Easel 5000
Week 9 Report
Seth Novoson
Work Completed

Machine Shop Work

This week more machine shop work was done. Additional connecting components were cut to length, ½” holes were drilled in the proper places, the battery casing was completed, and lip brackets for the canvas holder were cut and drilled.

Assembly

The assembly of the canvas holder, canvas arms, and canvas clamp are complete. The mechanism for securing the easel to the table has also been installed, but the threaded rods need to be cut to the appropriate length, and load distributors need to be cut from aluminum stock that was acquired from the machine shop. The battery enclosure was constructed out of pieces of PVC cut in the machine shop using PVC glue borrow from another team. A positioning safety system is now in place, because two locking pivot joints are present at each articulation. In order to reposition the easel, both locks restricting a certain range of movement must be unlocked.

Future Work

Future work will include the completion of the table fastening method, the installation of the PCB board and power supply, and testing. In addition, another trip to Mansfield supply is planned to acquire some last minute parts such as metric threaded nuts and bolts. The project should be complete by next week.
Project Review

The mechanical construction portion of the project is essentially done. There are a few remaining parts that need to be accounted for, but Team 3 is in good shape and is still on schedule for the completion of the project.

Hours
Seth - 11 Hours
Pictures

Figure 9.1 – Seth assembling the easel after completing machining work on the easel base.

Figure 9.2 – The saw. It was used for cutting the aluminum lip for the canvas holder.