For a small team as ours, safety needs to be a top priority for everyone. Outlined in this document is our safety plan for ROV Pool Side Operations as overseen by either the Chief Executive Officer, Chief Technical Officer, or authorized designee.

Overall Task: To safely deploy the Desert Star Robotics ROV, complete required tasks, and safely recover the Desert Star Robotics ROV.

Locations: Poolside, in the water, and Underwater.

Equipment: Desert Star Robotics ROV, Control Electronics, 48VDC Power Supply, Air Compressor, Props, and Top side Strain Relief.
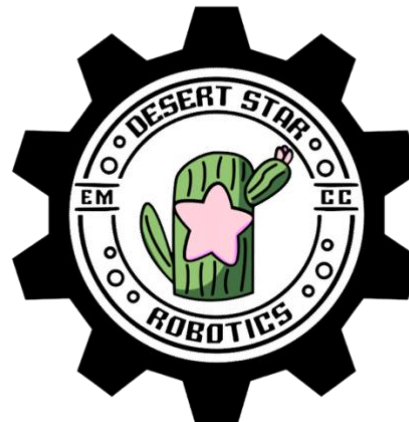
Personal: All personal are responsible to have a broad understanding of the task at hand and the safety requirements

- Person In Charge (PIC) – Person in charge of ensuring that the exercise is completed in accordance with established safety procedures. This is normally carried out by the CEO or the CTO
- Pilot – The Pilot sets up and maintains control of the vehicle and is responsible for all underwater tasks.
- Tether Manager – The Tether Manager is responsible for any pool side tasks and prop handling.
- Data Analyst (Optional) – Data Analyst Is responsible for taking and processing data received from mission equipment and works to relive workload on the pilot.

- Prop Manager (Optional) – Prop Manager is in charge of handling props and ancillary mission equipment and works to relive the Tether Manager workload.
- Swimmer (Optional/Non-Competition) – When Provided by the company the swimmer is required work with the prop manager and other team members to set up underwater props for tasks at hand.

Required PPE	
Poolside	Non-Slip Closed Toe Shoes
	Tight Fitting Clothes
	Safety Glasses
Control Station	Same as poolside except safety glasses are optional
Swimmer	Goggles
	Other person appropriately dressed to assist as needed

Job Site Analysis

Task	Job Step	Hazards	Mitigation	People Involved
Unpacking, Connection, and Prelaunch Testing	Unpacking ROV	Damaging Mission Critical Equipment Tripping over tether and other related equipment and Hoses	Ensure all Equipment is properly handled and that all team members directly involved are wearing PPE Consolidate locations of Tripping hazards and brief the crew on locations and avoid crossing them at all possible.	Tether Manager, Pilot, Prop Manager
	Movement and placement of Top side strain Relief	Heavy Drop Hazard Fatigue during Movement	Ensure assigned crew members are briefed and properly trained for handling the topside strain relief and that there is always a second person around to trade off the Load.	Tether Manager, Prop Manager
	Connecting the Tether and other electrical components	Shock, Equipment damage	Ensure no power is on the system and that all people involved are aware of the current state of the ROV	Pilot, Data Analysis
	Connecting Pneumatics (If used)	Damage to system due to shock and incorrectly regulated air Pinching Hazard and fast-moving object hazard for claw	Start with regulator all the way out, announce to team that the pneumatics are about to be connected, connect it to air source then set pressure.	Pilot, Tether Manager
	Power on and System Checks	Electrocution, Pinch Hazards, and cut hazards	Before power on a thorough inspection is to be completed looking for damaged equipment and wiring, illegible placards, and rear sealing plug. Pilot will Announce before startup to ensure everyone is clear, people near	Pilot, Tether Manager

			the ROV will clear out and reply clear when they are clear	
	ROV General Handling	Catching items in Motors and claw	Disable ROV During handling	Everyone
Operation	Placing ROV in water	Falling into water, Damage due to tension on tether	Ensure Tether has plenty of slack, all personnel approaching the pool is wearing PPE	Tether Manager, Prop Manager, PIC
	In Operation (Electrical)	Water Damage, Electrocution, and Off Gassing	Stop all Operation at first sign of water in electrical compartment	Tether Manager, Prop Manager, PIC
	Handing Items to ROV	Falling into water, damage to ROV, Pinch Hazard	Ensure Tether has plenty of slack, When handing the ROV items, ensure both hand are free and available for the task	Tether Manager, Prop Manager
	Pneumatic System (If used)	Damage due to lines coming loose	Watch for any line leaks and announce them then immediately shut off Air	Everyone, CEO, Pilot