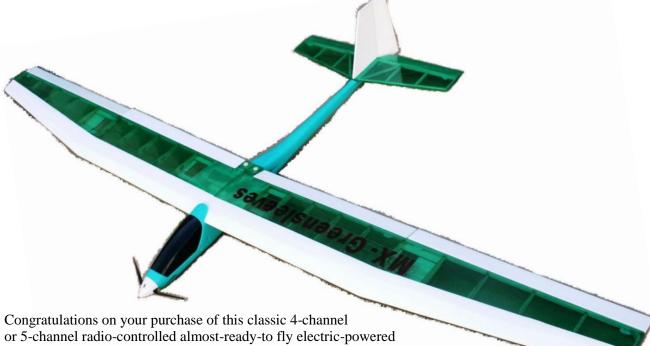
# GREENSLEEVES

CLASSIC 4- (or 5-) CHANNEL ARF RC GLIDER



or 5-channel radio-controlled almost-ready-to fly electric-powered sports-aerobatic glider! This model includes ailerons, rudder, elevator and throttle controls plus flaps (the flaps may also be setup as spoilers). With its smoothly contoured spinner, folding propeller, rugged fuselage and built-up, Mylar covered removable 2-piece wing, it is rugged enough for use as a trainer or to be enjoyed as an everyday flyer, and it is large enough to gracefully deal with most of the effects of wind or turbulence.

We invite you to enjoy the pride of ownership and the joy of flying this graceful ARF EP Glider.



I.	Safety precautions and assembly tips	1	V.	Special features	4
II.	Warranty, liability waiver & return policy	2	VI.	Assembly instructions	4
III.	Specifications	3	VII.	Setup and adjustments	7
IV.	Parts list	3	VIII.	Storage, field setup & preflight checks	7

# I. SAFETY PRECAUTIONS & ASSEMBLY TIPS (IMPORTANT – PLEASE READ THIS SECTION BEFORE YOU BEGIN ASSEMBLY)

1. This product should not be considered a toy, but rather a sophisticated, working model aircraft that functions much like a full-scale airplane. Because of its performance capabilities, this product, if not assembled and operated correctly, could cause injury to you or spectators and damage to property. Maxford USA provides you with a high-quality, thoroughly tested model airplane kit with assembly instructions. However, the quality

4. Temporarily position your receiver in the fuselage under the front edge of the servo tray.

with your motor to install the motor in the nose as shown. (NOTE: The X-mount supplied with a Maxford USA Uranus 35425 motor may not be necessary. Instead, we supply a motor mounting plate with holes predrilled at 25 mm on-

center as shown at the right. If your motor requires different spacing, you may drill new holes in the metal mounting

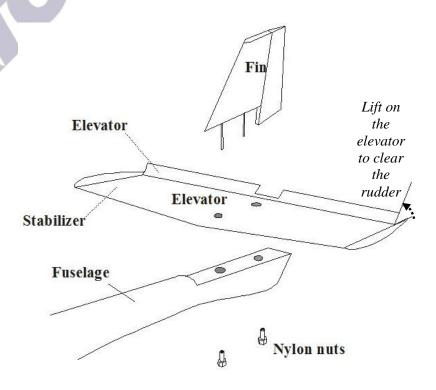
plate or you might elect to install your motor by substituting washers for the metal mounting plate as shown at the right.)

5. Use the supplied metal mounting plate and the hardware provided

- 6. Connect your ESC's 3 leads to your motor. Position your ESC on either side of the motor and secure it to the inside of the fusealge with double-sided tape (not supplied).
- 7. Connect the ESC's servo-like lead to the throttle port on your receiver.
- 8. With NO propeller installed on your motor, test your motor's direction of rotation as follows:
  - a. Set your transmitter's throttle and throttle-trim controls to minimum and switch ON your transmitter.
  - b. Switch ON your radio's power and connect your LiPo flight battery to the ESC.
  - c. After you hear a series of initialization sounds, carefully and slowly raise the transmitter's throttle to no more than 25% of maximum and observe the propeller's direction of rotation. The propeller should be rotating clockwise as viewed from the rear of the airplane.
- 9. If the motor powered up in the wrong direction, swap either 2 of the 3 ESC-to-motor wires and repeat the above test to ensure the motor rotates in the correct direction.
- 10. You will determine the final position of your battery as you adjust the center of gravity after assembly is complete. (NOTE: Leave you battery disconnected from your motor until you are ready to fly.)

#### **B. TAIL SURFACES:**

- 1. Use the small guide-holes on the sides of the rudder and elevator and the hardware supplied with the control horns to securely attach a control horn to the elevator and
- 2. Align the vertical stabilizer at 90degrees to the horizontal stabilizer.
- 3. As shown at the right, lift the elevator fully to obtain clearance to position the vertical stabilizer onto the top of the horizontal stabilizer.
- 4. Insert the 2 long bolts (built-into the base of the vertical stabilizer) down through the 2 holes in the horizontal stabilizer.
- 5. Tighten the two long plastic nuts from beneath the tail end of the fuselage to fix the complete tailsurfaces in place.



Shown without the supplied

metal motor mounting plate

X-mount supplied with

motor is not used

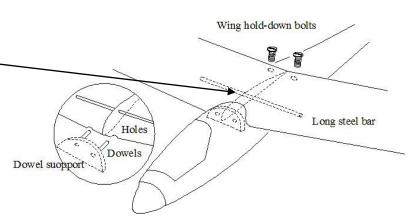
- 6. Elevator and rudder pushrod connections: Connect the "Z-bend" end of the elevator and rudder pushrods to the servo horns and the clevis-ends to the control-horns of elevator and rudder.
- 7. Ailerons (the outer control surface on each wing panel):
  - a. Use epoxy to attach the pedestals to the servo hatch covers. Use the hardware provided with your servos to mount the aileron servos on their pedestals as shown.
  - b. Attach an extension to each aileron servo.

    (REMINDER: We recommend using optional Maxford USA servo-extension safety clips to secure all servo extension and Y-cable connections.)
  - c. Use a length of coat-hanger or heavier wire to guide the aileron-servo extensions from each servo bay out through the root rib of each top wing panel.
  - d. Secure the aileron servo hatch covers to their wing panels with 5/16-inch (1cm) wood screws.
  - e. Position and mount the aileron control horns directly behind your aileron-servo's output arms.
  - f. Attach the supplied aileron pushrods between the aileron control horns and aileron servo output arms.
  - g. Guide a Y-harness' servo-like connector to your receiver and connect its servo-like lead to your receiver's aileron port.
- 8. Flaps and Spoilers (the inner control surface on each wing panel): To use the flaps, repeat steps 'a' through 'g' above to install 2 more servos, 2 more extensions, and 1 more Y-harness. Mark the 2 aileron-servo extensions "A" and the 2 flap-servo extensions "F." If you will not use the flaps, use transparent tape to secure each flap to its adjoining wing panel near the fuselage. To setup your Greensleeves' flaps to also act as "spoilers," connect your flap servos to a channel on your transmitter that is controlled by a 3-position switch or a rotary knob; place the transmitter's 3-position switch or rotary knob is in its center position and adjust your flap/spoiler servos and the flap/spoiler linkages so each flap/spoiler is 'even' with the bottom of its wing panel; then adjust the linkages and/or your transmitter to obtain the desired amount of travel when you flip the switch or roatate the knob to lower the flaps (to increase lift and slow your Greensleeves) or raise these same control surfaces as spoilers (to reduce lift and help your Greensleeves to gently decend. (NOTE: Ensure the angle of each flap/spoiler is the same as the other or the 'flaps' or 'spoilers' might cause your Greensleeves to roll toward its left or right.)
- 9. Adjustment of push-rods: The push-rods are adjusted by turning the clevis clockwise or counter-clockwise. Adjust the push-rods so that when the servo arms are in a neutral position, the control-surfaces are also at neutral.

#### C. ASSEMBLING & MOUNTING THE WING:

The GREENSLEEVES features plug-in wing panels which are easily assembled and attached to the fuselage for flying and may be quickly disassembled after flight for easy transportation and storage.

- 1. Insert the wing dihedral joiner (a straight steel bar) in the hole in the root rib of each wing panel and slide the two panels firmly together.
- 2. Connect the left and right aileronservo extensions to the 2 free ends of the ailerons' Y-harness. If you are using flaps/spoilers, connect the flap-servo extensions to the 2 free ends of the flaps/spoilers Y-harness.
- 3. To mount the wing onto the wing saddle on top of the fuselage,



Rudder pushrod

N========

Aileron or flap servo

Elevator pushrod

Rudder servo

Elevator

servo

observe the 2 dowels inside the fuselage and two holes near the center of the leading edge of the wing as shown in the diagram on the preceding page. Align the wing with the dowels and let the dowels slip into the holes as you allow the wing to settle into place on the fuselage.

- 4. Ensure the aileron and flap extensions and Y-harnesses are tucked into the fuselage fully and are not pinched between the wing and the fuselage.
- 5. Insert the 2 plastic hold-down bolts through the holes in the trailing edge of the wing. Guide these bolts into the nuts built-into the wing saddle. 'Snug' (but do not overtighten) these 2 plastic bolts against the wing.
- 6. To install the cockpit canopy, place the canopy over the cockpit as shown at the right and allow the magnets to hold it in position.



### Congratulations. Assembly is finished!

#### VII. SETUP & ADJUSTMENTS

- 1. Center of gravity (CG): For your initial flight we recommend the aircraft should balance (neither nose up nor nose down) when lifted at a point approx. 2 5/8-inches (6 cm) behind the leading edge of the wing near the fuselage. Depending on your choice of radio, power system, setup and personal preference, you may or may not need to move the battery and/or add more weight in the nose. Once you have adjusted the CG to your taste, we recommend using hookand-loop material to safely secure your battery during flight.
- 2. Servo centering and direction: If you fly mode 2 pull the right stick toward you and the trailing edges of the elevator should deflect upwards; push the right stick to the right, the right aileron should deflect upwards and the left aileron should deflect downwards; push the left stick left and the rudder and tailwheel should deflect to the left as viewed from the rear of the fuselage.
- 3. Choose which holes in the servo arm and in the control horn to adjust the control throws. Or, if you are using a 'computer radio,' for initial flights set the elevator, rudder and aileron linkages for near-maximum-possible deflections and use your transmitter to add some 'exponential' to soften the control throws around center. Initial settings if you are using a non-computer radio:

#### VIII. STORAGE, FIELD SETUP & PREFLIGHT CHECKS

- 1. Preparation for transport and storage: To remove the wing, unscrew and lift out the 2 plastic bolts; lift the wing slightly away from the fuselage; disconnect the aileron (and flap/spoiler) extensions from the Y-harness(es); slide the wing back and off from the dowels at the leading edge; lift the wing away from the fuselage; and separate the wing panels by sliding them apart. Safely store the metal wing rod and plastic bolts for future use.
- 2. Reverse the above procedure to reattach the wings to fly.
- 3. Ensure the propeller is securely attached to your motor and remains undamaged and correctly balanced.

- 4. Check the Mylar covering material's joints and surfaces. If necessary, carefully use an iron on medium heat to secure the edges and to tighten any loosened areas. Recheck and retighten from time to time; be careful to not apply too much heat as you secure edges or tighten the Mylar. Never apply heat to any trim, insignia, marking or plastic part.
- 5. As with all radio-controlled models, this airplane must pass the radio-range ground check recommended by your radio's manufacturer or you may not fly safely.
- 6. Although the GREENSLEEVES handles winds nicely in the hands of an experienced glider pilot, we suggest you choose a day with less than a 15 mph breeze for your flights.

# Congratulations on your new GREENSLEEVES. May you enjoy many Happy Landings!



#### Reminder ...

- This product is NOT a toy.
- The quality and capabilities of your finished model airplane depend on how you assemble it.
- Your safety depends on how you use and fly it. Any testing, flying and use of this model airplane is done entirely at your own risk.

#### PLEASE ENJOY YOUR HOBBY AND FLY SAFELY!

#### Manufactured by:

Maxford USA RC Model Mfg, Inc.

#### Distributed by:

Maxford USA RC Model Distribution, Inc.	Telephone (voice)
15939 Illinois Avenue, #B-C	Fax
Paramount, CA 90723	Toll free (orders only)

Felephone (voice)	(562) 529-3988
Fax	(562) 562-6988
Foll free (orders only)	(866) 706-8288
Website WWW.ma	xfordusa.com

Order replacement parts, optional accessories, servos, brushless motors, electronic speed controls, and a wide variety of other high-quality RC hobby items online at <a href="https://www.maxfordusa.com">www.maxfordusa.com</a>.

Copyright: Maxford USA 2014 Page 8 of 8 Greensleeves / S140630