



JOB SAFETY ANALYSIS

Safety Information for the Staff

Maritime State University Robotics Team
Vladivostok, Russia.

TASKS	HAZARD	CONTROL
Building the ROV		
Lift vehicle or heavy machinery	Can cause back injury	Squat down to lift object, use palms for proper grip and lift gradually, ask for help if needed. Prevent bending of back.
Get tools from an untidy workspace	Tripping on miscellaneous tools, cables and/or rubbish	Remove rubbish and prevent build up. Clear floor from any tools and/or cables. Put in storage area.
Use electric hand drill	Worn out and damaged drill bit	Replace with new and sharp drill bit to ensure safety.
Use cutting chop saw	Worn out and damaged cutting disc	Replace with new and sharp cutting disc to ensure safety.
Cut metals using cutting chop saw	These saws create dust, sparks, and debris	Use Personal protective equipment: eye protection, thick gloves and hearing protection. As well as sturdy long pants and sleeved shirts and work boots for additional protection.
Cutting buoyancy foam	Skin burn	Make sure that hot wire foam cutter is switched off when not in use.
Applying fiberglass and filler-primer to make buoyancy foam	In the process of creating a lot of harmful dust	To work strictly in the respirator and gloves. Work is done outdoors.
Operating the ROV		
Deploying ROV	Deep, cold water (drowning, freezing)	Ensure no obstacles or obstructions near deployment. Use waterproof boots.
Attach wires to all electrical and communication systems	Various cords from table to ROV (tripping hazard)	Ensure only needed cables used. Warn about the hazard of standing next to people. Check for reliable connection of wires before power supply.
Power on electronics	Electrocution hazard	Use fuses (for overcurrent). Use GFCI (reduce electrocution effect). Don't use bare wires.
Setting up the control panel	Overvoltage	Check that the voltage reading to ensure that it is kept at a safe level of about 48V.
Power on thrusters	Fast spinning propellers (cuts, bruises, etc.)	Screws covered with special grates. Hands removed from thrusters before power test.

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