COMPLETE RTF AIRPLANE

FLYZONE™

SKY FLY 2™

REQUIRES:
8 "AA" Alkaline Batteries

Radio-controlled!
READY-TO-FLY

Please retain this information for future reference.

ASSEMBLE ONLY WITH ADULT SUPERVISION

Please read through this instruction booklet to **THOROUGHLY** familiarize yourself with the assembly and flight characteristics of this airplane before beginning to assemble the kit.

Please inspect all parts carefully before starting assembly! If any parts are missing, broken or defective, or if you have any questions about the assembly or flying of this airplane, please call us at **(217) 398-8970** and we'll be glad to help.

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, 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 buyers are not prepared to accept the liability associated with the use of this product, they are 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.

Printed in China HCAA41xxMnl01

PROTECT YOUR MODEL, YOURSELF AND OTHERS; FOLLOW THESE IMPORTANT SAFETY PRECAUTIONS

Your SkyFly 2 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 SkyFly 2, if not assembled and operated correctly, could possibly cause injury to you or spectators and damage to property.

We highly recommend that you get experienced, knowledgeable help with assembly and during your first flights. This will make your modeling experience more enjoyable. You'll learn faster and avoid risking your model before you are truly ready to solo. Your local hobby shop has information about flying clubs in your area whose membership includes qualified instructors. You can contact the **Academy of Model Aeronautics (AMA)**, which has more than 2,500 chartered clubs across the country. Instructor training programs and insured newcomer training are available through any one of these clubs.

Contact the AMA at the address or toll-free phone number below.

Academy of Model Aeronautics
5151 East Memorial Drive
Muncie, IN 47302
(800) 435-9262 Fax: (765) 741-0057
or via the Internet at: **www.modelaircraft.org**

PRECAUTIONS

1. Assemble the plane **according to instructions**. **DO NOT** alter or modify the model. If you make any modifications, you void your warranty.

2. **Test** the operation of the model **before each flight** to insure that all equipment is operating properly and that the model remains structurally sound.

3. Fly only on calm days (with wind speeds less than 5mph) and in large, open areas free of trees, people, buildings, or any other obstacles.

Remember: Take your time and follow the instructions to end up with a well-built model that is durable and easy to fly. The R/C model hobby becomes more and more enjoyable as your experience grows. Your chances for success and graduation to higher levels are very good if you take your time and follow the assembly and flying instructions carefully and completely. We hope you enjoy flying your SkyFly 2 airplane.

GLOSSARY

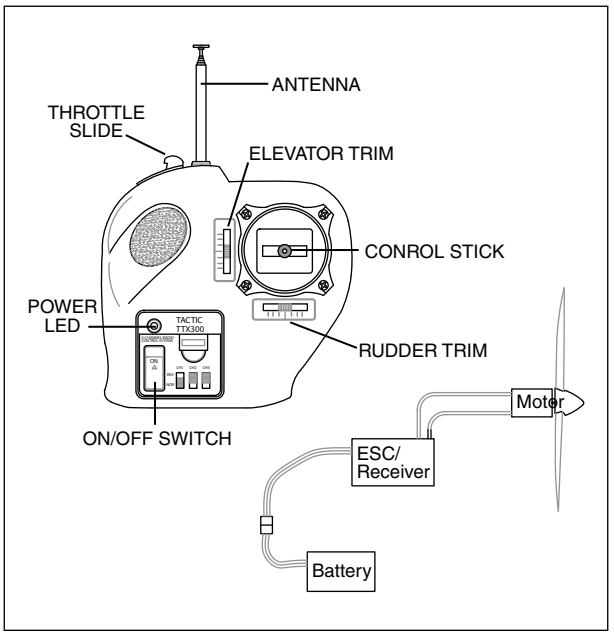
Electronic Speed Control/Receiver (ESC/RX): This unit controls the speed of the motor and control surfaces.

Elevator: Control altitude.

Rudder: Controls direction.

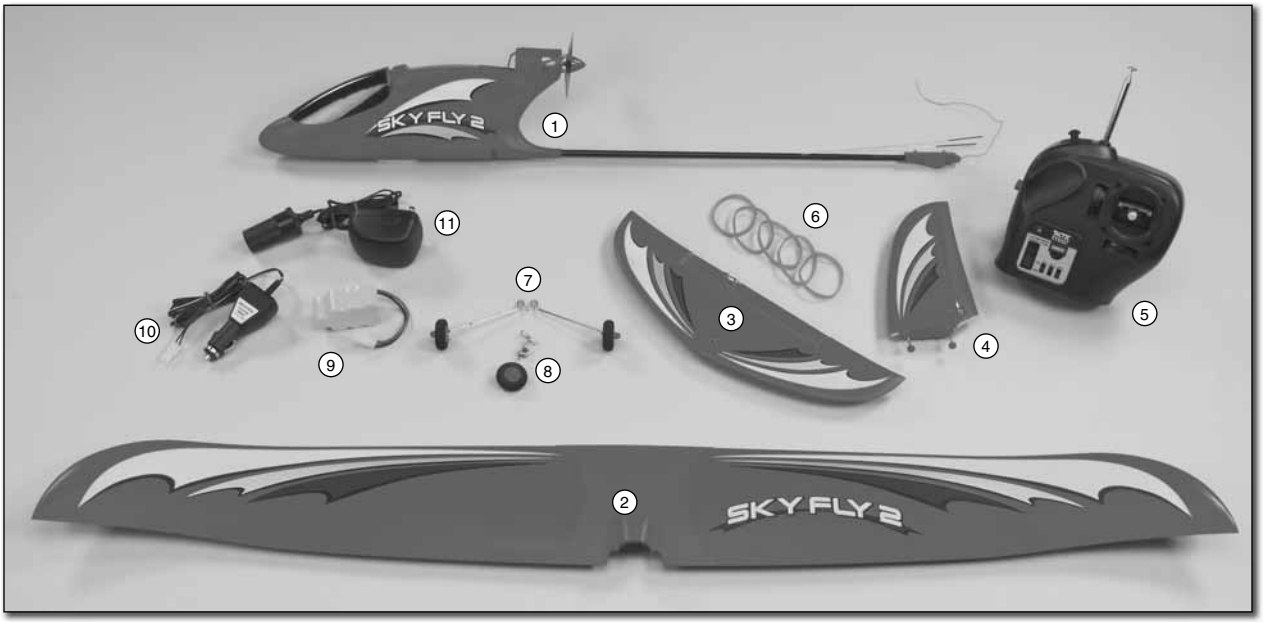
Nickel-Metal Hydride (NiMH) Battery: Rechargeable batteries which are used to power the airplane. NiMH batteries are lighter and smaller than most other types of rechargeable batteries.

Transmitter (TX): This is the hand-held unit that sends the signal to the control unit (or RX). Moving the controls will control speed, altitude and direction.



AIRFRAME PARTS AND HARDWARE

Before starting to build, take an inventory of this kit to make sure it is complete and inspect the parts to make sure they are of acceptable quality. If you need assistance with assembly, contact Product Support. When reporting defective or missing parts, please use the part names exactly as they are written in the parts list.



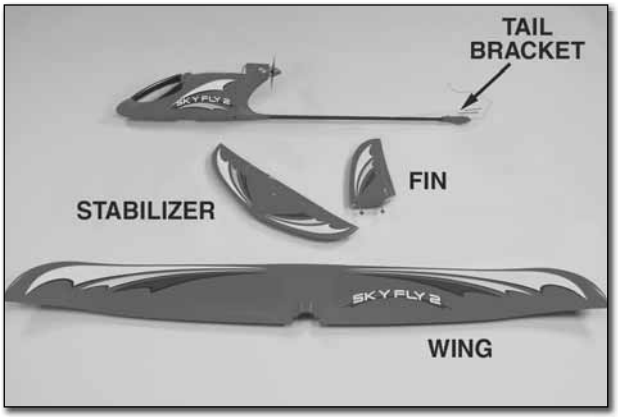
1. Fuselage
2. Wing
3. Horizontal Stabilizer
4. Vertical Fin
5. Tactic 3-Channel Transmitter
6. Rubber Bands
7. Main Landing Gear Assembly
8. Nose Gear Assembly
9. NiMH 8.4V 900mAh Battery
10. 12V DC Peak Charger
11. 120V AC Wall Adapter

FCC REQUIREMENT

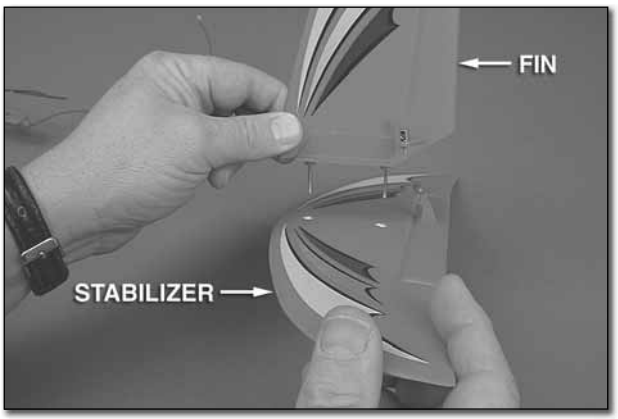
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

CAUTION: Changes or modifications to this product not expressly approved by the party responsible for compliance may void the user's authority to operate the equipment.

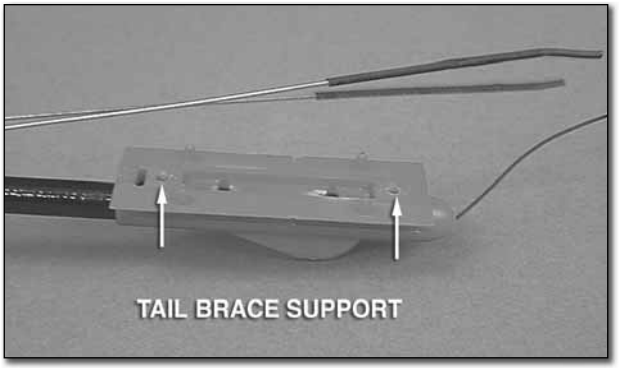
ASSEMBLE THE TAIL

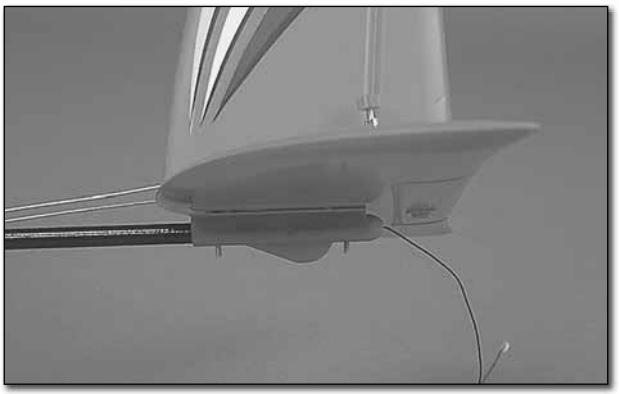


Remove the **fuselage** from the packaging. Lay the parts out on a table. You will notice the receiver antenna wire extends from the back of the fuselage. **DO NOT CUT OFF THE EXCESS WIRE!**

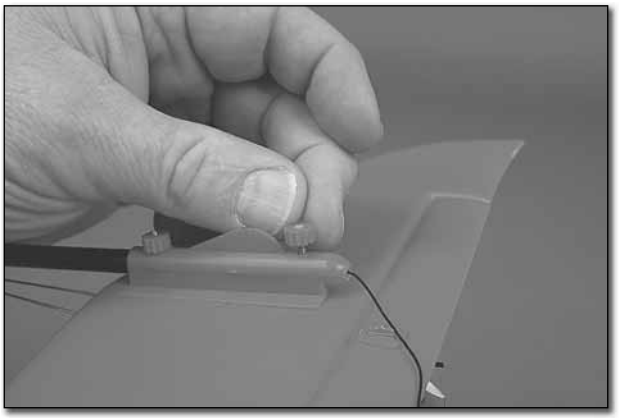


Insert the fin into the holes in the stabilizer.

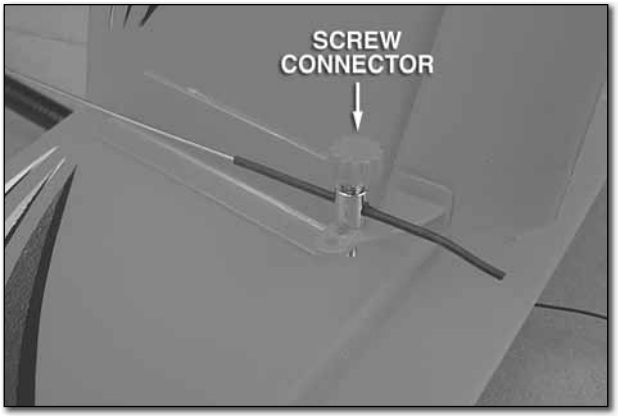




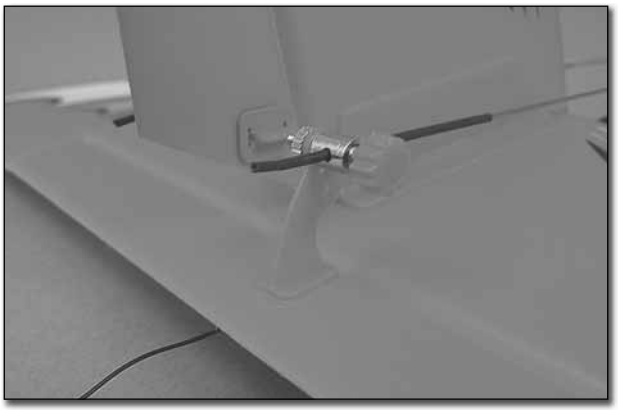
Slide the threaded wire rods into the holes in the tail brace support. **IMPORTANT! Be very careful when inserting the wire through the holes in the tail bracket. The antenna wire runs through the bracket. You must be sure the threaded wire does not bind on the antenna wire when inserting the wires through the tail bracket.**



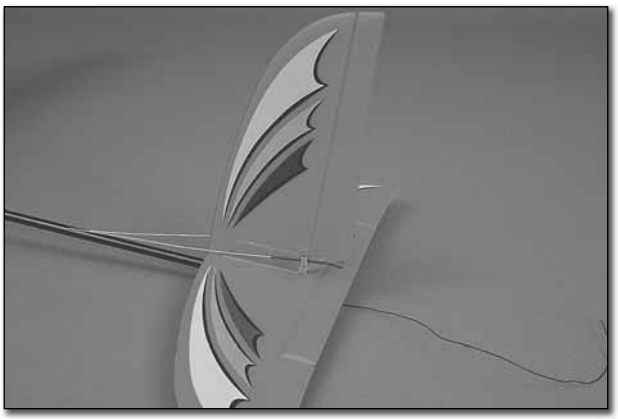
Secure the tail assembly to the tail brace support using two of the red nylon nuts. Tighten the nuts snugly using just your fingers.



Insert the pushrod wire through the hole in the metal connector that is pre-installed to the rudder. Screw one of the red nylon screw connectors into the metal connector, securing the wire to the connector.

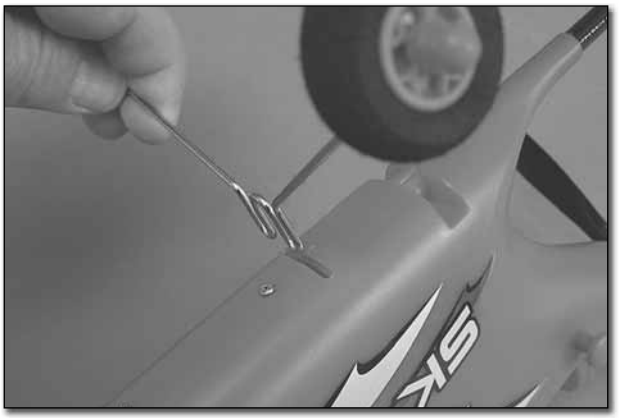


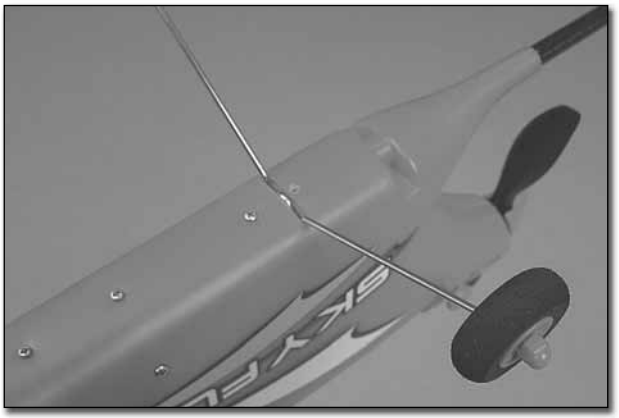
Repeat this for the elevator.



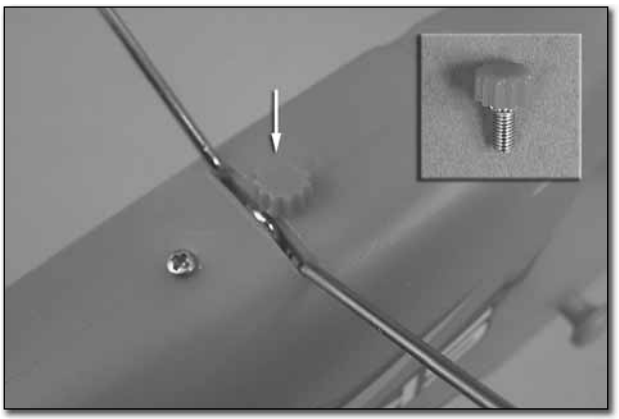
This completes the installation of the tail assembly. We will make final adjustments when we set up the radio.

INSTALL THE LANDING GEAR

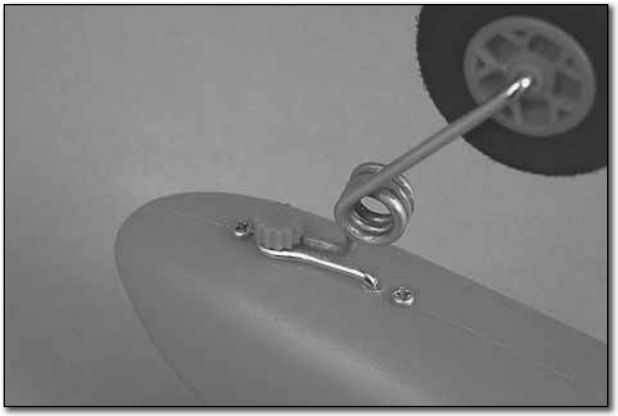




Locate the **main landing gear**. Slide the landing gear into the slot in the bottom of the fuselage as shown.

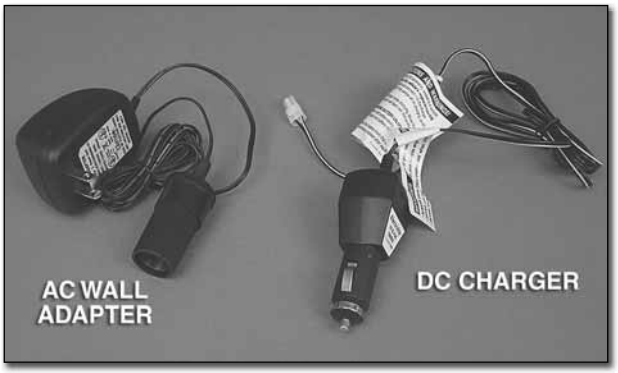


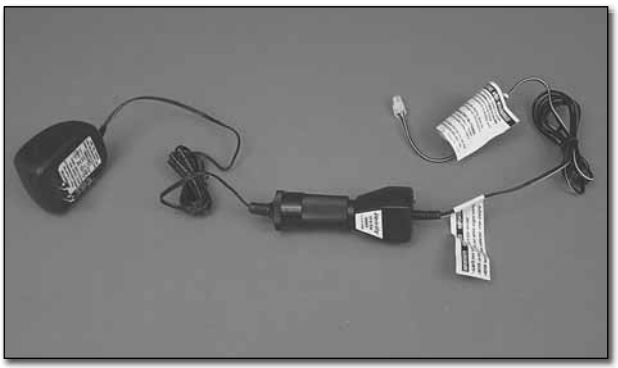
Locate a red nylon thumb screw and thread it into the fuselage to hold the main gear in place.



Follow the same procedure to install the **nose gear** as shown.

CHARGING THE BATTERY PACK





The included 12V DC Peak Charger can be plugged directly into an automobile 12V receptacle. The charger can also be powered with 120V AC by using the AC wall adapter. The AC wall adapter can be plugged into any household outlet and when connected to the charger, it provides a convenient way to recharge the SkyFly 2 battery when a 12V source is unavailable. **NEVER PLUG THE BATTERY DIRECTLY INTO THE AC WALL ADAPTER!**

- To begin charging the battery pack, plug the 12V peak charger into your automobile or 120V AC outlet (using the AC adapter). If plugged into the AC outlet, plug the peak charger into the adapter. (When the charger is plugged into the power source you will hear short beeps. This will stop once the battery is plugged into it).

- Connect the pack to the white connector on the charger. The battery can only connect to the 12V charger in one direction. Do not force it. If using the charger in an automobile, **do not have the engine running—overcharging the battery may result!** (When the battery is plugged in correctly, the charger will stop emitting the short beeps that were heard when you plugged in the charger).

- The red light on the front of the charger will be solidly lit during the charging process.

- The peak charger will automatically detect when the battery pack is fully charged and terminate the peak charge. The red light will flash and beeping will occur when the battery is fully charged. Typical charge time for a depleted pack is approximately 1 hour. The actual time the charger takes to fully charge the SkyFly 2 battery pack may vary. If you try to charge a fully charged battery, it may take up to 10 minutes for the charger to detect the peak charge. The battery will warm during this process, which is normal.

IMPORTANT! NEVER LEAVE A CHARGING BATTERY UNATTENDED! Although the 12V DC Peak Charger automatically detects when the battery is full and terminates peak charge, the battery pack must not be left unattended during charging. It is normal for the battery pack and charger to become warm during peak charge. If, however, the battery pack becomes too hot to handle, immediately terminate peak charge by unplugging the battery pack from the charger and then unplugging the charger. A properly cared for battery will last a long time. Always allow a hot battery pack to cool before use or recharge, and be sure to fully discharge the battery pack before recharging. To fully discharge the battery pack, run the motor at high speed until the motor begins to stop. Remove the pack from the airplane and allow it to cool if necessary.

CHARGING PRECAUTIONS

- ALWAYS place battery and charger outside of the vehicle!
- NEVER use this charger with your vehicle engine running!
- ALWAYS completely discharge your battery before charging!

BATTERY RECYCLING

NiMH

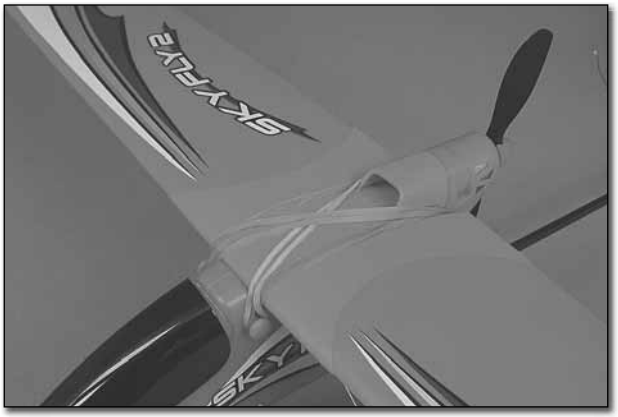
ATTENTION: The product you have purchased is powered by a rechargeable battery. At the end of the battery's useful life, under various state and local laws, it may be illegal to dispose of this battery into the municipal waste system. Check with your local solid waste officials for details in your area for recycling options or proper disposal.

WARNING: This product contains a chemical known to the State of California to cause cancer.

CONNECT THE BATTERY

Open the canopy. Slide the **battery** at a slight angle into the nose of the plane. While pushing it forward, gently push down on the rear of the battery to fit it in place. It will be a snug fit but the battery should rest fully in the battery compartment. **Do not connect the battery until you are ready to fly.**

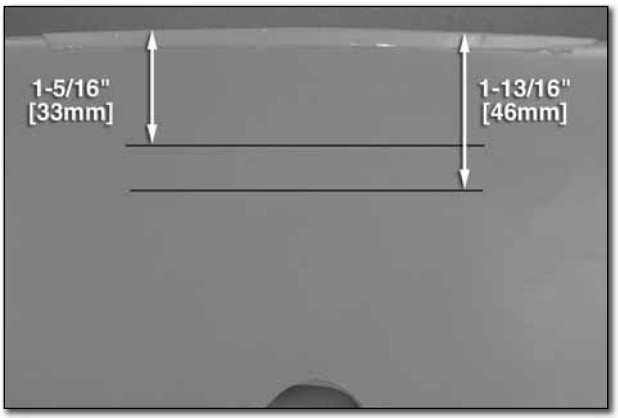
ATTACH THE WING



Place the wing onto the top of the fuselage. Secure the wing with two rubber bands, straight from the front to the rear pegs. Attach two additional rubber bands diagonally over the top of the wing. Only use four rubber bands to attach the wing to the fuselage.

BALANCE THE MODEL

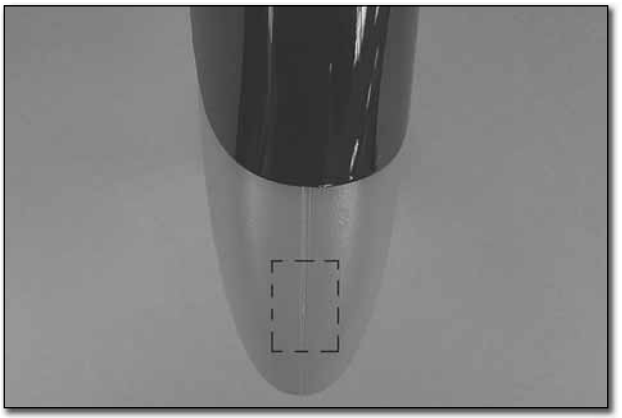
Your model comes out of the box "factory balanced." The following information takes you through the process of balancing the model should you need to do so.



Use a fine-point felt-tip pen to mark the balance range on both sides of the **bottom** of the wing according to the measurements shown in the photo. Note that the measurements are from the **front**, or leading edge of the wing.

With the battery in place, lift the model with your fingertips between the lines under the wing. Position your fingertips where necessary to get the model to sit level, or "balance". If your fingertips are between the lines, the SkyFly 2 is ready to fly.

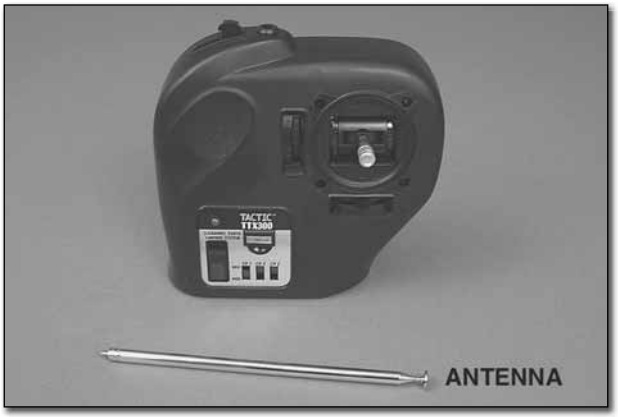
If the model balances with your fingertips ahead of the lines, weight will have to be added to the tail to get it to balance. Tail weight may be stuck to the bottom of the stabilizer at the center. Be sure that any added weight does not interfere with the operation of the elevator.

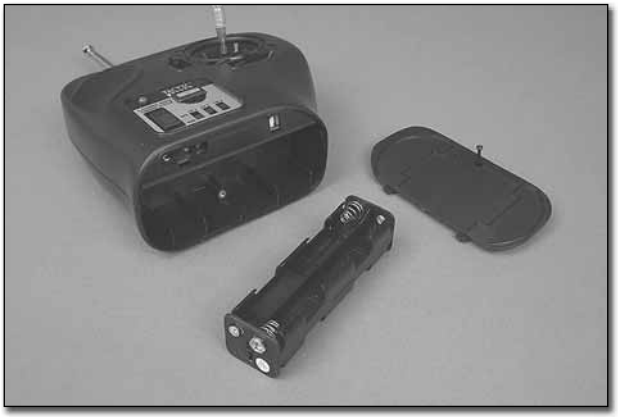


If the model balances with your fingertips behind the lines, weight will have to be added to the nose to get the model to balance. Nose-weight may be stuck to the upper inside of the fuselage Stick-on lead weight may be purchased from your local hobby shop.

Stick on as much weight as required to get the model to balance when lifted by your fingers between the lines. If you add any weight, recheck the balance.

PREPARE THE TRANSMITTER



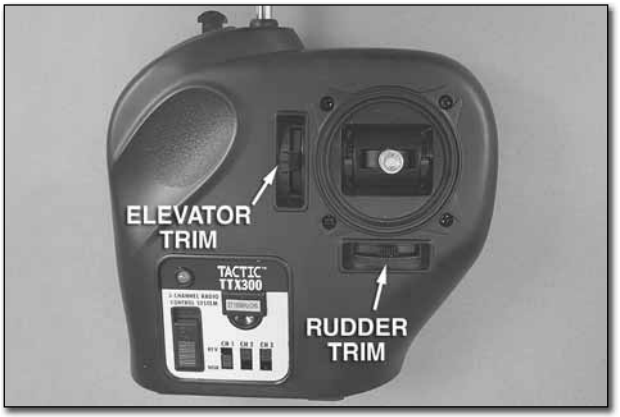


Locate the antenna and screw it into the top of the transmitter. The transmitter that controls your airplane requires power, in the form of eight “AA” batteries. To install the batteries, remove the battery cover on the bottom of the transmitter. Pull the battery holder out of the transmitter case and install eight new “AA” batteries, following the diagram on the holder. Reinsert the battery holder in the transmitter case. Reinstall the battery cover on the bottom of the transmitter case. Switch on the transmitter and check the LED on the front. If the LED is green, it is safe to fly. If the LED is red, you need to install fresh batteries.

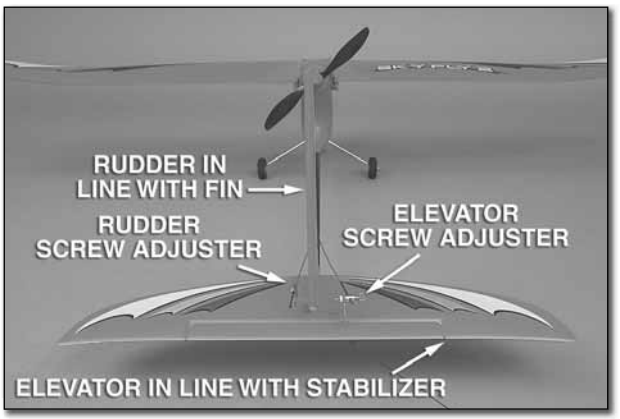
CAUTION!

- Do not mix old and new batteries.
- Do not mix alkaline, standard (carbon-zinc) or rechargeable (NiCd or NiMH) batteries.

CHECK THE CONTROL DIRECTIONS

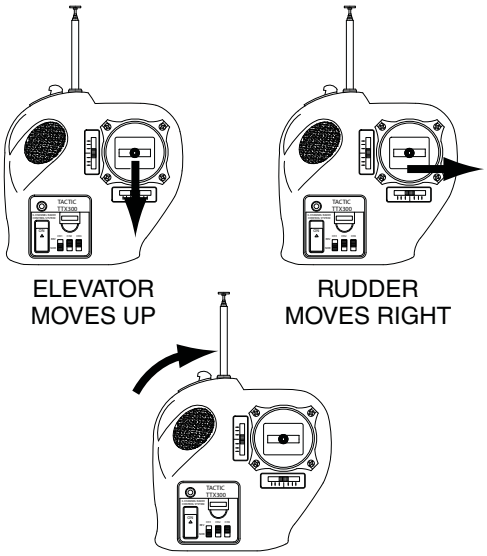


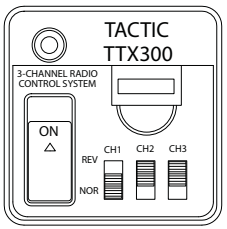
Be sure your transmitter has fresh “AA” batteries installed (not included). Turn on the transmitter and center the trims tabs. **Staying clear of the propeller**, open the canopy from the SkyFly 2 and connect the battery to the **receiver/ESC**.



If necessary, adjust the control surfaces by loosening the nylon screw connectors and moving the control surfaces so that the elevator is aligned with the stabilizer and the rudder is aligned with the fin. Re-tighten the screw connectors.

RADIO SETUP





SERVO REVERSING SWITCHES

CH1: RUDDER

CH2: ELEVATOR

CH3: THROTTLE

Check the operation of all control surfaces. If the control surfaces do not move as shown in the sketch, reverse the direction of the servo reversing switches on the front of the radio.

CHOOSE A GOOD FLYING SITE

The SkyFly 2 should be flown only when the wind speed is 5 mph or less. If the wind is calm or very light, the SkyFly 2 will be docile and easy to control. Also, find an area clear of trees, power lines and other structures. A flying field for R/C planes is best. Don't fly around groups of people, especially children or within 6-miles of existing R/C flying fields.

PREPARE FOR TAKEOFF

Find an open area free of buildings, trees, power lines and people. For your first few flights, fly only when the wind is calm. After you are comfortable with the airplane, you can fly in winds that are no more than 5 miles per hour. If flown in stronger winds, the plane may be blown down wind and not have enough power to get back. If others are flying in the same area, make sure that they are not using the same channel radio system you are. The front of your transmitter has a tag with a number on it (i.e. 1 through 6 and 26.995 through 27.255). This is the channel number and frequency you are using. If someone is on the same channel or frequency, DO NOT switch on your transmitter until they are finished flying.

FLYING THE SKYFLY 2

Your transmitter controls the altitude, direction and speed of the airplane. The stick controls the altitude and direction and the slide on the top, left side of the transmitter controls the speed. When the flight battery power gets too low, the "Auto Cut-Off" feature of the speed control will stop the motor. When this happens you must land. Moving the slide for the throttle to off and then back to full power should yield enough additional power to land the airplane under power. If not the airplane does have a very good glide path and should be able to safely land without power.

First, extend the transmitter antenna and switch your transmitter power switch "ON." **Be sure your throttle slide is moved to the bottom, left position.**

Second, connect your battery to the electronic speed control in the fuselage.

Caution: Keep your hands away from the propeller.

The throttle slide must be first moved to the idle (bottom, left) position in order to activate the throttle function. Once this is done, slide the throttle to the full power position and leave it there for 5 seconds. Move the throttle slide back down to the off position. The propeller is now armed. Moving the throttle stick upward will cause the prop to rotate. The farther the slide is moved, the faster it will spin.

Perform a range check your radio before each flight. Switch on the airplane and then switch on the transmitter. Have a helper hold the airplane. With the transmitter waist high and the antenna collapsed, walk 75 feet away from the airplane, holding the transmitter with the antenna pointing up. Move the control stick, checking that the control surfaces respond. Also, turn the motor on and check the range. If you still have control of the airplane, it is safe to extend the transmitter antenna and fly the airplane. If you do not have control of the plane, make sure the batteries in the transmitter are fresh and the battery in the plane is charged. Also, make sure the wire antenna is extended out the back of the airplane.

With the throttle slide moved fully upwards, hand launch the SkyFly 2 into the wind, at a slight upward angle. **Note:** For the first couple of flights, we recommend having a helper hand launch the airplane. After you become familiar with the flight characteristics of the airplane, it can be flown off a hard surface instead of being hand launched.

Pull the right stick toward you so that the plane climbs at a 20 to 30 degree angle. Allow the airplane to climb a few seconds before turning it.

When your airplane is moving away from you, moving the stick to the left will make your plane turn to the left. Moving the stick to the right will make the airplane turn to the right. By adding a little up elevator (moving the right stick towards you) during the turn, the airplane will turn much tighter. To stop the turn, move the stick the opposite direction until the airplane is flying straight. **Caution:** It only requires a small amount of up elevator.

When the airplane is coming toward you, moving the right stick left still causes left rudder, but your airplane goes to your right. In short, you have to reverse the way you control the rudder. Here's a good way to familiarize yourself with the controls: When the airplane is coming toward you, turn your body so that you are facing the same direction the airplane is going, looking over your shoulder at the airplane. Now when you move the rudder stick left, the plane will go to your left.

Now that you have gained some altitude, it is time to trim the plane for straight, level flight. If the airplane wants to climb when the elevator stick is released, move the elevator trim lever up. If the airplane wants to dive, move the elevator trim lever down. It should require very little trim. Your goal is to have the airplane fly level with the elevator stick centered.

Now, with the airplane flying level, check to see if the airplane is flying straight. If it wants to turn when the rudder stick is centered, move the rudder trim lever opposite the direction the airplane is turning. The airplane should be trimmed so that if you take your hands off of the control stick, the airplane will fly straight and level on its own. Having the airplane trimmed properly makes flying much easier and more enjoyable.

Don't let the airplane get too far away from you. The farther away it is, the harder it is to see what the airplane is doing.

When learning to fly, it is best to keep the airplane high enough so that if you make a mistake, you have enough altitude to correct the mistake.

IT'S NOW TIME TO LAND

It's a known fact among fellow R/C pilots that your airplane **will** land. It is up to you as to where and how it lands. For your first couple of flights we recommend that you attempt to land before the motor stops. Your SkyFly 2 comes with an auto cut-off feature which reserves battery power for safe landings. During your first flight, while at a high altitude, turn the motor off and notice how the SkyFly 2 reacts. This will give you an idea of how the airplane will react during a landing.

To land the SkyFly 2, fly down wind, past the landing area. Gently turn into the wind and reduce the throttle so that the airplane starts to come down. Adjust the throttle as needed to reach the landing area, but not fly past it.

Just before landing, at about 1 foot above the ground, apply a little up elevator to flare (raise the nose of the airplane). This will cause the airplane to slow and settle to the ground.

Caution: If, during a rough landing, the propeller on the SkyFly 2 should become jammed and cannot rotate with the throttle in the run position, the battery and speed control will become very hot. Immediately move the throttle stick down to stop the motor. If you fail to do this, the motor, speed control and/or battery will be damaged.

AFTER THE FLIGHT

Unplug the battery from the airplane and switch the transmitter off. Remove the battery from the battery compartment. Allow the motor and battery to cool before recharging. Check the airplane over to make sure nothing has come loose or may be damaged.

SAFETY CHECKLIST

Always follow this sequence before and after each flight.

TO FLY:

1. Move throttle slide to the "motor off" position (left).
2. Turn on transmitter and extend antenna.
3. Plug in airplane battery.

AFTER FLIGHT:

1. Move throttle slide to the "motor off" position (left).
2. Unplug battery from the airplane.
3. Turn off transmitter.

REPAIRS

Even the best R/C pilots in the world damage their airplanes every now and then. In the unfortunate event that you damage your airplane, repairs are fairly simple to make yourself. If there are any cracks in the wing or fuselage, apply 6-minute epoxy or white glue to the broken areas and hold together with clear packaging tape. Let the glue cure, leaving the tape in place for added strength.

REPLACEMENT PARTS

To order replacement parts for your SkyFly 2, use the order numbers in the parts list. Replacement parts are available only as listed. Replacement parts are not available from Product Support, but can be purchased from hobby shops or mail order/internet order firms. If you need assistance locating a dealer to purchase parts, contact:

Product Support
Phone: 217-398-0007
Fax: 217-398-7721
E-mail: **productsupport@hobbico.com**

Stock #	Description
GPMM7702	12V DC Peak Charger
GPMP7704	NiMH 8.4V 900mAh Battery
HCAA3875	Wing
HCAA3876	Horizontal Stabilizer
HCAA3877	Vertical Fin
HCAA3878	Pushrods
HCAA3879	Main Landing Gear
HCAA3880	Front Landing Gear
HCAA3881	Screw Landing Gear (4)
HCAA3882	Wing Mount Rubber Bands (6)
HCAA3883	Canopy Rubber Bands (2)
HCAA3884	Tail Brace Support
HCAA3885	Vertical Fin Holder
HCAA3886	Control Horn Set
HCAA3887	Screw-Lock Connectors
HCAA3888	Fuselage w/Tail Boom
HCAA3889	Vertical Fin Nuts (2)
HCAA3890	Canopy Cover
HCAA3891	Motor Mount
HCAA3892	AC Wall Adapter w/Plug
HCAA3893	Propeller w/Spinner
HCAG1054	380 Motor
HCAQ3501	7x3 Propeller (2)
TACL31A1	RX/ESC Channel A1
TACL31A2	RX/ESC Channel A2
TACL31A3	RX/ESC Channel A3
TACL31A4	RX/ESC Channel A4
TACL31A5	RX/ESC Channel A5
TACL31A6	RX/ESC Channel A6
TACJ31A1	Tactic 3-Channel Transmitter A1
TACJ31A2	Tactic 3-Channel Transmitter A2
TACJ31A3	Tactic 3-Channel Transmitter A3
TACJ31A4	Tactic 3-Channel Transmitter A4
TACJ31A5	Tactic 3-Channel Transmitter A5
TACJ31A6	Tactic 3-Channel Transmitter A6