

Meeting Minutes Week 03/20/17-03/26/17

Meeting: February 13, 2016 3:30-5:30 pm in Capstone lab

Team Meeting Discussion/Activity:

- ❖ Reconstruct Harness System with new steel EZ-up frame and new track design.
- ❖ Purchase new materials for reconstruction:
 - 4' track sections from Home Depot
 - Bigger diameter wheels
 - Fasteners
 - Washers
 - 6' Metal Support Strips
 - Elastic bungee cord material
 - Tie down straps
- ❖ Assemble harness system
 - 4' Length Track sets were held together with 1.5 inch bolts. For increased reinforcement of these connection points, metals strip as shown below in **Figure 1** were placed on the track system. These strips were positioned on the bottom and right sides of the guide-rail.



Figure 1. Bolts Connecting Separate Track Sections

- Once the track systems were connected, it was attached to the EZ-UP frame as shown in **Figures 2 and 3** below.



Figure 2. Track Attached to Frame



Figure 3. Track and Frame Assembly

- ❖ After finishing the model with the new materials, the team encountered the following issues with the new design:
 - Track not aligning properly for wheel to roll smoothly
 - Additional supporting 'criss-cross' members which did not exist on previous EZ-up Frame
 - This caused problems with the alignment of the three screw holes. When the holes aligned to place fasteners through the track system into frame, the bolts connecting the track sections together in the middle interfered supports causing the track to stick out in the middle
 - The group was able to use eye-hooks on each vertical leg support to connect the track system on the ends but with the new design the holes were orientated the opposite way forcing the group to drill new holes if the new frame is used. This is shown in **Figure 4** below.



Figure 4. Hole-Orientations in Leg of Frame

Weekly Tasks 03/20/17-03/26/17

Team Member	Tasks Assigned
Khaled	<ul style="list-style-type: none"> Update information for the team's website
Hasan	<ul style="list-style-type: none"> Go to Home Depot to get materials Continue to monitor budget
Noah	<ul style="list-style-type: none"> Contact Dr. Winfree to Confirm meeting with group Friday 03/31
Eileen	<ul style="list-style-type: none"> Continue to construct gravity harness instruction manual Update team's Wiki-link
A.J.	<ul style="list-style-type: none"> Submit meeting minutes by 03/26/2017 Research aesthetic qualities to add to design

Next Steps:

- ❖ Hardware Review 2 Wednesday at 12:30 pm
- ❖ Meet with Dr. Winfree on 03/31/2017