Work Completed:

The location the handle for the fist rail was determined simply by balancing the entire rail with the ramp folded up and finding its center of mass. The holes were then traced out and drilled. They had to be tapped by hand because the rail doesn’t fit under the tap station. The sides and back of the second rail were also welded in place and the ramp was tapered to the correct 15 degree angle. Back side had to be cut again but the sides are more or less perpendicular to the plate.
Some electronic parts were selected and ordered from Newark. I spent some time on the phone with them discussing way to connect the load cells to the electronics (pcb). Ended up getting crimp housing, contacts and, headers for the four cells. The order was sent out and they should be here by the time we get back from break. Different housings were ordered: one with ramp locking and one without. The one with locking will be on the electronics box.

![Electronic parts](image)

**Current Status:** There is currently a problem that has been reported with the first rail; all of the load cells points do not touch the ground when the plate is unloaded. This means that the plate is either warped or the ground is not even. If the former is true something will need to be done.

**Future Work:** The last thing that needs to be done to complete rail two is the handle attachment. This will be done Friday. Then the carpet and aesthetics need to be applied in a preliminary test.
**Project Review:** The warping of the first rail could be a setback if there is no easy fix for it. Also, the load cells may need to be shielded as they are getting interference from outside sources.

**Hours worked:** 13