



SAFETY ANALYSIS

Task	Potential Hazards	Recommended Procedure	Personnel Responsible for Task
1: Setup of ROV and Equipment at Poolside	1A: Damage to ROV and equipment 1B: Injury caused by dropping the ROV 1C: Injury from sharp edges	Recommended Procedure 1A,1B: Use care when carrying ROV and use both hands 1C: No sharp edges on ROV	Full team
2: Supply Power to ROV	2A: Injuries from electric shock 2B: Damage to components from electrical surge	2A: Team members are grounded, no wires are bare, all wiring is insulated 2B: In-line fuses and regulated power	Adam Culbert Aditya Kondapuram Evan Kinsman
3: Check All Connections	3A: Injuries from electric shock	3A: Team members are grounded, no wires are bare, all wiring is insulated	Adam Culbert Aditya Kondapuram Evan Kinsman
4: Perform Initial Check of All ROV Systems	4A: Component damage from improper connections	4A: Ensure all connections are correct and properly connected	Adam Culbert Aditya Kondapuram Evan Kinsman
5: ROV Lowered Into Water	5A: Damage to ROV and equipment 5B: Injury from falling into competition pool	5A: Use care when carrying ROV and use both hands 5B: Team members are aware of surroundings and are careful by poolside	Adam Culbert Eli Langile Ciaran OBrien Teodora Milos
6: ROV Operation	6A: Water damage to the ROV 6B: Electrical discharge into the water 6C: Injury or ROV damage from foreign objects drawn into thruster propellers	6A,6B: All connections are properly waterproofed and waterproofing tested 6C: All motors properly shrouded according to IP20 standards (protected against particles greater than 12.5mm)	Full team
7: ROV Retrieval	7A: Damage to ROV due to improper retrieval 7B: Injury from falling into competition pool	7A: ROV is retrieved using proper retrieval tool 7B: Team members are aware of surroundings and are careful by poolside	Adam Culbert Eli Langile Ciaran OBrien Teodora Milos