

Build Instructions

# Swift (100)

A Full House Ultra Micro AeroBat!



**By Stevens AeroModel**

Length 17 inches | Span 21 inches | Area: 92 inches<sup>2</sup> | Flying Weight 3.0 oz.

Version 05/26/2011

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## 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](http://www.stevensaero.com).

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## Project Checklist

### Kit Contents

- Laser cut wood (6 Sheets)
- Build Instruction - Manual (photo supplement available on-line at [stevensaero.com](http://stevensaero.com))
- Computer drawn plan set (2 Pages)
- 1 - 1/4 in. Square x 24 in. Balsa Stock (leading edge)

Taped to back of wood brick:

- 1 - .045 in. x 12 in. wire
- 2 - .025 in. x 18 in. wire
- Hardware Bag
  - 1 - 1/16 in. Ply Motor Mount (F8)
  - 1 - 6 in. length of 1/16 in. heat shrink tube
  - 1 - 3.5 in. length of 1/8 in. dia. hardwood dowel
  - 2 - Balsa Servo Cuffs (W13)
  - 2 - Nylon Washers
  - 3 - #2 x 1/4 in. Screws
  - 6 - #16 Rubber Bands

Suggested Electronics (Available at [StevensAero.com](http://StevensAero.com))

- Spektrum Brushless DSM2 or DSMX 2.4ghz transmitter with at least 4 channels
- Spektrum ultra micro receiver/esc/servo "brick" [SPMAR6400LBL]
- Linear Ultra-Micro Servos (2) [SPMAS2000]
- 3 in. Ultra-Micro "Y" Harness [SPMA2002]
- SA Sport BL180 Brushless Outrunner Motor [SUPA1504-18]
- 4.5 x 3 Propeller [GWS EP-4530] with Adapter [ADP001]
- 120 - 240 mAh 7.4V LiPo [EFLB1202S20] or [HP-LG325-0240-2S]
- JST ESC Connector and Wire [EFLA242]

### Required Building Supplies and Tools

- Du-Bro RC 1-1/2 in. Wheels [DUB150MW]
- 1/4 oz. Medium CA Glue [PAAPT04]
- 1/4 oz. Thin CA Glue [PAAPT10]
- CA glue applicator tips [PAAPT21]
- 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. wide clear tape [MMM190]
- Servo mounting tape [DUB634]
- Adhesive Backed Velcro [DUB348]
- Soldering Iron
- 1/8 in. Drill Bits (2)
- Paste Glue Stick or 3M 77

### Optional Building Supplies and Tools

- CA glue accelerator (kicker) [PAAPT15]
- CA glue de-bonder [PAAPT16]
- Balsa filler [HCAR3401]
- Modeling Clay for Ballast
- Long sanding bar
- Masking Tape (Low tack painters tape)

# Build Instructions

## General Assembly Instructions

Thank you, for purchasing this Stevens AeroModel **Swift (100)** (100). A micro full-house flyer inspired by the Comper Swift. 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 intermediate 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 (temporarily bonding parts in assembly using a small dot of glue) parts, 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](http://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

## 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 F30.

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 observed.

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.

1. Fit center crutch F2 to right fuselage side F1 observing "Top" orientation.
2. Fit and bond F3a to F3b to make former F3. Note: Upper tab on F3 extends beyond outer surface of fuselage side.
3. Fit and tack glue formers F3 and F4 at each end of crutch F2, as indicated on the plan.
4. Fit battery tray F5 to fuselage side and F5 observing "Bottom" orientation.
5. Fit ply part F6 to fuselage side and F5.
6. Fit former F7 to F5 and fuselage side.
7. Fit motor mount F8 to fuselage side. Inspect fit of all formers installed in steps 1-7. With parts properly seated, proceed to tack glue each former to retain within fuselage assembly at the tab and notch locations.
8. Fit F9 to fuselage side and F2. Tack glue to retain.
9. Fit F10 to back of F9, fuselage side, and F2. Once satisfied with fit bond F9 to F10.
10. Fit left fuselage side F11 to assembly. Square assembly then bond all mating surfaces between fuselage side, formers and crutch with medium CA.
11. Fit ply part F12 to back side of F6 and fuselage sides.
12. Fit ply part F13 to back of F12 and fuselage sides. Bond F12 and F13 within position along outside edges using thin CA glue. Wick minimal amounts of CA within "pocket" area between ply parts.
13. Bond balsa fuselage doubler F14 to right and left fuselage side with thick or medium CA.
14. Bond second doubler F15 over F14. Align F15 using a 1/8 in. drill bit, or length of 1/8 in. dowel, in the forward alignment holes. Remove alignment dowel before the glue sets.
15. Fit and glue the edge of nose sheeting F16 to the top of F3...
16. Now, wrap F16 over fuselage sides to nose of model. Bond to fuselage sides/doublers, F3, and motor mount F8. **TIP:** Moisten outside of F16 with glass cleaner to soften it. This will make it easier to bend around the curve of the nose. Tape part in position using a low tack painters tape and allow to dry thoroughly prior to bonding.
17. Fit and tack glue former F17 between fuselage sides where indicated on plan.
18. Fit and tack glue former F18 between fuselage sides at rear of model.
19. Fit and tack glue former F19 to underside of the rear of the fuselage.
20. Fit F20 to the top of F4 and F17, with aft end centered on top of F18. Bond F17 and F20 permanently to fuselage sides, each other, F4 and F18.
21. Fit and bond F21 to rear edge of cockpit, against F4. Note: Lower edge of F21 will extend beyond exterior edge of cockpit. F21 will later be sanded flush with edge of fuselage.

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22. Assemble and bond parts F22a and F22b to form a right and left keel F22. Fit and bond keel to the right and left notches in bottoms of all formers, motor mount, and edge of F19.
23. Fit then bond ply doublers F23 to outside surface of right and left keels F22 between F13 and F7.
24. Fit and bond ply F24 spanning right and left keel and F13.
25. Fit and bond ply F25 spanning right and left keel and F7.
26. Fit and bond long side stringers F26 to notches in fuselage doublers and along right and left fuselage sides.
27. Fit and bond short stringers F27 along top edge of fuselage sides aft of cockpit.
28. Assemble doubler F28 from parts F28a and F28b, and install along lower edge of fuselage sides F1/F11. Bottom profile of F28 should match lower profile of fuselage side. Reference plan set for part positioning.
29. Fit and bond center shape stringer F29 to right and left fuselage side. Reference plan set for part location
30. Sand fuselage lightly. Sand cockpit side flush with edge of former F4. Round corners of nose. Bevel edges of F20 in line with fuselage sides.

Set fuselage aside until final assembly.

### Tail Group.

The horizontal and vertical stabilizers, rudder, elevator, and sub-fin are designated with a "H", "V", "R", or "E", as appropriate, followed by a numeric. Parts have been numbered so that the assembly and required parts follows in numeric order. *Assemble parts over the plan, protecting the plan with the poly bag that this kit was shipped in.*

31. Dry assemble horizontal stabilizer over the plan, from parts H1 through H5. Bond with thin CA. Lightly sand stabilizer, rounding the leading edge and leaving the trailing edge square.

Locate the elevator part E. Bevel the straight leading edge at a 45 degree angle, following the "Elevator and Aileron Tape Hinge Diagram" on the wing plan set. Lightly sand the elevator, leaving the trailing edge square.

32. Dry assemble the vertical stabilizer and rudder over the plan from parts V1 through V5 and R1 through R4. Bond rudder and stabilizer parts with thin CA. *Note: do not bond rudder to the stabilizer.* Lightly sand stabilizer, rounding the leading edge and leave the trailing edge square.

Bevel the leading edge of the rudder at a 45 degree angle, following the "Rudder Tape Hinge Diagram" on the fuselage plan set. Lightly sand the rudder, leaving the trailing edge square.

### Wing.

The wing is composed of one spar, leading edge, trailing edge, ribs and tip sheeting. 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 W15.

The wing is assembled one half at a time - left side first, then mirror build sequence to the right side. When a part is required in the build sequence (for instance "W3") refer to the plan set for part placement.

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.

33. Begin by building left half of wing. Locate parts W1 (main spar), and one rib W2. Using the plan set as a guide, dry fit left side rib W2 to spar W1. *Note:* The bottoms of all ribs should seat flush with bottom of spars.
34. Fit rib W3 to outer slot of spar W1. Refer back to plan for part placement.

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35. Fit trailing edge W4 to ribs W2, and W3. Properly seat then tack glue assembled parts to retain within assembly.
36. Fit rib W5 and W6 to spar W1 and trailing edge W4. Square assembly over the plan and tack glue ribs to spar and trailing edge.
37. Fit and tack glue tip support W7 to rib W3. *Note: upward taper on part W7 should match that of spar.*
38. Repeat steps 33 through 37 to complete the rib installation for right half of the wing.
39. Fit 1/4 in. square balsa leading edge stock centered across notches in leading edge of the ribs. ensure that an equal length of the leading edge extends from each end of the wing. Bond with medium CA.
40. Assemble two wing tips W8 from parts W8a and W8b. Bond W8a/b with thin CA.
41. Fit left wing tip W8 to tab on leading edge of left rib W3. Align Leading edge of wing tip along back surface of leading edge stock and against forward portion of rib W6. Tack glue along leading edge to retain. Repeat process for right wing tip. Allow glue to cure prior to completing next step.
42. With wing held flat against the table, bend left wing tip over rear portion of ribs, fitting to tab on W7 and notch in aft end of rib W3. Tack glue to hold position then revisit wing tip with CA to thoroughly bond part to assembly. Repeat for the right wing tip.
43. Trim excess leading edge stock just beyond left rib W3. Repeat for right side.
44. Locate the long and short laser cut strips of 3/32 square balsa W9 and W10. Fit W9 in the notches over the spar and bond to the spar and ribs with medium CA. Fit W10 in the notches in the forward portion of the ribs and nesting within slot at wing tip. Bond with medium CA.
45. Fit and bond W11 to the bottom of ribs W2.
46. Fit and bond the ply servo mounting plates W12 to the notches in spar W1 and ribs W5.
47. Bond the balsa servo cuffs W13 to the BOTTOM of each servo mounting plate, to create a pocket for the servo to rest in.
48. Fit ply trailing edge reinforcement W14 within notch of part W4 at trailing edge of wing. Bond with medium CA glue.
49. Use the plan set as a guide for proper positioning of balsa diagonal sub ribs W15. Fit right and left sub ribs to assembly, hold wing flat against your building board and bond with medium CA to retain parts.
50. Sand the leading edge to shape. Match the contour of the leading edge to fit the wing saddle on the fuselage. Flow the leading edge smoothly into the wing tip.
51. Dry assemble ailerons from parts A1 through A5. Bond with thin CA. Following the "Elevator and Aileron Tape Hinge Diagram" on wing plan sheet, bevel the underside of the leading edge of the ailerons at a 45 degree angle. *Note: Ensure that you sand the leading edges on the correct side so that you will end up with a LEFT and a RIGHT aileron.*

## Final Assembly

52. Cover fuselage, wing, ailerons, and stabilizers with a lightweight covering material. We suggest AeroLite, available at [stevensaero.com](http://stevensaero.com).
53. Following "Landing Gear Detail" on plan set accurately bend landing gear using needle nose pliers and included 12 in length of .045 in. wire.
54. Trim covering on fuselage to expose landing gear pocket. Test fit landing gear within gear pocket of fuselage. Remove.
55. Install wheels of your choosing to landing gear. We suggest Du-Bro 1-1/2 in. mini lite wheels [DUB150MW] available at [stevensaero.com](http://stevensaero.com). Retain wheels by making a 90 degree bend in gear axle and trimming excess wire as illustrated on plan set.
56. Install landing gear within fuselage and retain with 1/32 ply part F30 as illustrated on plan set. Retain F30 and landing gear within fuselage using CA glue.
57. Fit and bond ply tail skid TS to slot in F19.
58. Using a warm soldering iron, open the covering over the wing dowel holes in front of the wing saddle.

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59. Cut the provided 4 in. length of 1/8 in. hardwood dowel to one 1/2 in. length and one 2-1/2 in. length forming the front and rear wing retention dowels. If desired, paint these dowels to match your trim scheme. Install the longer dowel through the holes in the fuselage side, centered within the fuselage so that about 3/8 in. extends from each side. Bond with thin CA.
60. Fit and 1/2 in. cut dowel (from step above) through formers F10 and F9, leaving about 1/4 in. extending aft of former F10.
61. Following the Tape Hinge Diagrams on the plan sheets, attach the ailerons, elevator and rudder to their respective surfaces with clear tape.
62. Open covering over the control horn slots in the rudder and elevator. Install the ply rudder horn R to the **RIGHT** side of the rudder. Ensure that it is oriented per the diagram on the plan. Installing the horn backwards will create unequal left and right rudder throw.
- Install the elevator horn on the **TOP LEFT** side of the elevator. *Note: Elevator horn will not center over hinge line. This is intentional and produces the proper amount of differential travel specified on the plan set.*
63. Install pushrods through their exit slots first, then through former F4, and finally through formers F9/F10. The rudder pushrod will pass through the right slot on top of the fuselage, and the right holes in F4, and F9/F10. The elevator pushrod will pass through the left slot in the fuselage top, and through the left holes in F4 and F9/F10. Keep pushrods from sliding out by applying a small amount of tape to each end.
64. With pushrods in place, follow the General Pushrod Detail on the wing plan sheet to make "snake" bends on the ends of the pushrods that will connect with the receiver brick.
65. We suggest extending the leads from the Spektrum SPMAR6400LBL Receiver/ESC/Servo "Brick" by 2 in. Remove the motor lead or clip off the connector and solder on an appropriate length of 22 AWG wire. Finished length should be at least 5-1/2 in.

For the Battery lead we suggest clipping off the connector and soldering on a JST

connector suitable for most small batteries. Finished length should be at least 5-1/2 in.

66. Connect pushrods to receiver, then mount receiver on F2 with double sided servo tape [DUB-634].
67. Feed motor lead through F2, F3, and motor mount F8.
68. Remove covering over battery compartment. Feed battery lead down through F2 and F5, and out the opening for the battery compartment.
69. Mount the recommended SA-SPORT Park BL180 motor [SUPA1504-18] to F8 with three #2 x 1/4 screws. Place one nylon washer under the left mount to create the proper right offset for the motor. Mount GWS 5x3 HD propeller to motor shaft.
70. Temporarily install main wing. Now, dry fit the horizontal and vertical stabilizers to the fuselage. Slide the vertical stab. through the horizontal stab. and fuselage, securing the long tab in the slot in F19, and the short tab in the slot in F20. Square assembly perpendicular to the fuselage and each other, and bond in place with medium CA. Remove wing.
71. Follow the General Pushrod Detail on the wing plan sheet to finish the pushrods at the rudder and elevator.
72. Remove covering from the wing over the servo pockets and exit hole W9. Mount the aileron servos [SPMAS2000] within the servo pockets in the wing. Feed the servo leads down through the pocket, through Ribs W2 and out exit hole in W9. attach servo leads to a "y" harness [SPA2002] or two 3 in. extension leads [SPA2000], and plug into one of the aileron ports - refer to receiver diagram on plans.

*Note: The servos may initially operate together in the same direction. To correct this, follow the Servo Reversing instructions on the wing plan sheet, or on the servo manufacturer's web site.*

Install the aileron control horns "A" to the underside of the ailerons. Follow the "General Pushrod Detail" on the wing plan sheet to create and connect the pushrods for the ailerons. Mount pushrods in the outer



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holes on the aileron control horns for initial flights.

73. Mount paper color pilot profiles to the balsa profile P with 3M 77 spray mount or glue stick. Fit and bond pilot figure in slot in F2 within Cockpit.
74. Mount wing using two fresh #16 rubber bands.
75. Adjust balance of model by moving battery within battery tray, or adding a bit of modeling clay within nose of model. **Important!** Model must balance 1/8-1/4 in. behind the main wing spar (see plan sheet for balance point).
76. Congratulations! Your **Swift (100)** is complete! Follow the Flight Control Setup to prepare your **Swift (100)** for flight.

## 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 - FIX THE WARP.**
- Center control surface then set direction, rate of travel, and dampening (expo). Ensure that the controls move in the proper direction according to the inputs on the transmitter.

**Swift (100)** is designed to be a very solid sport aerobatic performer. The flight control throws should be as follows:

### Rudder Travel

Low Rate: +/- 20 deg. 30% expo  
High Rate: SAME

### Elevator Travel

Low Rate: 12 deg. down 30% expo  
          10 deg. up 30% expo  
High Rate 25 deg. down 50% expo  
          20 deg. up 50% expo

### Aileron Travel

Low Rate 10 deg. down 30% expo  
          15 deg. up 30% expo  
High Rate 25 deg. down 50% expo  
          20 deg. up 50% expo

The above exponential settings apply only to computer radios.

## Pre-Flight

Have an 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 averting 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 **Swift (100)**'s balance. The model should balance 1/8-1/4 inch behind the main spar of the wing. Use a permanent marker or trim tape to mark the underside of the left and right wing half at the CG measurement as given above.
- Use your right and left hand index fingers and suspend the model from below, at the marked CG measurements. Site from profile of aircraft against horizon. If the horizontal stabilizer appears to hang level with horizon line, then **Swift (100)** is properly balanced to fly. Move equipment and or battery within fuselage to obtain proper balance.
- Check Weather** - **Swift (100)**'s first flight should be outdoors and in **zero** wind conditions. **Swift (100)** is capable of flying in winds up to 10 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. *Note: Ailerons must be centered at neutral point as given on plan set.*
- 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.

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- 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 **Swift (100)** typically cruises 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) on the **Swift (100)**

By now you'll have noticed that **Swift (100)** is a stable, responsive airplane. When built straight, and trimmed for level flight, **Swift (100)** should always return to wings level from any attitude. We've found **Swift (100)** to capture the imagination of sport pilots with both intermediate and advanced skills.

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 model for proper balance; equipment and airframe for damage, improper installation, and/or airframe twists and warps. The most common mistake is to try and fly with a warped or twisted wing, or a model that's improperly balanced. Additionally, make certain that your wing is straight, and the aileron pushrods are connected to the outer hole on the aileron control horns for your first flights.

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](mailto:support@stevensaero.com)

RCGroups.com - Forum Build Threads

Facebook.com - Search for Stevens AeroModel

Phone - 719.387.4187