



JOB SAFETY ANALYSIS (JSA)

In every task, members are required to stop and alert our Head of Safety if they observe any unsafe practices. Everyone must follow the guidelines specified in our safety checklists, as well as the control measures listed below.

TASK	POTENTIAL HAZARD(S)	CONTROL MEASURES
1 Working with power tools	Sharp blades / drill-bits Improper conduct and/or handling of tools Electrical shorts Debris discharge	Participants must be supervised by another team member Participants must handle all tools correctly, keeping fingers away from the cutting area Participants must make sure that the tool is plugged in correctly and only when in use and that their workspace is clean (especially of liquids) Participants must wear proper safety gear for the tool they are handling (e.g. safety goggles)
2 Working with saws	Sharp blades Improper conduct and/or handling of saw Debris discharge	Participants must handle all tools correctly, keeping fingers away from the cutting area Participants must wear proper safety gear for the tool they are handling (e.g. safety goggles)
3 Handling epoxy and other chemicals	Skin and/or eye irritation Allergic respiratory reactions	Participants must wear gloves and safety goggles when working with chemicals Participants must touch their eyes or mouth while working with chemicals

TASK	POTENTIAL HAZARD(S)	CONTROL MEASURES
<p>4 Working with electronics</p>	<p>Electrical shorts Contact with live parts resulting in shock and/or burns Fire or explosion</p>	<p>Participants must make sure that their workplace is clean and free of liquid</p> <p>Participants may use no more than 12 volts</p> <p>Participants must use correct wire for the intended current</p> <p>Participants must use proper grounding</p> <p>Participants may never leave wire exposed</p> <p>If a participant is electrocuted, another member must call 911 immediately and NOT touch the participant</p>
<p>5 Soldering</p>	<p>Burns Fumes Soldering “spitting” Lead exposure</p>	<p>Participants must be supervised by another team member</p> <p>Participants must only touch the handle of soldering iron</p> <p>Participants must return the soldering iron to its stand when not in use</p> <p>Participants must keep the sponge wet</p> <p>Participants must wear safety goggles</p> <p>Participants must use tweezers or gloves to hold solder</p>
<p>5 Swimming / Mission Set Up</p>	<p>Drowning Disease</p>	<p>Participants must be capable swimmers before entering the pool</p> <p>The pool must be properly cleaned and treated before swimmers may enter</p> <p>Swimmers must carry only prop at a time to the bottom of the pool</p>