

ELECTRIC 50-INCH WINGSPAN
Hughes H-1 V2
INSTRUCTION MANUAL

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Congratulations on your purchase of Maxford USA's scale Hughes H-1 !

We invite you to enjoy the pride of ownership and the joy of flying this high quality balsa, composite, and light-ply Almost-Ready-to-Fly aircraft.

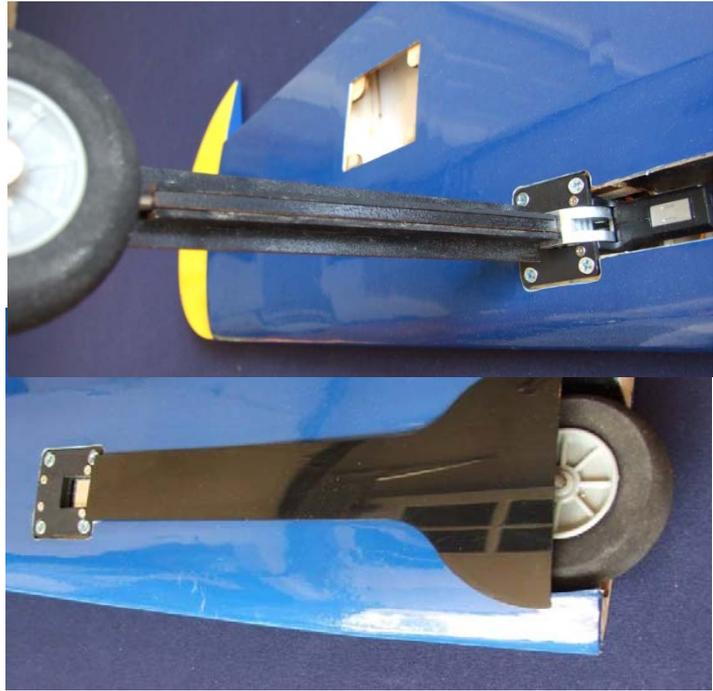


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recommend epoxy for these two steps because it is less likely to run and the set up time is more predictable than CA.

- Now extend the gear and glue the plywood cap over the exposed metal strut.
- Retract the gear again. Locate the two plastic gear doors and cut off the bottom half of the round part. Glue them to the plywood strut brace.
- Locate the fiberglass wing joiner tube, test fit it into the wings to make sure the wing tube sockets are not obstructed. Slide the tube through the fuselage and test fit the wing in place.

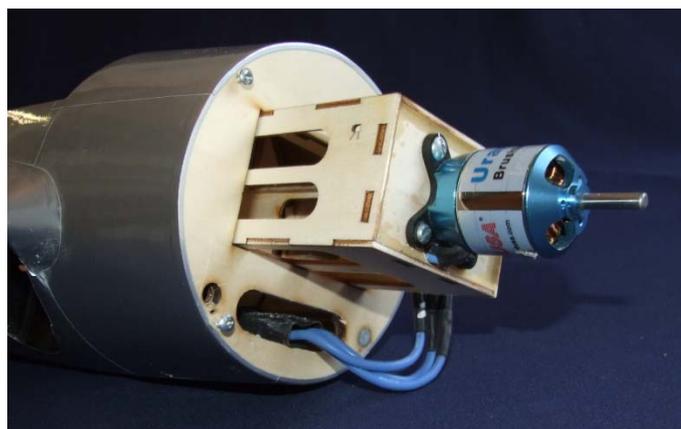


INSTALL THE MOTOR AND ESC:

- The twist-on "Max-Cowling" is a Maxford exclusive. Notice the three small screws and one magnet near the edge of the front of the fuselage. Test fit the cowl by positioning it so that the magnet on the fuselage lines up with the magnet in the cowl and then pushing the cowl over the screw heads and twisting the cowl a few degrees clockwise. If the cowl won't turn, loosen the screws. If it goes on but is loose, tighten the screws.
- Remove the cowl and the sliding motor mount box. Mount your motor onto the box, centered on the X that is scored on the firewall. Carefully measure back **5 3/8"** from the rear of the propeller and put a mark on the side of the box. Slip the box into the fuselage but **DO NOT GLUE IT IN YET.**



- Install the cowl and verify that the prop clears the cowl by about 1/2 inch and that the prop shaft is near the center of the opening in the dummy engine. If you chose to use a different motor and it is longer or shorter than the Maxford U35425 that we used in the prototypes, you can slide the motor box back or forward to make prop shaft come out nearer the center of the hole. When you are happy with the fit go ahead and glue the box into the fuselage.

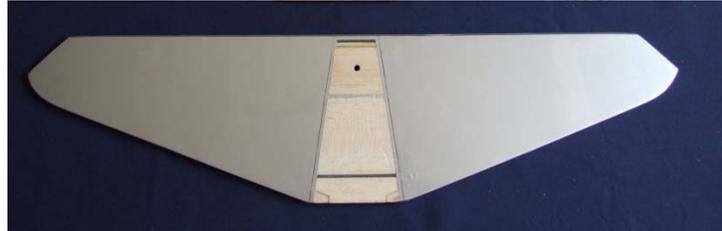


- Mount the ESC under the motor box by sliding it through the hole in the lower firewall.

NOTE: Assembling the rear end of the fuselage is not difficult, but you must follow the steps below in order to avoid problems.

INSTALL THE STABILIZER:

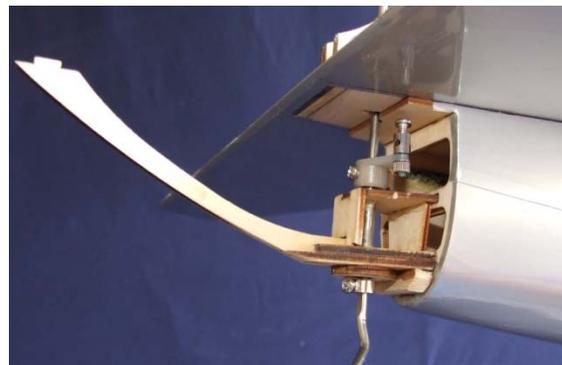
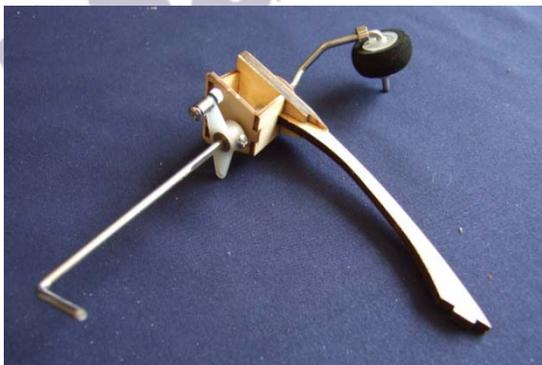
- Temporarily mount the wings on the fuselage. Slide the stabilizer into its slot in the rear of the fuselage and measure from the back of the wing to the tips of the stab to make sure the stab is aligned properly with the wing. Draw a line along the sides of the fuselage on the top and bottom of the stab. Then pull the stab back out and remove the covering material from the center of the stab between the lines. (Leave 1/8 or so of the covering inside the lines so that the bare wood won't show after you glue the stab in place.)



- Use epoxy to glue the stab into its slot, using the lines to position it correctly.

INSTALL THE REAR FUSELAGE EXTENSION:

- Locate the preassembled rear fuselage extension/ tail wheel, remove the tailwheel and set it aside.
- Put an adjustable pushrod connector through the hole in the **right** side of the tailwheel steering arm.



- Slip the top of the tail wheel strut through the hole in the stabilizer and glue the extension assembly into the slots in the rear former. (See photo.)

- There is a 3" piece of 1/4" square balsa provided in the kit which you can use to reinforce the lower joint between the extension assembly and the rear former of the fuselage.
- Locate the top rear fuselage extension and The [shaped wire elevator joiner. Slide the top extension on **with the elevator joiner between the extension and the stabilizer.** Glue the extension in place. (See photo.)

INSTALL THE FIN AND RUDDER AND THE ELEVATOR:

- Slide the vertical fin into its slot, draw a line on each side and remove the covering as you did on the stabilizer. Glue the fin in place.

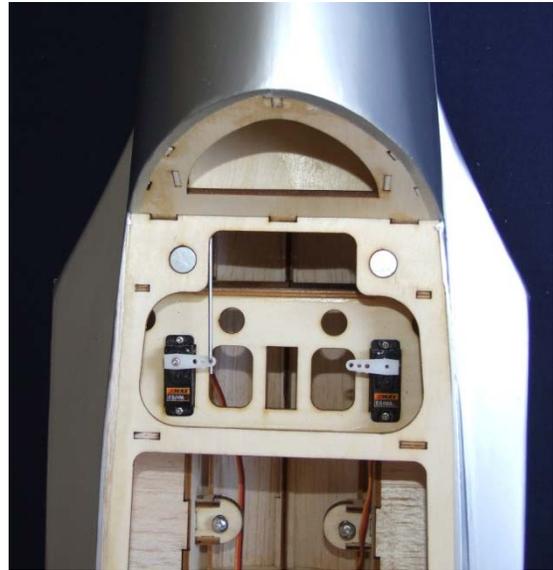


- Slide the rudder onto the tail wheel strut and install the rudder to the fin as you did the elevators. You may have to loosen the set screws on the steering arm and the wheel collar so that the strut can move up or down to set the rudder at the right height.
- Don't forget to retighten the set screws.
- Insert the elevator joiner wire into the factory drilled holes and install the elevators to the stabilizer using the same hinging techniques that you used for the ailerons. **NOTE:** The elevator with the predrilled holes for the control horn goes on the **left** side.



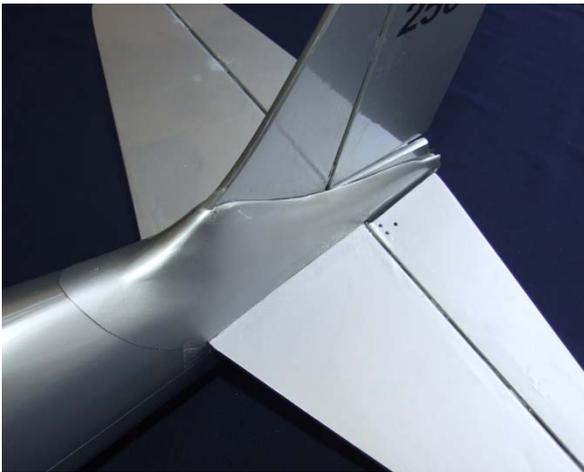
HOOK UP THE RUDDER/TAILWHEEL PUSHROD:

- Install micro servos in the outer holes of the servo tray in the fuselage using the mounting hardware that came with your servos.
- Locate the shorter of the two long pushrod wires. Slide the pushrod through the preinstalled guide tube on the **right** side of the fuselage and through the pushrod connector on the tailwheel steering arm. Put the Z bend of the pushrod through the outer hole of the arm on the right servo. Center the servo and the rudder, then tighten the pushrod connector.



INSTALL THE PLASTIC TAIL FAIRINGS:

- Locate the top fairing and check its fit. Trim it if necessary to clear the rudder. You can use the provided M2x10 self tapping screws to attach it, but we have found that clear glossy tape is the easiest way.



- Slip the bottom fairing over the tailwheel strut and trim the fairing as needed. The part of the bottom fairing that is beside the elevators should slip under the top fairing. Again, tape is the easiest way to hold the fairing in place.
- Now you can reinstall the tailwheel.

HOOK UP THE ELEVATOR PUSHROD:

- Attach an adjustable pushrod connector to the outer hole of the remaining control horn. Use the provided M2x10 machine screws to attach the horn to the elevator.
- Slide the remaining pushrod through the



preinstalled guide tube on the **left** side of the fuselage and through the pushrod connector on the elevator control horn. Put the Z bend of the pushrod through the **inner** hole of the arm on the left servo. Center the servo and the elevator, then tighten the pushrod connector.

- Make sure the elevators and rudder are moving in the right direction.

ADD THE CANOPY:

- If you wish, you can glue a cockpit floor (not included) to the bottom of the hatch and add a pilot of your choice.
- Glue the canopy in place with "canopy glue" or contact cement. Do not use CA because it will leave a white firm inside the canopy after it sets.



SETUP AND ADJUSTMENTS:

- Plug all of the servos and the ESC into your receiver and mount the receiver in the area behind the battery tray. Use Y-connectors for the ailerons and retract landing gear.
- Install your battery (**do not install a propeller yet**) and use your transmitter to re-center all of the servos. Adjust the pushrod connectors on the ailerons, rudder and elevators so that all of the control surfaces are centered.

Set the **initial control travels** as follows: (Measured at the widest point of the control surface.)

	<u>High Rate</u>	<u>Low Rate</u>
Ailerons	5/8" up 5/8" down	80%
Elevator	1/2" up 1/2" down	70%
Rudder	1 1/4" left and right	70%

If you use exponential, add 25% on the high rates.

Install the propeller and set the **Balance Point (C/G)** at **3 1/2 to 3 3/4 inches** behind the leading edge, at the side of the fuselage, with the stabilizer level to the ground.

NOTE: The Hughes H-1 is a short nosed airplane. You will need to mount the battery as far forward as possible and you will probably need to add 2 to 3 ounces of lead to the front of the motor box.

PRE-FLIGHT CHECKS

1. Make certain that all screws, clevises and other connections throughout the air frame are secure.

2. Double-check the control travel directions of the throttle, ailerons, elevator and rudder.
3. As with all radio-controlled model airplanes, this model must pass the radio range ground check recommended by your radio's manufacturer, or you may not safely fly.
4. Get into the habit of turning on your transmitter and moving the throttle to minimum before plugging in your battery, and operate your electric power system according to the manufacturer's instructions.

REMINDER: An important notice to our customers!

THIS PRODUCT IS NOT A TOY.



The quality and capabilities of your finished model airplane depend on how you build it.

Your safety depends on how you use and fly it.

Any testing or flying of this model airplane is done entirely at your own risk.

We thank you for choosing Maxford USA and we sincerely wish you many happy landings!

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Distributed by:

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