

# JOB SAFETY ANALYSIS

Safety Information for the R-Mateys

## R-Mateys



Task	Hazard	Control
1. Handles are fastened, all pieces of ROV are tightly fastened and durable.	ROV usage may cause wires to be undone or damage towards personnel operation.	Ease of use to enter and exit water, avoiding hazards.
2. All ends are smooth, filed edges and cut zip ties.	Damage to personnel, potential of cut or bruising.	Edges are part of the frame, along with the zipties being filed and cut.
3. All motor and motor shrouds are properly functioning.	Spinning blades are hazardous and powerful, danger to personnel and motors.	Motors have no room for fingers or limbs entering.
4. Ensuring all connections are properly fastened and plugged, with proper wire management included.	Electrical shock in water, damage of property and objects.	Greased and hot glued, with no room for water entering.
5. Strain relief is properly fastened and durable, can withstand strain from tether, along with the tether being unraveled and inspected properly.	ROV tether may experience stress, causing both electrical and physical hazards for personnel and property.	Strain relief is hooked and functioning properly.
6. Power Supply is plugged into the socket properly, along with laptop charging and an Anderson power pole properly connected to the control box.	Damage to ROV and power supply, potential electrical shock.	Power supply is checked often and properly plugged, along with other wires.
7. Killswitch can now be turned on, ensuring all connections receive power. If not, immediately flip killswitch.	Power is connected to all required points, if not, potential electric shock in or outside of water.	Control box and ROV power connections are all greased, with several heat shrinks enclosing the wires.
8. Power distribution is functional.	Electrical shock and damage to property.	Allows all power to be distributed as needed to each component of the control box.
<b>Required Training:</b> <b>Proper soldering experience, use of tools, OSHA certification, and a lifeguard license.</b>	<b>Required Personal Protective Equipment (PPE)</b> <b>Gloves, safety glasses, hair ties, Face shields, respirators, close-toed shoes, and facemasks.</b>	

**Other Information:**  
**Contributors:**  
**Created:**

See the **Safety** section within the R-Mateys Technical Report 2024, on page  
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