

Job Safety Analysis

Procedure	Cautions	Safety rules
ROV in action		
1. Pool procedure	1. Tripping over tether 2. Tripping over shoe lace	1. Wear closed-toed shoes. 2. Carry tether or other wires; no wires should be hanging freely.
2. Control Box	1. Rain	1. Make sure the control box is under shelter when raining.
3. Tether Management	1. Possibility of tripping	1. Tether manager should hold the tether with appropriate tension. 2. Tether manager should warn others when ROV is in action.
4. Electronics	1. Sparks 2. Destroy system	1. Make sure there is no exposed wire. 2. Make sure there is a 25 amp fuse.
5. Loading and unloading objects	1. Back injury	1. Carry items upright without bending your back.
6. Checking if thrusters are working to the code	1. Finger cuts 2. Hand injury	1. Use hex fences to cover up thrusters.
In the workplace		
1. Using machinery	1. Hand/Finger injuries	1. Complete and pass safety test at the beginning. 2. Watch other peers/mentors for demonstration. 3. Wear safety goggles. 4. People with long hair should tie up their hair.
2. Using a drill	1. Hand/Finger injuries	1. Safety test completed and passed. 2. Long hair tied up. 3. Wear safety goggles.
3. Using soldering iron	1. Burns	1. Complete and pass safety test. 2. Wear safety goggles.
4. Wiring	1. Possibility of fire	1. Engineers should frequently check on wires.

Required training

1. Complete the safety test to use specific machinery
2. Learn how the electronics work
3. Learn how to run the program

Required personal protective equipment

1. Safety goggles
2. Closed-toed shoes