



Job Site Safety Analysis Sheet

Company: East Tennessee State University Buccaneers

- Overview: Deployment and operation of an underwater Remotely Operated Vehicle (ROV) for coral inspection, underwater maintenance, cable laying, or data collection tasks.

Task Description

- Purpose: Deployment, operation, and retrieval of an underwater ROV.
- Task: [#1) Ocean Observing Initiative: Coastal Pioneer Array; #2) SMART Cables for Ocean Observing; #3) From the Red Sea to Tennessee; #4) MATE Floats

Hazards Identification and Risk Assessment

Activity	Potential Hazard	Risk Level (H/M/L)	Control Measures
Transportation of ROV	Equipment damage during transit	M	Secure ROV properly, use protective cases with padding and tie-downs if necessary.
Deployment from surface	Slips, trips, and falls; lifting injuries	H	Use proper lifting techniques; wear PPE (personal flotation devices, gloves, hard hats.)
Operating ROV underwater	Entanglement with underwater structures; communication loss	H	Pre-deployment site survey; establish communication protocols
Electrical systems handling	Electrical shock, burns	H	Use insulated tools; ensure power is OFF during maintenance
Retrieval of ROV	Equipment damage; physical injury; falling into water	M	Following standard operating procedures; use appropriate lifting

			equipment
Weather / Water conditions (if outside use)	Adverse weather impacting operations; operations in salt-water pools	M	Monitor weather forecasts, have contingency plans; be aware of shorting due to salt-water conductivity in the case of leaks
Power Supply and Handling	Sparking, shorts, or Fires	M	Ensure proper gauge of cables; fire extinguisher accessible and up-to-date
Working over water	Drowning risk	H	Ensure team members wear personal flotation devices; members are aware of fall-in scenarios and proper rescue procedure
Working with tools	Injury from tools while performing job-site maintenance	M	Ensure tools are being properly used, first aid kit ready to use in case of injury