ASAES Underwater Robotic

Safety

Safety is a primary concern for L-Marrgafar. L-Marrgafar is designed to be safe at all times. We followed all safety protocols and wore proper eye protection at all times in the worksite. Precautions were taken when cutting and sanding, working with electric circuits and soldering. We were able to finish the building of our ROV without many mayor incidents. Some being scrapes and burns. All work involving machinery was done by us members having the proper skill set to use the tools.

The L-Marrgafar frame is made completely out of PVC pipe. It is designed to fit in the regulation space provided. Wires in our ROV are well organized to ensure no possibility of entanglements. All wires were waterproofed in the process. Special safety protocols were taken into concern to ensure safe functioning of our ROV underwater.

Safety Summary

Company

- Eye protection worn at all times

- Job-specific protection accounted for (gloves, facemask, fans - depends on the job)
- Licensed driver/mentor present at all times
- Power tool training required prior to operating the tools
- Complicated power tools used the supervision of an outside mentor, in the workshop setting

Physical

- No sharp edges exposed on the ROV
- All connections are secured with PVC casing
- PVC Motor Housing protecting the engine propellers
- The transportation of the ROV must be carried out by 3 people: one carrying the ROV, one carrying the tether wire, and one carrying the black box dry with the control box

Electrical

- All naked wires and non-waterproofed connections are located on the control board.

- All underwater wire connections sealed with butt connectors heat shrink and epoxy
- Abrasion resistant tether wrap and strain relief to protect connector
- Main power on/off switch
- The control board are securely with Velcro in black dry box