

| | | | |
|--|---|-------------------------------------|---|
| JOB HAZARD ANALYSIS (JHA) | | Date: 3/09/2012 | New JHA Revised JHA |
| Park Unit: GLBA | Division: Resource Management | Branch: Oceanographic Monitoring | Location: GLBA marine research vessels |
| Job Title: Deploying oceanographic monitoring gear (CTD/rosette water sampler, hydraulics) | | JHA Number: | Page 1 of 2 |
| Job Performed By: GLBA resource management, NPS inventory and monitoring, external researchers, other NPS staff, volunteers | Analysis By: Chris Sergeant, Lewis Sharman, Brendan Moynahan | Supervisor: Lewis Sharman | Approved By: |
| Required Standards and General Notes: | All employees performing this task should be familiar with the Park Boating Policy, the Oceanographic Monitoring General Safety Plan, and this JHA. This job requires reasonable wind and sea conditions (<20 knots; <3 ft. waves) and a minimum of two people. Consider employee physical fitness level for lifting and moving heavy gear. | | |
| Required Personal Protective Equipment: | PFD, work gloves, steel-toed boots, and hearing protection; pocket knife; raingear and warm clothing, as appropriate | | |
| Tools and Equipment: | Research vessel davit, hydraulic winch, small engine for hydraulics, oceanographic CTD and rosette sampler, tub of line | | |

| Sequence of Job Steps | Potential Hazards/Injury sources | Safe Action or Procedure |
|---|---|--|
| <p>1. Move CTD/rosette (sampler) and tub of line between dock and vessel deck.</p> <p>2. Organize gear on deck; connect hydraulic system and train of oceanographic sampling gear.</p> <p>3. Deploy sampler by raising off deck with winch, rotating davit across gunwale, lowering into water, continuing to target depth.</p> <p>4. Recover sampler by raising from depth with winch, bringing out of water, rotating davit across gunwale, lowering to deck.</p> <p>5. Each sampling station repeats steps three and four.</p> | <p>For all steps:</p> <p>1. SB: sampler (mainly a danger to feet when lowering)</p> <p>2. Fall into water</p> <p>3. O: due to weight of sampler</p> <p>4. CO: sampler/line/hydraulic block</p> <p>5. CB: sampler and gunwales</p> <p>6. FS/SA: trip over line or hydraulic hoses</p> <p>7. E: hearing damage from noise of small engine powering hydraulics</p> | <p>1. Load only with assistance from at least one co-worker; use appropriate PPE; communicate moving plan before lifting sampler; clear any obstacles from moving path; mind fingers and hands; keep feet clear of drop area.</p> <p>2. Wear PFD whenever on deck; do not shift center of gravity over water; keep body clear of rope bight or path of travel; beware hydraulic hoses and puller (trip hazards).</p> <p>3. Lift using legs and with assistance; avoid moving at awkward angles.</p> <p>4. Do not wear loose clothing around deck gear; keep body clear of sampler during transfer between deck and water; keep all body parts clear of rope bight; keep hands well clear of sheave; person controlling hydraulics continuously alert to juxtaposition of coiler (person), line, sheave, and sampler; wear gloves.</p> <p>5. Do not position between gunwale and sampler.</p> <p>6. Keep deck tidy, no loose lines/hoses, watch footing.</p> <p>7. Wear hearing protection.</p> |

Common Injury Sources: SB= Struck By, SA = Struck Against, CBY = Contacted By, CI = Caught In, CB = Caught Between, CO = Caught On, FB = Fall to Below, CW = Contacted With, O = Overexertion or Repetitive Motion, FS = Fall at the Same Level, BR = Bodily reaction, E = Exposure to Chemical, Noise etc.

Approved by: _____

Date: _____