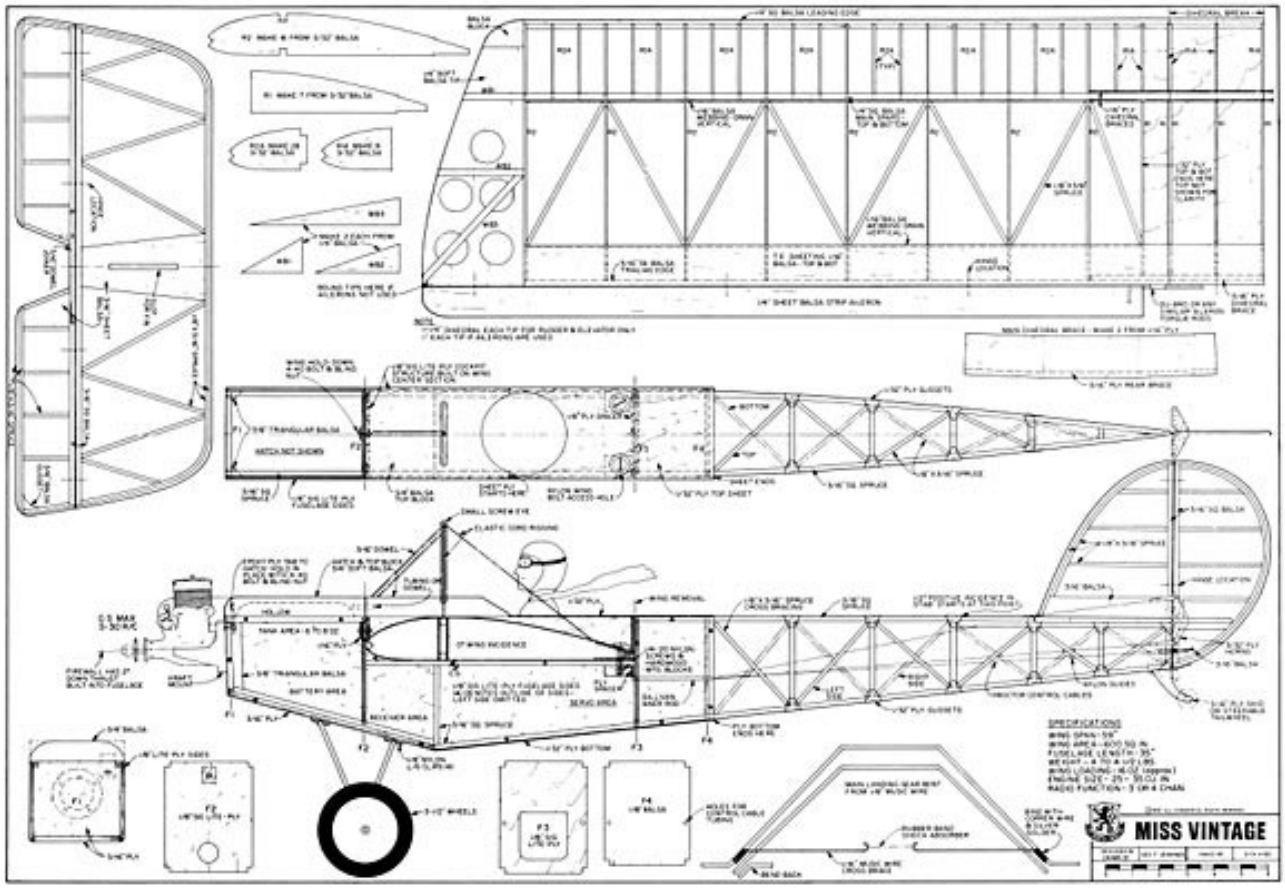
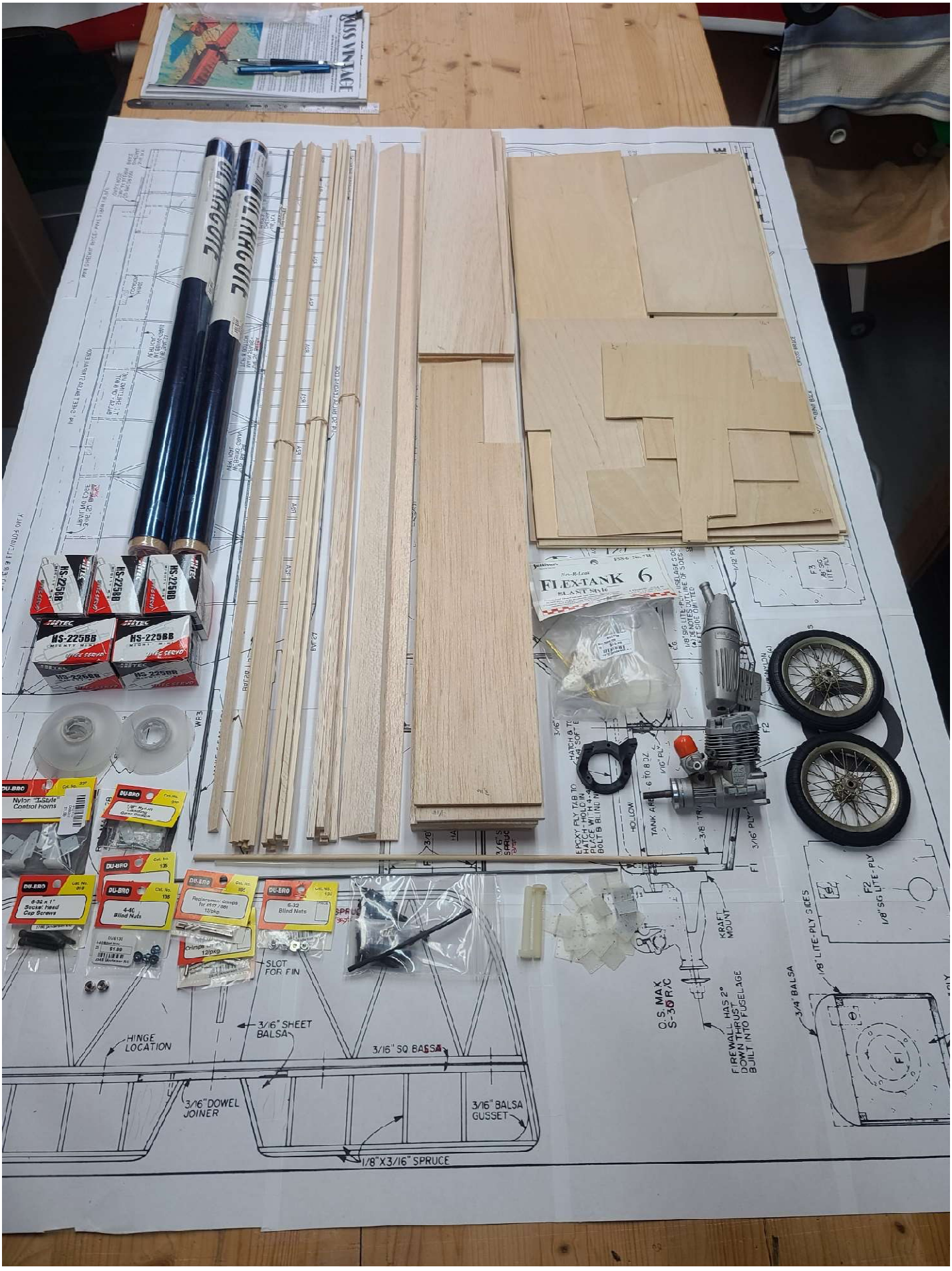
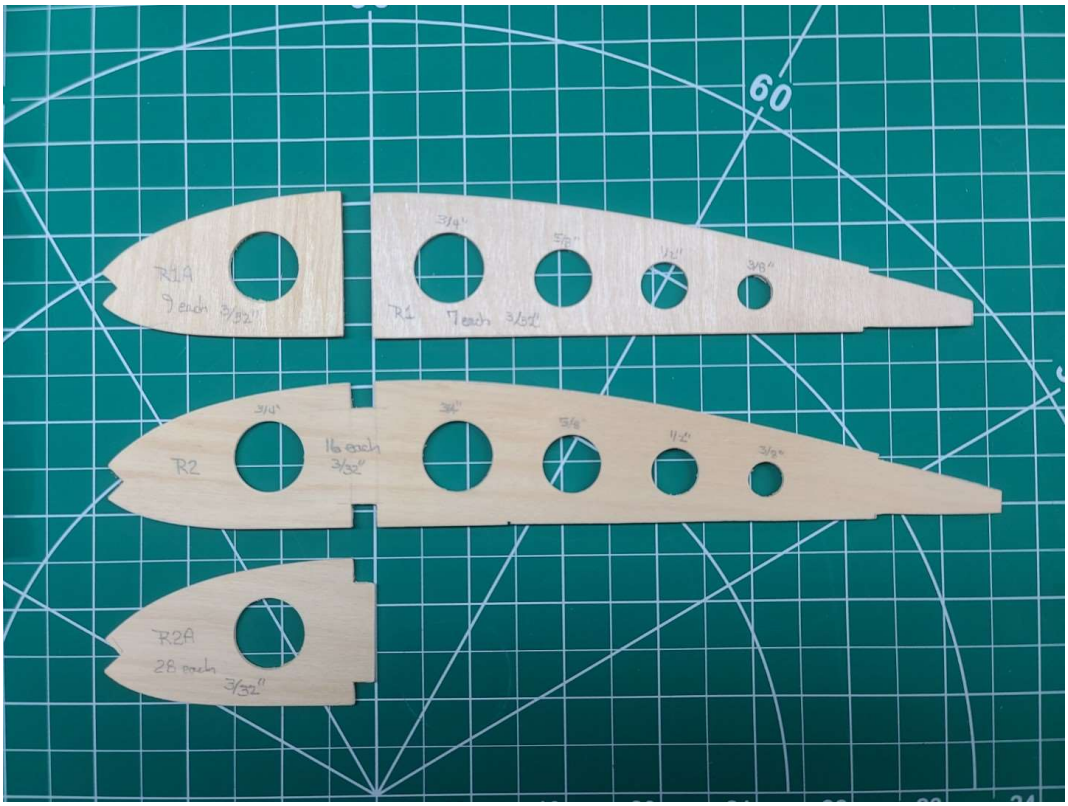
Miss Vintage Build Description



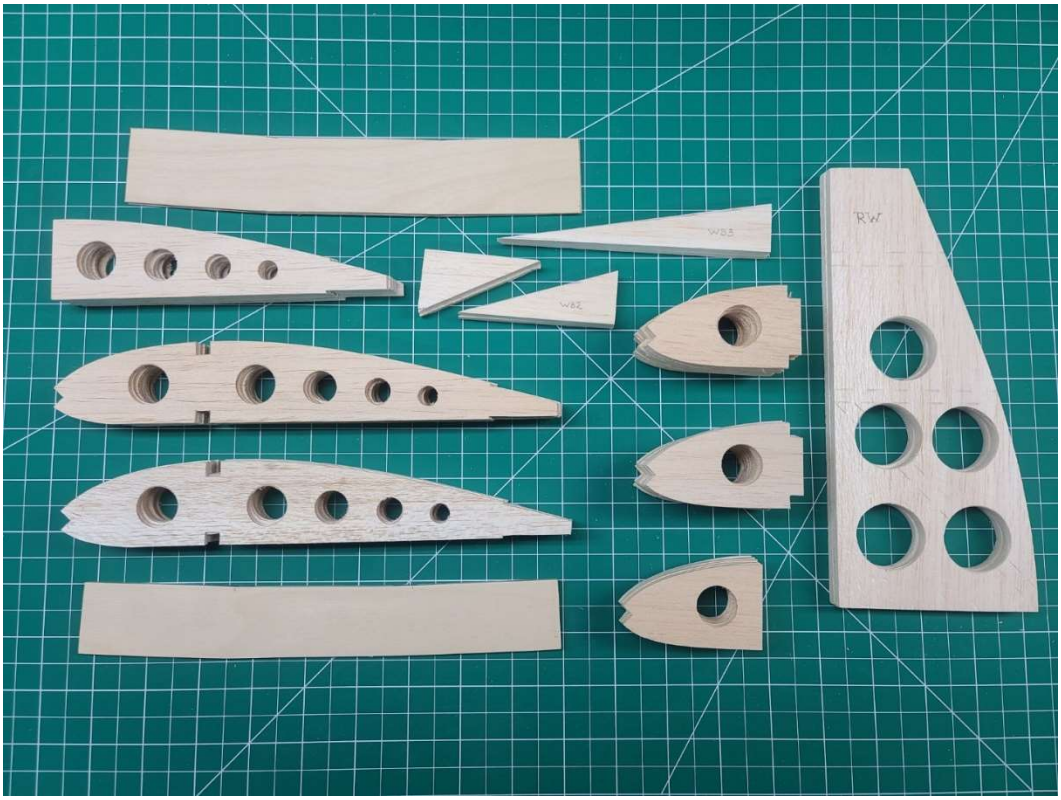
While working on the coding for the April 2024 edition to my "Build of the Month Series," I found the model selection so interesting that I decided it would be my next scratch build project. Miss Vintage can be built using a great set of RCM plans, which are available from Outerzone @: https://outerzone.co.uk/plan_details.asp?ID=4746. As with all my scratch builds, the first task is to print out the plans using my Canon TS9120 and put all the pages together resulting in a full-size set of plans. As you can see in the image above, the RCM plans only have the left wing. To get the right wing I used my graphics program, GIMP (which you can get free on the web) to flip the .pdf file over, and then cropped the resulting file for the right wing. A list of the required materials is contained in the RCM article that you can download from the Outerzone webpage. Any balsa, basswood, and lite plywood that I did not have in my back stock was ordered from Balsa USA. I picked up the hardware, servos, fuel tank, etc. from my local hobby shop, Anderson RC. I will use an old O.S. .35 SX 2-stroke that I had sitting on the shelf for power. She will be covered using blue transparent Ultracoat so all the work I put into the wings and tail feathers can be seen. I also think the open fuselage structure with pull-pull control cables is cool.

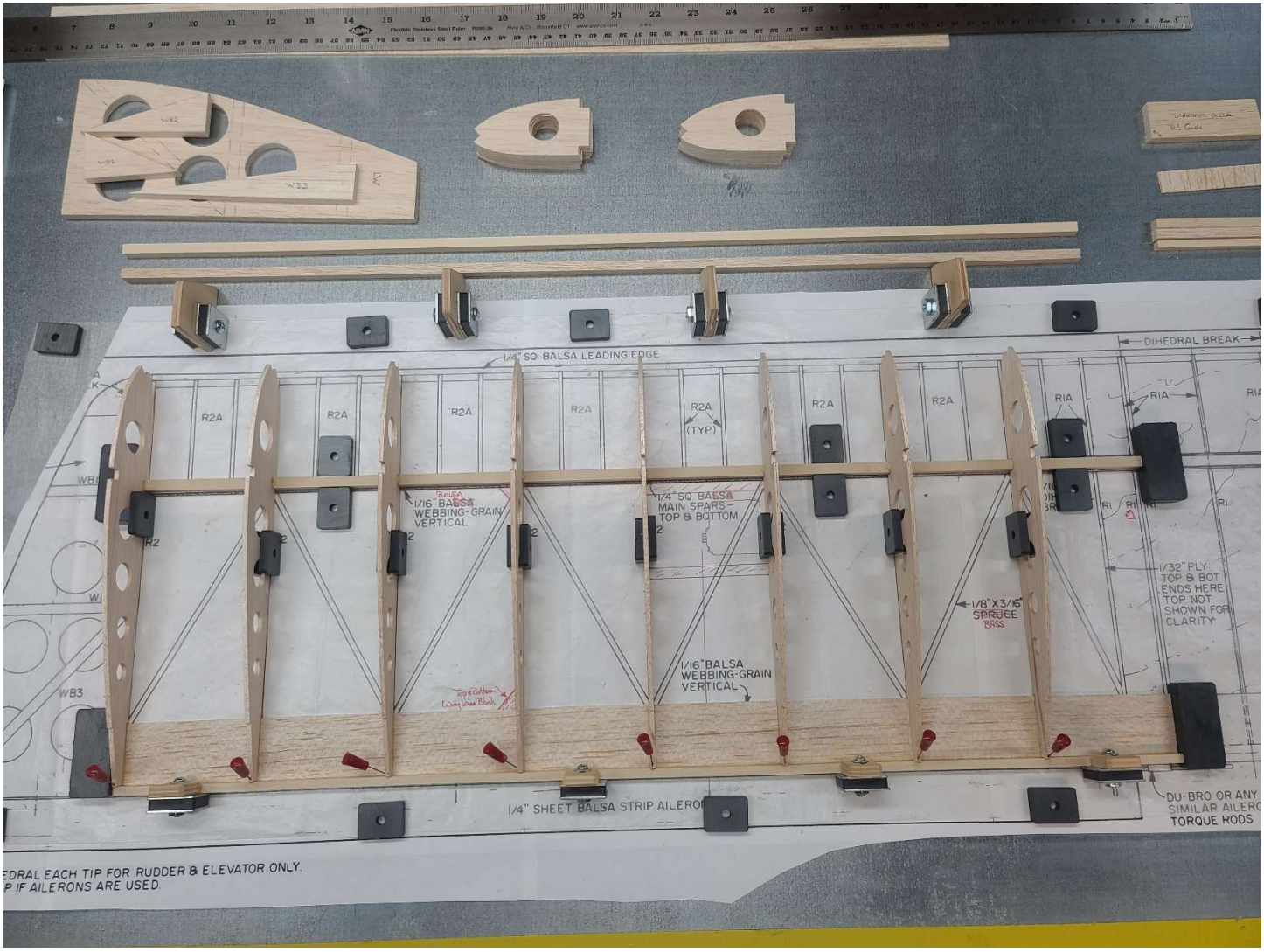
The only modifications that I currently see needed for this scratch build is to substitute basswood for anything that is called out requiring spruce, some lightening holes in the ribs, and I will use aileron servos in each wing versus the single center wing aileron servo in the plans. I also plan to add full-up wing rigging top and bottom. The image below shows all that will be needed for this build.


FLEX-TANK 6
SLANT STYLE
HS-225BB
Nylon "T-Style" Control Horns
6-32 x 1" Socket Head Cap Screws
4-40 Blind Nuts
6-32 Blind Nuts
SLOT FOR FIN
HINGE LOCATION
3/16" SHEET BALSA
3/16" SQ BALSA
3/16" DOWEL JOINER
3/16" BALSA GUSSET
1/8" X 3/16" SPRUCE
O.S. MAK S-36 R/C
KRAFT MOUNT
FIREWALL HAS 2° DOWN THRUST BUILT INTO FUSELAGE
3/4" BALSA
1/8" LITE-PLY SIDES
F2
1/8" SQ LITE-PLY
F1
3/16" PLY

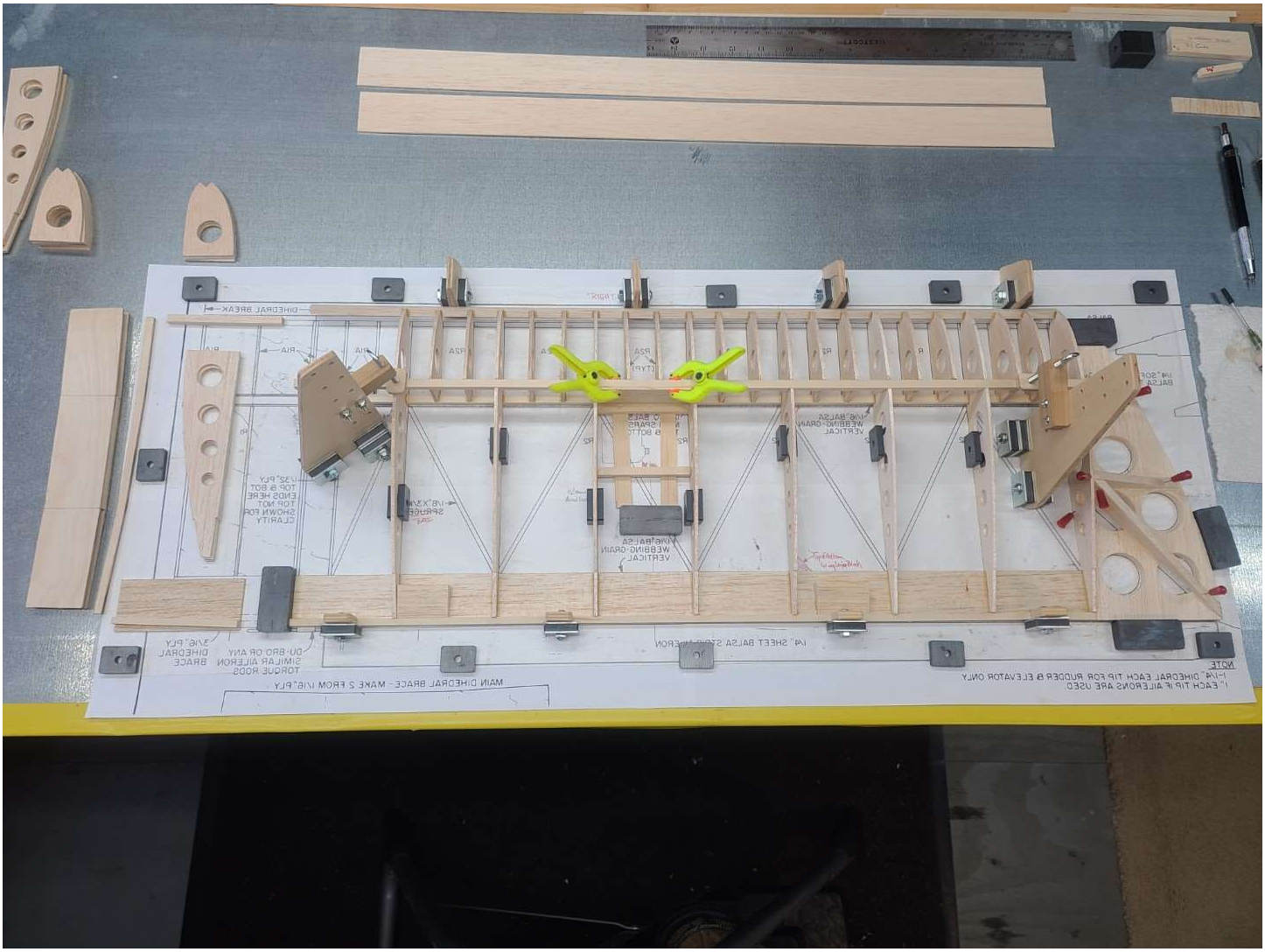


To start this build I took the wing rib profiles from the plans and transferred them to 1/16" plywood, which I then added some lightening holes as can be seen in the above image. Using these templates, I could quickly cut out each rib from 3/32" balsa sheets with a couple passes of a #11 X-Acto knife along the outline of the template. Seen below are all the wing ribs, wingtips and support braces from 1/4" balsa sheet, and the front and rear wing dihedral braces cut from plywood sheets. So, the next step is to start building the left-wing panel using my magnetic build board and fixtures.

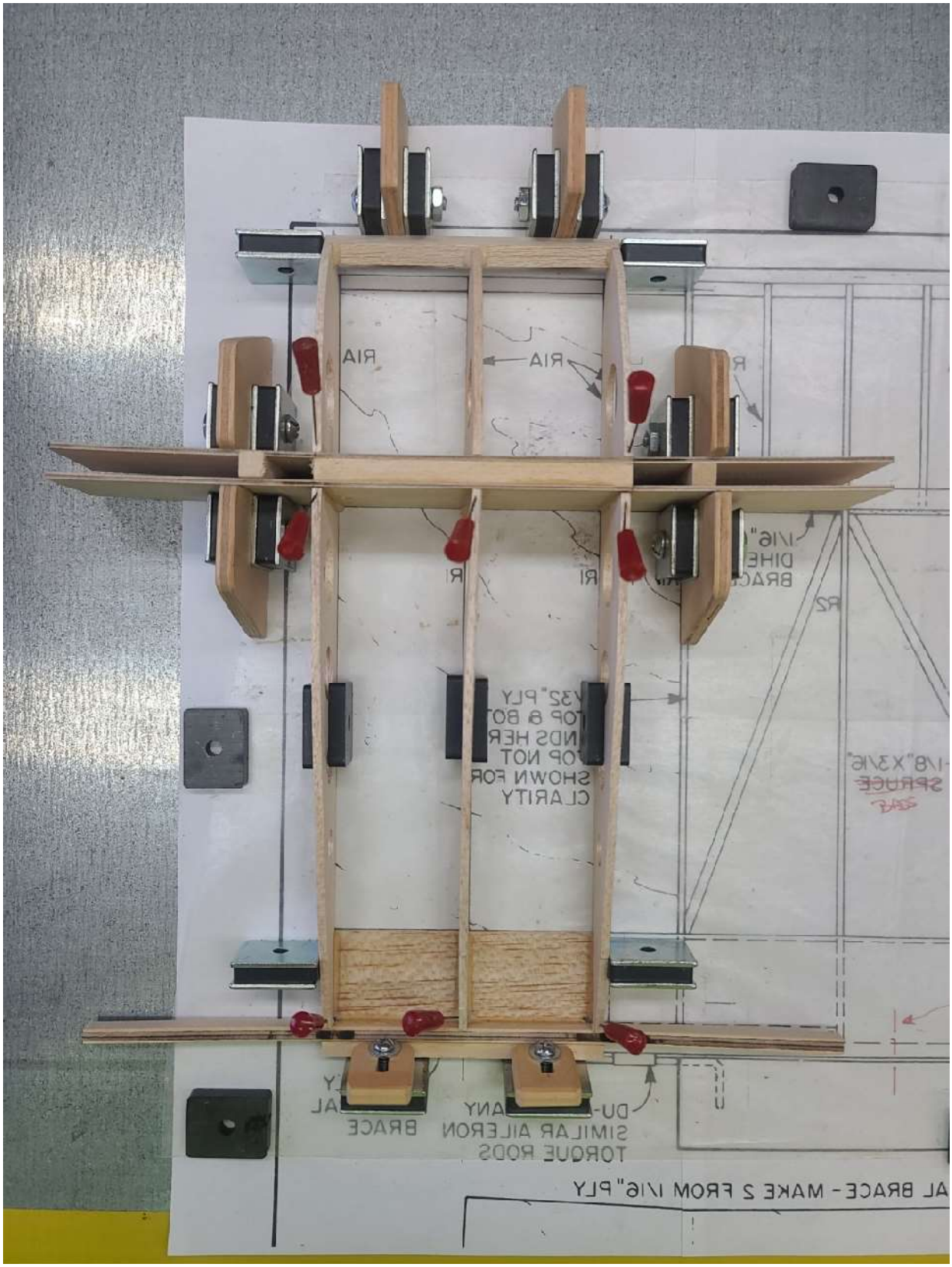




The image above shows the start of the left-wing panel build with the 8 R2 ribs glued to the lower 1/4" square basswood spar, 1/16th balsa sheet and 3/16" square balsa trailing edge. Small magnets are used to keep each R2 rib vertical and in position while the Titebond III wood glue dries overnight. You can see where I plan to put the HS-225BB aileron servo between the 3rd and 4th R2 ribs, which will also alter the 1/8"x3/16" bass diagonal bracing between some of the R2 ribs.



In this next image above, you see the right-wing panel build. Here all eight R2 ribs were first glued in place, followed by the 1/4" square balsa leading edge and then the 1/4" square basswood top spar. Then all 14 R2A ribs were glued in place along with the right wingtip and support braces. You can see the aileron hatch support bracing which is held 3/32" above the bottom of the wing to allow for the aileron hatch thickness. I also added two balsa filler blocks between the trailing edge sheeting to provide more surface area for the aileron hinges gluing. Next up is the buildup of the wing center section using R1 and R1A ribs, main dihedral plywood bracing, and the other pieces seen at the left of the above image. This center section will be used to join the two wing panels together.



Seen above is the build-up of the wing center section directly over the right-wing panel plans.

In the image above you see all three wing sections in a jig I set up on my wood workbench for a dry-run test fit. Only some minor adjustments to the main spar ends were needed to get a nice fit. Looking good so far. Next comes mixing up some epoxy and putting these beauties together for a total wingspan of 59". I used the 1" dihedral at the end of the main spars as called out on the plans. Once the wing join epoxy has cured, I'll complete the wing build with installation the remaining R1 and R1A ribs, top and bottom 1/32nd plywood sheeting over the entire wing join area, some 1/16th vertical grain shear webbing at the main spars and between the trailing edge balsa sheeting, basswood diagonal braces between the wing ribs, soft balsa wingtip nose blocks, and an overall sanding to get the final shape needed. The plans for the fuselage and tail feathers will now go down on my magnetic build board in preparation of their assembly.