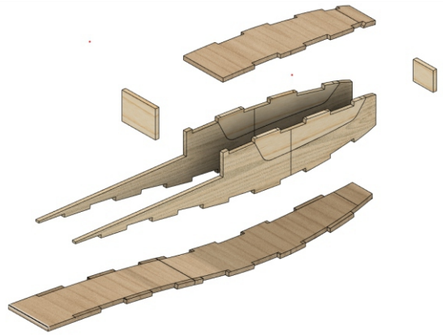
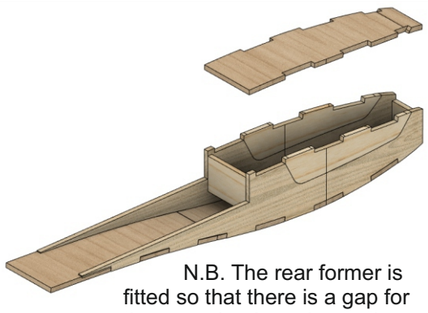
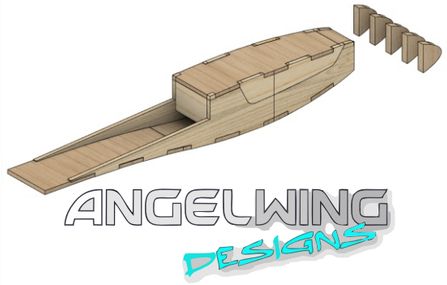
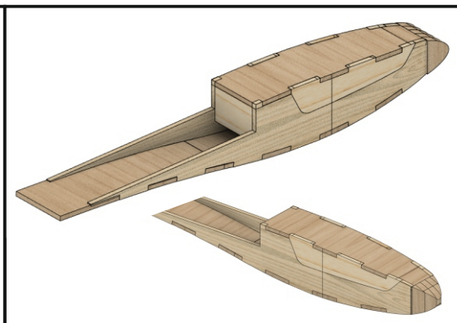
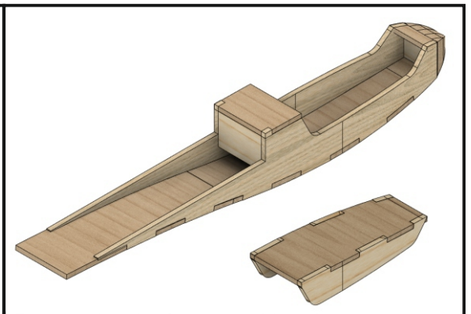




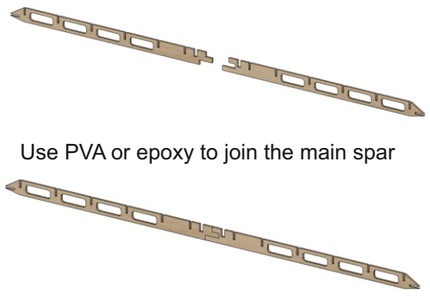
N.B. The rear former is fitted so that there is a gap for the servo leads underneath



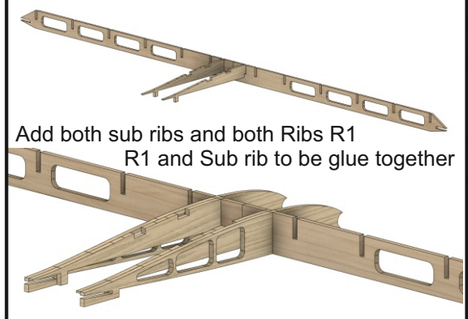




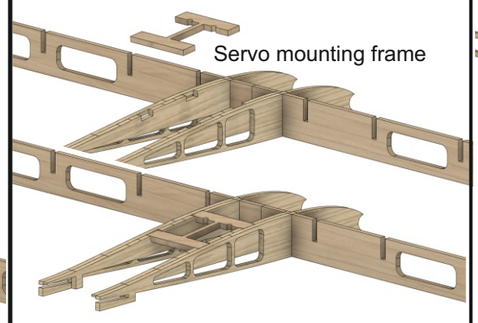
Remove hatch after assembly using a razor saw



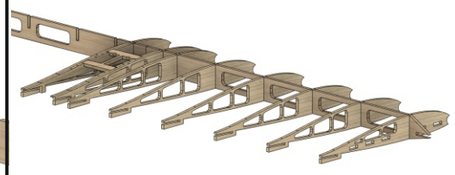
Use PVA or epoxy to join the main spar



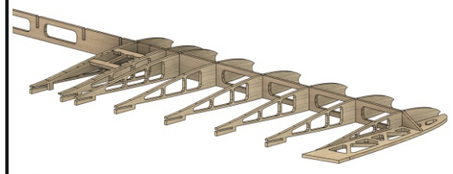
Add both sub ribs and both Ribs R1
R1 and Sub rib to be glue together



Servo mounting frame

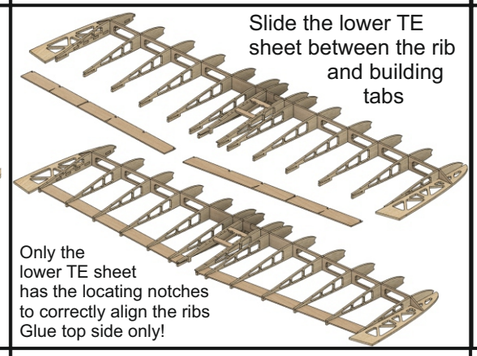


Add the remaining ribs R2 - R7
You can use CA,or PVA adhesives
Our personal favouirte is superphatic from Deluce Materials



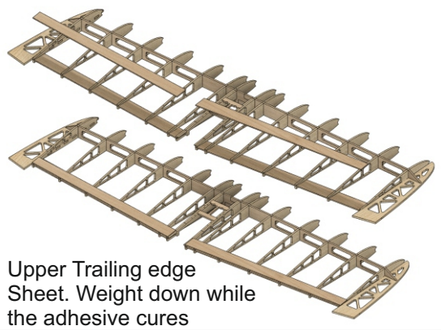
The wing tips are a snug fit into the spars and rib R7, Support the rib while pushing the tip into the interlocking tabs

Repeat the previous step for the opposite wing half, installing all remaining ribs and wing tip

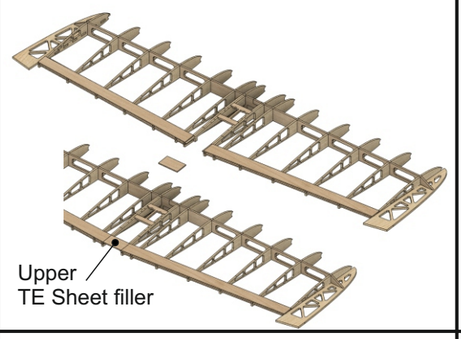


Slide the lower TE sheet between the rib and building tabs

Only the lower TE sheet has the locating notches to correctly align the ribs
Glue top side only!

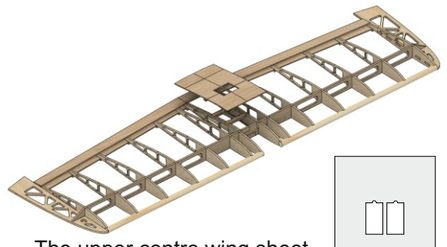


Upper Trailing edge Sheet. Weight down while the adhesive cures

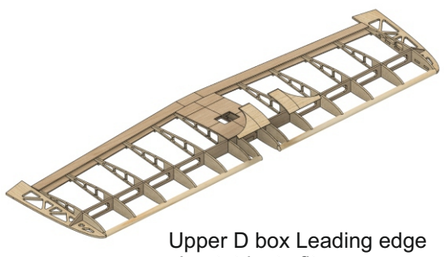


Upper
TE Sheet filler

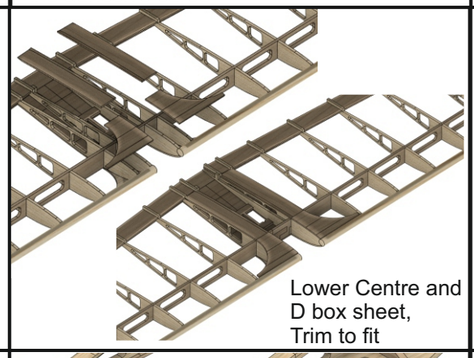
Lightly sand or clean the hardwood dowel leading edges with IPA before glueing. This helps give a better glue bond



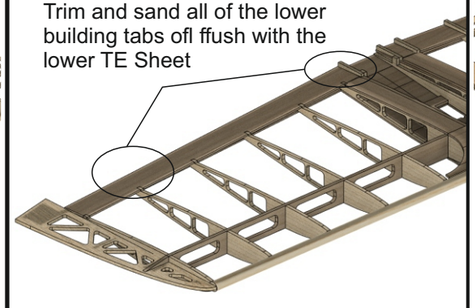
The upper centre wing sheet is made by joining the 2 pieces shown to the right



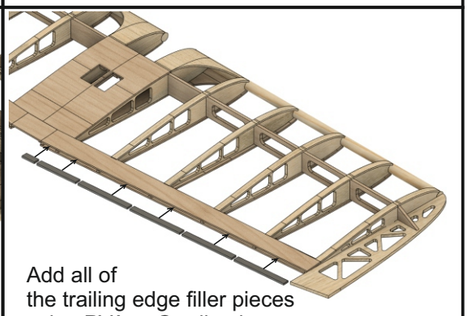
Upper D box Leading edge sheet, trim to fit.



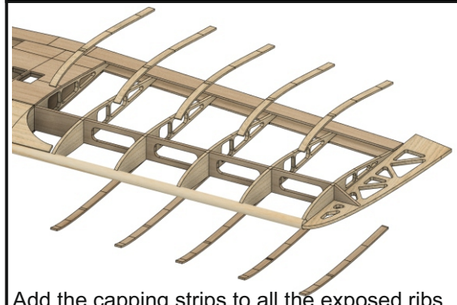
Lower Centre and D box sheet, Trim to fit



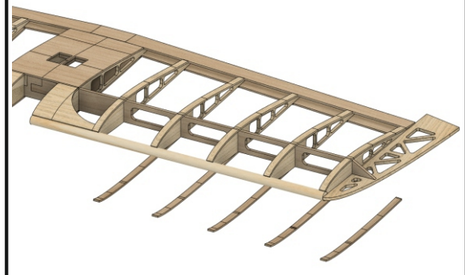
Trim and sand all of the lower building tabs ofl ffush with the lower TE Sheet



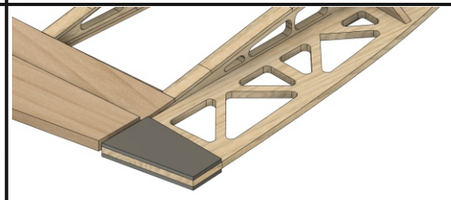
Add all of
the trailing edge filler pieces
using PVA or Gorrila glue



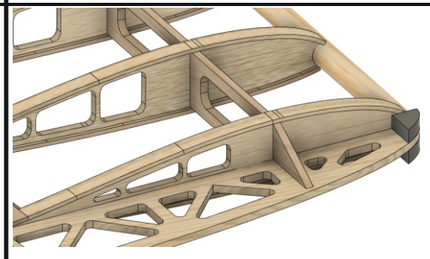
Add the capping strips to all the exposed ribs
We crush the leading edge of each capstip



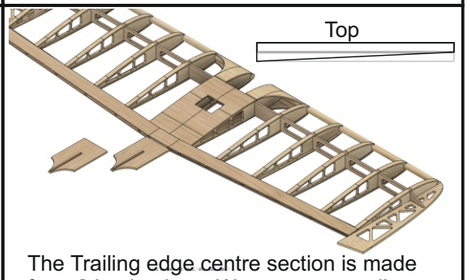
Crushing the leading edge of the capstrips give a nice closer fit to the LE dowel



Add the precut doublers to the wingtips top and bottom, this is to get a nice transition from the trailing edge when sanding and covering

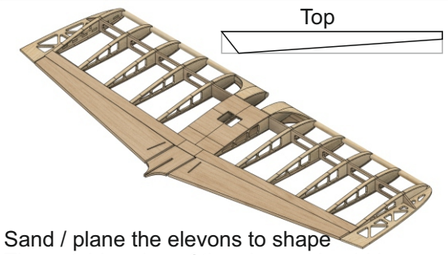


Just like the trailing edge filler pieces can be added to the LE of the tip to aid covering.
Cut these from scrap material from the elevons

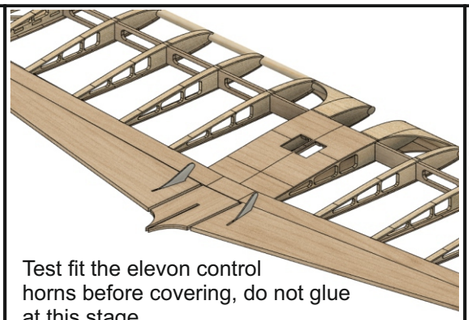


The Trailing edge centre section is made from 2 laminations. We suggest sanding this to the profile as shown above before fitting

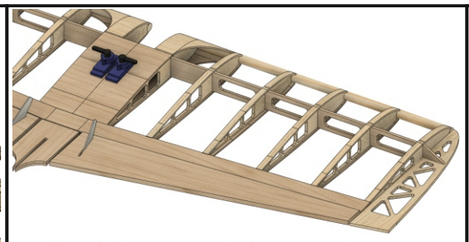
When attaching the centre trailing edge section it is important to follow the contour of the underside of the wing section. You can do this by holding the rear of the wing flat against your bench / building surface. This gives the correct amount of reflex as a starting point for test flights



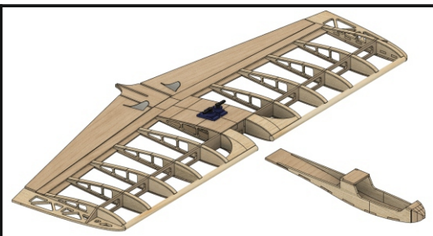
Sand / plane the elevons to shape
The outside edge of the elevon should be approximately 2mm thick, don't forget to angle
The exact section isn't critical however



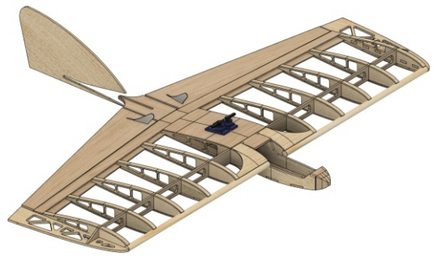
Test fit the elevon control horns before covering, do not glue at this stage

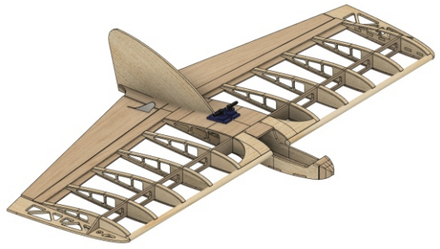


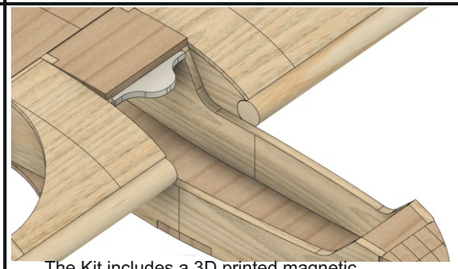
Test fit the servos before covering
adjust the openings to suit your servos before covering or adding the fuselage



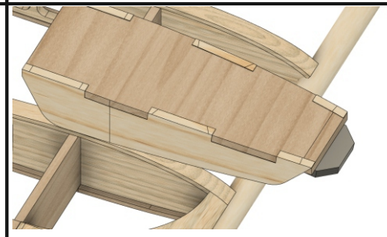
Test fit the fuselage and fin.
Whilst the fuselage can be glued into place not it is easier to cover first and then fit the fuselage







The Kit includes a 3D printed magnetic hatch retainer and additional magnet. Use a dremel tool or similar to embed the 2nd magnet into the underside of the canopy area

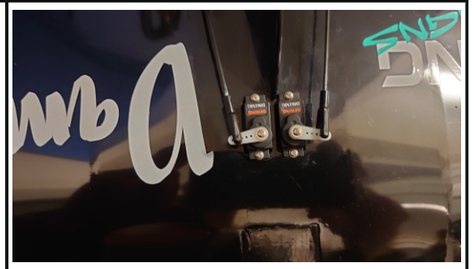


Use an offcut of the poplar ply to create a tongue for the front of the hatch

Time to make some dust!. There is very little sanding so take your time to get a nice finish as this is the secret to a smooth ride covering

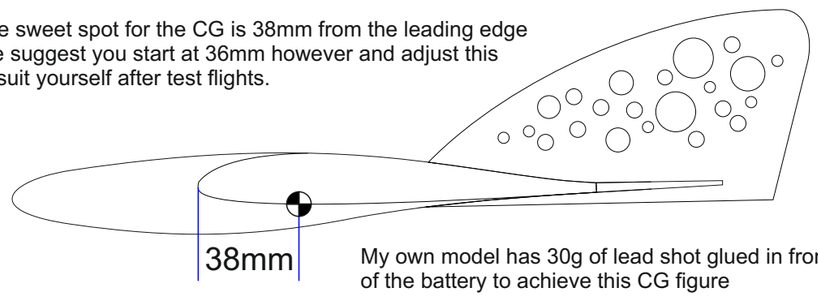
You can new glue the fuselage into place
The fin, and mount your elevons and control horns. The elevons can be hinged from the top using film covering or something like diamond tape, or you can sand a traditional bevel onto the leading edges and use thin mylar hinges if preferred, If you do use a mylar hinge make sure there are no gaps between the elevon and trailing edge of the wing.
This can lead to a noticeable drop in overall performance , particularly low lift performance

The Plastic snap link / clevices are simply glued to the carbon rod pushrods using thin CA or epoxy if you prefer more working time. Please note that the servo arms should be mechanically cranked forward so the pushrod and servo arm form a 90 degree angle.
This gives the best geometry and reduces the need for electronic differential for aileron.



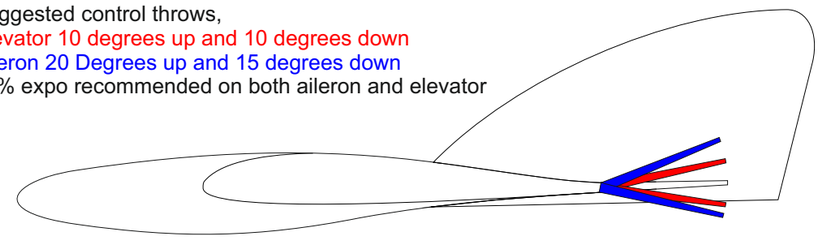
Designed around a 4 cell AAA RX Battery

The sweet spot for the CG is 38mm from the leading edge
We suggest you start at 36mm however and adjust this to suit yourself after test flights.



My own model has 30g of lead shot glued in front of the battery to achieve this CG figure

Suggested control throws,
Elevator 10 degrees up and 10 degrees down
Aileron 20 Degrees up and 15 degrees down
30% expo recommended on both aileron and elevator



These instructions and model are intended for people who have some building and flying experience. Our facebook builders group is a very friendly resource where pretty much any question that arises during a build such as this can be answered quickly, and often from more than one single view point. Please remember that model aircraft are not toys and should be flown in accordance with all current regulations and in a responsible and safe manor. We designed the dammit as a quick to build and fun compact model for slope flying in winds around 10 to 30mph. The structure is built with this in mind to achieve a typical flying weight of approx 300g which will give good all round flight performance without getting blown back from the slope. We hope you enjoy building and flying our models and are always happy to receive feedback email awdbalsakits@gmail.com

ANGELWING DESIGNS