

This is a short tutorial on making an inexpensive steerable Tailwheel Bracket and installing it on the aircraft.

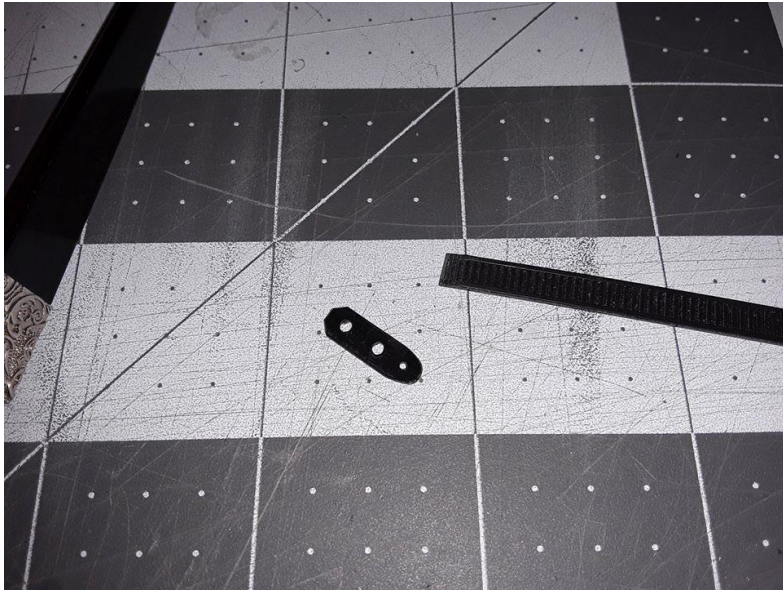
The pictures shown are of two different 250g class planes the I recently built. The only real difference between them is the adhesive used during the pinning process. Both use .026 wire for the gear leg.



The Falcon (shown above) used a UMX tail Wheel, and the red/white one used the Du-Bro 3/8" tail wheel available through WN. The black plastic strip is a piece of tie wrap strap detailed below.



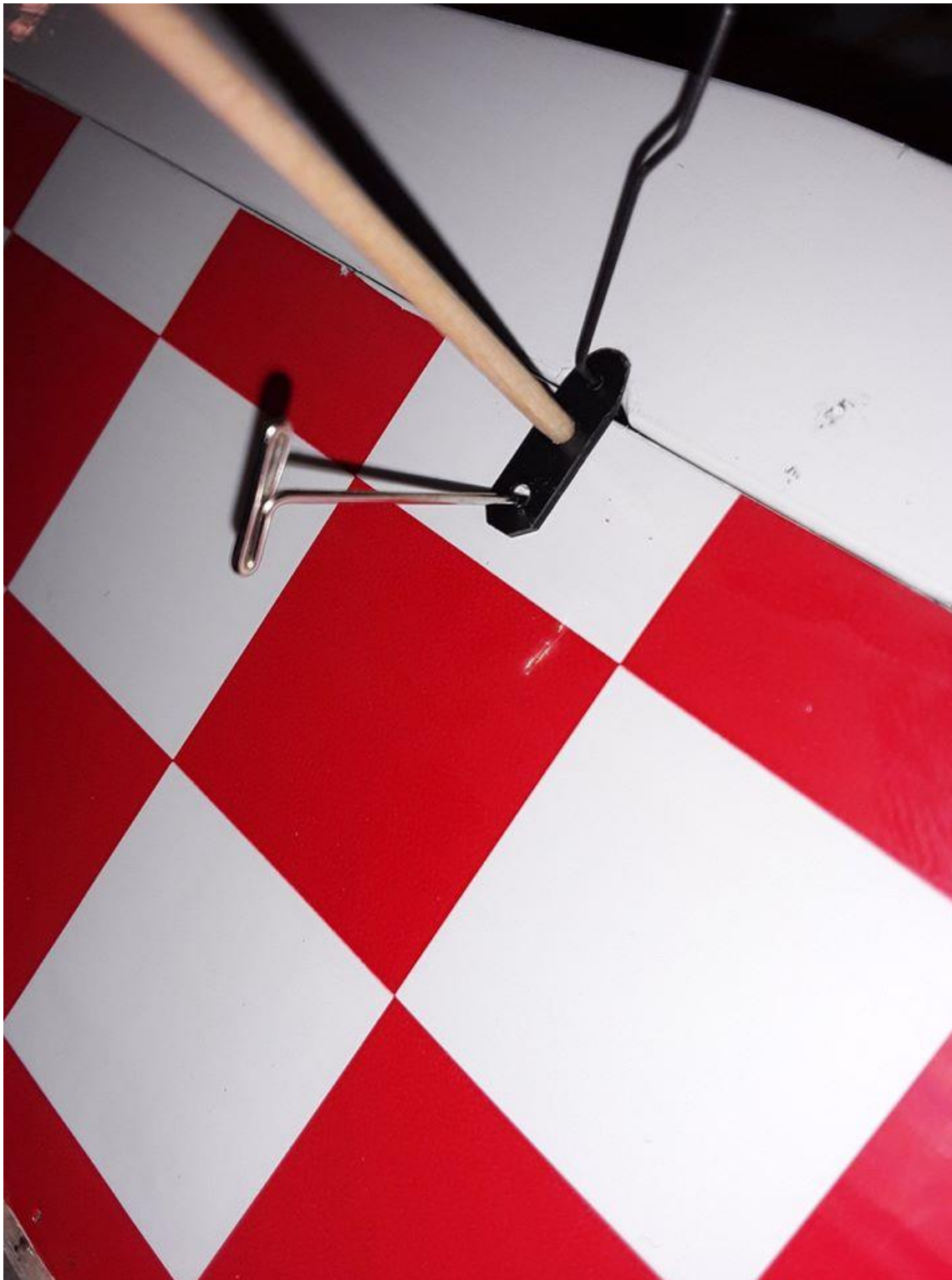
As shown in the picture, a small groove is made in the rudder and a hole is drilled. A small amount of epoxy pushed into the hole and bedding the wire in the groove hold it in place.



Small strip of Tie wrap, 2 hole are $\frac{1}{16}$ " (.062) and the small hole is $\frac{1}{32}$ (.031).

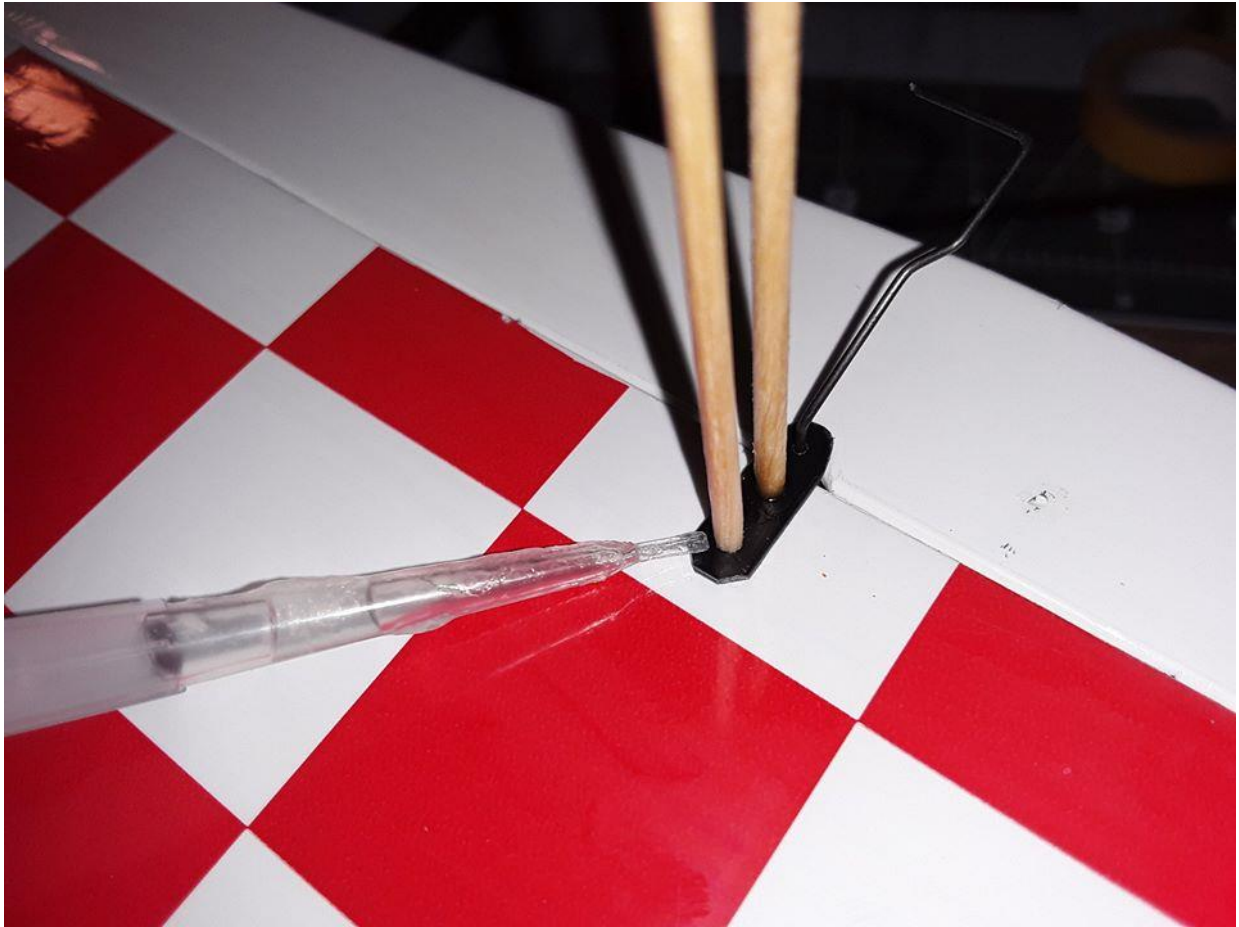


Alternately there is a mini/micro Du-Bro DUB854 tail wheel bracket available through WN. Using only the part with the pins you will need to drill a hole at the narrow end for the gear leg and fabricate the wire to connect to Rudder for steering.

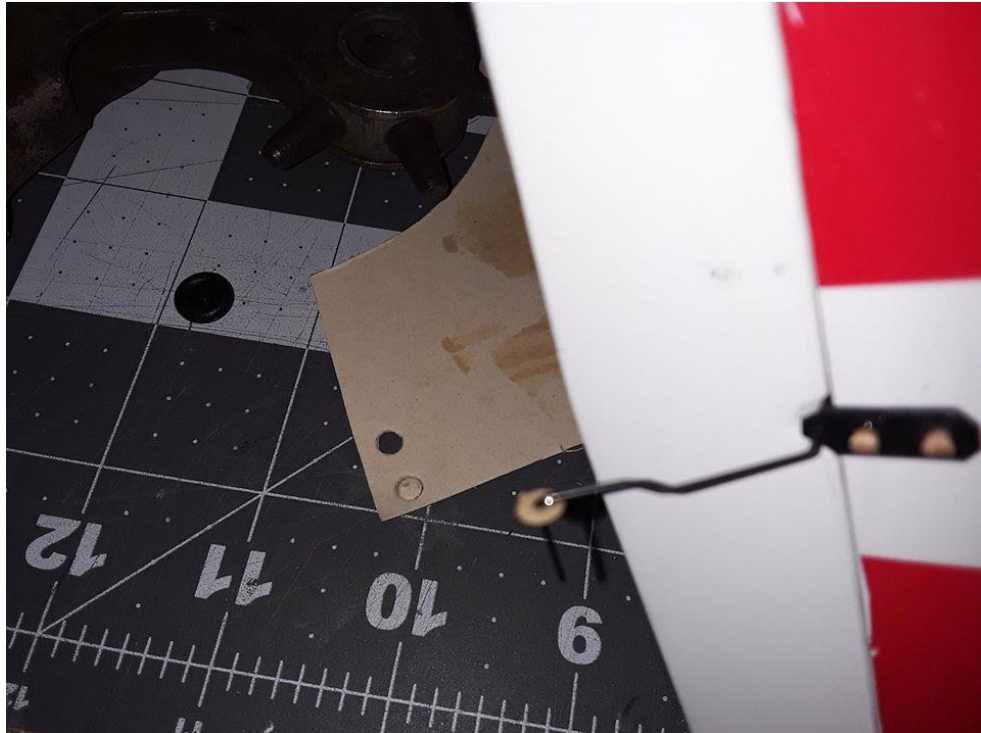


Once the Rudder is covered and hinged in place, a pin aligns plastic strip to drill and pin with first toothpick.

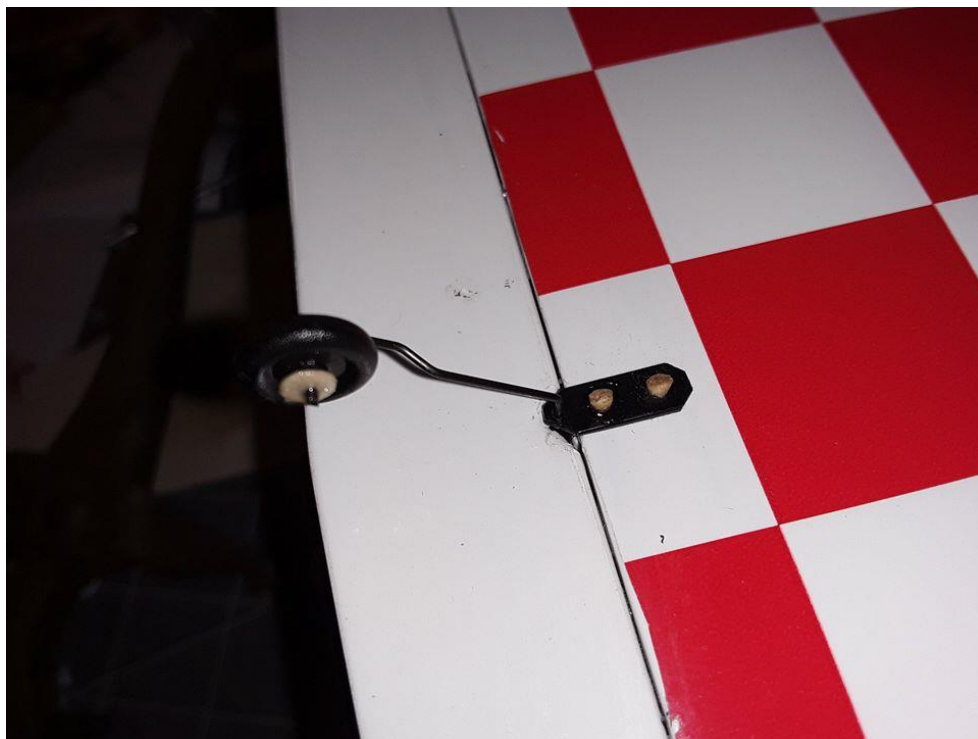
I turn down the toothpick in a drill to fit snug in the holes.



With the pin removed, drill a second hole and add toothpick. Add a drop of CA to each toothpick. The adhesive will wick into the holes and under the nylon strip.



The Toothpicks are cut off slightly protruding. A small disc keeper is punched from card stock and held with a small drop of CA.



Finished install with a second card stock disc. Apply the CA with a small dab on a toothpick or it will wick into wheel.



Shown mocked up on the WN Jr Falcon, the small bracket made from zip tie. This setup works quite well and acts as a lower hinge for the Rudder, and as a bonus weigh about nothing.



I used a little epoxy to glue the toothpicks on this assembly. I stuff a little epoxy in the holes first, then push the toothpick in through the tie wrap bracket. Trim and add a dab of epoxy to the top of each pin.



I have used this same method with small screws instead of toothpicks on larger ,15 to .25 size planes and have yet to break one.

This method is amazingly simple to do and most of us have these things on hand at home, so the cost is basically nothing and the weight is minimal.

Give it a shot, you'll find it a go to method in the future.