model was in storage, and remove prior to flight. **DO NOT ATTEMPT FLIGHT IF WING IS WARPED**. Lack of aileron control on this model will make contending with a warped wing very difficult. **FIX THE WARP.**

☐ Center control surface then set direction, rate of travel, and dampening (expo).

Rudder servo should be controlled by the Aileron channel of your radio as rudder on this model also controls roll of the aircraft. Rudder should follow Aileron stick travel i.e. moving Aileron stick to right should move Rudder to right of aircraft. Likewise, left Aileron stick input will move Rudder left.

Elevator servo will be controlled by Elevator channel of your radio. Pulling back on the Elevator stick should result in the Elevator moving UP! Likewise, forward stick results in the Elevator moving DOWN!

SkyBuggy™ is designed to be a very docile flyer, therefore the flight controls are set up for fairly minimal throws. With the pushrods connected to the outer holes on the control horns (as they should be for test flights), the Rudder and Elevator throws should be as follows:

Rudder Travel (rudder is VERY effective)
Low Rate +/- 15 degrees 30% expo
High Rate +/- 20 degrees 50% expo

Elevator Travel
Low Rate +/- 15 degrees 30% expo
High Rate +/- 20 degrees 50% expo

The above Exponential settings apply only to computer radios.

Pre-Flight

Have and experienced pilot assist you with pre-flighting your new model. Just like having someone proof read something you’ve written, having a second **fresh** set of eyes to inspect your final product is often helpful at avoiding disaster.

While not an exhaustive pre-flight check these are some of the major items that you should consider using when developing your own pre-flight check list. Get in the habit of always pre-flighting your models before each and every flight.

☐ **Weight and Balance** - Check **SkyBuggy’s**™ balance. The model should balance between 1-5/8 - 1-3/4 inches from the leading edge of the wing (basically at to just forward of the main spar). Use a permanent marker or trim tape to mark the underside of the left and right wing half at the forward and aft most CG measurements as given above.

☐ Use your right and left hand index fingers and suspend the model from below, between the marked CG measurements. Site from profile of aircraft against horizon. If the top edge of the fuselage appears to hang level with horizon line, then **SkyBuggy**™ is properly balanced to fly. Move equipment and or battery within fuselage to obtain proper balance.

Build Instructions

- ☐ **Check Weather** - **SkyBuggy's**™ first flight should be outdoors and in **zero** wind conditions. **SkyBuggy**™ is capable of flying in winds up to 5-8 mph so long as the pilot is capable.

- ☐ **Inspect airframe** for warps and obvious signs of wear or damage. Do not fly a damaged or warped model.

- ☐ **Inspect control surfaces** for center, proper direction of travel, rate of throw, secure pushrod connections, hinges, and receiver/ servo mounting hardware.

- ☐ **Check wing attach points** for damage and/ or wear. Inspect rubber bands, that they are installed correctly and in good condition to adequately retain wing.

- ☐ **Inspect battery for full charge.** Never begin a flight with a partially charged battery.

- ☐ **Clear prop!** Before applying power to the model, clear and keep clear of the prop arc.

- ☐ **Range check radio.** Follow the radio makers guidelines for performing a proper range check.

- ☐ **Check for traffic.** Proceed to the flight line (With your mentor/instructor if you are a novice pilot) and observe other RC traffic. If the runway is clear, and no one is in the pattern to land, loudly announce your intentions to take off. Remember etiquette dictates that all aircraft on ground must yield the runway to those landing.

- ☐ **Go flying.** Point model into wind (if present) and steadily advance throttle to full. Use rudder to correct track while on ground roll. Within several feet the model should be airborne. Fly model to a comfortable 1-2 mistake high altitude, reduce throttle to stop climb, then trim model for straight and level flight at a comfortable cruise speed (Depending on speed control responsiveness **SkyBuggy**™ typically cruise at just over 1/2 throttle).

- ☐ **Setup for landing.** Clearly announce your intention to land. Make landings into the wind. With rudder/elevator control and no ailerons setting up landings in cross-winds should be avoided until you are comfortable with the model's in-flight behavior.

Congratulations!

You've completed your first flight(s). SkyBuggy™

By now you'll have noticed that SkyBuggy™ is a very stable airplane. When built straight, and trimmed for level flight, SkyBuggy™ should always return to wings level from any attitude. We've found SkyBuggy™ to capture the imagination of prospective pilots both young and old. We never miss an opportunity to allow an on-looker at the field to get some stick time in with SkyBuggy™. In-fact we've found SkyBuggy™ to be a very capable, instructor assisted, three channel trainer.

If your first flight was a bit more exciting than you'd have liked and are having problems with erratic flight performance; please inspect your equipment and airframe for damage, improper installation, and/or twists and warps. The most common mistake is to try and fly with a warped or twisted wing. With such a fat chord and short moments a small warp can cause big in-flight problems. Make certain that your wing is straight before you fly.

We are committed to improving your build and flying experience and are constantly refining our processes, designs, and manuals to reflect customer feedback. You may correspond with Stevens AeroModel staff using any of the following methods:

E-Mail - support@stevensaero.com

RCGroups.com - Forum Build Threads

Facebook.com - Search for Stevens AeroModel