

Bellanca Aircruiser C27-A V2 Build Plan Matagami Designs

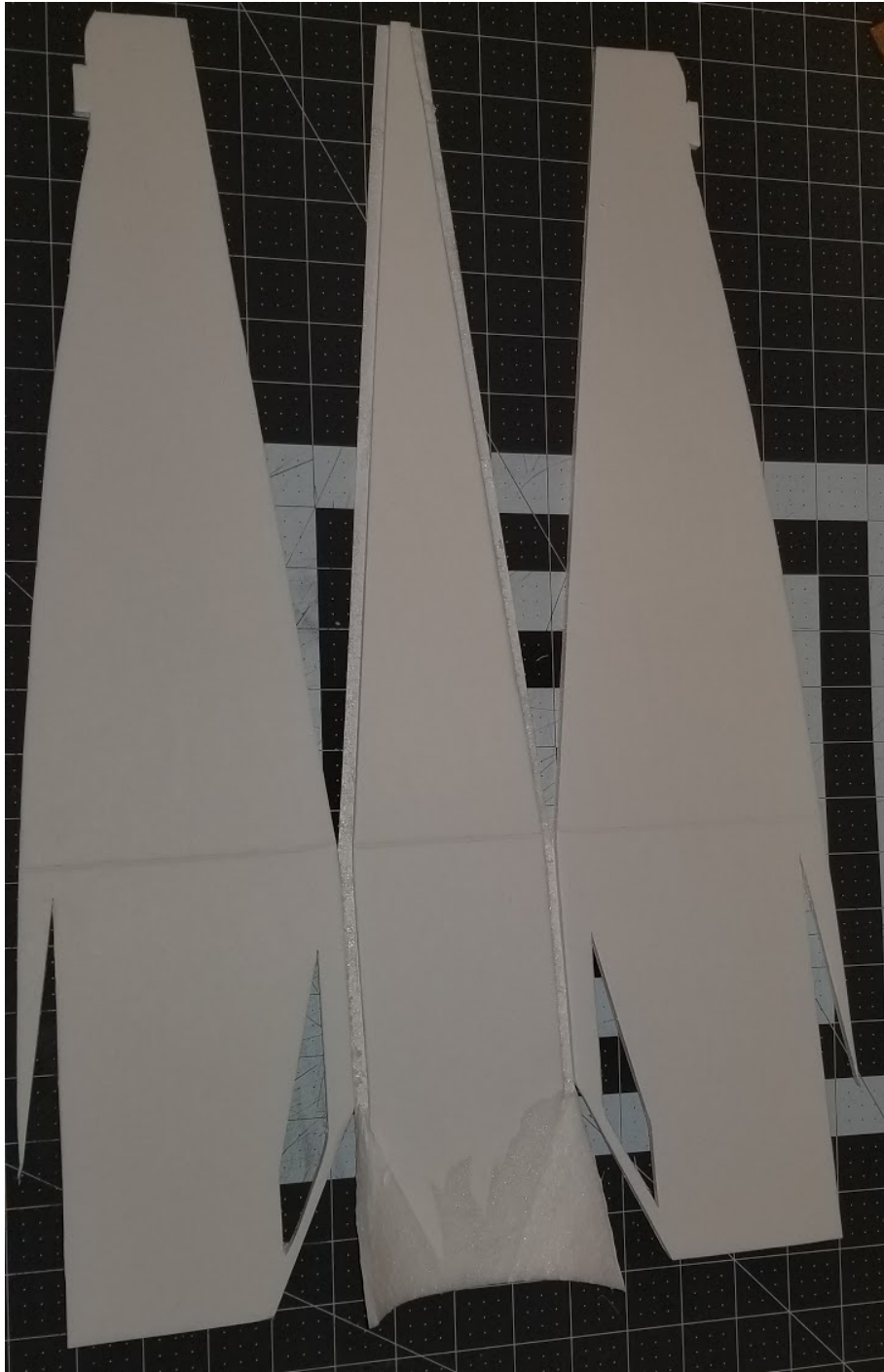


You will need:

1. Six sheets of 5mm or 3/16inch foam board.
2. Flite Test 'C' power pack motor
3. Four 9 gram Servos (Flite Test ES08All recommended)
4. Flite Test swappable firewalls
5. Flite Test control horns
6. 0.039" music wire
7. Coffee stirrers
8. Hot glue
9. 0.25" dowell rod
10. Bamboo skewers
11. Velcro
12. 2.75" Flite Test foam wheels
13. Sticker paper (optional)
14. Paint (optional)
15. 3d printed parts (optional)

Please Consider this an addendum to [FTFC20 - Bellanca Aircruiser Build Instructions V1.5](#)
Build Video <https://youtu.be/73dcYFI1opo> to highlight changes to techniques in V2.

Fuselage Cut and Ready to Fold



Fuselage with B Folds Glued



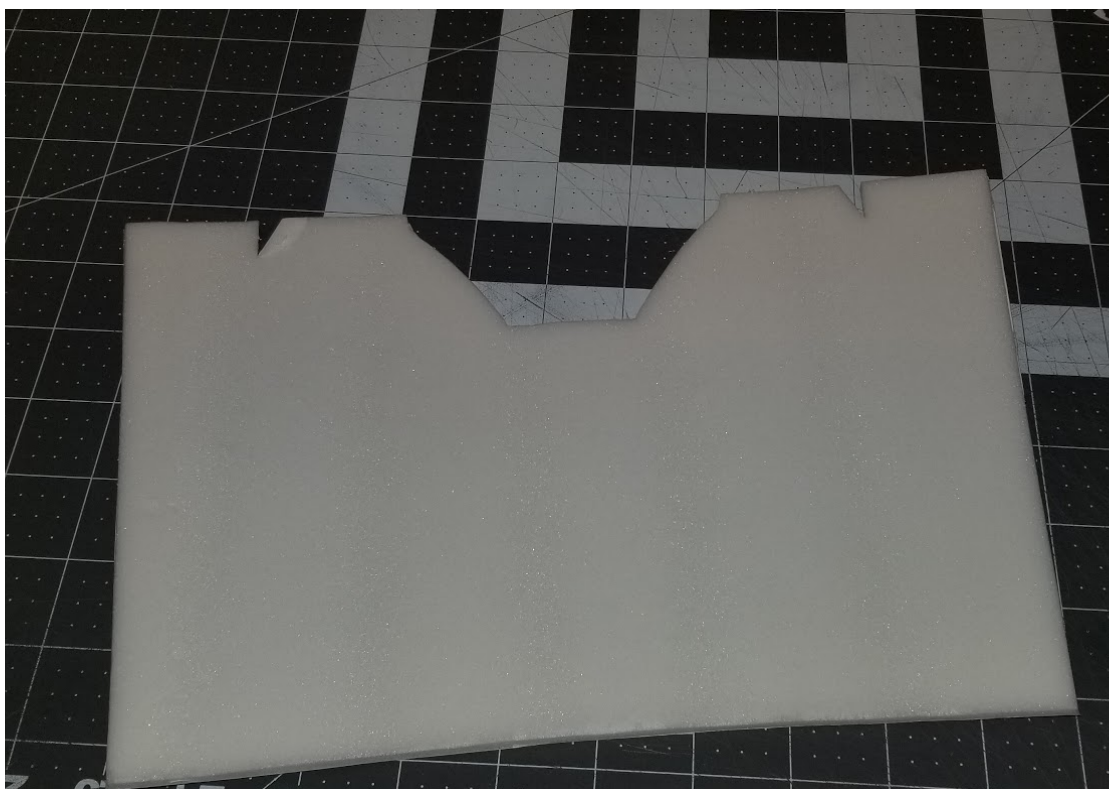
Transition Folds Glued



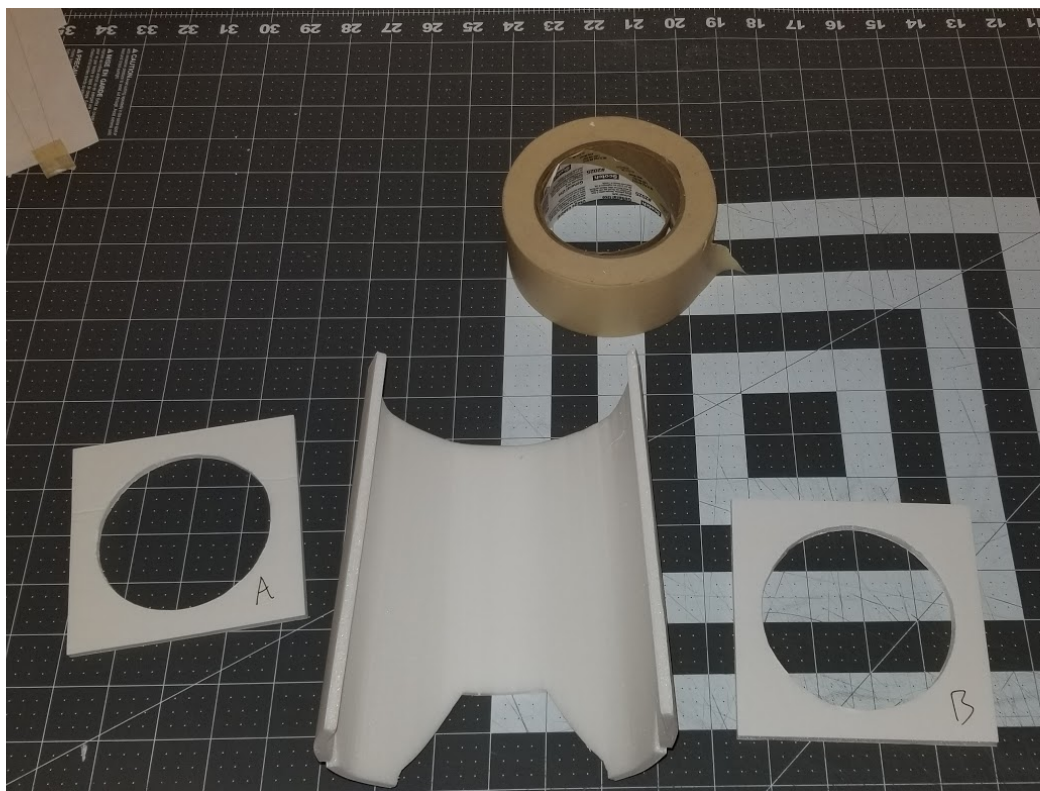
Tail linkage Guides Installed



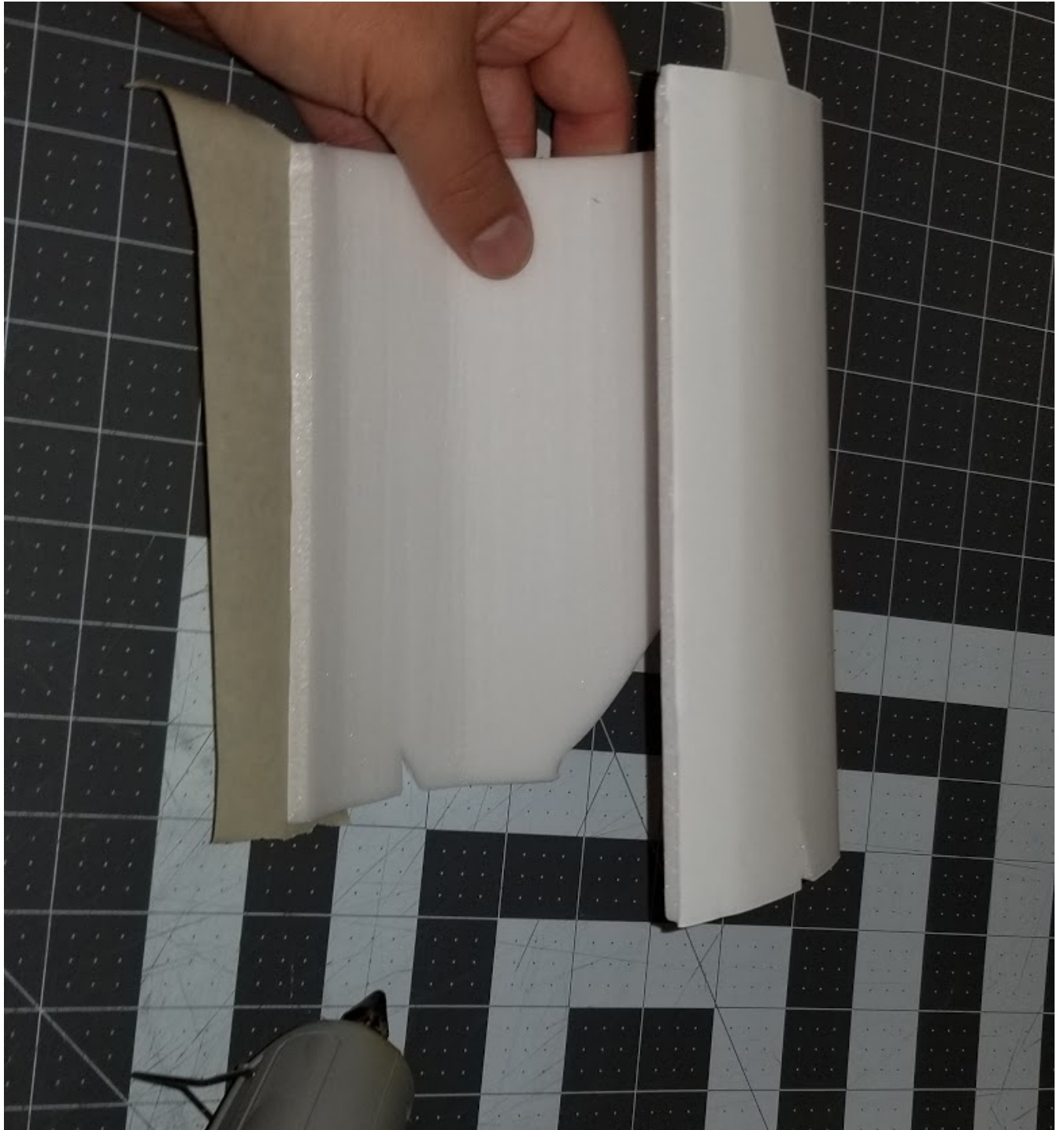
Nose Cut, Paper Removed and Ready for Forming



Nose Rolled, Gauges Cut



Ready Nose Seam with Masking Tape



Glue Nose Seam, Immediately Place in Gauges to help set Diameter
Cut Powerpod Reinforcements from thin (1/16") plywood/plastic



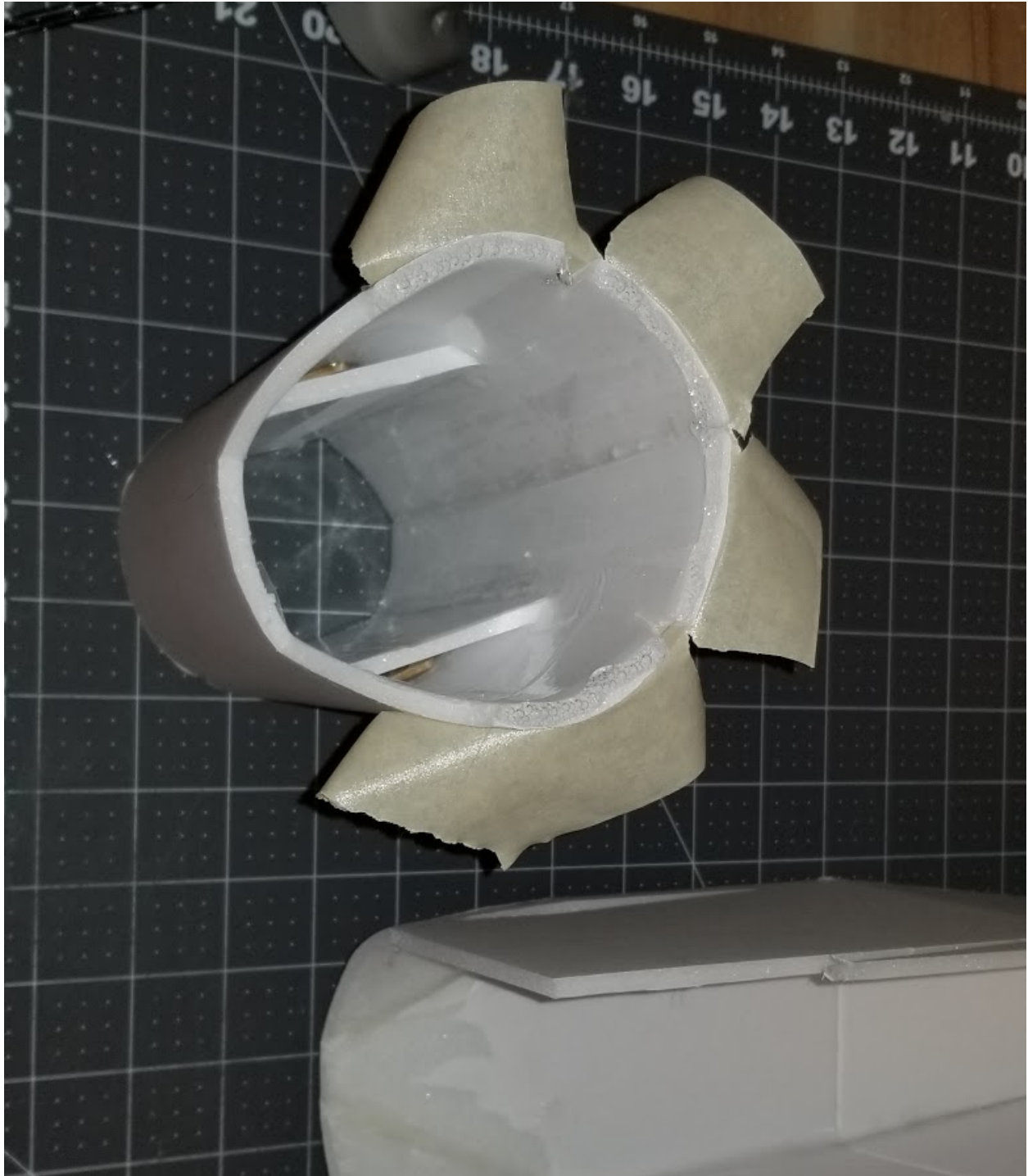
Glue Reinforcements to Powerpod Holes
Reinforce Seam with Packing Tape



Add Power Pod Alignment Plates,
Installed at a depth of 0.75" from front.



Prepare to Glue Nose to Fuse, Apply Masking Tape



Glue Nose to Fuse



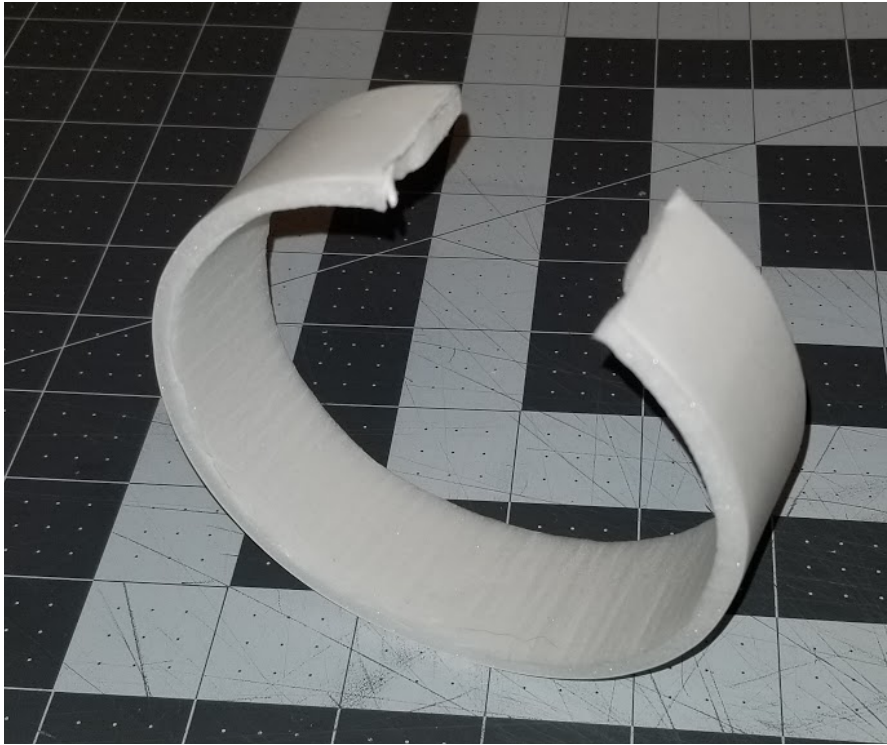
Finish Cutout for Flying Struts



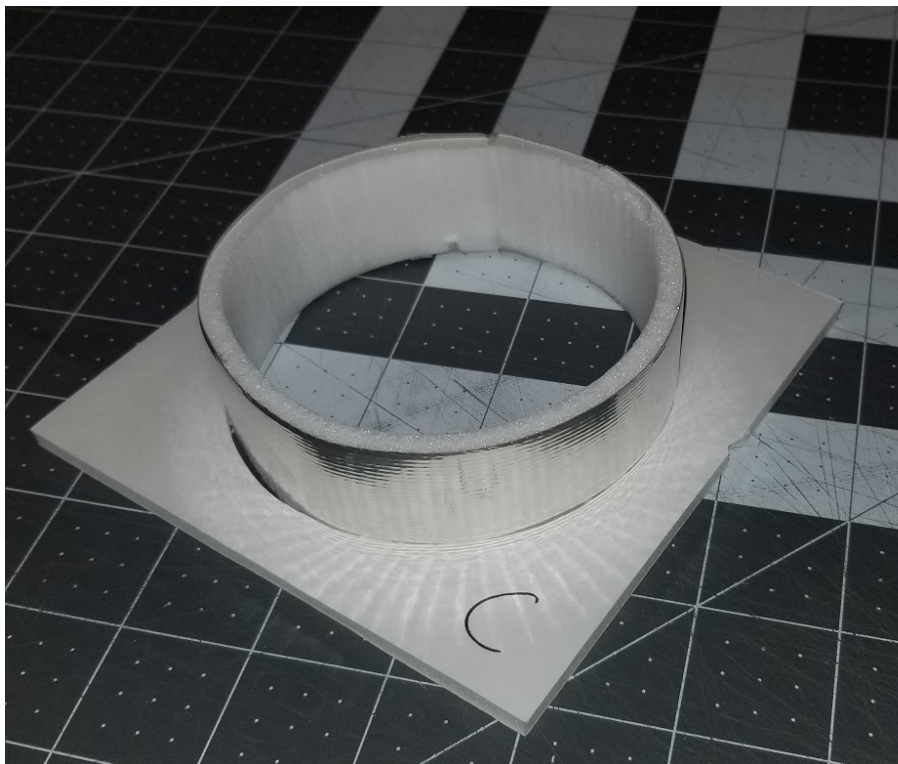
Reinforce nose Seam with Cardstock



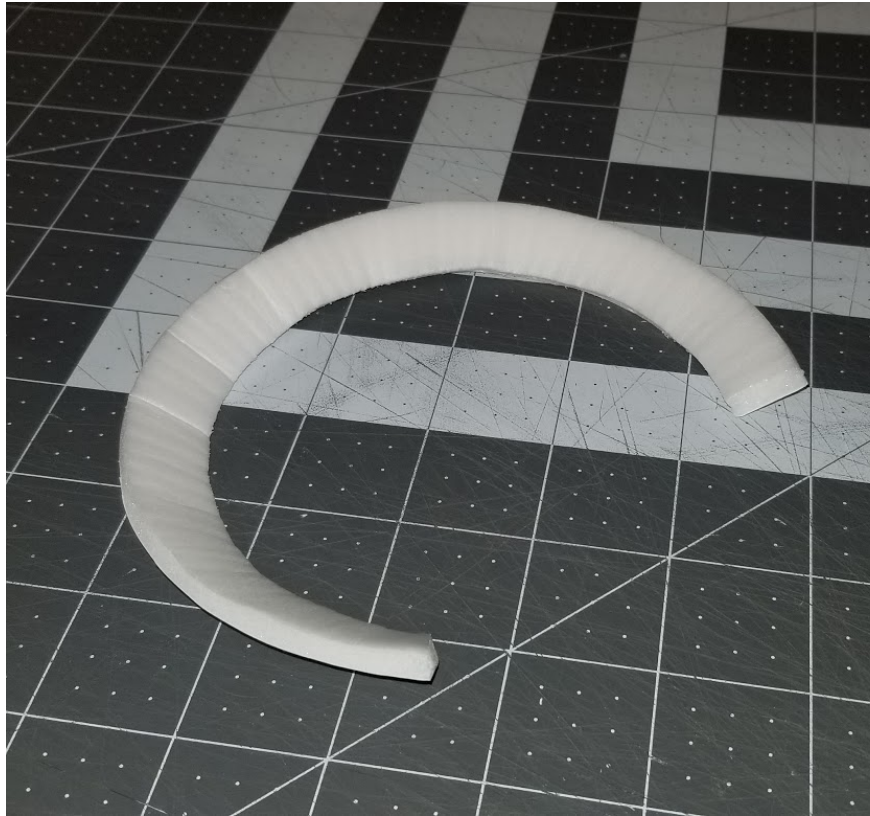
Cut and Roll Cowling



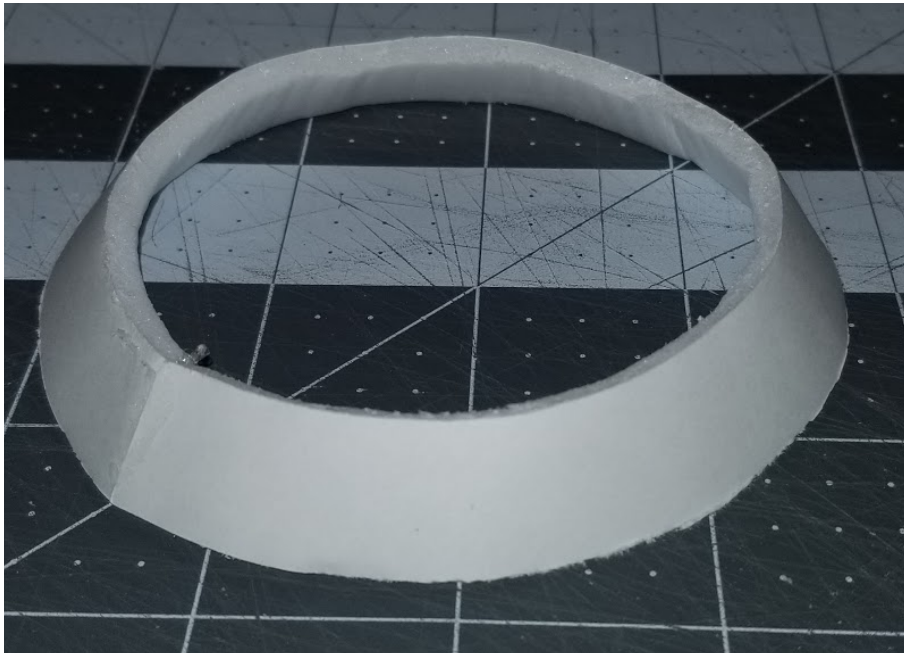
Glue in Gauge C



Cut and Roll Cowling LE



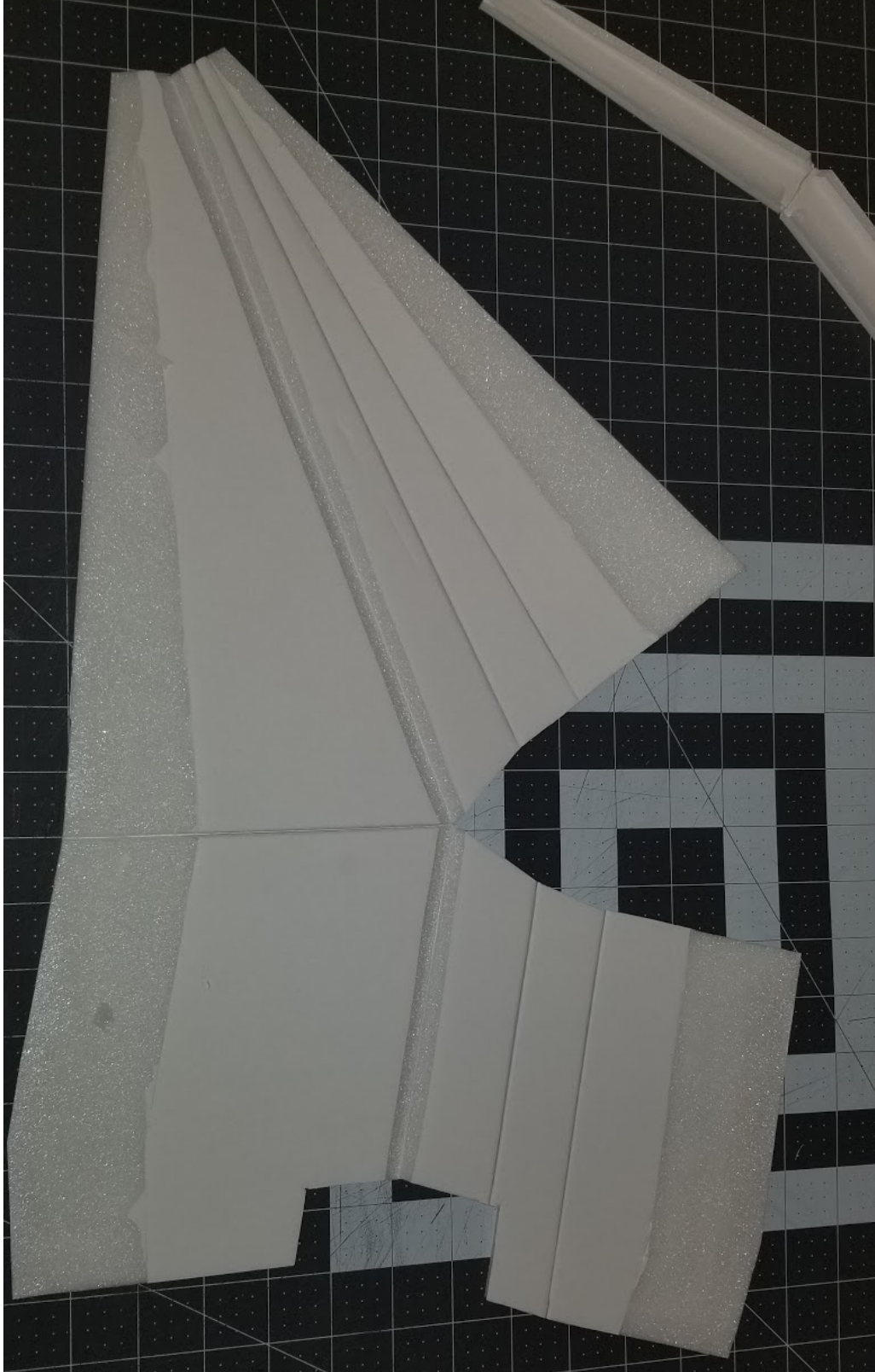
Glue Seam



Glue LE Cowl to Cowl



Flying Strut Cut and Chamfered
Sand Chamfers Especially at the Trailing Edges



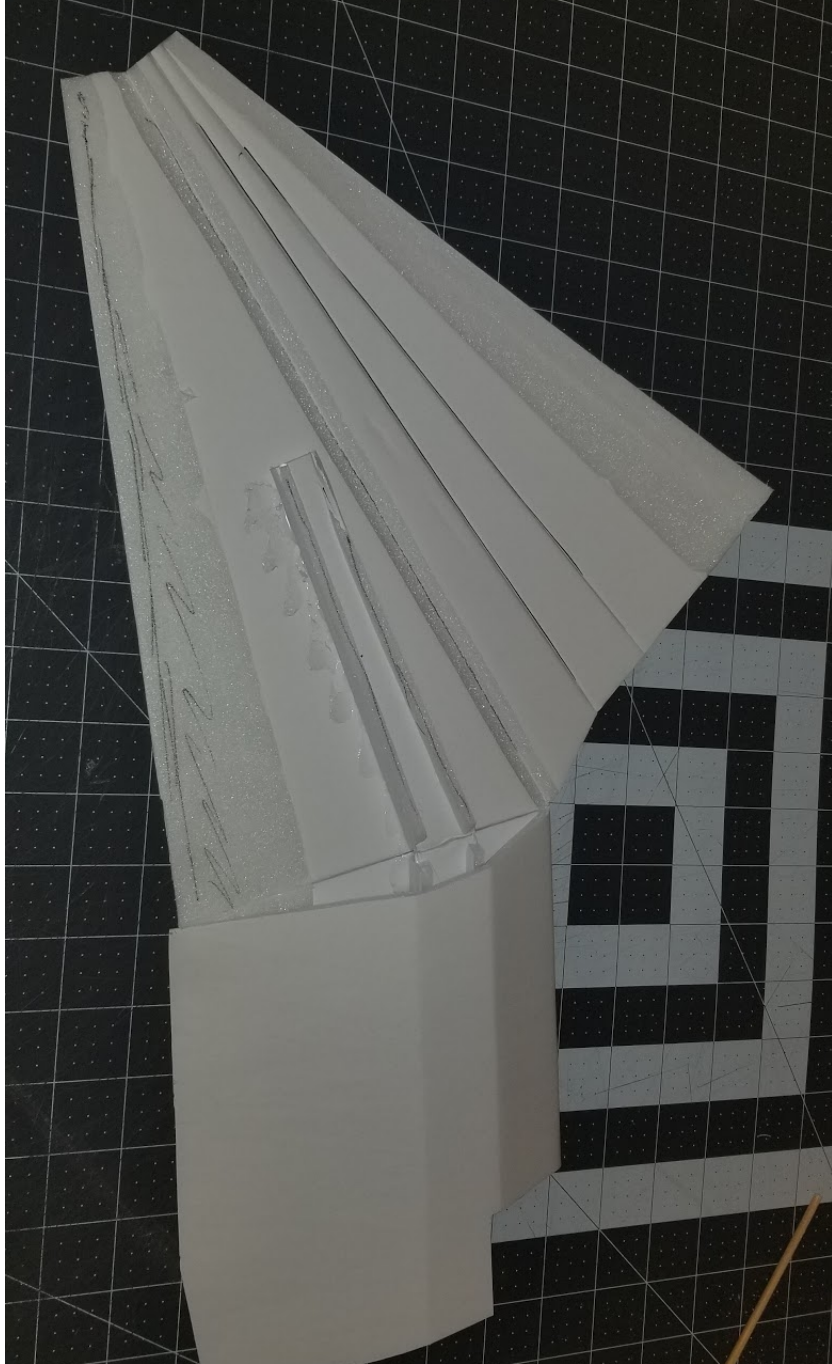
Glue in Wheel Strut Spar
Cut Strut Spar at the Center Fold to Reduce Stress When Bending



Glue Inner Half And Fold Over to Form Lower Airfoil



Glue Outer Half And Fold Over

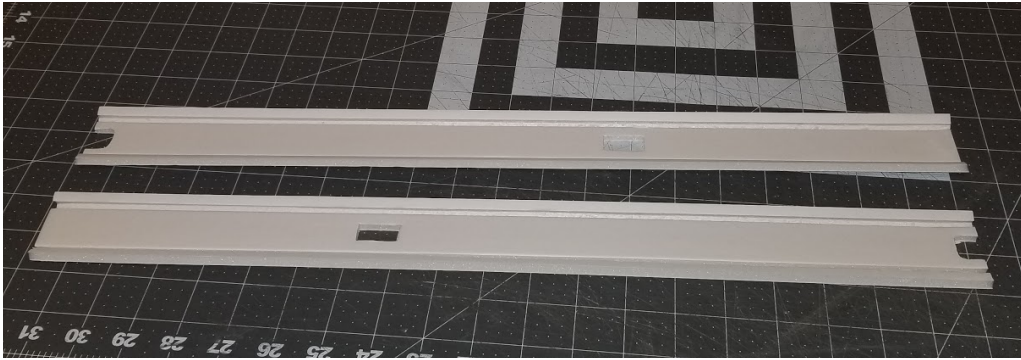


Wing Half Cut and Chamfered

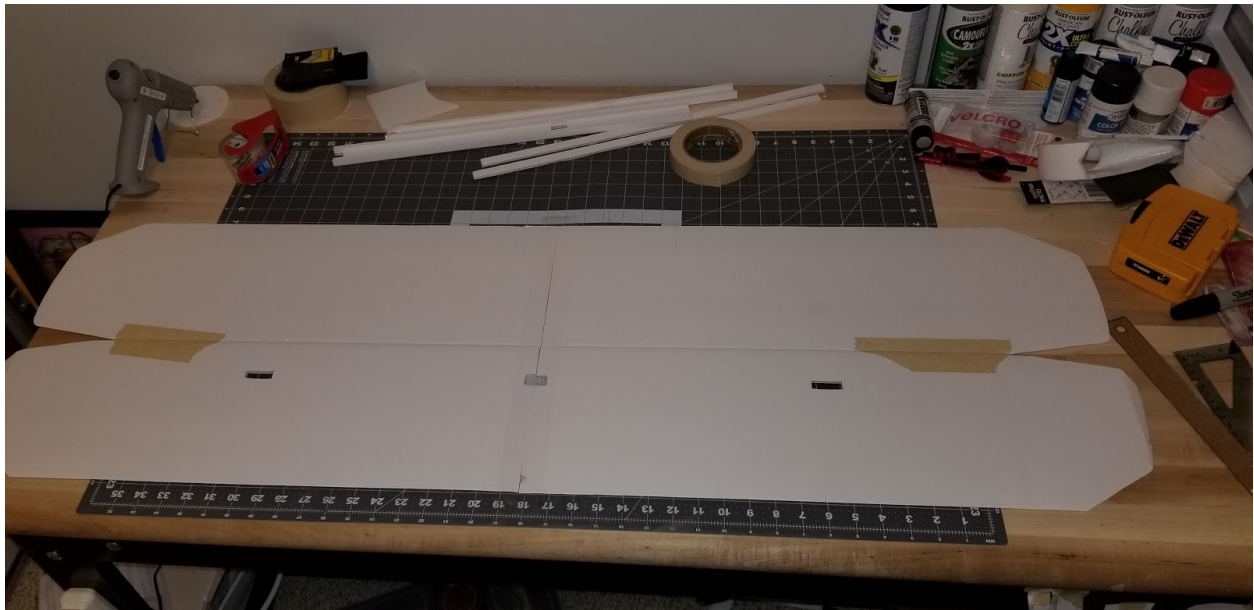
Sand Chamfers Especially at the Trailing Edges



Wing Spars Cut



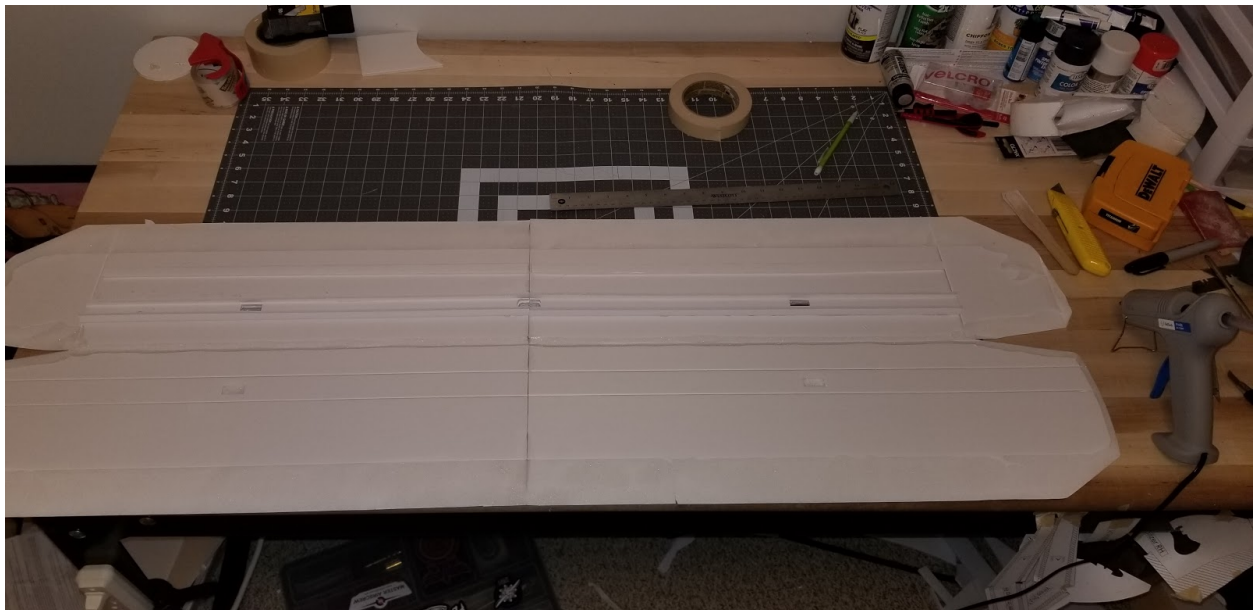
Wing Halves combined with Packing tape.
Masking Tape at Edges can Relieve Stress Built up when Folds are Performed



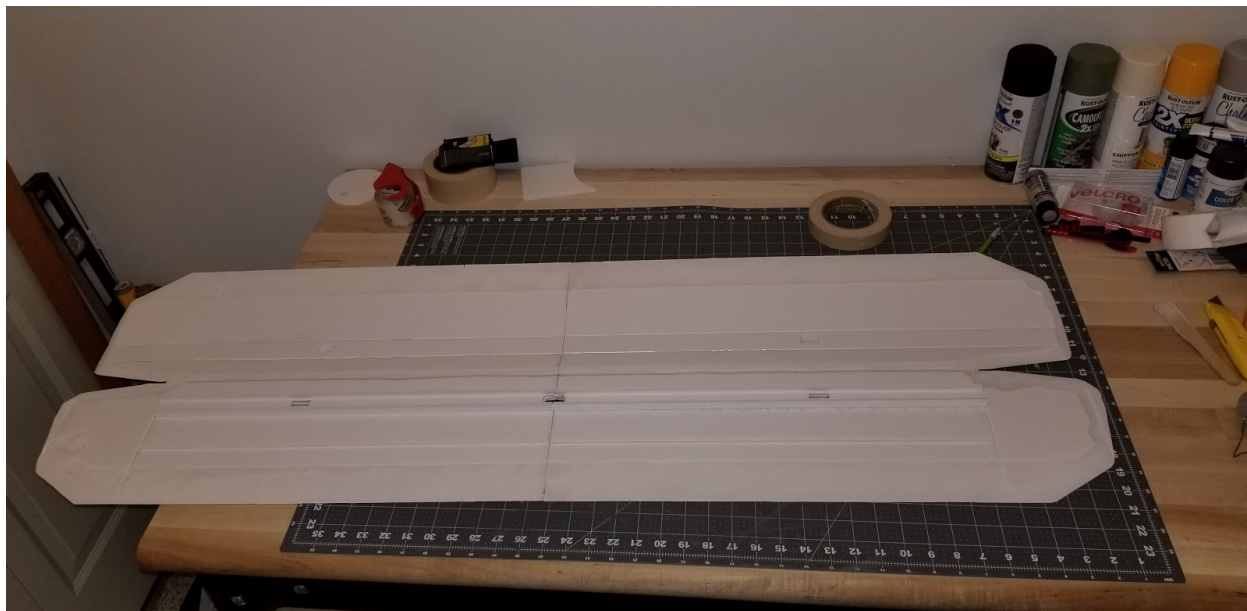
Glue Wing Halves Skipping Appropriately for Eventual Dihedral Bend



Glue in Wing Spars



Pre-form and glue upper wing airfoil surface



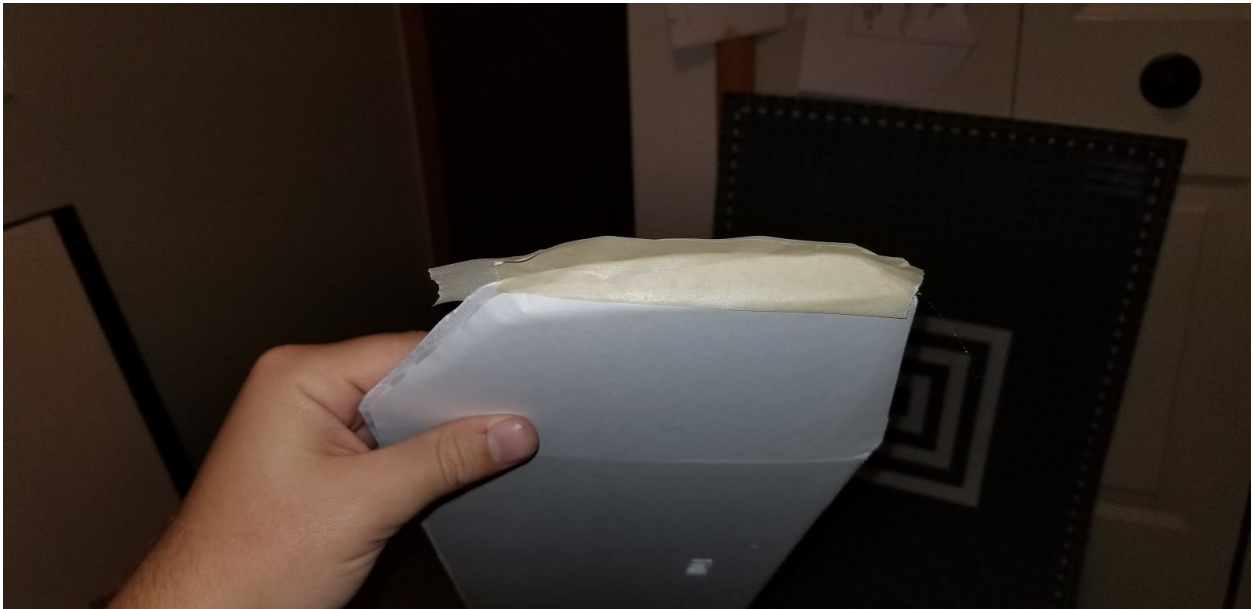
Fold wing over Glue Center seam, Spar, and Trailing edges, get help to hold while drying.



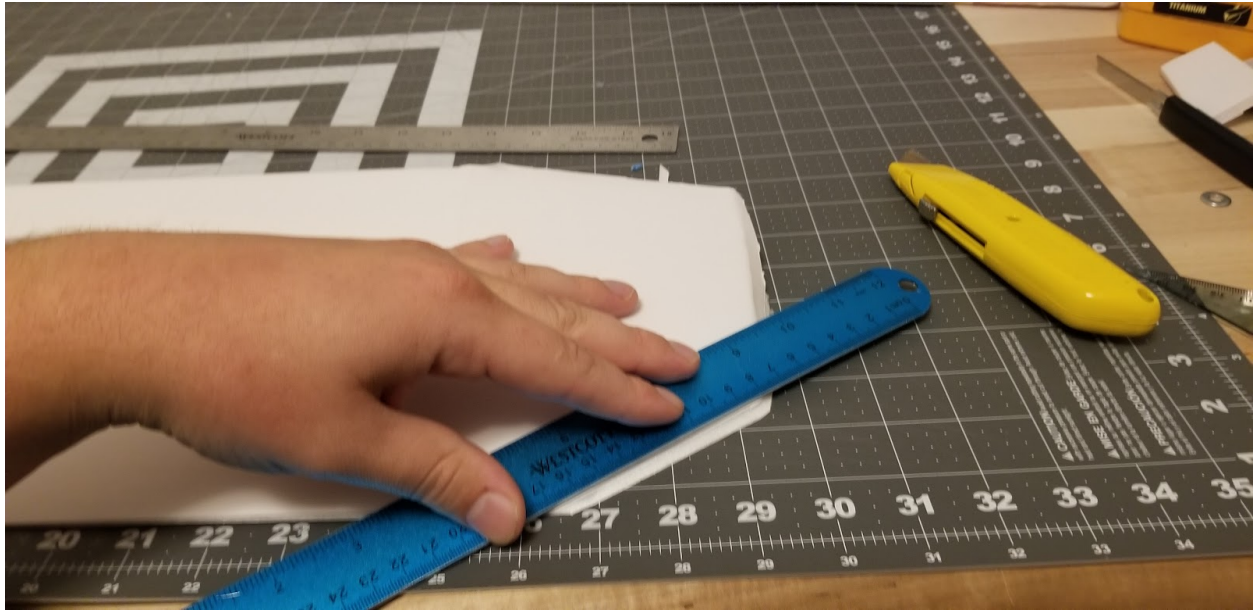
Fold up and glue wing tip Lead and trailing edges, use masking tape to help hold.



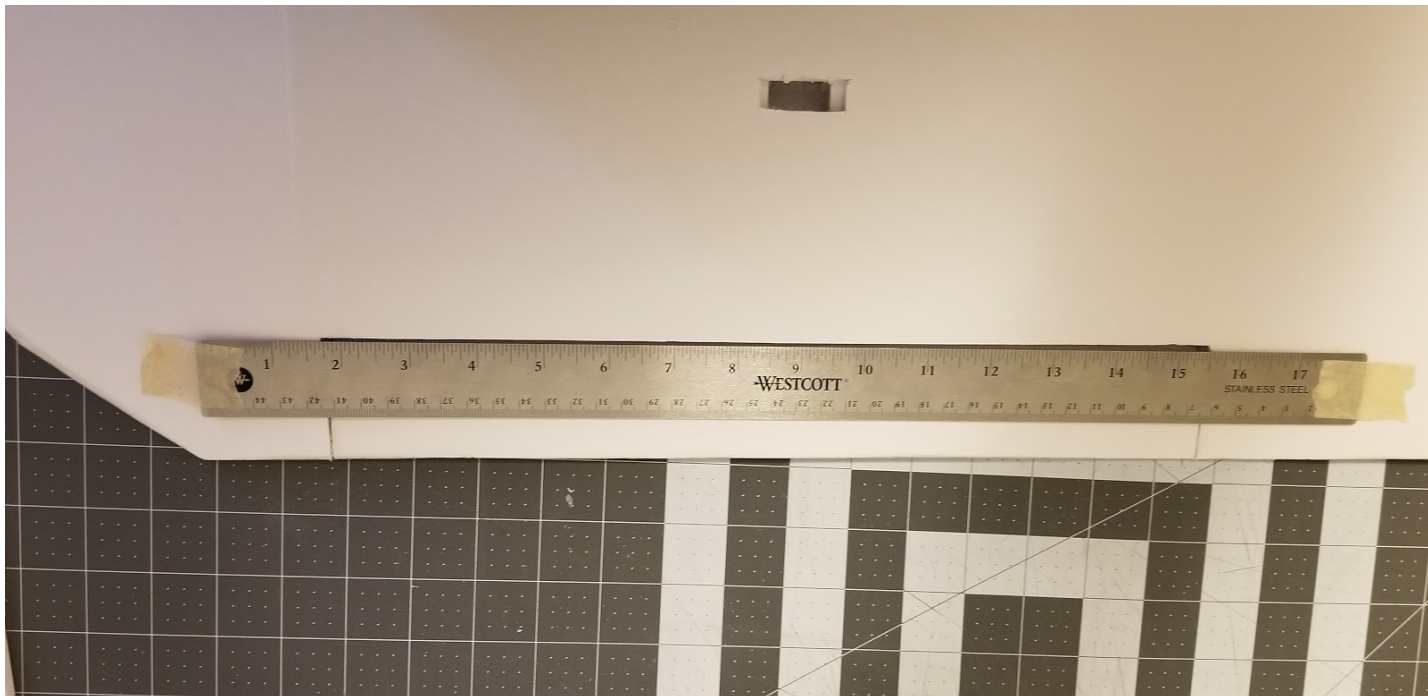
Add Glue to Wing Tips
Use masking tape to Hold



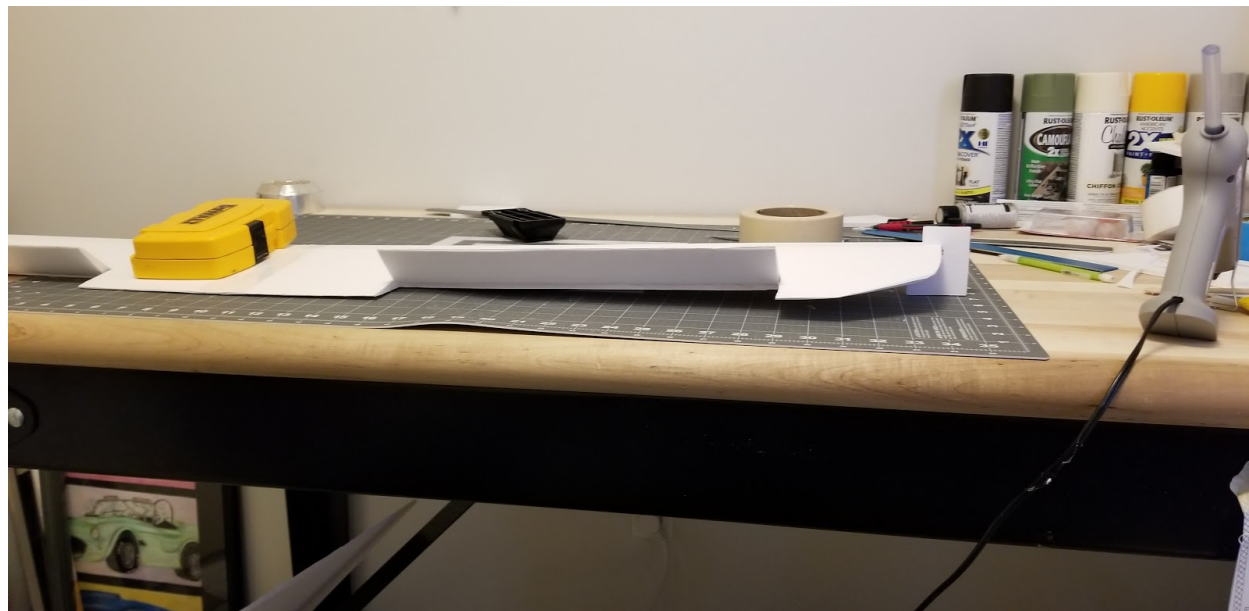
Trim Excess from Top Surface on Trailing Edges



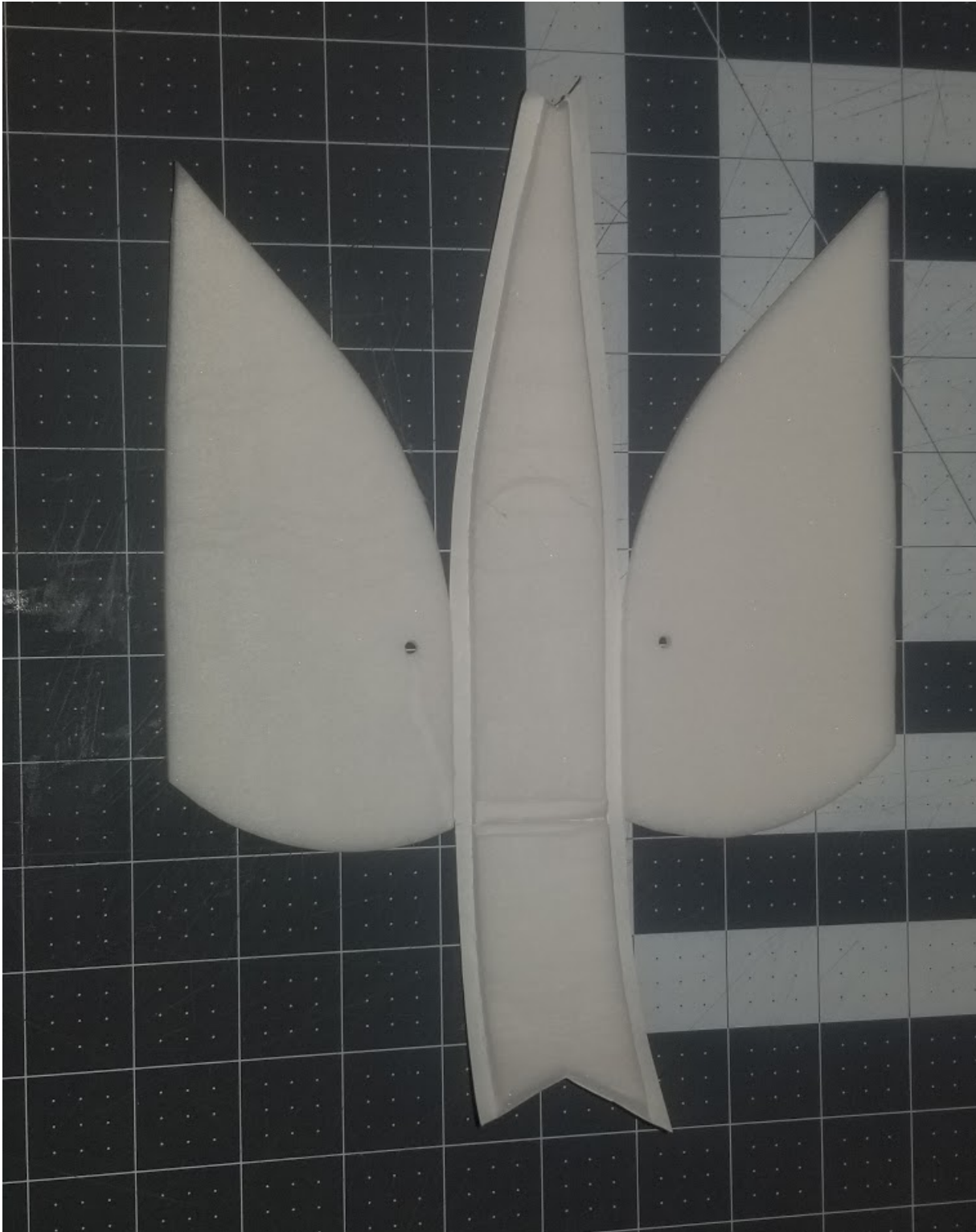
Cut in Control Surfaces on Bottom of Airfoil be Careful not to go all the way through



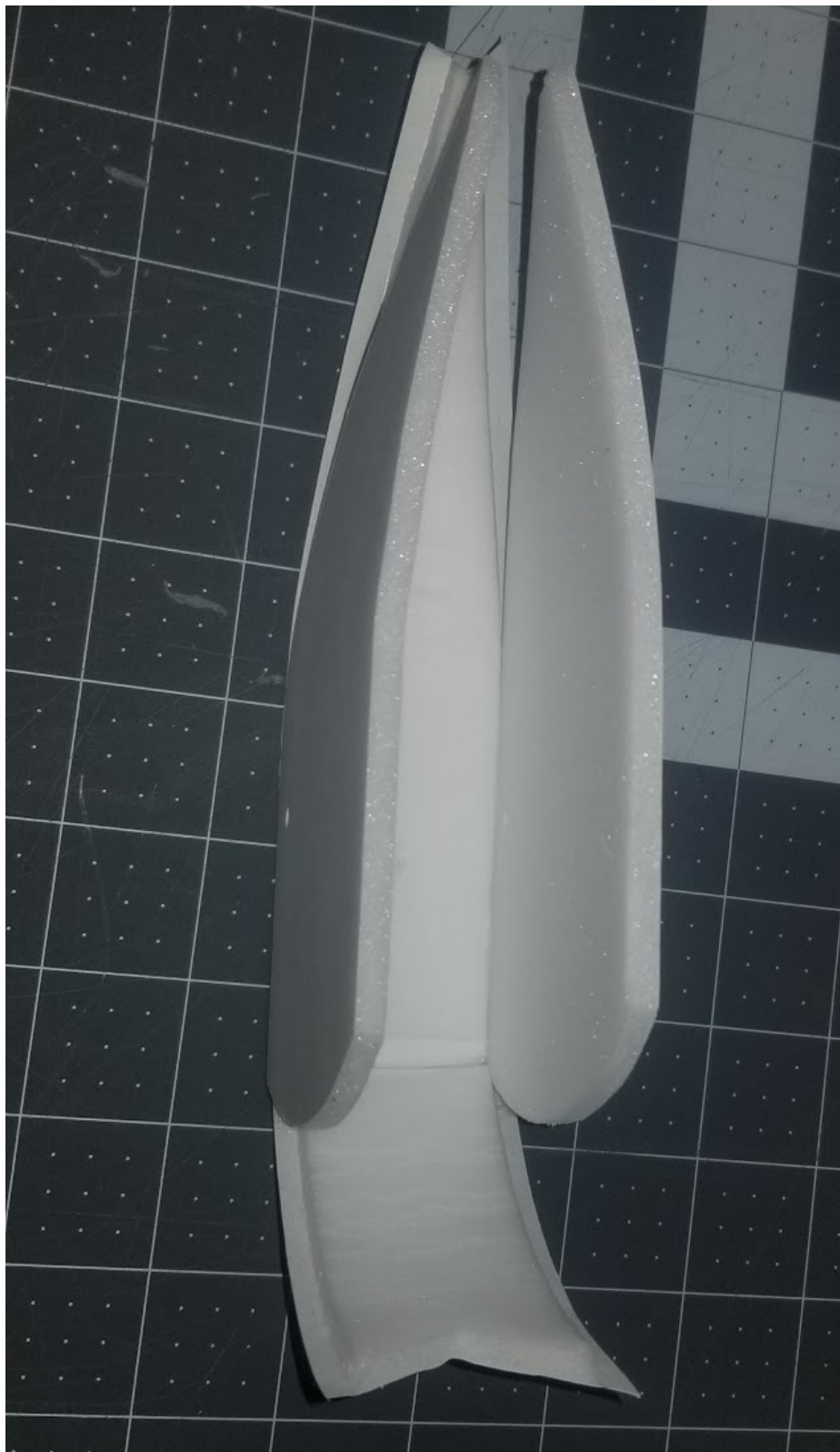
Add Dihedral, Glue Center and Reinforce with Packing Tape



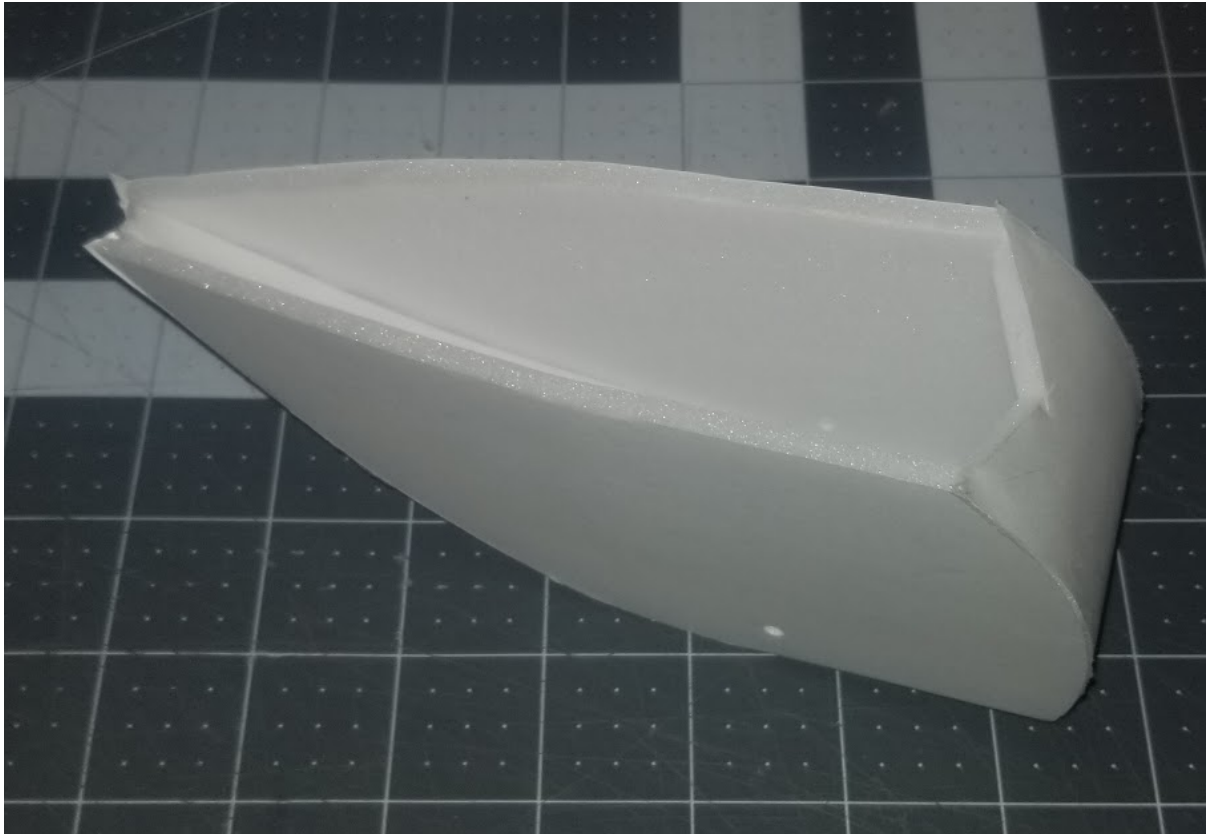
Wheel Pant Cut and Ready to Fold , Wheel Cut Scored 50%
Slightly Roll Up Leading and Trailing Edges



B Folds on Sides



Use Table and Roll Front and Rear Faces While Glue Dries.



Cut out Hole For Wheel (Already 50% Scored)



Please Ask Questions and Post your Build in the Build Thread here:

<https://forum.flitetest.com/index.php?threads/ftfc20-bellanca-aircruiser-c-27a-by-matagami-designs.59923/>