



Kit No. CBMD-007

Construction Detail
Part 1 of 2

CB Model Designs

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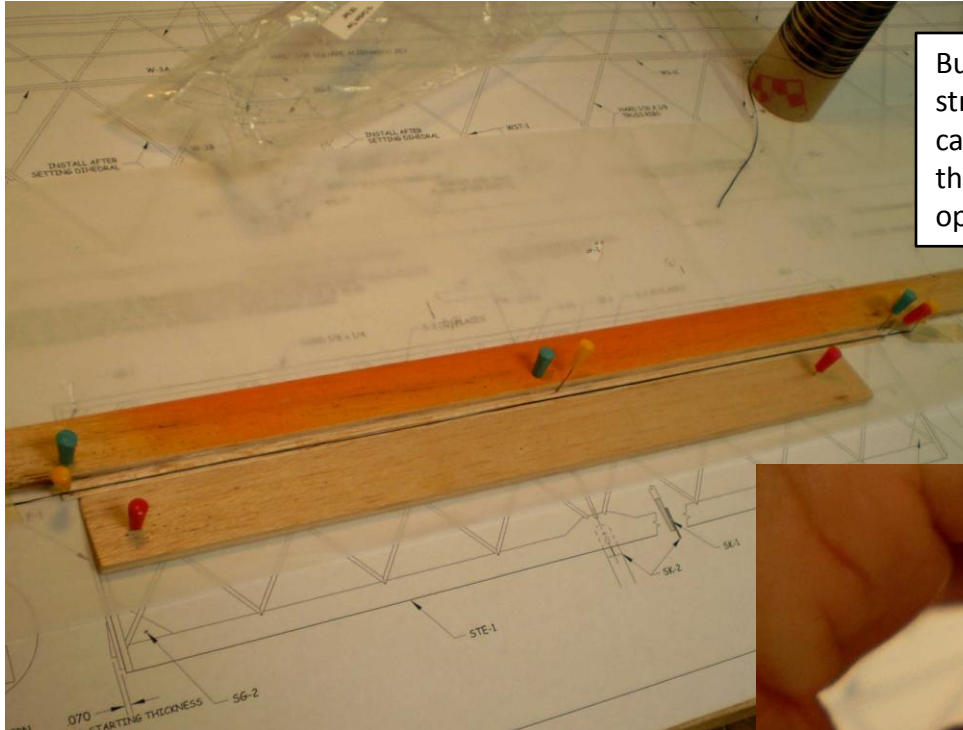
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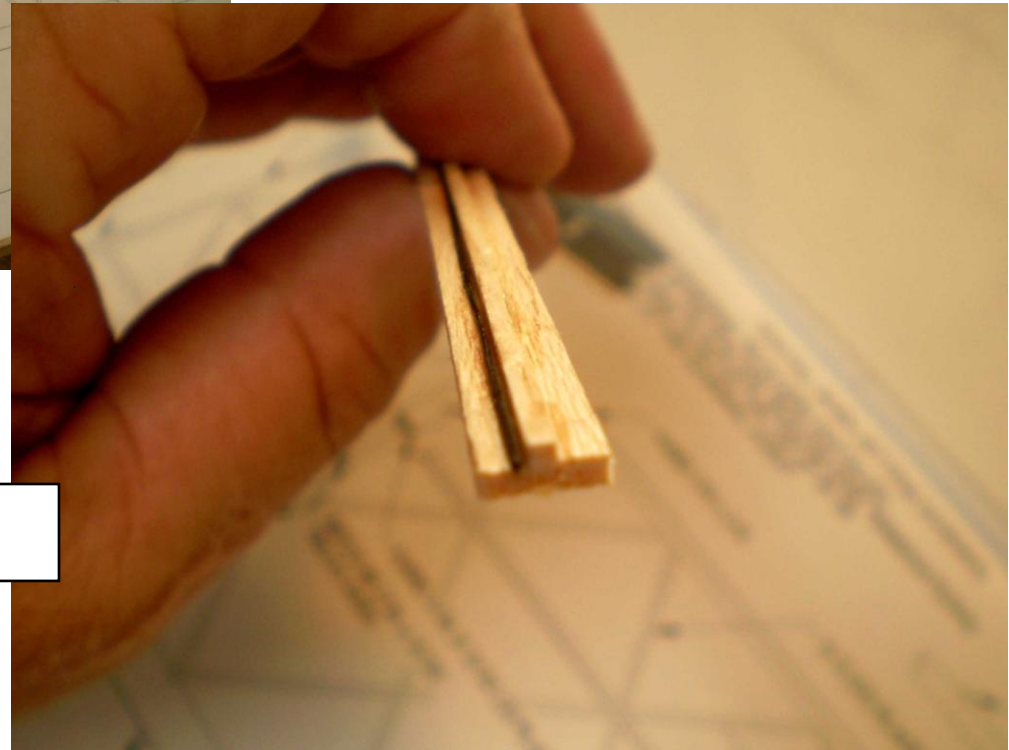


Model data:

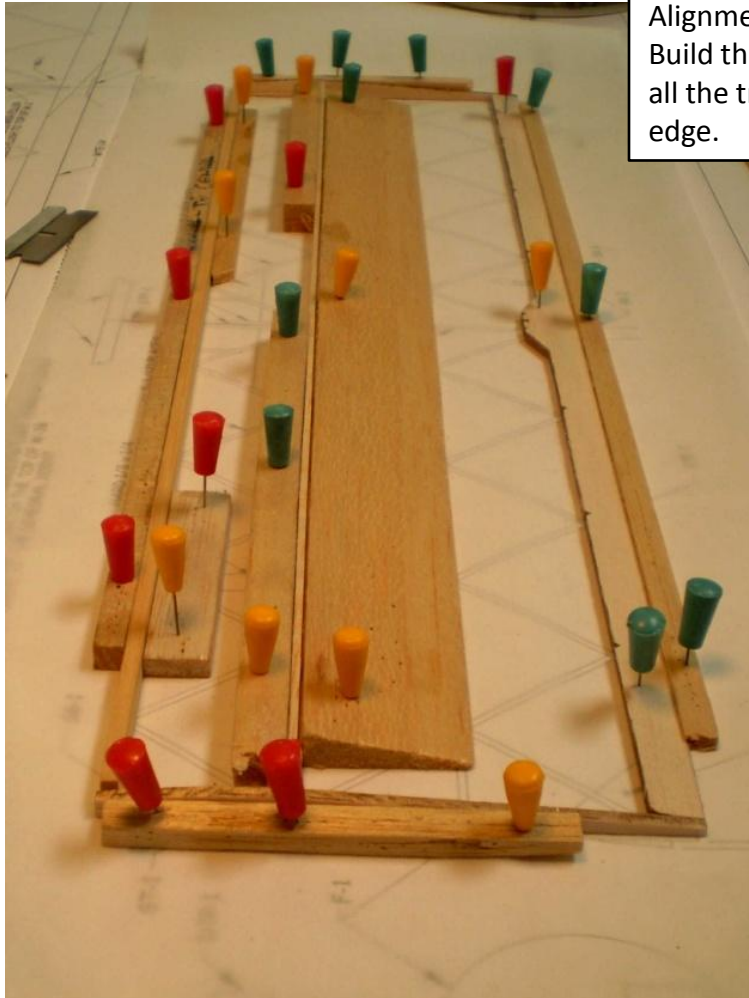
- Weight ready to fly.....153 grams
- Wingspan.....36 Inches
- Wing Area.....235 Sq. In.
- Nominal Length.....31 9/16 Inches



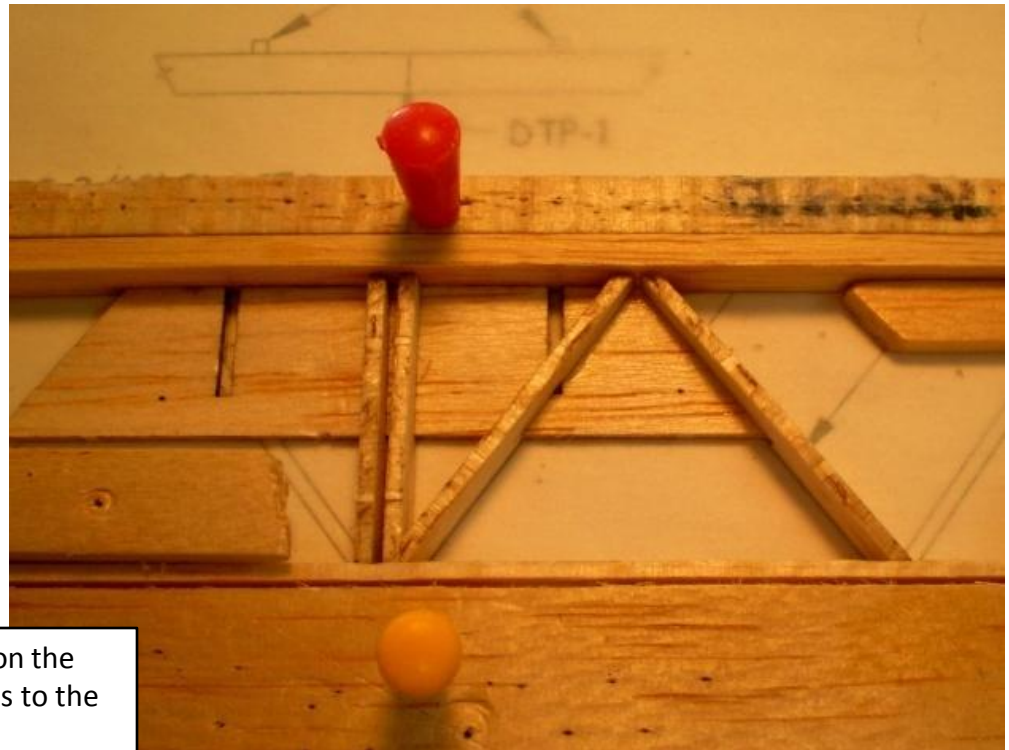
Built-up stab spar with blocking to maintain straightness in the assembly. I'm using a 1K carbon tow bonded into the lower corner with thin CA as an optional modification-it's totally optional.



Finished stab spar showing the 'Tee' configuration.



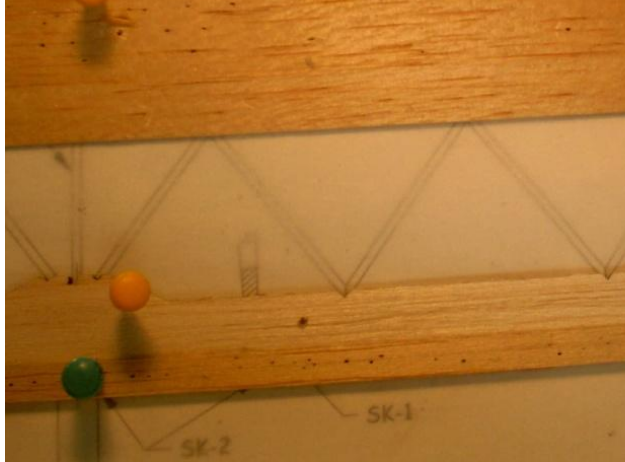
Alignment blocking for stab plan form control. Build the forward 'D' section first, and then set all the truss ribs between the spar and trailing edge.



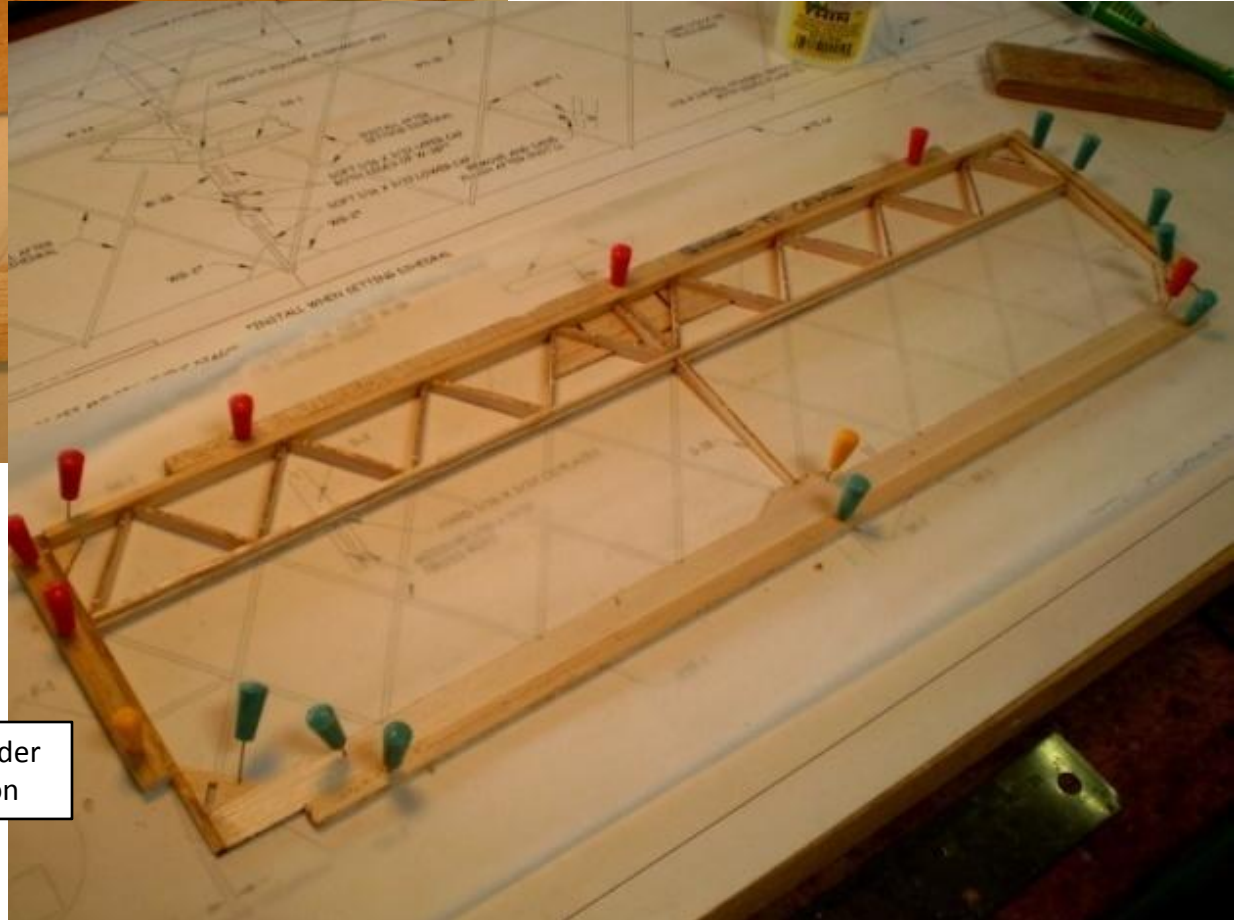
Nose ribs and stab platform filler-position the filler carefully to match the slot locations to the drawing.



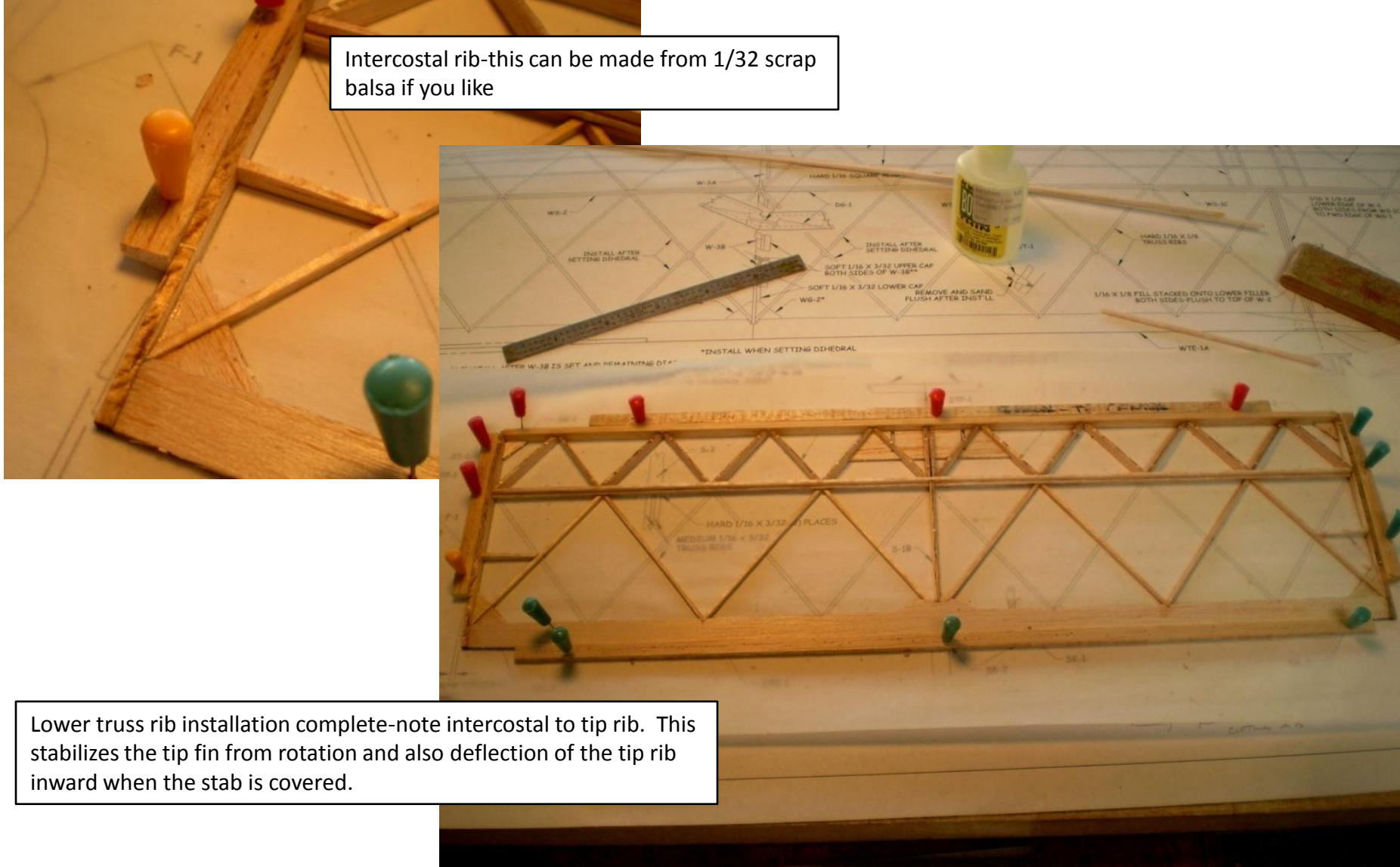
'D' section ribs installed with tip rib gusset



Starting to frame the remainder with the center rib installation

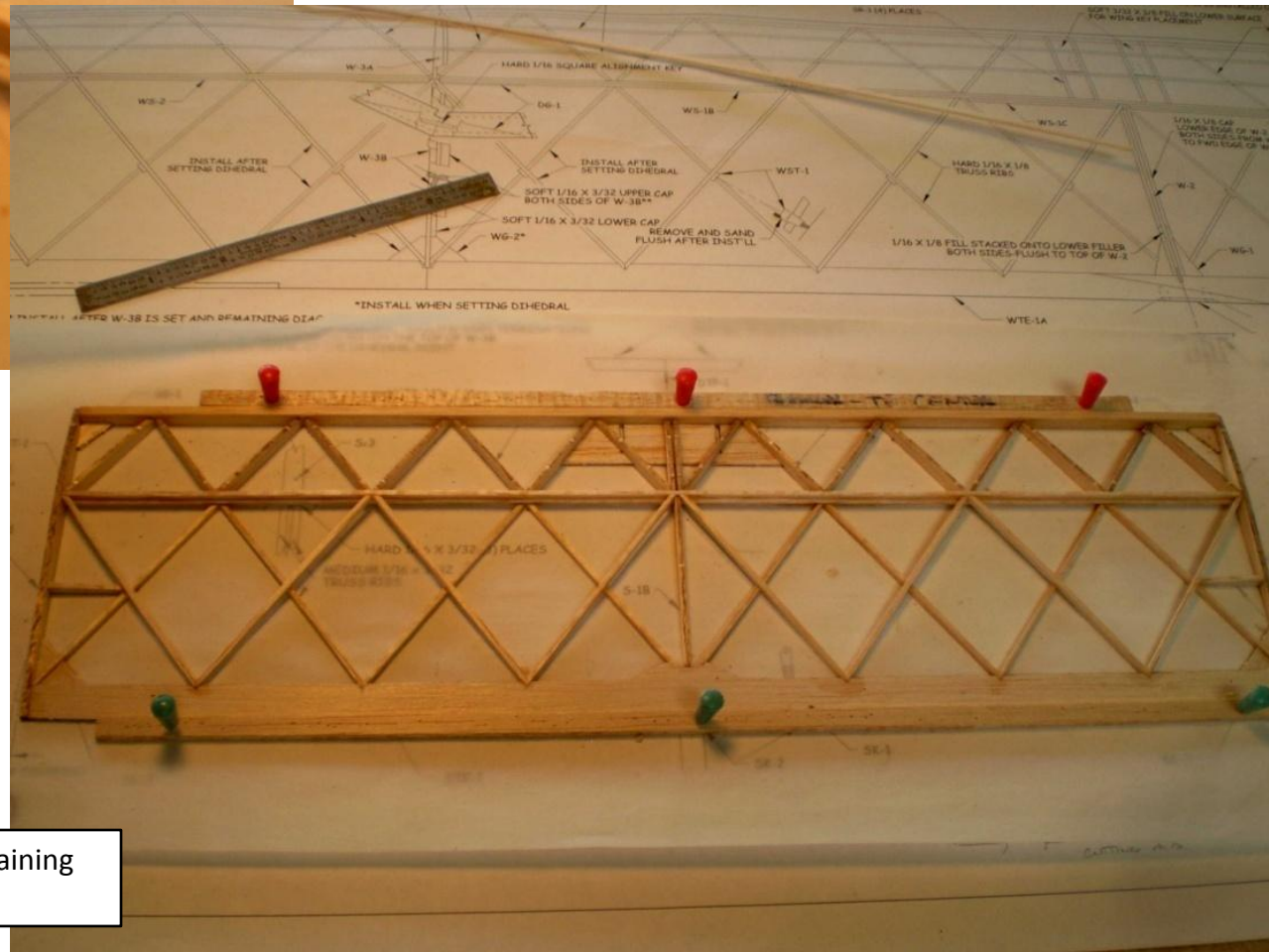


Intercostal rib-this can be made from 1/32 scrap balsa if you like

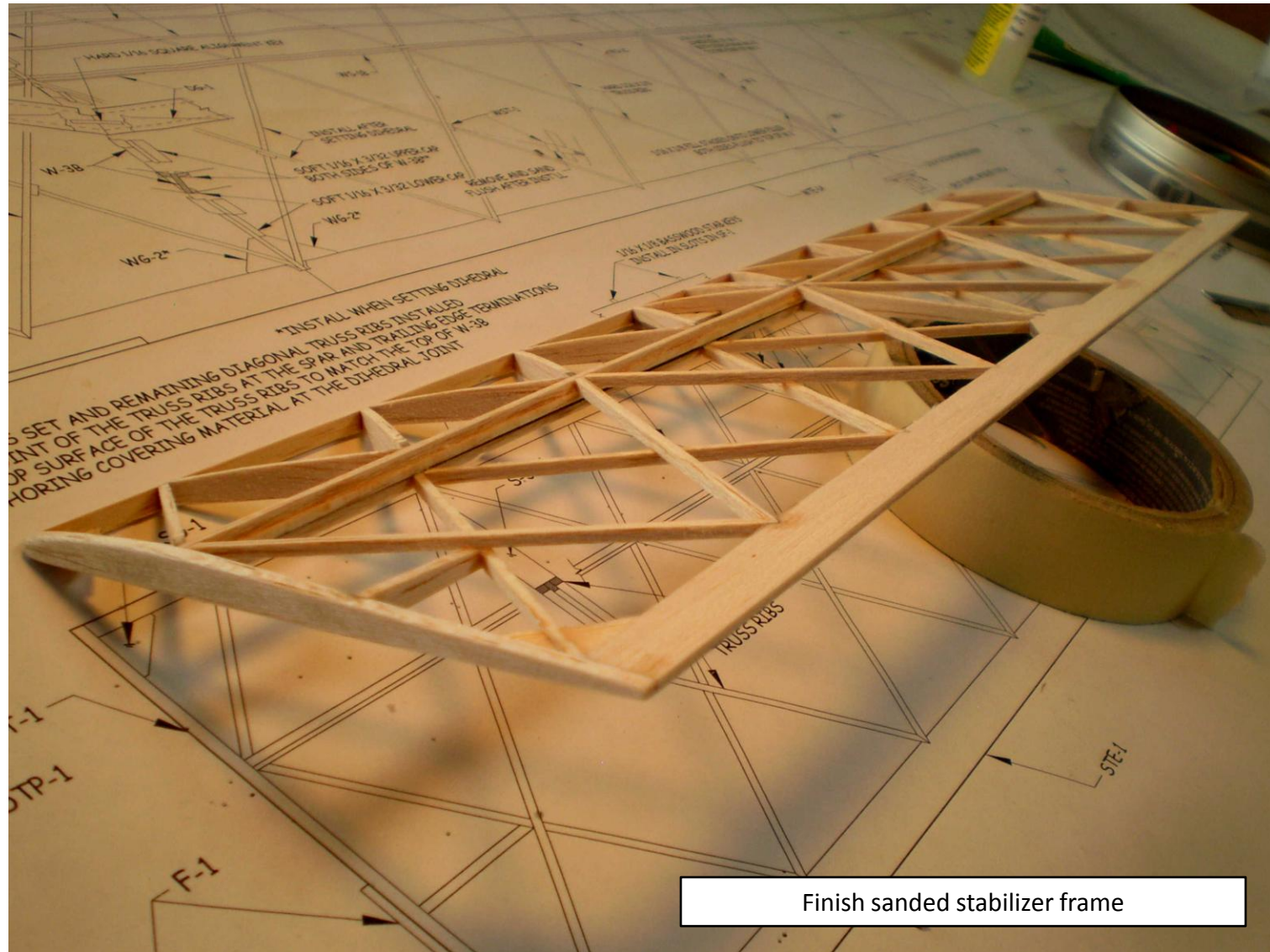


Lower truss rib installation complete-note intercostal to tip rib. This stabilizes the tip fin from rotation and also deflection of the tip rib inward when the stab is covered.

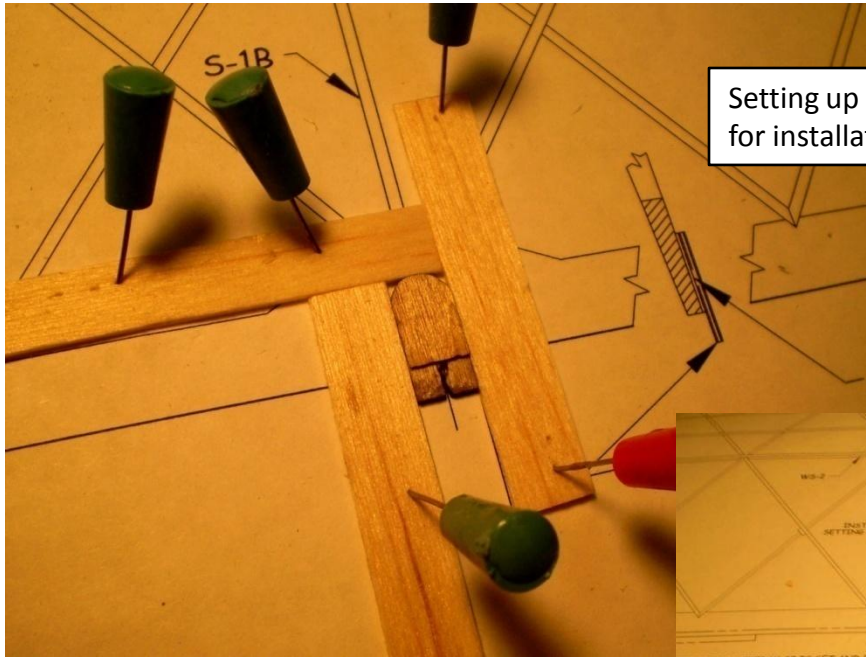
Tip area-note the truss ribs contact each other where they cross-make sure to glue these joints



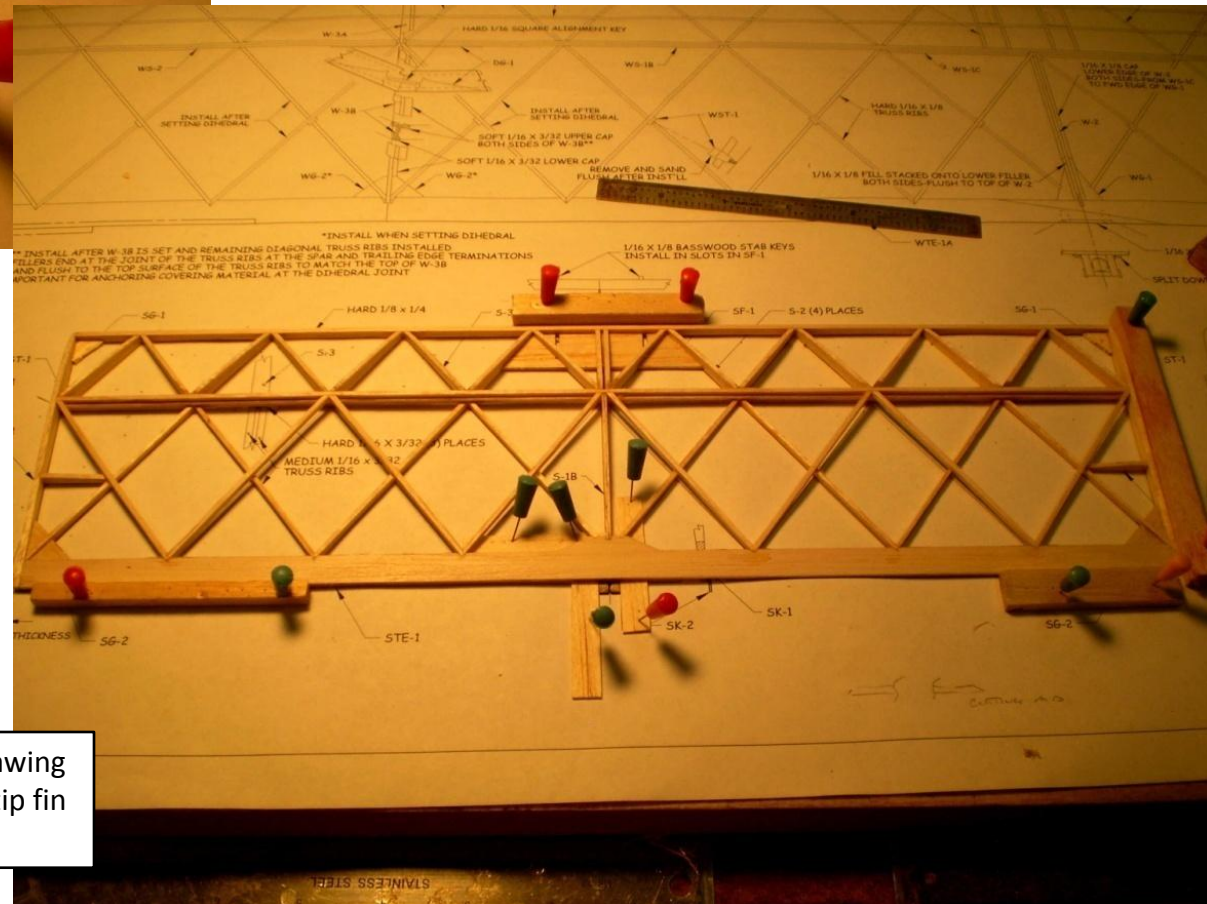
Upper truss ribs installed along with remaining gussets common to the trailing edge



Finish sanded stabilizer frame

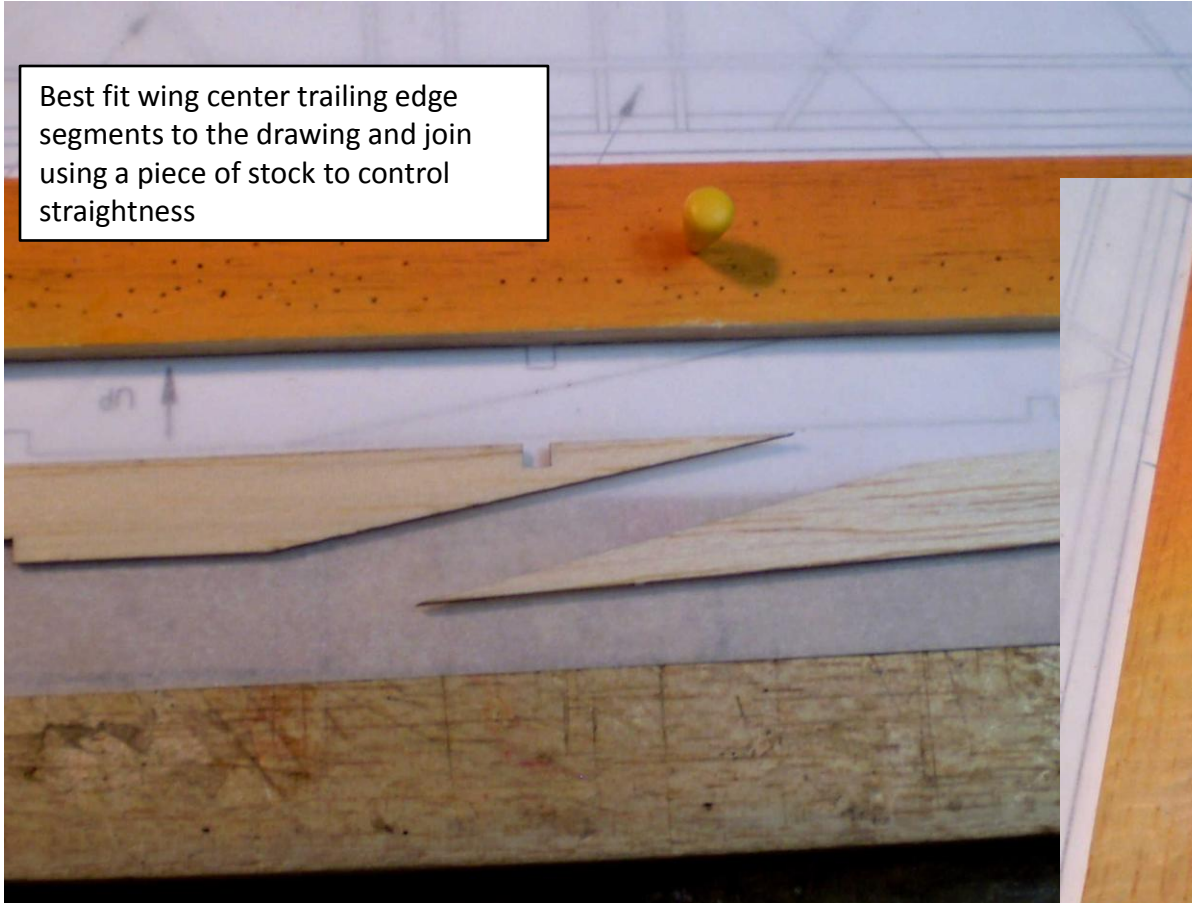


Setting up the stab index key assembly SK-1 & 2 for installation on the stabilizer frame

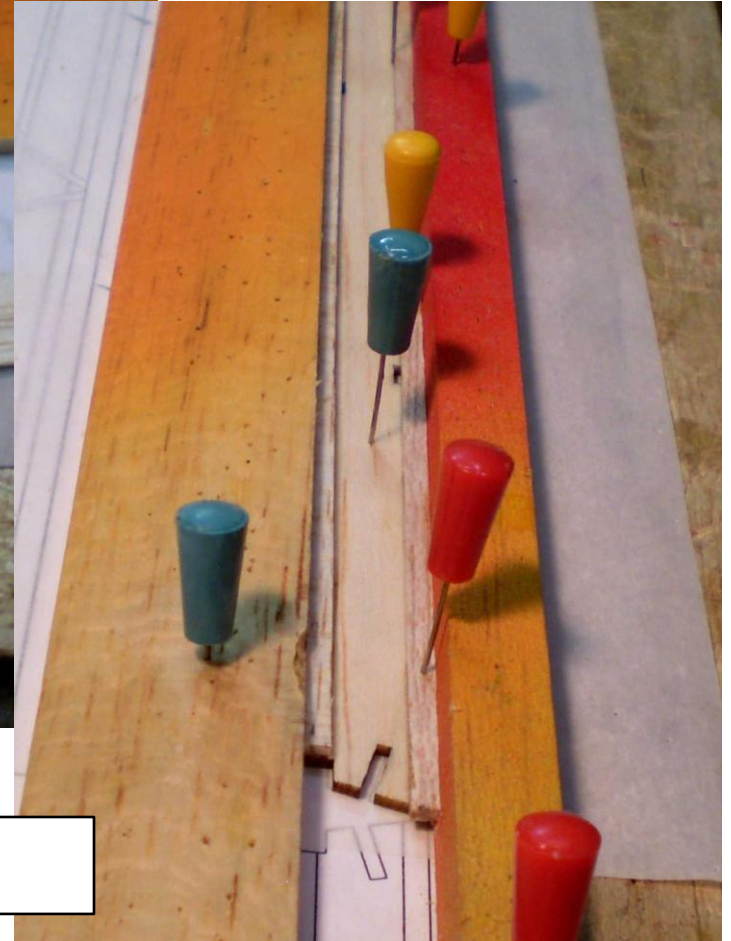


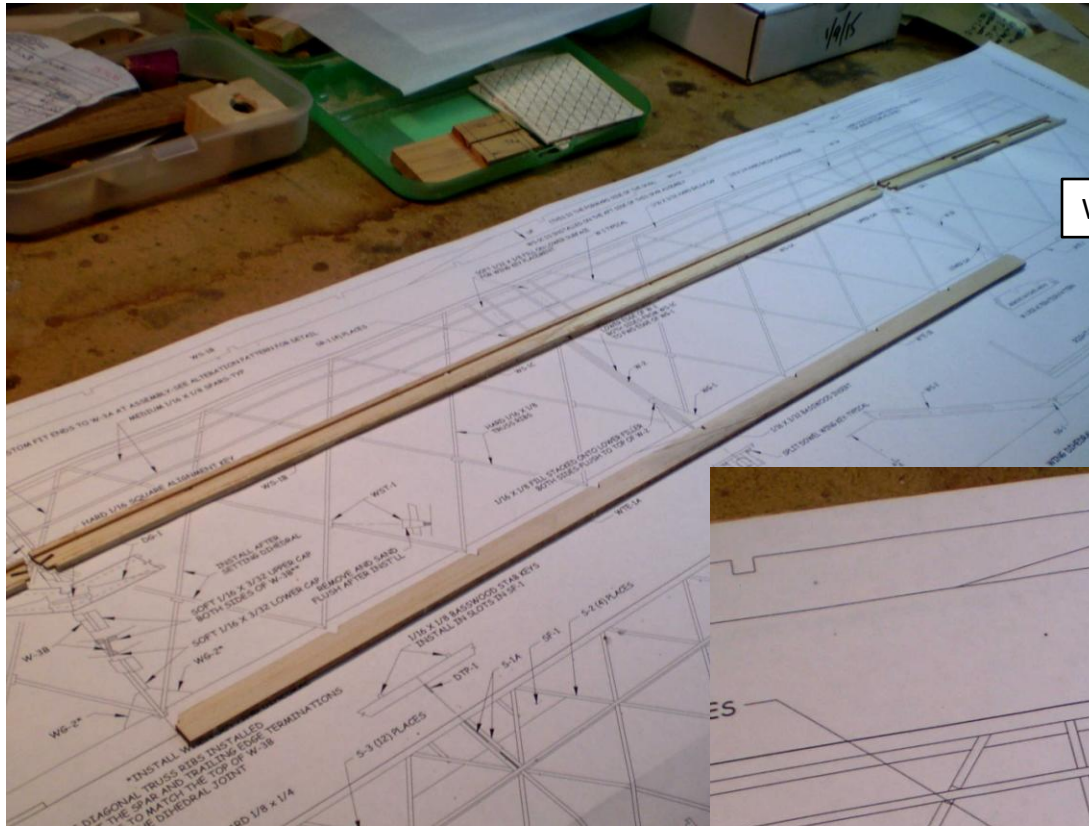
Set up the stabilizer frame to match the drawing exactly for control of the stab key slot and tip fin relationships to the SK index assembly

Best fit wing center trailing edge segments to the drawing and join using a piece of stock to control straightness

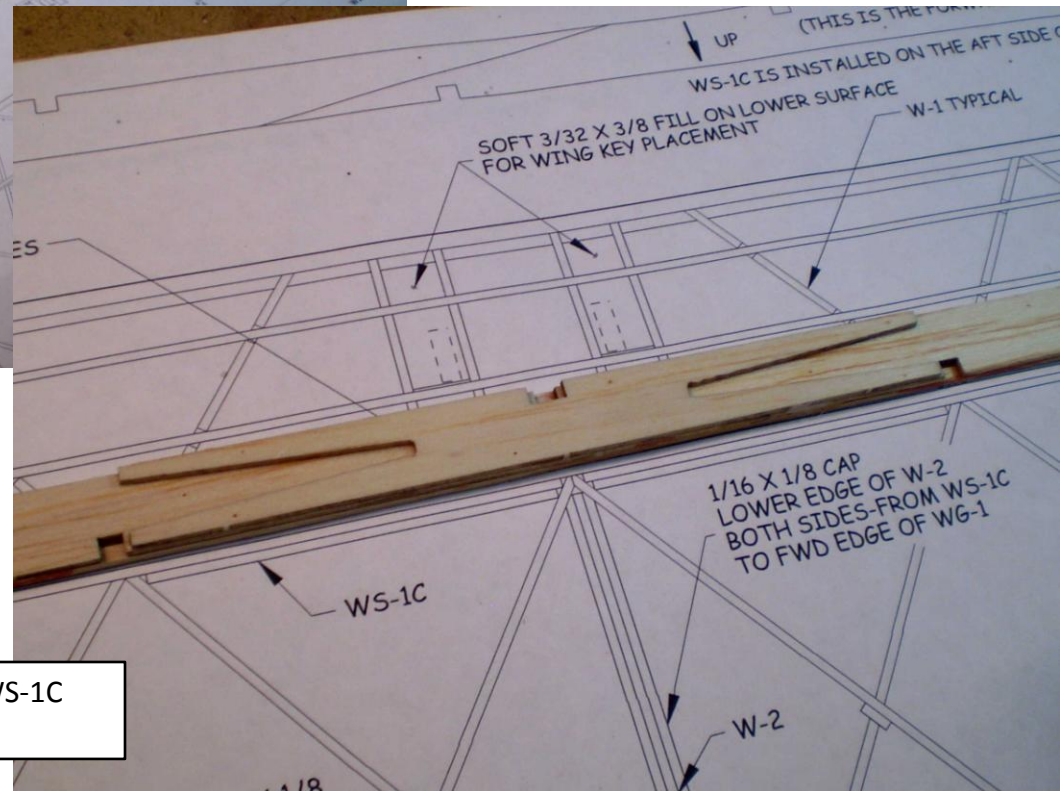


View of wing spar cap installation-use stock to control straightness



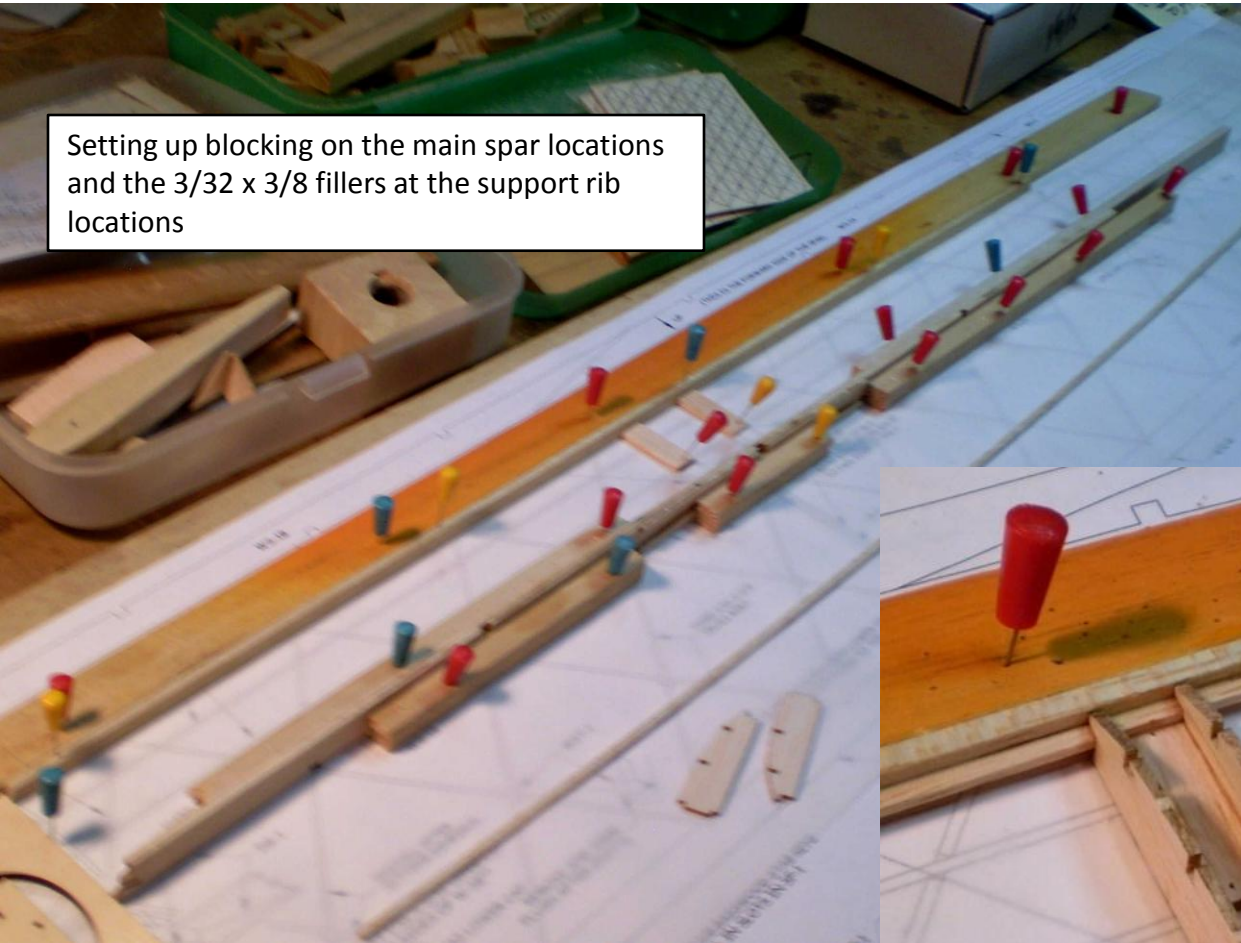


Wing spar and trailing edge assemblies

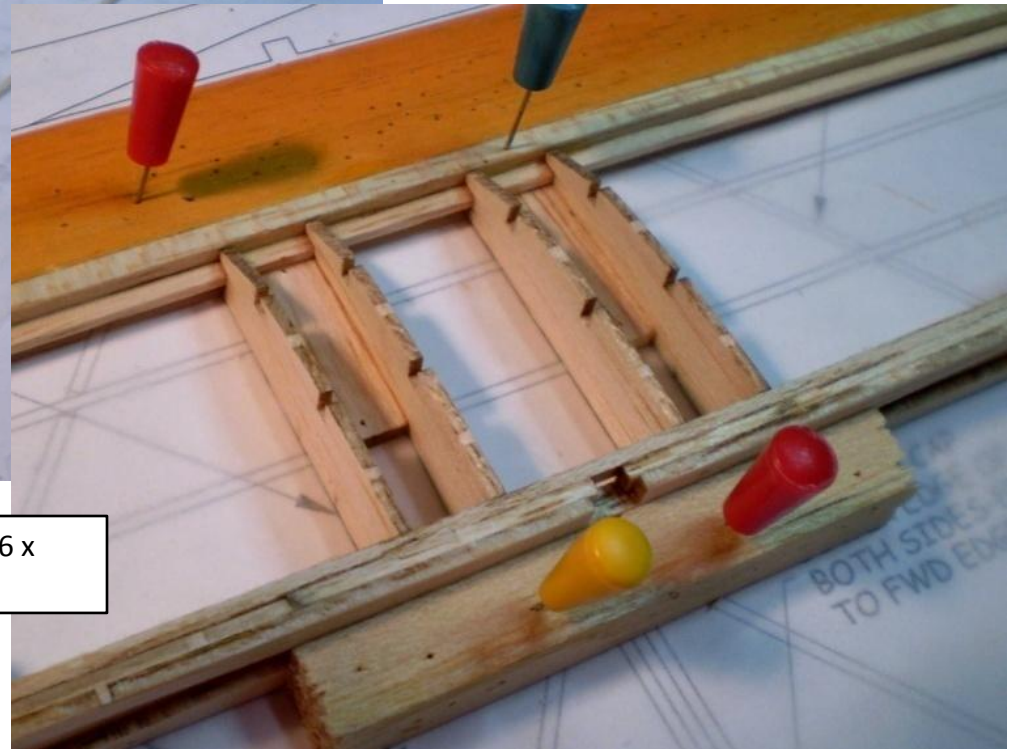


Wing center spar doubler WS-1C installed on the aft side

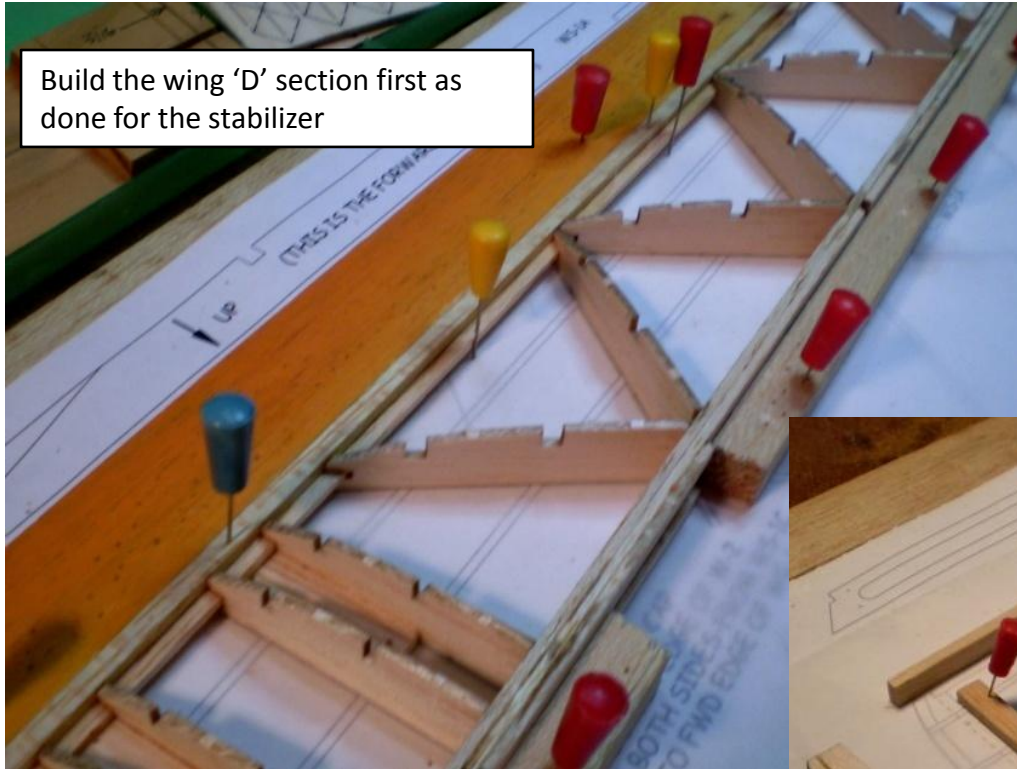
Setting up blocking on the main spar locations and the 3/32 x 3/8 fillers at the support rib locations



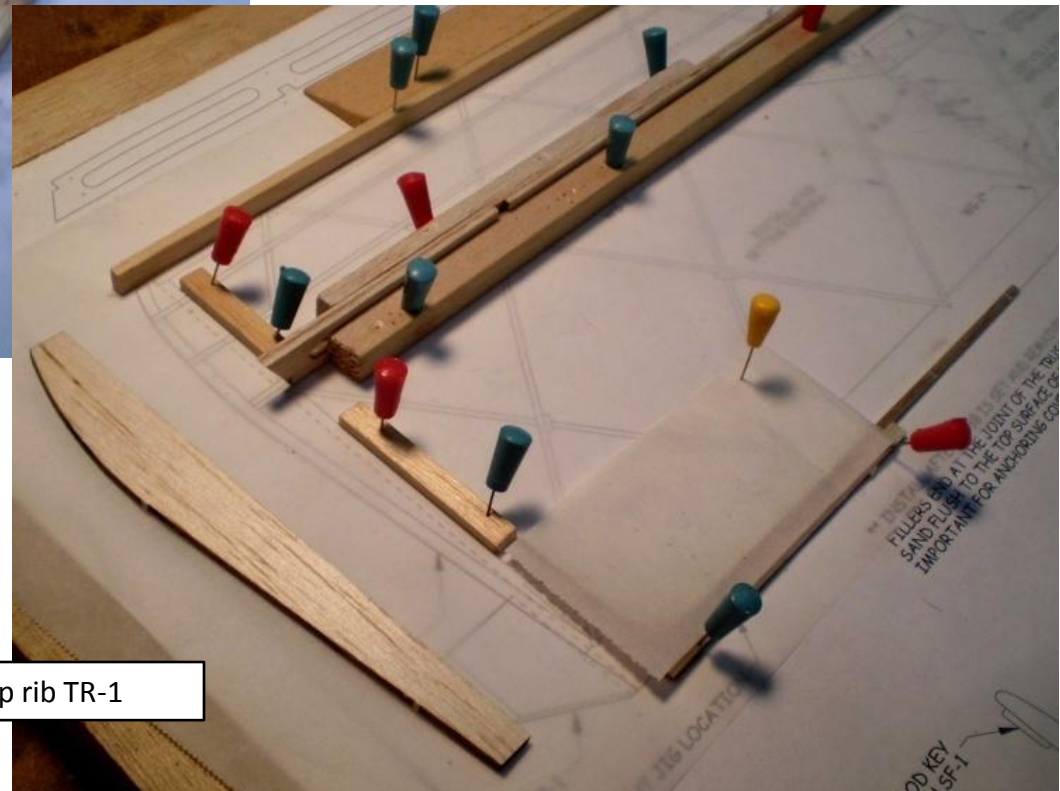
Support ribs SR-1 with lower filler and 1/16 x 3/32 leading edge cap

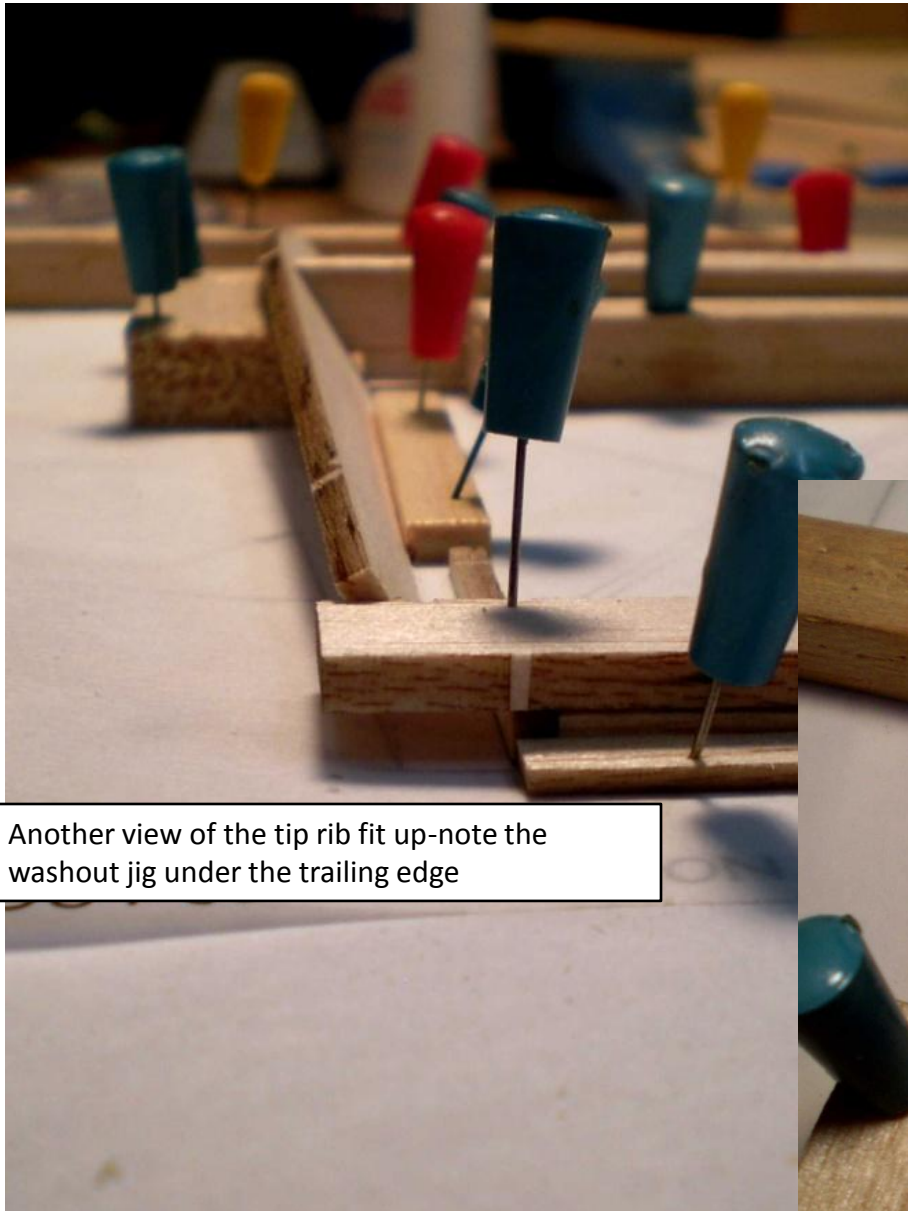


Build the wing 'D' section first as done for the stabilizer

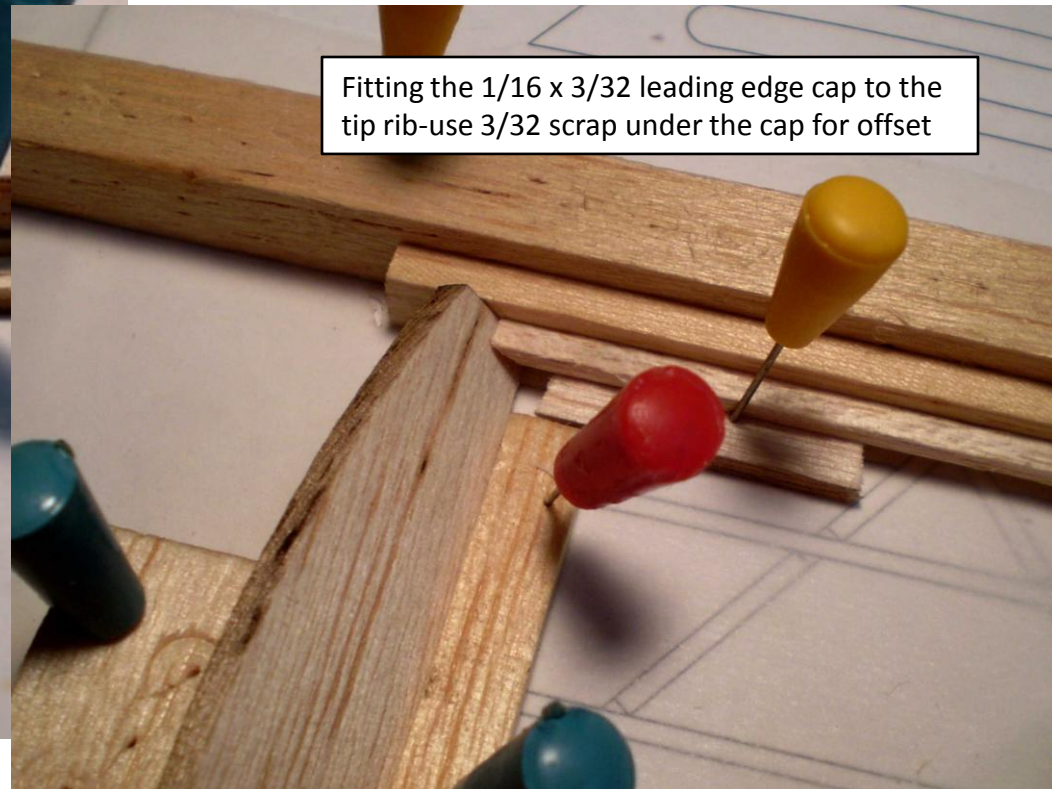


Setting up position control for the canted tip rib TR-1

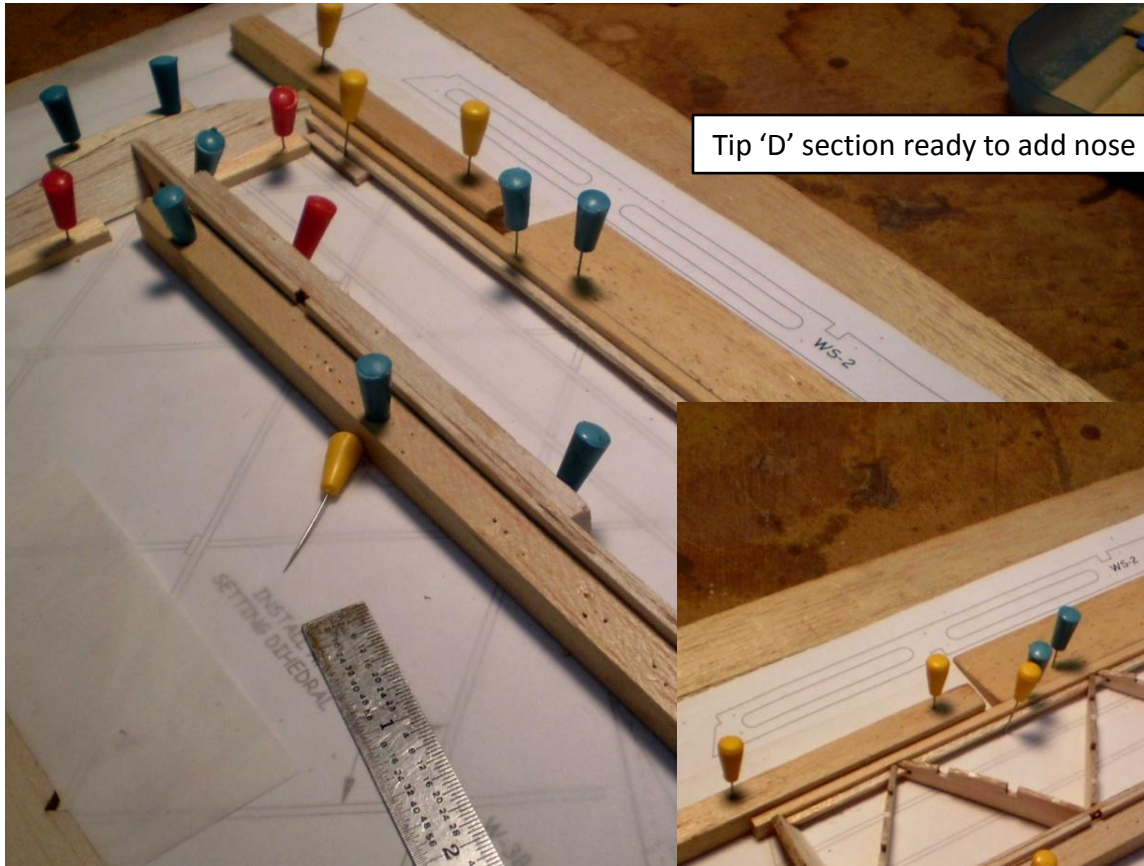




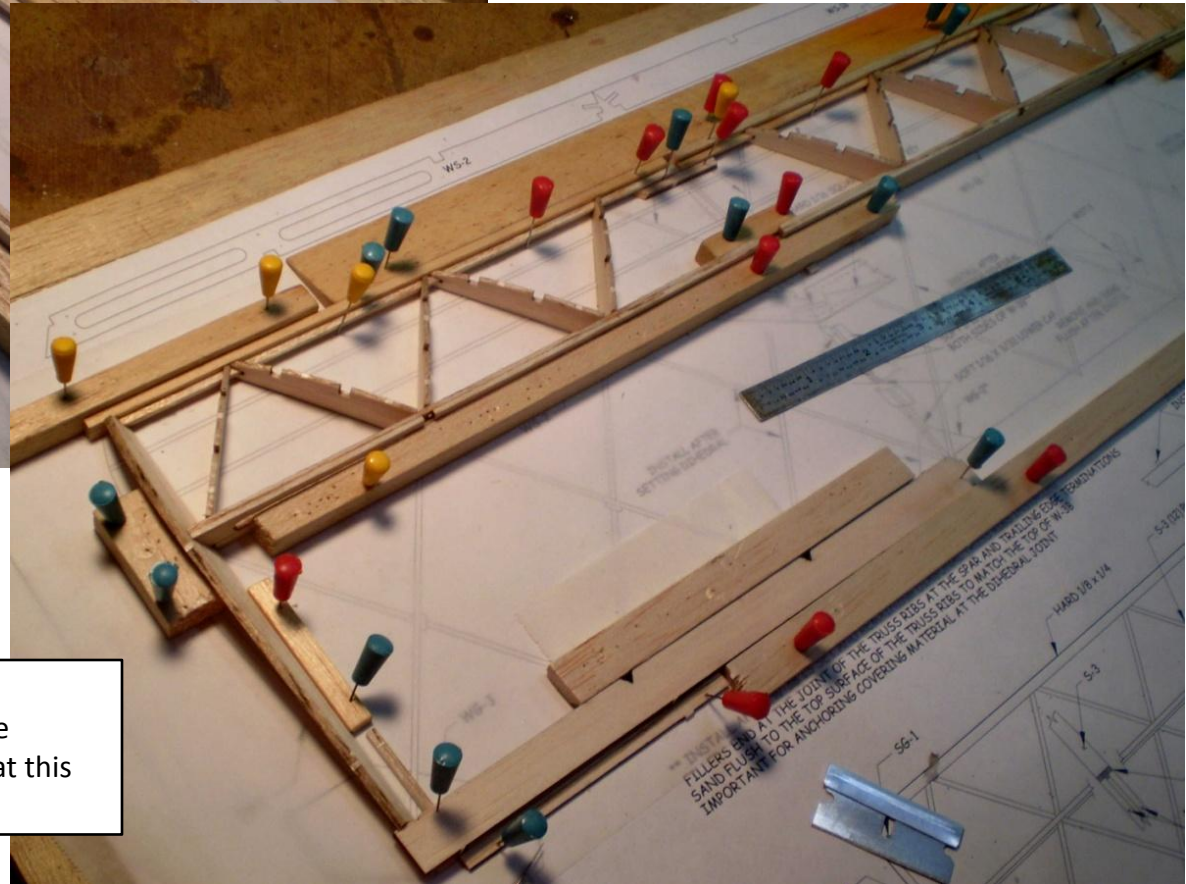
Another view of the tip rib fit up-note the washout jig under the trailing edge



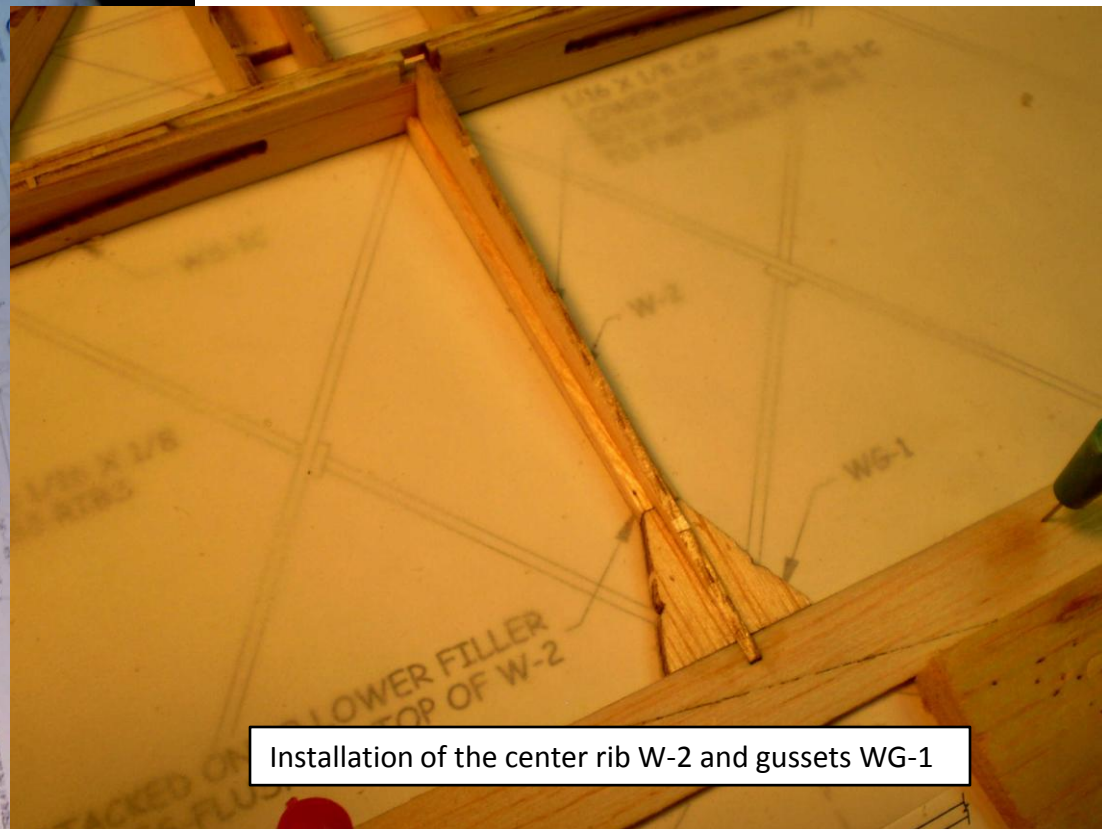
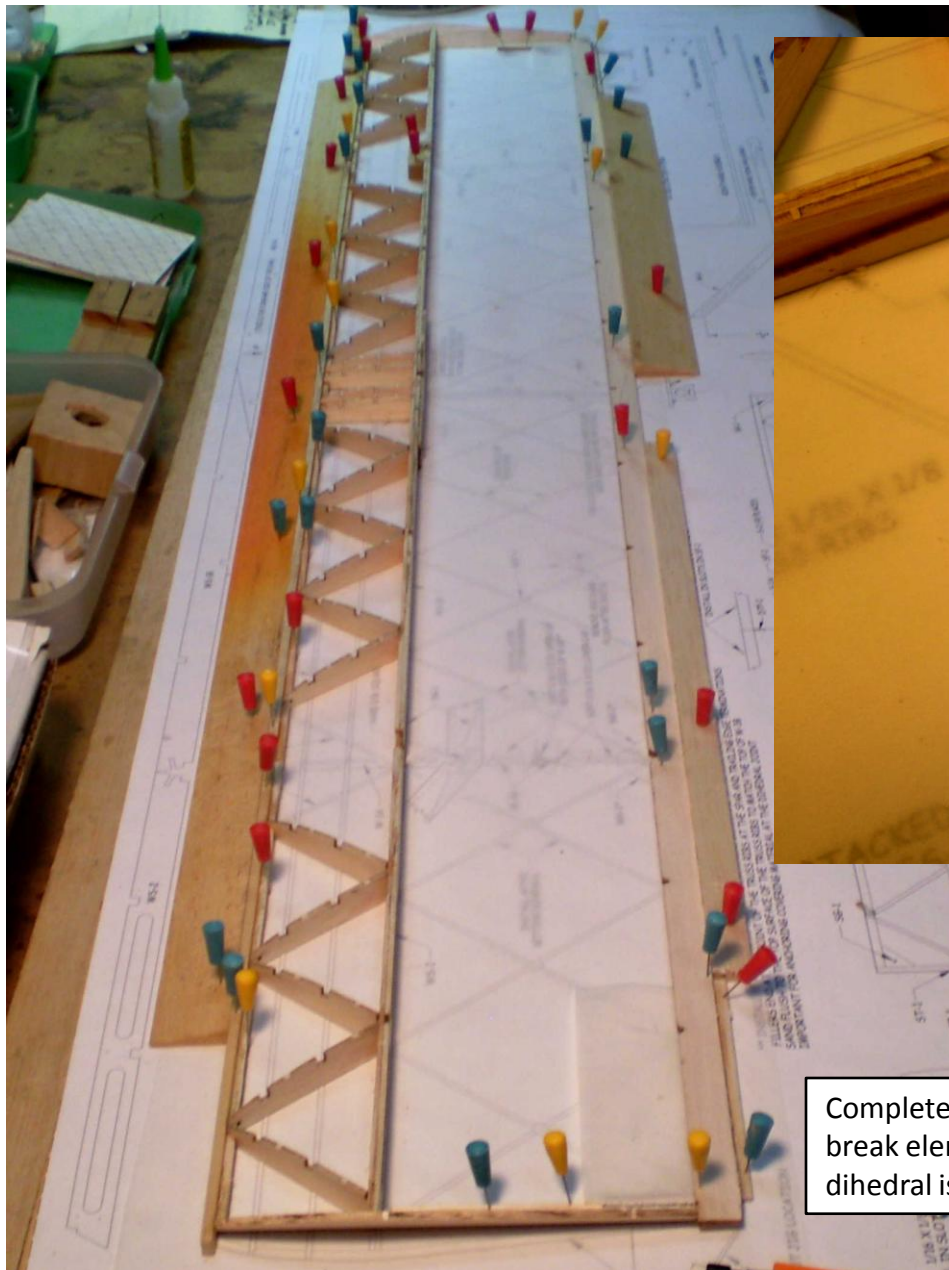
Fitting the 1/16 x 3/32 leading edge cap to the tip rib-use 3/32 scrap under the cap for offset



Tip 'D' section ready to add nose ribs

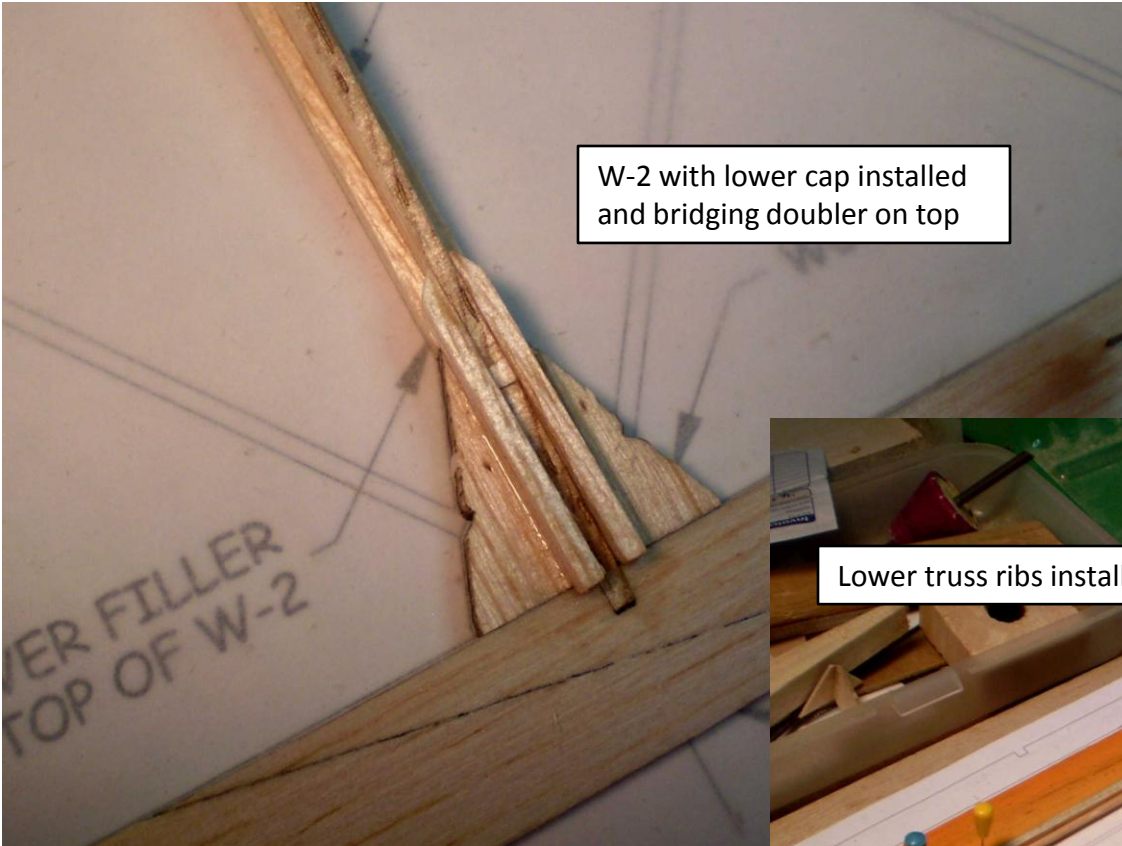


Tip panel 'D' section assembly complete-tip rib is bonded to the leading edge and spar end only at this stage



Installation of the center rib W-2 and gussets WG-1

Completed 'D' sections-dihedral break elements left open until dihedral is added



W-2 with lower cap installed and bridging doubler on top

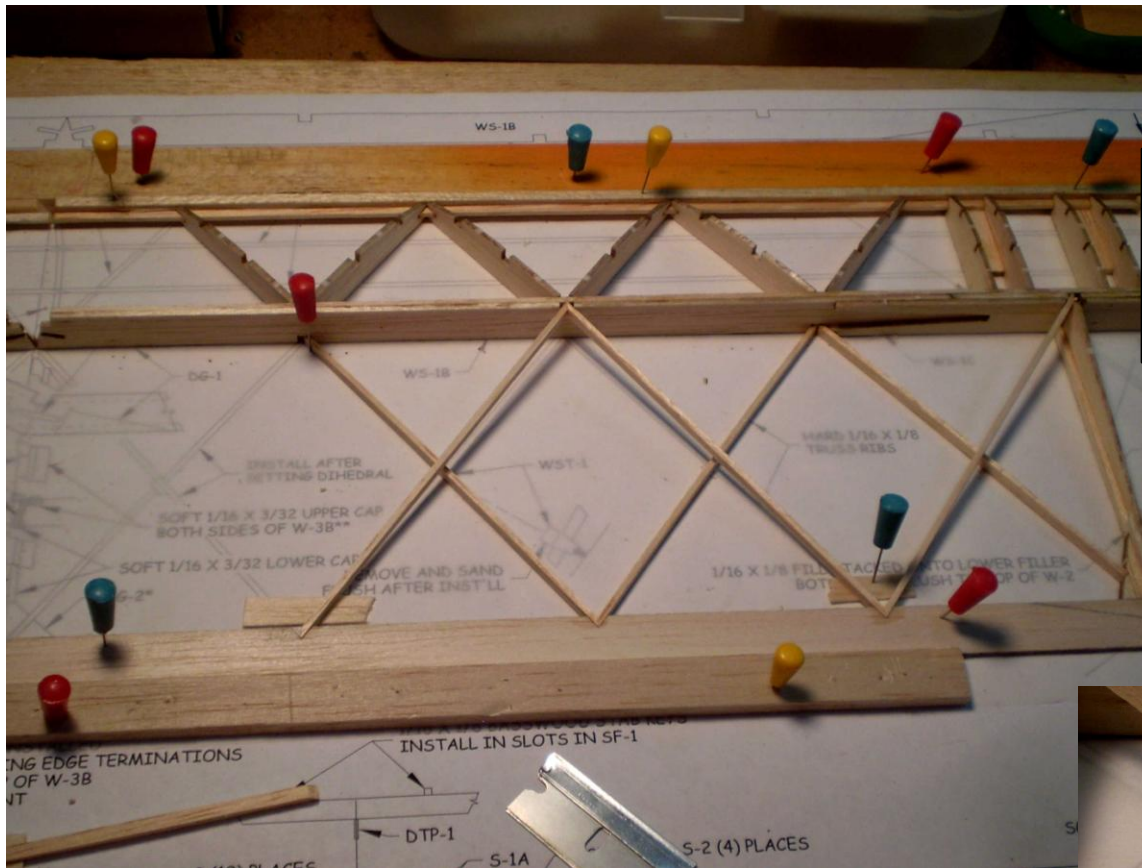
A close-up photograph showing a wooden component labeled W-2. It features a lower cap and a bridging doubler on top. The component is positioned over a larger wooden piece. In the background, a blueprint is visible with the text "OVER FILLER TOP OF W-2".



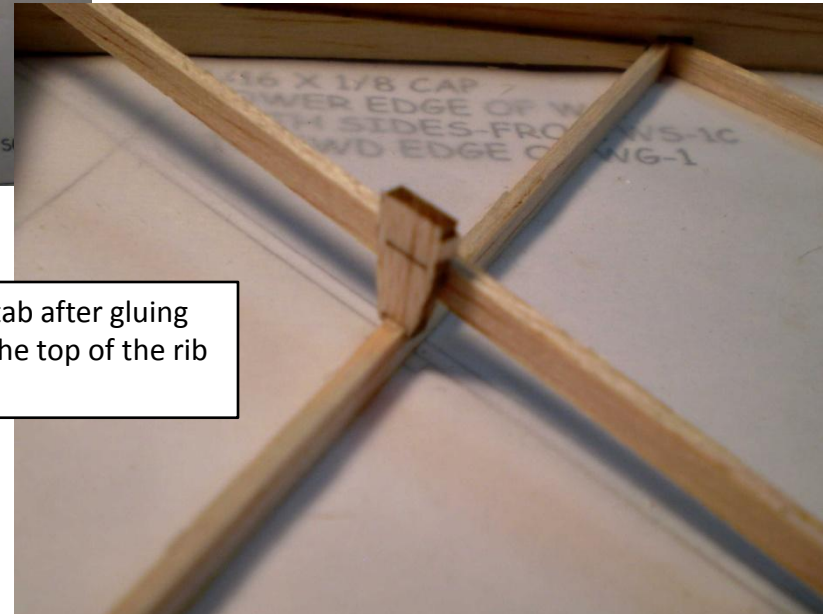
Lower truss ribs installed first

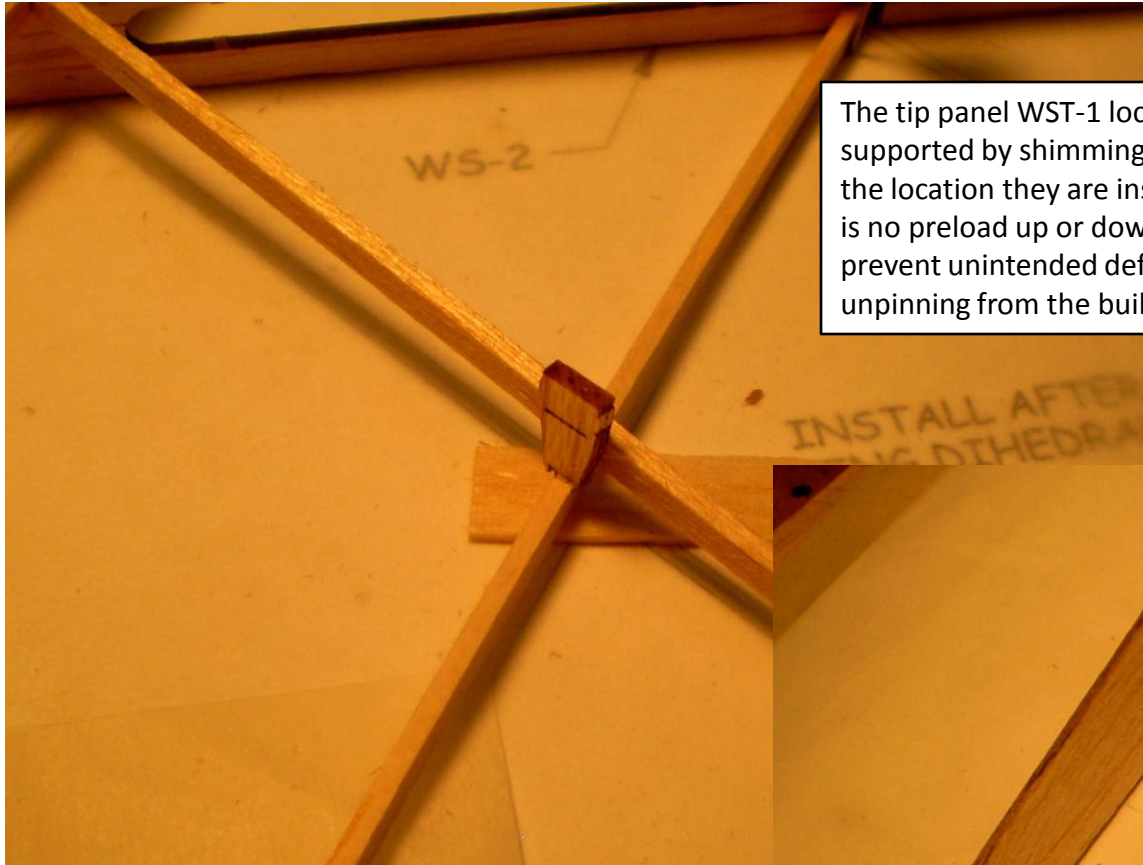
A photograph showing the lower truss ribs of a model airplane fuselage. The ribs are made of wood and are being installed onto a larger wooden structure. The ribs are held in place by several colorful pushpins (red, blue, yellow). The assembly is laid out on a blueprint with various technical drawings and labels. Labels include "W5-18", "W5-11", "W5-1", "W5-2", "W5-3", "W5-4", "W5-5", "W5-6", "W5-7", "W5-8", "W5-9", "W5-10", "W5-12", "W5-13", "W5-14", "W5-15", "W5-16", "W5-17", "W5-19", "W5-20", "W5-21", "W5-22", "W5-23", "W5-24", "W5-25", "W5-26", "W5-27", "W5-28", "W5-29", "W5-30", "W5-31", "W5-32", "W5-33", "W5-34", "W5-35", "W5-36", "W5-37", "W5-38", "W5-39", "W5-40", "W5-41", "W5-42", "W5-43", "W5-44", "W5-45", "W5-46", "W5-47", "W5-48", "W5-49", "W5-50", "W5-51", "W5-52", "W5-53", "W5-54", "W5-55", "W5-56", "W5-57", "W5-58", "W5-59", "W5-60", "W5-61", "W5-62", "W5-63", "W5-64", "W5-65", "W5-66", "W5-67", "W5-68", "W5-69", "W5-70", "W5-71", "W5-72", "W5-73", "W5-74", "W5-75", "W5-76", "W5-77", "W5-78", "W5-79", "W5-80", "W5-81", "W5-82", "W5-83", "W5-84", "W5-85", "W5-86", "W5-87", "W5-88", "W5-89", "W5-90", "W5-91", "W5-92", "W5-93", "W5-94", "W5-95", "W5-96", "W5-97", "W5-98", "W5-99", "W5-100".

Upper truss rib installation on the center panel-note shear tie WST-1 installed between the upper and lower ribs where they cross. Do not omit as these add a lot for torsional stiffness in the wing structure.

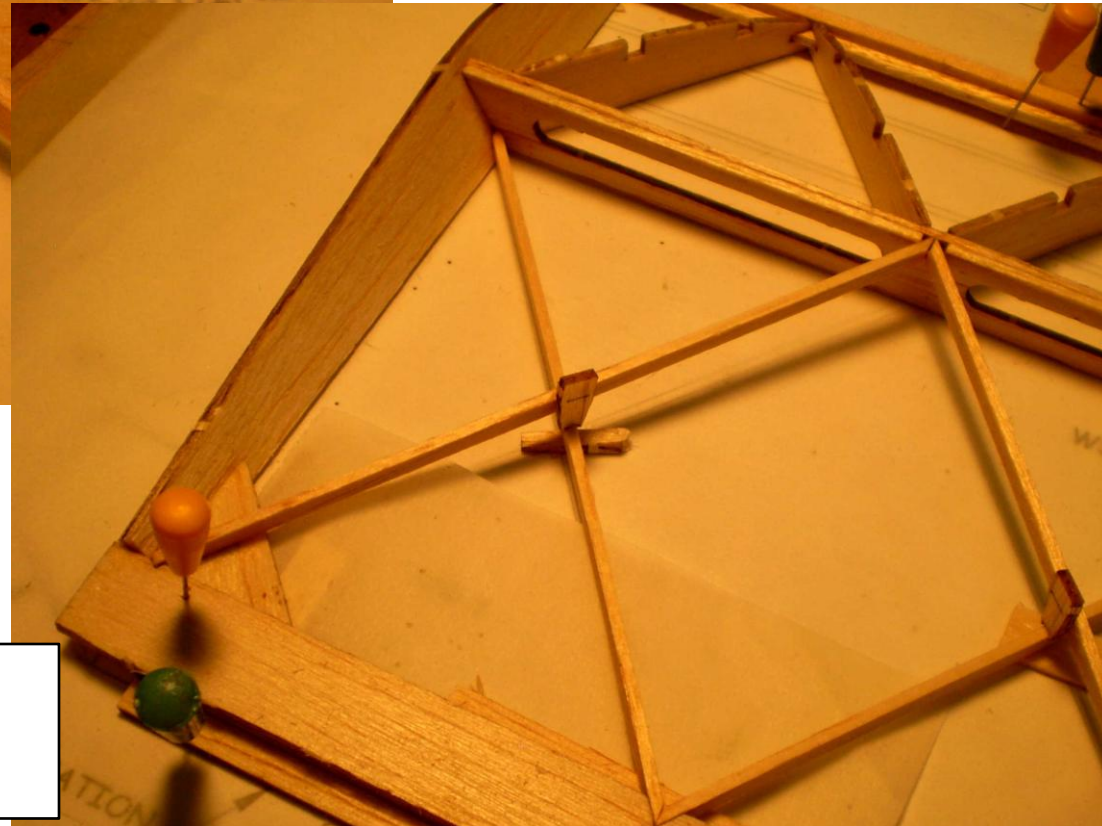


WST-1 installation-remove the upper tab after gluing and blend the remaining top flush to the top of the rib during sanding

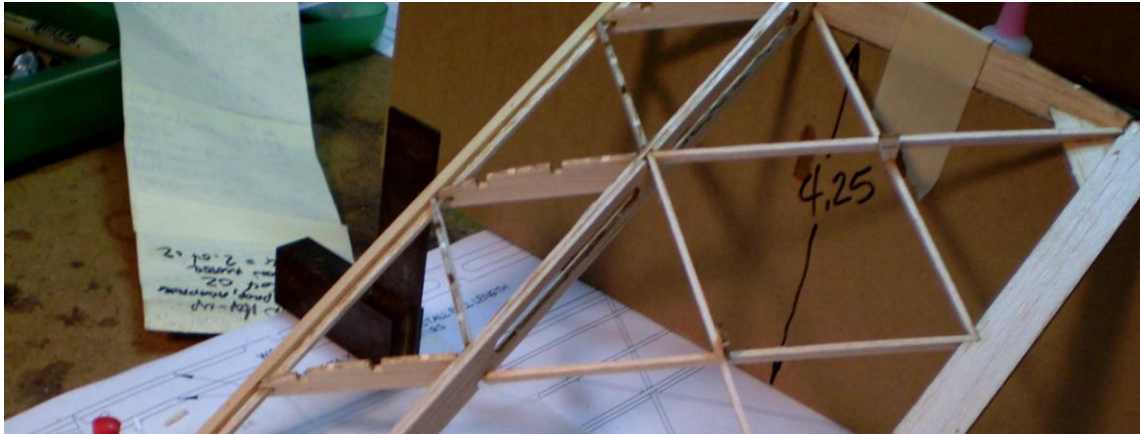




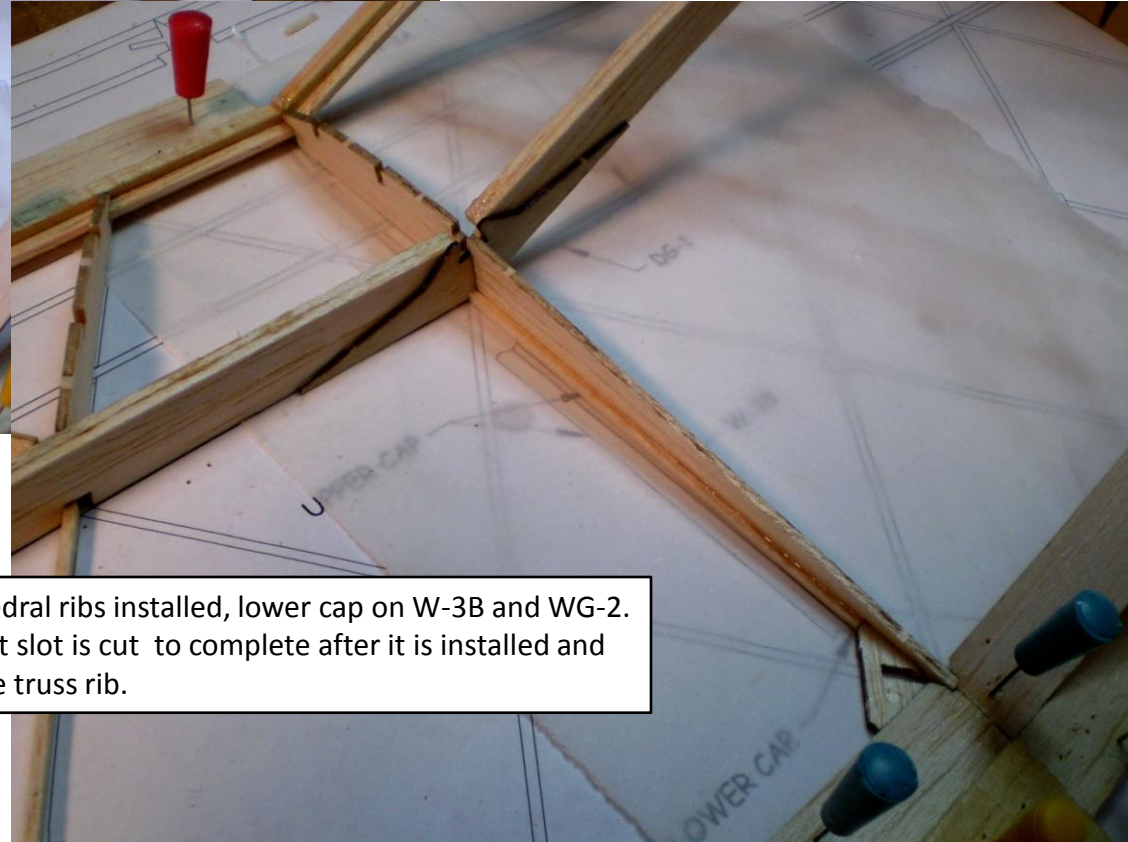
The tip panel WST-1 locations need to be supported by shimming under the lower rib at the location they are installed. Make sure there is no preload up or down on these joints to prevent unintended deflection of both ribs after unpinning from the building board.



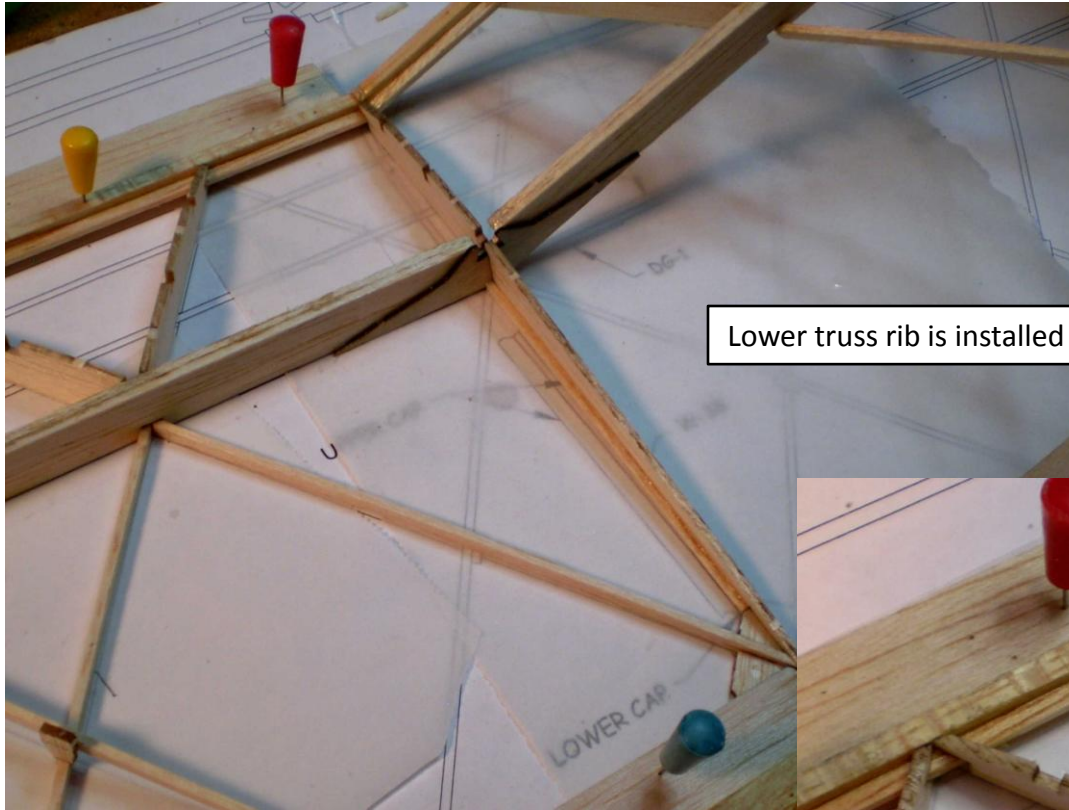
Showing an example of a tapered shim positioned until there is no movement of the lower spar. Also note the gusset WG-3 installation.



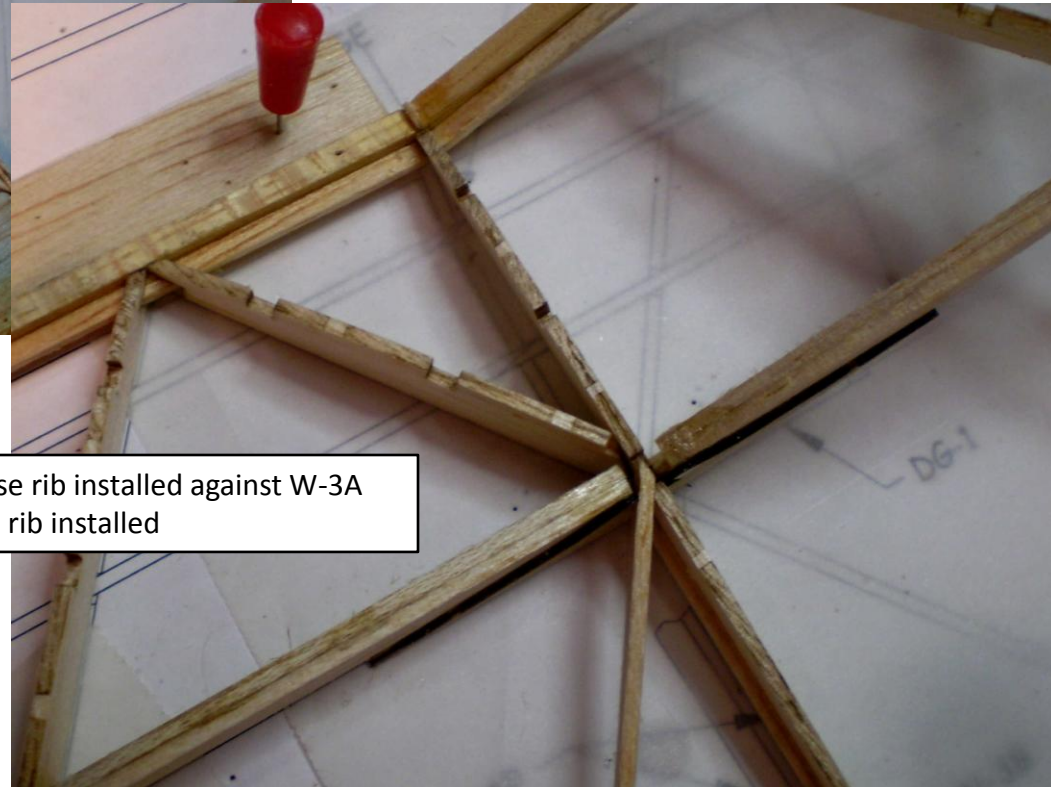
Adding tip dihedral and DG-1



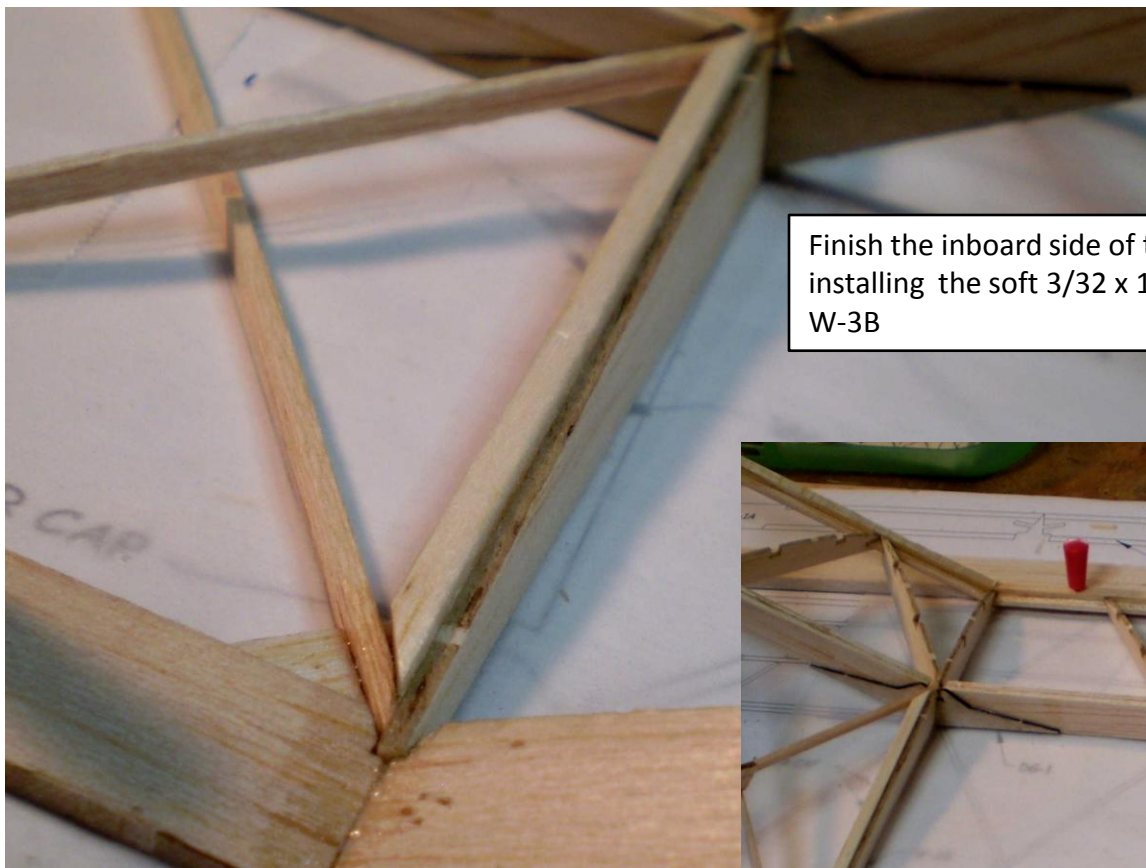
Wing dihedral ribs installed, lower cap on W-3B and WG-2. The gusset slot is cut to complete after it is installed and accept the truss rib.



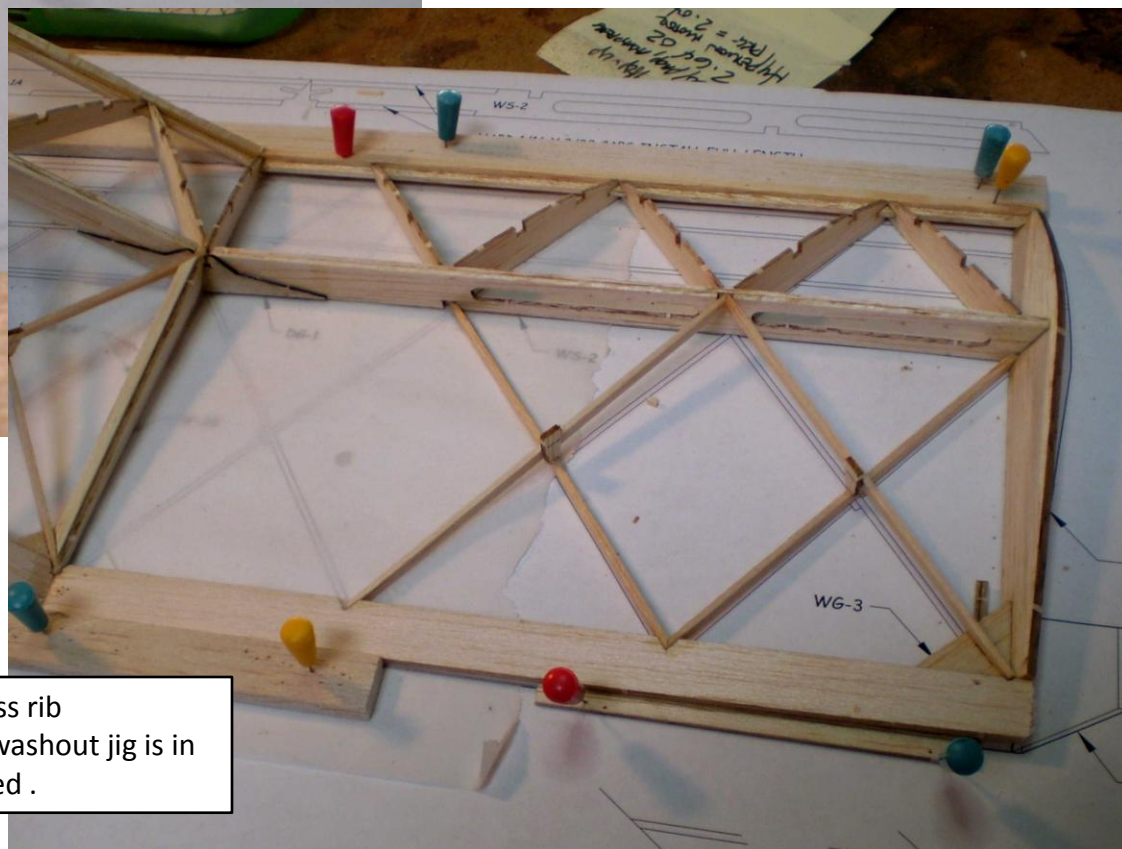
Lower truss rib is installed



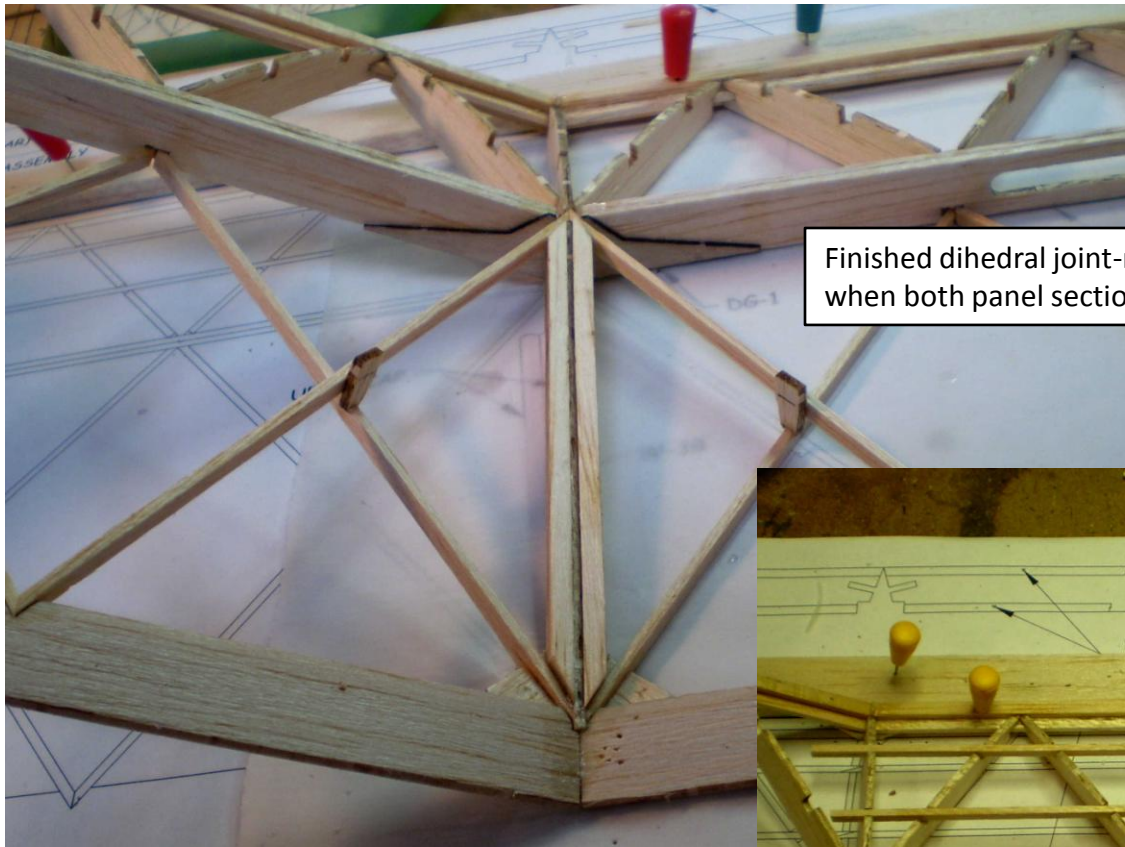
Altered W-1 nose rib installed against W-3A and upper truss rib installed



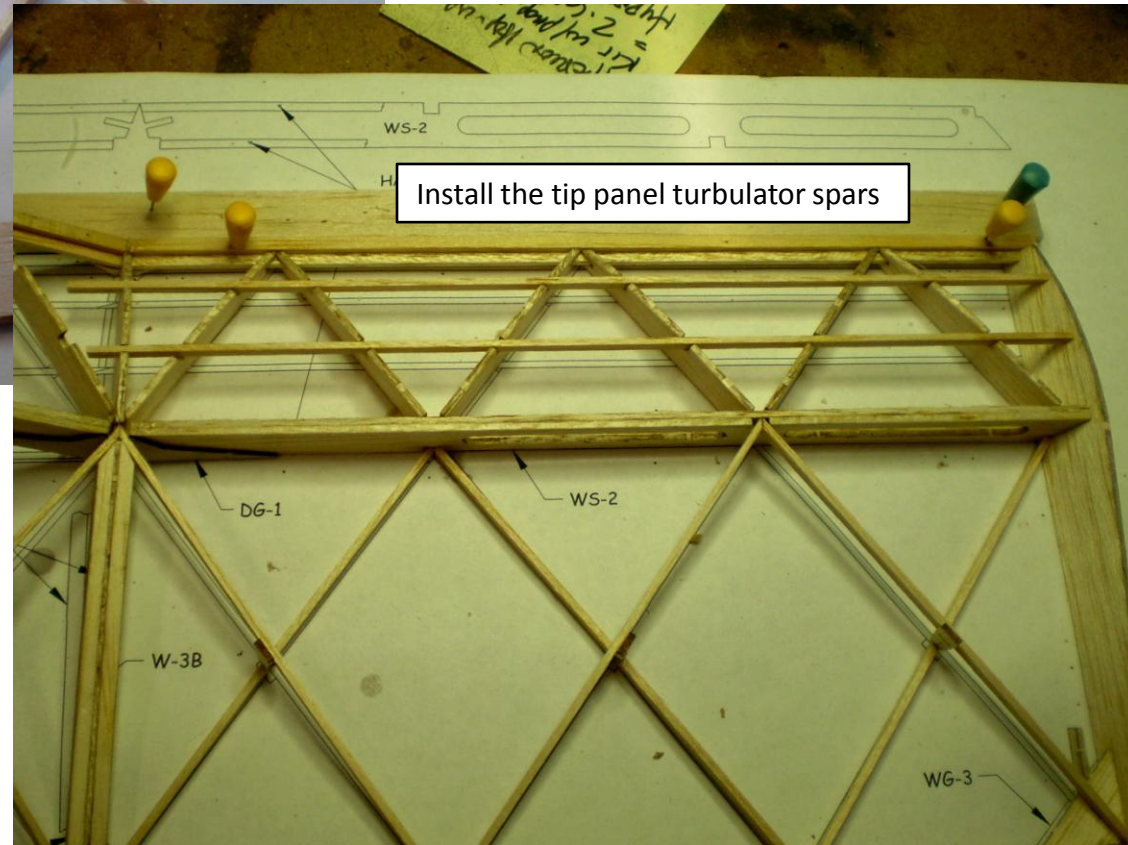
Finish the inboard side of the dihedral joint by installing the soft 3/32 x 1/8 upper filler attached to W-3B



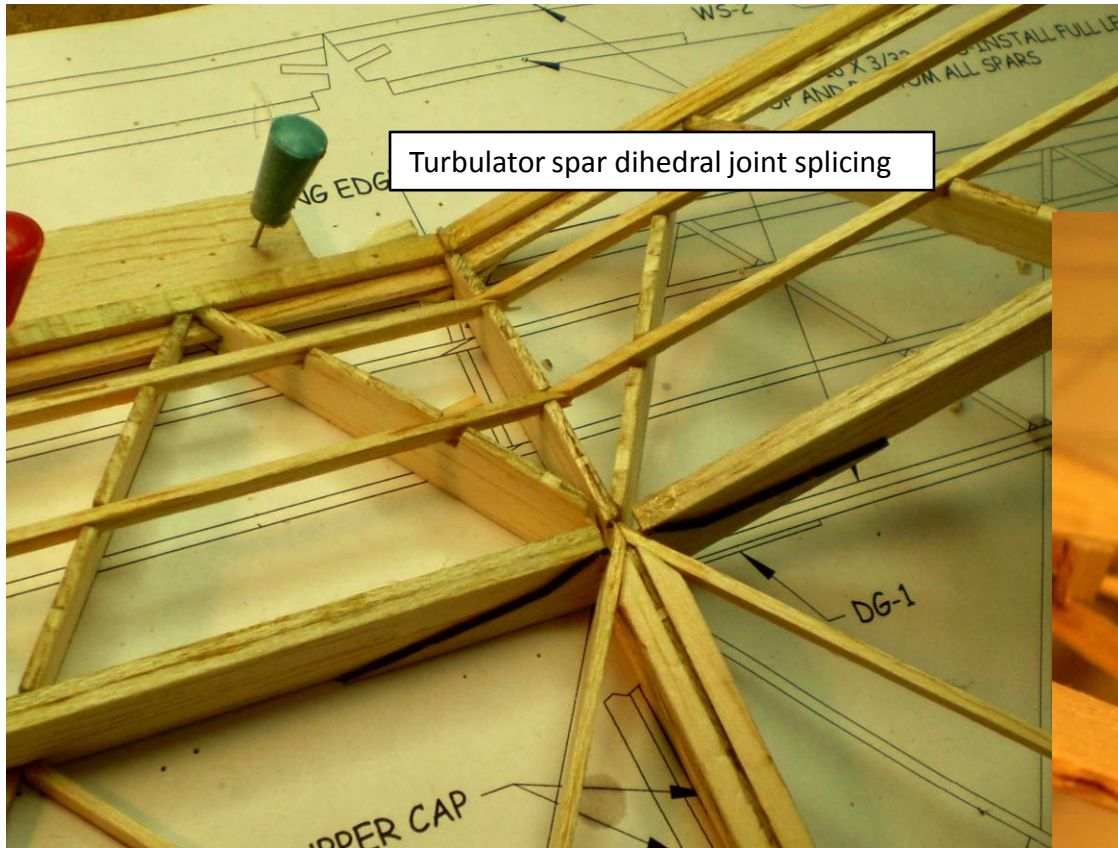
Setting up the tip panel to finish the truss rib installation, gusset and filler. Note the washout jig is in place to support the panel as constructed .



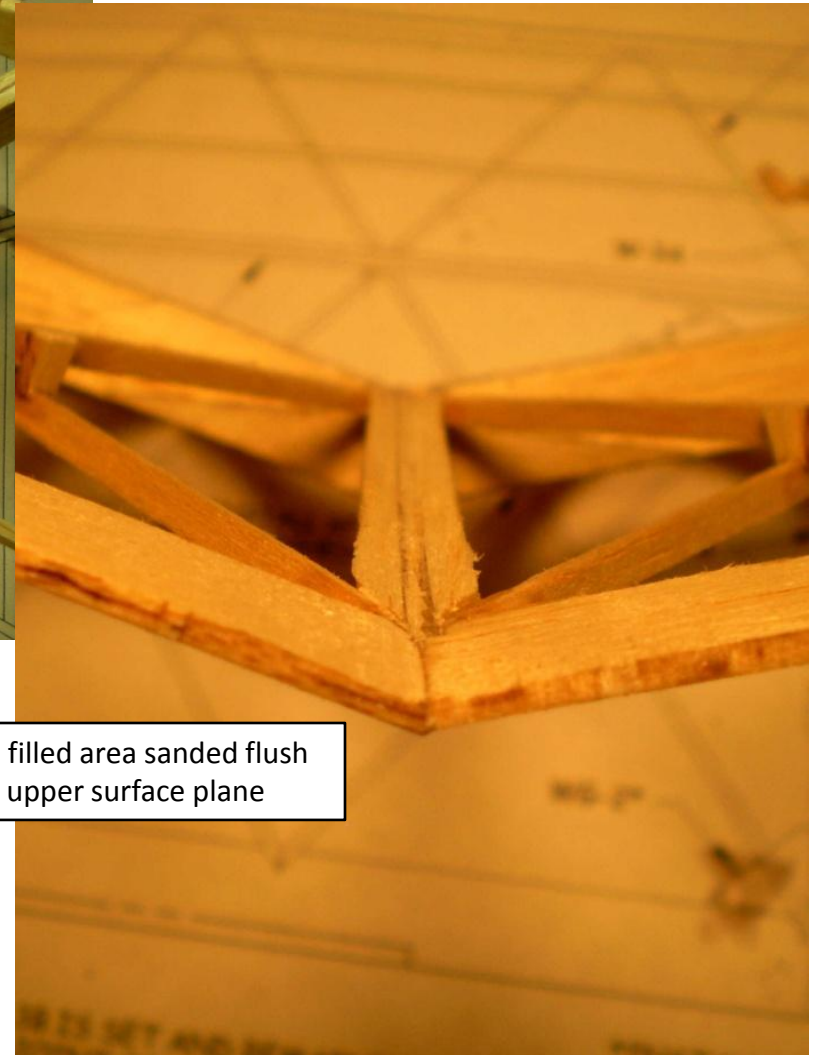
Finished dihedral joint-note the altered W-1 ribs have been installed when both panel sections were flat on the building board



Install the tip panel turbulator spars



Turbulator spar dihedral joint splicing



View of the filled area sanded flush to the wing upper surface plane