

# Zeke's Park Scale Models



Thank you for purchasing the Cessna 337 from **Park Scale Models**. From a very early age I had a fascination for aircraft of all types, but especially for general aviation aircraft. As a young boy building Comet© and Guillows© models, I developed a passion for planes built from balsa. Nothing could capture my imagination like the balsa structures I'd see in books and magazines and I dreamt of one day having a business that specialized in park flyer sized remote controlled aircraft. Now, 25 years later, technology has made it possible to turn my boyhood dream into reality. I sincerely hope you have as much enjoyment building and flying your Cessna 337 as I did developing it.

## General Building Information

Please be sure to carefully read through the instructions before building your Cessna 337. Having a good understanding of the building process will help to make a more enjoyable experience and greatly reduce the chance of making a mistake. It is strongly suggested that you follow the building sequence in the manual. A great deal of thought and time has been put into making the building sequence as 'fool-proof' as possible.

You will need to have a sharp cutting blade (X-acto© #11 works well) to free the parts from the sheets by cutting the small 'hold-in' tabs. Because balsa is a natural product, the density can vary several places in a single sheet. Occasionally the laser might not cut through the sheet completely when it hit's these spots of higher density. You can quickly free these parts by running your cutting blade along the laser cut line.

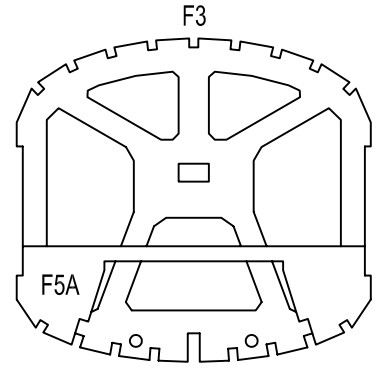
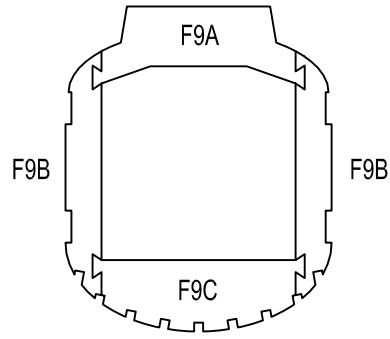
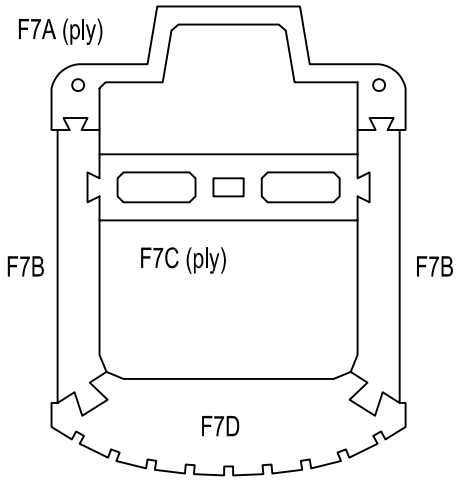
The Cessna 337 can be built with or without landing gear

Cessna 337 specifications	
Length:	26 ½"
Wing Span:	37"
Wing Area:	~192 in <sup>2</sup>
Weight:	9.0 ~ 12.0 oz.
Wing Loading:	6.75 ~ 9.0 oz/ft <sup>2</sup>
Recommended Power System:	Two (2) GWS IPS-S2 w/ GWS 8043 prop
Control Functions:	Rudder, Elevator & Throttle
Recommended Battery Pack:	750 mAh 2S Lithium Polymer

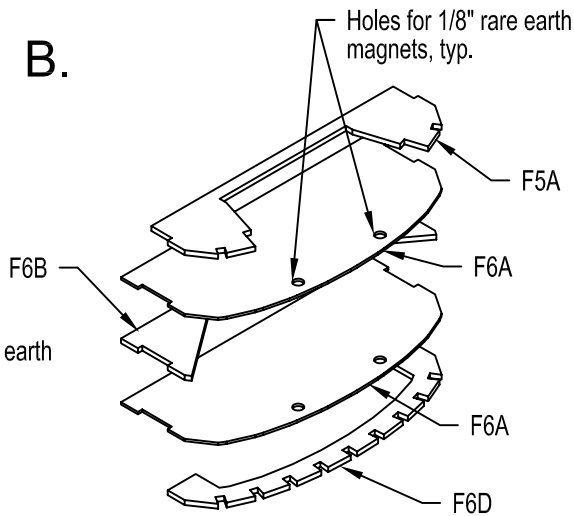
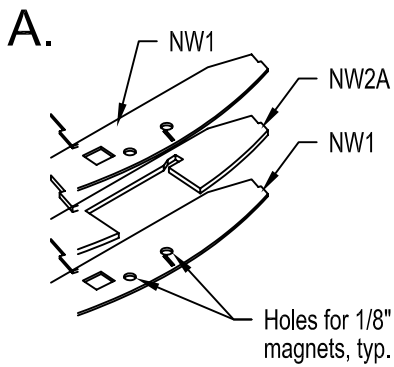
## **Items needed to complete your Cessna 337:**

- Appropriately sized micro receiver
- 2 – 3 sub micro servos (.33oz/9 grams or less recommended)
- Appropriately sized Electronic Speed Controller
- Two (2) GWS IPS – S2
- GWS 8x4.3 slow flyer propeller or Watt-Age 10x4.5 cut down to 7" (tractor and pusher available for counter rotating props)
- 1" lightweight wheels of choice (3 Req.)
- Sullivan's .032" Gold-n-cable for rudder and elevator controls
- 1 roll of light weight covering material
- Misc. building supplies (glue, razor blades, etc.)
- Dubro 1/16" Dura-Collars (4 Req.)

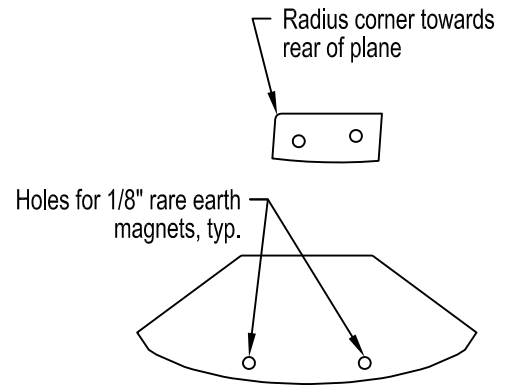
# 1. Glue the fuselage formers together.



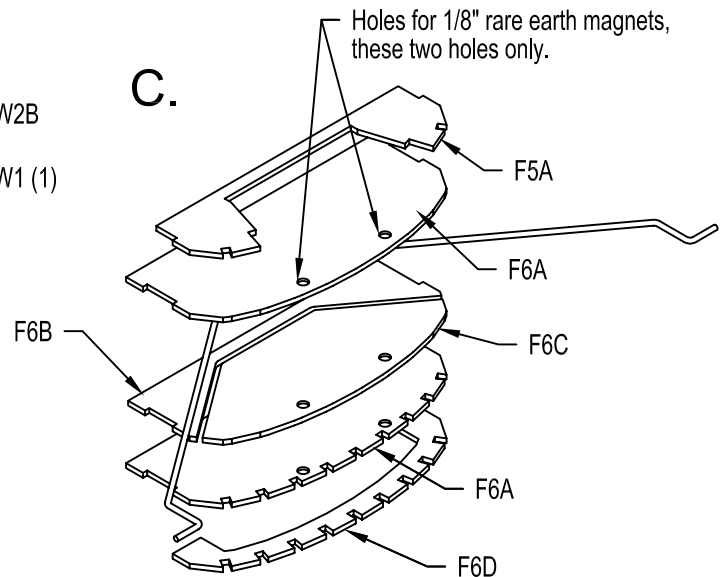
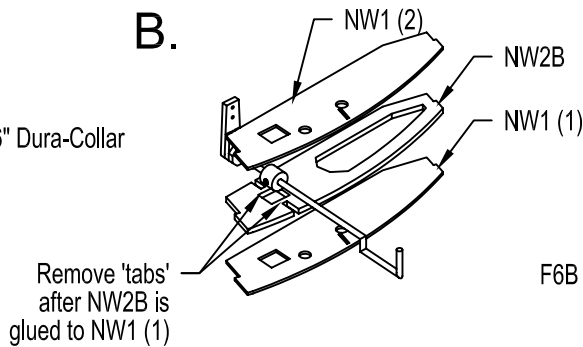
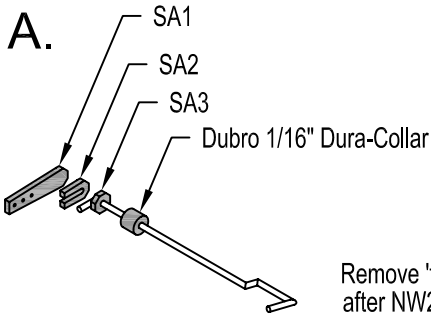
# 2a. Landing gear assemblies for removable landing gear. Make sure the polarity for the magnets are aligned in the same direction.



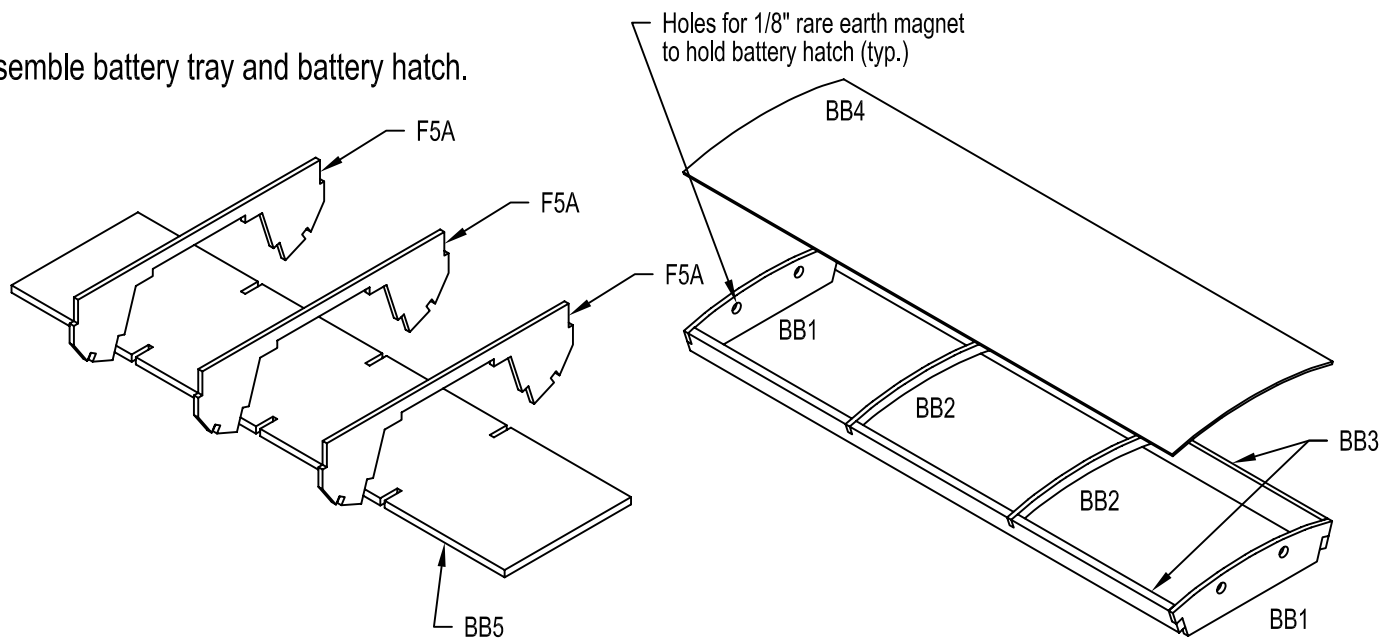
# C. Landing gear retainers



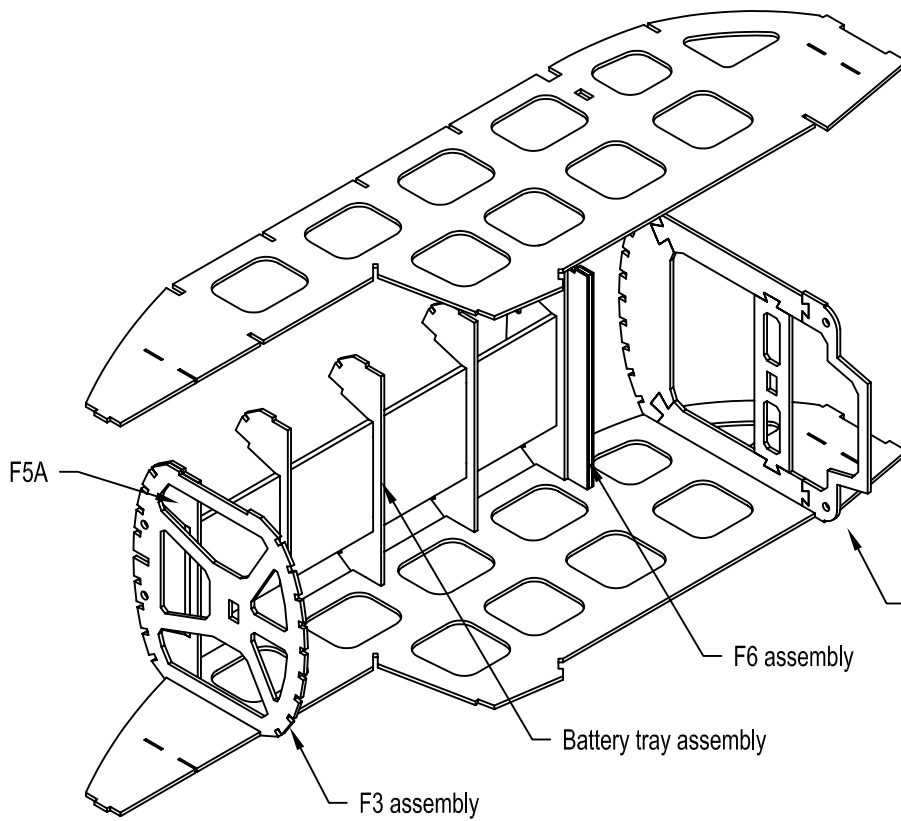
# 2b. Landing gear assemblies for fixed landing gear with steerable nosewheel.



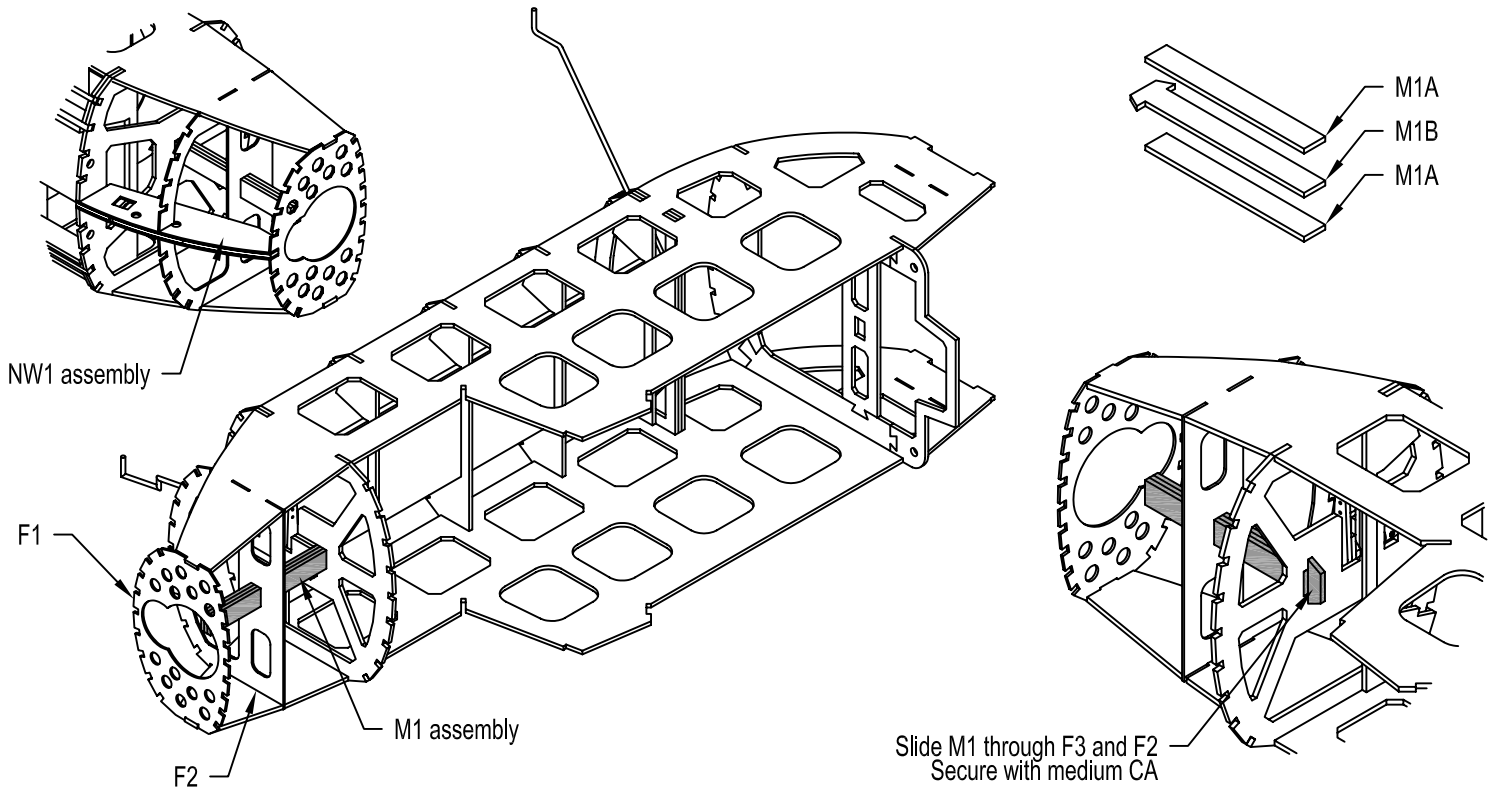
3. Assemble battery tray and battery hatch.



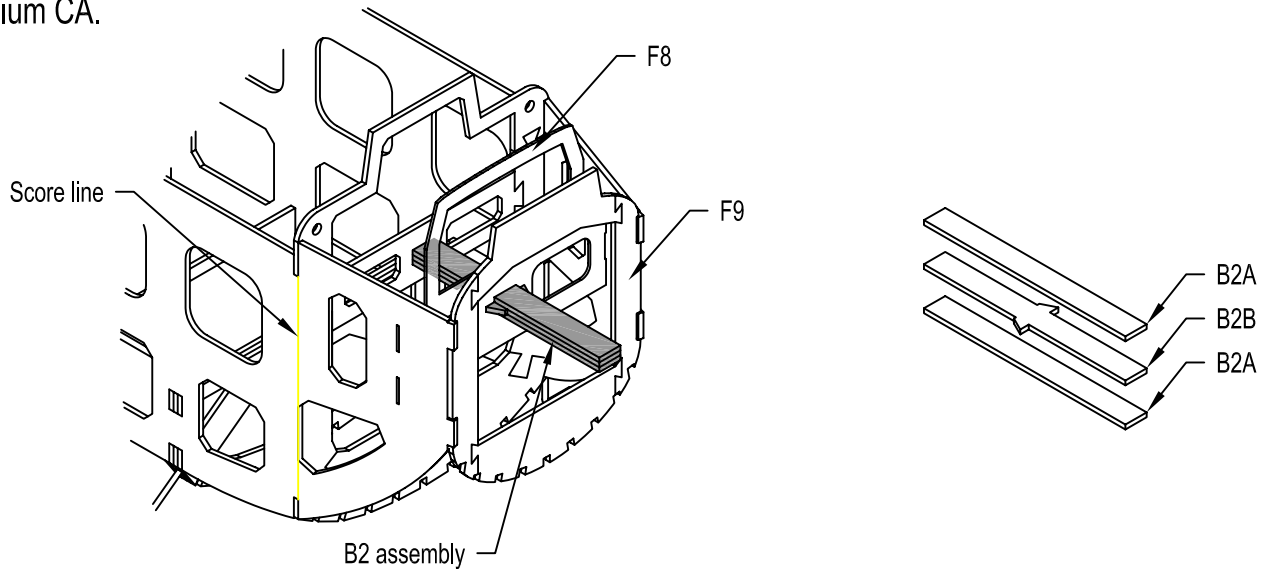
4. Glue F3, F6, F7 & battery tray assembly to fuselage sides.



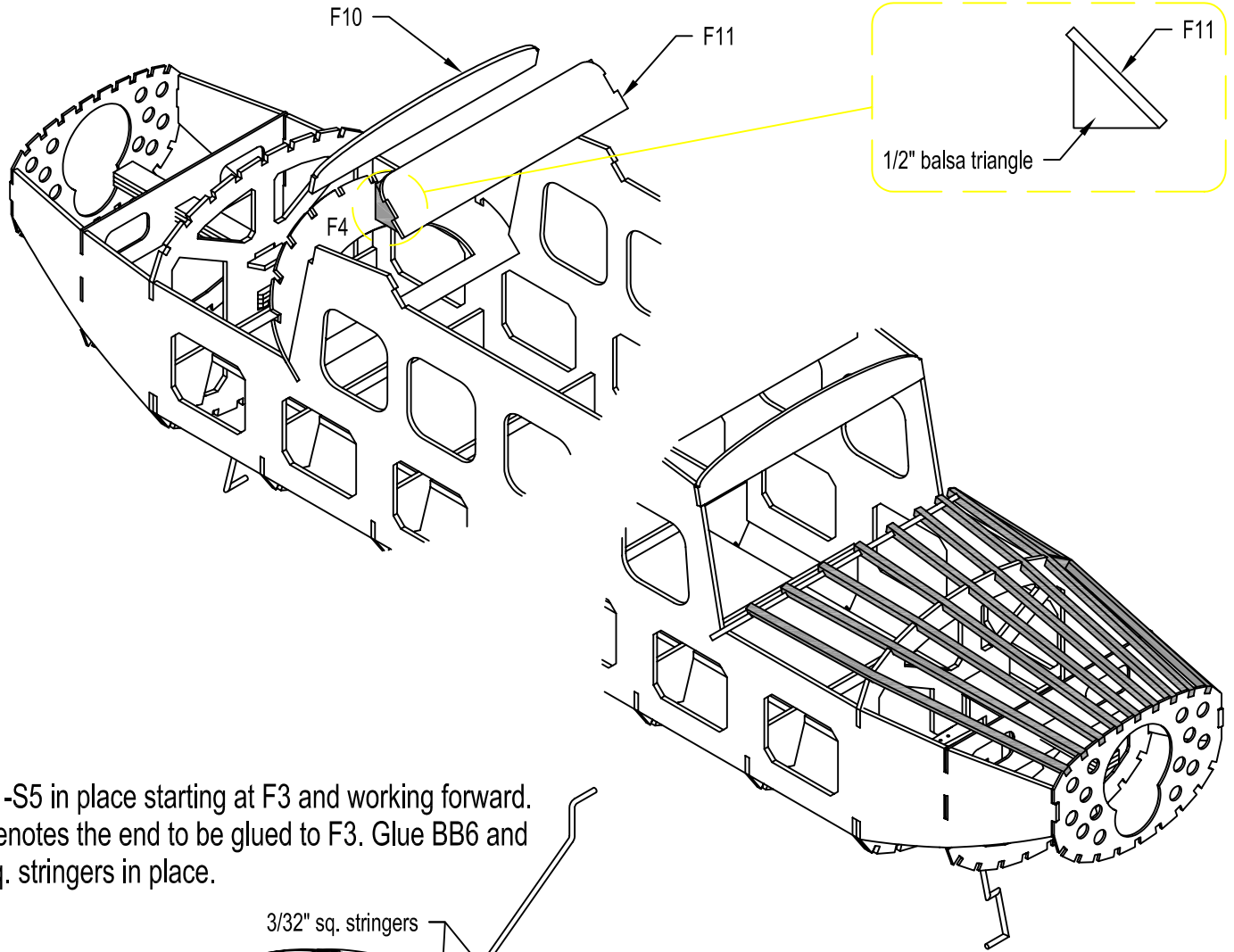
5. Glue F1 & F2 in place, wet fuselage sides to help bend if necessary. Assemble front motor mount (M1) by gluing M1B between two M1A's. Slide M1 through F3 and F2. Secure to F3 with medium CA. Fit NW1 assembly into notches in F1 and F3. Fit tabs in the bottom of F2 into notches in NW1.



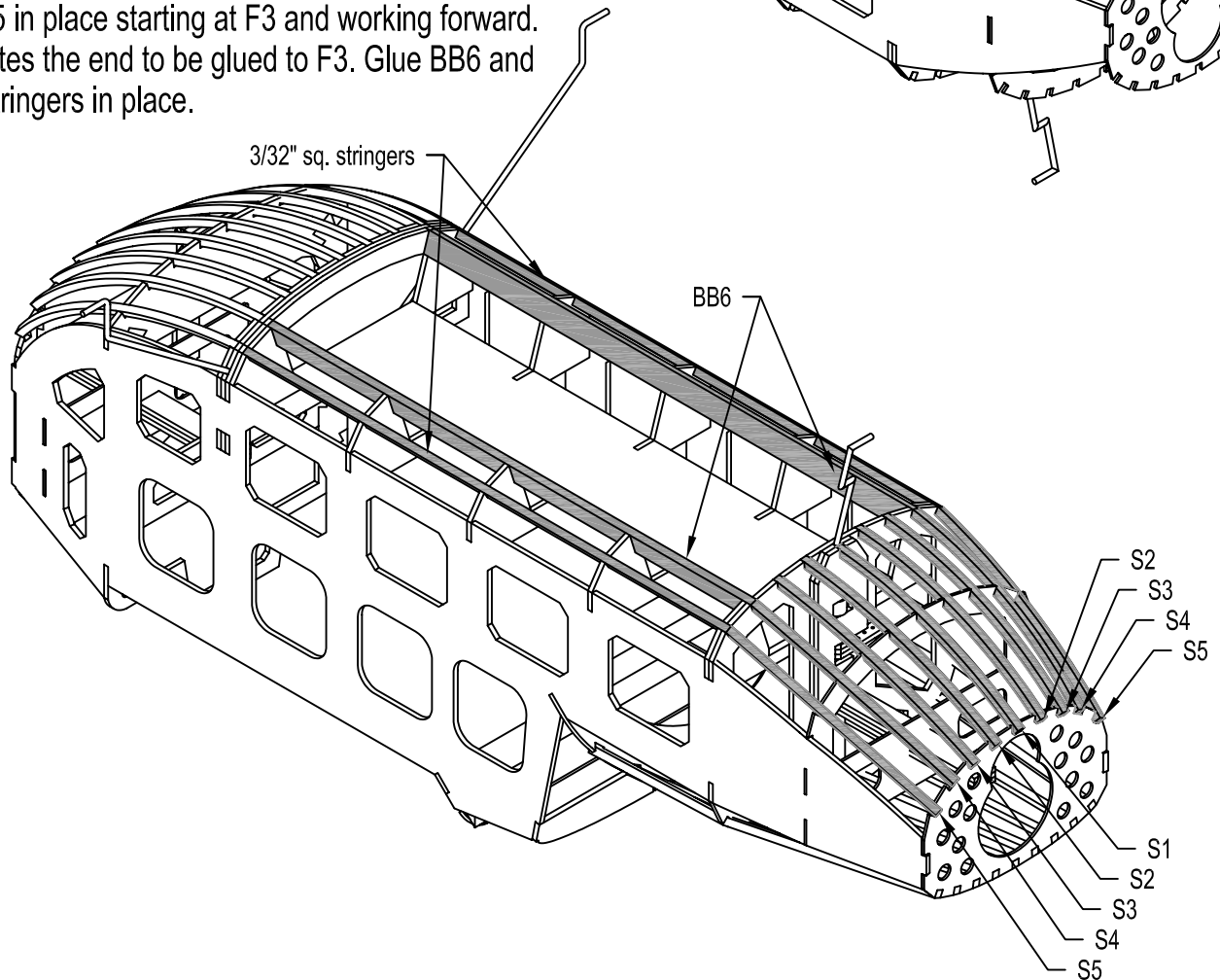
6. Glue F8 & F9 in place, score fuselage sides to help bend. Strengthen score line by soaking with thin CA. Assemble rear motor mount (B2) by gluing B2B between two B2A's. Slide B2 through F8 and F7. Secure to F8 with a small drop of medium CA.



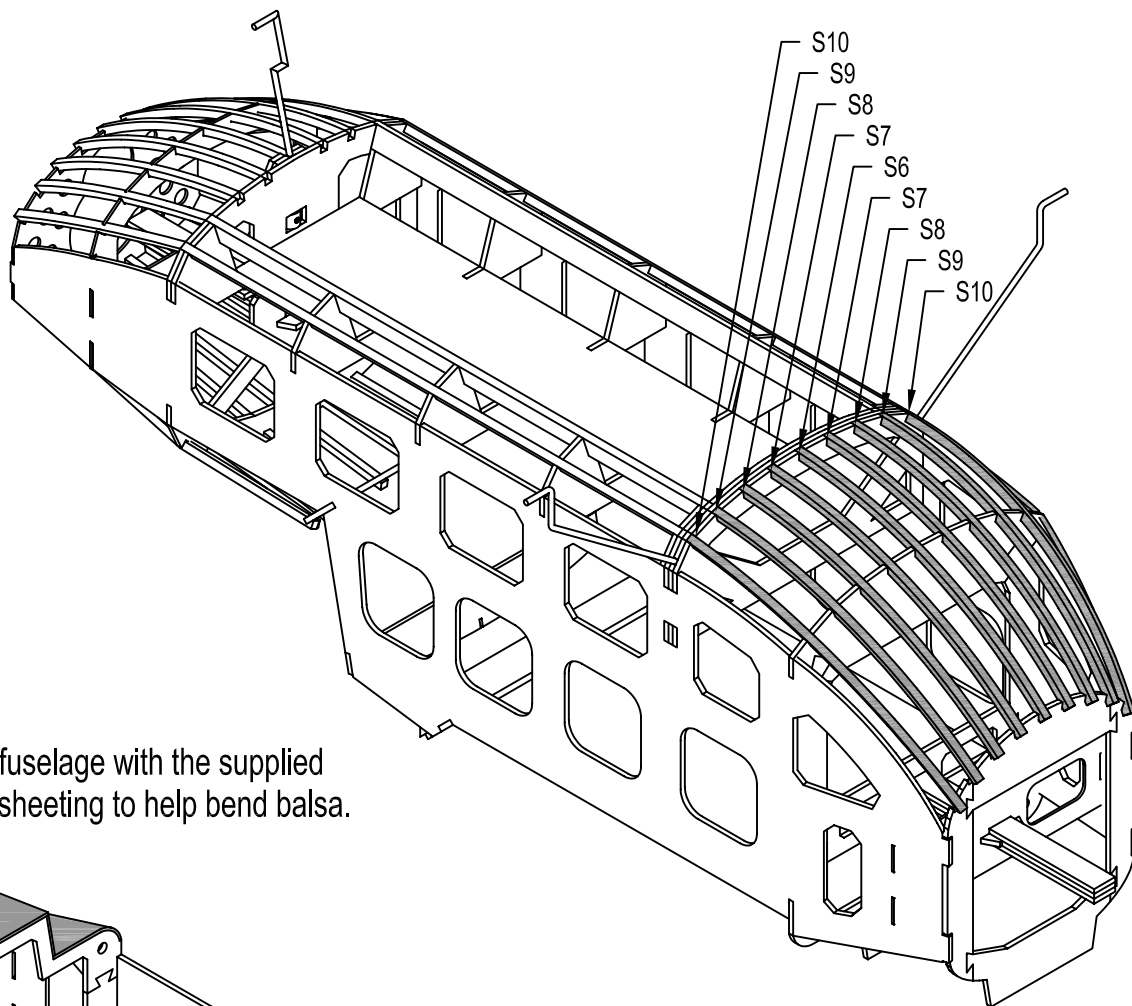
7. Cut 1/2" balsa triangle stock to fit between fuselage sides and glue to F11. Glue F4, F10 & F11 in place. Glue 3/32" sq. stringers in place, starting at F4 and working towards F1.



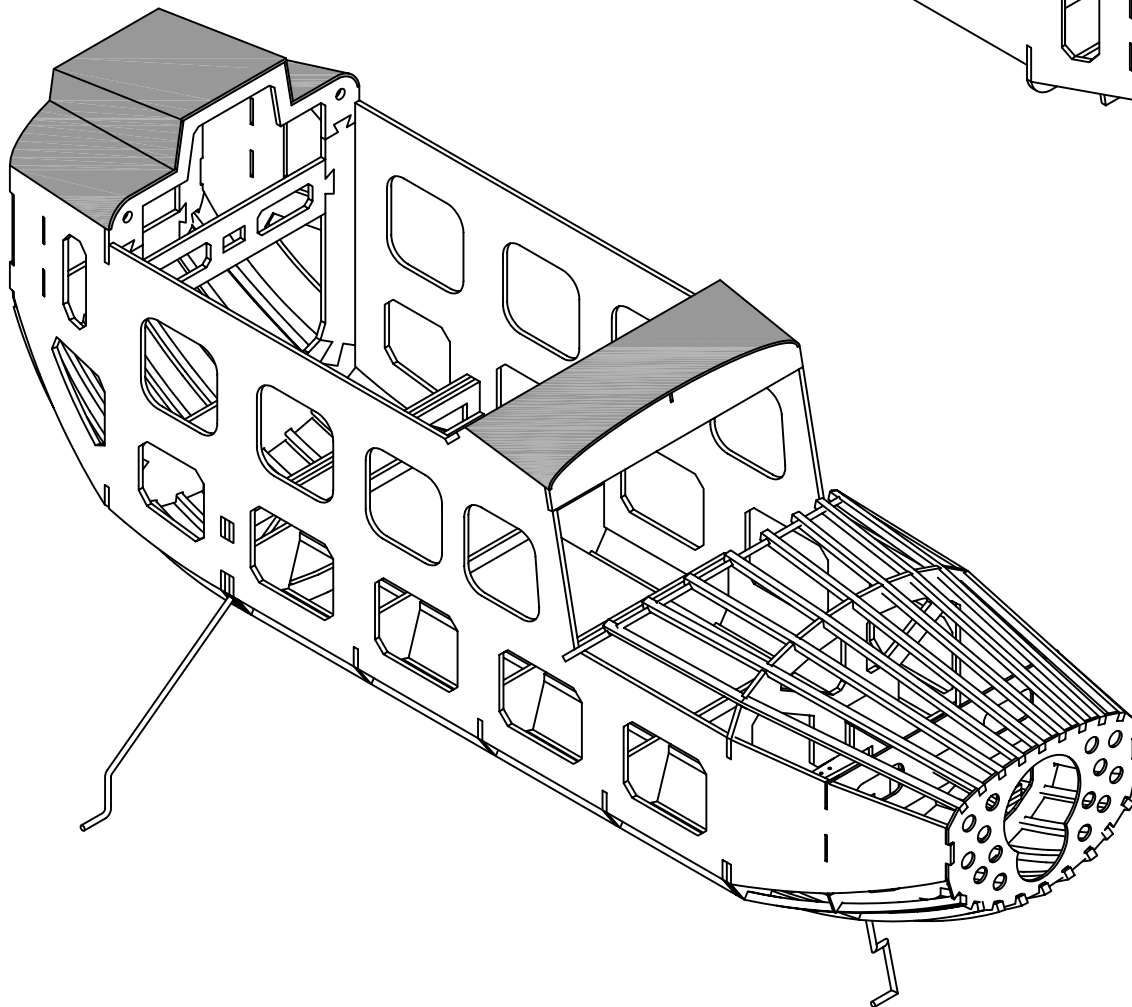
8. Glue S1-S5 in place starting at F3 and working forward. The \* denotes the end to be glued to F3. Glue BB6 and 3/32" sq. stringers in place.



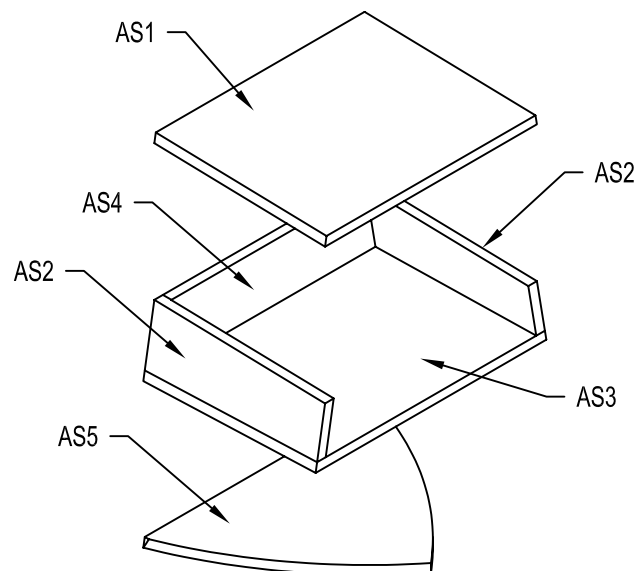
9. Glue S6-S10 in place starting at F6 and working rearward. The \* denotes the end to be glued to F6.



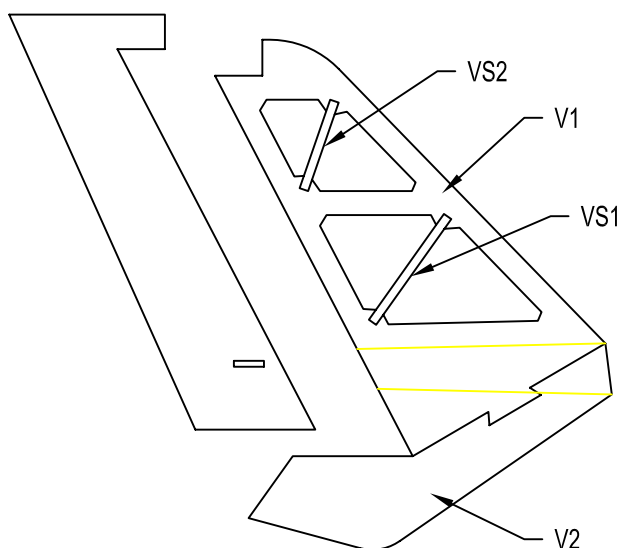
10. Sheet the top of the fuselage with the supplied 1/32" sheeting. Wet sheeting to help bend balsa.



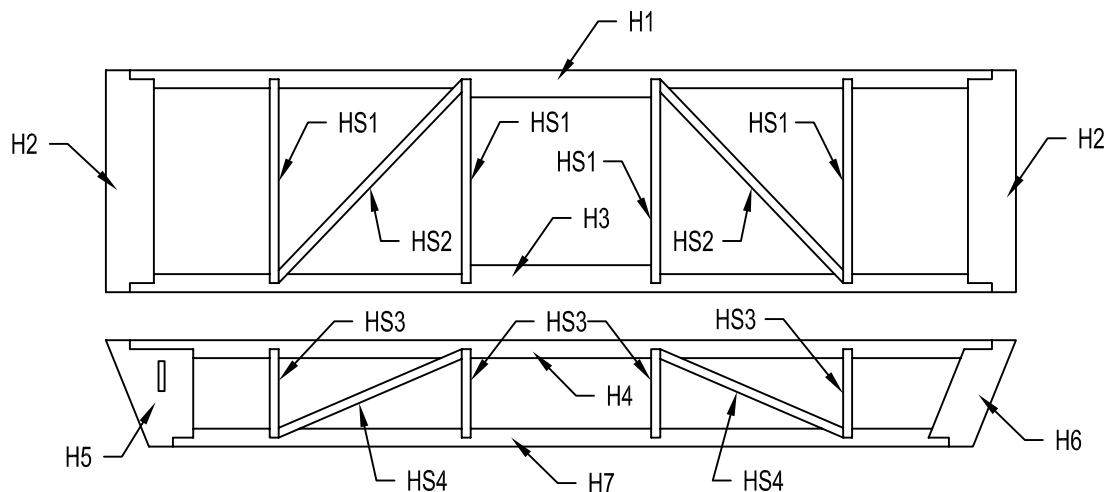
11. Glue the airscop together. Check the fit of the airscop after the wings are built.  
Sand as necessary. Glue airscop to wing after it is covered.



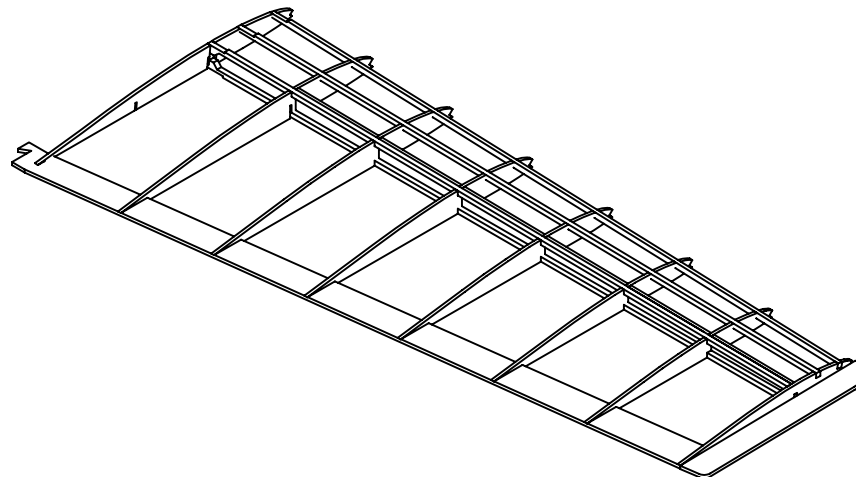
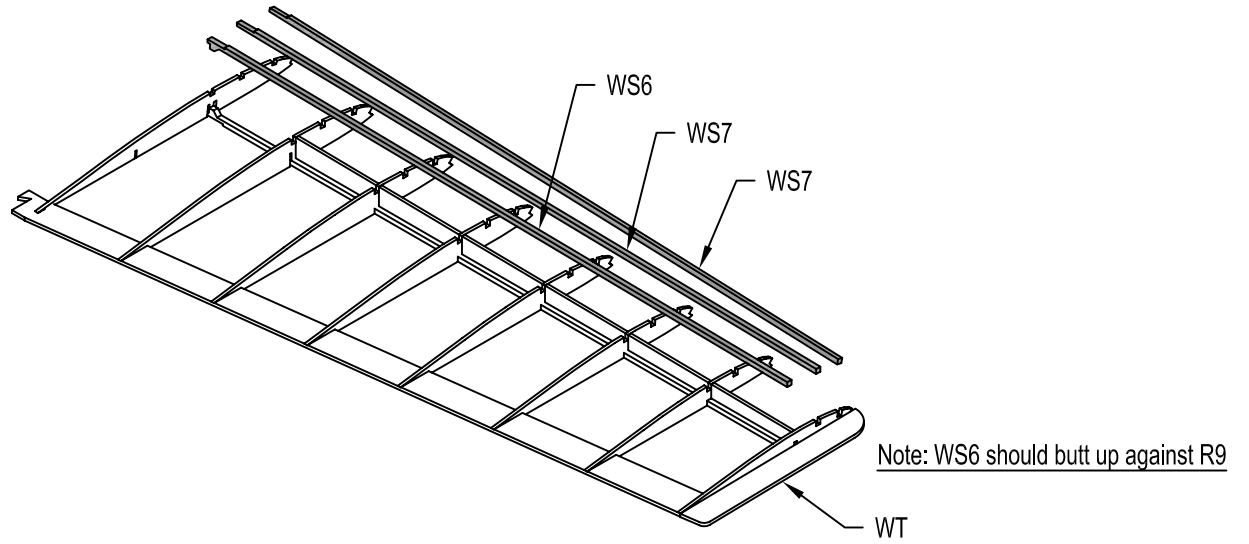
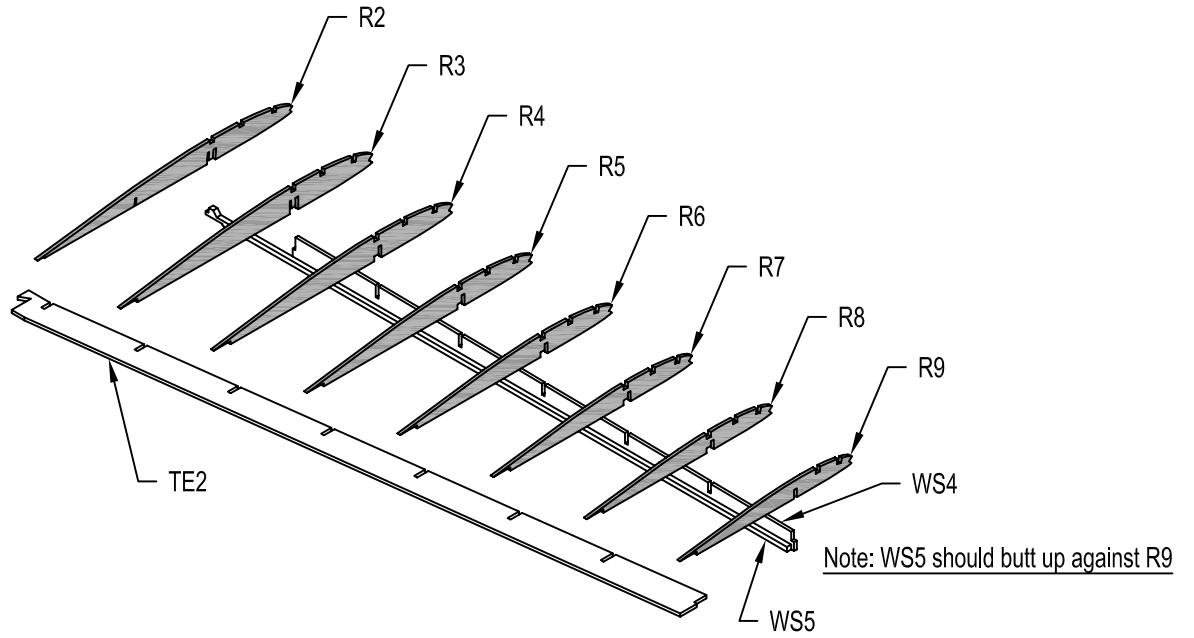
12. Glue the vertical stabs together.



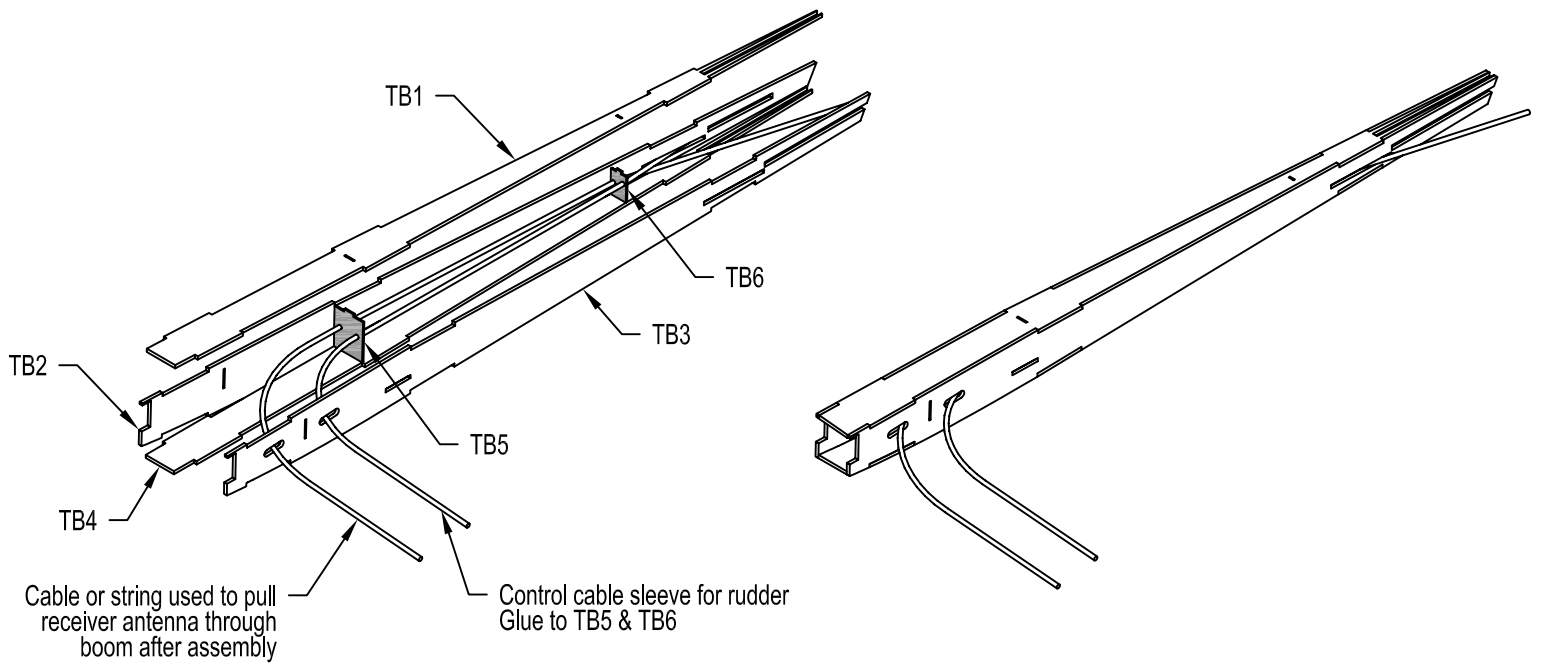
13. Glue the horizontal stab together.



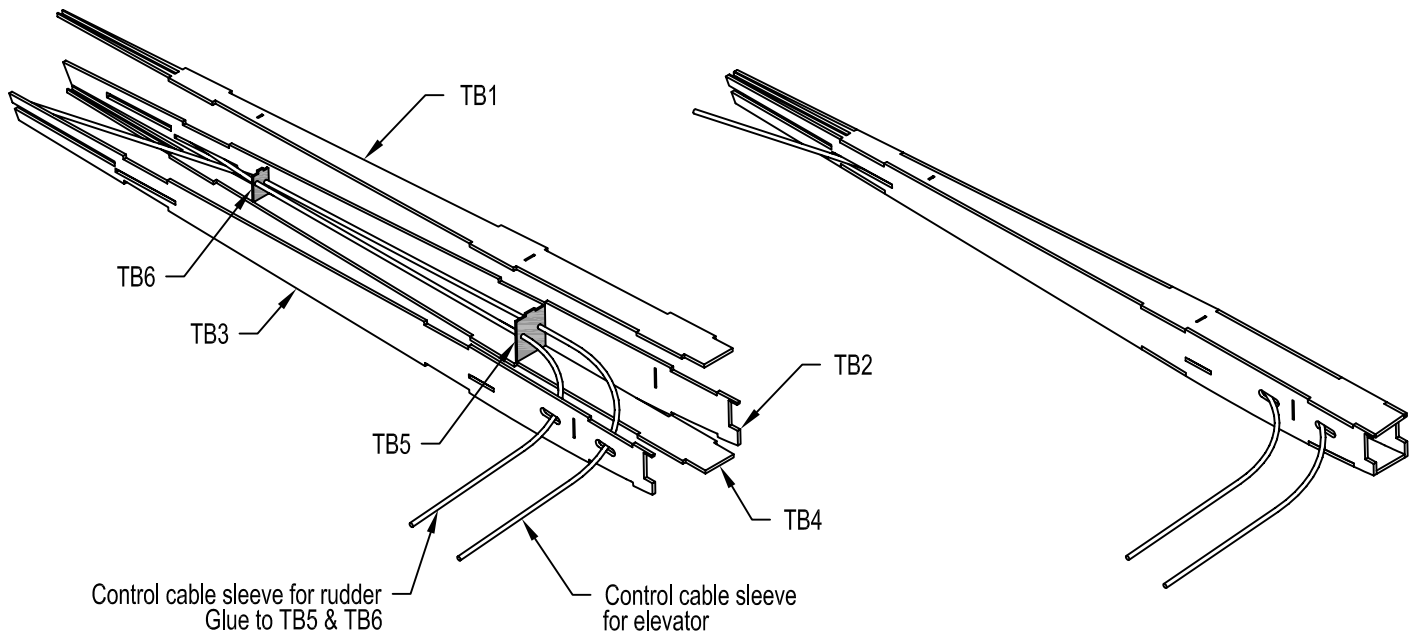
14. Assemble outer wing panels. WS5 and WS6 should butt up against R9.



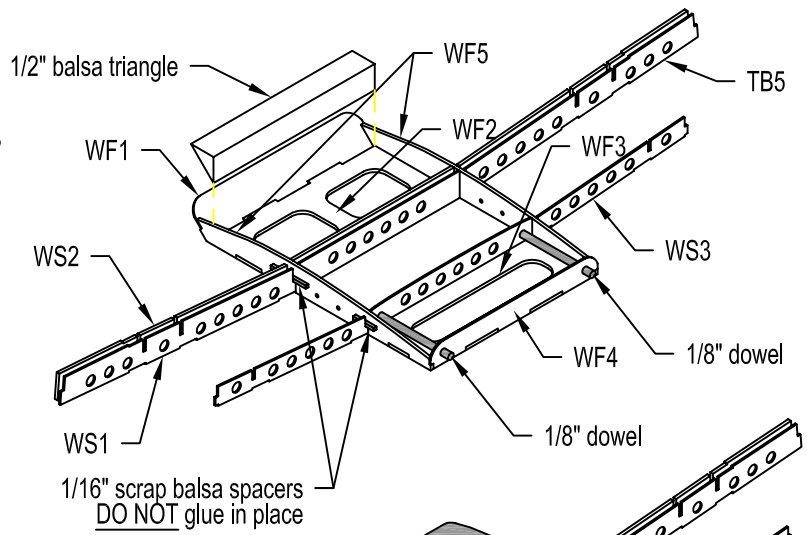
**15a.** Assemble right tail boom. Note that control cables cross behind TB6.



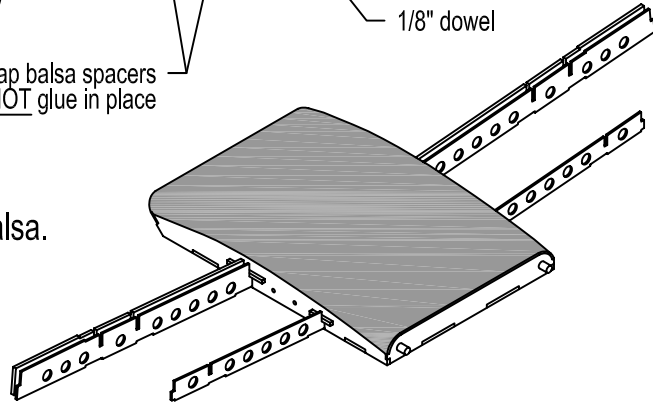
**15b.** Assemble left tail boom. Note that control cables cross behind TB6.



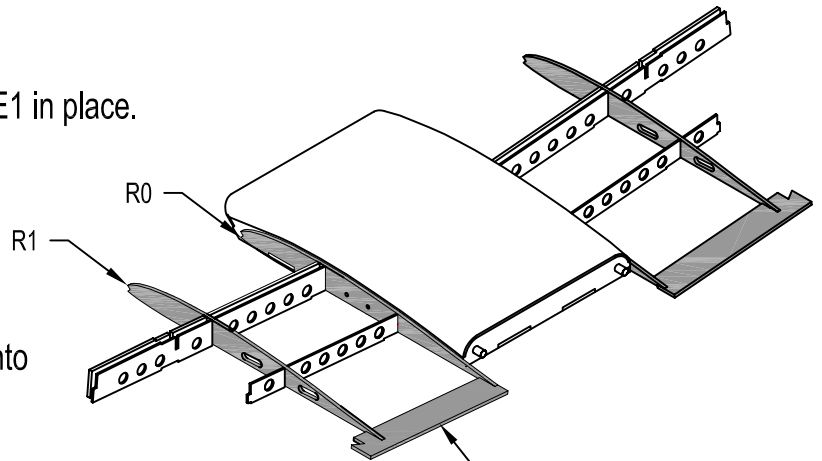
**16a.** Assemble wing center section.  
 Glue 1/2" balsa triangle to WF1  
 Allow 1/8" wing hold down dowels to stick out about 1/8" from WF4.



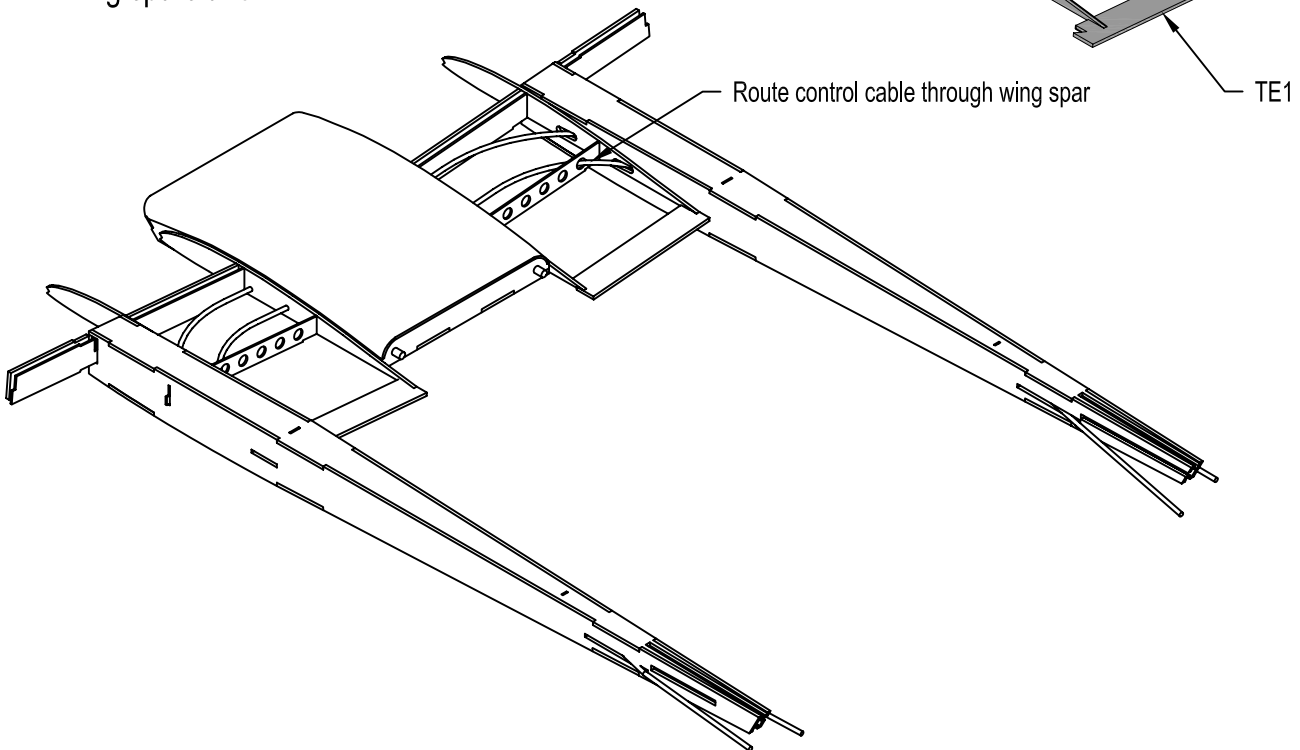
**16b.** Sheet top of wing center section with 1/32" balsa.



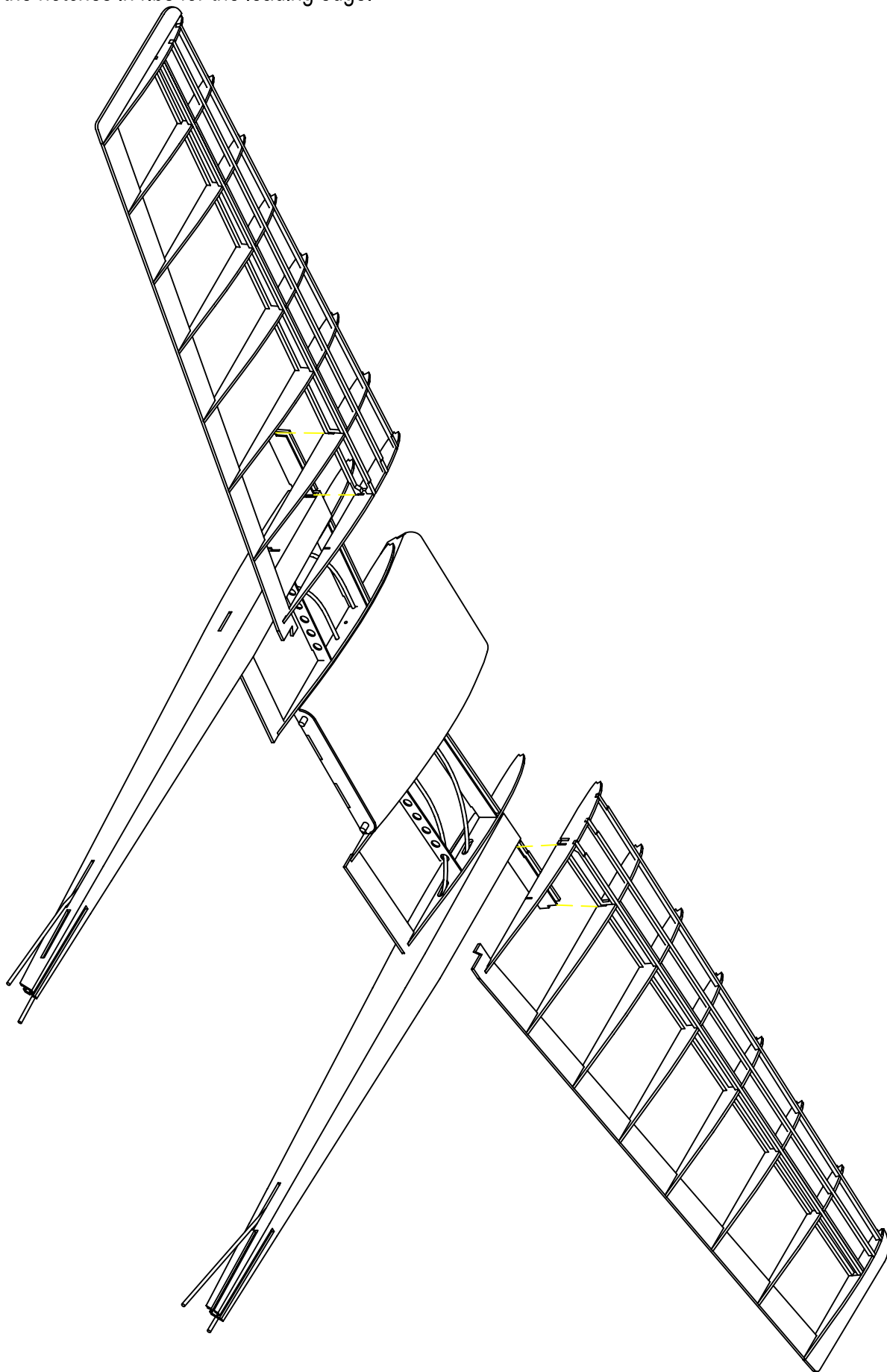
**16c.** Remove 1/16" balsa spacers and glue R0, R1 & TE1 in place.



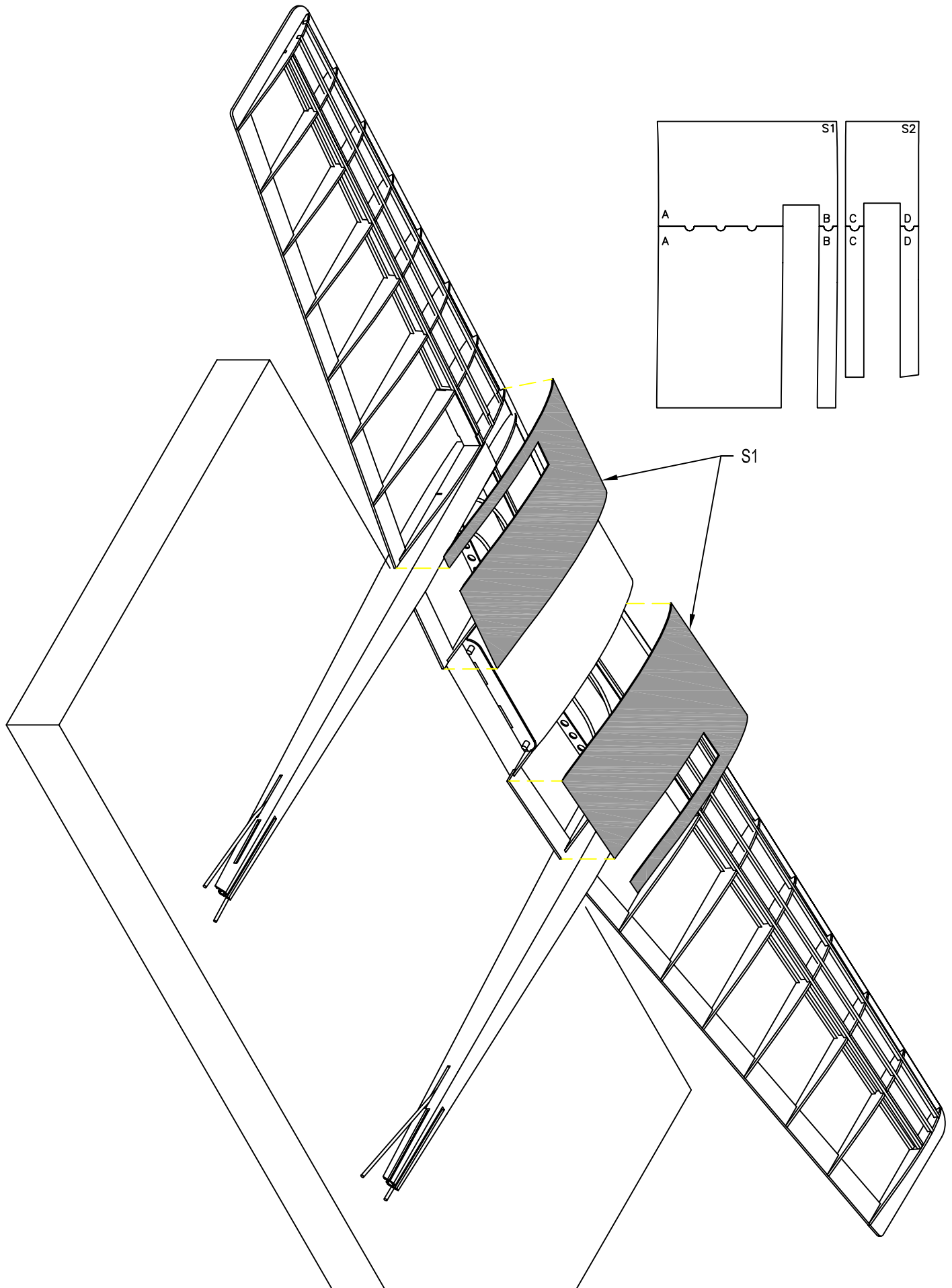
**17.** Attach tail booms to wing center section by sliding onto wing spars and TE1.



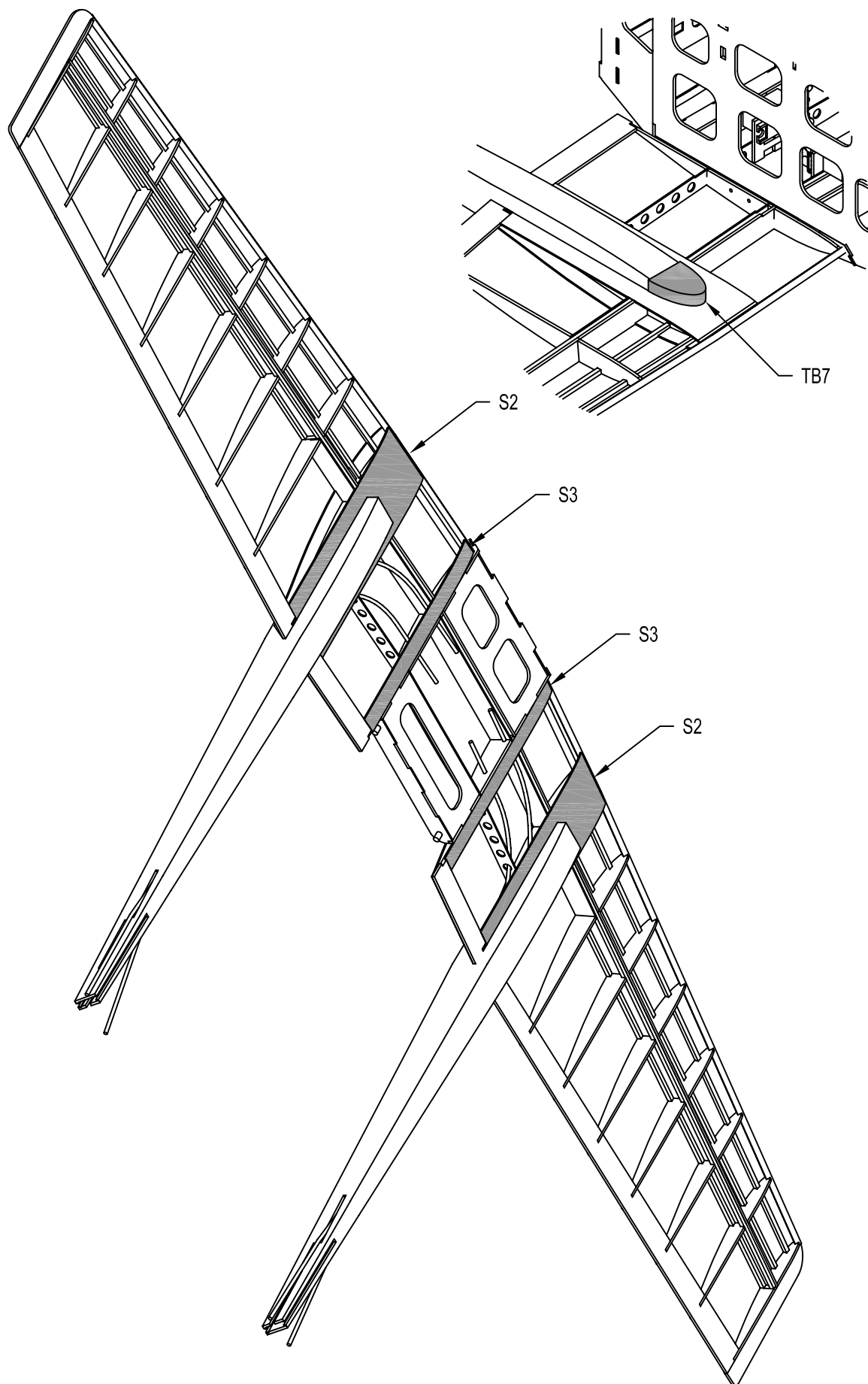
18. Attach outer wing panels to wing center section/tail boom assembly by fitting TE2 into the slot on the tail boom and fitting the 3/32"sq. stringers between wing spars and ribs into the notches in WS1 and WS2. Glue 3/32"sq. stock into the notches in ribs for the leading edge.



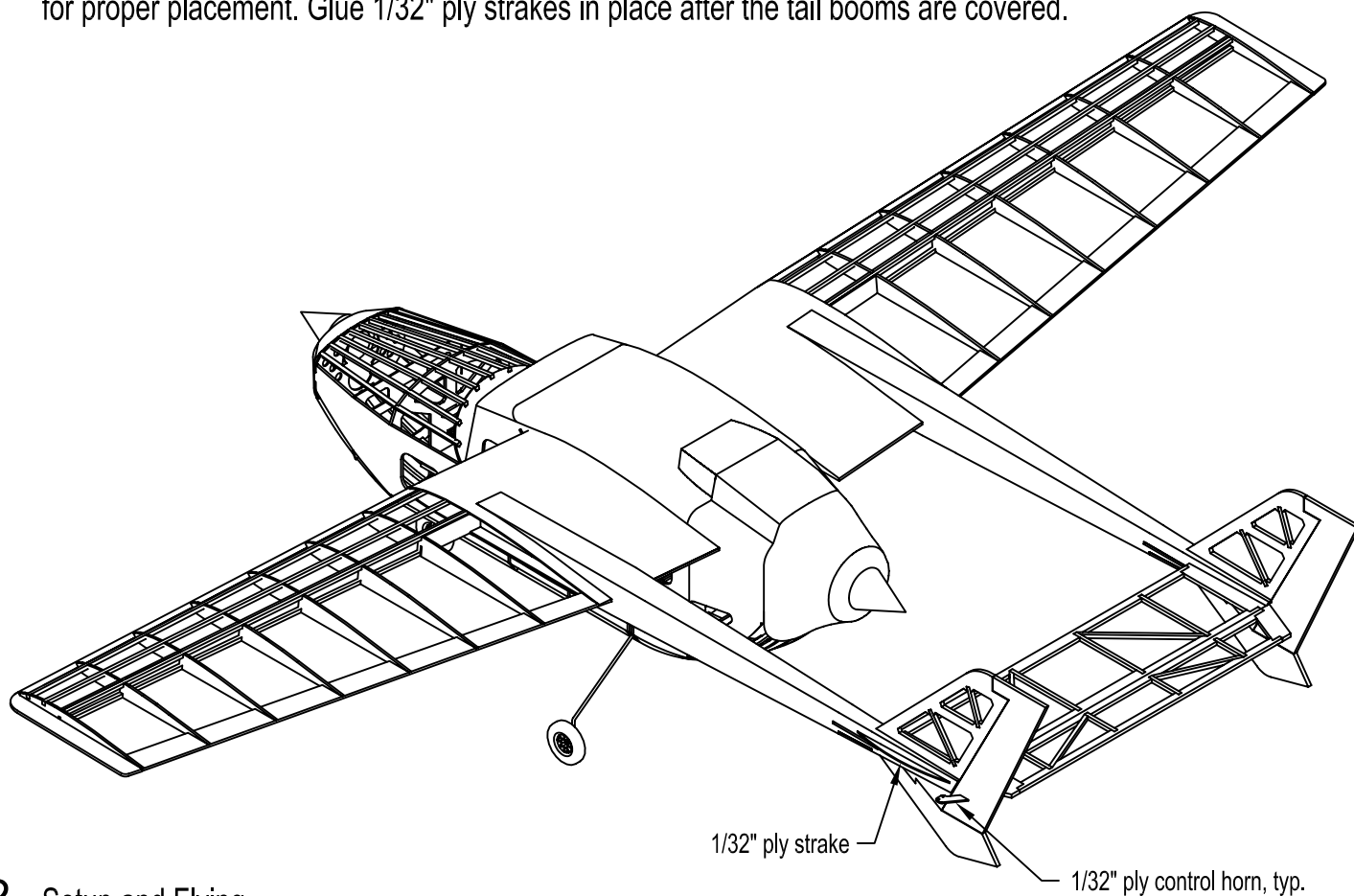
19. Ensure both booms are flat on a level surface and hold down with some weight. Glue the wing sheeting together with medium CA and sheet the top of the wings.



20. Ensure both booms are flat on a level surface and hold down with some weight and sheet the bottom of the wing. S2 and S3 should be flush with the trailing edge. Glue TB7 to wing and sand to shape.

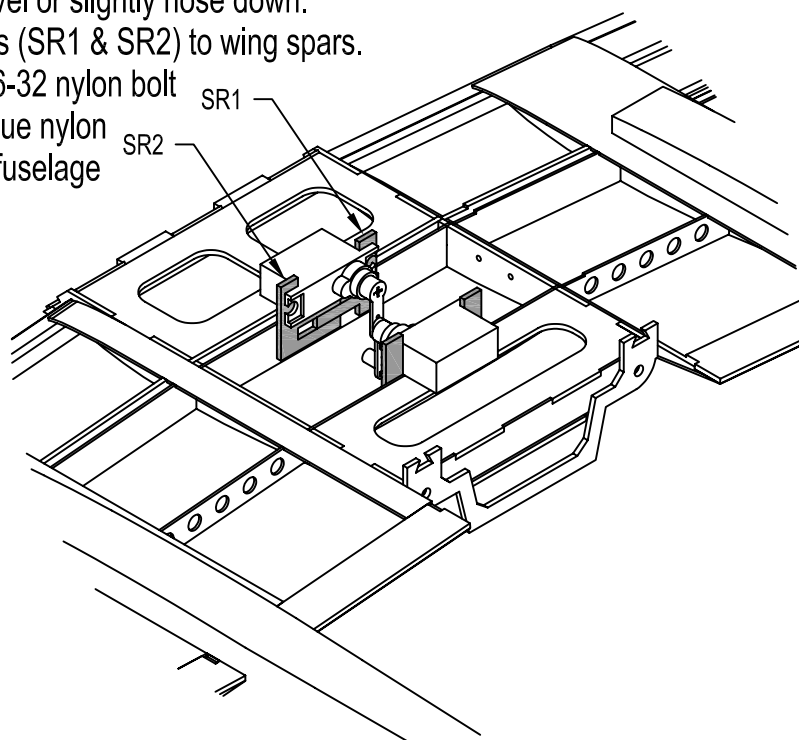
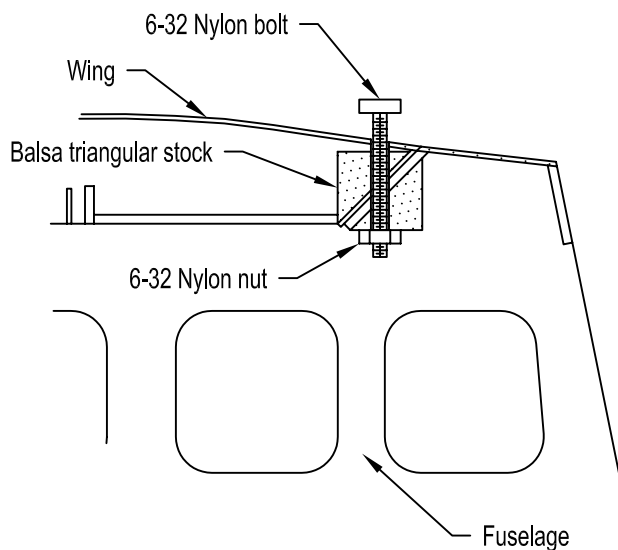


21. Horizontal and vertical stabs should be glued in place after they are covered. Use alignment marks on rudders for proper placement. Glue 1/32" ply strakes in place after the tail booms are covered.



## 22. Setup and Flying

1. Wings should have 1/4" - 3/8" of washout at the trailing edge of each wing tip.
2. Rudders should have 3/8" - 1/2" of throw in each direction. The elevator should have 1/4" - 3/8" of throw in each direction.
3. The model should balance on the main spar, level or slightly nose down.
4. Mount servos by gluing adjustable servo mounts (SR1 & SR2) to wing spars.
5. Secure wing to fuselage by drilling a hole for a 6-32 nylon bolt through balsa triangles in wing and fuselage. Glue nylon nut to the underside of the balsa triangle in the fuselage



## 23. Landing gear templates

