

# RISK ASSESSMENT FORM

Follow HS01 Guidance Document when completing this Form

For Health and Safety Use

Assessment No      Vessel  
                                 DO      Revision No      2

**1.0 Assessment Type** (tick box)     NEW     REVIEW

## 2.1 Subject of Assessment

"Discover Oceanography" and similar sessions aboard School of Ocean & Earth Science, University of Southampton coastal research vessels.

## 2.2 Who is doing the Work

Vessel crew and demonstrators, with visitor participation (Risk Group RG06, Members of the public).

## 2.3 Cruise Number(s) / Location of Work

RV Callista  
RV Bill Conway

## 2.4 Brief Description of Activity

Manual deployment and recovery of small, light weight instrumentation.  
The use of upper deck fitted machinery for the deployment and recovery of instrumentation, towed bodies and sampling equipment.

## 2.5 Main Equipment Used

Winches, A Frames and associated lifting equipment.  
Capstan and/or crane in the event of failure of the above systems.

**3.0 Hazard Category(ies)** – select all hazards that are applicable

- |  |  |
|--|--|
| <b>H01</b> <input type="checkbox"/> Use of workshop type machinery                       | <b>H25</b> <input type="checkbox"/> Electric shock   |
| <b>H02</b> <input checked="" type="checkbox"/> Possible entanglement in moving machinery | <b>H26</b> <input type="checkbox"/> Fire from ignition sources (including static electricity)    |
| <b>H03</b> <input type="checkbox"/> Use of hand held/portable power tools                | <b>H27</b> <input type="checkbox"/> Explosion  |
| <b>H04</b> <input type="checkbox"/> Use of hand/foot operated machine tools              | <b>H28</b> <input type="checkbox"/> Contact with molten metals                                   |
| <b>H05</b> <input type="checkbox"/> Use of hand tools                                    | <b>H29</b> <input checked="" type="checkbox"/> Use of hydraulic/pneumatic systems                |
| <b>H06</b> <input type="checkbox"/> Handling of glass                                    | <b>H30</b> <input type="checkbox"/> Use of compressed gases                                      |
| <b>H07</b> <input checked="" type="checkbox"/> Operation of crane/overhead gantry        | <b>H31</b> <input type="checkbox"/> Compressed air   |
| <b>H08</b> <input checked="" type="checkbox"/> Loads being transported overhead          | <b>H32</b> <input checked="" type="checkbox"/> Work in extremes of temperature                   |
| <b>H09</b> <input type="checkbox"/> Falls of objects from heights                        | <b>H33</b> <input type="checkbox"/> Frostbite/Scalding/Burns                                     |
| <b>H10</b> <input type="checkbox"/> Operation of forklift trucks                         | <b>H34</b> <input type="checkbox"/> Vibration  |
| <b>H11</b> <input checked="" type="checkbox"/> Manoeuvring of heavy loads                | <b>H35</b> <input type="checkbox"/> High noise levels  |
| <b>H12</b> <input type="checkbox"/> Stacking/storing                                     | <b>H36</b> <input type="checkbox"/> Low light levels   |
| <b>H13</b> <input type="checkbox"/> Operation of vehicles                                | <b>H37</b> <input type="checkbox"/> Fumes  |
| <b>H14</b> <input type="checkbox"/> Vehicles hitting people                              | <b>H38</b> <input type="checkbox"/> Lack of ventilation  |
| <b>H15</b> <input checked="" type="checkbox"/> Manual handling                           | <b>H39</b> <input checked="" type="checkbox"/> Work over/near water, liquids                     |
| <b>H16</b> <input type="checkbox"/> Work with Display Screen Equipment                   | <b>H40</b> <input type="checkbox"/> Environmental pollution                                      |
| <b>H17</b> <input type="checkbox"/> Office Workstation (computers/printers/ furniture)   | <b>H41</b> <input checked="" type="checkbox"/> Deck operations                                   |
| <b>H18</b> <input type="checkbox"/> Repetitive movements                                 | <b>H42</b> <input type="checkbox"/> Carrying equipment up gangway                                |
| <b>H19</b> <input checked="" type="checkbox"/> Slips/trips/falls of person on same level | <b>H43</b> <input type="checkbox"/> Use of small boats   |
| <b>H20</b> <input type="checkbox"/> Falls of persons from heights                        | <b>H44</b> <input type="checkbox"/> Use of divers  |
| <b>H21</b> <input type="checkbox"/> Collapse of structure                                | <b>H45</b> <input checked="" type="checkbox"/> Working with ship rails lowered                   |
| <b>H22</b> <input checked="" type="checkbox"/> Sharp objects                             | <b>H46</b> <input type="checkbox"/> Near by operations   |
| <b>H23</b> <input checked="" type="checkbox"/> Inexperienced staff involvement           | <b>H47</b> <input checked="" type="checkbox"/> Any other foreseeable hazards not already covered |
| <b>H24</b> <input type="checkbox"/> Violence   |  |

**4.0 Special Hazards**

- |   |  |
|---|--|
| <b>SH01</b> <input type="checkbox"/> Use of hazardous chemical substances <sup>*1</sup>     | <b>SH04</b> <input type="checkbox"/> Work in confined spaces <sup>*2</sup>           |
| <b>SH02</b> <input type="checkbox"/> Work on any machinery in motion <sup>*2</sup>          | <b>SH05</b> <input type="checkbox"/> Work on live electrical equipment <sup>*2</sup> |
| <b>SH03</b> <input type="checkbox"/> Hot work (welding/brazing/flame cutting) <sup>*2</sup> | <b>SH06</b> <input type="checkbox"/> Lone/remote working/Out of hours <sup>*3</sup>  |

<sup>\*1</sup> Separate COSHH Assessment is required<sup>\*2</sup> Permit to Work System/Work Safety Instruction is required<sup>\*3</sup> Separate Lone Working Checklist is required**5.0 Risk Groups** (tick who might be affected by your activities, other than those who are doing the work)

- |   |   |
|---|---|
| <b>RG01</b> <input type="checkbox"/> Cleaners               | <b>RG06</b> <input checked="" type="checkbox"/> Members of the public |
| <b>RG02</b> <input type="checkbox"/> Maintenance staff      | <b>RG07</b> <input type="checkbox"/> Students                         |
| <b>RG03</b> <input type="checkbox"/> Security               | <b>RG08</b> <input type="checkbox"/> Ship borne personnel             |
| <b>RG04</b> <input type="checkbox"/> Contractors            | <b>RG09</b> <input type="checkbox"/> Pregnant women                   |
| <b>RG05</b> <input type="checkbox"/> Other members of staff | <b>RG10</b> <input type="checkbox"/> Staff with disabilities          |
| <b>RG11</b> <input type="checkbox"/> Others (give details): |   |

PLEASE IDENTIFY THE CONTROLS MEASURES TO BE PUT IN PLACE IN THE TABLE OVERLEAF

**STAFF WITH MEDICAL OR PHYSICAL CONDITIONS SHOULD ALWAYS DISCUSS THE CONTENTS OF THIS ASSESSMENT AND ANY ADDITIONAL PRECAUTIONS WITH LINE MANAGER OR PROJECT LEADER BEFORE PROCEEDING WITH THE WORK**

### 6.0 Assess the Level of Risk

<i>Haz No.</i>	<i>Description of activities relating to the hazards identified</i>	<i>(a) Hazard Consequence</i> 3 Major 2 Serious 1 Slight	<i>(b) Likelihood</i> 3 High 2 Medium 1 Low	<i>Risk Rating = (a) x (b)</i> High (6 & 9) Medium (4) Low (1 to 3) <b>H M L</b>	<i>6.1 Controls to be Implemented</i>	<i>6.2 Revised Risk Level</i> High Medium Low <b>H M L</b>	<i>6.3 Further Action Necessary</i>  (Comments)
HO2	Heaving and veering rope wound on capstan drum.	3	2	H	<p><i>NOTE The capstan is unlikely to be used except following failure of the vessel winch and A frame systems.</i></p> <p>Keep area clear of all except essential staff. Only competent crew or operator must operate capstan.</p> <p>Suitable protective clothing must be worn – steel toe cap footwear, gloves, boiler suits or equivalent.</p> <p>Ensure loose clothing and jewellery, including rings with large protrusions, is not worn. Long hair is to be tied back so that it cannot get close to rotating parts.</p> <p>Ensure capstan is kept in good working condition by regular maintenance and cleaning.</p>	M	Caution and vigilance to be taken at all times.

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H07 H08 H11	Loads suspended and moved with deck crane and "A" frame.  Load to be suspended via sheave block which is attached to the "A" frame and the use of crane – possible failure of equipment/connectors.	2	2	M	<i>NOTE The crane is unlikely to be used except following failure of the vessel winch and A frame systems.</i> Competent crane driver must assess sea state impact on task before proceeding. A Frame is to be operated only by trained and experienced operators. Ensure no unauthorised personnel enter the rear deck area (Red Zone)*. Ensure all persons stand clear of the area below loads, winch cables and crane. All key lifting points and equipment should have a valid test certificate. Appropriate PPE such as safety shoes, hard hats and overalls should be worn. Suspended loads should be kept as low as possible at all times.	L	A nominated person to watch for potential problems during operation.  Comprehensive briefing to cover load movement or retrieval.
H15 H41	Hazards associated with manual handling operations on deck or through labs such as musculo-skeletal injury, cuts, abrasions and impacts.	2	2	M	Ensure materials are stored in a manner that minimises the risks of manual handling. Ensure staff are trained in basic manual handling tasks. Ensure adequate lifting and moving equipment is provided. Ensure protective footwear and gloves (if necessary) are worn when manual handling tasks are undertaken.	L	

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H19	Slipping on wet surfaces. Tripping over equipment on deck and in the labs.	2	2	M	Ensure a high standard of housekeeping is maintained to prevent slips, trips and falls. Keep walkways free of obstructions and spillages. Ensure all visitors are made aware of the potential hazards. As far as is workable due to vessel constraints, storage and work areas are to be kept separate. Ensure that there is adequate heating, lighting and general ventilation. Wearing of non slip, flat footwear is highly recommended.	L	
H22	Cuts from sharp objects in trawl and grab samples. Bites and stings from creatures in trawl and grab samples.	1	1	L	Cuts are likely to be minor. First aid equipment is carried aboard vessels. All vessel crew are fully first aid trained and certified. Crew and demonstrators are to sort samples, identify and remove hazardous items and creatures.	L	
H23	Inexperienced persons onboard	2	2	M	Ensure hazardous tasks are restricted to authorised personnel only. Ensure a full safety briefing is given to all persons aboard, prior to the vessel sailing. Ensure all activities are closely supervised by appropriately trained crew or demonstrators.	L	
H29	Operation of hydraulically powered deck equipment.	2	2	M	Operation of equipment is only to be undertaken by persons who are appropriately experienced and trained to operate such machinery. Ensure all persons are well clear of moving machinery, loads and cables prior to commencing operations.	L	Skippers are to ensure only persons with their authority operate machinery.

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H32	Working on deck in cold weather whilst exposed to wind chill. Working on deck whilst exposed to sunlight.	2	2	M	Crew to ensure all persons are made aware of hazard during briefing and to offer advice on how to minimise risk. Crew to monitor participants whilst aboard and watch for signs of over exposure to cold or sun. Sessions for groups aged 17 years or below are NOT to be arranged to take place during December or January.	L	Vessel is always crewed by a minimum of one person who holds a "Medical 1st Aid Aboard Ship" certificate.
H39 H45	Deployment of equipment over the stern or gunwhales.	3	2	H	Persons deploying equipment over the gunwhales are not required to wear lifejackets unless instructed to do so by a member of the crew. All persons working in the life jacket "red zones" are required to wear lifejackets when the hand rails have been lowered or when instructed to do so by a member of the crew.	L	Equipment is only to be deployed once permission of the helmsman has been granted.
H47	Participants feeling unwell (seasickness) during session	1	2	L	All vessel crew are first aid trained. Situation will be assessed and appropriate action taken.	L	Vessel is always crewed by a minimum of one person who holds a "Medical 1st Aid Aboard Ship" certificate.

**\* RED ZONES are defined as:**  
**Any area of the vessel where there is no standard height handrail between the work area and overboard**

TAB TO THE END OF TABLE TO INSERT NEW ROWS

<b>7.0 Attachments</b>					
<b>7.1 COSHH Assessments (tick box)</b> <input checked="" type="checkbox"/> Not Required <input type="checkbox"/> Attached		<b><u>Names of Chemicals/Trade Names (Manufacturer)</u></b>			
<b>7.2 Work Safety Instructions/ Permits to Work (tick box)</b> <input checked="" type="checkbox"/> Not Required <input type="checkbox"/> Attached		<b><u>Titles/Permits to Work Number</u></b>			
<b>7.3 Lone Working Checklist (tick box)</b> <input checked="" type="checkbox"/> Not Required <input type="checkbox"/> Attached		<b><u>Titles</u></b>			
<b>8.0 Assessor Details (original assessor)</b>					
<b><u>Name of Assessor</u></b> G Fisher	<b><u>Signature</u></b>	<b><u>Date</u></b>	<b><u>Name of Line Manager</u></b> S Hayward	<b><u>Signature</u></b>	<b><u>Date</u></b>
<b>9.0 Assessment Review</b>					
<b><u>Name of Reviewer</u></b>	<b><u>Date of Review</u></b>	<b><u>Reviewers Comments</u></b>		<b><u>Line Manager's Signature</u></b>	<b><u>Date</u></b>
<b>10.0 Declaration: I have read, understood and will follow the safety precautions in this assessment and associated documents</b> (To be completed by all workers involved)					
<b><u>Name</u></b> G Blythe  M MacLean  K Padley	<b><u>Signature</u></b>	<b><u>Date</u></b>	<b><u>Name</u></b> W Fletcher	<b><u>Signature</u></b>	<b><u>Date</u></b>

Copies of completed Risk Assessments plus attachments should be sent to the Divisional Safety Officer.