Job Safety Analysis

Company: R-Matey's Robotics School: Dobyns Bennett Excel

Task	Hazard	Control
Wiring on the ROV and electronics board	Possibility of wiring not being waterproofed or having split wires- leading to electrocution and damage to company product as well as sparks on land leading to a fire.	Check the waterproofing and wrappings, apply extra layer of hot glue and heat shrink. Avoid contact with electronics board while connected to power.
Building and operating the thrusters	Even though it is a plastic blade, at high speed it has the capability to do damage to the ROV along with the person building and controlling the motor.	Adding a Motor shroud to the thrusters, protecting the propeller while still allowing it to function. It is strong enough to survive a hit by a wall or object while having small enough holes where figers cannot get through.
Power Tools	Improper use of power tools can lead to at least one of the following- Burns, cuts, bruises, and in some cases death.	Provide lessons and safety gear for the members to wear. Include mentors who have previous experience working with such tools and can help provide assistance.
Soldering circuit board and other electricals	Produces a fire hazard, a chance of burning skin, and chemical inhalation.	To prevent these, turn off the soldering iron when not in use, do not leave hot iron unattended, remove combustible materials from work area, place the soldering iron back on its holder after use, and perform work in a ventilated area.
Operating the ROV	Injuring of body parts	Using basic safety protocols such as Closed shoes, eye gear etc.
Transportation of ROV	Foot injury and injury from	Wear closed-toe shoes and

hitting the cart.	secure all loose items to the cart.
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