



Job Safety Analysis

JOB STEP	POTENTIAL HAZARDS	RECOMMENDED RISK CONTROL MEASURES
Using power tools	1. Cutting hands or other extremities 2. Tripping over loose wire (if any) 3. Dropping tools on feet 4. Waste material flying into eyes	1. Operators must wear gloves when applicable 2. Keep wires secured, neat, and as short as possible 3. Operators must wear closed toed shoes 4. Operators must wear safety goggles People Responsible: All company staff
Soldering wires	1. Burning hands or fingers 2. Tripping on soldering iron power cord	1. Keep soldering iron in holder when not in use, use third hand tool to hold wires 2.a. Inform all members in the workshop or members who enter the workshop that the soldering iron is on and in use 2.b. Keep power cord secured and away from walkways People- Responsible: All company staff
Using heat gun	1. Burning hands/fingers 2. Tripping on heat gun power cord	1. Operators must point heat gun away from members in the area, and ensure no heat sensitive equipment is in area 2. Keep power cord secured and away from walkways People Responsible: All company staff
Carrying ROV, tether, and supplies onto and around the pool deck	1. Dropping supplies on feet 2. Tripping on power wires 3. Hands caught in tether or wire 4. Heavy lifting	1. All members wear closed-toe shoes 2. Keep wires secured, out of the way, and as short as possible 3. Keep tether/wire neatly coiled and carry above knee height 4. Ensure a strong and secure grip before lifting. Lift with the knees People Responsible: All company staff
Connecting ROV to power source	1. Electric shock 2. Short circuiting	1. Only hold plastic connectors, no skin contact with metal. Ensure there is no exposed metal 2. Install connections properly. Red and green color coded positive, and black is negative. Ensure fuse is installed People Responsible: Nicholas Durkin, CEO; Nathan Wang, CSO
Testing ROV functions	1. Hands caught in motor 2. ROV being placed on hands or feet	1.a. Warn all members of the potential hazards on the ROV 1.b. Label all motors with caution signs, and keep shrouds and guards installed 2.a. Always clear the area before placing the ROV down, and wear closed-toe shoes 2.b. Verbal confirmation from all members in the area before power on People Responsible: Nathan Wang, CSO; Daniel Westphal, Pilot; John McNab, Co-Pilot
Required Training: 1. Experience with power tools and soldering iron 2. How to lift heavy objects without injury 3. Knowledge of potential hazards on the ROV		Required Protective Equipment: 1. Closed-toed shoes 2. Gloves 3. Safety goggles