G.E.A.R.S. Jobsite Safety and Environment Analysis (JSEA)

Tasks	Hazards	Consequences	Risk Controls	Persons Responsible
1: Entering/exiting the pool deck area	Slipping	Injury to company employees	 All team members must wear closed-toed shoes with a good grip. Inform judges and team members of any puddles in the workspace. 	All company employees
	Dropping objects	Injury to company employees	Ensure all team equipment is contained and can be comfortably carried to the workstation.	All company employees
	Lifting strain	Injury to company employees	 Heavy objects should be carried by multiple people. 	All company members
2: System set up	Getting water on equipment	Damage to equipment	Keep all equipment except the ROV and ROV attachments out of the water. Take care to ensure that non-ROV cables do not contact the water.	ROV Lead / Lifeguard – Caleb
	Tripping over wires	Injury to company employees	 Keep the ROV tether away from the rest of the setup wires. Lay all the wires flat on the ground when crossing pathways and coil them out of the walkway when there is excess. 	Tether Operator – Paul II
	Environmental threats	Damage to equipment	 Check the weather before and during an attempted run of the ROV in outdoor pools. 	ROV Lead/Lifeguard - Caleb
3: Power up checks	Shock hazard	Injury to company employees	Ensure all wires are properly connected and non-tether wires are clear of the water.	Copilot - Grady
	Voltage Spikes	Damage to equipment	• Connect the power supply before turning on the ROV.	Copilot - Grady

4: Pool side operations	Tether operator slipping or falling into pool	Damage to equipment Injury to company employees	 Train the tether operator how to properly stand, coil, and feed during operations. Always have a trained lifeguard present. Identity who is not a confident swimmer and advise to stay away from edge of pool. 	Tether Operator – Paul II Lifeguard - Caleb
	Injury from ROV	Injury to company employees	• The tether operator should wait 3 seconds after getting confirmation from the driver to interact with the ROV.	Pilot - Jonathan
5: System breakdown	Slipping	Injury to company employees	 All team members must wear closed-toed shoes with a good grip. Inform judges and team members of any puddles in the workspace. 	All company employees Lifeguard – Caleb
	Dropping objects	Injury to company employees	Ensure all team equipment is contained and can be comfortably carried to the workstation.	All company employees
	Lifting strain	Injury to company employees	Heavy objects should be carried by multiple people.	All company employees