



# Job Safety Analysis (JSA) Form

Jesuit High School Robotics • 1200 Jacob Lane • Carmichael • California • United States of America  
• www.jesuitrobotics.org

<b>Picture of task/equipment:</b>	<b>Task:</b>	<b>LAUNCHING ROV &amp; WATER SAFETY</b>
	<b>Analyzed by:</b>	
	<b>Date:</b>	

### Required Personal Protective Equipment:

- A buddy (never work alone)
- Life jacket (if conditions call for one)
- Laser-rated safety glasses (if ROV has lasers)
- Non-slip shoes
- Sun protection (if outdoors)

### Required/Recommended Trainings:

Practice launching/removing ROV from pool.  
Refer to "Stingray 2015 Safety/Operation Checklist".

TASK	HAZARDS	CONTROLS
Pre-launch	Slips / Trips / Falls	Wear non-slip footwear and inspect pool area for trip hazards before launching ROV. Keep an eye on the tether.
	Eye Damage	Wear laser safety glasses rated for ROV laser wavelength of 650nm (red).
	Electrocution	<ol style="list-style-type: none"> <li>1. Verify power switches and circuit breaker on Tether Control Unit (TCU) are off.</li> <li>2. Verify electronics housings are sealed. Check top-side and bottom-side of enclosure.</li> <li>3. Ensure all tools are appropriately guarded and electrical appliances are protected by means of a residual current device.</li> <li>4. Ensure all extension cords are in a safe condition with plugs and connections properly wired.</li> </ol>
Launch and Retrieval	Back strain	<ol style="list-style-type: none"> <li>1. Kneel down.</li> <li>2. Stay low and close to pool edge.</li> <li>3. Avoid sharp twisting movements and do not over reach for ROV.</li> </ol>
	Finger Damage	Make sure thrusters are disabled and/or power is shut off to the vehicle before putting hands and fingers near thrusters.
	Drowning	Never launch alone. 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.