

# 1/4 Scale P-39 Build.

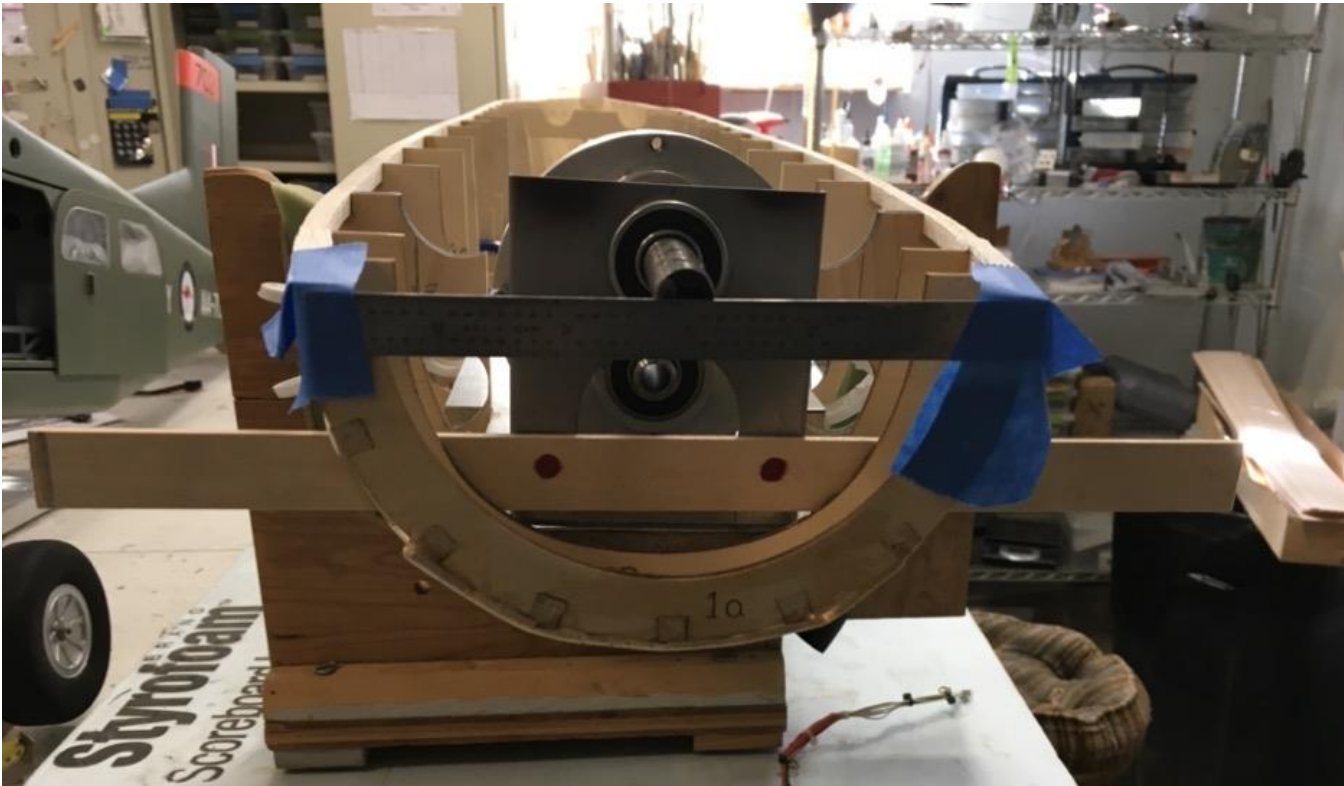
15

Paul Fleming and Jim Lake  
1/5/2023

*Here is a link to visit all previous issues of this build. [http://kitsaparcs.org/construction\\_fleming\\_quarter-scale\\_p-39.html](http://kitsaparcs.org/construction_fleming_quarter-scale_p-39.html)*

---

Now that the propulsion system has been completed and passed the initial testing we are now ready to go back to the airframe. Before we can start sheeting the fuselage we need to locate and install the torque plate foundations. If you refer to the photos in Build 1 you can see the center line of the propeller shaft is exactly on the center line of the fuselage. As the fuselage is quite fragile at this time, we removed everything from the Torque Plate except the gearbox to reduce weight.



We taped a steel ruler across the lower fuselage half to locate exact horizontal plane and installed temporary supports. A brass tube was inserted into the propeller shaft tube and a laser line was projected from the side along the fuselage top and brass tube to get the vertical plane. (Sorry that didn't photograph well.) Once all the temporary supports were in place, we plotted the foundation bolt locations. We removed the Torque Plate and Jim put it back in the Milling Machine and bored the bolt holes. Next

he 3D printed the center and aft foundation mounts. Our mounting hardware is 6-32 socket head cap screws secured using T-nuts pressed into mahogany. The space under the gearbox was so limited we bolted in a block of aluminum which we tapped the for the two hold down bolts.



The gearbox has been, removed with the Torque Plate is bolted in place we an proceed with strip planking the fuselage.

***A special note here: Bob Beaty has joined the project. Bob has undertaken to build the wings. This will surely speed up this project. Many Thanks Bob.***

Last entry 1/5/2023