



# CESSNA

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# CORVALIS



## INSTRUCTION MANUAL

### SPECIFICATIONS

<b>Wingspan:</b>	57 in [1450mm]	<b>Wing Loading:</b>	13-14 oz/ft <sup>2</sup> [40-43g/dm <sup>2</sup> ]
<b>Wing Area:</b>	362 in <sup>2</sup> [23.3 dm <sup>2</sup> ]	<b>Length:</b>	38 in [965mm]
<b>Weight:</b>	2-2.25 lbs [910-1020 g]	<b>Radio:</b>	5+ channels (required)

### WARRANTY

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

In that Hobbico 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.**

To make a warranty claim send the defective part or item to Hobby Services at the address below:

#### Hobby Services

3002 N. Apollo Dr. Suite 1  
Champaign IL 61822 USA

Include a letter stating your name, return shipping address, as much contact information as possible (daytime telephone number, fax number, e-mail address), a detailed description of the problem and a photocopy of the purchase receipt. Upon receipt of the package the problem will be evaluated as quickly as possible.

READ THROUGH THIS MANUAL BEFORE STARTING CONSTRUCTION. IT CONTAINS IMPORTANT INSTRUCTIONS AND WARNINGS CONCERNING THE ASSEMBLY AND USE OF THIS MODEL.

## TABLE OF CONTENTS

INTRODUCTION	2
SAFETY PRECAUTIONS	2
ADDITIONAL ITEMS REQUIRED	3
ORDERING REPLACEMENT PARTS	3
KIT INSPECTION	4
KIT CONTENTS	4
BEFORE YOU BEGIN	5
ASSEMBLE THE MODEL	5
PREPARE FOR FLIGHT	9
Check the Control Directions	9
Set the Control Throws	10
Operate the Motor	11
Check the C.G. (Center of Gravity)	11
Identify Your Model	12
FLYING THE CESSNA 350 CORVALIS	13
Find a Suitable Flying Site	13
Perform a Range Check	13
Monitor Your Flight Time	13
Take Off	13
Flying	14
Landing	14
After Flight	14

## INTRODUCTION

Thank you for purchasing the Cessna 350 Corvalis. Originally produced by Columbia aircraft and called the Columbia 350, the design was recently purchased by Cessna and was renamed the Cessna 350 Corvalis—after the name of the town near where it was being manufactured. After opening the box, you will no doubt be anxious to see the sleek lines of this modern single-engine aircraft come together on your work bench. Fortunately, all of the time-consuming work has already been done for you. Innovative assembly methods allow this plane to virtually finish itself in under an hour. Once at the field, you will find that the Cessna flies smoothly but with authority from the pre-installed brushless outrunner motor and LiPo battery.

For the latest technical updates or manual corrections to the Cessna 350 Corvalis, visit the Flyzone web site at [www.flyzoneplanes.com](http://www.flyzoneplanes.com). Open the “manuals” link, then select the Cessna 350 Corvalis.



## AMA

If you are not already a member of the AMA, please join! The AMA is the governing body of model aviation and membership provides liability insurance coverage, protects modelers' rights and interests and is required to fly at most R/C sites.

### ACADEMY OF MODEL AERONAUTICS



5151 East Memorial Drive  
Muncie, IN 47302-9252  
Tele. (800) 435-9262  
Fax (765) 741-0057

Or via the Internet at:

<http://www.modelaircraft.org>

### IMPORTANT!!!

Two of the most important things you can do to preserve the radio controlled aircraft hobby are to avoid flying near full-scale aircraft and avoid flying near or over groups of people.

## PROTECT YOUR MODEL, YOURSELF & OTHERS... FOLLOW THESE IMPORTANT SAFETY PRECAUTIONS

1. Your Cessna 350 Corvalis should not be considered a toy, but rather a sophisticated, working model that functions very much like a full-size airplane. Because of its performance capabilities, the Cessna, if not assembled and operated correctly, could possibly cause injury to yourself or spectators and damage to property.
2. You must assemble the model according to the instructions. Do not alter or modify the model, as doing so may result in an unsafe or unflyable model. In a few cases the instructions may differ slightly from the photos. In those instances the written instructions should be considered as correct.
3. If you are not an experienced pilot or have not flown this type of model before, we recommend that you get the assistance of an experienced pilot in your R/C club for your first flights. If you're not a member of a club, your local hobby shop has information about clubs in your area whose membership includes experienced pilots.
4. While this kit has been flight tested to exceed normal use, if the plane will be used for extremely high stress flying, such as racing, or if an engine larger than one in the recommended range is used, the modeler is responsible for taking steps to reinforce the high stress points and/or substituting hardware more suitable for the increased stress.

We, as the kit manufacturer, provide you with a top quality, thoroughly tested kit and instructions, but ultimately the quality and flyability of your finished model depends on how you build it; therefore, we cannot in any way guarantee the performance of your completed model, and no representations are expressed or implied as to the performance or safety of your completed model.

## ADDITIONAL ITEMS REQUIRED

A 5+ channel transmitter and receiver are required for the Cessna 350. The radio must have servo reversing; ATV or EPA is recommended. The radio system shown in the manual can be purchased using the following stock number:

- Futaba® 6EX 6-Channel 2.4GHz Transmitter/Receiver (FUTK6900)

If you wish to purchase only the Futaba 2.4GHz receiver shown, use the following number (Note: This receiver is only compatible with Futaba brand 2.4GHz transmitters):

- Futaba R617FS 7-Channel 2.4GHz FASST™ Receiver (FUTL7627)

In addition to the radio system, the following items are required for assembling the Cessna 350 Corvalis:

- Fine-point felt-tip pen
- Masking tape
- #2 Phillips screw driver

The recommended flight battery and charger can be ordered using the following part numbers:

- 11.1V 1800 mAh LiPo battery for motor (HCAA3840)
- 3S (11.1V) LiPo battery charger (Great Planes® Smart Charger w/DC car adapter (GPMM3319))

**OR**

- Great Planes Smart Charger w/AC and DC adapter (GPMM3318)

For an optional charger that is capable of charging NiMH, NiCd, LiPo, and lead acid batteries, purchase the following part numbers (the Equinox LiPo Cell Balancer is required to charge the recommended LiPo flight battery using the Triton2 charger).

- Great Planes ElectriFly™ Triton2™ DC Computer Charger (GPMM3153)
- Great Planes ElectriFly Equinox™ LiPo Cell Balancer (GPMM3160)

## ORDERING REPLACEMENT PARTS

Replacement parts for the Hobbico Flyzone Cessna 350 Corvalis are available using the order numbers in the **Replacement Parts List** that follows. The fastest, most economical service can be provided by your hobby dealer or mail-order company.

To locate a hobby dealer, visit the Hobbico web site at [www.hobbico.com](http://www.hobbico.com). Choose "Where to Buy" at the bottom of the menu on the left side of the page. Follow the instructions provided on the page to locate a U.S., Canadian or International dealer.

Parts may also be ordered directly from Hobby Services by calling (217) 398-0007, or fax at (217) 398-7721, but full retail prices and shipping and handling charges will apply. Illinois and Nevada residents will also be charged sales tax. If ordering via fax, include a Visa® or MasterCard® number and expiration date for payment.

Mail parts orders and payments by personal check to:

**Hobby Services**  
3002 N. Apollo Drive, Suite 1  
Champaign, IL 61822

Be certain to specify the order number exactly as listed in the **Replacement Parts List**. Payment by credit card or personal check only; no C.O.D.

If additional assistance is required for any reason, contact Product Support by telephone at (217) 398-8970, or by e-mail at [productsupport@hobbico.com](mailto:productsupport@hobbico.com).

### REPLACEMENT PARTS LIST

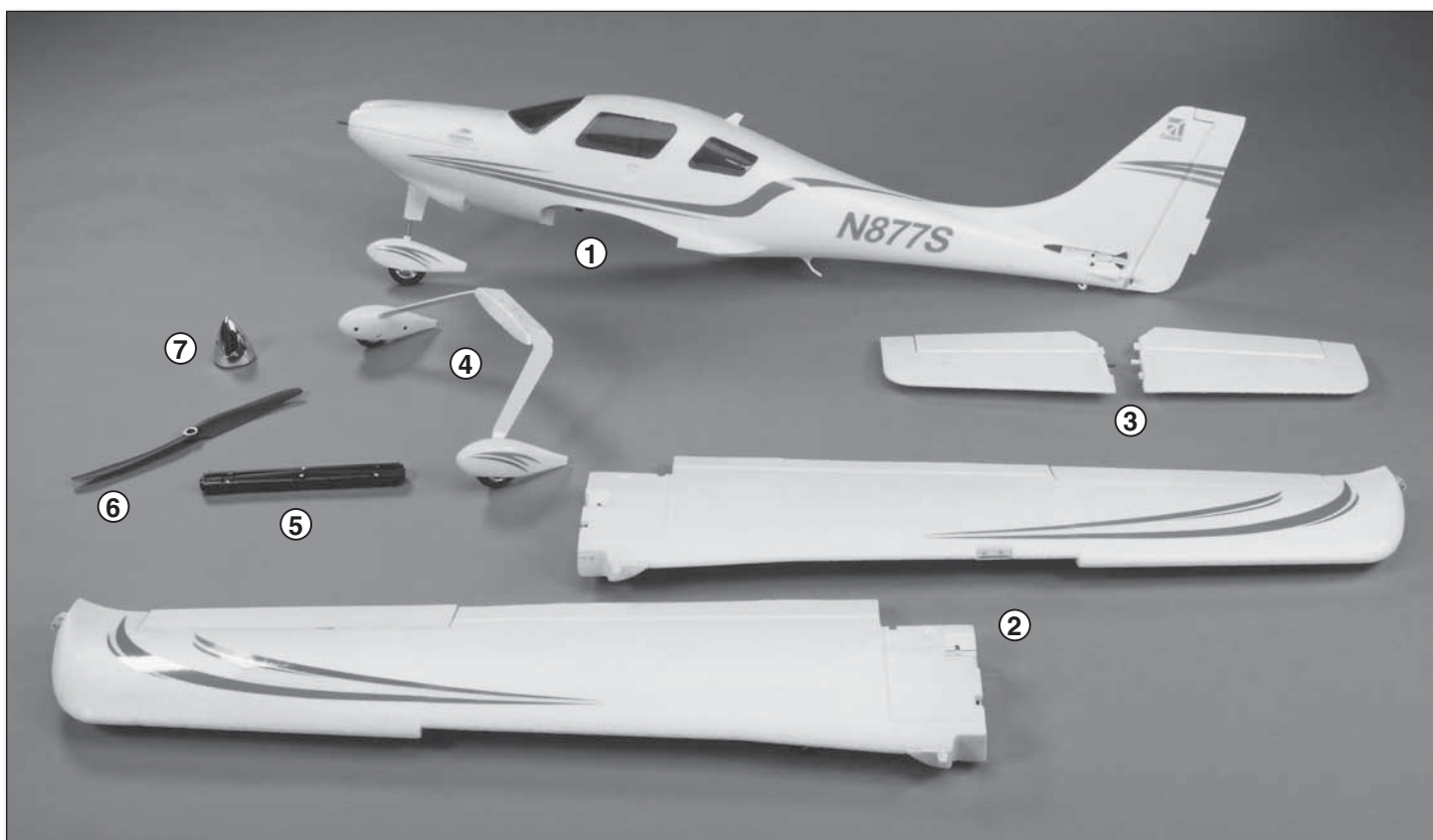
Order No.	Description
HCAA6355	Fuselage
HCAA6356	Wing Set
HCAA6357	Stabilizer/Elevator
HCAA6358	Hatch
HCAA6359	Main Gear with Cover
HCAA6360	Wheels/Pants
HCAA6361	Nose Gear
HCAA6362	30A ESC
HCAA6363	Motor/Mount
HCAA6364	Spinner
HCAA6365	Light Set
HCAA6366	9x5 Propeller
<b>NOTE</b>	Full-size plans are not available. You can download a copy of this manual at <a href="http://www.hobbico.com">www.hobbico.com</a> .

## KIT INSPECTION

Before starting to build, inspect the parts to make sure they are of acceptable quality. If any parts are missing or are not of acceptable quality, or if you need assistance with assembly, contact **Product Support**. When reporting defective or missing parts, use the part names exactly as they are written in the Kit Contents list.

**Hobbico Product Support**  
3002 N. Apollo Drive, Suite 1  
Champaign, IL 61822  
Telephone: (217) 398-8970, ext. 5  
Fax: (217) 398-7721  
E-mail: [airsupport@hobbico.com](mailto:airsupport@hobbico.com)

## KIT CONTENTS



1. Fuselage (with nose gear installed)
2. Wing halves (with ailerons/flaps installed)
3. Horizontal stabilizer halves (with elevators installed)
4. Main landing gear (with wheels/wheelpants installed)

5. Wing joiner
6. Propeller
7. Spinner

## BEFORE YOU BEGIN

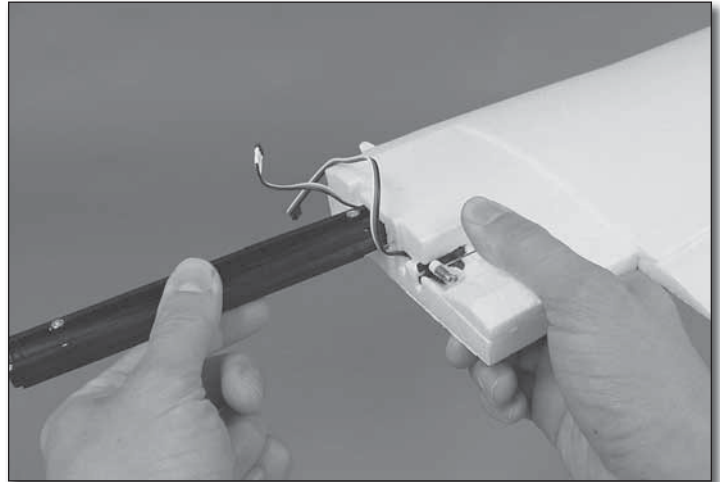
Before you begin assembling your Cessna 350 Corvalis, thoroughly read the instruction manual included with the battery charger. Also familiarize yourself with the following lithium polymer battery cautions. When satisfied with your understanding of the battery charge process and safe handling of LiPo batteries, charge your flight battery so it will be ready to use when your assembly is complete.

### LITHIUM BATTERY HANDLING AND USAGE

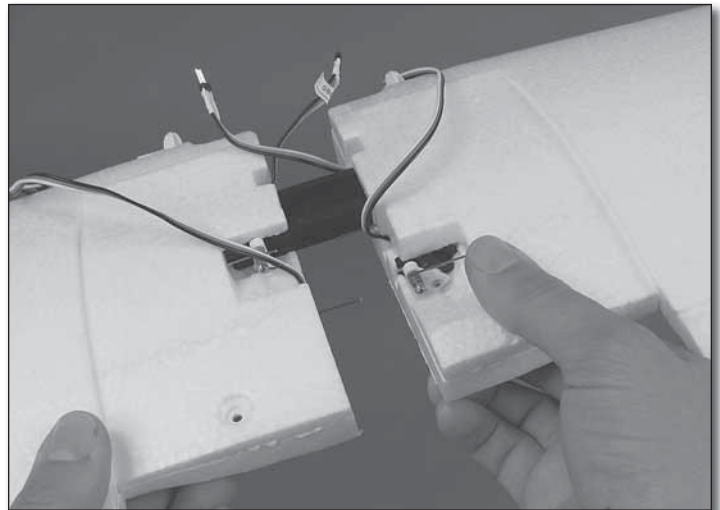
**WARNING!!** Read the entire instruction sheet included with your battery charger. Failure to follow all instructions could cause permanent damage to the battery and its surroundings, and cause bodily harm!

- ONLY use a Li-Po approved charger. NEVER use a NiCd/NiMH peak charger!
- NEVER charge in excess of 4.20V per cell.
- ONLY charge through the “charge” lead. NEVER charge through the “discharge” lead.
- NEVER charge at currents greater than 1C.
- ALWAYS set charger’s output volts to match battery volts.
- ALWAYS charge in a fireproof location.
- NEVER trickle charge.
- NEVER allow the battery temperature to exceed 150° F (65° C).
- NEVER disassemble or modify pack wiring in any way or puncture cells.
- NEVER discharge below 3.0V per cell.
- NEVER place on combustible materials or leave unattended during charge or discharge.
- ALWAYS KEEP OUT OF REACH OF CHILDREN.

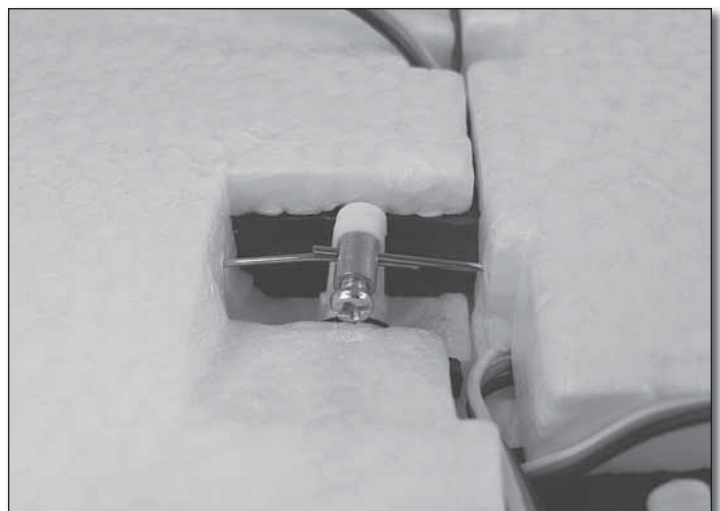
## ASSEMBLE THE MODEL



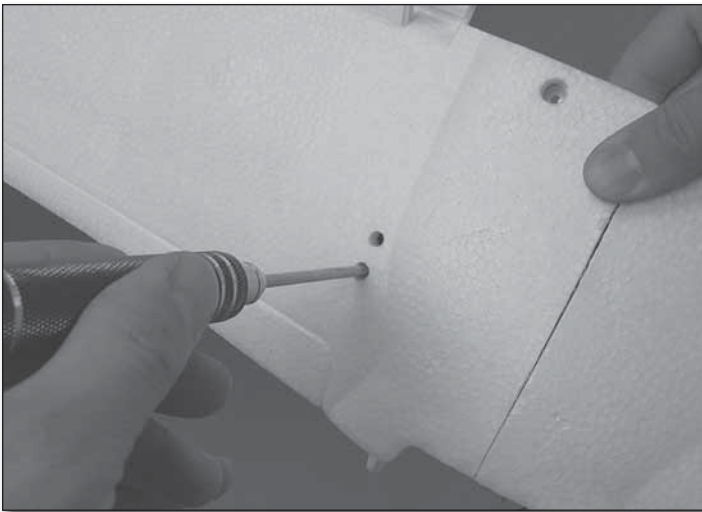
1. Insert the wing joiner into the wing pocket of one wing panel. Be sure that the “V” shape of the joiner points toward the underside of the wing.



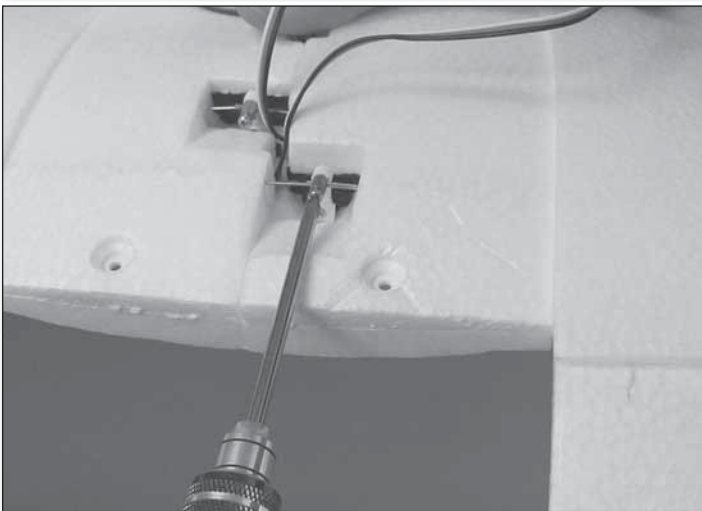
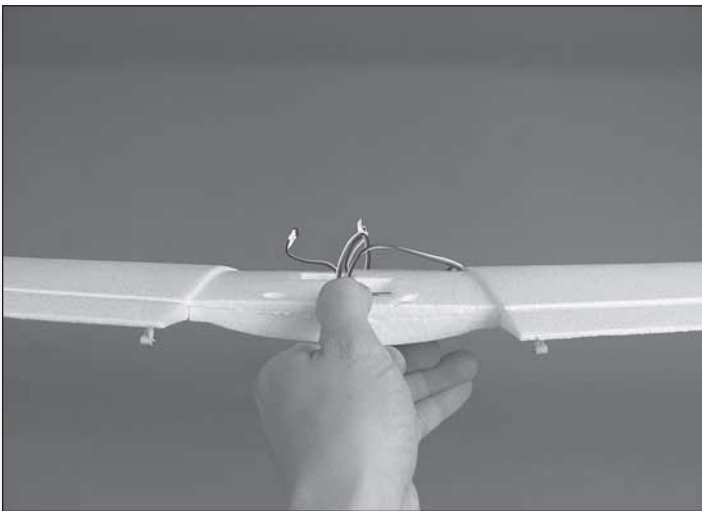
2. Fit the other wing panel onto the wing joiner.



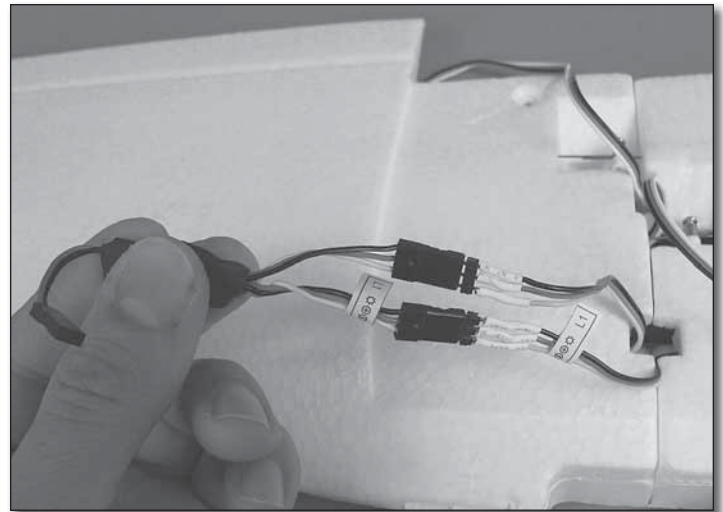
3. The aileron and flap pushrod wires must pass through the holes in the screw lock connectors when the wing panels are joined together.



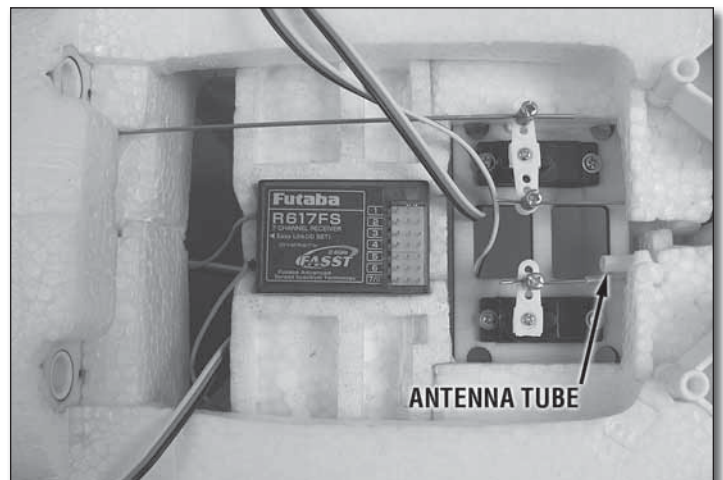
❑ 4. Tighten the wing joiner screws that can be seen through the access holes in the underside of the wing panels.



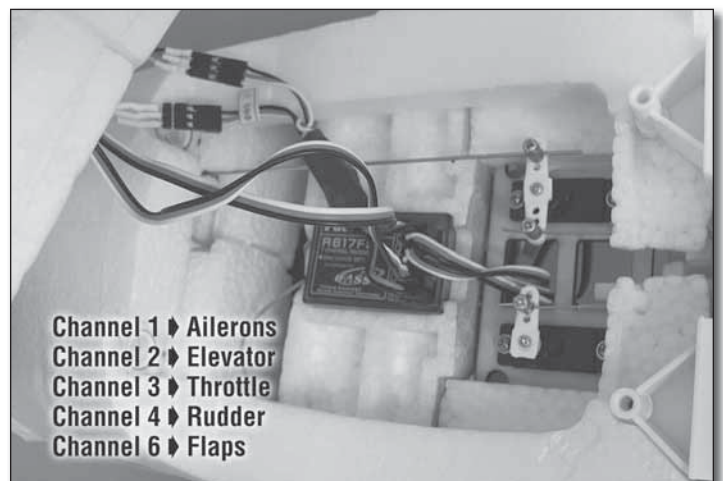
❑ 5. Position the flaps and ailerons inline with each other (left aileron and right aileron even with each other, left flap and right flap even with each other) and tighten the screws in the screw lock connectors. **Note:** After the receiver has been installed and you test the operation of the flaps and ailerons, you may need to loosen the screws, reposition the pushrod wires in the screw lock connectors, and retighten the screws.



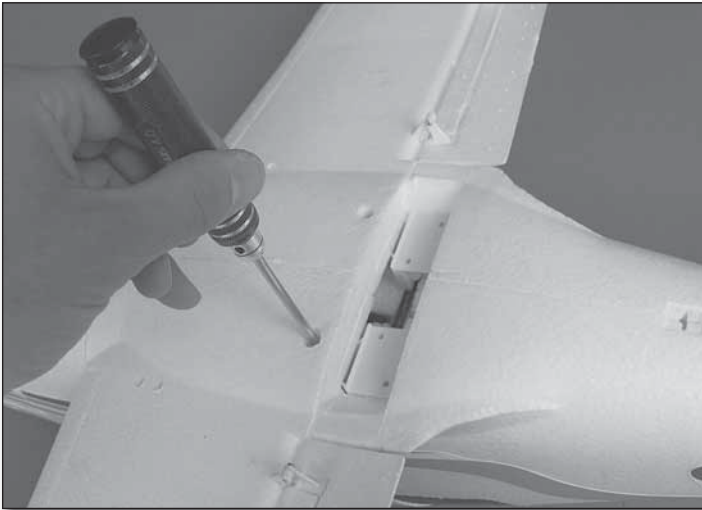
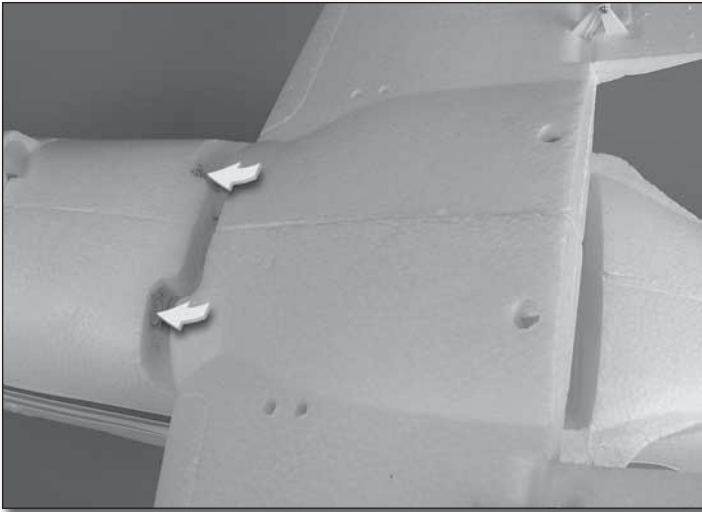
❑ 6. Connect the Y-harness to the wing lights as shown.



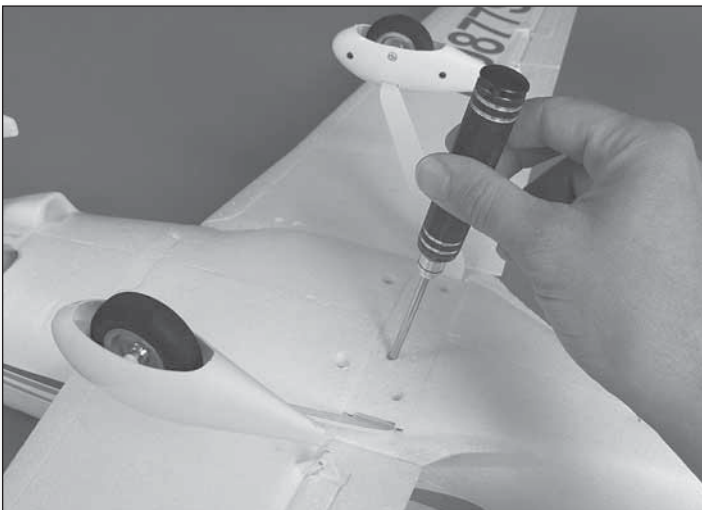
❑ 7. Using the included piece of double-sided foam tape, install your receiver onto the radio tray as shown. Installing a receiver other than the model shown may require you to trim the tray in order for it to fit. An antenna tube is installed in the fuselage if you will be using an FM radio system.



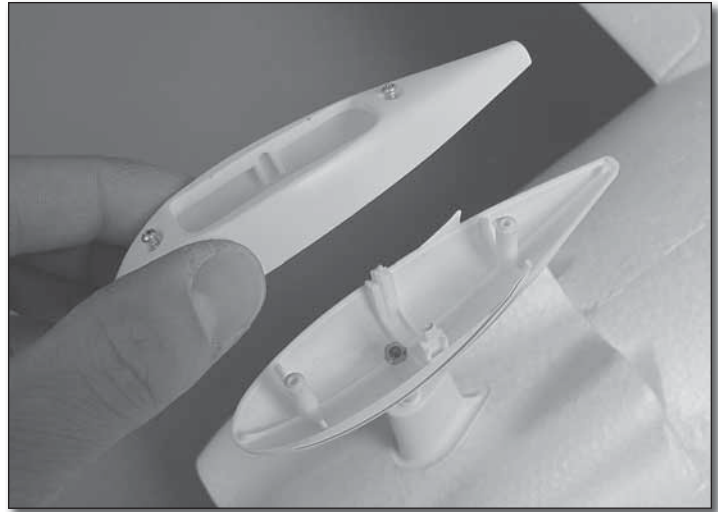
❑ 8. Connect the servo leads into their appropriate channels on the receiver. The Y-harness for the wing lights can be plugged into any remaining unused channel of the receiver. Note that the Y-harness does not have a white signal wire as the servos do.



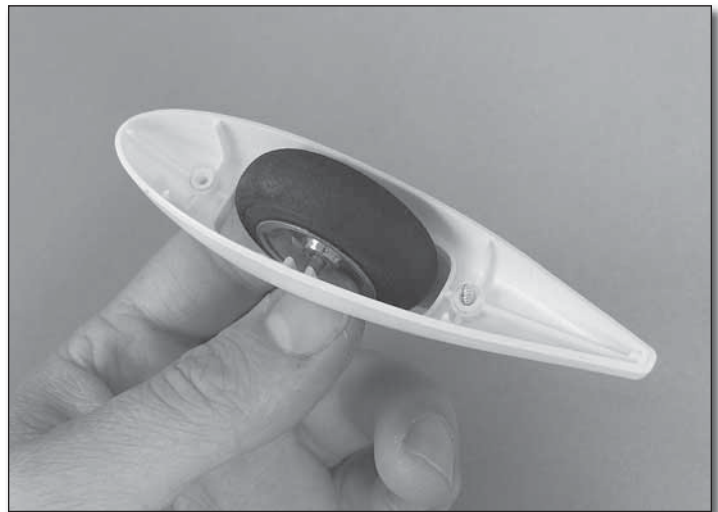
□ 9. Insert the wing dowels into the holes in the fuselage at the front of the wing saddle. Make sure that none of the servo wires interfere with the tail servos. Press the wing into place and attach it to the fuselage using two 3x22mm machine screws.



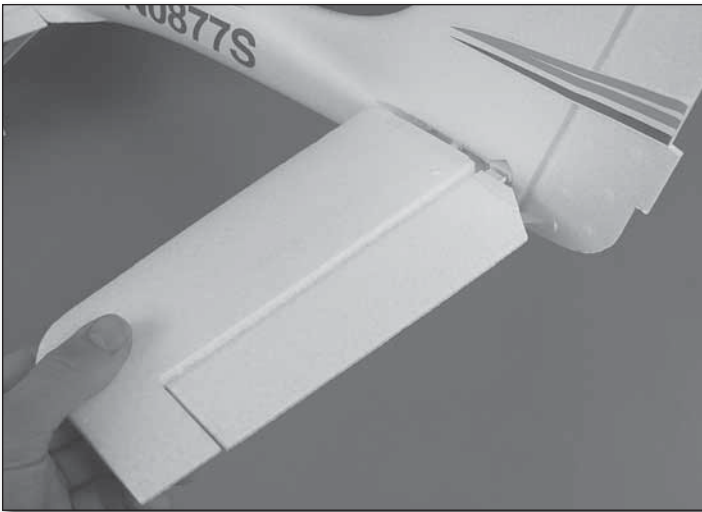
□ 10. Mount the landing gear to the fuselage using four 3x16mm self-tapping screws.



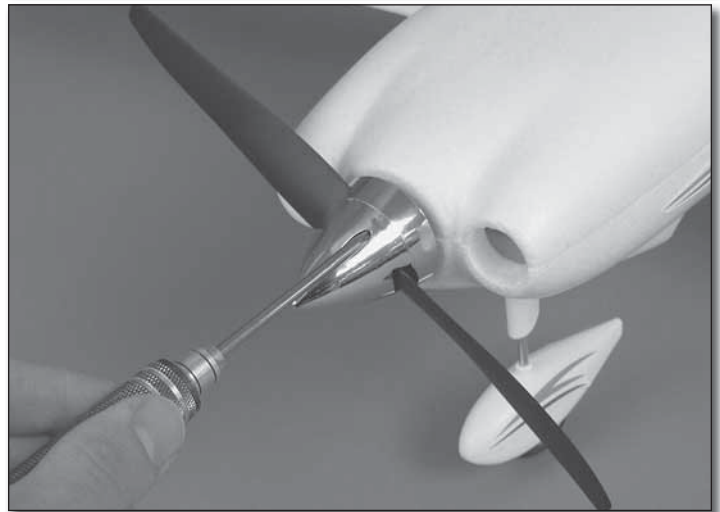
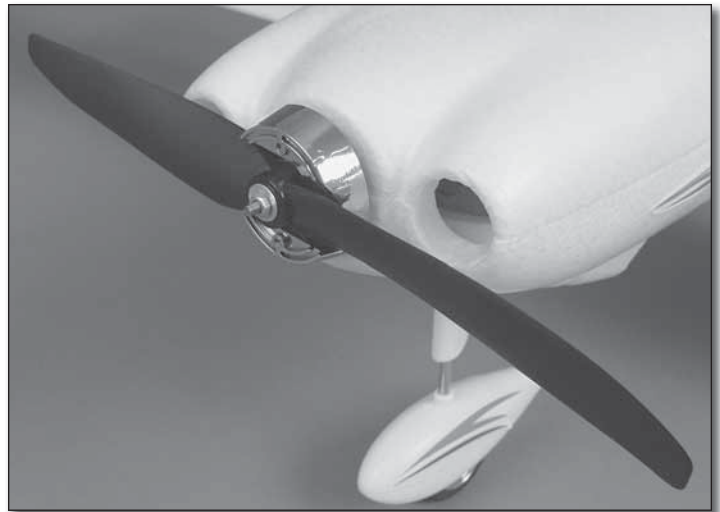
□ 11. Unscrew the bottom half of the nose wheel pant.



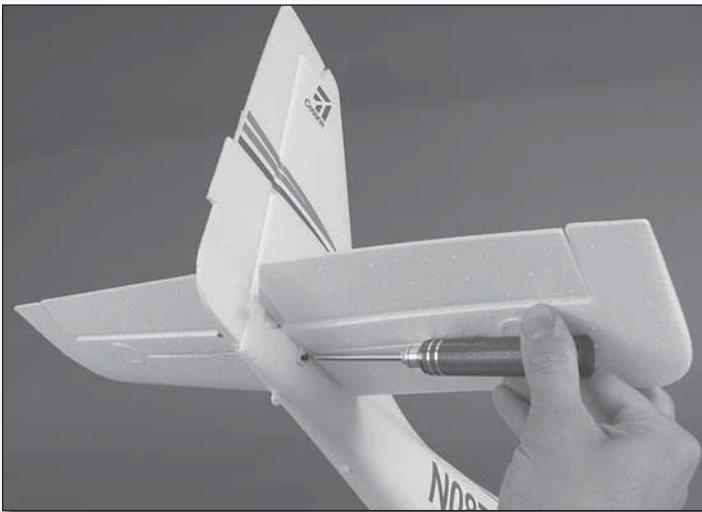
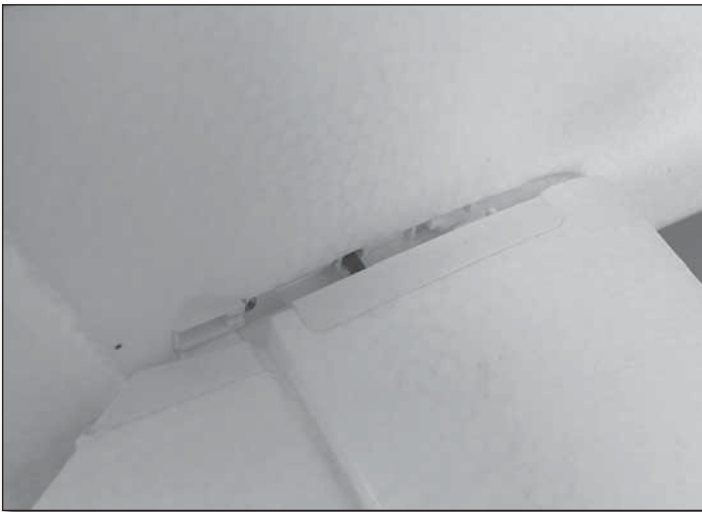
□ 12. Insert the nose wheel axle through the nose wheel and fit it into the grooves in the lower nose wheel pant. Replace the lower nose wheel pant and screw it back into place.



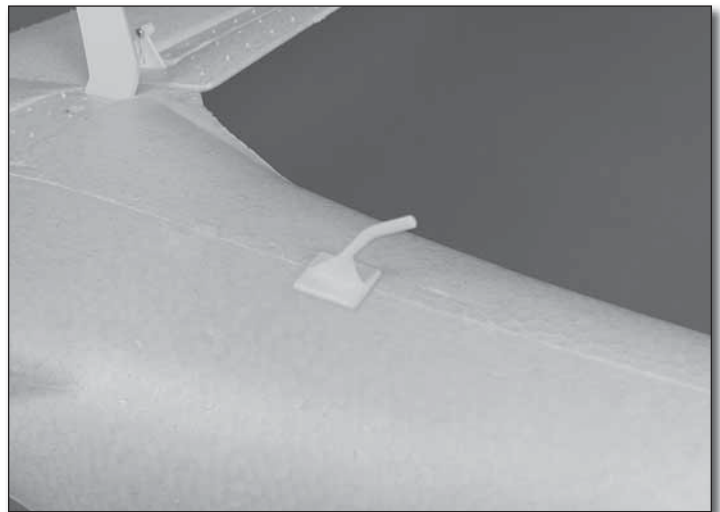
□ 13. Slide the left horizontal stabilizer onto the fuselage. Align the plastic fittings into their mating slots in the fuselage and press the stab half against the fuse until fully seated.



□ 15. Remove the spinner cone by unscrewing the two screws that hold it to the spinner backplate. Install the propeller followed by the prop washer and then the prop nut. Thoroughly tighten the prop nut. Reinstall the spinner cone.



□ 14. Install the right horizontal stabilizer in the same manner. Thread a 2.5x8mm self-tapping screw into each stab mounting hole and tighten them securely.



□ 16. Install the antenna onto the underside of the fuselage. Apply a couple drops of glue to the base of the antenna before fitting it in place. CA, epoxy, white glue, hot glue, or any other household glue would be acceptable.



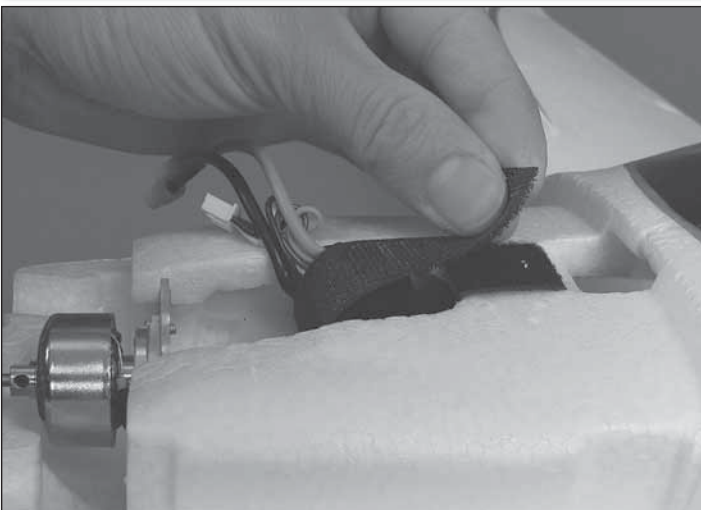
## PREPARE FOR FLIGHT



- ❑ 1. Remove the cowl top by grasping it through one of the front cooling holes and lifting up.



- ❑ 2. With your battery fully charged, slide it into the battery compartment as far as it will go. Secure the battery with the hook and loop strap attached to the battery compartment. **Do not yet plug the battery into the ESC!**



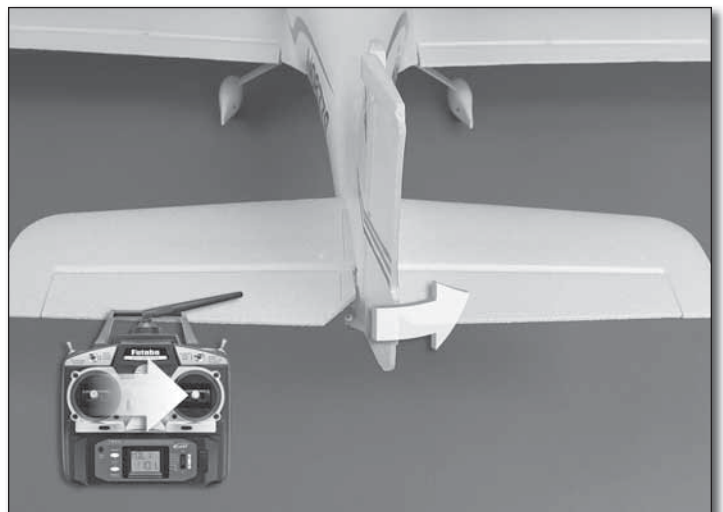
- ❑ 3. Turn on your transmitter. Move the throttle stick to the **middle position** (50% of stick travel). Each and every time before you plug your flight battery into the ESC you must be sure that the propeller is free of anything that could interfere with its rotation and is pointed in a safe direction. Note: If you are using a Futaba radio, move your throttle channel servo reversing switch to the REVERSE position.



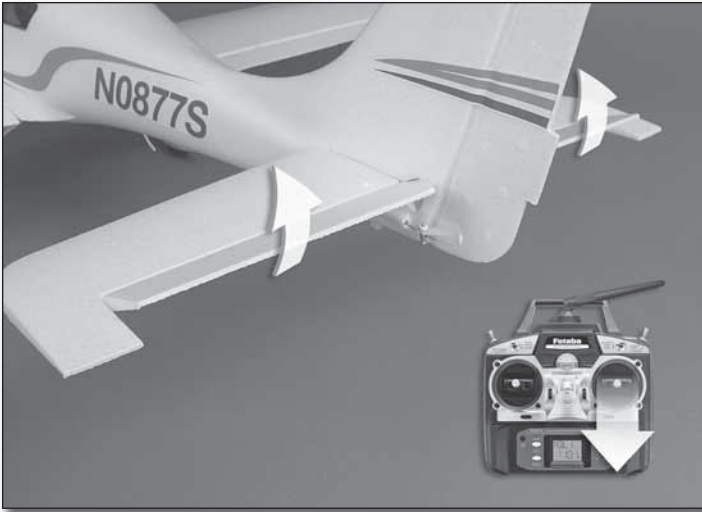
- ❑ 4. Being careful to keep your hands clear of the propeller arc, plug the battery into the ESC. Reinstall the cowl top onto the fuselage and confirm that it is securely clipped into place.

## Check the Control Directions

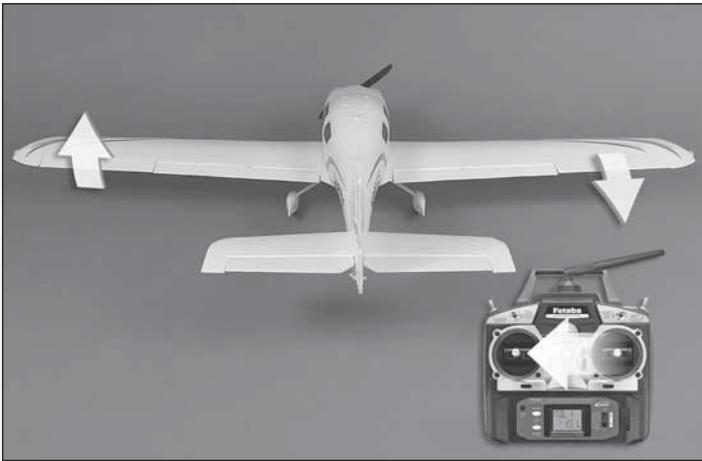
*As described in the previous section, your throttle stick should still be in the middle position. When checking the control directions, keep the throttle stick in this position to avoid arming the ESC until you are ready to operate the motor.*



- ❑ 1. Viewing the model from behind, move the rudder stick to the right. The rudder should move to the right as shown. If it does not, change the position of the rudder channel servo reversing switch.



□ 2. Move the elevator stick down. The elevators should move up. If they do not, change the position of the elevator channel servo reversing switch.



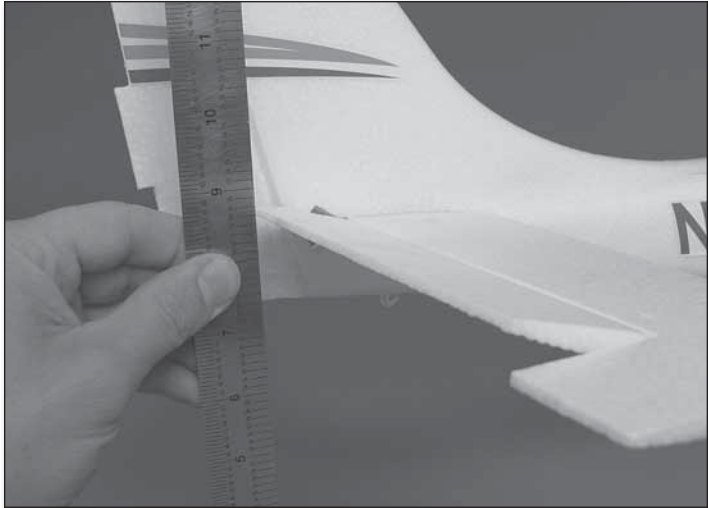
□ 3. Move the aileron stick to the left. The left aileron should move up and the right aileron move down. If they do not, change the position of the aileron channel servo reversing switch.



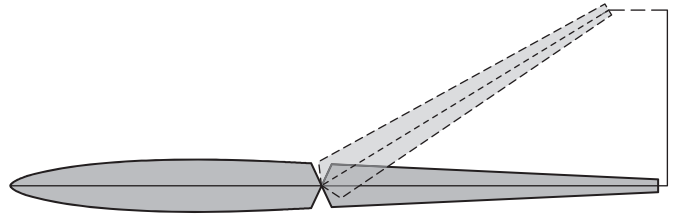
□ 4. Flip the flap switch (or whatever dial or slide you have chosen to use if applicable) toward you (or down depending on the orientation of the switch on the transmitter). The flaps should move down. If they do not, change the position of the flap channel servo reversing switch.

□ 5. With the trim levers all in the neutral position, confirm that the control surfaces are still centered. If necessary, remove the wing from the fuselage and make adjustments to the positions of the pushrods in the screw lock connectors to re-center the control surfaces. Double check that the left flap and aileron are in line with the right flap and aileron.

### Set the Control Throws



Use a Great Planes AccuThrow™ (or a ruler) to accurately measure and set the control throw of each control surface as indicated in the chart that follows.



**NOTE:** The throws are measured at the **widest part** of the elevators, rudder, flaps and ailerons. If you are using a ruler to set your control surface throws, the deflection distance is measured as the height from the center trailing edge of the control surface when moved from the neutral position as shown in the sketch. Deflection in degrees is also provided for an alternative measuring method.

These are the recommended control throws:			
<b>ELEVATOR</b>	<b>Up</b>	15/32"	15/32"
		[10mm] 13°	[10mm] 13°
<b>AILERONS</b>	<b>Up</b>	9/16"	9/16"
		[14mm] 21°	[14mm] 21°
<b>RUDDER</b>	<b>Right</b>	1"	1"
		[25mm] 31°	[25mm] 31°
<b>FLAPS</b>	<b>Down</b>	13/16"	13/16"
		[21mm] 41°	[21mm] 41°

**IMPORTANT:** The Cessna 350 Corvalis has been **extensively** flown and tested to arrive at the throws at which it flies best. Flying your model at these throws will provide you with the greatest chance for successful first flights. If, after you have become accustomed to the way the Cessna flies, you would like to change the throws to suit your taste, that is fine. However, too much control throw could make the model difficult to control, so remember, "more is not always better."

## Operate the Motor



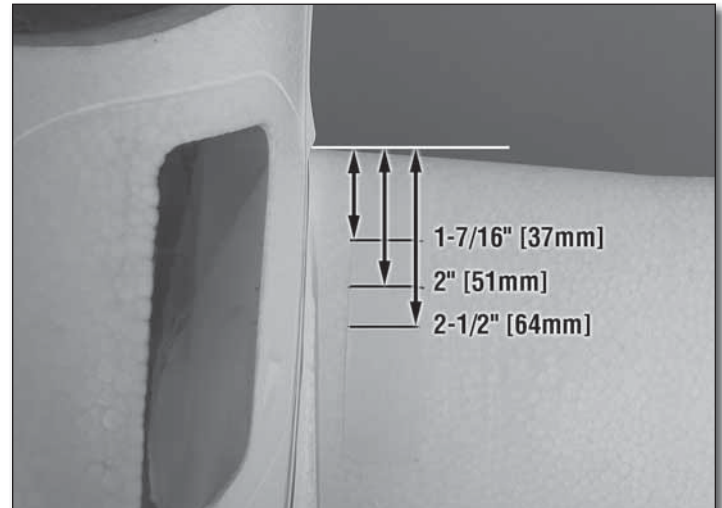
- ❑ 1. Move the throttle stick to the middle position and plug the battery into the ESC. Move the throttle stick to the idle position. The ESC will make an audible tone (either one tone or two tones). **Assume now that the ESC is armed and the propeller will rotate when the throttle stick is advanced!**
- ❑ 2. With a firm grip on the tail of the plane and the propeller pointed in a safe direction, slowly advance the throttle stick. The propeller should begin to rotate. If it does not, return the throttle stick to the idle position, disconnect the battery, and flip the throttle channel servo reversing switch.
- ❑ 3. Move the throttle stick to the middle position. Reconnect the battery. Move the throttle stick to the idle position. With a firm grip on the tail of the plane, slowly advance the throttle stick and confirm that the propeller rotates.
- ❑ 4. The ESC is equipped with a BRAKE feature. We recommend flying the Cessna with the brake OFF. When the ESC is armed, one beep indicates the brake is off. Two beeps indicate the brake is on. To toggle the brake on and off, first disconnect the battery from the ESC. Advance the throttle stick to full throttle and reconnect the battery. After a few moments, the motor will emit a tone (one beep for brake off, one beep for brake on). Move the throttle to the idle position to arm the ESC. If you wish to toggle the brake feature on or off again in the future, repeat this step.

*Note: The motor is connected to the ESC at the factory to rotate in the correct direction. If at any time you disconnect the motor from the ESC for repair or replacement and the motor rotates the wrong direction, simply disconnect any two of the three motor leads and swap their positions.*

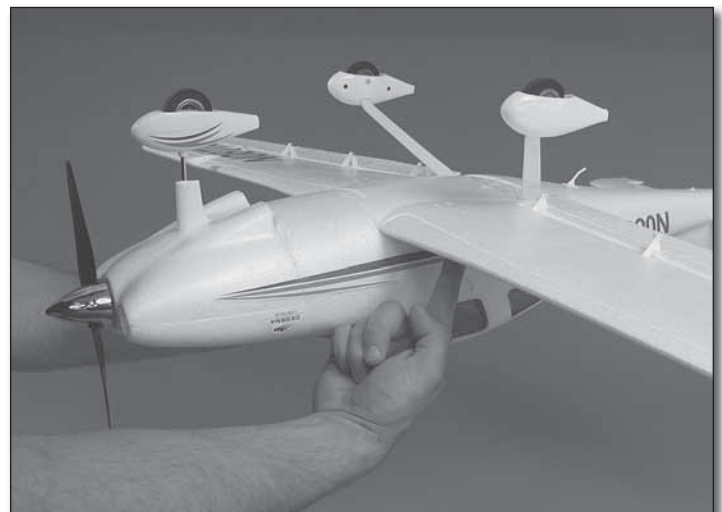
- ❑ 5. Disconnect the battery from the ESC but leave the battery installed in the fuselage to check the C.G.

## Check the C.G. (Center of Gravity)

The C.G. (Center of Gravity) is the location on the wings, measured back from the leading edge on both sides of the fuselage, where the model balances. In addition to the control surface throws, the C.G. has a **GREAT** effect on the way the model flies. If the C.G. is too far aft (tail heavy), the model will be too responsive and difficult to control. If the C.G. is too far forward (nose-heavy), the model will be too stable and not responsive enough. Follow the instructions to make sure the model is balanced properly and the C.G. is in the correct location.

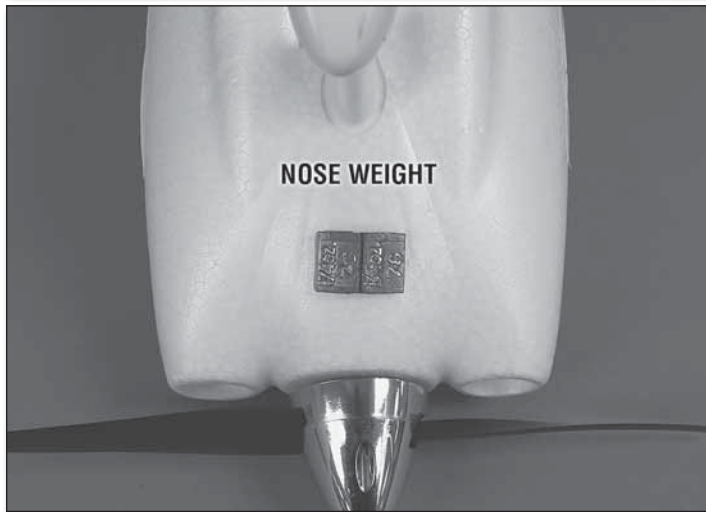
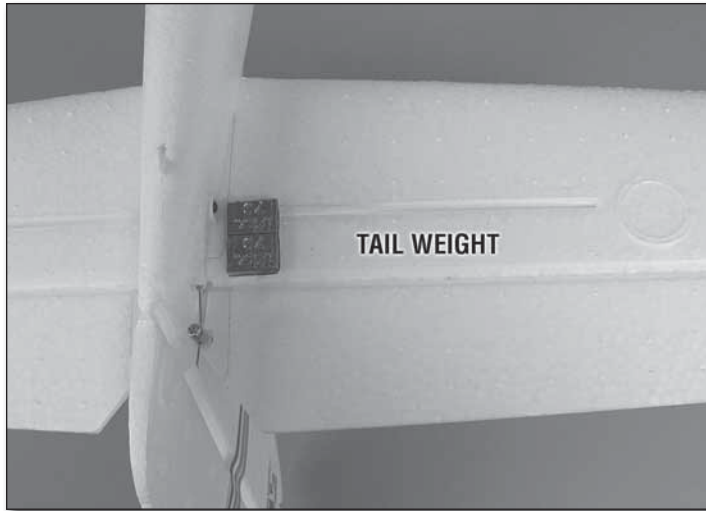


- ❑ 1. Place pieces of masking tape onto the top of each wing panel. Measure back from the leading edge of the wings where they meet the fuselage and draw three lines onto each piece of tape using the measurements shown. These three lines represent the forward limit, recommended and aft limit C.G. positions.



- ❑ 2. With the battery and cowl top installed, place your fingers on the middle balance marks, turn the plane upside down and lift the model. The fuselage should remain level—it may be helpful to have an assistant view the model from the side (or have your assistant lift the model) to see if it is level. If the nose of the plane drops, move your fingers

forward of the middle lines and recheck the balance. If the tail of the plane drops, move your fingers aft of the middle lines and recheck the balance. As long as the plane will balance with your fingers somewhere between the forward and aft lines, the Cessna will be safe to fly. We recommend that the plane balance at or close to the middle lines, at least for your first few flights. Add weight to the nose or tail of the plane as necessary until the plane balances with your fingers on the middle lines. If the tail drops, nose weight will be required. If the nose drops, then tail weight will be required. The best way to add weight to balance the model is to place segments of stick-on lead weight on the fuselage wherever it may be needed. For this, Great Planes stick-on lead weight (GPMQ4485) should be used.



❑ 3. Determine the amount of weight required by placing segments over the cowl or tail where shown, but do not attach the lead yet.

❑ 4. Once you can get the model to balance and you know how much lead will be required, permanently stick it into position. If nose weight is required, you could simply stick it to the bottom of the fuselage just in front of the nose landing gear. If you prefer the lead to be concealed, stick it out of the way in the battery compartment. If tail weight is required simple adhere it to the underside of the horizontal stabilizer.

❑ 5. Recheck the C.G. to make certain the model still balances where required. Once finished, remove the battery. Never charge the battery while it is installed in the model.

❑ 6. Later, once you become an expert at flying your Cessna, you may change the flying characteristics by changing the balance point—but do not go beyond the marks you already made on the top of the wing. Moving the C.G. forward (nose heavy) will improve the model's stability. This could be an advantage on breezy days. Moving the C.G. aft (tail heavy) will make the model more sensitive to control input.

### ***Identify Your Model***

No matter if you fly at an AMA sanctioned R/C club site or if you fly somewhere on your own, you should always have your name, address, telephone number and AMA number on or inside your model. It is **required** at all AMA R/C club flying sites and AMA sanctioned flying events and simply a “good idea” even if flying somewhere else. Write this information on a strip of masking tape and place it on the inside of the cowl top (or simply write the information directly on the inside of the cowl top).

## **FLYING THE CESSNA 350 CORVALIS**

Although the Cessna 350 Corvalis is an extremely sturdy airplane made of durable foam construction, its low wing configuration does not have the self-righting characteristics of a trainer plane and is therefore not recommended for beginner pilots. The Cessna is, however, easy to fly even for pilots with moderate experience. If you have not previously flown a trainer it is strongly suggested that you learn to fly with one first. Or, get the assistance of an experienced pilot to help you with the first few flights (or however many it takes until you are proficient with the entire flight from take-off to landing).

### **Find a Suitable Flying Site**

Find a flying site clear of buildings, trees, power lines and other obstructions. Until you know how much area will be required and have mastered flying your Cessna in confined spaces, a site at least the size of two or three football fields should be adequate—a flying field specifically intended for R/C planes is best. Don't fly within six miles of R/C flying fields and never fly near people—especially children who can wander unpredictably.

### **Perform a Range Check**

As a precaution, an operational *ground range test* should be performed before the first flight each time out. Performing a range test is a good way to detect problems that could cause loss of control such as low batteries, defective or damaged radio components or radio interference. This usually requires an assistant and should be done at the actual flying site you will be using.

First, turn on the transmitter. Then, install the fully-charged battery into the fuselage and hold it in place with the hook-and-loop strap. Connect the battery and install the cowl top.

**Remember, use care not to “bump” the throttle stick. Otherwise the propeller will turn possibly causing damage or injury.**

With the antenna on the transmitter collapsed (not extended), begin walking away from the model operating the controls in a predictable pattern (for example; up, then down elevator. Right, then left aileron. Right, then left rudder). While moving the control surfaces, also vary motor rpm. Have your assistant alert you if the controls fail to respond or if they move suddenly or erratically. You should be able to maintain control up to a distance of approximately 100' [30m].

If the controls respond erratically or if anything else seems wrong, make certain all the servo wires are securely connected to the receiver and that the transmitter and receiver batteries are fully charged. If you cannot find a mechanical problem with the model it is slightly possible that there is radio interference somewhere in the area. One option would be to try another range check at an alternate flying site.

After the range check, fully extend the antenna.

**Note:** *If you are using a 2.4GHz transmitter, consult your radio manual for the proper range checking procedure.*

### **Monitor Your Flight Time**

Monitor and limit your flight time using a timer such as the one on your wrist watch. When the batteries are getting low you will usually notice a performance drop before the ESC cuts off motor power, so when you notice the plane flying slower you should land.

To avoid an unexpected dead-stick landing on your first flight, set your alarm or timer to a conservative 4 minutes. When the alarm sounds you can either land your model or, if you are an experienced pilot, you may continue to fly—planning for a dead-stick landing to see just how long the motor will run. Circle the plane upwind of the landing area until the motor quits. Note the run time, then land.

When you learn how much flight time you are getting you can adjust your timer accordingly. Always be conservative so the motor won't quit unexpectedly and you will have enough battery to land under power.

### **Takeoff**

**Until you have become comfortable with flying your Cessna 350 Corvalis, do not fly if the wind speed is greater than 10 mph [16 km/hr].**

One final check before takeoff: **always double-check the flight control response to your inputs from the transmitter before every flight.** Be certain the ailerons, elevator and rudder respond correctly and that none of the controls have inadvertently become reversed.

**Don't forget to fully extend the transmitter antenna.**

Place the model on your “runway” with the nose pointing into the wind—this will reduce the ground speed that must be reached and automatically provide “heading assist,” making steering and takeoff easier. Slowly advance the throttle, adding rudder correction as needed to keep the model rolling straight. When the plane becomes “light” continue to apply throttle until you are at full-power—all this will happen in a few seconds. When sufficient liftoff speed has been reached gradually apply “up” elevator, allowing the model to leave the ground. Do not “yank” up on the stick—rather, be smooth and allow the plane to establish a gentle climb.

Once you have reached a safe flying speed at a comfortable altitude (approximately 50' [15m]), work the controls as necessary to establish a gentle turn away from the runway.

## Flying

One thing to remember is that, when the plane is flying away from you, moving the aileron stick to the right will make the plane bank to **your** right. However, when the model is flying toward you, moving the aileron stick to the right will make the plane move to **your** left. Of course, the plane is still responding the same way; it's just that your orientation has reversed. This must be kept in mind while learning to fly (and is also a good reason to take flight lessons from an experienced pilot!).

To establish a turn, "up" elevator (pulling back on the stick) is usually required along with aileron input to get the model into a bank. To stop the turn, apply a small amount of opposite aileron.

Once you get the plane into the air and have climbed to a comfortable altitude, the first "order of business" will be to "trim" the model for straight-and-level flight. The model flies best at approximately 3/4-throttle. Adjust the trims on the transmitter to make minor control surface adjustments as necessary until the plane will fly straight without any control inputs. Often, your assistant can reach over and adjust the trims for you.

Remember to keep the model high enough to give yourself time to make corrections, but don't let it get too far away. Otherwise, it will be difficult to see its attitude and which way it is going.

One final check before landing: see how the model will react when it's time to land and you cut the power. To do this, while still at altitude, cut the motor power. The model should establish a gentle, downward glide path. This is how the model will react when it's actually time to land. Add power and climb back up to your original altitude.

Practice a few of these "climb and glides" to judge how far out you will need to be when its time to land.

## Landing

To land, fly down-wind past the landing area. Gently turn into the wind and reduce the throttle so that the airplane initiates a descending glide path. If necessary, add power to extend the glide path to reach the runway. As the model approaches and loses altitude, gradually and proportionally, add "up" elevator to control the glide path and altitude. Continue to apply elevator until the model touches down at which time you should be holding full, or nearly full up elevator. This will cause the airplane to slow and settle to the ground.

**Caution: If, during a rough landing, the propeller becomes jammed and cannot rotate, the battery and speed control will become very hot. Immediately move the throttle down to stop the motor. If you fail to do this, the motor, speed control and/or battery will be damaged.**

## After Flight

Disconnect the battery and remove it from the airplane, then turn off the transmitter. Allow the battery to cool before recharging, or allow the motor to cool before installing another battery for the next flight. Inspect the airplane to make sure nothing has become loose or damaged.



## COMPLETE YOUR CORVALIS WITH THESE PRODUCTS!



### Futaba® 6EX 2.4GHz Computer Radio

*Superior full-range capability  
comes to 2.4GHz technology.*

Once you've experienced the 6EX 2.4GHz FASST system, you won't want to fly any other way! The secret is the all-in-one R606FS receiver: its compact size and light weight makes it easy to mount and perfect for park flyers — but it's also powerful enough to control any type of R/C aircraft, including electric, gasoline-powered and giant-scale planes as well as helis. You can fly without fear of signal conflict or the need for a frequency pin, because Continuous Channel Shifting makes interference virtually impossible, and Pre-Vision™ scans incoming data and applies corrections in advance. With Easy Link™, your receiver will respond only to your transmitter — and you'll enjoy a strong signal regardless of your plane's attitude because Dual Antenna Diversity seamlessly selects the best reception between two antennas. Equip your model with whatever Futaba servos it requires — the 6EX 2.4GHz FASST system is compatible with them all! (FUTK6900)

### ElectriFly™ Triton™ 2 Charger

*DC Computerized Peak Charger,  
Discharger & Cyclor*



Like the popular original Triton charger, the Triton2 offers easy programming. But the adjustable charge current has been increased from 5.0A maximum to 7.0A, and the Triton2 can handle LiPo packs with up to 5 cells in series. A cool blue backlight on the 2 x 16 LCD screen makes for easier reading in any conditions, and the rotating dial has been raised for enhanced feel and more precise fingertip control. The Triton2 is more versatile too: you get alligator clips that mate onto the banana plugs, for quick connection to 12V batteries or power supplies. You'll still be able to charge 1-4 cell lithium-ion and lithium-polymer batteries, and peak 1-24 cell NiCd and NiMH packs at rates you set to peak detection values you choose - before discharging them at custom rates and then repeating the cycle up to 10 times. GPMM3153





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