



RISK AWARENESS

PASSENGER CLAIMS:

PASSENGER SHIPS AND FERRIES – INJURY & ILLNESS

An aid to risk identification and loss reduction



UK P&I CLUB
IS MANAGED
BY **THOMAS
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DEFINITIONS

In this checklist, colour is used to denote the various elements in the risk awareness process

Threat

Something that if not controlled could cause a P&I incident

Consequence

The monetary cost to the Club/Member

Control

Something which reduces the possibility of a 'Threat' causing an incident

Something that should be in place after the incident to help reduce the cost of the claim

How effective do you think the Controls are on your ship – are there any accidents just waiting to happen?

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USING THIS CHECKLIST / SCORING

This booklet is a guide to the Controls and key points that the UK Club's Risk Assessors look for when inspecting a vessel.

It will allow you to carry out a similar check on the Threats and Controls and make sure the vessel has a good risk profile.

Each booklet in the *Risk Awareness* series deals with an area of Risk – Personal injury, collision, pollution, etc – and these are sub-divided into Threats and then Controls.

Each Threat is followed by a 'score' section where the individual Controls can be graded according to how effective they are:

- 1 Very good control**
- 2 Good control**
- 3 Average control**
- 4 Poor control**
- 5 Very poor control (maybe non-existent)**

Furthermore, there is space to make comments on certain Controls; to note ways in which deficient ones could be improved.

At the back, there is a section on Consequences, which is also divided into Controls that should be in place to mitigate the cost of any claim, i.e. after the event controls. These too can be graded.

Personal injury (general)

THREAT: MOORING

CONTROLS:

Vessel mooring equipment of appropriate standard for operations being undertaken

- Certification of winches and condition of mooring equipment in general
- Certification of ropes and wires, appropriate stoppers in use
- PMS regimes are in place for all mooring equipment including all ropes and wires, shackles and other items
- Look at condition of:
 - Wires
 - Mooring ropes
 - Tonsberg, mandal or other mooring shackles in use
 - Drum ends (painted or not)
 - Bitts
 - Fairleads and pedestal rollers
 - Winch marking, heave and slack directions
 - Winch brakes (are they tested annually, properly maintained, are brake drums free of scale and well maintained – not painted, etc?)
 - Are split mooring drums used correctly? Not more than one layer of rope on the tension drum (effective holding power of brake is reduced by 7% per extra layer of rope)

Mooring areas basic design factors

- Anti-slip paint
- Obstruction marking
- Snap-back zones defined
- Gratings in good condition around all walkways and winches, as appropriate
- Drip trays around all hydraulic winches as appropriate
- Sufficient lighting at night and in daylight as appropriate

Housekeeping standards maintained in all areas

- Housekeeping to immediately clean up spills
- Ropes to be properly coiled or flaked out to avoid trip hazards at all times
- Ropes to be protected/covered when not in use to avoid UV or soot damage

- Ropes should be stowed clear of steel decks and not adjacent to chemicals (use of wooden pallets etc)
- Maintain walkways free of obstructions and trip hazards (eg cables, hoses, disposal of icing on all outside areas as required)
- Keep all hoses and cables away from mooring areas as far as possible
- Keep all rubbish stowage clear of mooring area leads and winches, etc

Trade competency of personnel to perform required duties

- Do all personnel have required certification for the jobs they do, are these certificates valid?
- Training checks, HR and ship follow-up on joining, full familiarisation and training on board the vessel as required for tasks to be performed

Continuous on board training as required, carried out in all areas (ISM requirement)

- On job training to be carried out by supervisors and not workmates
- Continuation training by senior officers for junior ranks and on job supervision during training
- Some workmate intervention is allowed in training as well if appropriate
 - (Safety awareness for all can be enhanced if a 10 minute 'buddy overview' is used
 - A colleague watches what the worker is doing, makes notes on both the good and bad points and then critiques the on job safety, starting with the good points
 - Both persons can learn from this type of interaction and safety awareness promotion on board)
- Ongoing training and proper familiarisation of all officers and ratings on vessel type

To cover:

- Mooring/unmooring
- Ship to ship work

Sufficient personnel for required operation

- Are there adequate numbers of personnel available to cover all the required workload in safety
- Are experienced crew only used in mooring operations

Effective supervision by officer/supervisor during operation

- Are proper supervision levels defined and is the supervisor required to take part in operations

Communications established between all parties throughout operations

- Between all parties and bridge throughout operations, and is a back-up communications system provided should primary systems fail

Pre-mooring planning meeting held between bridge staff and mooring officers

- How are pre-mooring planning meetings conducted?
- Is the vessel mooring plan consulted before deciding the correct arrangement of lines?
- Are safety measures taken into account, including weather conditions expected, use of tugs, berth plan and pilots advice on mooring arrangement to be used
- Are officers in charge of mooring stations fully appraised of any special requirements?

Toolbox talks and work planning meetings

- Are these pre-work meetings held on board?
- They should include, as far as practical to do so, the following:
 - Risk assessment of operation to include the plan to be discussed and evaluated with the team members
 - Safety matters, to include:
 - Discuss the job plan overall
 - What is the job, and procedure to follow?
 - Who will do what?
 - Discuss the safety rules for the area of work to be done
 - What could go wrong?
 - What are the main hazards?
 - Assess the risks and how do you eliminate them?
 - Get all to participate to create ownership of safety in the job to be done, and full safety awareness
 - Ensure, as far as possible, all personnel understand the safety rules for the job to be done
 - Remind all of the STOP procedure if the job changes (ie weather hazards, additional ropes required, winch problems, minor and major accidents should occur)

SCORE

Threat: Mooring and unmooring operations

Vessel mooring equipment	
Mooring areas basic design factors	
Housekeeping standards maintained	
Trade competency	
Continuous on board training	
Sufficient personnel for operation	
Effective supervision	
Communications established	
Pre-mooring planning meeting	
Toolbox talks	

COMMENTS

THREAT: ENCLOSED SPACE ENTRY

CONTROLS:

Access control to areas during maintenance and operations

- Provide barriers around working area (where applicable) and minimise the number of personnel exposed in the area
- Rope off manholes to avoid personnel falling into open spaces or from heights generally

Forced ventilation prior to and during entry of the space continuous

- Space to be fully ventilated prior to any entry by personnel and continuously during entry period
- Check fans are in good order if possible

Enclosed space to be isolated from all other spaces

- Procedure in place to have tank or ballast tank valves closed and locked out/tagged out during entry
- All ventilation ducts to other compartments isolated, locked and tagged out as required

Atmosphere checks before and during entry period

- Tests for oxygen, hydrocarbon and toxic gases carried out prior to entry and at regular intervals during operations within the enclosed space, with sufficient sample tubing to reach lowest point of space being tested
- Are personal multi gas monitors used

Stand-by personnel assigned and SCBA, plus rescue equipment deployed

- At least one man with communications equipment to be posted at the entrance to the enclosed space being entered
- Equipment for entry
- Gas detection equipment
- Oxygen resuscitation equipment
- First aid equipment
- Stretcher
- SCBA unit(s)

Trade competency of personnel to perform required duties

- Do all personnel have required certification for the jobs they do, are these certificates valid?
- Training checks, HR and ship follow up on joining, full familiarisation and training on board the vessel as required for tasks to be performed

Continuous on board training as required carried out in all areas (ISM requirement)

- On job training to be carried out by supervisors and not workmates
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- Some workmate intervention is allowed in training as well if appropriate
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- Ongoing training and proper familiarisation of all officers and ratings on vessel type

To cover:

- Emergency situations in all areas of the vessel
- Enclosed space entry and emergencies in such spaces
- Safe cargo operations

Effective supervision by officer/supervisor during operation

- Are proper supervision levels defined and is the supervisor required to take part in operations?

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Toolbox talks and work planning meetings

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- Safety matters, to include:
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 - Who will do what?
 - Discuss the safety rules for the area of work to be done
- What could go wrong?
- What are the main hazards?
- Assess the risks and how do you eliminate them?
- Get all to participate to create ownership of safety in the job to be done and full safety awareness
- Ensure as far as possible all personnel understand the safety rules for the job to be done
- Remind all of the STOP procedure if the job changes (ie weather hazards, additional ropes required, winch problems, minor and major accidents should occur)

Permit to work including appropriate checklist completion prior to job commencement

- Permits to work including lock-out/tag-out procedures in place for maintenance
- Checklists completed as appropriate
- Job safety analysis or hazard analysis carried out as required
- Risk assessment made as required

SCORE

Threat: Enclosed space entry

Access control to areas during maintenance	
Forced ventilation	
Enclosed space isolated	
Atmosphere checks	
Stand-by personnel	
Trade competency of personnel	
Continuous on board training	
Effective supervision	
Communications established	
Toolbox talks	
Permit to work	

COMMENTS

THREAT: ROTATING MACHINERY

CONTROLS:

Appropriate tools and equipment properly maintained

- All required tools and other items required for maintenance to be carried out are compatible with the job and maintained in safe condition ie Old spanners, worn tools and items of lifting gear in poor condition are replaced
- All strops and loose gear are certificated and inspected prior to each use

Guards and/or physical separation provided around all rotating machinery

- Appropriate guards and rails around all machinery to prevent personnel falling into, and being injured or killed by, turning equipment, including perspex screens and tool rests correctly set up

Access control to areas during maintenance and operations

- Provide barriers around working area (where applicable) and minimise the number of personnel exposed in the area, and isolate equipment as required
- Rope off manholes to avoid personnel falling into open spaces or from heights generally

Inspection and planned maintenance

- Machinery and equipment in all areas is logged into an inspection and planned maintenance system on board
- Adequate for the task

Trade competency of personnel to perform required duties

- Do all personnel have required certification for the jobs they do, are these certificates valid?
- Training checks, HR and ship follow up on joining, full familiarisation and training on board the vessel as required for tasks to be performed

Continuous on board training as required carried out in all areas (ISM requirement)

- On job training to be carried out by supervisors and not workmates
- Continuation training by senior officers for junior ranks and on job supervision during training
- Some workmate intervention is allowed in training as well if appropriate

(Safety awareness for all can be enhanced if a 10 minute 'buddy overview' is used

A colleague watches what the worker is doing, makes notes on both the good and bad points and then critiques the on job safety starting with the good points

Both persons can learn from this type of interaction and safety awareness promotion on board)

- Ongoing training and proper familiarisation of all officers and ratings on vessel type

To cover:

- Mooring/unmooring
- Ship to ship work
- Work at height and overside
- Heavy weather working
- Rigging and lifting heavy loads
- Safe cargo operations

Effective supervision by officer/supervisor during operation

- Are proper supervision levels defined?

Toolbox talks and work planning meetings

- Are these pre-work meetings held on board?
- They should include, as far as practical to do so, the following:
 - Risk assessment of operation to include the plan to be discussed and evaluated with the team members
 - Safety matters, to include:
 - Discuss the job plan overall
 - What is the job, and procedure to follow?
 - Who will do what?

Discuss the safety rules for the area of work to be done

- What could go wrong?
- What are the main hazards?
- Assess the risks and how do you eliminate them?
- Get all to participate to create ownership of safety in the job to be done and full safety awareness
- Ensure as far as possible all personnel understand the safety rules for the job to be done
- Remind all of the STOP procedure if the job changes (ie weather hazards, additional ropes required, winch problems, minor and major accidents should occur)

SCORE

Threat: Rotating machinery

Tools and equipment properly maintained	
Guards/physical separation around machinery	
Access control	
Inspection and planned maintenance	
Trade competency of personnel	
Continuous on board training	
Effective supervision	
Toolbox talks	

COMMENTS

THREAT: SLIPS, TRIPS AND FALLS

CONTROLS:

Lighting standards adequate and maintained throughout vessel

- Lighting should be of appropriate safe design and give high levels of illumination in all areas of the vessel
- NB: light covers must be appropriate for the area of the ship
- Emergency lighting must be marked and properly designated
- Are battery powered lights designated or are all from the emergency generators as required
- On deck at night crew/passengers should be able to see without the use of torches in all areas for walking around generally
- In stores, workshops, interior working and living areas lighting should give almost daylight standards throughout to avoid dark areas, etc

Obstructions, trip and fall hazards on V/L clearly marked

- Walkways, ladders, machinery space gratings and plates of adequate construction, highlighted to avoid accidents
ie Tiger stripes or yellow markings, obstructions at head height marked as well as those at low level to avoid trips and head injuries
- Stairwells clearly marked and all steps and changes of height in passenger areas clearly visible
- Slippery floor areas clearly marked at all times in all areas of the vessel
- Cables, ropes, cleaning gear obstructions, etc across walkways for passenger and crew access are clearly marked
- Disabled access routes around the vessel clearly marked

Non-slip on all walkways, working areas and ladders

- Engine room has non-slip plates in all areas
- Gratings are non-slip, decks non-slip where possible
- All work areas on deck painted non-slip
- All gratings are properly secured
- Chequer plates have non-slip paint
- Stairwells are non-slip coated or clearly marked as not non-slip coated
- All changes of height in passenger areas are non-slip coated, disabled ramps included
- Restaurant floors are non-slip tiling or coating

- Pool areas are non-slip coated around the edges and on steps into pools
- Sun deck areas are non-slip coated

Access control to areas during maintenance and operations/cleaning

- Provide barriers around working area (where applicable) and minimise the number of personnel exposed in the area
- Rope off manholes to avoid personnel falling into open spaces or from heights generally
- Rope off areas in passenger accommodation where work is taking place and install clear signage to prevent passenger access to these areas

Housekeeping standards maintained in all areas

- Housekeeping to immediately clean up spills
- Ropes to be properly coiled or flaked out to avoid trip hazards at all times
- Maintain walkways free of obstructions and trip hazards (eg cables, hoses, disposal of icing on all outside areas as required)
- Keep all hoses and cables away from roped off areas as far as possible
- Workshops maintained in a safe and tidy condition, including cleanliness of machines
- Proper disposal of waste materials/garbage in metal bins to promote fire safety
- Inside galley, and storerooms in general, all items to be well secured
- Drains and flooring to be kept clean and free at all times
- Restaurant flooring to be kept free of spills and slippery areas at all times

Heavy weather operating procedures

- No working on deck permitted in heavy weather except in emergency situations
- Reduction of other activities in heavy weather - ie heavy lifting, heavy maintenance
- Reduction of galley activities as appropriate, cold food served in very severe weather for safety reasons
- Restrictions on galley working as required
- Access controls established for exposed areas on deck, use of lifelines, harness, life jackets to access areas well defined
- Restriction of dangerous activities for passengers in severe weather

Toolbox talks and work planning meetings

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 - What are the main hazards
 - Assess the risks and how do you eliminate them?
 - Get all to participate to create ownership of safety in the job to be done and full safety awareness
 - Ensure as far as possible all personnel understand the safety rules for the job to be done
 - Remind all of the STOP procedure if the job changes (ie weather hazards, additional ropes required, winch problems, minor and major accidents should occur)

Appropriate footwear on board

- Is appropriate footwear standard established for passengers as well as crew?

SCORE

Threat: Slips, trips and falls

Lighting standards adequate	
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Obstructions on V/L clearly marked	
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Non-slip on all walkways, working areas and ladders	
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Access control	
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Housekeeping standards maintained	
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Heavy weather operating procedures	
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Toolbox talks	
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Appropriate footwear on board	
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COMMENTS

THREAT: WORKING WITH PORTABLE POWER TOOLS

CONTROLS:

Equipment specs – pneumatic power or domestic voltage on board limit

- Is voltage suitable for equipment in use
- Is working pressure suitable for pneumatic equipment in use

Inspection and planned maintenance

- Machinery and equipment in all areas is logged into an inspection and planned maintenance system on board
- Adequate for the task
- Appropriate safety guards fitted

Trade competency of personnel to perform required duties

- Do all personnel have required certification for the jobs they do, are these certificates valid?
- Training checks, HR and ship follow up on joining, full familiarisation and training on board the vessel as required for tasks to be performed

Continuous on board training as required carried out in all areas (ISM requirement)

- On job training to be carried out by supervisors and not workmates
- Continuation training by senior officers for junior ranks and on job supervision during training
- Some workmate intervention is allowed in training as well if appropriate
 - (Safety awareness for all can be enhanced if a 10 minute 'buddy overview' is used
 - A colleague watches what the worker is doing, makes notes on both the good and bad points and then critiques the on job safety starting with the good points
 - Both persons can learn from this type of interaction and safety awareness promotion on board)
- Ongoing training and proper familiarisation of all officers and ratings on vessel type

Toolbox talks and work planning meetings

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- Remind all of the STOP procedure if the job changes (ie weather hazards, additional ropes required, winch problems, minor and major accidents should occur)

SCORE

Threat: Working with portable power tools

Equipment specs	
Inspection and planned maintenance	
Trade competency of personnel	
Continuous on board training	
Toolbox talks	

COMMENTS

THREAT:

WORKING WITH CHEMICALS/ PAINTS/CARGO (LIQUID)

CONTROLS:

MSDS sheets located as required

- MSDS (marine safety data sheets) for all hazardous substances should be located in a file close to the substance storage position
- Referenced by all personnel when using these substances
- Cargo MSDS sheets located on notice boards for all hazardous cargoes for crew reference (supplied by shippers)
- MSDS should be in the operational language of the vessel, especially if English is not the first language of the crew (ie Russian, Chinese, Japanese, Korean, etc)

Eyewash and first aid equipment located at chemical store

- Possibly an emergency shower and permanent eyewash unit located at storage, or eyewash bottles

Housekeeping standards maintained in all areas

- Housekeeping to immediately clean up spills
- Maintain walkways free of obstructions and trip hazards (eg cables, hoses, disposal of icing on all outside areas as required)
- Inside galley, and store rooms in general, all items to be well secured and areas to be free of general clutter, allowing safe access to all equipment
- Workshops maintained in a safe and tidy condition, including cleanliness of machines
- Proper disposal of waste materials/garbage in metal bins to promote fire safety
- Where possible bins to have proper lids and garbage to be segregated for eventual disposal ashore
- Switches and explosion-proof lighting in good order

Trade competency of personnel to perform required duties

- Do all personnel have required certification for the jobs they do, are these certificates valid?
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Continuous on board training as required carried out in all areas (ISM requirement)

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Toolbox talks and work planning meetings

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 - Ensure as far as possible all personnel understand the safety rules for the job to be done
 - Remind all of the STOP procedure if the job changes (ie weather hazards, additional ropes required, winch problems, minor and major accidents should occur)

SCORE

Threat: Working with chemicals/paints/cargo

MSDS sheets located as required	
Eyewash and first aid equipment	
Housekeeping standards maintained	
Trade competency of personnel	
Continuous on board training	
Toolbox talks	

COMMENTS

THREAT: WORKING OVERSIDE OR AT HEIGHTS >2m

CONTROLS:

Minimum equipment standards established

- Required equipment for safe operations is defined in the ISM SMS and also PTW systems on board in all areas of work
- Required equipment is of adequate standards to carry out the task, spare equipment is maintained on board to ensure that poor equipment can be taken out of service as required
ie
 - Pilot ladders
 - Gangways
 - Portable ladders
 - Safety lines
 - Harnesses
 - Fall arrest equipment
 - Life jackets etc
- Equipment should be correctly rigged

Inspection and planned maintenance

- Machinery and equipment in all areas is logged into an inspection and planned maintenance system on board
- Adequate for the task
- Regular inspections of all equipment used and all machinery are carried out and regular maintenance performed. Equipment in poor condition is removed from service and replaced as soon as possible for safety
- All personnel are instructed to inspect all equipment prior to use and to replace any worn or dangerous tools, PPE, other equipment prior to commencing operations

Trade competency of personnel to perform required duties

- Do all personnel have required certification for the jobs they do, are these certificates valid?
- Training checks, HR and ship follow up on joining, full familiarisation and training on board the vessel as required for tasks to be performed

Continuous on board training as required carried out in all areas (ISM requirement)

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 - Both persons can learn from this type of interaction and safety awareness promotion on board)
- Ongoing training and proper familiarisation of all officers and ratings on vessel type

To cover:

 - Work at height and overside
 - Heavy weather working
 - Emergency situations in all areas of the vessel
 - Working with chemicals and paints (hazardous substances)
 - Enclosed space entry and emergencies in such spaces
 - Rigging and lifting heavy loads
 - Safe cargo operations

Effective supervision by officer/supervisor during operation

- Are proper supervision levels defined and is the supervisor required to take part in operations

Permit to work including appropriate checklist completion prior to job commencement

- Permits to work including lock-out/tag-out procedures in place for maintenance
- Checklists completed as appropriate
- Job safety analysis or hazard analysis carried out as required
- Risk assessment made as required

Toolbox talks and work planning meetings

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 - Risk assessment of operation to include the plan to be discussed and evaluated with the team members
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 - Who will do what?
 - Discuss the safety rules for the area of work to be done
 - What could go wrong?
 - What are the main hazards?

- Assess the risks and how do you eliminate them?
- Get all to participate to create ownership of safety in the job to be done and full safety awareness
- Ensure as far as possible all personnel understand the safety rules for the job to be done
- Remind all of the STOP procedure if the job changes (ie weather hazards, additional ropes required, winch problems, minor and major accidents should occur)

SCORE

Threat: Working overside or at heights >2m

Minimum equipment standards established	
Inspection and planned maintenance	
Trade competency of personnel	
Continuous on board training	
Effective supervision	
Toolbox talks	

COMMENTS

THREAT: WORKING WITH ELECTRICAL SYSTEMS

CONTROLS:

Appropriate tools and equipment properly maintained

- All required tools and other items required for maintenance to be carried out are compatible with the job and maintained in safe condition
ie, old spanners, worn tools and items of lifting gear in poor condition are replaced
- All strops and loose gear are certificated and inspected prior to each use
- Insulating mats in place

Up-to-date electrical drawings, system manuals, manufacturer's guideline available

- All drawings for electrical installations should be updated to the latest standards in use.
- Any retrofits should be included in the drawings and out-of-date drawings should be removed from service whenever possible

Policy for working on live and/or HV equipment

- A policy should be in place defining when and how any working on live equipment is allowed and controls required

Trade competency of personnel to perform required duties

- Do all personnel have required certification for the jobs they do, are these certificates valid?
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Continuous on board training as required carried out in all areas (ISM requirement)

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- Are these pre-work meetings held on board?
- They should include, as far as practical to do so, the following:
 - Risk assessment of operation to include the plan to be discussed and evaluated with the team members
 - Safety matters, to include:
 - Discuss the job plan overall
 - What is the job, and procedure to follow?
 - Who will do what?
 - Discuss the safety rules for the area of work to be done
 - What could go wrong?
 - What are the main hazards?
 - Assess the risks and how do you eliminate them?
 - Get all to participate to create ownership of safety in the job to be done and full safety awareness
 - Ensure as far as possible all personnel understand the safety rules for the job to be done
 - Remind all of the STOP procedure if the job changes (ie weather hazards, additional ropes required, winch problems, minor and major accidents should occur)

SCORE

Threat: Working with electrical systems

Tools and equipment properly maintained	
Up-to-date drawings, manuals and guidelines	
Policy for working on live and/or HV equipment	
Trade competency of personnel	
Continuous on board training	
Permit to work	
Toolbox talks	

COMMENTS

THREAT: HOT WORK – GENERAL

CONTROLS:

Screened areas provided inside engine room workshop

- Yes/No?

Inspection and planned maintenance

- Machinery and equipment in all areas is logged into an inspection and planned maintenance system on board
- Flashback arrestors fitted to O₂/Acetylene cylinders as appropriate and in workshop outlets
- Adequate for the task

Hot work outside engine room subject to specific approval

- Procedure in place for authorisation of burning, cutting and welding outside the engine room workshop area of the vessel

All adjacent areas checked for combustible materials and found safe

- Item should be contained in the checklist and permit to work system
- Checks must be physically made

Fire watch in place for all hot work

- Item should be contained in the checklist and permit to work system

Trade competency of personnel to perform required duties

- Do all personnel have required certification for the jobs they do, are these certificates valid?
- Training checks, HR and ship follow up on joining, full familiarisation and training on board the vessel as required for tasks to be performed

Permit to work including appropriate checklist completion prior to job commencement

- Permits to work including lock-out/tag-out procedures in place for maintenance
- Checklists completed as appropriate
- Job safety analysis or hazard analysis carried out as required
- Risk assessment made as required

Toolbox talks and work planning meetings

- Are these pre-work meetings held on board?
- They should include, as far as practical to do so, the following:
 - Risk assessment of operation to include the plan to be discussed and evaluated with the team members
 - Safety matters, to include:
 - Discuss the job plan overall
 - What is the job, and procedure to follow?
 - Who will do what?
 - Discuss the safety rules for the area of work to be done
 - What could go wrong?
 - What are the main hazards?
 - Assess the risks and how do you eliminate them?
 - Get all to participate to create ownership of safety in the job to be done and full safety awareness
 - Ensure as far as possible all personnel understand the safety rules for the job to be done
 - Remind all of the STOP procedure if the job changes (ie weather hazards, additional ropes required, winch problems, minor and major accidents should occur)

SCORE

Threat: Hot work – general

Screened areas provided	
Inspection and planned maintenance	
Hot work outside engine room subject to approval	
Adjacent areas checked for combustible materials	
Fire watch in place	
Trade competency of personnel	
Permit to work	
Toolbox talks	

COMMENTS

THREAT: GALLEY ACTIVITIES

CONTROLS:

Galley equipment standards

- Stove rails, layout, height, food segregation facilities, storage arrangements, mixer/peeler guards, etc

Galley general standards

- Non-slip flooring, drainage, ventilation, lighting, hand wash sinks, ergonomic layout

Inspection and planned maintenance

- Machinery and equipment in all areas is logged into an inspection and planned maintenance system on board
- Adequate for the task

Housekeeping standards maintained in all areas

- Housekeeping to immediately clean up spills
- Maintain walkways free of obstructions and trip hazards (eg cables, hoses, disposal of icing on all outside areas as required)
- Inside galley, and store rooms in general, all items to be well secured and areas to be free of general clutter, allowing safe access to all equipment
- Drains and flooring to be kept clean and free at all times
- Sinks and basins to be hygienic and clean
- Galley maintained in a safe and tidy condition, including cleanliness of machines
- Proper disposal of waste materials/garbage in metal bins to promote fire safety
- Where possible bins to have proper lids and garbage to be segregated for eventual disposal ashore
- Extractor fan filters to be kept clean

Food preparation and handling procedures

- Colour-coded nylon chopping boards
- High temperature cleaning of all chopping boards daily
- Refrigeration temperature and cleanliness monitoring – food storage
- Dry stores cleanliness and condition
- Infestations – weevils and other insects
- Galley overall cleanliness
- Dish washing procedures – high temperature dishwasher provided
- Can opener cleanliness – daily cleaning

- Daily cleaning of all sinks and food preparation pot/pans/friers/frying pans/stove tops, etc
- Hygiene procedures for food handling – hand washing, coloured bandages and plasters in first aid kits, smoking regulations in galley, etc

Heavy weather operating procedures

- Restrictions on galley working as required

Trade competency of personnel to perform required duties

- Do all personnel have required certification for the jobs they do, are these certificates valid?
- Training checks, HR and ship follow up on joining, full familiarisation and training on board the vessel as required for tasks to be performed

Continuous on board training as required carried out in all areas (ISM requirement)

- On job training to be carried out by supervisors and not workmates
- Continuation training by senior officers for junior ranks and on job supervision during training
- Some workmate intervention is allowed in training as well if appropriate
 - (Safety awareness for all can be enhanced if a 10 minute 'buddy overview' is used
 - A colleague watches what the worker is doing, makes notes on both the good and bad points and then critiques the on job safety starting with the good points
 - Both persons can learn from this type of interaction and safety awareness promotion on board)
- Ongoing training and proper familiarisation of all officers and ratings on vessel type

Regular inspection of food storage/handling spaces/galley/work practices/hygiene standards

- Master's/Food and beverage manager's weekly inspections carried out?

SCORE

Threat: Galley activities

Galley equipment standards	
Galley general standards	
Inspection and planned maintenance	
Housekeeping standards maintained	
Food preparation and handling procedures	
Heavyweather operating procedures	
Trade competency of personnel	
Continuous on board training	
Regular inspections	

COMMENTS

THREAT: STEAM AND HOT LIQUID SYSTEMS – SCALDING

CONTROLS:

All safety relief valves vent away from manned spaces, or are piped to safe venting

Shielding of flanges and proper insulation of all pipework throughout the vessel

Boilers and pressure vessels de-pressurised prior to opening for maintenance

- Procedure to de-pressurise all pressure vessels prior to any maintenance work for safety of crew

Inspection and planned maintenance

- Machinery and equipment in all areas is logged into an inspection and planned maintenance system on board
- Adequate for the task

Trade competency of personnel to perform required duties

- Do all personnel have required certification for the jobs they do, are these certificates valid?
- Training checks, HR and ship follow up on joining, full familiarisation and training on board the vessel as required for tasks to be performed

Toolbox talks and work planning meetings

- Are these pre-work meetings held on board?
- They should include, as far as practical to do so, the following:
 - Risk assessment of operation to include the plan to be discussed and evaluated with the team members
 - Safety matters, to include:
 - Discuss the job plan overall
 - What is the job, and procedure to follow?
 - Who will do what?
 - Discuss the safety rules for the area of work to be done
 - What could go wrong?
 - What are the main hazards?
 - Assess the risks and how do you eliminate them?
 - Get all to participate to create ownership of safety in the job to be done and full safety awareness

- Ensure as far as possible all personnel understand the safety rules for the job to be done
- Remind all of the STOP procedure if the job changes (ie weather hazards, additional ropes required, winch

SCORE

Threat: Steam and hot liquid systems – scalding

Safety relief valves vent away or safely vented	
Flanges shielded and pipework insulated	
Boilers and pressure vessels de-pressurised	
Inspection and planned maintenance	
Trade competency of personnel	
Toolbox talks	

COMMENTS

THREAT: HOT AND COLD SURFACES

CONTROLS:

Continuous on board training as required carried out in all areas (ISM requirement)

- On job training to be carried out by supervisors and not workmates
- Continuation training by senior officers for junior ranks and on job supervision during training
- Some workmate intervention is allowed in training as well if appropriate
 - (Safety awareness for all can be enhanced if a 10 minute 'buddy overview' is used
 - A colleague watches what the worker is doing, makes notes on both the good and bad points and then critiques the on job safety starting with the good points
 - Both persons can learn from this type of interaction and safety awareness promotion on board)
- Ongoing training and proper familiarisation of all officers and ratings on vessel type

All required equipment insulated with guards/ cages around hot and cold surfaces

All safety relief valves vent away from manned spaces, or are piped to safe venting

SCORE

Threat: Hot and cold surfaces

Continuous on board training	
Equipment/surfaces insulated with guards/cages	
Safety relief valves vent away or safely vented	

COMMENTS

THREAT: LIFTING/MOVING/ HANDLING HEAVY EQUIPMENT

CONTROLS:

Availability of specialised lifting equipment

- Mobile cranes, hoists, trolleys, chain blocks, blocks and tackles, strops, etc
- All certificated and in good condition
- No 'home made' lifting devices in use on board
- Are back protection belts available/used

Inspection and planned maintenance

- Machinery and equipment in all areas is logged into an inspection and planned maintenance system on board
- Adequate for the task

Trade competency of personnel to perform required duties

- Do all personnel have required certification for the jobs they do, are these certificates valid?
- Training checks, HR and ship follow up on joining, full familiarisation and training on board the vessel as required for tasks to be performed

Continuous on board training as required carried out in all areas (ISM requirement)

- On job training to be carried out by supervisors and not workmates
- Continuation training by senior officers for junior ranks and on job supervision during training
- Some workmate intervention is allowed in training as well if appropriate
 - (Safety awareness for all can be enhanced if a 10 minute 'buddy overview' is used
 - A colleague watches what the worker is doing, makes notes on both the good and bad points and then critiques the on job safety starting with the good points
 - Both persons can learn from this type of interaction and safety awareness promotion on board)
- Ongoing training and proper familiarisation of all officers and ratings on vessel type
 - To cover:
 - Heavy weather working
 - Rigging and lifting heavy loads

Sufficient personnel for required operation

- Are there adequate numbers of personnel available to cover all the required workload in safety?

Communications established between all parties throughout operations

- Restrictions on galley working as required

Trade competency of personnel to perform required duties

- Between all parties and OOW throughout operations, back-up system provided should primary systems fail

Toolbox talks and work planning meetings

- Are these pre-work meetings held on board?
- They should include, as far as practical to do so, the following:
 - Risk assessment of operation to include the plan to be discussed and evaluated with the team members
 - Safety matters, to include:
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 - Discuss the safety rules for the area of work to be done
 - What could go wrong?
 - What are the main hazards?
 - Assess the risks and how do you eliminate them?
 - Get all to participate to create ownership of safety in the job to be done and full safety awareness
 - Ensure as far as possible all personnel understand the safety rules for the job to be done
 - Remind all of the STOP procedure if the job changes (ie weather hazards, additional ropes required, winch problems, minor and major accidents should occur)

SCORE

Threat: Lifting/Moving/Handling heavy equipment

Availability of lifting equipment	
Inspection and planned maintenance	
Trade competency of personnel	
Continuous on board training	
Sufficient personnel for operation	
Communications established between all parties	
Toolbox talks	

COMMENTS

THREAT: HEAVY WEATHER

CONTROLS:

Safe access to essential areas established

- Safe access to the bow arrangements, underdeck passageways if provided, etc
- Lifelines and harnesses available for personnel use in heavy weather
- Inflatable life jackets/work vests available

Communications established between all parties throughout operations

- Between all parties and OOW throughout operations, and is a back-up communications system provided should primary systems fail

Continuous on board training as required carried out in all areas (ISM requirement)

- On job training to be carried out by supervisors and not workmates
- Continuation training by senior officers for junior ranks and on job supervision during training
- Some workmate intervention is allowed in training as well if appropriate
 - (Safety awareness for all can be enhanced if a 10 minute 'buddy overview' is used
 - A colleague watches what the worker is doing, makes notes on both the good and bad points and then critiques the on job safety starting with the good points
 - Both persons can learn from this type of interaction and safety awareness promotion on board)
- Ongoing training and proper familiarisation of all officers and ratings on vessel type

To cover:

- Heavy weather working

Toolbox talks and work planning meetings

- Are these pre-work meetings held on board?
- They should include, as far as practical to do so, the following:
 - Risk assessment of operation to include the plan to be discussed and evaluated with the team members
 - Safety matters, to include:
 - Discuss the job plan overall
 - What is the job, and procedure to follow?
 - Who will do what?

- Discuss the safety rules for the area of work to be done
- What could go wrong?
- What are the main hazards?
- Assess the risks and how do you eliminate them?
- Get all to participate to create ownership of safety in the job to be done and full safety awareness
- Ensure as far as possible all personnel understand the safety rules for the job to be done
- Remind all of the STOP procedure if the job changes (ie weather hazards, additional ropes required, winch problems, minor and major accidents should occur)

Heavy weather operating procedures

- No working on deck permitted in heavy weather except in emergency situations
- Reduction of other activities in heavy weather - ie heavy lifting, heavy maintenance
- Reduction of galley activities as appropriate, cold food served in very severe weather for safety reasons
- Restrictions on galley working as required
- Access controls established for exposed areas on deck, use of lifelines, harness, life jackets to access areas well defined

Advice to passengers in heavy weather

Closure of dangerous areas and deck areas as appropriate in heavy weather

Stabiliser function – PMS system checks

Securing all equipment and passenger entertainment equipment

SCORE

Threat: Heavy weather

Safe access to essential areas	
Communications established between all parties	
Continuous on board training	
Heavy weather operating procedures	
Advice to passengers in heavy weather	
Closure of dangerous areas	
Stabiliser function – PMS system checks	
Securing equipment	

COMMENTS

THREAT: FIRE ON BOARD

CONTROLS:

Regular inspection (fire rounds)

- Are procedures in place for checking/testing/maintaining remote sensors?
- Are procedures in place for manual checking of areas, including fire doors?
- Defined checks, hourly and at the end of each watch
- UMS system checks made on a regular basis
- Dead man alarms in use where required for checks

Housekeeping standards maintained in all areas

- Housekeeping to immediately clean up all spills and leakages
- Inside galley and store rooms, flammable materials well stowed
- All waste bins in vessel of non-combustible material with tight fitting lids
- Workshops maintained in a safe and tidy condition to prevent spontaneous combustion possibilities
- All changing rooms to be tidy, all clothing in lockers provided and doors kept closed
- No clothing stored in alleyways, inside accommodation, or on handrails in machinery spaces
- Tumble dryers – filters should be cleaned after every use to avoid build up of lint (fluff) in filters, which prevents proper air flow and causes overheating in machines
- All fire doors closed or on proper automatic closing magnets activated from alarms
- All fire door self-closers and packing functioning correctly
- No obstruction of fire equipment on board

Fire detection system in place accommodation/engine room/stores and cargo holds

- Fire detection system in hold spaces, PMS included for this item, regularly tested and verified, log maintained

Smoking controls on board

- Designated smoking areas
- Are smoking controls effectively policed

Regular drills

- Are regular fire drills held for passengers and crew? Are responsibilities to rescue disabled passengers defined and practiced on board?

SCORE

Threat: Fire on board

Regular inspection (fire rounds)	
Housekeeping standards maintained	
Fire detection system in place	
Smoking controls	
Regular drills	

COMMENTS

THREAT: LIFEBOAT LAUNCHING

CONTROLS:

Guards and/or physical separation provided around all rotating machinery

- Appropriate guards and rails around all machinery to prevent personnel falling into and being injured or killed by turning equipment

Inspection and planned maintenance

- Machinery and equipment in all areas is logged into an inspection and planned maintenance system on board
- Rations and water adequate
- All lifeboat required equipment in good order and regularly inspected
- Lifeboat painters rigged correctly per LSA code requirements
- Proper testing of engines and charged batteries
- Inspection of air bottles for enclosed boats

Lifeboat release hooks tested and checked regularly

- Additional strop used when lowering under test for each hook
- On free fall boats safety pins engaged when hook release first tested
- Boat re-secured and only released when all personnel on board are properly strapped in to seats

Trade competency of personnel to perform required duties

- Do all personnel have required certification for the jobs they do, are these certificates valid?
- Training checks, HR and ship follow up on joining, full familiarisation and training on board the vessel as required for tasks to be performed

Continuous on board training as required carried out in all areas (ISM requirement)

- On job training to be carried out by supervisors and not workmates
- Continuation training by senior officers for junior ranks and on job supervision during training
- Some workmate intervention is allowed in training as well if appropriate
 - (Safety awareness for all can be enhanced if a 10 minute 'buddy overview' is used.

- A colleague watches what the worker is doing, makes notes on both the good and bad points and then critiques the on job safety starting with the good points.
- Both persons can learn from this type of interaction and safety awareness promotion on board)
- Ongoing training and proper familiarisation of all officers and ratings on vessel type

Effective supervision by officer/supervisor during operation

- Are proper supervision levels defined correctly as oversight of the operation for safety

Communications established between all parties throughout operations

- Between all parties and bridge throughout operations, back-up system provided should primary systems fail

Exercises conducted only in calm conditions

- Weather and sea state assessed before launching exercises carried out

Exercises conducted with minimum operational crew on the boat

Regular drills

- Are regular drills held for passengers and crew. Are responsibilities to rescue disabled passengers defined and practiced on board

SCORE

Threat: Lifeboat launching

Guards or separation around rotating machinery	
Inspection and planned maintenance	
Lifeboat release hooks tested and checked regularly	
Trade competency of personnel	
Continuous on board training	
Effective supervision	
Communications established between all parties	
Exercises conducted only in calm conditions	
Exercises with minimal operational crew on boat	
Regular drills	

COMMENTS

THREAT: MANUAL LIFTING/ MOVING/HANDLING

CONTROLS:

Trade competency of personnel to perform required duties

- Do all personnel have required certification for the jobs they do, are these certificates valid?
- Training checks, HR and ship follow up on joining, full familiarisation and training on board the vessel as required for tasks to be performed

Continuous on board training as required carried out in all areas (ISM requirement)

- On job training to be carried out by supervisors and not workmates
- Continuation training by senior officers for junior ranks and on job supervision during training
- Some workmate intervention is allowed in training as well if appropriate
 - (Safety awareness for all can be enhanced if a 10 minute 'buddy overview' is used.
 - A colleague watches what the worker is doing, makes notes on both the good and bad points and then critiques the on job safety starting with the good points.
 - Both persons can learn from this type of interaction and safety awareness promotion on board)
- Ongoing training and proper familiarisation of all officers and ratings on vessel type

To cover:

- Heavy weather working
- Rigging and lifting heavy loads
- HSE bending and handling training for waiters
- HSE bending and handling training for luggage porters
- HSE bending and handling training for general staff in other areas of the vessel

Sufficient personnel for required operation

- Are proper supervision levels defined correctly as oversight of the operation for safety

Communications established between all parties throughout operations

- Between all parties and bridge throughout operations, back-up system provided should primary systems fail

Toolbox talks and work planning meetings

- Are these pre-work meetings held on board?
- They should include, as far as practical to do so, the following:
 - Risk assessment of operation to include the plan to be discussed and evaluated with the team members
 - Safety matters, to include:
 - Discuss the job plan overall
 - What is the job, and procedure to follow?
 - Who will do what?
 - Discuss the safety rules for the area of work to be done
 - What could go wrong?
 - What are the main hazards?
 - Assess the risks and how do you eliminate them?
 - Get all to participate to create ownership of safety in the job to be done and full safety awareness
 - Ensure as far as possible all personnel understand the safety rules for the job to be done
 - Remind all of the STOP procedure if the job changes (ie weather hazards, additional ropes required, winch problems, minor and major accidents should occur)

Availability of specialised lifting equipment

- Mobile cranes, hoists, trolleys, chain blocks, blocks and tackles, strops, etc
- All certificated and in good condition
- No 'home made' lifting devices in use on board
- Are back protection belts available/used

SCORE

Threat: Manual lifting/Moving/Handling

Inspection and planned maintenance	
Trade competency of personnel	
Continuous on board training	
Sufficient personnel for operation	
Communications established between all parties	
Toolbox talks	
Availability of specialised lifting equipment	

COMMENTS

Personal injury (specific)

THREAT: RESTAURANTS HYGIENE/SAFETY

CONTROLS:

Self service areas procedures established

Housekeeping standards maintained in all areas

- Cleaning regimes established for all surfaces to prevent illness spreading
- Cleaning regimes established for floors to prevent slipping

Passenger hygiene procedures established in all areas

Passenger hand sanitisers provided

Food preparation and handling procedures

- Colour-coded nylon chopping boards
- High temperature cleaning of all chopping boards daily
- Refrigeration temperature and cleanliness monitoring – food storage
- Dry stores cleanliness and condition
- Infestations – weevils and other insects
- Galley overall cleanliness
- Dish washing procedures – high temperature dishwasher provided
- Can opener cleanliness – daily cleaning
- Daily cleaning of all sinks and food preparation pot/pans/friers/frying pans/stove tops, etc
- Hygiene procedures for food handling – hand washing, coloured bandages and plasters in first aid kits, smoking regulations in galley, etc

Norovirus procedures

- Are any extra precautions taken?

Trade competency of personnel to perform required duties

- Do all personnel have required certification for the jobs they do, are these certificates valid?

- Training checks, HR and ship follow-up on joining, full familiarisation and training on board the vessel as required for tasks to be performed

Continuous on board training as required, carried out in all areas (ISM requirement)

- On job training to be carried out by supervisors and not workmates
- Continuation training by senior officers for junior ranks and on job supervision during training
- Some workmate intervention is allowed in training as well if appropriate
 - (Safety awareness for all can be enhanced if a 10 minute 'buddy overview' is used
 - A colleague watches what the worker is doing, makes notes on both the good and bad points and then critiques the on job safety starting with the good points
 - Both persons can learn from this type of interaction and safety awareness promotion on board)
- Ongoing training and proper familiarisation of all officers and ratings on vessel type

Regular inspection of food storage/handling spaces/galley/work practices/hygiene standards

- Master's or food and beverage/senior manager's weekly inspections carried out

Washing up and cleaning procedures

Inspection and planned maintenance

- All machinery is under an inspection and planned maintenance system on board and is electrically as well as mechanically checked at regular intervals – floor cleaners/ vacuum cleaners etc

Trip hazard identification

- Trip hazards identified
- Clearly marked:
 - Different coloured carpets
 - Extra lighting, etc

Heavy weather operating procedures

- Restaurant equipment secured

SCORE

Threat: Restaurants hygiene/safety

Self service areas procedures established	
Housekeeping standards maintained	
Passenger hygiene procedures established	
Passenger hand sanitisers provided	
Food preparation and handling procedures	
Norovirus procedures	
Trade competency of personnel	
Continuous on board training	
Regular inspection of food storage/handling spaces/ galley/work practices/hygiene standards	
Washing up and cleaning procedures	
Inspection and planned maintenance	
Trip hazard identification	
Heavy weather operating procedures	

COMMENTS

THREAT: HOTEL HYGIENE/SAFETY

CONTROLS:

Housekeeping standards maintained in all areas

- Is there an effective regime in place for cleaning public areas – how often?
- Cleaning regimes established for all surfaces to prevent illness spreading
- Cleaning regimes established for floors to prevent slipping

Public toilet areas properly cleaned and hygiene standards established for pax and crew alike

- Is there a cleaning regime in place?

Norovirus procedures

- Are any extra precautions taken?

Trade competency of personnel to perform required duties

- Do all personnel have required certification for the jobs they do, are these certificates valid?
- Training checks, HR and ship follow-up on joining, full familiarisation and training on board the vessel as required for tasks to be performed

Continuous on board training as required, carried out in all areas (ISM requirement)

- On job training to be carried out by supervisors and not workmates
- Continuation training by senior officers for junior ranks and on job supervision during training
- Some workmate intervention is allowed in training as well if appropriate
 - (Safety awareness for all can be enhanced if a 10 minute 'buddy overview' is used
 - A colleague watches what the worker is doing, makes notes on both the good and bad points and then critiques the on job safety starting with the good points
 - Both persons can learn from this type of interaction and safety awareness promotion on board)
- Ongoing training and proper familiarisation of all officers and ratings on vessel type

Inspection and planned maintenance

- All machinery is under an inspection and planned maintenance system on board and is electrically as well as mechanically checked at regular intervals – floor cleaners/vacuum cleaners, etc
- Air conditioning regularly checked

Trip hazard identification

- Trip hazards identified
- Clearly marked:
 - Different coloured carpets
 - Extra lighting, etc

Heavy weather operating procedures

- Heavy equipment well secured:
 - Gym machines
 - Casino gambling machines

SCORE

Threat: Hotel hygiene/safety

Housekeeping standards maintained	
Public toilet areas properly cleaned	
Novovirus procedures	
Trade competency of personnel	
Continuous on board training	
Inspection and planned maintenance	
Trip hazard identification	
Heavy weather operating procedures	

COMMENTS

THREAT: LAUNDRY ACTIVITIES

CONTROLS:

Trade competency of personnel to perform required duties

- Do all personnel have required certification for the jobs they do, are these certificates valid?
- Training checks, HR and ship follow up on joining, full familiarisation and training on board the vessel as required for tasks to be performed

Continuous on board training as required, carried out in all areas (ISM requirement)

- On job training to be carried out by supervisors and not workmates
- Continuation training by senior officers for junior ranks and on job supervision during training
- Some workmate intervention is allowed in training as well if appropriate
 - (Safety awareness for all can be enhanced if a 10 minute 'buddy overview' is used
 - A colleague watches what the worker is doing, makes notes on both the good and bad points and then critiques the on job safety starting with the good points
 - Both persons can learn from this type of interaction and safety awareness promotion on board)
- Ongoing training and proper familiarisation of all officers and ratings on vessel type

Laundry machine safe operating procedures

- Master's or food and beverage/senior manager's weekly inspections carried out
- Drier safety
- Ironing machine safety

Fire awareness

- Spontaneous combustion awareness
- Drier filter checks
- Laundry machines checked daily
- Ironing machines checked, thermostats checked daily
- Part of fire round circuit

Regular inspection of laundries/handling spaces/work practices/hygiene standards

- Master's weekly inspections carried out

Inspection and planned maintenance

- All machinery is under an inspection and planned maintenance system on board and is electrically as well as mechanically checked at regular intervals

SCORE

Threat: Laundry activities

Trade competency of personnel	
Continuous on board training	
Laundry machine safe operating procedures	
Fire awareness	
Regular inspection of laundries etc	
Inspection and planned maintenance	

COMMENTS

THREAT: POOL AREA SAFETY

CONTROLS:

Pool safety notices in place

- Designated opening hours
- Designated under 12s accompanied by adults
- Designated rules for cleanliness to avoid transmission of disease
- Designated rules for diving and jumping into pools as appropriate

Heavy weather operating procedures

- Restrictions to swimming in heavy weather

Nets set up to cover empty pools

- Are nets tight enough to prevent passengers injuring themselves if they fall or dive into an empty pool?
- Is mesh small enough for this purpose?

Anti-slip surfaces

- Are they in place?
- Are they in the right areas?
- Are they in adequate condition?

Chlorination and filtration for hygiene carried out correctly

SCORE

Threat: Pool area safety

Pool safety notices in place	
Heavy weather operating procedures	
Nets set up to cover empty pools	
Anti-slip surfaces	
Chlorination and filtration carried out correctly	

COMMENTS

THREAT: GYMNASIUM SAFETY

CONTROLS:

Attendants in gym at all times

Operational safety notices in place

- Designated opening hours
- Designated under 12s accompanied by adults
- Designated rules for cleanliness to avoid transmission of disease
- Designated rules for equipment operation as appropriate
- Health rules for passengers undertaking activities as appropriate

Inspection and planned maintenance

- All mechanical and electrical gym equipment is under an inspection and planned maintenance system on board and is electrically as well as mechanically checked at regular intervals

Safety rules prominently displayed for passengers using gym

Heavy equipment secured

SCORE

Threat: Gymnasium safety

Attendants in gym at all times	
Operational safety notices in place	
Inspection and planned maintenance	
Safety rules prominently displayed	
Heavy equipment secured	

COMMENTS

THREAT: SPORTS ACTIVITIES

CONTROLS:

Safety equipment provision

Heavy weather operating procedures

Supervision

Safety rules prominently displayed for passengers

SCORE

Threat: Sports activities

Safety equipment provision	
Heavy weather operating procedures	
Supervision	
Safety rules prominently displayed	

COMMENTS

THREAT: LAUNCHES

CONTROLS:

Launch use procedures in place and comprehensive

- Procedures to cover:
 - Passengers in wheelchairs
 - Children
 - Elderly passengers

Effective supervision by officer/supervisor during operation

- Are proper supervision levels defined correctly as oversight of the operation for safety
- Are crew vetted when children are involved
- Are records kept of who is involved in operation, in case witnesses are required at a later date
- Are records kept of the operation itself including positive reporting

Trade competency of personnel to perform required duties

- Do all personnel have required certification for the jobs they do, are these certificates valid
- Training checks, HR and ship follow up on joining, full familiarisation and training on board the vessel as required for tasks to be performed

Continuous on board training as required, carried out in all areas (ISM requirement)

- On job training to be carried out by supervisors and not workmates
- Continuation training by senior officers for junior ranks and on job supervision during training
- Some workmate intervention is allowed in training as well if appropriate
 - (Safety awareness for all can be enhanced if a 10 minute 'buddy overview' is used
 - A colleague watches what the worker is doing, makes notes on both the good and bad points and then critiques the on job safety starting with the good points
 - Both persons can learn from this type of interaction and safety awareness promotion on board)
- Ongoing training and proper familiarisation of all officers and ratings on vessel type

Continuous on board training as required, carried out in all areas (ISM requirement)

- Between all parties and bridge throughout operations, and is a back-up communications system provided should primary systems fail

Transportation conducted only in calm conditions

- Weather and sea state assessed before launching carried out

Launch gangways and platforms inspection and maintenance

Boarding launches controlled by experienced crew

Sufficient personnel for required operation

- Are there adequate numbers of personnel available to cover all the required workload in safety

SCORE

Threat: Launches

Launch use procedures in place	
Effective supervision during operation	
Trade competency of personnel	
Continuous on board training	
Communications established between all parties	
Transportation only in calm conditions	
Gangways and platforms inspection/maintenance	
Boarding launches controlled by experienced crew	
Sufficient personnel for required operation	

COMMENTS

THREAT: SHORE EXCURSIONS

CONTROLS:

Excursion providers regularly vetted

Transport providers for shore excursions regularly vetted

All-inclusive excursion providers regularly vetted

SCORE

Threat: Shore excursions

Excursion providers regularly vetted	Yellow
Transport providers regularly vetted	Yellow
All-inclusive excursion providers regularly vetted	Yellow

COMMENTS

THREAT: GARBAGE ACTIVITIES

CONTROLS:

Inspection and planned maintenance

- All machinery is under an inspection and planned maintenance system on board and is electrically as well as mechanically checked at regular intervals

Fire awareness

- Spontaneous combustion awareness
- Spontaneous heating in bins regularly checked
- Temperature probes in garbage holding bins as appropriate

SCORE

Threat: Garbage activities

Inspection and planned maintenance	
Fire awareness	

COMMENTS

Medical issues (general)

THREAT: DISABLED PASSENGERS

CONTROLS:

Suitable accommodation

- Designed for wheelchair access
- Are facilities adequate

Continuous on board training as required, carried out in all areas (ISM requirement)

- On job training to be carried out by supervisors and not workmates
- Continuation training by senior officers for junior ranks and on job supervision during training
- Some workmate intervention is allowed in training as well if appropriate
 - (Safety awareness for all can be enhanced if a 10 minute 'buddy overview' is used
 - A colleague watches what the worker is doing, makes notes on both the good and bad points and then critiques the on job safety starting with the good points
 - Both persons can learn from this type of interaction and safety awareness promotion on board)
- Ongoing training and proper familiarisation of all officers and ratings on vessel type

Safe access to essential areas established

Safety procedures for evacuations

Heavy weather precautions for disabled passengers

Provision of medical equipment

Provision of medicines on board

SCORE

Threat: Disabled passengers

Suitable accommodation	
Continuous on board training	
Safe access to essential areas	
Safety procedures for evacuations	
Heavy weather precautions	
Provision of medical equipment	
Provision of medicines	

COMMENTS

THREAT: ILLNESS ON BOARD

CONTROLS:

Up-to-date health screening of passengers

Medical assistance provision on board

Hospital on board effectively fitted

Medical assistance availability from shore

- Means of obtaining advice from shore medical centres defined for inexperienced doctor on board as applicable

Provision of medical equipment

Provision of medicines on board

SCORE

Threat: Illness on board

Up-to-date health screening of passengers	
Medical assistance provision on board	
Hospital on board effectively fitted	
Medical assistance availability from shore	
Provision of medical equipment	
Provision of medicines	

COMMENTS

THREAT: AGE

CONTROLS:

Up-to-date health screening of passengers

Provision of medical equipment

Provision of medicines on board

SCORE

Threat: Age

Up-to-date health screening of passengers	
Provision of medical equipment	
Provision of medicines	

COMMENTS

THREAT: MEDICAL (SUPPORT)

CONTROLS:

Doctors vetted prior to sign on

Nurses vetted prior to sign on

Trade competency of personnel to perform required duties

- Do all personnel have required certification for the jobs they do, are these certificates valid
- Training checks, HR and ship follow up on joining, full familiarisation and training on board the vessel as required for tasks to be performed

Continuous on board training as required, carried out in all areas (ISM requirement)

- On job training to be carried out by supervisors and not workmates
- Continuation training by senior officers for junior ranks and on job supervision during training
- Some workmate intervention is allowed in training as well if appropriate
 - (Safety awareness for all can be enhanced if a 10 minute 'buddy overview' is used
 - A colleague watches what the worker is doing, makes notes on both the good and bad points and then critiques the on job safety starting with the good points
 - Both persons can learn from this type of interaction and safety awareness promotion on board)
- Ongoing training and proper familiarisation of all officers and ratings on vessel type

Provision of medical equipment

Provision of medicines on board

SCORE

Threat: Medical (support)

Doctors vetted prior to sign on	
Nurses vetted prior to sign on	
Trade competency of personnel	
Continuous on board training	
Provision of medical equipment	
Provision of medicines	

COMMENTS

THREAT: ALCOHOL

CONTROLS:

Policy for control of alcohol sales to minors

- Key cards with age inset

Continuous on board training as required carried out in all areas (ISM requirement)

- On job training to be carried out by supervisors and not workmates
- Continuation training by senior officers for junior ranks and on job supervision during training
- Some workmate intervention is allowed in training as well if appropriate
 - (Safety awareness for all can be enhanced if a 10 minute 'buddy overview' is used
 - A colleague watches what the worker is doing, makes notes on both the good and bad points and then critiques the on job safety starting with the good points
 - Both persons can learn from this type of interaction and safety awareness promotion on board)
- Ongoing training and proper familiarisation of all officers and ratings on vessel type

Policy for bringing alcohol on board

Policy for control of alcohol sales

- Appearance of drunkenness taken into account when selling alcohol to passengers

SCORE

Threat: Alcohol

Policy for control of sales to minors	
Continuous on board training	
Policy for bringing alcohol on board	
Policy for control of alcohol sales	
COMMENTS	

THREAT: PRE-EXISTING CONDITIONS

CONTROLS:

Up-to-date health screening of passengers

Health screening questionnaires requested with bookings

SCORE

Threat: Pre-existing conditions

Up-to-date health screening of passengers	
Health screening questionnaires with bookings	

COMMENTS

THREAT: AIR CONDITIONING

CONTROLS:

Inspection and planned maintenance

- All machinery is under an inspection and planned maintenance system on board and is electrically as well as mechanically checked at regular intervals

Fans and trunking cleanliness

Testing for legionella and other diseases

Procedures for use when there is an illness on board

- Recycling/filtering

SCORE

Threat: Air conditioning

Inspection and planned maintenance	
Fans and trunking cleanliness	
Testing for legionella and other diseases	
Procedures for use when there is illness on board	

COMMENTS

Security issues (stowaways, piracy, assaults)

THREAT: SECURITY OF PORT

CONTROLS:

Is the port area secure?

- Fenced and gated area where no unauthorised access is permitted
- Additional security on the wharf to stop unauthorised access
- Passengers restricted to passenger terminal and security checks carried out on all passengers

Is port area fenced and patrolled?

- Non passenger areas of terminal are under security at all times
- CCTV in non passenger areas of the terminal

Does port employ proper security guards?

Are ID checks and purpose of visit validations made for all visitors to the port?

- Procedure to vet visitors prior to arrival at vessel (visitor list)
- Procedure for ID and visit validation checks at the gangway or entry point
- Visitor ID badges issued and regs in place for escort to master
- Baggage checks as required

SCORE

Threat: Security of port

Is port secure?	
Is port area fenced and patrolled?	
Does port employ proper security guards?	
Are ID checks and validations made for all visitors?	

COMMENTS

THREAT: VESSEL SECURITY PLAN

CONTROLS:

Vessel has ISSC and CSR (approved ship security plan)

All areas are sealed and searched prior to arrival in port

- Major areas where stowaways hide on board are checked and sealed or locked as appropriate
- Required areas locked, battery locker, chain lockers and fresh water tanks (ISPS Code)

To include, but not limited to:

- Store rooms
- Accommodation areas
- Pipe ducts
- Cable ducts
- Under deck passages
- Steering gear areas
- Ballast tank hatches
- Cargo hold and tank accesses
- Pump rooms
- Lifeboats and MOB boats
- Large fire lockers
- Fan rooms
- Vent rooms
- Air conditioning rooms
- Emergency generator room
- External accommodation

Gangway watch and ID checks in place

- Log of all persons coming on board and ID checks at the main gangway
- Single access point to the vessel, all pilot ladders and accommodation ladders on sea side removed as soon after berthing as possible
- Portable ladders only rigged to read drafts etc. When they should be manned and removed as soon as possible after use

Patrols in place to stop unauthorised boarding

- Open areas are patrolled at regular or irregular intervals to deter stowaways and thieves from boarding the vessel (two-man patrols are better)

- At sea regular patrols of open decks to look for suspicious small craft in close proximity to ship
- Possible use of additional security guards in high risk ports to augment ship's crew and also to comply with rest hours requirements

Pre-departure search and seal checks made

- All seals and areas searched pre arrival are checked predeparture to ensure that the seals are intact and that no one has boarded and secreted themselves on the vessel
- In high risk ports divers used to search areas over side (rudder trunks, etc) where stowaways might secrete themselves
- UK Club pre departure search checklist available
- Are dogs used onboard

CCTV/Alarms

- Is vessel fitted with CCTV and specialist door locking devices, door alarms, etc
- These are especially helpful if vessel is in a liner service to high risk areas

SCORE

Threat: Vessel security plan

Vessel has approved ship security plan	
All areas sealed prior to arrival in port	
Gangway watch and ID checks in place	
Patrols to stop unauthorised boarding	
Pre-departure search and seal checks made	
CCTV/Alarms	

COMMENTS

THREAT: TRADING AREA

CONTROLS:

Load/Discharge port awareness

- Is crew aware of any security issues at port(s)
- Is any information given to them from owners/charterers
- Are any extra measures permitted to stop stowaways boarding (dogs, extra security guards) in high risk ports
- Are Foreign Office guidelines taken into account when declining cruise itineraries

SCORE

Threat: Trading area

Load/Discharge port awareness



COMMENTS

THREAT: ATTACKS ON CREW

CONTROLS:

Company has anti-piracy plan in place?

- What measures are in place to combat piracy in dangerous areas?
 - Somalia/Red Sea/Malacca Strait/Africa/South America
- Is vessel aware of main pirate operating areas?
- Are piracy updates supplied to the vessel?

Vessel fitted with proper alarm system to alert authorities of attack?

SCORE

Threat: Attacks on crew

Company has anti-piracy plan in place?	
Vessel fitted with alarm to alert authorities of attack?	

COMMENTS

THREAT: SEXUAL ASSAULT

CONTROLS:

Company has anti-assault plan in place

- What measures are in place to combat sexual assaults on board and ashore?
- Is there a policy on board regarding crew in passenger cabins and passengers in crew cabins – is it enforced?

Pre-employment vetting of crew members

- Criminal record checks

Does port employ proper security guards?

On board security

- Vessel on board security teams trained to deal with assaults of all nature

SCORE

Threat: Sexual assault

Company has anti-assault plan in place	
Pre-employment vetting of crew members	
On board security	

COMMENTS

THREAT: ASSAULT

CONTROLS:

Company has anti-assault plan in place

- What measures are in place to combat assaults on board and ashore?

On board security

- Vessel on board security teams trained to deal with assaults of all nature

SCORE

Threat: Assault

Company has anti-assault plan in place	
On board security	

COMMENTS

Consequences

CONTROLS:

Damage mitigation procedures

- What procedures are in place to help reduce the effects of a personal injury incident and how effective are they?
- Have all possible measures been taken and recorded to limit physical damage to crew/passengers in every possible way, as appropriate to the trade and type of the vessel?
- All mitigation measures are logged?

Alarm/Stop procedures

- Are procedures in place to warn ship/shore of incident and to stop the operation?
- Communications procedure in place for all incidents?
- General and fire alarms are functioning correctly?
- Automatic fire detection is good?
- Fixed gas detectors, where fitted, check regular calibration, etc.
- Verbal alarm raising system is defined and can be shown to be adequate?
- Procedure in place to suspend or stop the operation if an accident occurs and if it is safe to do so?

Emergency drills/training

- Are drills/training procedures in place to cope with high risk incidents?
- Fire drills
- Lifeboat and abandon ship drills
- MOB rescue drills to include Williamson turn and deployment of all equipment
- Security drills
- Anti-piracy drills
- Anti-pollution drills
- Emergency steering drills
- Medical emergency drills and rescues for various areas of the vessel
- Pollution drills – bunker leak, cargo leak, grounding, collision, etc
- Watertight integrity drills – watertight doors, bulkhead valves, etc
- Ballasting procedures in the event of a hull breach

Emergency equipment adequacy/availability

- Is the ship's equipment available/adequate to deal with high risk incidents:
 - Fixed fire equipment
 - Portable fire equipment
 - SCBA
 - EEBD and location suitability for all breathing apparatus
 - Lifebuoys
 - Life rafts
 - Lifeboats
 - Lifejackets – are extra lifejackets stored at muster stations and areas of high passenger use, restaurants, etc, and do they include children's lifejackets?
 - MOB boats or designated MOB boats
 - MOB equipment including scrambling nets
 - Thermal protective aids – LSA and FFE
 - Fire plans, external and internal
 - Crew lists
 - Ventilation plans
 - Damage control plans
 - First aid equipment
 - Vessel hospital, medical equipment and treatment on board as required
 - Standard of hospital
 - Stretchers and equipment overall
 - Suitable portable winch equipment for enclosed spaces
- Are crew familiar with the equipment?

Emergency reporting/communication procedures

- Are there reporting procedures in place and understood if an incident occurs?
- Reporting to owner, charterer, P&I correspondent
- Categorisation of incident?
- Timing of incident?
- Communication requirements
- Who was informed on board/on shore?
 - When?
 - How?
 - Why?
 - What did they do?
- Records of communications. (ship management, third parties, national authorities, P&I, etc)

- Letters of protest:
 - Are there procedures in place for issuing letters of protest?
 - Are the reasons for issuing letters of protest understood?
 - For all incidents LOP should be issued and where possible notarised, signed for receipt, etc
 - Copies retained on file on board and entered in the evidence log for use in defending the claim should it arise

Record keeping/evidence retention

- Information required to help process claims:
 - Log books preserved and records tallied with bell books (movement book – deck and engine)
 - Charts preserved and records kept as evidentiary chain
 - Voyage data recorder (VDR) information properly preserved and evidence used
 - Time of the incident GMT and local time?
 - What happened and to whom?
 - Where did it happen?
 - When did it happen?
 - What were they doing at the time?
 - What were the immediate consequences?
 - Full list of witnesses to the incident
 - Witness statements
 - Electronic records of ship's operational position at the time of the incident
 - Operational status of vessel, at sea, in port, tank cleaning, cargo operations, mooring, etc.
 - Records of casualty communications and third part responses (salvors, other vessels, etc.)
- Weather conditions:
 - Description of incident environment (hot, cold, stuffy, dark, confined, moving machinery, etc)
 - Description of weather
 - Description of sea state
- Photos of incident and location time/date stamped, camera set up recorded, full description given in title and/or in comments field
- Photos to be secured from tampering by using security settings under properties
- Layout diagram
- Ship's logs
- Procedures in use at time of incident
- Risk assessment records
- Personal protective equipment (PPE) in use

- Exhibits (failed ladder, rope, etc)
- Service records
- Certifications
- Communications logs
- Permit to work records as applicable
- Toolbox talk records
- List of equipment (tools) involved in incident: condition of equipment, missing equipment
- Equipment certification, inspection logs, maintenance records
- CCTV – locations, how long tapes/discs kept
- Details of crew/passengers involved or witnesses to incident – names, age, clothing, footwear, etc
- Cleaning records/regimes carefully kept
- Records of personnel used during use of tenders – full details of tender operation kept, time date weather, passenger numbers, etc to include positive reporting
- Records kept of passenger/crew medical calls – times, dates who attended, findings, responses, etc

Capability of crew to deal with incident

- How capable is the crew to deal with the incident
- Competence of individuals involved in incident (recruitment, certification, training records, fitness to work (medical records))
- Medical:
 - Master and officers qualified and/or full medical team on board
- Fatigue factors: hours of work/rest, time on shift
- Contracted time on board vessel
- Actual time on board vessel current period
- Competence of individuals involved in response
- Experience of crew involved in the incident
- Language barriers of crew/shore personnel involved if any

Use of third party assistance

- Procedures for contacting third parties for assistance in the event of an incident, including when to call in helivac services
- By phone, radio, satellite link etc
- General advice:
 - Club correspondent
- Medical advice:
 - Doctor
 - Hospital
- Stability advice:
 - Collision – classification society

Learning from incidents

- Are lessons learned from previous incidents?
- Non conformity raised for incident?
- Incident/Accident report correctly filled in?
- Incident is raised at safety meetings and full crew meetings:
 - Discussion of what went wrong and how this can be avoided in future
- Incident is discussed and appraised at Company level:
 - Actions to avoid future incidents are discussed and taken, improving barriers
- Incident promulgated to full fleet to avoid duplication if possible
- Incident promulgated industry wide if appropriate to enhance safety culture
- Full risk assessment undertaken to improve barriers/controls in on board checklists
- Toolbox talks, job hazard awareness (JHA) systems and others as appropriate in all fleet vessels

SCORE

Consequences

Damage mitigation procedures	
Alarm/Stop procedures	
Emergency drills/training	
Emergency equipment adequacy/availability	
Emergency reporting/communication procedures	
Record keeping/evidence retention	
Capability of crew to deal with incident	
Use of third party assistance	
Learning from incidents	

COMMENTS

METHODOLOGY

Following the well-known definition:

RISK = FREQUENCY x CONSEQUENCE

The Club has analysed the number and value of the Club's claims to prioritise high risk areas and determine what the THREATS are that cause these claims. Then, with the aid of those at the sharp end – our correspondents, surveyors, claims executives and underwriters, and last but not least, our crews – we have sought to determine what CONTROLS – be it engineered, procedural or managerial – have mitigated such claims, or would have done so if they had been in place. Those threats and controls can then be targeted for assessment, either with the help of the Club's own risk assessors, or by Members themselves in conjunction with their crews.

Although 60% of UK Club claims are caused by 'human error', human error is often only 'the straw that breaks the camel's back' – the last event in a chain of causal events.

These causal events can normally be traced back to failures in one or more areas of ship operation, we sometimes refer to them as 'accidents waiting to happen'.

How can we reduce the frequency of these 'accidents waiting to happen'? What 'controls' should we be looking at to ensure the 'threat' is contained and an 'incident' does not occur?

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