

Job Safety Analysis

SEAPREME, TESLA STEM HIGH SCHOOL, WA USA

Describe Job Step (List the natural steps of the job. Do not make the steps too broad or too fine)	Potential Hazards (What are the potential hazards identified at this part of the job steps)	Recommend Risk Control Measures (Describe how the identified hazards can be eliminated or reduced)	Responsible Person(s) (Implementing Control)	Initial (Of the responsible person(s))
Connecting to Power Supply	Electrocution Miscommunication	Anyone at any time can call “STOP” during an emergency situation Ensure participants are wearing correct PPE to handle live electronic components	Jakob Bjorner	JB
Testing Power Connection	Overheating Incorrect-Wiring	Ensure participants are wearing correct PPE to handle live electronic components Ensure the right amount of electricity is passing through the Anderson power pole connectors before testing	Arnav Sacheti	AS
Testing USB Connection	Circuit Board Malfunction <ul style="list-style-type: none"> ● Incorrect Wiring ● Exposed Wiring 	Ensure participants are wearing correct PPE to handle live electronic components Ensure that there is no exposed or loose wiring before testing Ensure that the circuit boards are in the pressure chamber before testing occurs	Devesh Sarda	DS
Testing Motors	Miscommunication Jamming of Props Motors not properly shielded	Anyone can call “STOP” during an emergency situation Ensure the motor shield are properly secured Ensure that there is no debris obstructing the props	Ayan Gupta	AG
Testing Laser	Line of Fire Lack of Safety Equipment	Ensure participants/witnesses are wearing the correctly rated laser safety glasses	Devesh Sarda	DS

		Ensure participants/witnesses are not in the line of sight to the lasers		
Tether Management	Tangling <ul style="list-style-type: none"> • Tripping Exposed Wire Connections	Ensure participants responsible for tether management are wearing correct PPE Ensure that there are no exposed wiring prior to testing	Graham Sabin	GS
Testing Claw	Physical <ul style="list-style-type: none"> • Pinching • Scraping • Cutting Miscommunication	Ensure that no participants are allowed to operate the claw while someone is within 3 feet of it Anyone at any time can call “STOP” during an emergency situation	Jakob Bjorner	JB
Adjusting Ballasts	Removing and Adding Washers <ul style="list-style-type: none"> • Pinching • Scraping • Cutting 	Ensure participant is wearing safety equipment and is handling in a safe manner	Ayan Gupta	AG
Using hand tools (Screwdrivers, Files, etc..)	Physical Injury from improper use	Ensures that the user has proper experience in using the tools Make sure that the tools are the correct tool of the task	The Whole Team	WT
Using power tools (power drills, soldering irons)	Physical Injury from improper use Fumes from soldering irons may lead to health issues	Ensure that the user has proper PPE Have proper ventilation equipment when fumes are present	The Whole Team	WT