

Health and Safety at sea policy statement

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Introduction

1. This policy supplements NERC health and safety procedure no 1, <u>"Health and Safety Policy Statement"</u>. The Chief Executive and staff of the Natural Environment Research Council (NERC) are committed to achieving and maintaining a high level of health and safety at sea. We will go beyond our legal obligations to provide effective management of health and safety risks on all vessels where there are NERC staff. We will produce clear policies and procedures appropriate to particular types of vessel and particular use patterns of those vessels.

We will expect non-NERC scientists using NERC ships, and owners/operators of chartered vessels to show equal commitment to these aims.

The aims will be met by:

- Assessing risks in advance of any significant personal exposure:
- Reducing risks by appropriate and effective control measures:
- Nominating suitable competent persons:
- Providing appropriate information, instruction and training:
- Routine monitoring of our health and safety management activities.
- Appropriate health surveillance.

Later paragraphs of this statement give details of those carrying managerial responsibility for safety on different types of vessels. Cross-reference is made to specific procedures operated in different components of the Research Council in paragraph 9; contact names are also given there.

All safety management systems for work at sea **must** meet the requirements of the relevant national and/or international legislation in <u>Annex A</u>.

In the context of this policy, "at sea" covers all tidal waters including estuaries and micro-tidal seas such as the Mediterranean. This policy also applies to large navigable bodies of freshwater such as The Great Lakes.

2. A number of NERC's research and collaborative centres are involved in research which requires the use of ships and boats ranging from ocean-going vessels to small dories and inflatables. The work breaks down into two main areas:

a. The operation of vessels, which is directly subject to maritime legislation.

b. Scientific or technical operations at sea; much of this is not covered by specific legislation, but it is still subject to maritime legislation as regards injury to personnel, damage to the ship or other ships, and pollution of the environment.

The risks of both types of work must be assessed and safe systems of work produced to minimise those risks.

3. NERC staff work at sea in a number of different ways

a. RSU and BAS facilitate research by operating ocean-going vessels crewed by employees who are professional seamen. The scientists and technicians who are on the ship for periods of time either to conduct research or travel to and from their area of operations include NERC employees from all the NERC marine research centres, observers and collaborative researchers from other organisations.

b. Many laboratories also use smaller vessels that generally return to port or sheltered anchorage each evening; these must be under the control of appropriately trained personnel. The distinction between marine and scientific/technical personnel is the same as for BAS/RSU. PML have contracted the management of their vessels to Serco Denholm. SAMS are responsible for ship operations at Dunstaffnage.

c. Research and collaborative centres either charter vessels for specific projects or use vessels belonging to other organisations. In these cases the scientific and technical staff will be from the research or collaborative centre but the ship's crew will be employed by the ship owner or ship's manager.

d. Most research centres use small boats for research projects; some of this work is on inland waters.

This policy covers the work listed above apart from the small boat work, which is covered by local policies.

4. The work listed in paragraph 3a is subject to maritime legislation – see paragraphs 5 and 6. Research and collaborative centres have developed suitable procedures for the work described in paragraph 3b – see paragraphs 8 and 9. The aim of this policy is to provide a framework for consistent treatment of the work in paragraphs 3a-c throughout NERC.

The operation of vessels

5. There is a wide range of legislation covering the use of ships and boats depending on the size of the vessel and the type of waters in which it will be used. The relevant legislation covering British vessels is The Merchant Shipping Act 1995, the International Convention for the Safety of Lives at Sea (SOLAS), the International Ship and Port Facility Security (ISPS) Code and the International Management Code for the Safe Operation of Ships and for Pollution Prevention, (the ISM Code),

which comprises chapter 9 of the SOLAS convention. A fuller list of relevant legislation together with web addresses is given in <u>Annex A</u>. A summary of the ISPS Code is given in <u>Annex B</u>.

6. BAS and RSU operate ocean-going research ships, which are subject to both UK and international legislation. PML has transferred the responsibility for operating its vessels to Serco-Denholm, but still has exclusive use of the vessels for its research and that of MBA. SAMS operates two research vessels, which are subject to UK legislation. For details of how these research and collaborative centres discharge their duties under maritime legislation, contact the individuals shown in the list in paragraph 9.

7. The ship owner, operator or master must be satisfied that suitable risk assessments have been carried out, safe systems of work produced and that the relevant scientific/technical staff are competent to carry out the work. At sea, the master has overall responsibility for the safety of the ship and everyone on board.

Scientific or technical operations at sea

8. Research and collaborative centres carry out a variety of different types of operations at sea – see paragraph 3 for details. In most cases there is no specific legislation, which applies to the whole of the work, though elements of both maritime and land-based law may apply. In these circumstances risk assessments must be carried out to determine safe systems of work for scientific and technical operations – see <u>NERC health and safety procedure no 12</u>, <u>Risk assessment & risk management</u>. As mentioned in paragraph 7, the master has overall responsibility at sea and can overrule scientific/technical staff if the safety of the ship or those on board are at risk.

9. For details of how research and collaborative centres discharge their health and safety duties for scientific or technical work at sea, see the following web sites or contact the individuals shown below:

itact name
ris Hindley
ster Skinner
vid Harris
n Humphery / Sultan Khan
drew Louch
Watson

For advice and information on best practice, contact Chris Hindley or Andrew Louch.

Use of non-NERC ships

10. NERC staff use other vessels besides those run by research or collaborative centres. These can be divided into two categories:

a. Charter vessels

b. Other research or naval vessels, including those managed from overseas, and ships of opportunity where NERC does not have total control.

11. Where NERC charters vessels for a specific project, there should be no difficulty in specifying the same health and safety standards as on NERC vessels. On vessels in category 10b, it may be more difficult to ensure acceptable standards because:

a. the NERC project may be secondary to the main purpose of the cruise

b. there may be only a small number of NERC staff aboard and their influence will be correspondingly small.

c. some operators adopt a different approach to health and safety from that of the UK.

12.A check list for use in selecting and auditing charter vessels has been written and is attached as Annex C to this Policy. Charterers are recommended to discuss their preferred vessels with other NERC staff before committing to a cruise. For advice on chartering vessels please contact Chris Hindley (BAS), Andrew Louch (RSU), Trevor Ross (RSU) or Alister Skinner (BGS).

13. Where NERC does not have total control of ship operations, ship users must make every effort to work as safely as possible. If you consider that conditions or procedures are dangerous you must stop operations. Where possible, issues such as this should be resolved at cruise planning meetings held well before work starts – see paragraph 21. It may be impracticable to attend cruise planning meetings for overseas vessels.

Roles and responsibilities

14. The ship owner has ultimate responsibility for the operation of vessels. Day-to-day responsibility for ship safety lies with the master. The legislation referred to in paragraph 5 sets out the regulations covering ship safety.

15. The director of the principal scientist's research/collaborative centre has ultimate responsibility for scientific/technical work at sea. Day-to-day responsibility for scientific/ technical safety lies with the principal scientist, though responsibility is shared with the ship's captain if the scientific/technical procedures affect the safety of the ship.

16. Other roles should be clearly set out in each research or collaborative centre's policy and procedures.

Monitoring and auditing

17. Operation of this policy should be monitored by research/collaborative centres and audited by specialist auditors to check that it is working as intended. <u>Annex C</u> sets out the principles of monitoring and auditing safety at sea.

Training and competence

18. See <u>NERC procedure no 16</u>, <u>Competence in health and safety</u>, which defines competence as:

"Training, qualification or experience required against terms of reference defining areas of responsibility."

19. As a minimum, all staff who work on the decks of vessels and staff working from small boats should go on a sea survival course before working at sea. NERC requires all staff including those participating on non-NERC vessels who are involved in marine deck operations to renew PST at a period not exceeding 5 years. The course should be repeated at regular intervals. Research and collaborative centres should assess the risk to temporary staff and other cruise participants, and send them on a course if necessary. RSU and BAS ships carry out induction training on board ships; principal scientists should ask for similar training on other vessels they use.

20. Competence standards for the operation of vessels are covered in the legislation mentioned in paragraph 5. Principal scientists should determine the relevant competence standards for themselves and members of their scientific team, with special reference to:

a. their own competence

b. the competence of machinery operators

Cruise planning procedures

21. Cruise planning meetings at which scientific/technical staff discuss their requirements with the ship operators are an essential part of the preparation for any research cruise. NERC principal investigators must carry out cruise planning procedures for all cruises for which they have responsibility, using the RSU/BAS procedures as a model. Such procedures are already standard practice for RSU and BAS cruises. It may not be possible to have such meetings before going on other vessels, including overseas research or naval vessels or ships of opportunity; in these cases it is essential to discuss safety issues with the master as soon as possible after going on board.

Signed: Prof J H Lawton, Chief Executive

Date: June 2004

Annex A: summary of legislation

The Merchant Shipping Act 1995 - see

http://www.legislation.hmso.gov.uk/acts/acts1995/Ukpga_19950021_en_1.htm

International Management Code for the Safe Operation of Ships and for Pollution Prevention, (The ISM Code) – see

http://www.imo.org/OurWork/HumanElement/SafetyManagement/Pages/ISMCode.aspx

Code of Safe Working Practices for Merchant Seamen - see

<u>https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/282659/coswp2010.pdf</u> International Convention for the Safety of Lives at Sea (SOLAS) – see

http://www.imo.org/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Safety-of-Life-at-Sea-(SOLAS),-1974.aspx

International Maritime Dangerous Goods Code.

International Labour Organisation Convention 180 (working hours).

Standards of Training, Certification and Watchkeeping for Seafarers (STCW) 1995 Merchant Shipping & Fishing Vessels (Health and Safety at Work) Regulations 1997 – see <u>http://www.hmso.gov.uk/si/si1997/97296201.htm</u>

International Ship and Port Facility Security (ISPS) Code

Annex B: Security Summary International Ships and Port Facility Security (ISPS) Code

The International Ship and Port Facility Security (ISPS) code became a legal requirement on 1 July 2004. All cargo ships over 500 GRT and all passenger ships in international trade, including high-speed light craft, must have a security certificate in place.

IMO's Maritime Safety Committee, which starting its work immediately after the September 11 2001 incident, developed the ISPS code. The code is a standalone instrument, put in force by an amendment to SOLAS chapter XI. It consists of a mandatory requirement, part A and a recommendation, part B. (Note: Both parts are mandatory for UK registered vessels.)

SOLAS will be amended to set the following additional requirements:

- An Active Identification System to know where ships are at any time.
- Ship Identification Number to easily identify a ship.
- Ship Security Alert System to notify if something is wrong onboard.
- Continuous Synopsis Record of ship operation.

The code operates with three security levels:

1 - Minimum appropriate protective security measures shall be maintained at all times.

2 - The level at which appropriate additional protective security measures shall be maintained for a period of time as a result of heightened risk of security incident.

3 - The level at which further specific protective security measures shall be maintained for a period of time when a security incident is probable or imminent.

Work required onboard ships

Each flag state has authorised a Recognised Security Organisation (RSO) to certify each vessel and its company. (In the UK this is the Maritime and Coastguard Agency, MCA).

The code sets up a framework for the security of ships:

- The authorisation of a dedicated company security officer.
- The authorisation of a dedicated ship security officer.
- The completion of a ship-specific security assessment.
- The completion of a ship-specific security plan.
- Following audit, the issue and an International Ship Security Certificate (ISSC).

The company has to set its own security policy and qualify dedicated security officers. A competent person has to make an assessment of the potential risks and the measures to address the risks. A ship security plan has to be developed on that basis. Ship security officers have to be allocated and trained in accordance with the security plan. The plan has to be implemented on board the ships before a certificate can be obtained.

Work to be done by port facilities

A similar procedure will apply for the port facilities serving ships with an International Ship Security Certificate (ISSC). Port facilities are not required to be certified according to the draft of the code, but they have to report to IMO that they have their secure regime in place in due time. The contracting government should ensure that appropriate measures are in place to avoid unauthorised disclosure of, or access to, security sensitive material relating to port facility security assessments and plans.

Prior to arrival the vessel must contact the port authority and confirm what security level the port is working to. The vessel must then operate at a minimum of the port's level. The ISPS Code allows for the vessel to operate at a higher security level than the port if the Master desires. Before departing the port the vessel must obtain the signature of the port security officer certifying that the vessel has remained in a secure state during the port call. The vessel must maintain these security clearances for the last ten ports visited. Failure to do so may result in the vessel being refused entry.

The effect of the ISPS Code implementation on scientists working on board the NERC vessels should be negligible. However the advent of the ISPS Code is reflected in increased customs scrutiny of marine cargo. It is therefore vital that all equipment to be sent to the vessels has the correct customs paperwork, including accurate weights and prices for goods. Failure to do so may result in customs refusing clearance, leading to delays to the scientific cruise programme. There is also a requirement for the vessel to conduct a search of personnel and goods coming on board. This is worked as a percentage of personnel boarding dependent on the level of security at which the vessel is working, i.e. at Level 1 up to 5% must be searched. Where possible non-invasive search techniques will be used.

Scientists will be briefed on the ISPS Code at the pre-cruise meeting and during the on-board familiarisation training. The vessels will conduct security drills in a similar manner and time scale as safety drills. If requested, the scientists will be expected to take part and assist the vessel during these drills.

Annex C: monitoring and auditing

Monitoring:

The monitoring of safety at sea requires:

- Documentation of the management system
- Written safe systems of work
- Documentation of management follow-up after introduction of such systems
- Accident reporting
- Documentation of actions taken as a result of follow-up and accident reporting
- Assessment of safety attitudes amongst staff
- Documentation of training undertaken
- Maintenance of equipment

Auditing:

The auditing of safety at sea requires:

- Checking that the documentation listed above is in place
- Assessing the effectiveness of safe systems of work
- Checking that safe systems of work are being followed
- Certifying that training is adequate and accredited
- Assessing management and staff attitudes by interview

SAFETY, HEALTH & ENVIRONMENTAL (SHE) AUDIT CHECKLIST FOR NON-NERC VESSELS

on behalf of the NATURAL ENVIRONMENT RESEARCH COUNCIL

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Summary Information

Client **Client representative on board Vessel Owner** Vessel Name Flag **Port of Registry Flag State Authority Builders/year built/where built** Last dry dock/where **Classification Society** Class **Tonnage gross/net Engines/power** Length o/a Master Safety Officer and Rank Ship Security Officer and Rank Number of crew, ship/scientific **Total accommodation** Audit commissioned by **Auditors Name/Company**

A. INTRODUCTION

A.1 Scope of the Audit

The audit is designed to:

- i) review what is seen on the vessel against what is published by the company being audited
- ii) assess the SHE management system for effectiveness of design and its implementation in shipboard operations
- iii) determine the suitability of the vessel for NERC use with regards to SHE protection

Audit findings should be supported by evidence taken from industry recognised standards.

Industry recognised standards include:

- i) Any specific references to safety, health and the environment in the contract
- ii) International Safety Management (ISM) Code
- iii) Safety of Life at Sea Regulations (SOLAS 73/78) and MARPOL 73/78
- iv) International Ship and Port Facility Security (ISPS) Code

In addition, the following references are also reviewed and evidence provided from:

- v) The contractor's own manuals and the SHE Plan for the specific vessel/s and project.
- vi) Applicable industrial advice.

A.2 KEY TO CHECKLIST AND AUDIT BASIS

The following checklist is used to assist in assessing vessels to a common standard.

KEY:

The following grades are used for the guidance of those who commission the audit:

0: SATISFACTORY, NO ACTION REQUIRED

- 1 : The subject presents an immediate hazard to those working or living nearby, or is illegal.
 IT SHOULD BE CORRECTED BEFORE ANY FURTHER WORK IS DONE
- 2 : The subject does not comply with the client's contractual standards; will be a hazard when in use; may be below standard due to current work or port call and will be corrected when the port call is over; there is a design fault that makes it more hazardous than necessary; information on use or procedure is dangerous, or could be to a better standard, or is not available.
 IT SHOULD BE CORRECTED/CHANGED AS SOON AS POSSIBLE, CERTAINLY DURING THE NEXT PORT CALL
- 3 : Procedure, design, placement, control etc., could be handled better; industry standards are generally better in this area.
 DESIRABLE TO CHANGE WHEN TIME AVAILABLE
- N/A: not applicable to this operation,
- N/S: not seen/checked during audit due to time or other constraints

B. BRIEF DESCRIPTION OF PLANNED SCIENCE TO BE UNDERTAKEN ON VESSEL:

C. CONCLUSIONS FROM AUDIT:

D. SUMMARY OF RECOMMENDATIONS

E. SHE MANAGEMENT

E.1 Contract Terms

E.2 Contractor's Corporate SHE Management System

E.3 Ship's SHE Management System

Item	Question	\checkmark
1.	Is there a ship's SHE Plan	
2.	Is there a project SHE Plan	
3.	Do these plans make the major hazards clear	
4.	Are hazards in the above documents referenced to control procedures	
5.	Are named persons responsible for the control procedures	
6.	Is the Principal Scientists responsible for operations SHE, in writing?????	
7.	Are all supervisors aware of their responsibilities in writing	
8.	Is there a procedure for joining the ship, e.g. safety tour	
9.	Are SHE meetings held at least monthly at senior level	
10.	Are minutes kept with decisions/designated persons noted	
11.	Do all personnel on board attend some form of periodic SHE meeting	
12.	Are accidents and near misses recorded	
13.	Are recommendations made for prevention of recurrence	
14.	Is there a risk management system, with all hazards reported, assessed and controlled	
15.	Is there a remedial work plan (RWP) or action point list	
16.	Is there SHE information specific to the ship	
17.	Is the muster list posted	
18.	Is the muster list up to date with emergency positions	
19.	Are crew organisation charts maintained	
20.	Is a cross-auditing system in place	
21.	Is unsafe act auditing carried out	
22.	Are all audit reports (client, management and cross-) available on file	
23.	Is one person appointed to be SHE Adviser	
24.	Has he/she been on an industry SHE Management course	
25.	Does he/she have a clear list of duties	
26.	Is there a Permit to Work system	
27.	Is there a "lock-out/tag-out" for working on equipment	
28.	Can all personnel communicate in the ship's working language	

E.4 Training

Item	Question	\checkmark
1.	Is training a regular part of the routine	
2.	Is there a training matrix for all personnel	
3.	Has the training in the matrix been achieved	
4.	Are certificates of attendance at training available	
5.	Are 75% of all persons on board trained in safety and survival at sea	
6.	Is there a list of those on board who have not attended a survival course	
7.	Is there a trained fire fighting team, experienced in the use of Self Contained Breathing Apparatus (SCBA)	
8.	Is diver training applicable; has it been carried out	
9.	Are there at least two crewmembers with Fast Rescue Craft (FRC) coxswains certificates if applicable	
10.	Has training been carried out for work boat coxswains and crewmen	
11.	Has crane and winch operation training been carried out	

F. SECURITY

F.1 ISPS Code security requirements

1.	Who is the Company Security Officer (CSO)	
2.	Does the ship have security on the gangway	
3.	Are regular security inspections conducted	
4.	Are regular security drills conducted	
5.	Are searches of goods and personnel conducted	
6.	Does the ship have security clearances for the last ten ports	

G. WORKING PROCEDURES AND EQUIPMENT

G.1 Working Area

Item	Question	\checkmark
1.	Are there substantial guards across the stern and other 'overside' areas	
2.	Are there working lifejackets with a planned maintenance systems and regular testing	
3.	Are areas marked for the use of safety lines and harnesses	
4.	Are there adequate safety harness location points	
5.	Are safety harnesses freely available and in good condition	
6.	Are walking surfaces non-slip and trip hazards clearly marked	
7.	Are hard hats available for overhead hazards	
8.	Are safety boots worn as standard	
9.	Are warning/instruction signs posted	
10.	Is there a "man overboard" alarm at the stern	

Item	Question	\checkmark
11.	Are there emergency stops and are these operating close by deck working areas	
12.	Can the operator see all personnel when deploying equipment	
13.	Is there good communication with the laboratories and bridge	
14.	Is there good communication with the deployment area	
15.	Is there an emergency escape ladder located at the stern	

G.2 Equipment – Wires and Cables

Item	Question	\checkmark
1.	Are all cables in good condition and inspected regularly	
2.	Is there a test certificate record available	
3.	Is there a record of use book available	
4.	Are there instruction manuals available	

G.3 Equipment – Electrical Cables

Item	Question	\checkmark
1.	Are electrical cables in good condition	
2.	Is PAT testing undertaken	
3.	Are instructions as to electrical safety posted	
4.	Are cables tidied away to prevent tripping hazards	
5.	Are all cables properly earthed/protected	
6.	Are electrical systems protected by RCDs	
7.	Are there remote indications for power on cables	
8.	Is there a lone worker policy on high voltage equipment	
9.	Are instructions posted for first aid response to electric shock	
10.	Are electrically "floating" units properly earthed	
11.	Do wiring and electrical circuits conform to safe practice	

G.4 Equipment – Seismic systems

Item	Question	\checkmark
1.	Are all controls clearly marked	
2.	Are all controls consistent in style and movement	
3.	Are all high-pressure air hoses safely secured	
4.	Do compressed air systems have emergency stops; date last tested	
5.	Are guns secured against excessive movement when on board	
6.	Is the vessel familiar with Environmental Impact Assessments (EIA) for seismic work	

G.5 Winches and Electrical Systems

Item	Question	\checkmark
1.	Are all winch controls centre-sprung to "off"	
2.	Are all winch controls clearly marked and consistent with direction of travel	
3.	Are all winches properly guarded	
4.	Do remote operated winches have guards, warning signs/beacons?	

G.6 Systems - General

Item	Question	\checkmark
1.	Is there a written system for deployment/recovery of airguns	
2.	Is there a written system for the deployment/recovery of cables	
3.	Is there a written system for the deployment/recovery of other in-water equipment	
4.	Is there a written system for working on deployed equipment	
5.	Are there adequate locking arrangements on cable reels	
6.	Does all the rigging conform to safe practice, and is there a planned maintenance system and record	
7.	Is there a planned maintenance system for all in-water equipment	
8.	Is all lifting equipment tested and certificated	

G.7 Laboratories/Instrument Rooms

Item	Question	\checkmark
1.	Are there two exits and access kept clear	
2.	Is paper cleared daily	
3.	If smoking is permitted, are ash trays available	
4.	Are there sufficient suitable fire extinguishers	
5.	Is there good communication with the working decks	
6.	Can the remote equipment be stopped quickly, are the switches clearly marked	
7.	Are emergency power cut-off switches clearly marked	
8.	Are electrical cables and hydraulic hoses kept out of the working area	

H. SHIP'S PROCEDURES AND EQUIPMENT

H.1 General

Item	Question	\checkmark
1.	Is the gangway properly rigged with netting and fire plan	
2.	Is access to the vessel adequately controlled	
3.	Are all shore-side contractors supervised by ship's personnel	
4.	Is there a planned maintenance system for all deck equipment	
5.	Are windlasses and anchoring equipment on good condition and regularly turned and greased	
6.	Are all personnel properly equipped for working with cranes and other lifting plant	
7.	Do cranes and lifting beams have Safe Working Loads (SWL) marked	
8.	Is all lifting hear marked with SWL and registered	
9.	Are operators trained/experienced, are records kept.	
10.	Do crane control positions provide a clear view of operations	
11.	Is all rigging (wires, blocks, shackles, hooks and anchor points) in good condition and conforming to safe practice	
12.	Are open hatches roped off	
13.	Are all passageways roped off below open hatches	
14.	Is a helideck fitted and if so is it to be used on this contract	
15.	Are there qualified/experienced people available	
16.	Are walking surfaces non-slip, with trip and overhead hazards clearly marked	
17.	Do wiring and electrical circuits conform to safe practice	
18.	Are there signs for 'man aloft' in respect of radar	
19.	Is equipment stored on deck well lashed	
20.	Are there special hazardous materials storage areas and clearly marked	

H.2 Rescue Craft and Work Boats

Item	Question	\checkmark
1.	Is there a recovery craft (FRC) and work boat	
2.	Is the FRC fitted with two engines	
3.	Is there an emergency kit ready for rapid use	
4.	Do the designated teams practise	
5.	Is the FRC regularly started and ready to go	
6.	Are there written procedures for all small boat operations	
7.	Are communications with rescue and work boats adequate	
8.	Is the work boat supported by another craft/vessel when working	

H.3 Accommodation

Item	Question	\checkmark
1.	Are emergency instructions posted in all cabins/all languages	
2.	Are ashtrays available	
3.	Are there smoke detectors	
4.	Are there lifejackets for each bunk	
5.	Are there Immersion Suits in each cabin	
6.	Are General Arrangement and Fire Plans posted	
7.	Are escape routes clearly marked	

H.4 Galley/Food Stores

Item	Question	\checkmark
1.	Is there a First Aid kit, fire blanket and extinguisher	
2.	Do staff have medical checks	
3.	Is the galley, associated stores and mess areas kept clean	
4.	Are there any notable hazards (shelving, flooring, etc)	
5.	Do fridges/coolers have safety locks/shut in alarms	
6.	Do fridges/Freezers have thermometers; are temperatures correct	
7.	Are staff aware of contamination and cross-contamination hazards	
8.	Are foodstuffs in-date	

H.5 Engine Room

Item	Question	\checkmark
1.	Is there a planned maintenance system for all machinery and list of spares	
2.	Are ear defenders available and worn	
3.	Are there emergency alarm panels	
4.	Are there two exists clearly marked	
5.	Is there a smoke/fire detector linked to the main panel on the Bridge	
6.	Are walking surfaces non-slip and trip hazards clearly marked	
7.	Is all machinery safely guarded	
8.	Is there a 'lone worker' system	
9.	Is all garbage properly contained in non-combustible containers with lids	
10.	Are flammable substances under control	
11.	Is proper solvent available for parts washing	
12.	Are emergency shut-offs for fuel and ventilators clearly marked	
13.	Is there routine maintenance and testing of emergency fire pump and generator	
14.	Is the Chief Engineer aware of any defects in main or standby machinery alarms, control or detection systems	

Item	Question	\checkmark
15.	Are bilges clean and clear of debris	
16.	Are there Emergency Escape Breathing Devices (EEBD) available	

H.6 Compressor Room (if fitted)

Item	Question	\checkmark
1.	Are ear defenders available and worn	
2.	Are there emergency alarm beacons	
3.	Are there two exits clearly marked	
4.	Is there a smoke/fire detector linked to the main panel on the Bridge	
5.	Are walking surfaces non-slip and trip hazards clearly marked	
6.	Is all machinery safely guarded	
7.	Are all high pressure air hoses safely secured	
8.	Is there a 'lone worker' system	
9.	Are flammable substances under control	
10.	Is proper solvent available for parts washing	

H.7 Workshops and Storage Areas

Item	Question	\checkmark
1.	Are flammable substances under control	
2.	Is the correct protective clothing and equipment available	
3.	Is the space tidy	
4.	Are all chemicals properly packed, labelled, with data sheets	
5.	Are compressed gas bottles correctly stowed and marked	
6.	Do battery storage areas have protective equipment and procedures and precautions displayed	
7.	Are there correct extinguishers for lithium batteries	
8.	Do all bench and portable machines have suitable guards and safety locks	

H.8 Other Machinery Spaces (Winchrooms etc.)

Item	Question	\checkmark
1.	Are flammable substances under control	
2.	Is the correct protective clothing and equipment available	
3.	Are ear defenders available and worn	
4.	Is there a planned maintenance system for all machinery and list of spares	
5.	Is the space tidy	
6.	Are there emergency alarm panels	
7.	Are there two exists clearly marked	
8.	Is there a smoke/fire detector linked to the main panel on the Bridge	
9.	Are walking surfaces non-slip and trip hazards clearly marked	
10.	Is all machinery safely guarded	
11.	Is there a 'lone worker' system	
12.	Is all garbage properly contained in con-combustible containers with lids	
13.	Are flammable substances under control	
14.	Are there emergency shut-offs for machinery and do these work	
15.	Is the Chief Engineer aware of any defects in the main or standby machinery, alarms, control or detection systems	
16.	Are bilges clean and clear of debris	
17.	Are there EEBD's available	

I. EMERGENCY RESPONSE CAPABILITIES

I.1 Ship's Safety Equipment and Procedures

Item	Question	\checkmark
1.	Are drills held regularly (minimum twice per month)	
	Dates of last:	
	• boat drill	
2.	• fire drill	
	• man overboard drill	
	• medevac drill	
3.	Are there hydrostatically released liferafts (total 200%) on both sides	
4.	Are there lifejackets (200% cover)	
5.	Are there survival suits (100% cover)	
6.	Are there adequate lifebuoys with lines, lights and smoke/light floats	
7.	Is there a "man overboard" liferaft	
8.	Are there flares and line-throwing apparatus, and in date	
9.	Are there emergency rations kept ready, in date	

Item	Question	\checkmark
10.	Is there a planned maintenance system for life saving appliances	
11.	For preference is there one rigid hull lifeboat on each side	
12.	Are escape hatches and safety equipment clearly marked and clear of obstructions	
13.	Are passageways and exists kept clear	
14.	Do they have reflective exit signs (eye/floor level)	
15.	Is general and emergency lighting adequate all over the vessel	

I.2 Fire Precautions/Fighting

Item	Question	\checkmark
1.	Are all areas covered by a smoke/fire detector system	
2.	Are all detectors linked to a central control	
3.	Can general and fire alarms be heard in all areas of the vessel	
4.	Are fire extinguishers of suitable type seen all over the ship	
5.	Are there fixed systems for the cable reel(s) and cable store	
6.	Are fixed foam outlets tested monthly	
7.	Are there fixed systems for the engine room	
8.	Are there fixed systems for the compressor room	
9.	Are there fixed systems for other machinery spaces	
10.	Are controls for extinguishing systems remote from danger areas	
11.	Are all hydrants and hoses pressure tested (every 3 months)	
12.	Are fire hoses sufficient to reach all parts of the ship	
13.	Have fire extinguishers been professionally inspected within the last 12 months	
14.	Have fixed systems been professionally inspected within the last 12 months	
15.	Are there written records of inspections	
16.	Is training for emergency response adequate	
17.	Are fireman's suits available with breathing apparatus	
18.	Is knowledge of the ship's fire fighting system taught to all	
19.	Are fire equipment and fire flaps clearly marked, operable and unobstructed	

I.3 Medical & Health

Item	Question	\checkmark
1.	Do all members of the crew have current medical fitness certificates	
2.	Are appropriate inoculations and prophylaxis in force	
3.	Are certificates for inoculations available	
4.	Are ship's medical kits in date and suitable for the area	
5.	Are eyewash stations in date	
6.	Is there a Paramedic or Advanced First Aider	

Item	Question	\checkmark
7.	Is there a list showing location of First Aid kits	
8.	Is there a list of certified First Aiders	
9.	Is there a stretcher on board	
10.	Is there a medevac procedure for the area, posted up	
11.	Are all prescription drugs locked up	
12.	Has freshwater been analysed	
13.	Are fresh water tanks cleaned regularly	
14.	Is a record kept of all treatments provided	
15.	Has a noise level survey been conducted and results published	
16.	Is there a smoking policy and areas designated	
17.	Is the air quality and conditioning to an acceptable standard	

J. GENERAL SHIP MANAGEMENT

J.1 Environment Protection

Item	Question	\checkmark
1.	Are placards displayed regarding the correct disposal of garbage	
2.	Do the above placards define "special areas"	
3.	Is there a Garbage Management Plan	
4.	Is there a Garbage Record Book	
5.	Does the contractor operate a waste minimisation plan	
6.	Is there a Shipboard Oil Pollution Emergency Plan (SOPEP)	
7.	Is there a designated spill response team and drills carried out; date of last:	
8.	Is there a spill response equipment and in a clearly marked location	
9.	Is there an IMO approved incinerator and/or compacter	
10.	Are garbage skips provided and covered against accidental discharge	
11.	Is waste properly segregated	
12.	Does the contractor/ship operator monitor the adequacy of port garbage reception facilities	
13.	Do bunker vents and filling pipes have spill trays	
14.	Are bunkering procedure notices displayed	
15.	Is there an oily water separator or oil filtering equipment	
16.	Is there an Oil Record book (last entry and date:-)	
17.	Is there a receipt for waste oil discharged to shore or barge	
18.	What is the capacity of the dirty oil tank:-	
19.	When was it last pumped ashore:-	
20.	Are any special procedures applied to this operation (e.g. cetacean watch, pressure group interference)	

J.2 Stability and Construction

Item	Question	\checkmark
1.	Is there stability data available/posted	
2.	Has it been updated/approved since any major structural change	
3.	Are there any restrictions imposed	
4.	Has there been any structural damage in the last 12 months (e.g. grounding, collision, heavy weather, cracks, buckling, leaks, etc).	
5.	What action has been taken in respect of this	
6.	Are designated watertight doors closed at sea	

J.3 Navigation and Instruments

Item	Question		
1.	Are all statutory navigation instruments and equipment on board and in working order		
2.	Is chart coverage adequate for presen	nt employment	
3.	Are charts correct and up to date		
4.	Is there a regular supply of chart cor	rections	
5.	Is there a Navtex receiver		
	Are all statutory publications on board and up-to-date:		
	Tide tables	Tidal Stream Atlases	
6	ANM (1-22)	Almanac	
0.	List of Lights	List of Radio Signals	
	Pilot Books	Supplements	
	International Code of Signals	Mariners' Handbook	
7.	Is SOLAS Card No 2 posted		
8.	Are instructions for change-over to e	emergency steering posted	
9.	Are emergency steering drills conducted, date of last:		
10.	Are lights and shapes correct for present employment		
11.	Are log book entries adequate		
12.	Is there a constant radio watch at sea (Ch 16, 2182 KHz)		
13.	Is the vessel fitted with an EPIRBs and SARTs		

J.4 Ship's Certificates

Item	Question	Issued	Expiry	Latest
1.	List of Certificates			
	Certificate of Registry or Navigation			
	International Load Line			
	Cargo Ship Safety Construction			

Item	n Question Issued Expiry				
	Cargo Ship Safety Equipment				
	Cargo Ship Safety Radio				
	Ship's Radio License				
	Certificate of Shore Maintenance (GMDSS)				
	Classification of Machinery				
	Classification for Hull				
	Minimum Safe Manning				
	ISM Safety Management Certificate				
International Oil Pollution Prevention International Tonnage					
	Fire Equipment Inspection				
	Medical Stores Inspection				
	De-ratting Exemption				
	Liferafts				
	Helideck				
2.	Are there any outstanding items in respect of the ship	p's certificate	es		
3.	Were the originals of the certificates seen				
4.	Are the SOLAS certificates readily available on board				
5.	Is the vessel adequately manned (Check Officer's certificates against safe manning document)				
6.	Are there enough qualified crew to support the science (crane driving etc)				
7.	Complete the table below for crew certification.				

	Rank	Cert Nation	Class	Limitations	GMDSS	
Maste	er					
Ch Of	ff					
2^{nd} Ma	ate					
3 rd Ma	ate					
Ch Er	ıg					
2 nd En	ıg					
3 rd En	g					
Comments:						
8.	8. Does the ship owner check the validity of Certificates					

J.5 Equipment Certificates and Inspections

Item	Equipmont	Date of last		
	Equipment	Inspection	Test	
1.	Cranes and lifting equipment ¹			
2.	Seismic winches and lifting appliances ¹			
3.	Lifting strops and cables ¹			
4.	Air receivers ²			

Notes:

- 1. All lifting equipment should be visually inspected annually and load tested every five years.
- 2. Testing of air receivers should be specified by the manufacturer, but as a guide they should be visually inspected (internally) annually and hydrostatically tested every five years.

K. PHOTOGRAPHS