## JOB SAFETY ANALYSIS
Safety information for CMA Underwater Expert Ltd.

### LAUNCHING THE ZETA

<table>
<thead>
<tr>
<th>TASK</th>
<th>HAZARDS</th>
<th>CONTROLS</th>
</tr>
</thead>
</table>
| **Pre-launch Setting up Zeta** | Mild electrical shock or electrocution | • Make sure *Zeta* 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 | • 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 Zeta** | Back / muscle strain and injury | • Do not over reach for *Zeta*.  
• Avoid sharp twisting movements.  
• Slightly bend your body forward when loading or unloading *Zeta*. |
|          | Hand / finger injury | • Put warning signs / stickers on the thrusters.  
• Make sure thrusters are disabled and / or power is shut off to the vehicle before putting hands andingers near thrusters. |
|          | Sunburn | • Wear protective clothing.  
• Put on sunhat / sunglasses.  
• Apply sun screen. |
|          | Mild electrical shock or electrocution | • Assess for damaged wires / connectors before deploying / retrieving *Zeta*.  
• Evaluate the condition of the wires and replace cables when necessary. |

**Required Training:**  
• Loading and uploading procedures  
• Power checking and set-up procedures  
• Proper operation of specific tools  
• (Refer to the ‘Safety Checklist’ for operating the *Zeta*)

**Required Personal Protective Equipment (PPE):**  
Covered and non-slip shoes  
Safety gloves  
Safety glasses  
Sun protection

**Other Information:** See *Zeta* Technical Documentation for more information on Safety Measures

**Contributors:**  
Anderson ZENG, Jayden CHAN, Louise LO, Paul CHOW, Anson ZHAO, Krios LIANG, Kelvin KO, Yang XIAO, Jerry LUM, Devin LAI, Beth NA, Amber LIN

**Created:** January 2017  
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