MICRO - DLG

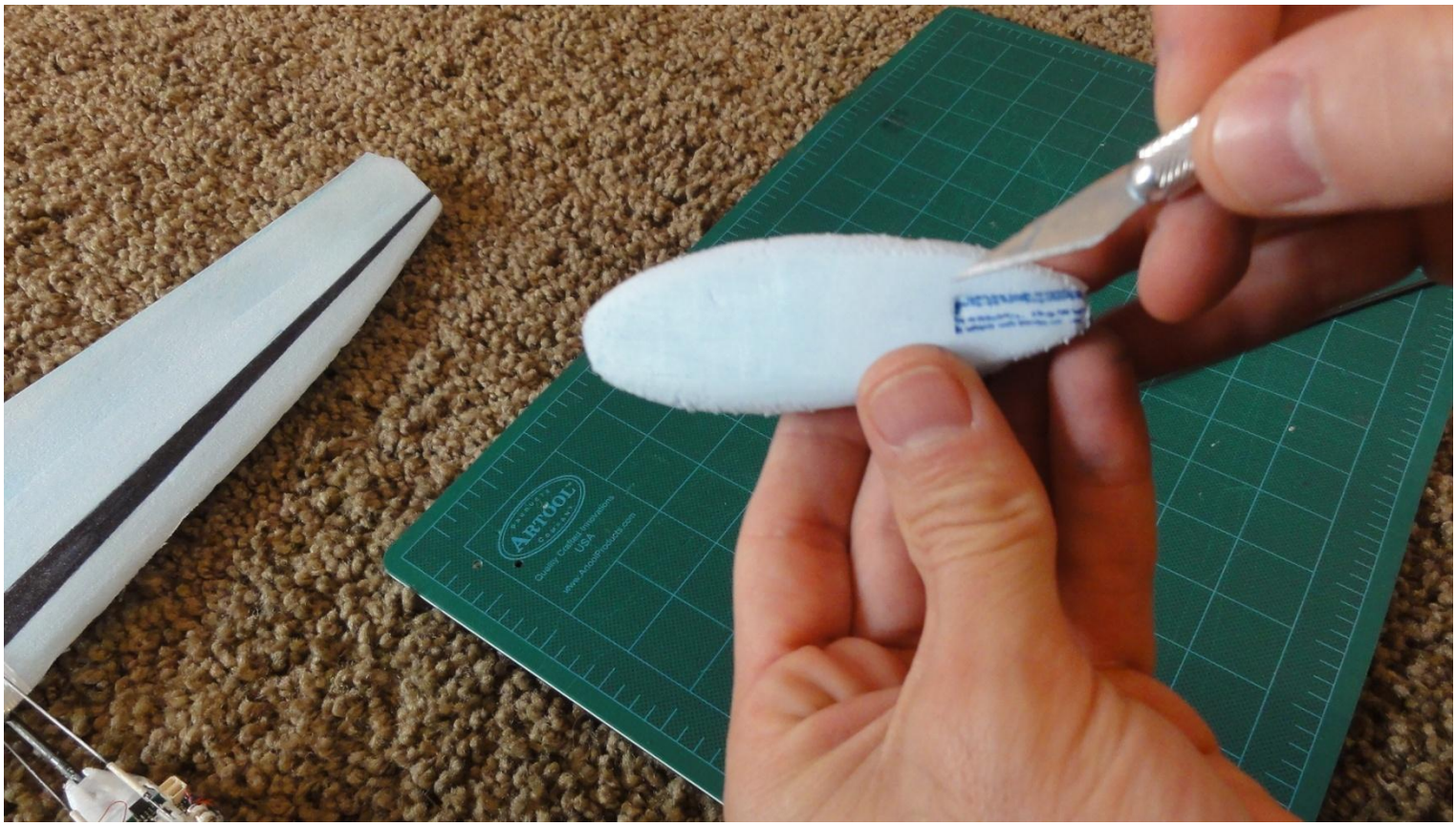
This kit should only take 30 minutes to compile, very simple and quick .

You will need:
Hot Glue (small tip preferably)
Sharp razor blade
Ruler
a strip of strong fiber tape
Thin nose Pliers

You might find sticking the wing on the pod first before gluing the pod might be easier. If so, skip to the wing installation first. (this is so you will not have to adjust the wing to center with the pod. adjusting the pod so its even with the wing might be easier)

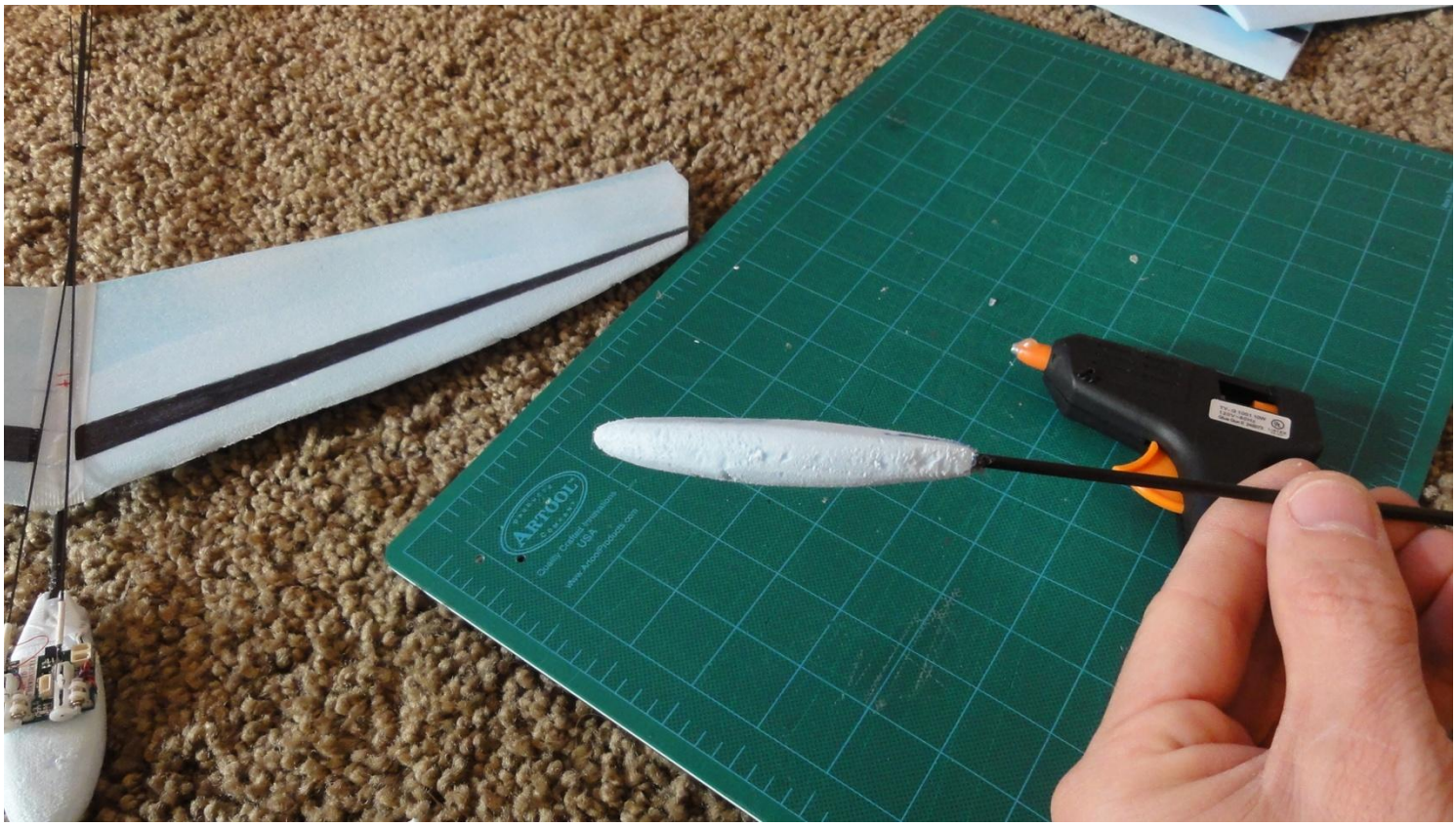
POD installation:

With your Xacto knife, cut half way deep on the marked location of the pod, if your pod is not marked, simply measure 18mm from the end point of the pod, keep the width the same as the boom. (it might be easy to press actual boom against the pod lightly to leave the desired mark . Cut approximately half way in and remove excess foam with needle nose pliers. Slide the tip of the boom and make sure everything fits evenly and snug, if you cut to much do not worry, we will be filling it with hot glue.

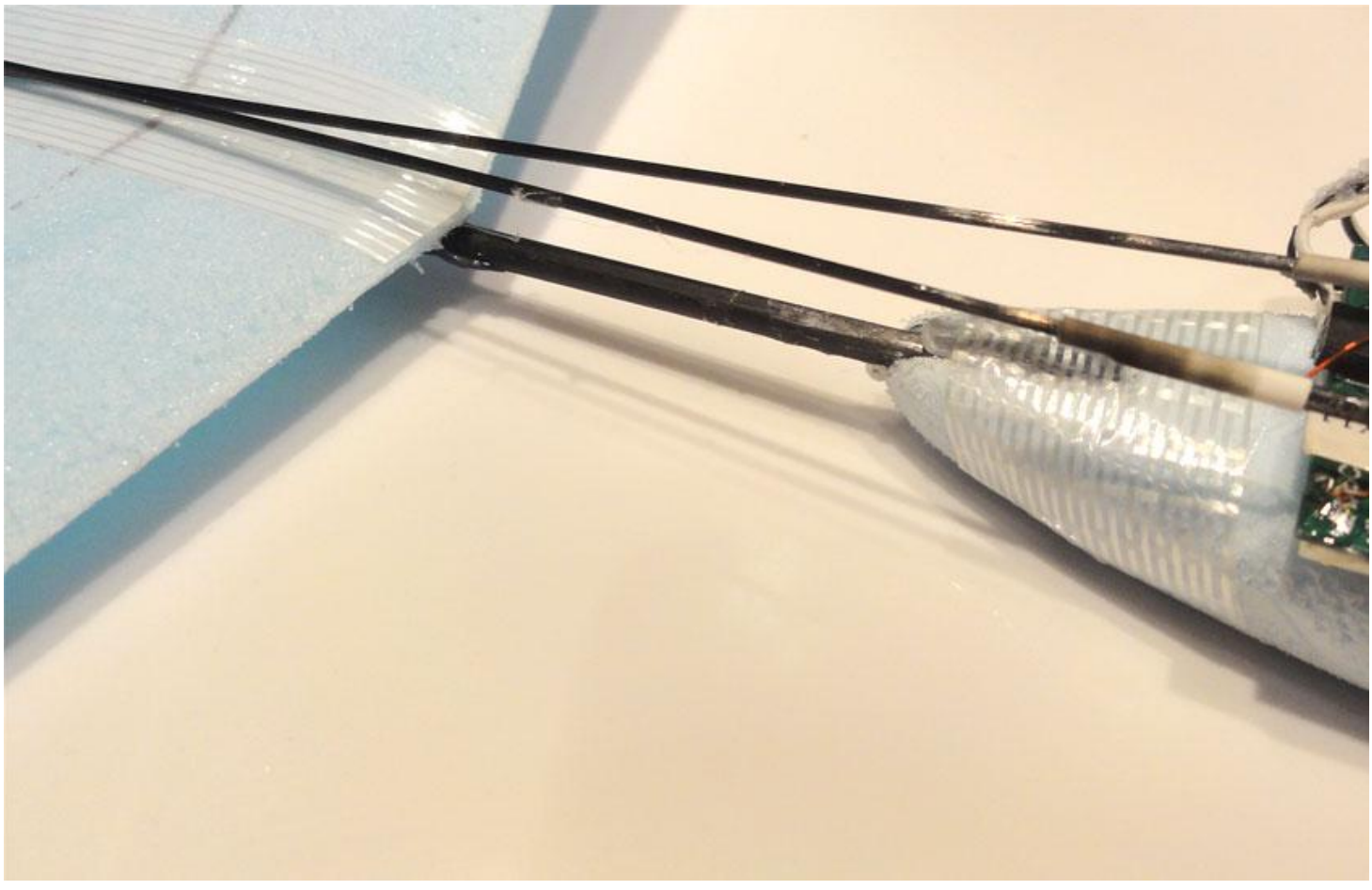


After taking out the cut pieces, apply hot glue in the hole and slide your boom.

Adjust the boom so its nice and even with the pod like the below picture. If you notice, one side of the pod is flatter, this is for the receiver and servos (AR6400) The side of the boom you slide into the pod should have one red tape, which marks the location of the wing. The side with 2 red tapes indicates the location of the elevator and rudder.

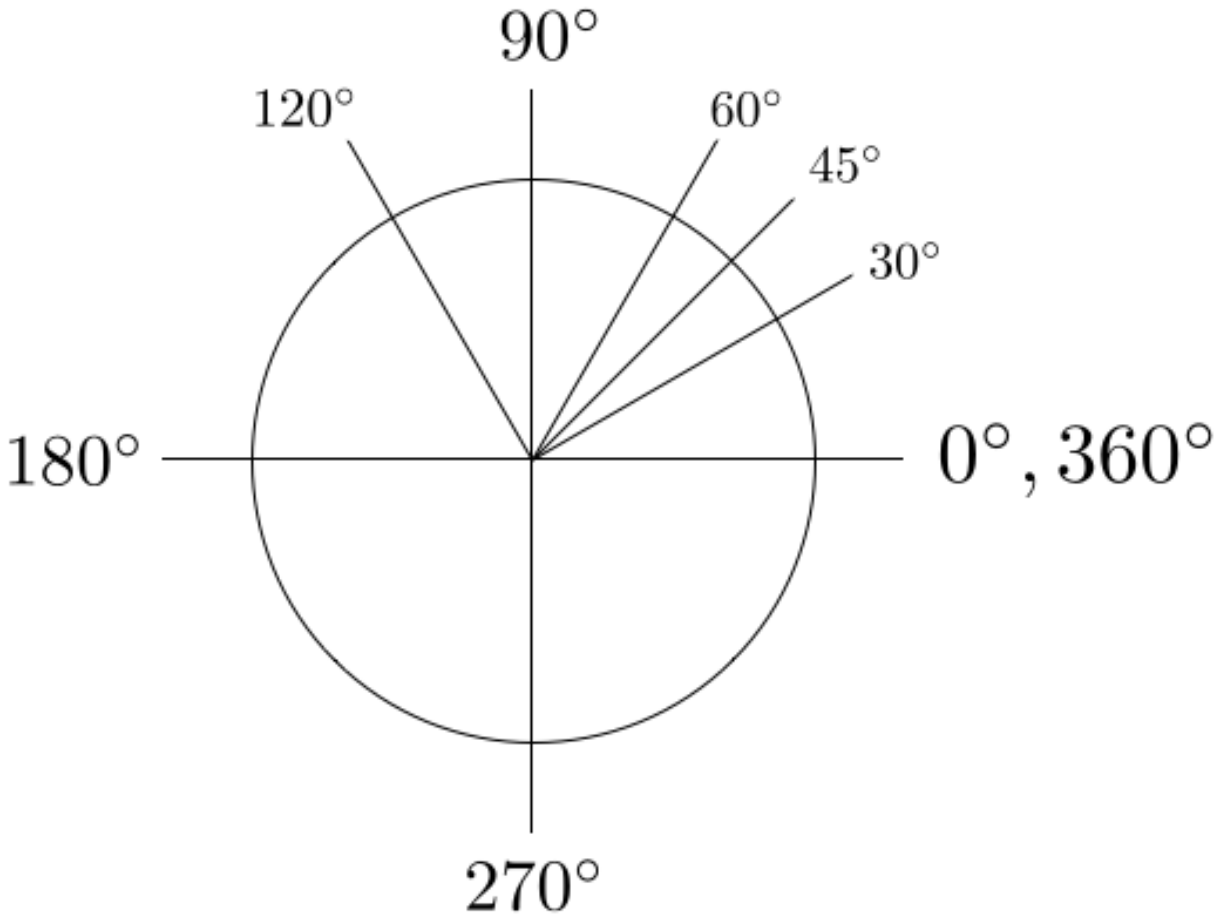


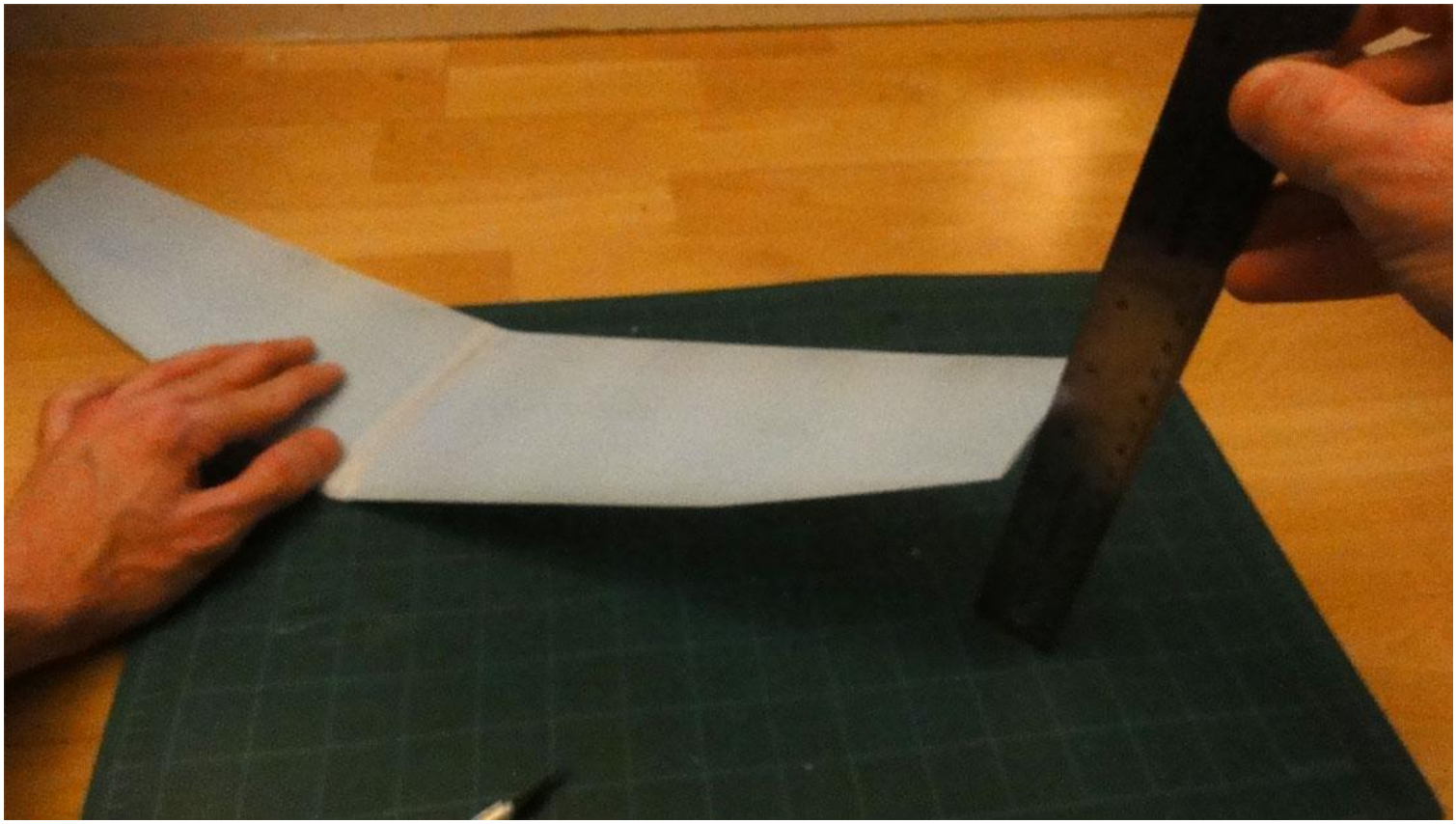
Place a piece of tape around the neck of the pod to give it extra strength as seen below.

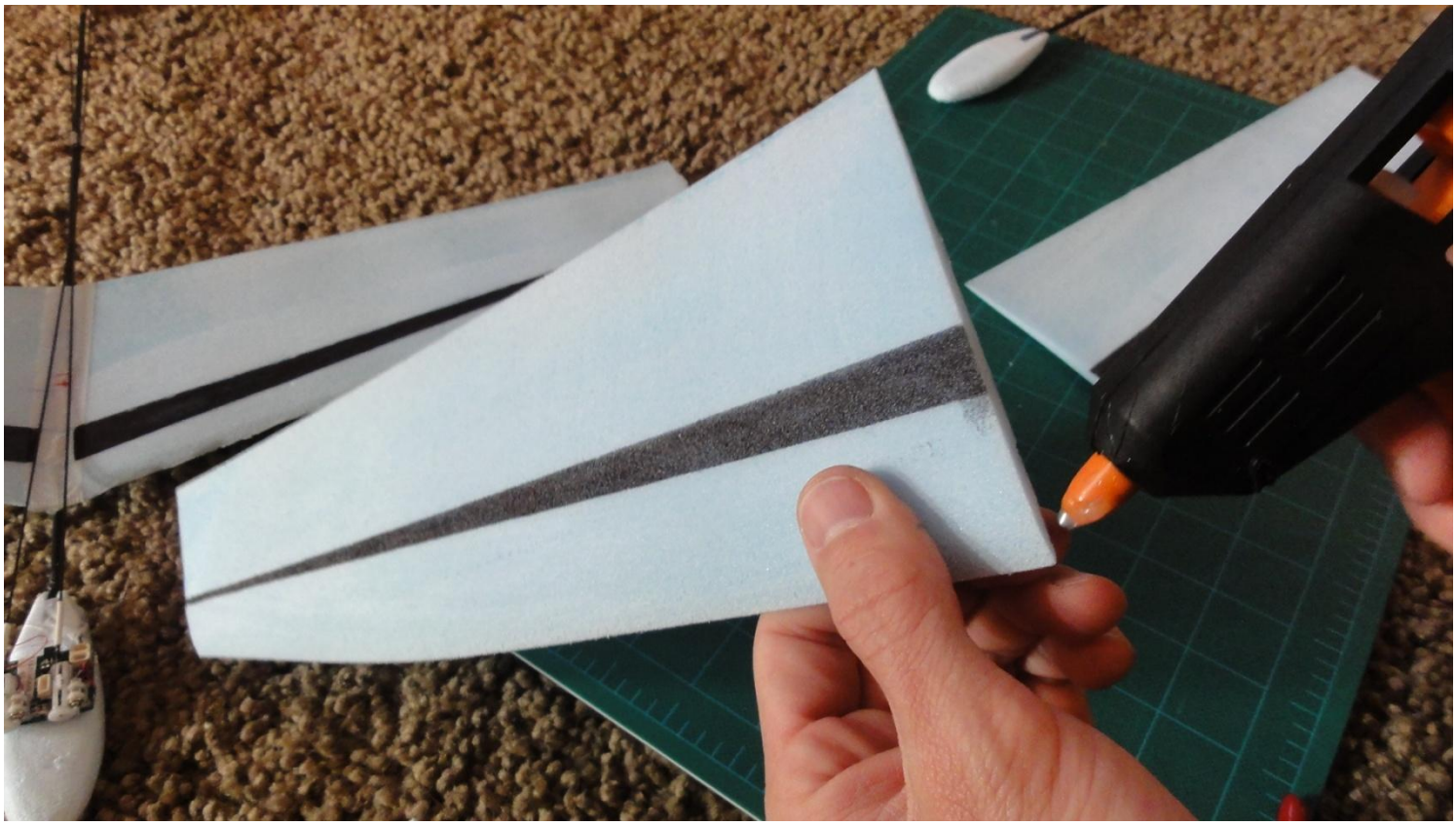


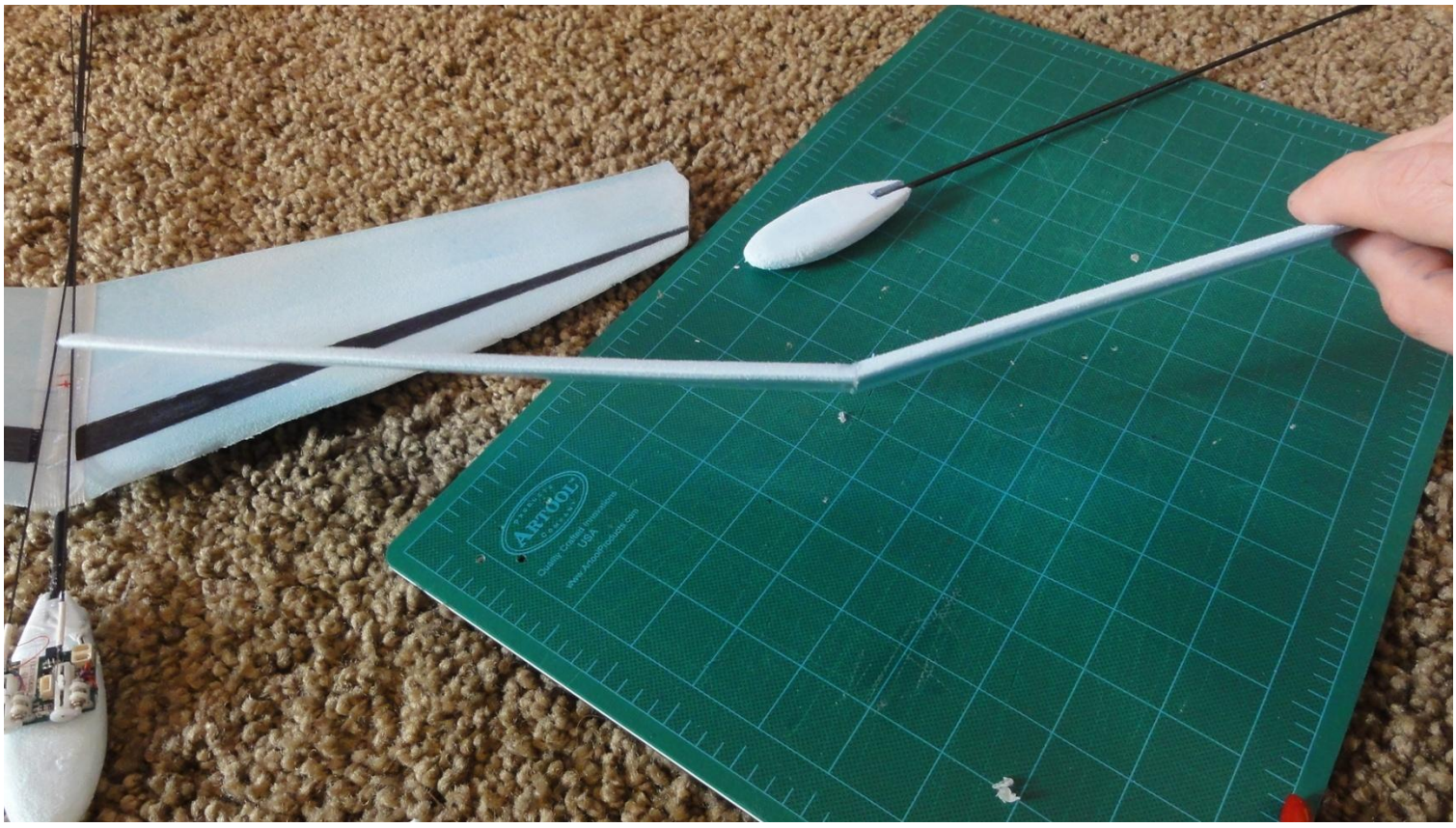
Wing Installation:

Flip the wing upside down and place it on your cutting board. With a metal ruler, cut at your desired angle with a sharp xacto knife, in this case, the angle used is 60 degrees. You can measure the distance between the wing tip and the ground until you get 4" inches .





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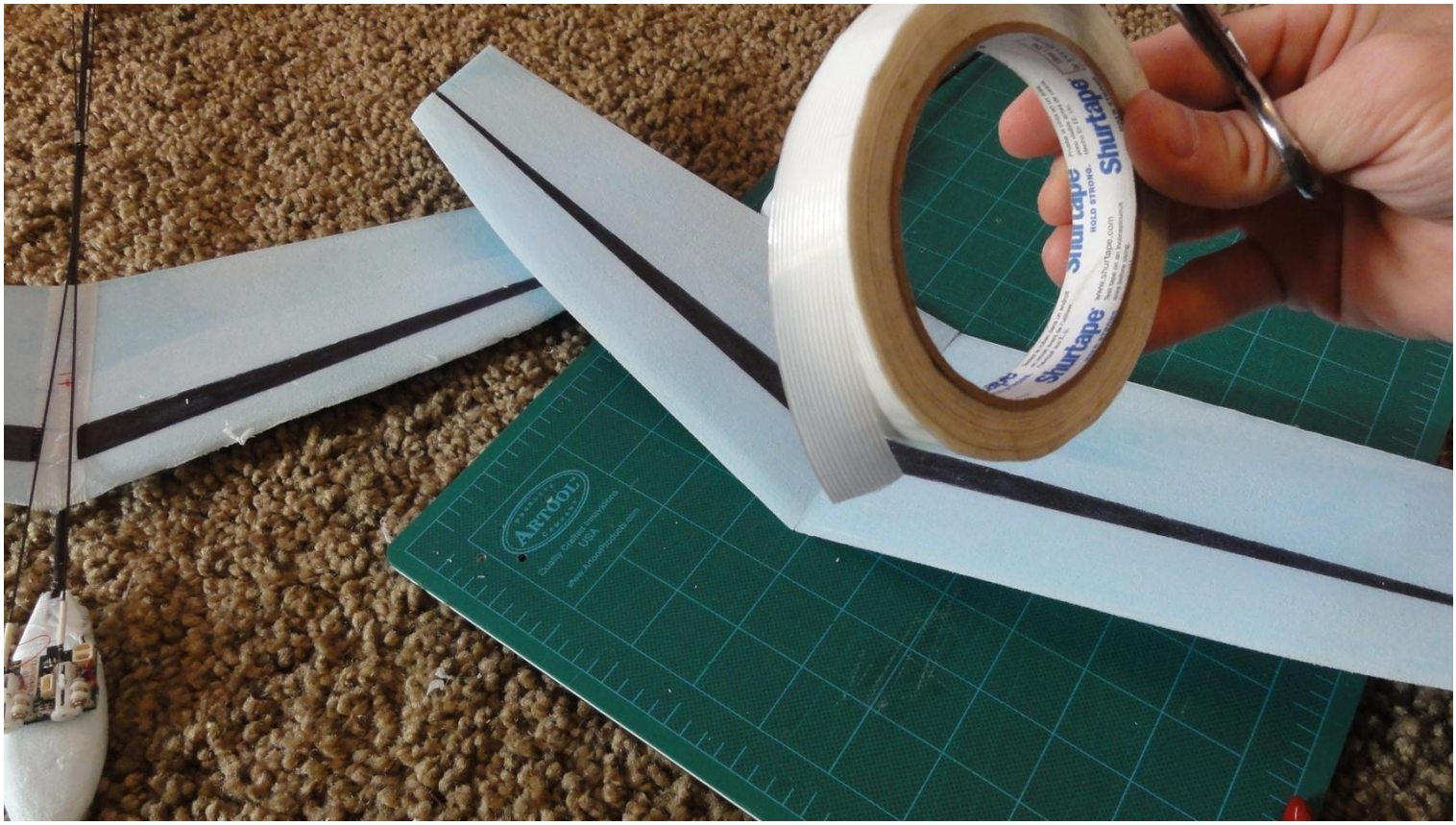
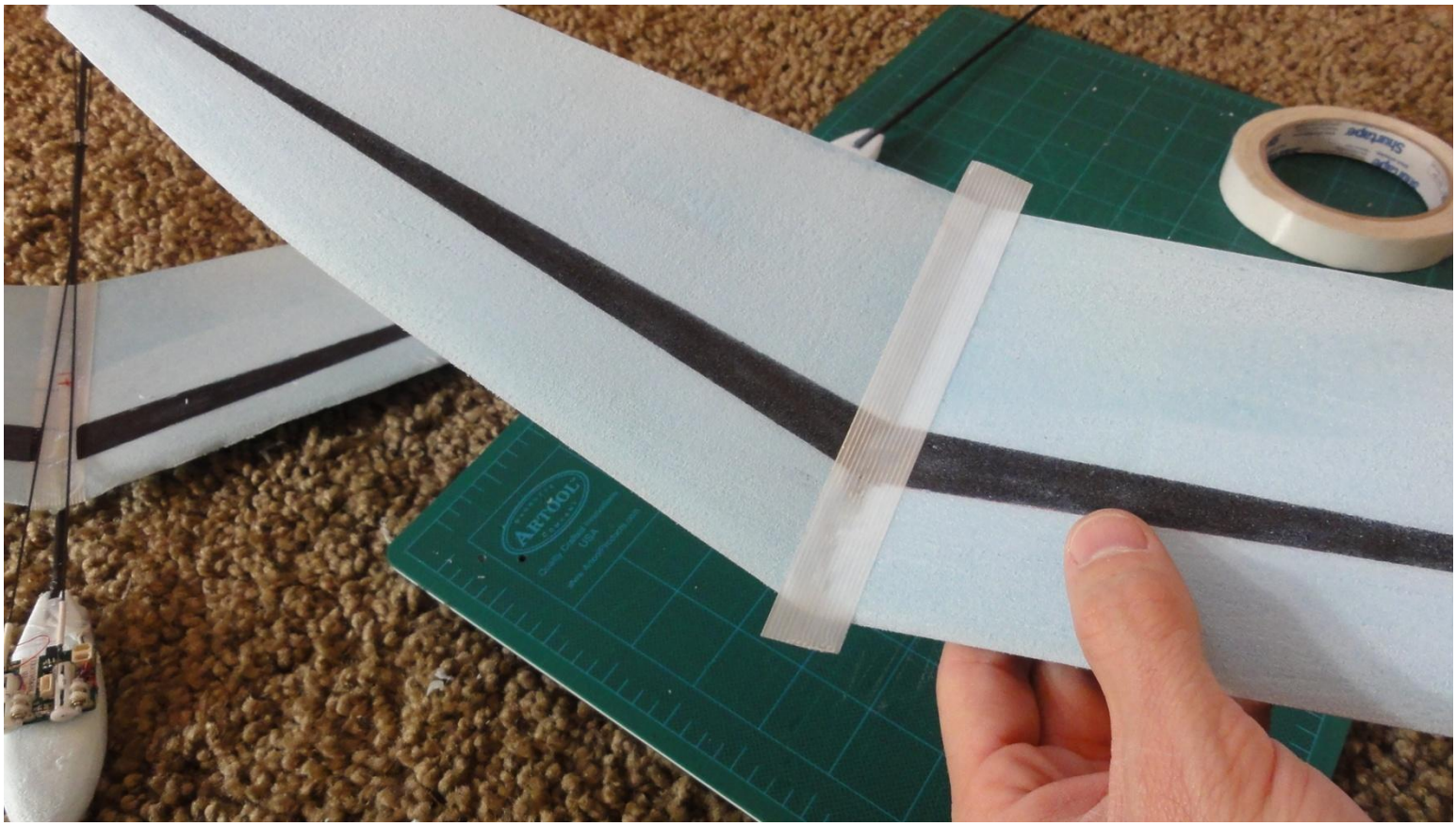
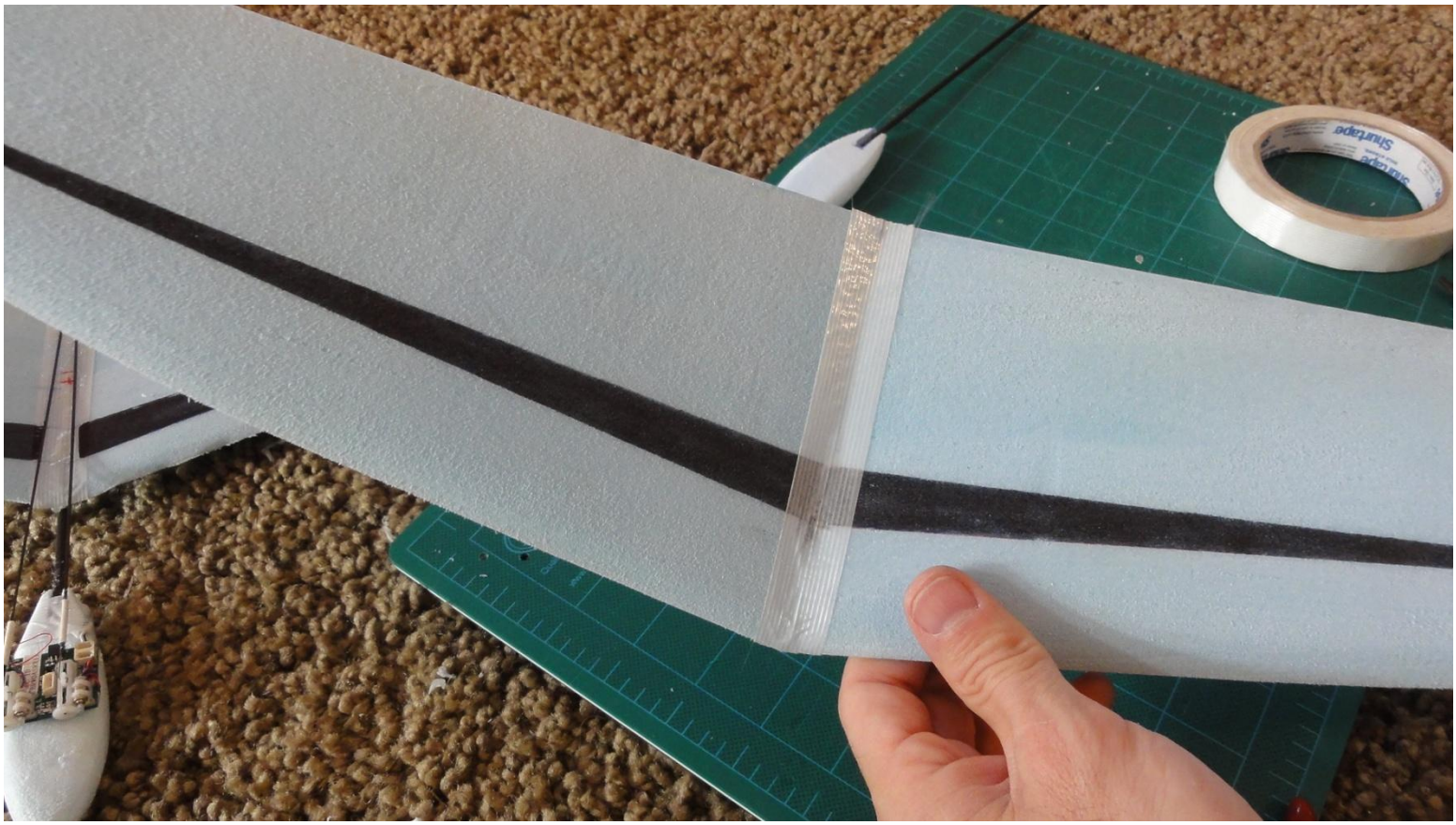
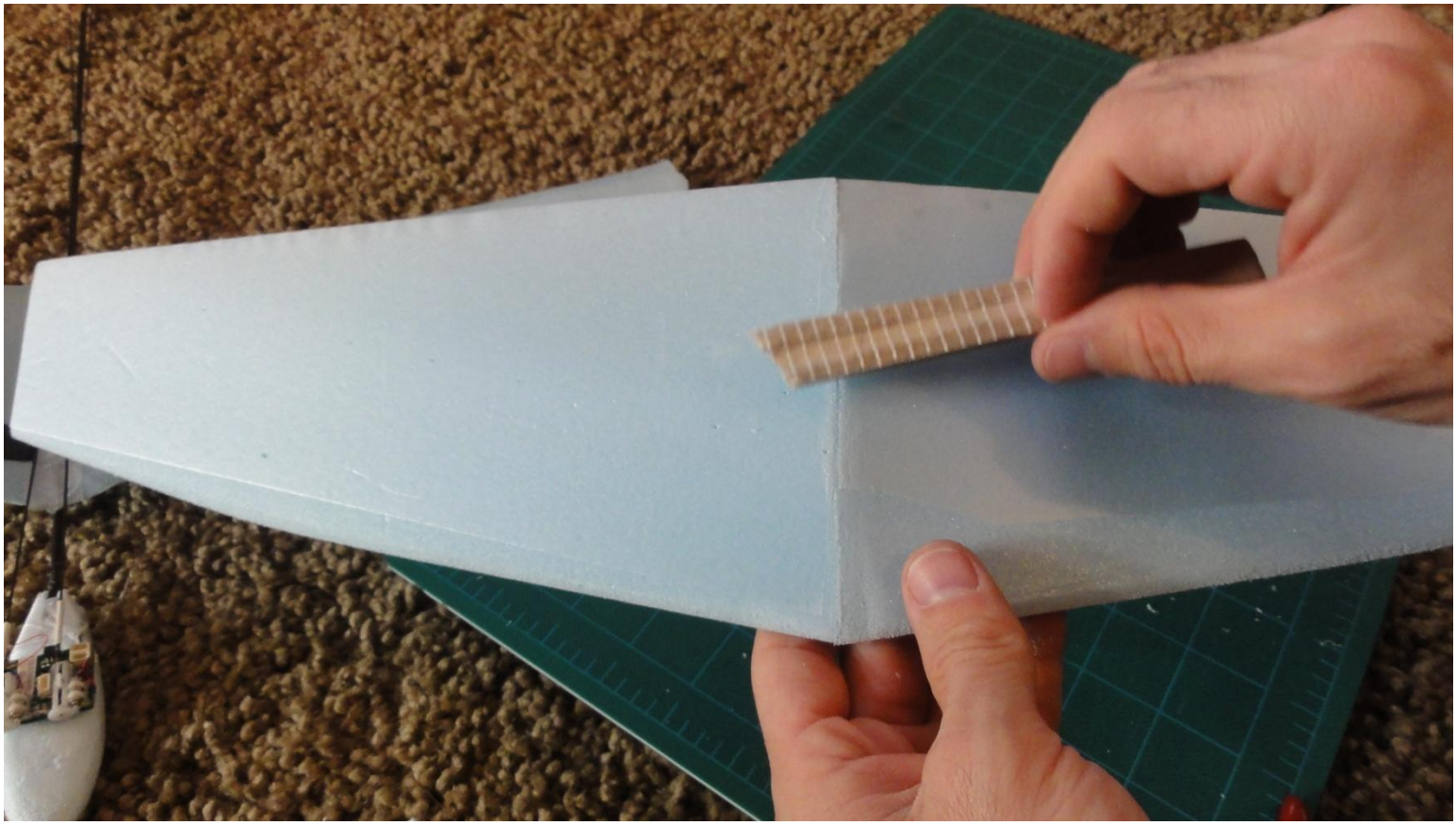
stick a strap of fiber tape on top of the wing joints for strength.



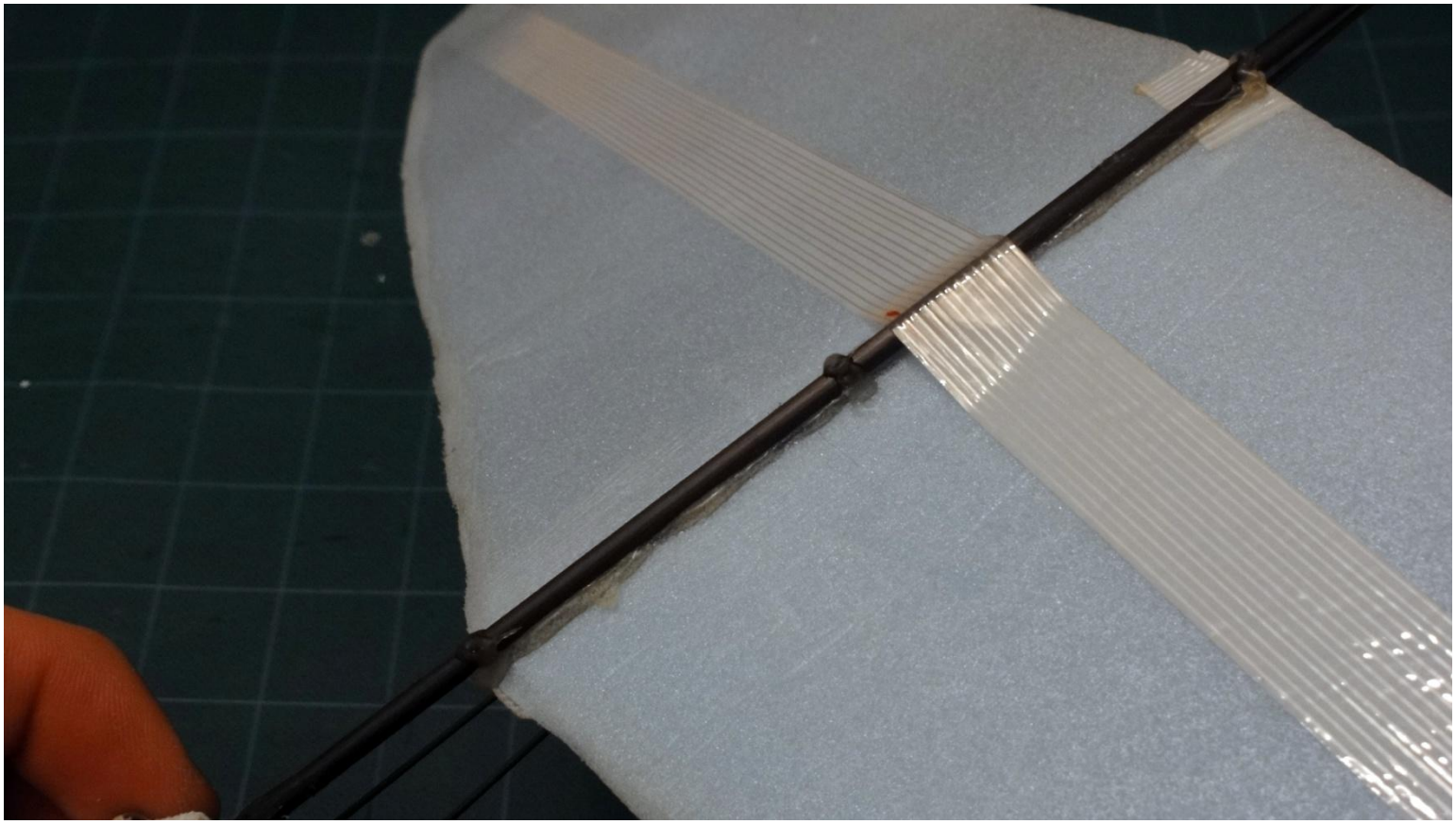


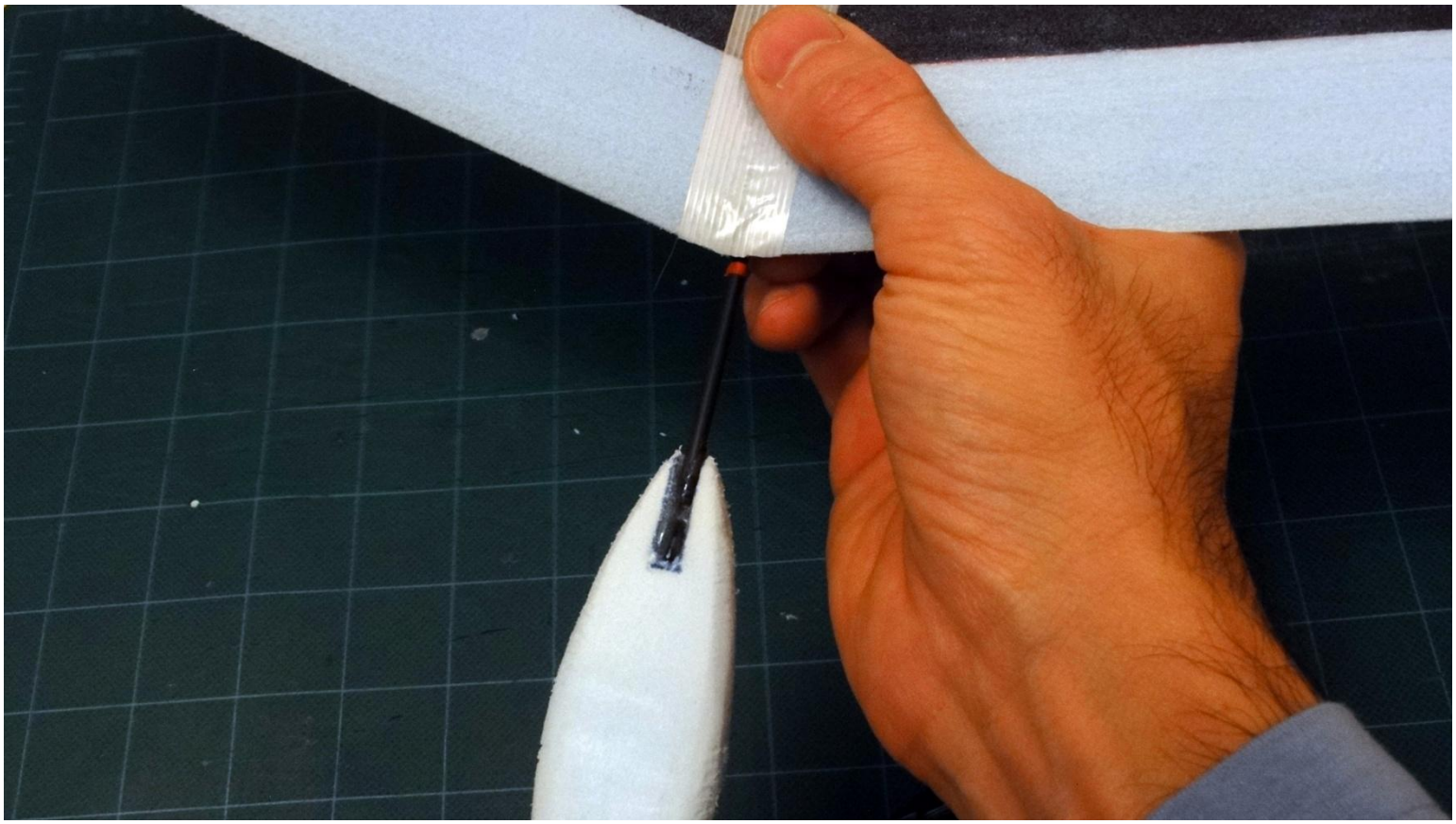


sand the bottom of the wing joint until its flat so when wing is glued to the boom,it sits nice and flat also giving it strength. (dont sand to much, just enough)



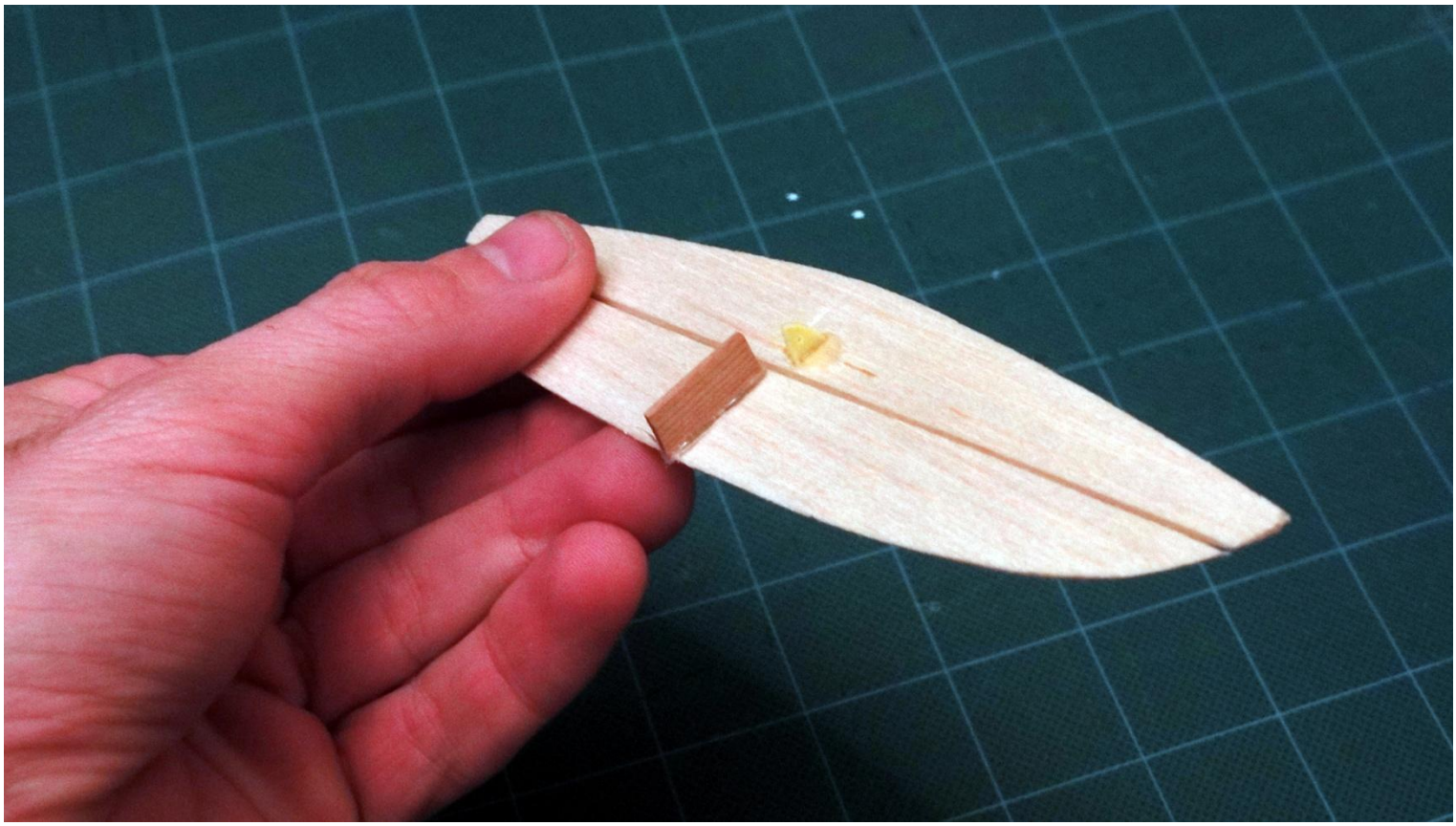
Apply a nice coat of hot glue on the wing joint where you sanded, simply measure 35mm from the top of the boom (*tip meaning all the way where it now sits in the pod*) and place the boom under the wing, make sure the wing sits right in the center of the boom and it is even with the pod, (*if you installed the wing first, you will be adjusting the pod so it sits even with the wing*) adjusting the wing so its straight with the pod while the glue is setting might be needed. If you notice, in the center on the picture below, i have hot glue going around the boom at 3 different locations, center, top and bottom, this is for extra strength. Now apply another piece of fiber tape all the way in the middle bottom of the wing as shown below, this will prevent the wings from collapsing upon throw after throw and it also straightens the wing as the tips are so thin, you might find a little bit of a bow.



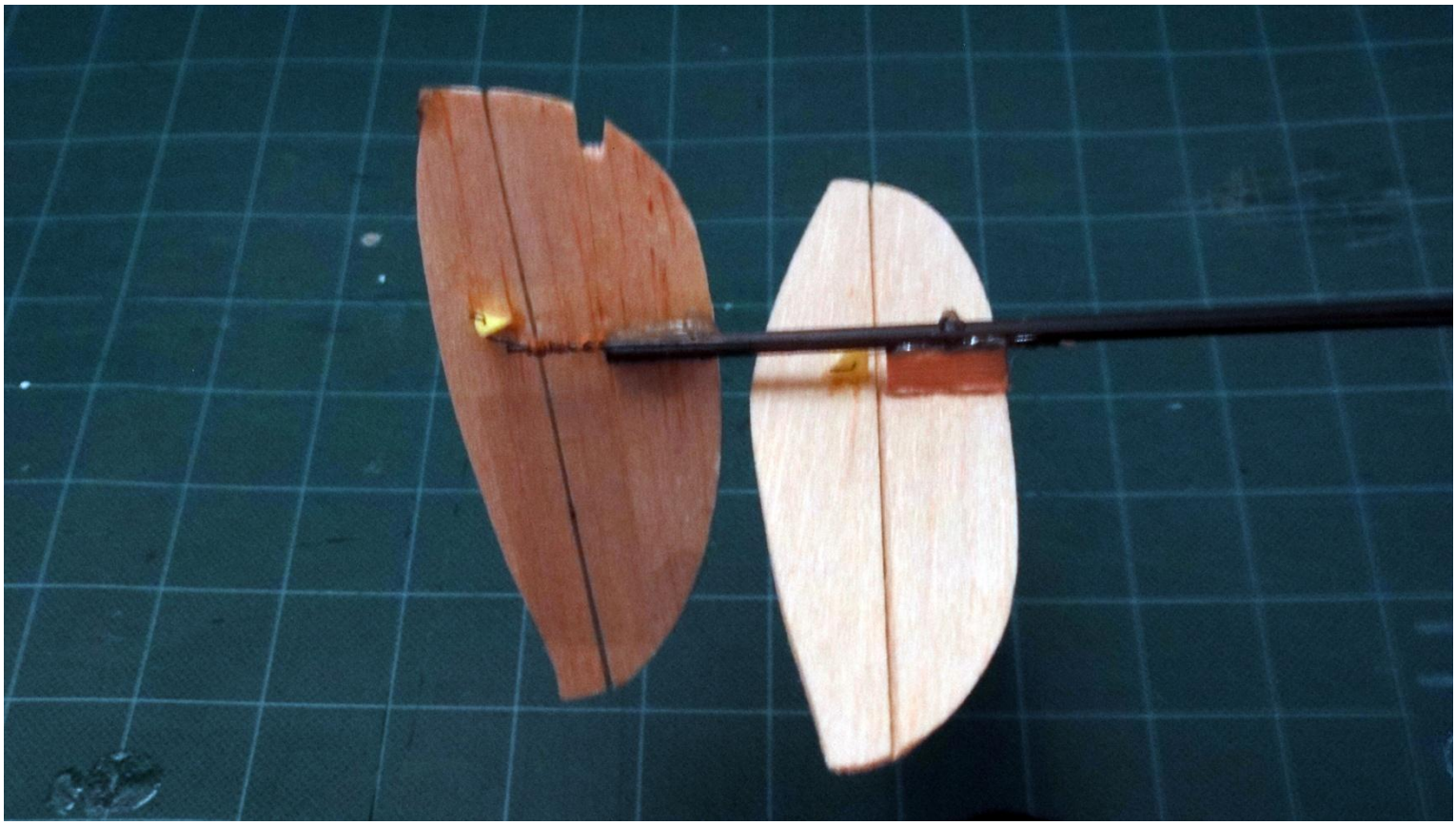


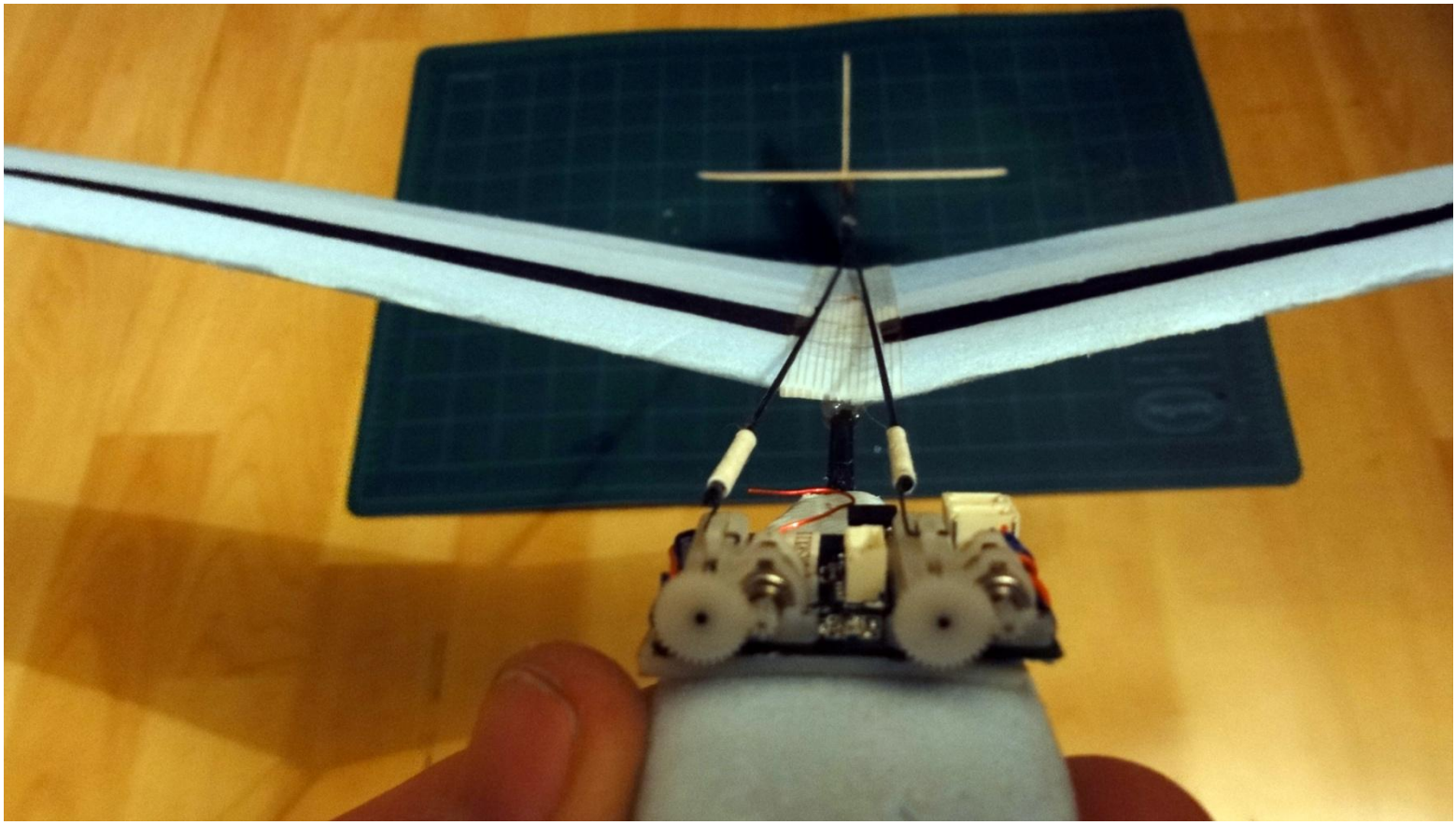
Tail Installation:

Using hot glue, glue the given piece of wood on the bottom of the elevator, make sure it sits nice and even at a 90 degrees angle.



This next step requires eye balling, you can install the rudder first if you wish, or the elevator, which ever you do first, you will have to hold the plane at the angle shown below to make sure everything is even with the wing, Use hot glue to attach the rudder and elevator. You will see black marks on the rudder and elevator, that is where glue is applied.



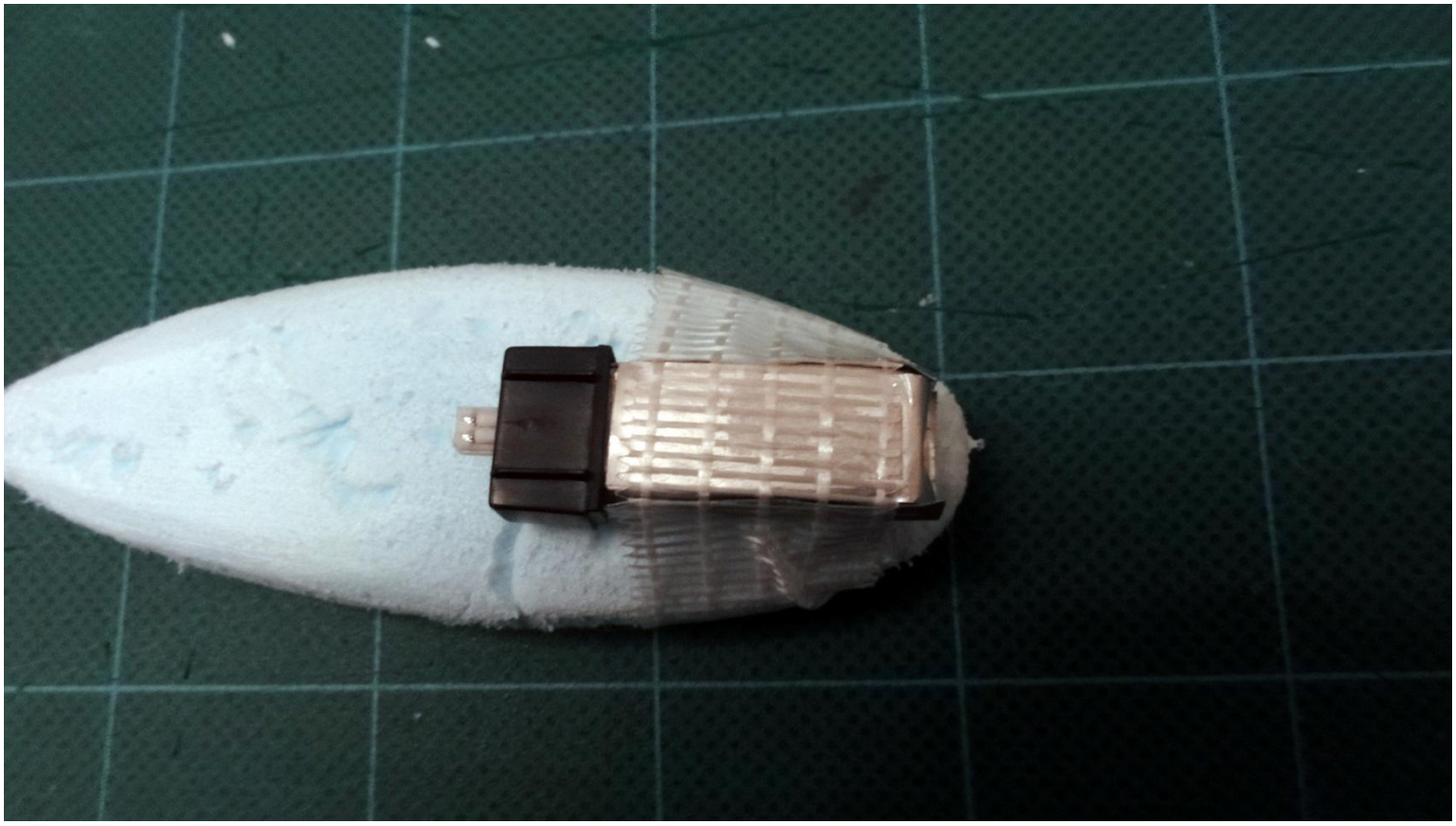


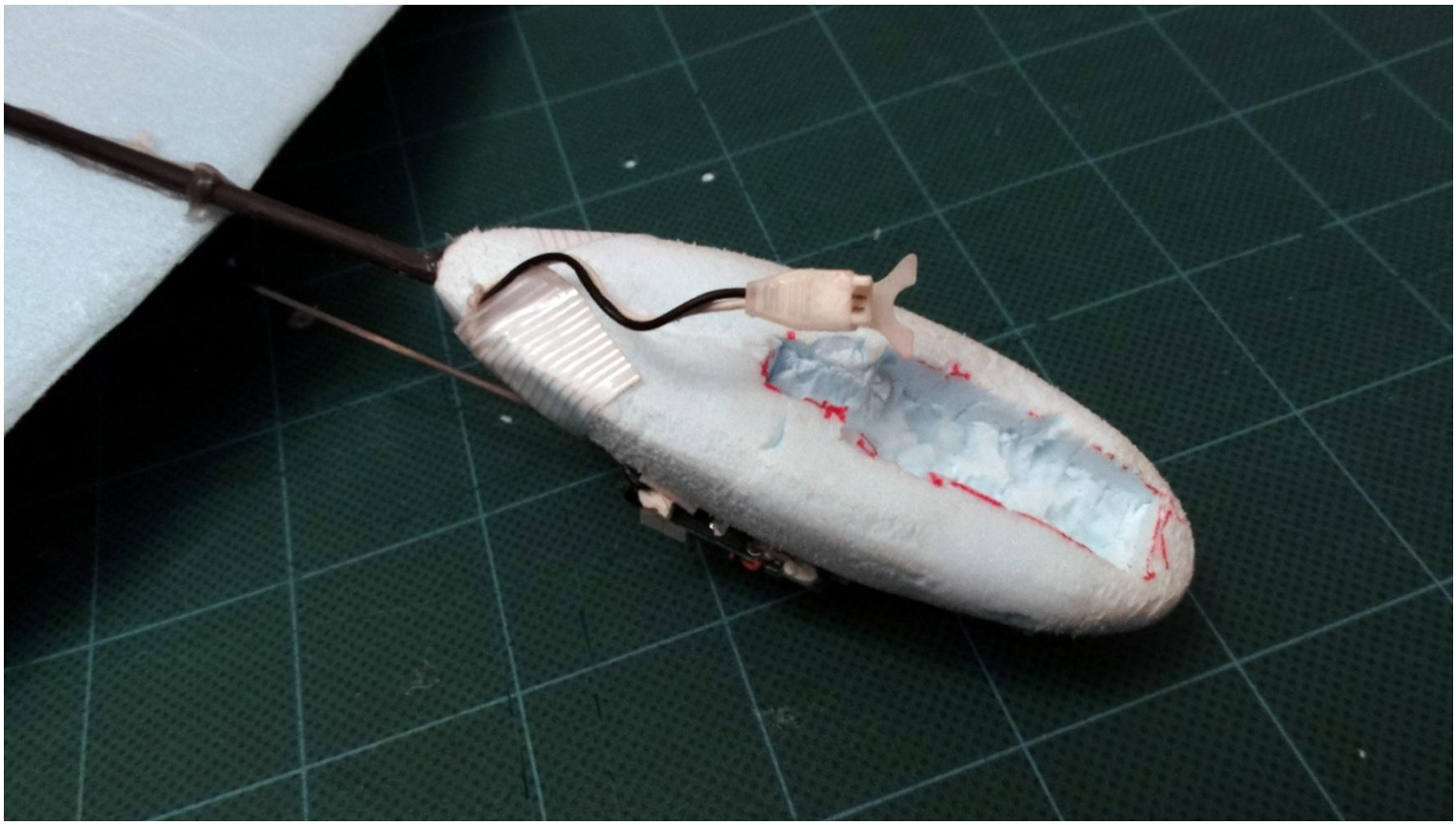
The rest is pretty simple, if you are using the AR6400 from Spektrum, use the 3M foam double sided tape to attach the receiver to the pod, but before you stick the receiver to the pod, slide the aluminum tubes in the pushrods, then attach the given Z-bend to the pushrods with the white shrink tube, you may heat it so it does not move. (when your servos are all set up and adjusted, you will apply think CA inside the shrink tube to secure and prevent the Z-bends from sliding) I have mounted my pushrods criss-cross as i found it prevents from bowing when controls are

applied during flight, you may just go straight from the servos to the horns, its up to you. also the aluminum tubes are hot glued (you may thick CA them) to the boom at 100mm from the back of the wing.

Battery Bay:

This is the last step to the installation of the micro DLG. since we all use different glue and amounts of it, it is best before cutting the battery tray out of the pod to test the CG and flight characteristics to your liking. the CG center of gravity should be around 2" inches from the leading edge of the wing , so mark this with a marker, tape the given lipo to the bottom nose of the pod as shown below. Go out for a test flight on a calm day with no wind (5mph winds or less is doable but no wind is super fun) if you find the plane is flying great, you may trace the battery hatch and cut with Xacto the bottom of the pod, usually the battery at the tip of the pod is balanced perfectly. always place a piece of tape across the battery to prevent the lipo from flying out upon throw. Remember, the slightest wind can toss her around. Few other notes, if you feel the plane is porpoising (rocking back and forth), you must give it down elevator to straighten the nose and regain level flight, most DLG's are this way, but this little guy since it is only .85oz, the slightest movement or wind can cause this effect and make you think the plane is tail heavy, so keep this into consideration when flying and dialing in the CG.





I have been able to keep the plane up on an average of 35 seconds on cold days with no wind. on very hot summer days, she flew for over 5 minutes when i found thermals, on a regular hot day with no thermal lift, i averaged around 50 seconds of flight time per throw. I have thrown this micro DLG hundreds of times and the wings never gave out, of course this was with lots of trial and error, some might suggest to put carbon on the wings, i have tried this and sure you get a higher toss, but the plane becomes heavier and does not fly as well.

If you have any questions, email me anytime, or if i missed something in this installation guide, please let me know.

Kind Regards,

Leon
www.SkyHighHobby.com
Micro DLG