**JOB SAFETY ANALYSIS (JSA) FORM**

<table>
<thead>
<tr>
<th>TASK:</th>
<th>ROV DECK AND WATER SAFETY</th>
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<tbody>
<tr>
<td>ANALYSIS BY:</td>
<td>Safety Lead and Deck Crew</td>
</tr>
<tr>
<td>DATE:</td>
<td>11/5/2016</td>
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**REQUIRED PERSONAL PROTECTIVE EQUIPMENT:**
- A buddy (never work alone)
- Life jacket (if conditions call for one)
- Non-slip shoes
- Eye protection

**REQUIRED/RECOMMENDED TRAININGS:**
1. Refer to “Rovotics’ Operational and Safety Checklists”.
2. Practice launching/removing ROV from deck.

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<tr>
<th>TASK</th>
<th>HAZARDS</th>
<th>CONTROLS</th>
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<tbody>
<tr>
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<td>Slips/Trips/Falls</td>
<td>Wear non-slip footwear and inspect pool area for trip hazards before launching ROV. Keep an eye on the tether.</td>
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<tr>
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<td>Eye Damage</td>
<td>Wear safety glasses to shield your eyes from any possible hazards or material.</td>
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</table>
|      | Finger Damage          | 1. Use safety-labeled ROV hand-holds only.  
2. Avoid placing fingers near thrusters.                                                                                                          |
| Pre-Launch |                           | 1. Verify power switches and circuit breaker on Tether Control Unit (TCU) are off.  
2. Visually inspect inside the clear electronics housing for leaks. Make sure all electronics are dry.  
3. Pay attention to the current ROV operating status lights.  
4. Ensure all extension cords are in a safe condition with plugs and connections properly wired. |
|      | Electrocution          | 1. Confirm with mission command that ROV is in Safe Mode.  
2. Kneel down.  
3. Stay low and close to ROV.  
4. Avoid sharp twisting movements.  
5. Do not overreach for ROV.  
6. To lower, bend the knees. DON’T STOOP.  
7. Seek/ask for help.                                                                 |
| Launch and Retrieval | Back Strain            | 1. Confirm with mission command that ROV is in Safe Mode.  
2. Kneel down.  
3. Stay low and close to ROV.  
4. Avoid sharp twisting movements.  
5. Do not overreach for ROV.  
6. To lower, bend the knees. DON’T STOOP.  
7. Seek/ask for help.                                                                 |
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| **Finger Damage** | 1. Make sure thrusters, motors and all accessories are disabled and/or power is shut off to the vehicle before putting hands and fingers near thrusters.  
2. Use labeled ROV hand holds only. |
| **Drowning**     | 1. Never launch alone.  
2. Ensure all personnel can swim or wear a life jacket. In some conditions, all personnel must wear life jackets. |
| **Sunburn**      | Sunhat/sunglasses/sunscreen/protective clothing.                                             |
| **Electrocution** | If a leak is detected, immediately cut power to TCU.                                        |