

Palos Verdes Institute of Technology, Palos Verdes High School

PVIT 2016 Job Safety Analysis (JSA)

HOUSEKEEPING

TASK	HAZARD	PROTOCOL
Machining	Contact with body Dangerous debris	Follow safety checklist, use personal protection equipment(PPE)
Mission Runs	Leaking and breaching of electrical systems	Perform pre-run checklist,
General Shop work	Stepping on sharp items and tools	Putting all items back where they belong Wear close toed shoes
Electrical Power Tool (soldering iron)	Unsafe contact with skin or clothing flying debris	Properly hold tools Keep all people not involved at a safe distance

HAND SAFETY

TASK	HAZARD	PROTOCOL
Laser Cutter	Contact with fingers	Keep lid closed, watch for sharp edges.
Drilling	Contact with fingers	Wear work gloves, Keep hand clear of drill bit.
Soldering	The use and contact of hot objects	Keep clear of hot surfaces, notify others of hot surfaces, stow hot iron in designated areas.
Drill Press	Hitting fingers	Use designated clamps. Keep hands clear.

LIFTING & BACK SAFETY

TASK	HAZARD	PROTOCOL
Moving the ROV	Heavy lifting Dropping heavy objects on self	Lift with the knees.
Launch/Recovery of ROV	Heavy lifting, awkward position.	Kneel on deck, use caution, and don't fall in the water.
ROV supply boxes	Heavy lifting Crushing fingers	Lift with the knees, use handholds, keep the load close
Moving Pelican Cases	Heavy lifting	Use wheels when possible, ONLY lift in pairs
Local transport of ROV	Heavy weight on body	Use rolling cart.

PERSONAL PROTECTIVE EQUIPMENT

TASK	HAZARD	PROTOCOL
Power tools	Puncturing of skin debris	Eye protection, gloves, close toed shoes.
Metal Machining (Lathe)	Debris in eyes	Face protection, gloves, close toed shoes, goggles.
ROV operation	Injuring of body parts	Eye protection, close toed shoes.

TOOL SAFETY

TASK	HAZARD	PROTOCOL
Drill Press	Damage to skin Crushing of fingers	Safety Glasses, Gloves, Close Toed Shoes
Dremel	Breaking of skin	Safety Glasses, Gloves, Close Toed Shoes
Soldering Iron	Serious burning of skin	Safety Glasses, Close Toed Shoes, Hot tip holder/cleaner
PVC cutter	Cutting of fingers	Safety Glasses, Close Toed Shoes

ELECTRICAL SAFETY

TASK	HAZARD	PROTOCOL
ROV Operation	Electrical shock	Follow all checklists, keep extension cord dry.
Troubleshooting ROV Control System	shock	Power Off.
ROV Electrical Design & Fabrication	Electrical systems failure	Use fuse, diodes, comply with MATE regulations. No power supply in water.

Implementation & Enforcement:
Employee Observation Program
Utilize Safety Task Analysis Cards (STAC).