

albatros



Flyzone[™]
how high will you soar

ASSEMBLE ONLY WITH ADULT SUPERVISION

Please read through this instruction booklet to **THOROUGHLY** familiarize yourself with the assembly and flight characteristics of this airplane prior to assembly. 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® Inc. 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, Inc. reserves the right to change or modify this warranty without notice. In that Hobbico, Inc. 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.

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.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

PRECAUTIONS

Your micro Albatros 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 Micro Albatros, if not assembled and operated correctly, could possibly cause injury to yourself or spectators and damage to property.

1. Operate the plane **according to the 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 indoors or on very calm days (with wind speeds less than 5mph) and in large open areas free of trees, people, buildings, or any other obstacles.
4. Although the Micro Albatros is designed to be successfully flown by the first time pilot, you may still benefit from the assistance of an experienced pilot for your first flights. If you're not a member of an R/C club, your local hobby shop has information about clubs in your area whose membership includes experienced pilots. You can also contact the National Academy of Aeronautics (AMA) which has over 2,500 chartered clubs across the country. Instructor training programs and insured newcomer training are available through any of these clubs. Contact the AMA at the following address or toll-free phone number:

Academy of Model Aeronautics

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

www.modelaircraft.org

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 flying instructions carefully and completely. We hope you enjoy flying your Micro Albatros plane.

GLOSSARY

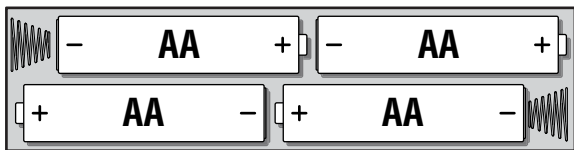
- **Lithium Polymer (LiPo) Battery:** Rechargeable battery which is used to power the airplane. LiPo batteries are lighter and smaller than most other types of rechargeable batteries.
- **Transmitter (TX):** This is the hand-held unit that sends the signal to the control unit, or RX.
- **Rudder:** The flight control on the airplane that controls turning direction. This will yaw the plane so that the nose points in toward the direction of the turn and will cause the wings to roll into the turn.
- **Elevator:** The flight control that controls pitch attitude. By adding power and pitching up, you can make the model climb or loop.
- **Servo:** The device on the model that moves the flight controls.

INCLUDED ITEMS



Check the parts against those shown. If any parts are damaged or missing, please call Hobby Services at: (217) 398-8970.

PREPARE the TRANSMITTER



- ❑ 1. Remove the battery cover on the back of the transmitter and insert four “AA” batteries. Make sure the negative ends of the batteries are touching the springs.

TRANSMITTER CAUTIONS

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



- ❑ 2. Open the charge lead door on the side of the transmitter and extend the charge lead as shown.



- ❑ 3. Close the door with the charge lead exiting from the notch in the door. Ensure that the charge lead is not pinched or severed when the door is reinstalled.

CHARGING the PLANE'S LiPo BATTERY

IMPORTANT!

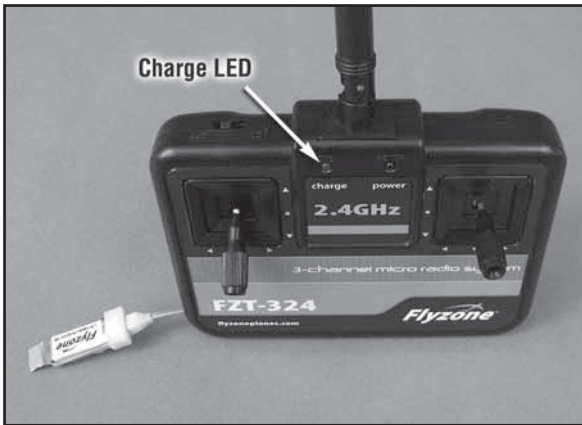
NEVER LEAVE A CHARGING BATTERY UNATTENDED!

WARNING!! Failure to follow all instructions could cause permanent damage to the battery and its surroundings, and cause bodily harm!

- ONLY use the Micro Albatros transmitter to charge the LiPo battery.
- ALWAYS charge in a fireproof location.
- NEVER allow battery temperature to exceed 150°F [65°C].
- NEVER disassemble or modify pack wiring in any way or puncture cells.
- NEVER place on combustible materials or leave unattended during charge or discharge.
- ALWAYS KEEP OUT OF REACH OF CHILDREN.



- ❑ 1. With the power switch on the transmitter set to “OFF”, connect the battery to the charge lead on the side of the transmitter.



- 2. With the power switch in the “OFF” position and the battery connected to the charge lead, the left LED will illuminate yellow.
- 3. When the charging process has been completed, the LED will go out. Disconnect the battery.
- 4. After each flight, remove the battery pack from the airplane and allow it to cool completely before recharging.
- 5. **Do not leave the battery connected to the Micro Albatros for an extended period of time. This can cause permanent damage to the battery.**

BATTERY CHARGING PRECAUTIONS

- 1. Always remove the battery from your Micro Albatros before charging.
- 2. Do not leave a charging battery unattended! Unplug the battery if it gets warm, even if the left LED has not gone out.
- 3. Do not use a different charger to charge the Micro Albatros flying battery.

WARNING: Misuse or malfunction may overheat the battery and charger, resulting in personal injury or damage to surroundings.

BATTERY RECYCLING

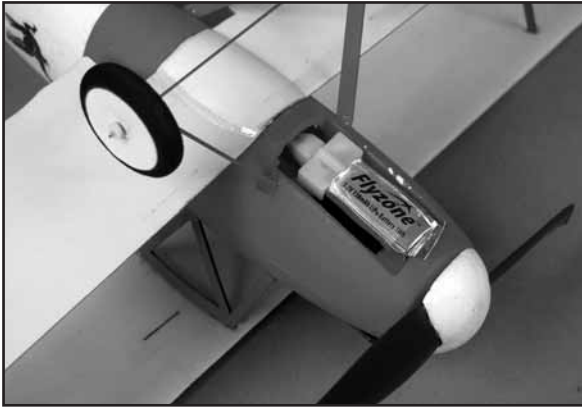
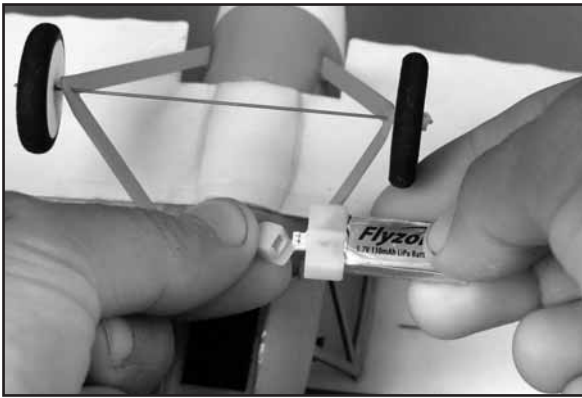
ATTENTION: The product you have purchased is powered by a rechargeable battery. At the end of the battery’s useful life, under various state and local laws, it may be illegal to dispose of this battery into the municipal waste system. Check with your local solid waste officials for details in your area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

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

PREPARE for FLIGHT



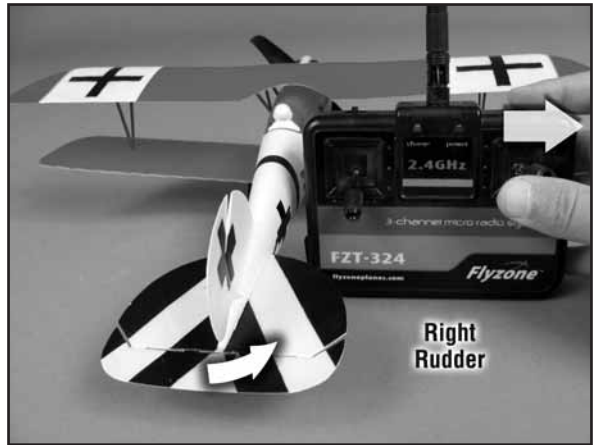
- 1. Be sure your transmitter has fresh “AA” batteries installed. Turn on the transmitter by moving the switch to the right.
- 2. Move the throttle stick all the way down to the idle position. Lay the transmitter face-up on a flat surface within reach so that you don’t accidentally bump the throttle.



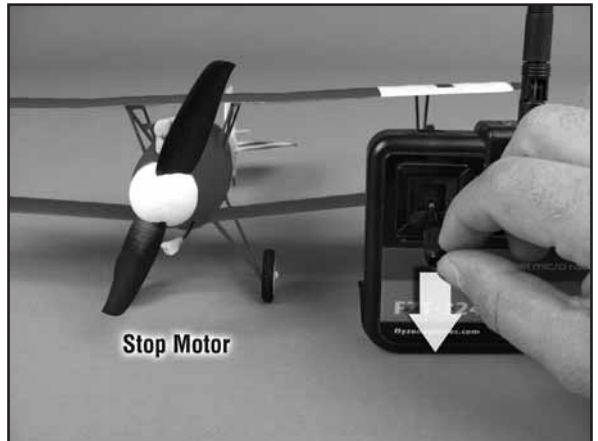
❑ 3. Connect the battery to the airplane and press it into the battery compartment. The hook and loop material will hold it in place during flight. **NOTE:** Always stay clear of the propeller when the battery is plugged into the airplane!



❑ 1. When the right control stick is moved down, the elevator should move up.



❑ 2. When the right control stick is moved to the right, the rudder should move to the right.

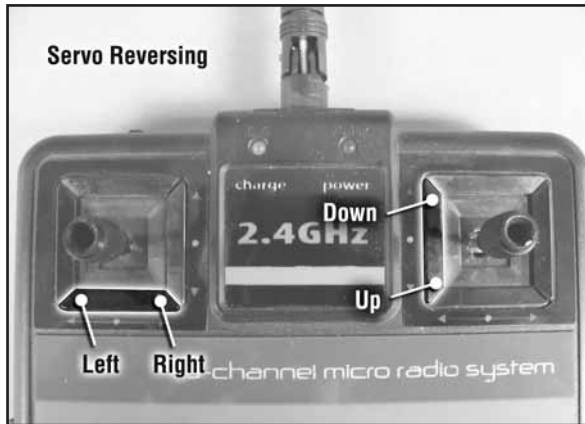


❑ 3. With the left control stick in the down position, the propeller should not be rotating. To test the operation of the motor, be sure to have a firm grasp of the airplane with your hands clear of the rotational arc of the propeller. Be sure to point the nose of the airplane away from people or obstructions. **Note:** When the LiPo battery is first plugged into the Micro Albatros, the propeller will not rotate until the left control stick is first moved all the way down to the “idle” or “off” position. Once this is done, the motor is considered “armed” and will rotate if the left control stick is moved up.

REVERSING THE CONTROL DIRECTIONS

If any of the control surfaces need to be reversed, please use the following procedure.

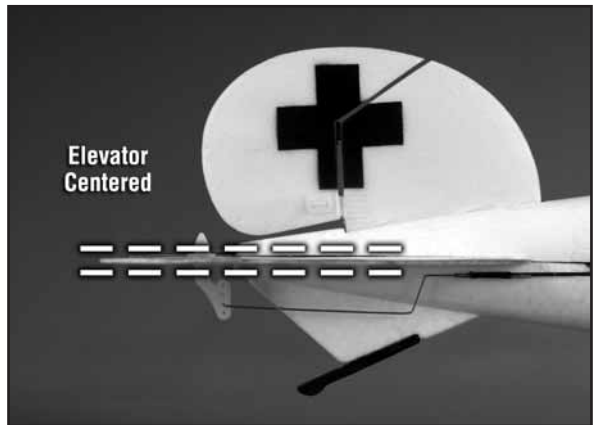
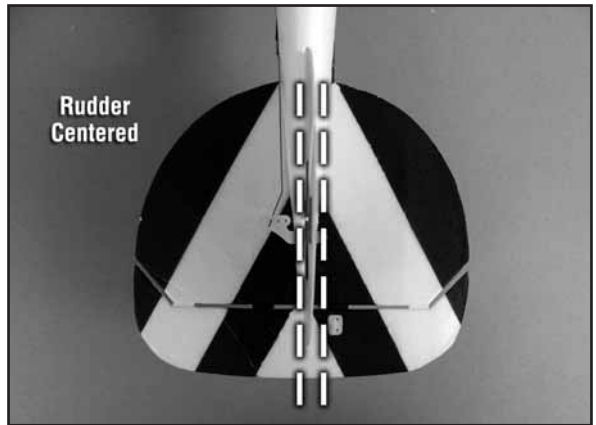
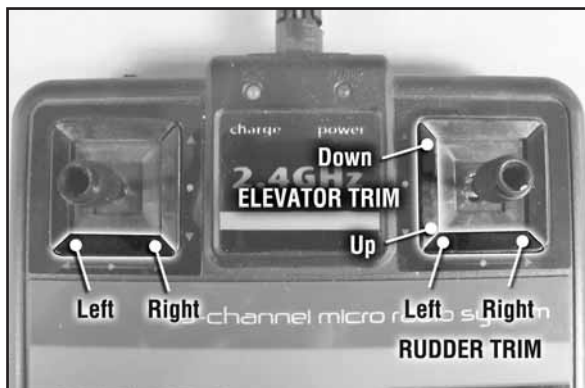
- ❑ 1. Unplug the LiPo battery from the airplane. This will prevent unwanted rotation of the propeller.



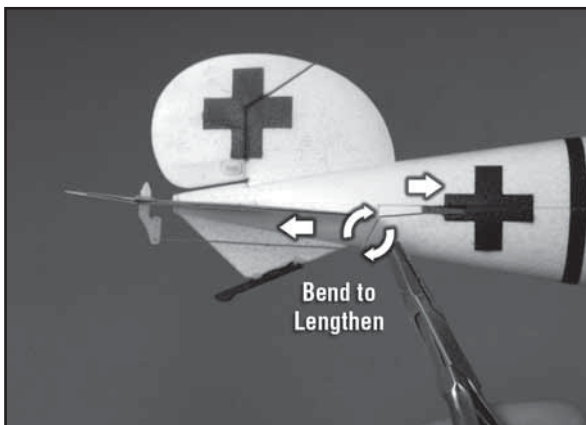
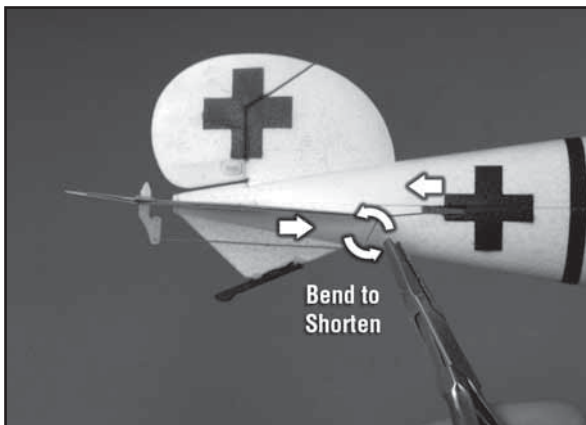
- ❑ 2. If the elevator does not move in the correct direction, you can reverse its movement by pressing and holding the **RIGHT TRIM** or **LEFT TRIM** button below the left control stick and simultaneously pressing the **UP TRIM** or **DOWN TRIM** button next to the right control stick.

- ❑ 3. If the rudder does not move in the correct direction, you can reverse its movement by pressing and holding the **RIGHT TRIM** or **LEFT TRIM** button below the left control stick and simultaneously pressing the **RIGHT TRIM** or **LEFT TRIM** button below the right control stick.

ADJUSTING THE CONTROL TRIM



- ❑ 1. Before making your first flight, use the trim buttons for the right control stick to center the elevator and the rudder. Adjust the trim as necessary using the trim buttons until the elevator is in line with the horizontal stabilizer and the rudder is in line with the vertical fin as shown. Make sure that you have at least three additional "clicks" of trim in either direction from center. Note: The transmitter will make four quick beeps to indicate the end of the trim range you are trying to adjust. **DO NOT** attempt to fly your model with any trim set to an extreme limit.



- ❑ 2. If additional trim is required or you will not have at least three clicks of additional trim in one direction, the bends in the pushrods can be adjusted to “mechanically” change the trim of the control surfaces. Using a set of needle-nose or flat pliers, increase both bend angles equally to lengthen the pushrod or decrease both bend angles to shorten the pushrod.

CHOOSE A GOOD FLYING SITE

The Micro Albatros can fly indoors or outdoors. Space, obstructions, and wind speed are primary considerations when choosing a flying site for your micro flyer. At least until you get used to flying this model, choose a site that will offer the lowest wind speed, the greatest space, and the lowest number of obstructions. Don't fly around groups of people, especially children.

FLYING INDOORS

Although the Micro Albatros is easy to fly in any gymnasium, you should choose an indoor location that is free from obstacles. Indoor tracks or field houses may have retractable basketball nets that can be moved out of the way. Plan your flight path and fly a simple “racetrack” pattern until you get used to flying indoors with this or any other indoor micro flyer. Consider the placement of any gym equipment, nets, vertical beams, or roofing beams. Also consider that most indoor gyms have ventilation systems. Do not fly near ventilation inlets or exhaust ducts. Always obtain the permission of the building owner or manager before flying indoors and respect any safety rules they have established.

FLYING OUTDOORS

Early mornings or late evenings are great times to fly your Micro Albatros outside when the wind is very calm. Wind speeds that gust to no more than 5mph [8km/h] are best. Choose a spot that is sufficiently far from trees, tall vegetation, power lines, phone lines, or other structures. Open grass fields are best, but if your back yard is free from trees or other obstructions you can comfortably fly from your patio.

FLYING the MICRO ALBATROS

Your transmitter controls the altitude, direction and speed of the airplane. Pulling back on the right stick will control the pitch attitude of the model by moving the elevator up. This causes the tail to drop and the nose to point up. When there is enough airspeed, this will make the model gain altitude or climb. Pushing the right stick to the right or left will cause the tail to push out laterally and will cause the wings to roll in the direction of the stick movement. Pushing the right stick to the right, for instance, will cause the model to roll right (the right wing drops as the left wing rises). The left control stick controls the throttle. Pushing the stick forward will increase motor speed, while pulling the stick down will stop the motor.

When you are flying, you will notice that turning an airplane is not like turning a car or boat. When the airplane is in a turn, you do not hold the same amount of right stick to hold the desired right bank angle. Holding the right stick to the right will continue the roll and this will cause

you to roll inverted. To hold a right turn, you will initiate the turn with right rudder and then gradually feed out the right stick command until you are holding very little right rudder to hold a constant bank angle. While in the turn, part of the lifting force is going to pull the airplane in the direction of the turn and part is holding the airplane up. More lift is needed to maintain altitude, so more up elevator will be needed while in the turn. Consequently, when rolling out of a turn with opposite rudder you will need to decrease the amount of up elevator that you hold so the airplane does not climb.

Caution: If you have another Flyzone micro model that uses the FZT-324 transmitter, you should label each of your transmitters to avoid confusion. Each model has its own trim settings and servo reverse settings. It is a good idea to always check that the controls operate in the correct direction before each flight.

❑ 1. Make sure the LiPo battery pack is fully charged and that the transmitter has fresh “AA” batteries installed.

❑ 2. Perform a range check on your radio system before each flight. Switch on the transmitter and then connect the battery to the plane. Have a helper hold the airplane.

CAUTION: Keep clear of the propeller. Walk 50’ [15m] away from the airplane, holding the transmitter with the antenna pointing up. Move the right control stick, and have your helper check the control surfaces for proper response. Move the throttle stick up to check the motor. If you still have control of the airplane, it is safe to fly. 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.

❑ 3. With the throttle stick in the full up position, hand launch the Micro Albatros into the wind (or if inside, launch in a direction that will provide you with the largest available space to make your first turn), at a slight upward angle. **NOTE:** For the first couple of flights, we recommend having a helper hand launch the airplane.

❑ 4. After you have climbed to a reasonable altitude, throttle back to 1/2 to 3/4 throttle.

❑ 5. 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.

❑ 6. 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.

❑ 7. Take note of the amount of up/down or right/left control that is necessary to keep the plane flying straight and level. When you land, apply one click of control trim and then test fly the model again. Repeat this until the model flies straight and level “hands-off.”

❑ 8. Practice throttling back the motor to an idle speed or completely off. Try to maintaining altitude with the elevator as long as possible. Speed will drop off gradually and the wing will stop flying – this is called a stall. The airplane will naturally pitch down the nose to recover. Releasing back pressure on the right control stick will help the wing regain flying speed. Knowing what to do in a stall is important when you lose power or when you are landing.

❑ 9. When you have become comfortable with the flight characteristics of the Micro Albatros, it can takeoff from the ground. A smooth surface is required for the wheels to roll.

LANDING the MICRO ALBATROS

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.

❑ 1. For your first couple of flights we recommend that you attempt to land before the motor stops. When the battery voltage becomes low during flight, the motor will stop rotating to protect the battery from being discharged to an unsafe voltage. Flight speed will begin to decrease before this occurs and you will notice that it will take more throttle to maintain altitude and climb. The Micro Albatros will fly for about 8-10 minutes during normal indoor flying and about 5 minutes during outdoor flying, so using a timer can be helpful.

❑ 2. During your first flight, while at a high altitude, turn the motor off by moving the left control stick all the way down and note how the Micro Albatros reacts. Pitching the nose up with up elevator will slow your descent and control your forward speed and glide slope. Add a little power to slow your descent rate.

❑ 3. To land the Micro Albatros, fly downwind (or the direction opposite your landing direction), past the landing area. Gently turn into the wind (or onto your final approach) and gradually reduce the throttle so that the airplane starts to slow into a smooth descent. Adjust the throttle to maintain the glideslope.

❑ 4. Just before touchdown, at about 6 inches [15cm] above the ground, move the throttle control stick all the way down and apply some up elevator (right control stick down) to land the Micro Albatros safely on the landing gear and tail skid.

❑ 5. When the transmitter battery power gets low (4.5V), the transmitter will beep once every two seconds. When this happens, it's time to land your Micro Albatros. Replace the transmitter batteries with fresh alkaline batteries.

CAUTION: If, during a rough landing, the propeller on the Micro Albatros should become jammed and cannot rotate with the throttle in the run position, the battery and airplane electronics could become damaged. Immediately lower the throttle to stop the motor.

AFTER the FLIGHT

Disconnect and remove the battery from the airplane. Then, switch the transmitter off. Allow the motor and battery to cool before recharging. Check the airplane over to make sure nothing has come loose or may be damaged. Check the wing strut and landing gear attachment points for security, and the elevator and rudder control horns.

BINDING the TRANSMITTER to the MODEL

If the model does not respond to control inputs when you power it up, the transmitter (Tx) may have lost communication with the receiver (Rx). To bind the model to a specific Tx, please follow these instructions.



❑ 1. Move the throttle stick all the way down to the OFF position. Turn on the transmitter.

❑ 2. Hold the model and stay clear of the propeller. Connect the LiPo battery to the model.

❑ 3. Press and hold the center of the throttle trim rocker button at the green dot labeled on the transmitter. You will hear a series of beeps until you hear one long beep. Release the button.

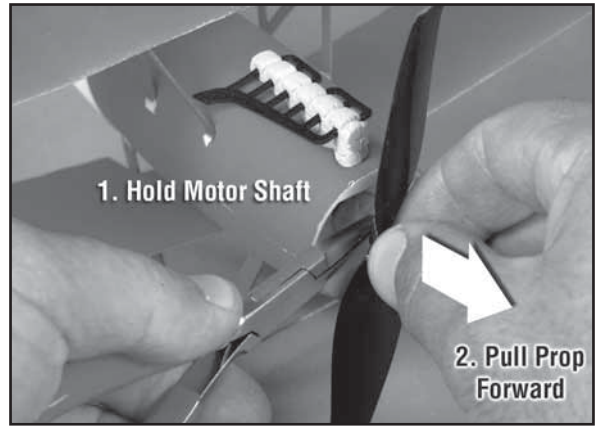
❑ 4. Your model should now be bound to the transmitter. Check the control directions

REPAIRS

Spare parts are available to repair your Micro Albatros. Please see the spare parts list earlier in this manual for the parts available and the part numbers.



❑ 1. If your model gets damaged, the best way to repair it is by using foam-safe cyanoacrylate (CA) adhesive (GPMR6069) and foam-safe CA accelerator (GPMR6035). CA accelerator can speed up the cure of CA, but be careful not to spray parts directly as they will cure too fast and create heat that will melt the foam structure. A #11 hobby knife (EXLR9018) and a pair of thin pliers (HCAR0625) or hemostats are also nice to keep on hand when you go flying. Clear household tape or hinge tape (DUBQ0916) can be helpful when repairing the elevator or rudder hinges. Lighter fluid (naphtha) is a solvent that debonds the adhesive used to stick the fuselage or other foam parts together. Apply sparingly and use caution as this is flammable. All of these supplies can be purchased at your local hobby shop and hardware store.



❑ 2. If you break the propeller, you can replace it easily. Carefully remove the foam spinner cone from the propeller using your hobby knife or a small flat blade screwdriver. Hold the propeller shaft firmly with a pair of small pliers. Grasp the propeller hub and rotate the propeller while holding the prop shaft stationary as you pull the propeller off the shaft. Fit a new propeller with the curved face of the propeller blade facing forward, pressing the prop all the way onto the prop shaft. Using a few drops of foam-safe CA on the inside of the spinner, attach the foam spinner to the new prop.



REPLACEMENT PARTS LIST

To order replacement parts for your Micro Albatros, use the order numbers in the list below. 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:

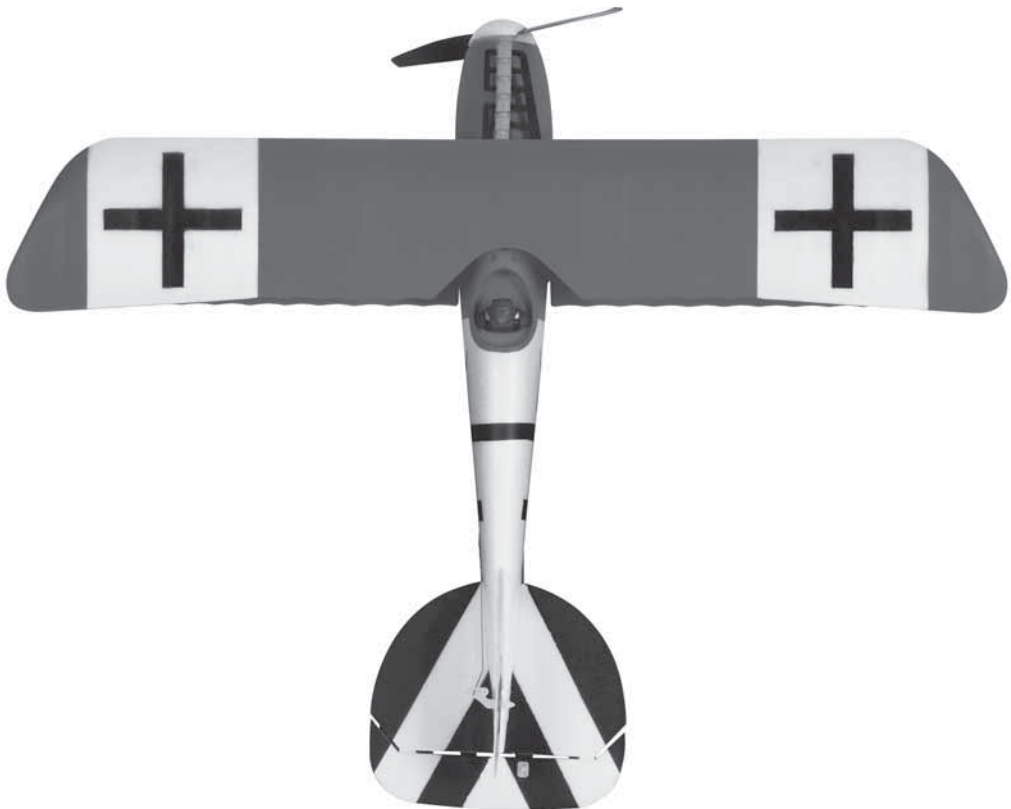
Product Support

Phone: 217-398-0007

Fax: 217-398-7721

E-mail: productsupport@hobbico.com

Stock No.	Description
HCAA6342	Wing Set
HCAA6343	Tail Set
HCAA6344	Wing Struts
HCAA6345	Fuselage
HCAA6346	Pushrod Set
HCAA6347	Landing Gear
HCAA6348	Propeller & Spinner
HCAA6349	Pilot & Dummy Engine Set
HCAA6350	Gearbox
HCAA6351	Machine Gun Set
HCAA6352	Control Horns
HCAA6353	Decals
HCAA6307	Motor
HCAA6309	130 mAh LiPo Battery
HCAL7600	2.4GHz Tx
HCAL7601	Micro Control Unit (Rx/ESC/Servos)





Flyzone™
how high will you soar