
Phoenix Robotics

2024 MATE ROV Competition Job Safety Analysis (JSA)

Brooks DeBartolo Collegiate High School
Tampa, Florida, USA



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JSA Table:

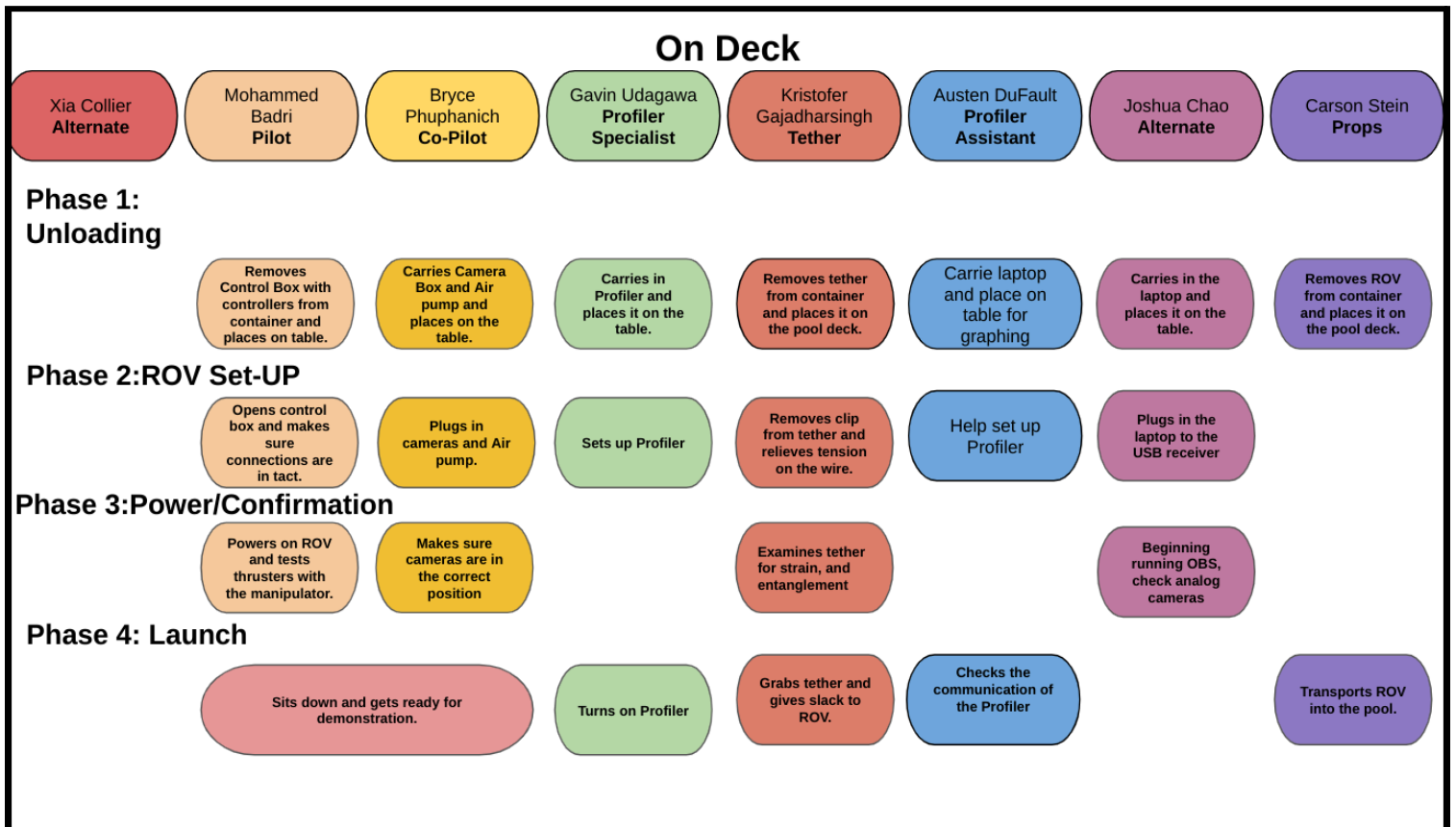
Task	Potential Hazards	Control Measures	Responsible Person (s)	Initial
Entering/ Exiting the Pool Deck	Slipping when entering/exiting pool area	<ul style="list-style-type: none"> - Communication between members when entering or exiting the area. - Keeping walkways clear of obstruction i,e: tether, wires, props 	Joshua Chao (Safety Officer)	J.C.
	Damaging devices	<ul style="list-style-type: none"> - Effective management of workspaces. - Storing tools and devices away when not in use. 	Xia Collier (CEO)	X.C.
			Bryce Phuphanich (Co-Pilot)	B.P.
Deck Operations Set-up	Missing person(s)	<ul style="list-style-type: none"> - Communication between team members.I.E: utilizing communication apps. - Coordination of who is where. - Having a buddy system going anywhere in groups of 2 	Joshua Chao (Safety Officer)	J.C.
			Xia Collier (CEO)	X.C.
	Miscommunications leading to general injury	<ul style="list-style-type: none"> - Having members verbally repeat back instructions. - Teaching members of standard deck procedure 	Xia Collier (CEO)	X.C.
Power-up Checks	Obstructions on deck due to prop mismanagement	<ul style="list-style-type: none"> - Having an organized and open space to house props in. - having an dedicated props person to oversee and manage props 	Gavin Udagawa (Vertical Profiler Specialist)	G.U.

Power-up Checks	Electrocution	<ul style="list-style-type: none"> - Wearing Proper PPE - Verbal confirmation when powering up - Ensuring no debris, electrical/conductive objects are nearby. - Inspection of regulators and devices before power on 	Mohammad Badri (CTO)	M.B.
Poolside Operation	General Injuries	<ul style="list-style-type: none"> - Practice mindfulness of self when performing any task risk inherent. - Allowing the "best person for the job" instead of attempting to do yourself if uncertain - Ensuring a clean and neat workspace 	Joshua Chao (Safety Officer)	J.C.
			Xia Collier (CEO)	X.C.
	Harm to appendages	<ul style="list-style-type: none"> - Wearing proper PPE when utilizing tools. I.E: gloves, closed toed shoes. - Staying at least 6 ft away if you are an observer. 	Joshua Chao (Safety Officer)	J.C.
	Eye Injury	<ul style="list-style-type: none"> - Informing members of proper procedure when handling tools. - Wearing proper PPE, I.E: goggles and/or face shield 	Joshua Chao (Safety Officer)	J.C.
	System Repairs	<ul style="list-style-type: none"> - Preventive maintenance - Tool organization - Clean and organized work space 	Joshua Chao (Safety Officer)	J.C.
Mohammad Badri (CTO)			M.B.	
Wet system operation	Miscommunication	<ul style="list-style-type: none"> - Having a select crew to increase synergy between members. - Teaching verbal syntax for communication - Creating non-verbal signals to communicate the start/end of procedures. 	Xia Collier (CEO)	X.C.
			Joshua Chao (Safety Officer)	J.C.

	Damage and or mismanagement of equipment	-Performing preventive maintenance on tools. - Teaching members on effective tool use to reduce wear. -Having a centralized tool area and long term equipment storage.	Joshua Chao (Safety Officer)	J.C.
			Xia Collier (CEO)	X.C
			Mohammad Badri (CTO)	M.B.

<h2 style="margin: 0;">Required Personal Protective Equipment (PPE)</h2>	All Phoenix Robotics members are required to wear said equipment when working on pool deck: <ul style="list-style-type: none"> Safety Glasses/Goggles Fitted apparel Closed-toed shoes Hair ties (If needed to tie back long hair. Gloves (If working with any potentially harmful chemicals)
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Appendices:



Training Log List:

Members and Their Roles	Basic Safety Training	Certified Production Technician (CPT)	Poolside Operations Training
Xia Collier (CEO) '25	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Bryce Phuphanich (COO) '25	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Mohammed Badri (CTO) '24	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Kristofer Gajadharsingh (CMO) '26	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Joshua Chao (CSO) '25	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Gavin Udagawa (Profiler Specialist) '25	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Austen DuFault (Profiler Assistant) '25	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Carson Stein (Poolside Assistant) '25	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Gavin Quijano (CDO) '25	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Contributors:

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