



Job Safety Analysis

Safety Information For ITU ROV Team

BUILDING THE ROV

TASKS	HAZARDS	CONTROLS
1. Using heavy machinery, hand tools	Respiratory distress	Wear mask to prevent breathe any matter's particles.
	Physical Injury	Check all tools for any malfunctions. Do not put any part of the body closely to any of tools and wear protective gloves.
	Eye injury	Wear protective goggles against sparks and pieces that break off from matter.
2.Soldering circuit boards and electronic equipment	Skin Burn	Make sure soldering iron switched off when not in use. Do not bring too close any part of the body to soldering iron.
	Respiratory distress	Wear mask to prevent breathing any toxic fumes.
	Fire Hazard	Make sure soldering iron switched off when not in use. Make sure soldering iron's surrounding is clear.
3. Waterproofing circuit boards and wires	Skin Damage	Wear protective gloves to prevent the contact any chemicals(epoxy, plastidip, liquid electric tape, grease) with the skin.
	Respiratory distress	Wear mask to prevent breathing any toxic fumes.

MANAGING AND OPERATING THE ROV

TASKS	HAZARDS	CONTROLS
4. Loading and unloading the ROV and equipment	Back injury from lifting heavy objects	Bend at hips and knees only, while keeping upper back straight and having a small arch in the lower back. Do not lift any heavy objects above the shoulder level. Do not lift alone.
	Hand Injury	Make sure grip is strong and safe Make sure the fingers are safe while dropping the object

	Foot injury	Make sure grip is strong and safe and ROV and equipment not falling
5. Setting up the power supply	Over Voltage	Check the voltage supplied by the power supply before connect anything to it.
	Wrong Connection	Check the Anderson Connectors fit each other correctly. (Positive and Negative must match.)
	Electrocution	Make sure there are no bare wires and check for any damaged wires
6. ROV Dry Test	Injury from motor blades	Do not put hands on the motors while in running.
	Damage to manipulator and frame	Make sure ROV securely place on the table to prevent any damage manipulator and frame can get.
	Electrical Failure	Check all electrical connection to prevent a short circuit and check the fuse
7. Setting and Managing the tether	Tangled tether	Wrap the tether properly around the tether transportation cart when going to or leave the pool.
	Tripping on the tether	Make sure tether is laid on the floor without tangling. Make sure tether does not block walking path.
8. Launching and retrieving the ROV	Injury due to slipping/ falling around pool deck	Make sure deck crew wear life jackets and non-slip footwear
	Back strain	Bring a team member to assist while launching and retrieving of ROV Hold the ROV
	Injury from motor blades	Do not hold any of motor while launching and retrieving
	Electrocution	Wear non-conductive gloves Make sure there are no bare wires and check for any damaged wires
	Required Personal and Protective Equipment	Required Training
	<ul style="list-style-type: none"> -Protective Gloves -Protective Goggles -Gas Masks -Life jacket and non-slip shoes (If situation requires it) 	<ul style="list-style-type: none"> -Proper use of machinery and tools -Practice launching and retrieving -Before lunch checking procedures -Practice Loading and Unloading