## <sup>1</sup>/<sub>4</sub> Scale P-39 Build.

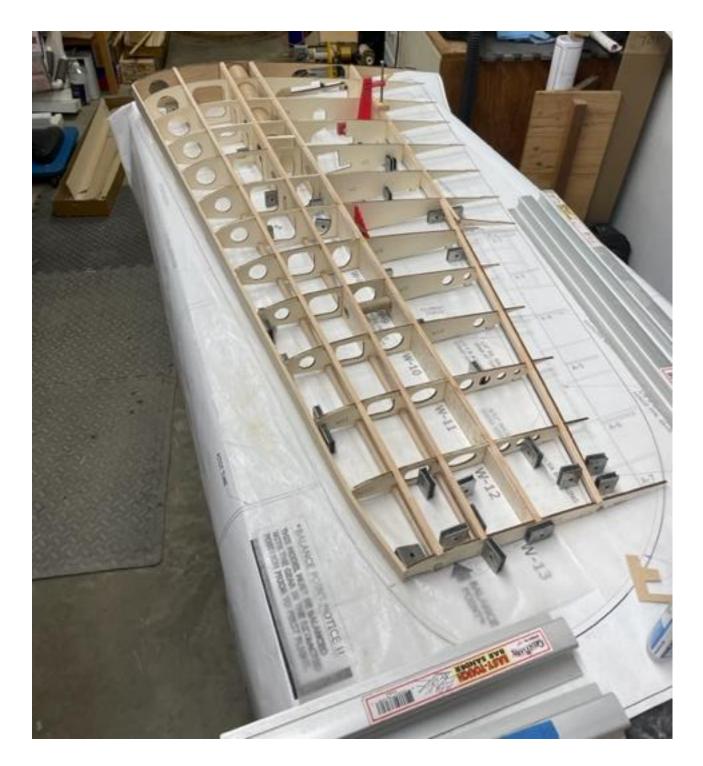
Paul Fleming and Jim Lake 2/1/2023

Here is a link to visit all previous issues of this build. http://kitsaparcs.org/construction\_fleming\_quarter-scale\_p-39.html

The Torque Plate foundations are now complete. With the TP bolted in place we are ready to start strip planking the fuselage. We will plank the top first, build the tail, install control linkages then plank the bottom.

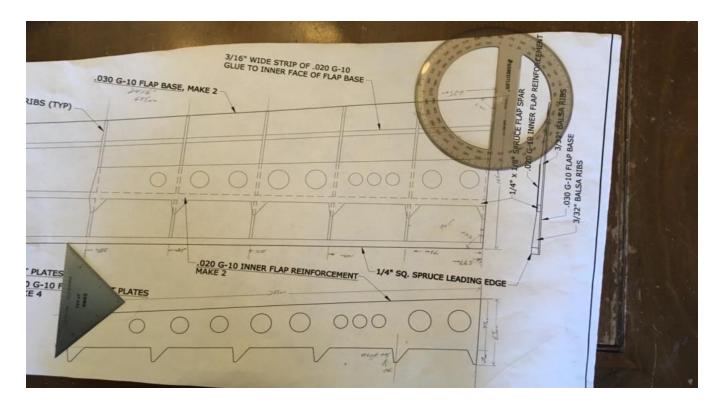


We have been looking for 3/32x4x48 balsa sheets to cover the wings. It seems four inch wide balsa is no longer available. I spoke with Midwest and National Balsa, maybe next year. I ended up buying 27 sheets of 3/32x3x48 for \$112 delivered. Bob has a good start on the left wing.

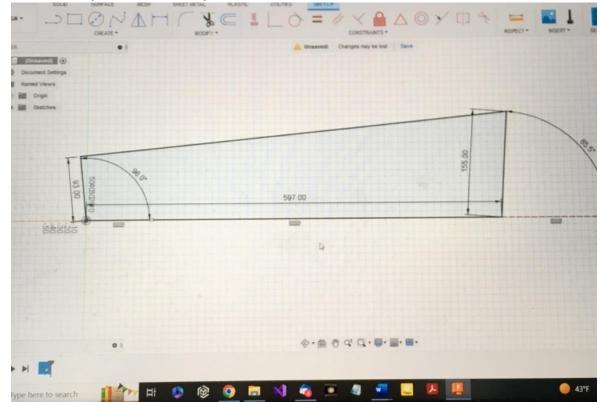


He has had a few difficulties mostly with the parts not cut correctly, but that's model building. Another challenging part of the wing is the flap. These things are two foot long and razor thin. Jerry Bates specified .030 G10 as the flap's lower surface with spruce spars and .020 G10 for span wise support and rib gussets. Things were rocking and rolling till we figured out the water jet cutter's max travel is 17 inches. The flaps are slightly over 24 inches. We really didn't want to have to join two parts so we elected touse a router to cut the flap bottom. Our G-10 is 24" square. There is only one square

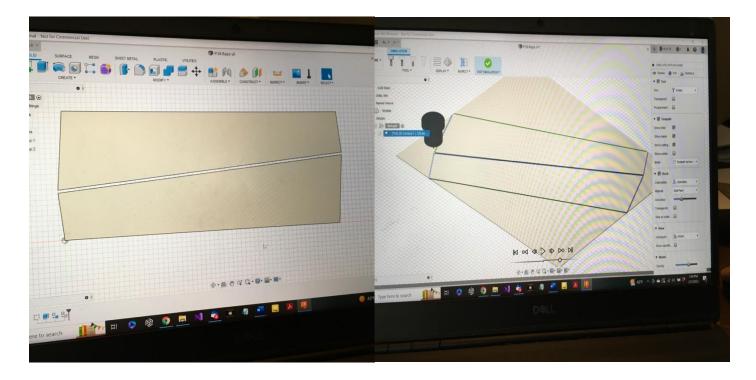
corner on the flap which causes the flap length about 24.3" if we built exactly as designed. We made careful measurements of all dimensions and angles.



We them plotted the flap dimensions into Fusion 360.



We mirror imaged the flap, then overlayed on a 24" square and rotated until both flaps were inside the 24"square dimension. The animation feature allowed us to to view the router executing the cutting pattern.



We went to the router to set things up and discovered the router computer hadn't been on since last August. Windows was so far out of date it wouldn't work till it is updated. It could take a day or two. While we wait till the computer is ready we can program the small G-10 parts and move on to the Water Jet Cutter.

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