

JOB SAFETY ANALYSIS

Safety information for CMA Underwater Expert Ltd.



LAUNCHING THE EPSILON

TASK	HAZARDS	CONTROLS
Pre-launch Setting up the Epsilon	Mild electrical shock or electrocution	<ul style="list-style-type: none"> • Make sure the Epsilon is placed on a dry location and hands are dry at all times. • Verify power switches and circuit breaker on Tether Control Unit. • Visually inspect the cables and connectors to check if they have been tightened and sealed. • Use the proper personal equipment in accordance with the supply voltage.
	Injury from slipping	Wear non-slip footwear to avoid slipping
	Injury from tripping on the tether	<ul style="list-style-type: none"> • Inspect pool area for possible trip hazards before launching. • Lay the tether nicely without blocking the way. • Always keep an eye on the tether. • Ensure that the tether is not tangled at all times.
Launching Operating and Retrieving the Epsilon	Back / muscle strain and injury	<ul style="list-style-type: none"> • Do not over reach for the Epsilon. • Avoid sharp twisting movements. • Slightly bend your body forward when loading or unloading the Epsilon.
	Hand / finger injury	<ul style="list-style-type: none"> • Put warning signs / stickers on the thrusters. • Make sure thrusters are disabled and / or power is shut off to the vehicle before putting hands and fingers near thrusters.
	Sunburn	<ul style="list-style-type: none"> • Wear protective clothing. • Put on sunhat / sunglasses. • Apply sun screen.
	Mild electrical shock or electrocution	<ul style="list-style-type: none"> • Assess for damaged wires / connectors before deploying / retrieving the Epsilon. • Evaluate the condition of the wires and replace cables when necessary.
Required Training: <ul style="list-style-type: none"> • Loading and uploading procedures • Power checking and set-up procedures • Proper operation of specific tools • (Refer to the 'Safety Checklist' for operating the Epsilon) 	Required Personal Protective Equipment (PPE): Covered and non-slip shoes Safety gloves Safety glasses Sun protection	
Other Information: See EPSILON Technical Documentation for more information on Safety Measures Contributors: CEO, Jayden CHAN; Electrical Engineer, Caspian LUK; Mechanical Engineer, Kenny WONG and Dicky LUM Created: November 2015 For more information about this JSA, contact CMA Underwater Expert Ltd. at CMA Secondary School, 298 Nam Cheong Street, Kowloon, Hong Kong http://www.cmassrobotics.com		