QUICKOATS

Wing Span: 21.75 inches | **Wing Area:** 100 square inches | **Average Flying Weight:** 2.0 ounces

Build Instructions - Version 1.18 *(revised 03.09.2020)*

Build It!™
stevensaero.com
Manufactured with Pride
Colorado, U.S.A.

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 use by the user. 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 at www.stevensaero.com.

Stevens AeroModel
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Build Instructions

QuickOats™ (100) - Kit Inventory

- ☐ Laser-cut wood, 7 sheets (See Sheet Wood Inventory, page 5)
- ☐ Build Instructions
- ☐ Photo Supplement
- ☐ Detail Set, 2 sheets, 11 in. x 17 in.
- ☐ Acetate Windscreen

Taped to back of wood brick:

- ☐ 1 Landing gear, wire, .032 in. x 12 in. (1002)
- ☐ 2 Pushrods, wire, .020 in. x 12 in. (2020)

Hardware Bag:

- ☐ 1 Heat shrink tube, 1 1/2 in. x 1/16 in. (5012)
- ☐ 1 Part E5, Basswood elevator joiner
- ☐ 1 Hardwood dowel, 1/8 in. diameter x 4 in. (1020)
- ☐ 1 Pair 1 1/8 in. wheels [SH540] (5015)
- ☐ 6 Rubber Bands, #16

QuickOats 100 - Background

Our **QuickOats (100)** is loosely based on the popular Quaker Flash free flight design and is a lighthearted caricature, of the styling cues that gave the Quacker Flash its unmistakable classic lines.

First and foremost we concentrated on creating a versatile, easy to fly, radio control arrangement that would be suitable for both novice and experienced pilots alike. We also chose to support popular micro hardware from leading hobby vendors – that would allow the builder to source everything they needed, to complete the model, from their favorite hobby supplier. When equipped and finished, as suggested with the brushed power system, the 2 oz. flying weight of the **QuickOats**, will allow for effortless piloting of the model within the confines of larger indoor gymnasiums.

Of course, the next best thing to flying a **QuickOats** is building one! Thanks to our modern kit design and trouble-free, interlocking build, the **QuickOats** frames quick and true – using signature laser-cut assembly processes pioneered by Stevens AeroModel.

Build Instructions

Suggested Items to Complete this Model

Many of the suggested items listed below are available at your local hobby shop. For your convenience, Stevens AeroModel stocks all the power system components and most of the building supplies required to complete this kit. If you have difficulties sourcing any of these items locally, please visit our website, *stevensaero.com* to purchase the items necessary to complete your model.

Required Electronics (brushed power system)

- ☐ RC transmitter with at least 3 channels
- ☐ Receiver/ESC/Servo brick (PKZ3352) or (SAR6410*)
- ☐ Motor/Gearbox (PKZ3624) or (SA8523)
- ☐ Propeller, 130mm x 70mm (EFL9051)
- ☐ LiPo battery, 130 - 160 mAh 3.7V

Optional Electronics (brushless power system)

- ☐ Receiver/ESC/Servo brick (SPMAR64510LBL*)
- ☐ SA Sport Park BL180 (2200KV)
- ☐ 5 x 3 GWS HD Propeller
- ☐ Spektrum ultra micro receiver/esc/servo “brick” [SPMAR6410LBL]*
- ☐ 7.4V 120-160mAh LiPo compatible with Spektrum “brick”

**SAR6410 and SPMAR6410LBL must be used with a modern computer radio.*

Covering Film Requirements

Required Building Supplies and Tools

- ☐ CA glue, medium, 1/4 oz (PAAPT04)
- ☐ CA glue, thin, 1/4 oz (PAAPT10)
- ☐ CA glue applicator tips (PAAPT21)
- ☐ CA glue accelerator (PAAPT15)
- ☐ Hobby knife with supply of #11 blades
- ☐ Sanding block with 120 and 240 grit paper
- ☐ Covering iron and heat gun
- ☐ Needle nose pliers, small
- ☐ Clear tape, 1/2 in. (DUB916)
- ☐ Velcro for mounting battery (PKZ1039)
- ☐ Masking tape (low-tack blue painters’ tape)
- ☐ AeroLITE™ covering film

Optional Building Supplies and Tools

- ☐ Balsa filler (HCAR3401)
- ☐ Modeling clay (ballast)
- ☐ CA glue de-bonder (PAAPT16)
- ☐ Clear lacquer-based sealant (DEFT)
- ☐ Lacquer-based spray paint (Design Master®)

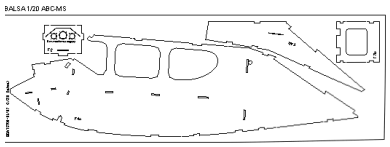
While any high-quality covering film may be used to finish this model, superior results will be achieved by using genuine AeroLITE brand covering film, available exclusively from Stevens AeroModel. The lower working temperature and light weight of AeroLITE are especially desirable for this type of model.

AeroLITE is one-third the weight of typical model covering films, and will present a significant weight savings when applied to this model.

- ☐ 3 - PatchPaks™ AeroLITE or equivalent covering film.

Build Instructions

Sheet Wood Inventory (1 of 1)



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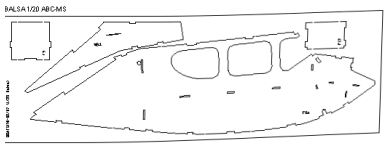

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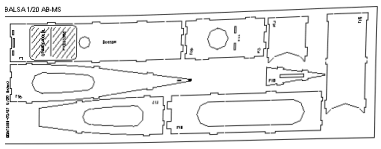

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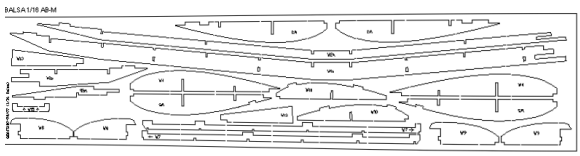

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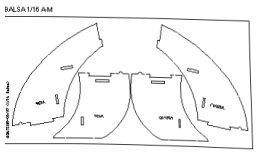

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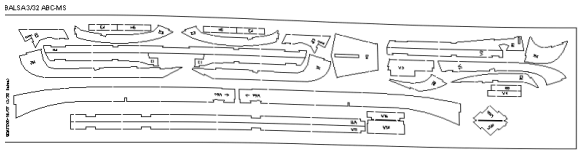
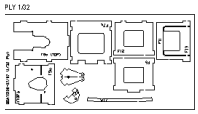


☐ QOATS100-0607 (Balsa 3/32)



☐ QOATS100-0707 (Ply 1/32)

Build Instructions

General Assembly Instructions

Thank you for purchasing the ***QuickOats (100)*** from Stevens AeroModel.

This model has been developed and manufactured using state-of-the-art CAD/CAM systems. Our kits feature a unique, interlocking construction process, that when compared to traditional building methods, saves 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 an experienced builder and pilot. If at any time during the assembly of this kit, should you run across a term or technique that is foreign to you, please contact our staff with your questions.

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

Pre-Sanding
DO NOT SKIP THIS STEP. Before removing any parts from the laser-cut sheet wood, use a sanding block loaded with 120 - 240 grit sandpaper and lightly sand the backside of each wood sheet. This step removes any residue produced as a result of the laser cutting process. We have found that most stock wood sizes run several thousandths of an inch oversized. This step also slightly reduces the thickness of each sheet of wood. Leave all parts in the sheet wood until required for assembly.

Protecting Your Work Surface

Use the poly tube that this kit was shipped in as a nonstick barrier between your work surface and the product assembly.

Bonding the Assembly

This product's tabs and notches interlock like a 3D puzzle. We strongly suggest that when fitting parts, you "dry fit" (use no glue) the parts together first. It is advised to work 1 - 2 steps ahead in the instructions, using this dry-fit technique. This allows the opportunity to inspect the fit and location of assembled components, and shows the benefits of our construction technique. As each successive part is added, it contributes to pulling the entire assembly square. Once you arrive at the end of a major assembly sequence, square your work on a flat work surface, and bond 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 square-and-true assembly.

Unless otherwise noted in the instructions, we find it easier to "tack glue" parts (temporarily bonding parts in assemblies, using a small dot of glue). When using medium CA glue, apply with a fine-tip CA glue applicator. Never bond painted or covered assemblies with thin CA, as it can destroy the finish of a beautifully prepared model.

Never Force the Fit!

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

Manual Updates

Please check our website for updates to these instructions before starting the build. To obtain downloads and updates for this model aircraft kit, please visit the 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, V3 and V4.

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, and E4. 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 E5 (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 the empennage aside until final assembly.

Build Instructions

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 number. Parts have been numbered so that the wing assembly and required parts follows in numeric order from W1 to W17.

The wing is assembled one half at a time and is composed of a right and left side. Assembly begins with the left half of the wing and works out to the wing tip. 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.

10. Locate and bond together parts W1a and W1b to create W1 main spar. Locate and bond together parts W2a and W2b to create W2 sub spar. Using the plan set as a guide, dry fit ribs W3 to slots within spars W1 and W2. Note: The bottoms of ribs should seat flush with bottom of spars.

11. Locate ribs W4 and W5 in slots in W1 and W2. Use plan set as a placement guide.

12. Assemble W6 trailing edge over plan set from parts W6a, W6b. Tack glue parts W6b to W6a to retain parts within assembly.

13. Fit assembled W6 at trailing edge of ribs W3, W4, and W5. Tack glue W6 where it contacts ribs to retain within assembly.

14. Locate leading edge jig W7 at leading edge of wing, with tabs facing forward, notches facing aft, and etched arrow on part W7 facing rib W3. Use plan set as a placement guide. Fit W7 flush with bottom of ribs W3, W4, and W5 at leading edge. Ensure that W7 is properly seated to rib assembly and retain using tack glue method described previously.

15. Fit sub rib W8 spanning W1 main spar and W7 leading edge jig. Tack glue part at W1 and W2 to retain.

16. Fit sub rib W9 spanning W1 main spar and W7 leading edge jig. Tack glue part at W1 and W7 to retain.

17. Fit tip rib W10 to assembly spanning sub spar W2, main spar W1, and leading edge jig W7. Tack glue W10 to assembly at W7 leading edge and spar W1. Do not glue W10 to sub spar W2.

18. Fit notches in W11 leading edge over tabs in W7 at leading edge of wing. Retain W11 by tack gluing at each rib and sub rib interface.

19. Assemble W12 wing tip from parts W12a and W12b. Fit and bond parts over a flat work surface.

20. Fit W12, wing tip to wing assembly. First, align tabs in spar W2 and rib W10 with corresponding notches in W12. Align wing tip to terminate flush with W6 trailing edge, Now, bond wing tip at tab and notch locations and trailing edge.

    Next, wrap W12 wing tip forward to leading edge fitting notch in W12 to corresponding tab at main spar W1. Align W12 to follow contour of tip rib W10 and bond from sub spar W2 forward to main spar along tip rib W10.

    Finally, complete wing tip by wrapping W12 forward to leading edge following contour of tip rib W10, nesting tab on W10 within corresponding notch at W12. Wing tip should come to rest with the top surface of W12 flush with top of leading edge part W11. Bond from main spar forward to leading edge and along leading edge where W12 contacts W11.

21. Hold wing assembly flat against your work table and fit W13 truss rib where indicated on plan set. W13 should fit flush with bottom of wing and taper in width as it approaches the leading edge.
    With W13 installed, and your wing held flat to your building table, thoroughly bond all parts within the wing assembly.

22. Repeat steps 11-21 for right side of wing assembly.

23. Hold center section of wing flat on a smooth surface, checking that both wing tips are an equal distance above the surface.

24. Fit and bond trailing edge W14 between ribs W3.

25. Fit and bond leading edge webbing W15 between ribs W3.

26. Fit and bond leading edge W16 between ribs W3.

27. Fit and bond ply trailing edge support W17 to notch on trailing edge center section.

28. Using 400 grit sand paper and a sanding block, lightly sand exterior edges of wing in preparation for covering. Use the “airfoil profile” on the fuselage plan set as a guide to shape leading edge. At wingtip taper leading edge upward from rib W10 to flow into wing tip sheeting.

    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 the wing aside until final assembly.

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 alpha-numeric order from F1 to F20.

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.

29. Build the center crutch. Locate the instrument panel F2, central crutch F1, and rear former F3. Center crutch F1 should be installed so that etched receiver placement guidelines will be visible from the bottom of the fuselage assembly. Instrument panel etching should face aft. Orient part F3 so that etched part number faces forward and observe “top” designation. Reference parts over plan set and retain by tack gluing.

30. Locate and bond together over the plans, parts F4a and F4b to create F4 fuselage side. Place F4 fuselage side on work table with etched part numbers facing up. Now, dry fit completed center crutch to fuselage side F4 aligning tabs in crutch with corresponding notches in F4.

31. 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.

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

33. Dry fit F6 landing gear mount to F4 fuselage side aligning tabs in panel with notches in fuselage side and center crutch F1.

34. 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.

35. 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.

36. Locate and bond together over the plans, parts F8a and F8b to create F8 fuselage side. Fit opposite fuselage side F8 to assembly capturing formers, motor mount, central crutch, and windscreen frame within fuselage.

37. 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.

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

39. Fit top former F10 spanning F7 windscreen frame and fuselage sides match tabs and notches. Bond F10 within assembly from F7 windscreen aft to rear former F3.

40. Fit ply landing gear pocket F11 within fuselage behind F6. Bond pocket within assembly around perimeter. Do not fill pocket area with glue.

41. Fit ply landing gear pocket cover F12 within fuselage assembly behind F11 and interlocking with F1 center crutch. Bond F12 to retain part. **Attention: be careful not to allow glue to enter landing gear pocket.**

42. Matching tabs and notches, fit nose sheeting F13 to underside of fuselage assembly spanning fuselage sides forward of landing gear pocket. Bond F13 within assembly from pocket and F6 forward.

43. Matching tabs and notches, fit bottom sheeting F14 within fuselage assembly behind landing gear pocket and spanning fuselage sides. **Bond F14 to retain. Attention: be careful not to allow glue to enter landing gear pocket.**

44. Fit and bond F15 bottom sheeting spanning fuselage sides forward of former F3.

45. Fit and bond F16 bottom sheeting spanning fuselage sides aft of former F3 to rear of fuselage.

46. Fit and bond F17 top sheeting spanning fuselage sides aft of former F3

47. Fit and bond F18 to rear portion of fuselage top.

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

49. Sand fuselage with sanding block and 400 grit paper. Remove protrusion of F11 forward of F7 windscreen. Lightly radius corners of fuselage.

50. 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.

    KIT UPDATE 02.01.2011

    We now provide a laser cut Acetate wind screen. Remove backing paper from windscreen and fold at edges of "front" window. Use the plan set as a guide to position the wind screen within fuselage and retain using canopy glue or medium CA glue.

Set the fuselage aside until final assembly.

Build Instructions

Final Assembly

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

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

53. Install wheels of your choosing to landing gear. We suggest Du-Bro 1-1/4 in. mini lite wheels [DUB125MW] available at stevensaero.com. Retain wheels by making a 90 degree bend in gear axle and trimming excess wire as illustrated on plan set.

54. Install landing gear within fuselage and retain with 1/32 ply part F19 as illustrated on plan set. Friction alone should be sufficient to retain F19 allowing easy removal of landing gear. If desired, retain F19 and landing gear within fuselage using CA glue.

55. Paint F20 tail skid to match trim scheme of model. Open covering in fuselage where tail skid installs. Fit and bond F20 to fuselage using medium CA glue.

56. 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.

57. 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 56). Reference plan set for installation of forward wing retention dowel. Bond within fuselage assembly from behind wind screen and underneath top former F11.

58. 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 56). 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.

59. Remove covering from tab on bottom of vertical stabilizer where it will insert through horizontal stabilizer and fuselage. Next, remove covering over notch in top/aft deck of fuselage to receive vertical stabilizer. Finally, remove covering from rectangular slot in center of horizontal stabilizer to allow tab on bottom of vertical stabilizer to pass through the slotted horizontal stabilizer.

60. Fit vertical stabilizer through horizontal stabilizer nesting tab on vertical stabilizer within slot at top rear of fuselage.

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

62. 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 gluing with medium CA glue at several points along fuselage.

    Square vertical stabilizer perpendicular to wing and horizontal stabilizer. Retain stabilizer with medium CA glue.

63. 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.

64. 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.

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

66. Follow instructional given on plan set for creating rudder and elevator push-rods. Route push-rods through proper slots in fuselage sides and holes provided in F3. It may be helpful to trim covering from the lightening hole 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.

67. Remove plastic mounting “pins” from “ears” of motor/gearbox PKZ3624. Route motor wire from PKZ3624 through opening in landing gear pocket. 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.
68. Install 120-160 mAh 3.7V li-po battery within fuselage behind landing gear pocket on top of bottom sheeting F14, using a small patch of velcro [PKZ1039] (not supplied). Alternatively, battery may be passed through opening in landing gear pocket into cavity forward of gear to adjust balance of model forward.

69. Mount EFL9051 propeller by screwing onto threaded propeller shaft of PKZ3624. Now, 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!

QuickOats is designed to be a very docile flyer, therefore the flight controls are set up for fairly minimal throws. 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.

Build Instructions

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 your model's balance. The model should balance between 1-5/8 - 1-3/4 inches from the leading edge of the wing (basically at or 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 **QuickOats** is properly balanced to fly. Move equipment and or battery within fuselage to obtain proper balance.
- ☐ **Check Weather** - **QuickOats'** first flight should be outdoors and in **zero** wind conditions. **QuickOats** 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 **QuickOats**™ 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.

Build Instructions

Congratulations!

Once you've completed your first flights, you will have noticed that the Stevens AeroModel ***QuickOats (100)*** is a very stable model airplane. When built straight, and trimmed for level flight, it should readily return to "wings level" from any attitude. When flying, we never miss an opportunity to allow an onlooker to get a little "stick-time".

If your first flight was a bit more exciting than you would have liked, and you are having problems with erratic flight performance, please inspect your airframe and equipment for damage, improper installation, and/or twists and warps. Check to make sure that the model is properly balanced. Moving the C.G. forward slightly can also improve flight performance. The most common mistake modelers make is to try to fly with a warped or twisted wing. Please make certain that your wings are straight and true, before you fly.

Contact Us!

At Stevens AeroModel, we are committed to improving your building and flying experience. We are constantly refining our processes, designs, and manuals to reflect customer feedback. You may correspond with the Stevens AeroModel staff at:

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