## 1/4 Scale P-39 Build.

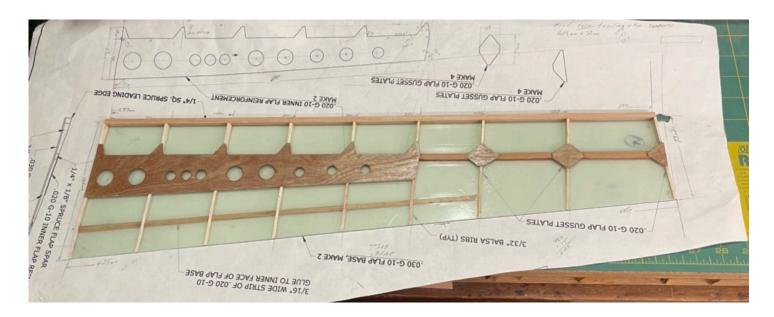
18

Paul Fleming, Jim Lake, Bob Beaty 3/3/2023

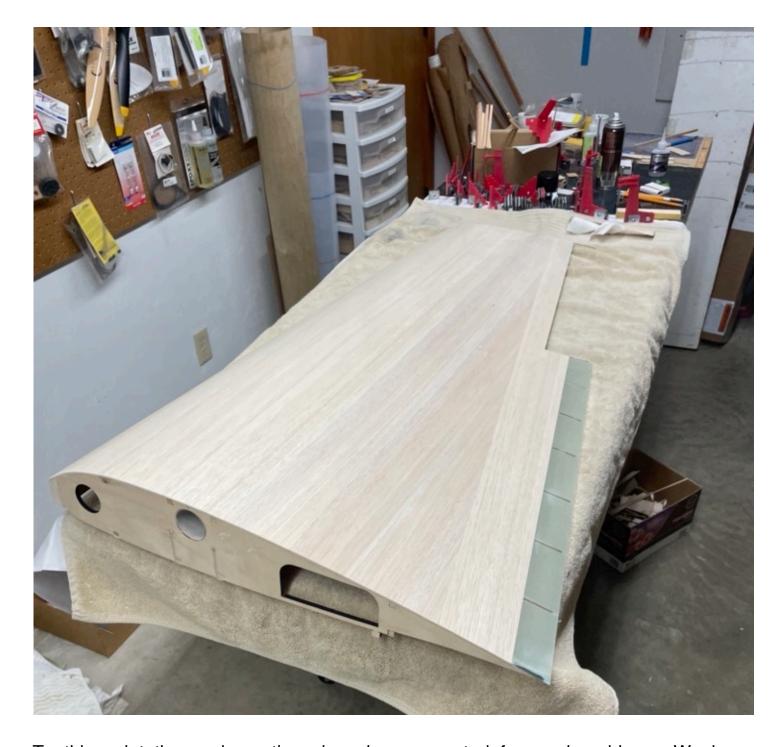
Here is a link to visit all previous issues of this build. http://kitsaparcs.org/construction fleming quarter-scale p-39.html

Here is a link to a video Jim made to show the water jet cutter and demonstrate what we learned about its' effect on G-10. <a href="https://www.youtube.com/watch?v=ib80oXA5aAE">https://www.youtube.com/watch?v=ib80oXA5aAE</a>

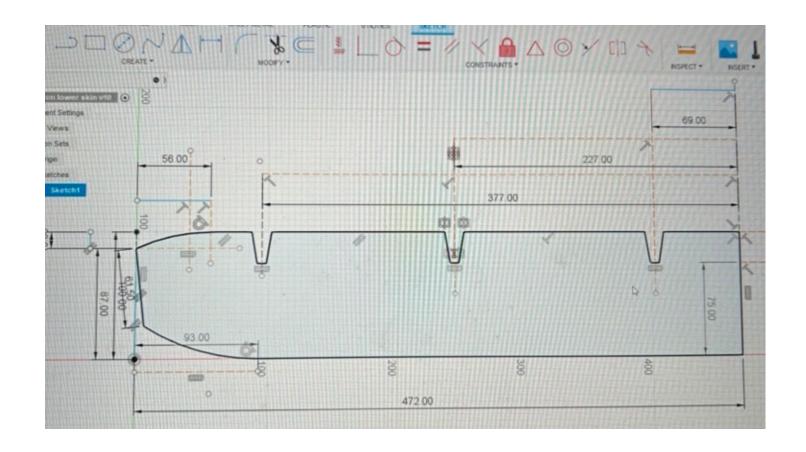
Jumping out of the closet in is Master Airplane Builder Costume, Bob quickly fabricated the flap stiffener out of 1/64<sup>th</sup> veneer and finished the flaps.

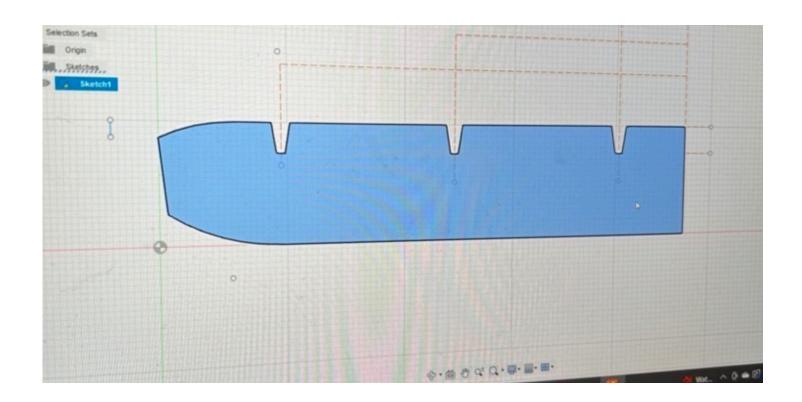


Both wings are now framed up on have the top sheeting installed. With little 4"x48" 3/23 balsa available several smaller sheets had to be edge bonded to produce a sheet of the necessary size. Bob has a large sheet of glass on one of his benches where he can cut and join balsa on a truly flat surface, what a good idea.

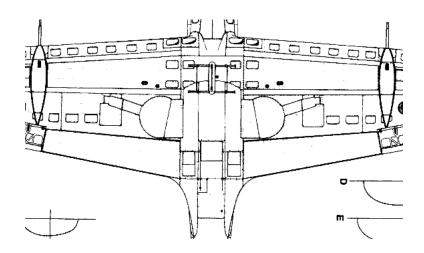


To this point the work on the wings has presented few real problems. We have experienced material problems associated with some of the wood provided in the kit. Most of the thin ply is not sufficiently flat. An example is the bottom of the ailerons is a sheet of 3/32 ply. Using steam, water or alcohol we were not able to straighten them out. Fortunately, we had some extra G-10 so we replaced them. Again Fusion 360 was used for the basic drawing then the program converted the data to a cutting file for the router.





The next problem we have encountered is the landing gear foundations in the ribs are not on the same angle and the mounting plate provided doesn't come close to fitting. Since there is no gear available for this plane, we will have to figure out how to sweep and rotate the gear at the same time. Sierra solved this problem on the VQ Hurricane and I have one of those, maybe we can make something similar. We managed to get the nose gear to work, I am sure we will figure this out.



The basic problem is as the main gear retracts the wheels must move aft enough to clear the spar and rotate slightly to fit inside the thin wing.

