Job Safety Analysis

Task	Hazard	Prevention
Pre-Launch		
Wet system operation test	Electrical shock or electrocution	 Check over all insulation and waterproof all elements.
Dry system operation test	Electrical fire from damaged components	 Check for proper insulation of all wires and electrical components. Use proper voltage to prevent from overvoltage.
Launching and removing USS Phoenix from water	 Back injury from heavy lifting Slipping and falling on the pool side 	 Use proper lifting techniques. Ask for help if needed. No running on poolside. Wear slip resistant closed toed shoes. Use caution.
Transportation of USS Phoenix	 Slipping, Tripping, Falling Back Strains Physical Strain Foot Injury 	 Wear slip resistant, closed toed shoes Require two company members to transport the USS Phoenix Require an additional member to look for any obstacles and direct the path Stop transportation of the USS Phoenix if any member has a strain or physical injury Make sure that all members working near the pool side can either swim, or will wear a life jacket.
Setting up the USS Phoenix	Electrical shock or electrocution	 Never handle the USS Phoenix with wet hands. Keep electrical appliances dry. Keep all electrical components insulated. Visually check cables and connecters to make sure they are properly tightened and sealed.

Job Safety Analysis

Launching		
Powering on the USS Phoenix	Electrical shockOvervoltage	 Always keep power supply within safe parameters: away from water, away from anybody off the team, away from dangerous components.
Operating thrusters	 Damage to fingers 	 Always keep safety shrouds on while powered to keep away from bodily injury.
Setting up and managing the tether	 Loose tether Tangled tether Tether damaged from pulling 	 Connect the tether to the control box and the USS Phoenix. Put a maximum of two people in charge of the tether. Properly wrap tether before placing the USS Phoenix on the transportation cart.
Developing the USS Phoenix		
Accessing tools	 Tripping on miscellaneous tools or cables. Damage to tools through misuse. 	 Having an organized work space. Have equipment stored in designated places Keep away from the hands of those that don't know how to handle the tools.
Applying sealant	Eye and skin irritation	 Wear proper personal equipment (PPE). Keep compound away from the skin.
Using hand tools (hacksaw, hammers, screwdriver, clamps, wrenches, pliers, channel lock, etc.)	Eye injurySkin perforation	 Wear safety goggles and gloves when using a saw Wear gloves when using hand tools Wear masks when needed
Using power tools (drill press, drill, heat gun, etc.)	Eye injurySkin injury	 Wear safety googles when powering any power tools. Wear safety gloves while using any power tool.