Easel 5000
Week 6
February 27, 2006
Alison Biercevicz
Work Completed

Research

Research on printed circuit boards was done. This was done to give myself knowledge of what I would be working with when it came time to put together my own. I went through express SCH and express PCB to start figuring out how these programs work. The Digi Key website was searched for potentiometers and knobs for the now completed dimming system.

Contacts

Professor Enderle suggested a few ideas during the team meeting that needed to be taken into account. End caps were suggested as a finishing touch on the easel. Also Professor Enderle suggested using a printed circuit board for the LED circuit.

LED System

A final round of testing was done on the LED circuit to ensure that the dimming option worked and so did the 9.6 V battery. The potentiometers being used to test the circuit were no creating any noticeable difference. This was probably due to the fact that they were 15 turn potentiometers and were very difficult to adjust in the circuit. Instead four 2.2 Kohm resistors were put in series in the circuit as a sort of in prompt to potentiometer. These were then tested with successful results. Different levels of resistance produced a dimming affect. Chris Liebler the provided a one turn potentiometer that solved the potentiometer issue and now the circuit is working in entirety. Also the ball was set rolling on the PCB. The circuit was drawn up in express SCH and will be transferred over to express PCB. This took longer than expected due to the learning curve of new soft wear.
Future Work

Next week the LED system will have the final schematic for the printed circuit board drawn up. The schematic will be run by Chris to account for any errors. A price quote will be obtained for the PCB and then it will be ordered. After this is done a more finalized diagram will be put together for the LED light box. Also the final parts for the circuit including the battery connector and any attachment pieces for the battery will be picked up

Project Review
We are still on good track. All of the parts of the easel have been staged and at this point we are waiting on some parts to make any further progress. A good portion of the construction and machining has been done. We should still have ample time to complete construction and then do product testing.

**Hours Worked**

12 hours