Work Completed:

This last week our team spent time determining how to split up any remaining tasks to be done on the easel. The physical assembly of the easel is nearly complete. The only remaining parts are cleaning up the welds and installing the wiring which will begin very soon. Frank, over the past week the vertical shafts and actuator bracket were welded into the device. Using the lathed rods Jackie made, he aligned them into the frame of the easel and welded these components together. Pictures of these parts being welded can be seen below.

Also completed the past week was Frank attached the screw drive to the tracking system so that the fabrication of the horizontal motion would be that much closer to being finished.

Adam and I went to Mansfield Supply to buy the majority of the supplies that we still required to finish the easel. We got sandpaper, cotter clamps, carriage screws and
bolts and an extension cord. Adam and Frank also planned out how they were going to attach the screw drive for the horizontal motion to the easel itself.

Jon and I agreed on a power supply and I placed the purchase request form. Jon spent a significant amount of time researching diodes to be used for the limit switches on the horizontal motion motor. He consulted Dr. Northrop for some advice and direction on what exactly he needed for the project. Jon also made a trip to the store and purchased a number of supplies for wiring the easel. Two choices of wire for the easel were selected and we will decide which is more appropriate once the wiring begins.
Jackie began thinking of ways to attach the joystick to the wheelchair. There are many options and as a team we will have to agree on what will be the best for our client. Jackie will also take a trip to OfficeMax to see about a light that we found online which is well within the price that we are willing to spend.

**Future Work:**

Over the next week we will be continuing our efforts to complete the easel in its entirety. We are looking forward to the arrival of the power supply, which will be one of the last major components needed to complete the project. As Frank and Adam finish the easel frame by grinding down welds and attaching the canvas clamp, Jackie and Jon will be wiring the easel and power supply, and also attaching a light for the easel. We will need to purchase a cord which we can use to power the easel. Adam will be fabricating the enclosures for the motor and electronics along with a shaft coupler to join the larger shaft of the motor to the smaller one of the screw drive. After that, the only parts remaining are to finish cleaning the easel up and then to paint it. Frank will be cleaning many of the new welds and file down some of the imperfections in the metal caused by welding. The vertical movement does not glide as smoothly as we would like, so a lot of time needs to be spent sanding down the rods as well.

**Project Review:**

Our project is continuing to make significant progress. The last few weeks will prove to be demanding; however we are fairly confident that we will be able to complete the project as scheduled. As a whole, we have consistently shown dedicated team work and we are confident in our work. We are still awaiting the arrival of some parts,
however, that will delay the final completion of the device. These parts include the power source, and 80/20 sliders and clamps. Work on the easel really cannot be completely finished until these parts arrive. However, we will do all the side work and preparation work that is necessary to be ready to move on when these parts do arrive.