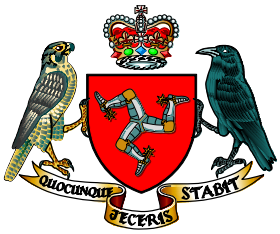
Isle of Man
Ship Registry

Summary of Casualties, Accidents and Incidents on Isle of Man Registered Vessels

2013

Isle of Man Government
Department of Economic Development



Isle of Man Government
Reiltys Ellan Vannin

Published March 2014

Introduction

The Isle of Man Ship Registry (IOMSR) is committed to helping seafarers, managers, owners and operators concerned with all Manx vessels in achieving continued high standards of safety and pollution prevention.

Occasionally things go wrong. When they do the master, skipper or technical manager is required by law to submit a report on what has occurred.

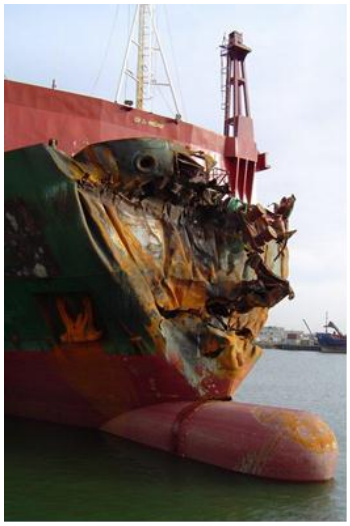
From these reports we can alert the shipping industry about areas and activities where any additional safety controls may be necessary and hopefully prevent similar occurrences from happening again.

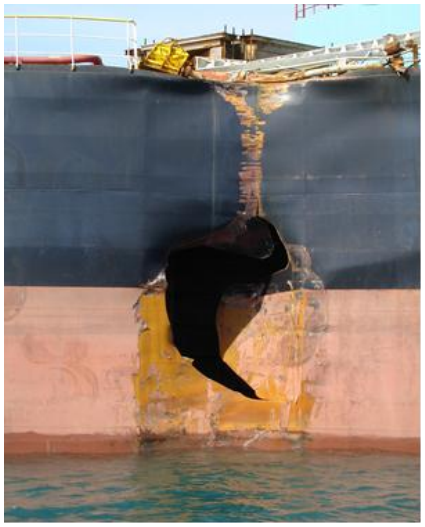
We also aim to produce statistics based on report findings. Where any trends are identified we can work with shipping companies and other organisations in an effort to reduce these occurrences on board Isle of Man vessels.

The reporting scheme is reliant upon masters, skippers or operators reporting as accurately and in as timely a manner as possible. To submit a report or if you have any questions then please contact us at:-

Isle of Man Ship Registry, Department of Economic Development,
St George's Court, Upper Church Street, Douglas, IM1 1EX, Isle of Man, British Isles

Tel +44 1624 688500
Fax +44 1624 688501
Email: marine.survey@gov.im





www.iomshipregistry.com

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1 What is an Occurrence?

An 'occurrence' is classed as either a **casualty**, **accident** or an **incident** in the Merchant Shipping Accident Reporting and Investigation Regulations (SD815/01). These are defined as follows:-

Casualty

This means "any contingency which results in:-

(a) loss of life or major injury to any person on board, or the loss of any person from, a ship or a ship's boat;
(b) the loss or presumed loss of any ship or the abandonment of any ship or a ship suffers material damage;
(c) a ship goes aground, is disabled or is in collision;
(d) any loss of life or major injury, or serious harm to the environment, is caused by a ship;
(e) any major damage to the environment brought about by damage to a ship and caused by, or in connection with, the operation of the ship."

Accident

This means "any occurrence of the following type provided that it caused material damage to any ship or structure, or damage to the health of any person, or serious injury:-

(a) the fall of any person overboard;
(b) any fire or explosion resulting in material damage to a ship;
(c) the collapse or bursting of any pressure vessel, pipeline or valve or the accidental ignition of anything in a pipeline;
(d) the collapse or failure of any lifting equipment, access equipment, hatchcover, staging or bosun's chair or any associated load-bearing parts;
(e) the uncontrolled release or escape of any harmful substance or agent;
(f) any collapse of cargo, unintended movement of cargo sufficient to cause a list, or loss of cargo overboard;
(g) any snagging of fishing gear which results in the vessel heeling to a dangerous angle; or
(h) any contact by a person with loose asbestos fibre except when full protective clothing is worn."

Incident

This means "any occurrence, not being a casualty or an accident as a consequence of which the safety of a ship or any person is imperilled, or as a result of which material damage to any ship or structure or damage to the environment might be caused."

Incidents can also be referred to as 'near misses' or 'near accidents'. Vessel inspections by the IOMSR have shown that the type of incidents reported to technical managers range from 'minor incidents', e.g. a person forgetting to wear a safety helmet on deck, to 'major incidents', e.g. narrowly avoiding a swung load suspended from a lifting appliance. The IOMSR encourages the master, skipper or technical managers to use their judgement in determining a 'minor incident' and a 'major incident'. All 'major incidents' should be reported to the IOMSR using the ARF Form. If there is any doubt then report to IOMSR.

2 Reporting Occurrences

2.1 Who has to Report

The master, skipper or technical manager of any Manx registered vessel wherever they may be.
The master, skipper or technical manager of any foreign flagged vessel in Manx territorial waters.

A vessel means any description of watercraft ranging from pleasure vessels, fishing boats, commercial yachts, passenger ships and cargo vessels.

Occurrences on board ships in ports, with the exception of those involving stevedores or shore-based workers, are included and must be reported. Occurrences involving shore-based workers should also be reported to the country's Health and Safety Department or equivalent body.

2.2 When to report

When a **CASUALTY** occurs the master, skipper or technical manager must inform the IOMSR as soon as possible after becoming aware of the casualty and the Master or Skipper must send a report to the IOMSR as soon as is practicable by the quickest means available.

When any **ACCIDENT** occurs the master, skipper or technical manager must inform the IOMSR as soon as is practicable and by the quickest means available. A report must be sent to the IOMSR no later than within 24 hours of the vessel's next arrival in port.

When an **INCIDENT** occurs the master, skipper or technical manager must report the incident to the IOMSR before the vessel departs from the next port.

2.3 How to report

Initial reports can be made directly by telephone, fax or email to the IOMSR. When the occurrence has been investigated on board the master, skipper or operator should complete the Accident Report Form (ARF – see right) and forward it to the IOMSR by fax, email or mail. Any additional report forms used on board to document the occurrence may also be submitted to the IOMSR along with the completed ARF. It is recommended that a copy of the ARF is kept on board as a record.

Reference No: -
(Ship Registry Use Only)

Accident Report Form

Isle of Man Government

Name of Ship: - IMO No.

Date of Accident: - Location of the Ship at the time of the Occurrence

Classification of the Occurrence
(Casualty, Accident or Incident)*

Details of Personnel Involved in the Casualty

Number of persons Killed

Number of Persons Injured

Was the Accident caused mainly by persons other than the ships crew? Yes / No
For Example shore personnel, stevedores, persons on another vessel

* Notes
1. Any Occurrences involving any of the following **MUST BE CLASSIFIED AS A CASUALTY**

Damage to the ship, its equipment or fittings, which requires immediate repair before the ship can continue in service, or a breach of the hull, or cracking of the primary structure.

Damage to equipment or machinery which has been identified as Safety Critical and prevents the ship from being operated as designed

Loss of life or serious injury to any person

Major damage to the environment.

An ACCIDENT is less serious than a casualty and includes falls overboard, small fires and explosions, machinery failures etc.
An INCIDENT is the least serious and covers near misses, which could have led to accidents or casualties.

Full Reporting requirements are contained in Manx Shipping Notice No. 3

Name of Person Making Report Signature (If submitted by Post or Fax)

Rank

Date

Form ARF 1 11/01/07 Page 1

It is also recommended that a brief statement is included in the Official Log Book narrative section.

The ARF is available on request from the IOMSR or available for download from the IOMSR website.
http://www.iomshipregistry.com/formsdocs/forms/

When reports are received the IOMSR decides whether or not an investigation is warranted. Not all occurrences are investigated, this may be because:-

- it has been agreed that investigation is being conducted by another investigation authority; or
- the shipboard staff and/or technical managers have completed a thorough investigation and the underlying cause is clear.

Investigations are carried out in accordance with SOLAS ChI Reg 21 using the guidance contained in IMO Resolutions A.849(20) and A.884(21). It is not the intention of these reports to apportion blame or economic liability.

The initial part of an investigation seeks to establish the causes and circumstances of what has happened, with a view to deciding whether or not any further investigation is warranted. This is called a 'preliminary examination'. When a preliminary examination is complete, the Isle of Man Ship Registry will decide if it is appropriate to conduct further investigation.

Whenever an occurrence is investigated a report is made. A provision is made for any person likely to be affected by a report to see the draft and comment on the facts and analysis therein before it is finalised. Sometimes due to the circumstances surrounding the investigation it is not always possible to publish the reports. Published reports are primarily for the benefit of all seafarers, managers and owners concerned with Manx vessels in the hope that lessons learnt may prevent similar occurrences from happening again. The names, addresses and any other details of anyone who has given evidence to an investigator are not disclosed unless a court determines otherwise. Any reports published are available on the IOMSR website.

2.4 ISM Code Vessels

Where vessels comply with the International Safety Management (ISM) Code the Safety Management Manual should include procedures for ensuring accidents and hazardous situations are reported (ISM9.1). The IOMSR will accept the vessel's reporting form in lieu of the ARF provided it contains at least all of the information required by the ARF.

If vessels have a safety officer on board as required by the Merchant Shipping Safety Officials, General Duties & Protective Equipment Regulations (SD816/01) then the safety officer should be involved in the investigation on board.

2.5 Reports Published in 2013

Vessel Name	Type of Vessel	Nature of Casualty
Sharp Lady	Oil Tanker	Enclosed space entry - asphyxiation and death
Constant Friend	Fishing Vessel	Crew injury

2.6 Investigations by IOMSR in 2013

Type of Vessel	Nature of Casualty
Oil Tanker	Enclosed space entry - asphyxiation and death
Fishing Vessel	Man overboard - UK registered fishing vessel in UK waters (inspection in an Isle of Man port at the request of UK MAIB)

2.7 Investigations by external investigation body on Isle of Man vessels in 2013

None.

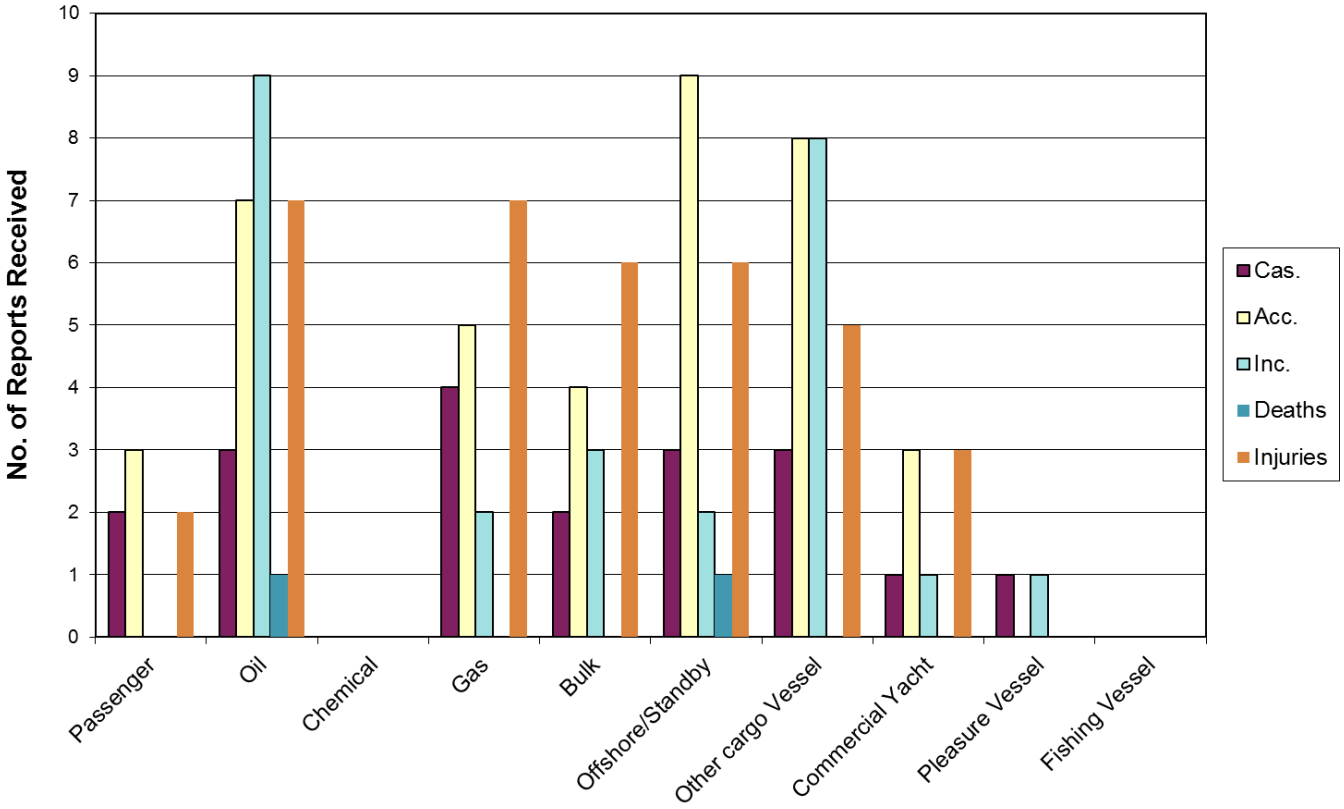
3 ARF Reports Received in 2013

In 2013 the IOMSR received a total of 84 ARF reports from Isle of Man registered vessels. The table below shows the number of reported occurrences by type in 2013 and the preceding 4 years including a breakdown per type of vessel for 2013.

Year	2009	2010	2011	2012	2013	2013									
Casualties	15	8	16	21	19	Passenger	Oil	Chemical	Gas	Bulk	Offshore / Standby	Other cargo Vessel	Commercial Yacht	Pleasure Vessel	Fishing Vessel
Accidents	26	49	39	61	39										
Incidents	16	12	16	27	26										
	57	69	71	109	84										
Collision, heavy contact, foundering or stranding	7	13	18	19	17	1	4		2	2	1	6		1	
Fire	3	5	7	6	6	2			1		2	1			
Explosion	-	-	-	1											
Pressure vessel: explosion, collapse or bursting	-	-	-	-	1					1					
Pipe systems: explosion collapse or bursting	3	1	1	2	1							1			
Sudden uncontrolled release of any substance from a system or pressure vessel	3	1	1	7	3		2				1				
Accidental ignition of flammable material	-	-	-	-											
Electrical short circuit or overload	-	-	-	-	1									1	
Failure of any lifting device	3	2	3	1	4		2			1			1		
Failure of any access equipment	-	-	-	2											
Involving access to or from the ship	2	1	2	2											
Slips or falls (same level)	3	7	5	12	5	1	2				1	1			
Slips of falls (different levels)	7	3	6	11	3					1			2		
Involving mooring ropes or hawses	4	7	2	5	8	1	3		1	1		2			
Involving lifting equipment	4	1	1	5	1							1			
Exposure to hazardous or toxic substances	-	2	2	1	1		1								
Man overboard	2	5	2	-	1						1				
Electric shock	-	-	1	-											
Violence to the person	-	-	1	2	1					1					
Other	1	1	1												
Moving about - no fall, no handling		3	7	8	3					1	2				
Moving about - manual handling	2	2		1	4					1	3				
Involving rescue boat/lifeboat/liferaft	1	1	1	2	3		2		1						
Drill - other than survival craft															
Cargo securing failure	1	1			2							2			
Maintenance - machinery	1	1		2	5		1		4						
Maintenance - other	3	4	2	5	1								1		
Navigation - COLREG infringement	1				1						1				
Navigation - machinery/equipment failure	2	2	4	9	5		1				1	2	1		
Illness	1	1		4	2				2						
Bunker operations				1	2						1	1			
Cargo operations	1	2	3		1							1			
Galley operations	1				2		1					1			
Mooring/anchoring operations	1		1												
Unauthorised boarding		2													
Leisure activity on board		1		1											
Total	57	69	71	109	84	5	19	0	11	9	14	19	5	2	0

In comparison to previous annual reports, the category of "Other", relating to a description of an "other" occurrence type not stated on the ARF report form, has been broken down into further categories based on what has occurred to be more descriptive.

The graph below represents reports received by IOMSR in 2013 of 19 casualty cases, 39 accident cases, 26 incident cases and includes 2 deaths and 36 people injured on different types of vessel.



The IOMSR recognises that the previous chart may not reflect the total number of incidents recorded by vessels and reported to their technical managers using the vessel's own incident reporting procedure. The majority of incidents reported to technical managers are therefore presumed to be very minor.

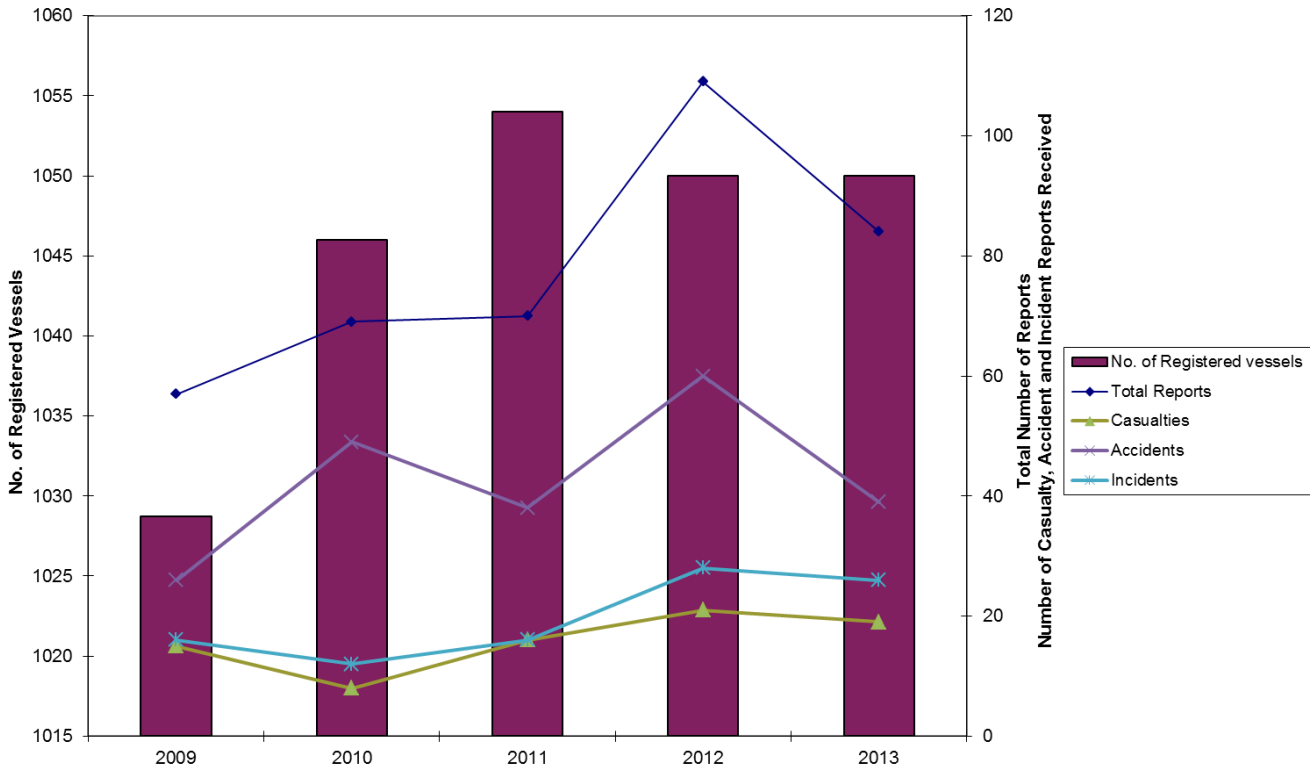
There were no reported occurrences from foreign flagged vessels in Isle of Man territorial waters in 2013.

3.1 ARF Fleet Comparison – Total Fleet

The table below shows occurrences as a percentage of the total Isle of Man registered fleet over 5 years. Isle of Man registered vessels include merchant ships, small ships, commercial yachts, pleasure vessels, fishing vessels, and demise ships.

Year	2009	2010	2011	2012	2013
Total Casualties / Fleet Size	1.5%	0.8%	1.5%	2.0%	1.9%
Casualties – death / Fleet Size	-	-	-	-	0.2%
Casualties – injury / Fleet Size	-	-	-	-	0.9%
Casualties – no injury / Fleet Size	-	-	-	-	0.8%
Total Accidents / Fleet Size	2.5%	4.7%	3.6%	5.7%	3.7%
Accidents – injury / Fleet Size	-	-	-	-	2.4%
Accidents – no injury / Fleet Size	-	-	-	-	1.3%
Incidents / Fleet Size	1.5%	1.1%	1.5%	2.7%	2.5%
Total Occurrences / Fleet Size	**5.5%**	**6.6%**	**6.6%**	**10.4%**	**8.0%**

The graph below shows a comparison between the number of reports received and the number of all Isle of Man registered vessels over the last 5 years. The total number of vessels on the Register each year is calculated as an average from the total number of vessels each month.

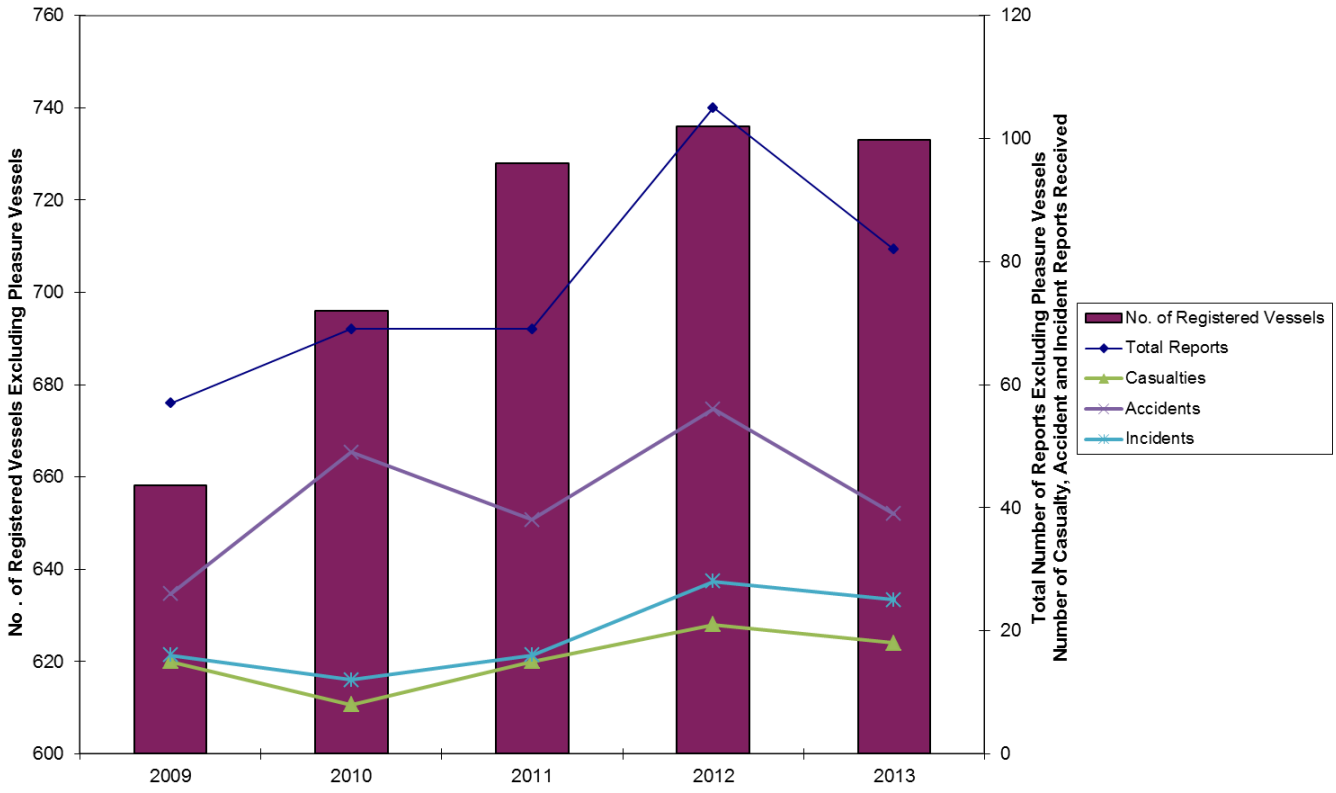


3.2 ARF Fleet Comparison – Total Fleet (Excluding Pleasure Vessels)

The table below shows occurrences with total Isle of Man registered fleet (excluding pleasure vessels) over 5 years.

Year	2009	2010	2011	2012	2013
Total Casualties / Fleet Size	2.3%	1.1%	2.1%	2.9%	2.5%
Casualties – death / Fleet Size	-	-	-	-	0.3%
Casualties – injury / Fleet Size	-	-	-	-	1.2%
Casualties – no injury / Fleet Size	-	-	-	-	1.0%
Total Accidents / Fleet Size	4.0%	7.0%	5.2%	7.6%	5.3%
Accidents – injury / Fleet Size	-	-	-	-	3.4%
Accidents – no injury / Fleet Size	-	-	-	-	1.9%
Incidents / Fleet Size	2.4%	1.7%	2.2%	3.8%	3.4%
Total Occurrences / Fleet Size	**8.7%**	**9.9%**	**9.5%**	**14.3%**	**11.2%**

The graph below compares the number of ARF Reports received with the number of Registered Vessels (excluding Pleasure Vessels) over a period of 5 years.



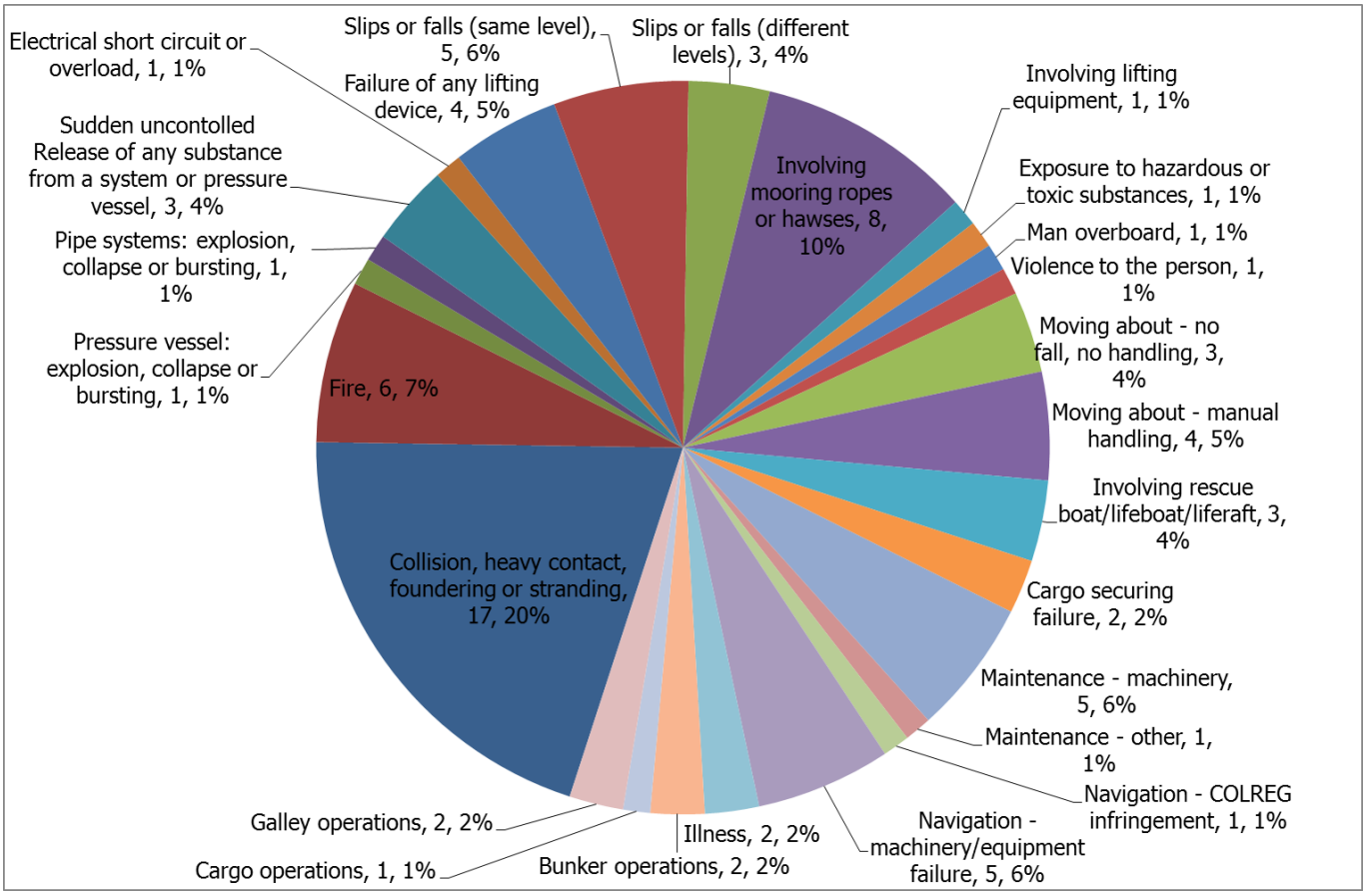
4 Analysis of ARF Reports Received in 2013

The table below summarises the condition the vessels were in at the time of the occurrence.

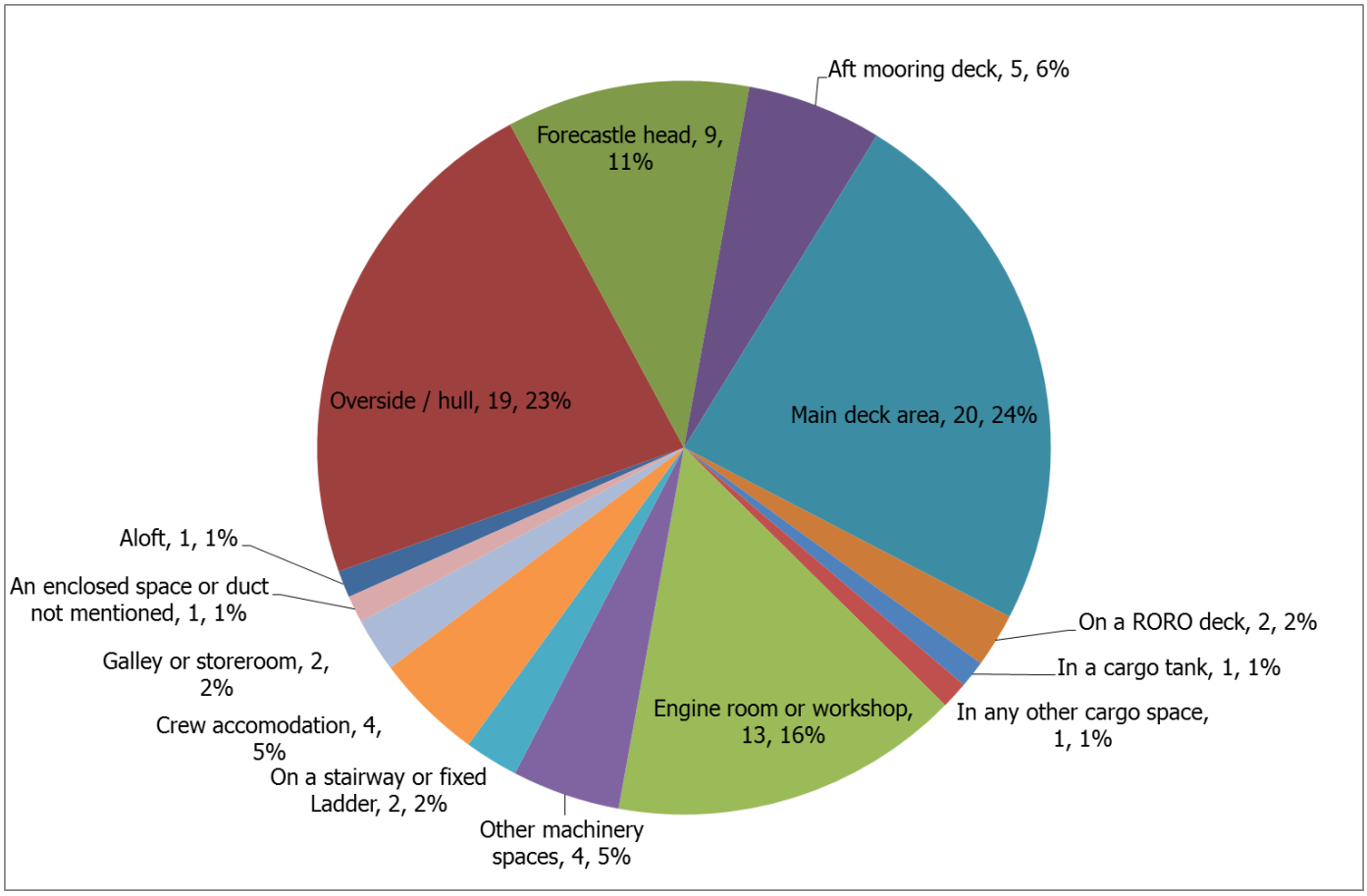
	Total Cases			Cases involving	
	Inc	Acc	Cas	Injury*	Death**
Berthed to quay/In shipyard	4	10	3	9	0
At anchor/Anchoring/Weighing anchor	7	9	3	9	0
Mooring/Unmooring	1	4	1	4	0
Making way in port/Confined waters	7	6	3	4	0
Making way - open sea	5	10	9	8	2
Stopped - drifting/dynamic positioning	2	0	0	0	0
Total	**26**	**39**	**19**	**34**	**2**

*In some cases more than one person may have been injured in the same case.
** Where a case involves deaths and injuries, this is counted once under a death case.

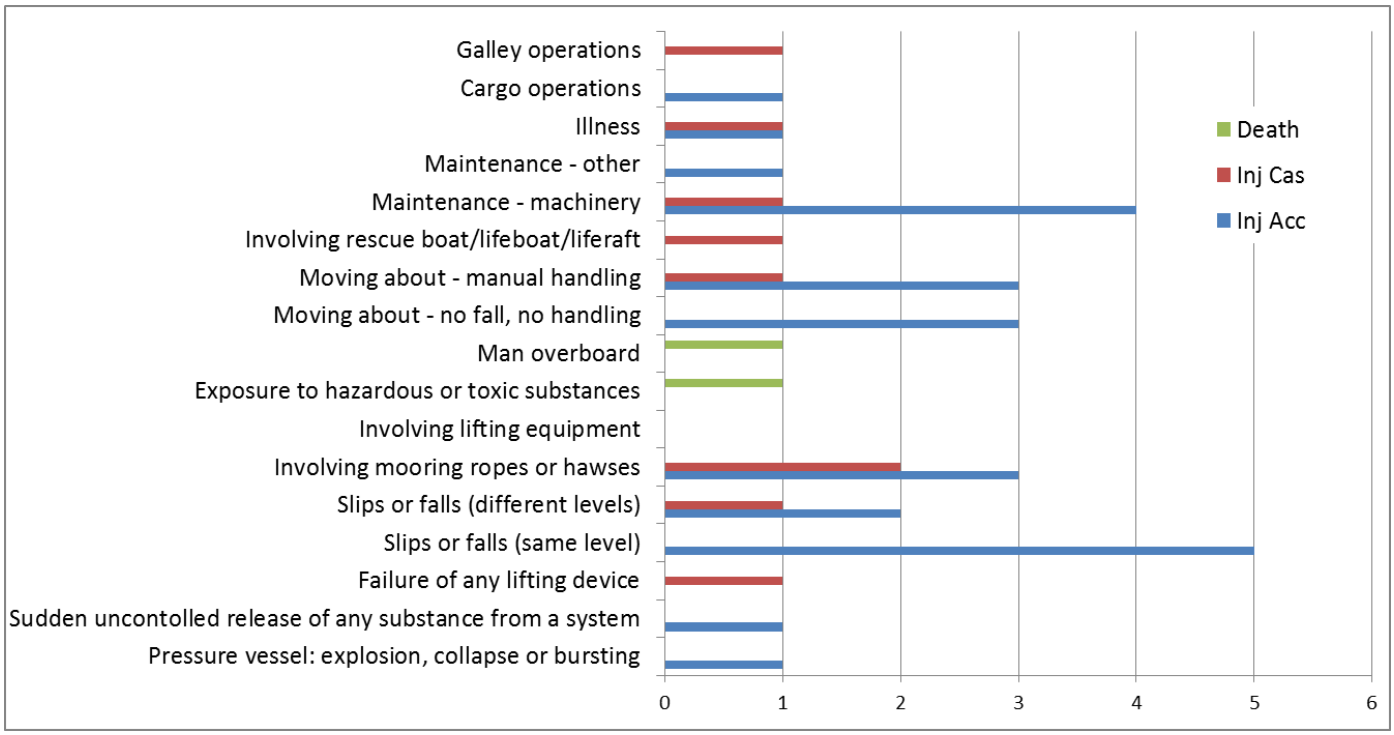
4.1 Type of Occurrences



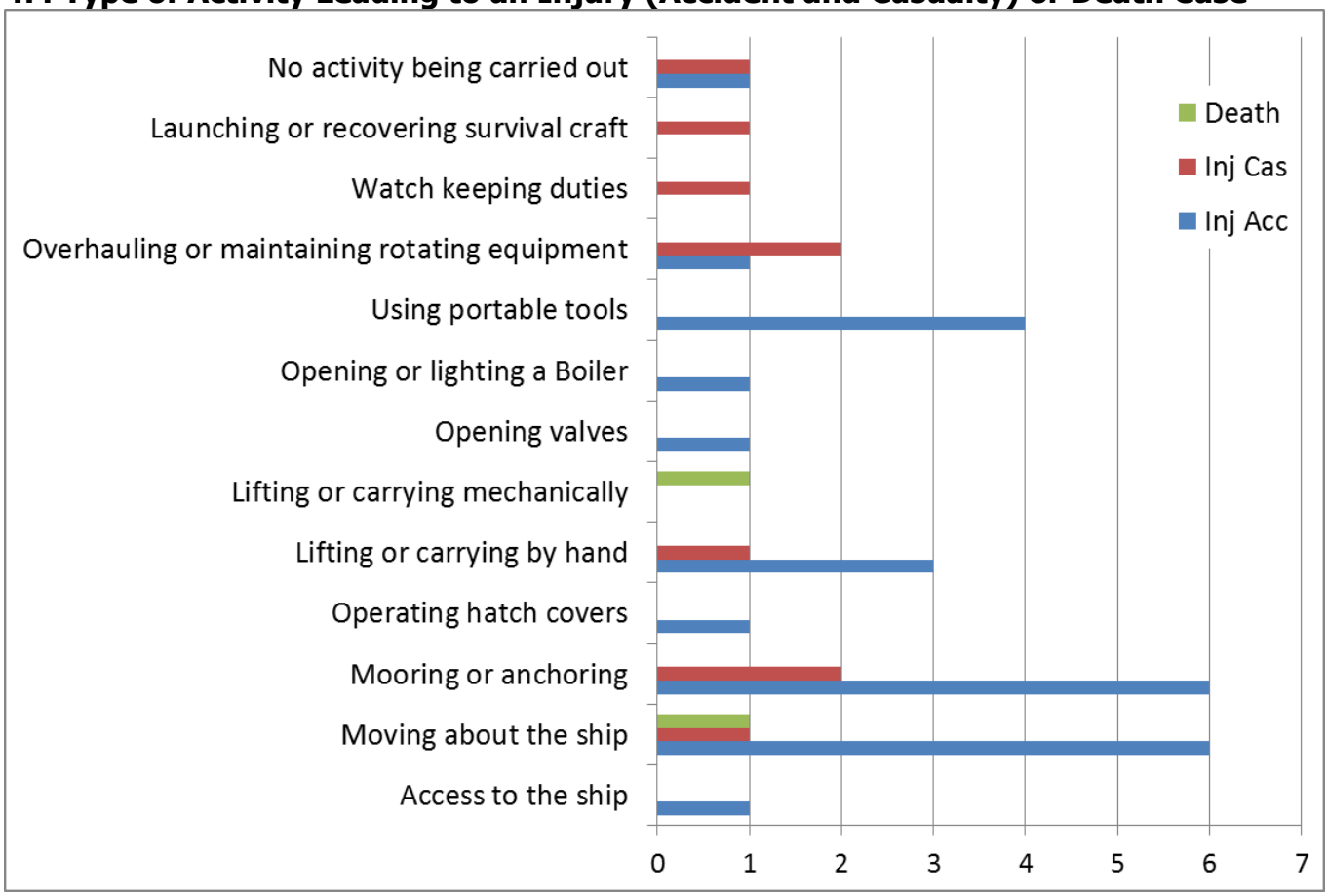
4.2 Place of Occurrences



4.3 Type of Occurrence Leading to an Injury (Accident and Casualty) or Death Case



4.4 Type of Activity Leading to an Injury (Accident and Casualty) or Death Case



4.5 Number of Injuries and Deaths by Rank

Rank	Injury Accident	Injury Casualty	Death
Master	0	1	1
Ch. Off	3	0	0
OOW Nav	0	0	0
Ch. Eng	2	1	0
2nd Eng	0	0	0
OOW Eng	1	0	0
Electrician	0	0	0
Deck/Dual Rating	11	5	1
Eng Rating	3	2	0
Deck/Eng Cadet	2	1	0
Cook/Steward/Purser	1	1	0
Passenger/Guest	0	0	0
Visitor/Contractor	2	0	0
Total	**25**	**11**	**2**

NB in some cases more than one injury may have occurred in the same case.

5 Casualties in 2013

A total of 19 casualty cases were reported in 2013 and are outlined below.

Casualties	Berthed to quay/ In shipyard	At Anchor/ Anchoring/ Weighing Anchor	Mooring/ Unmooring	Making way in port/ Confined waters	Making way - Open Sea	Stopped- Drifting/ DP	Total
Passenger	0	0	1	1	0	0	**2**
Oil	1	1	0	0	1	0	**3**
Chemical	0	0	0	0	0	0	**0**
Gas	0	2	0	0	2	0	**4**
Bulk	1	0	0	0	1	0	**2**
Offshore/Standby	0	0	0	1	2	0	**3**
Other Cargo Vsl	1	0	0	0	2	0	**3**
Comm. Yacht	0	0	0	0	1	0	**1**
Pleasure Vessel	0	0	0	1	0	0	**1**
Fishing Vessel	0	0	0	0	0	0	**0**
Total	**3**	**3**	**1**	**3**	**9**	**0**	**19**
Injury cases	1	3	1	1	3	0	**9**
Death cases	0	0	0	0	2	0	**2**

5.1 Brief Summary of All Casualties in 2013

1 Oil Tanker – Injury Case

Two crew members were injured while securing Yokohama fenders on the aft mooring deck. A crew member decided to rearrange the way the lines were secured to the mooring bitts. A mooring line secured to mooring bitts in a 'figure of 8' configuration was temporarily secured by a stopper. As the mooring line was removed from the mooring bitts the stopper proved ineffective to hold the mooring line it paid out at a great rate. A crewman holding the stopper let it go. As the mooring line continued to pay out at great speed it struck two crewmen. The crewmen suffered major bone fractures as a result.

2 Oil Tanker

While testing the fast rescue craft in the water it was noticed that the engine bay was rapidly filling with water which cut the power and electrical systems. The craft was eventually retrieved to the ship without further incident. It was noted that the water ingress was through a cooling water lid of poor design and construction. The craft was decommissioned for investigation and repairs.

3 Other Cargo Ship

Whilst crossing the Bay of Biscay in heavy weather the vessel was rolling heavily where a number of IMDG and general cargo containers were lost overboard. Other cargo containers shifted on the main deck and damaged the ship's structure.

4 Other Cargo Ship – Injury Case

The cook was frying chicken in a frying pan where he decided to remove excess oil from the chicken by holding the chicken in tongs and shaking the chicken. Whilst shaking the chicken the cook accidently hit the pan handle which caused hot oil to spill down his hand and arm causing second degree burns.

5 Other Cargo Ship – Injury Case
The master suffered a stroke on board and was airlifted to hospital.

6 Passenger RORO
Whilst arriving in port the vessel commenced a swing to manoeuvre onto the berth. During the swing the vessel made heavy contact with a dolphin fender causing significant damage to the fender and the vessel. The master misjudged the vessel's sternway when approaching the berth.

7 Bulk Carrier – Injury Case
One of the cargo cranes malfunctioned and repairs were undertaken by the ship's engineers. During the repair operation the hoisting wire parted causing the jib to fall and parts of the hydraulic brake were ejected from the winch causing severe injury to a crew member and further damage to the crane.

8 Offshore/Supply Vessel
Whilst pulling away from a rig the vessel made contact with the rig leg causing structural damage to the vessel. The bridge control consoles had not been set up correctly by the navigation officers to control the vessel.

9 Pleasure Vessel
A sailing vessel was making way on a parallel course to a motor pleasure vessel in a narrow channel. With little warning the motor vessel abruptly altered its course and collided with the sailing vessel causing significant structural damage and then left the scene without communicating or rendering assistance. The abrupt change of course was caused by the skipper of the motor boat leaning over to answer his mobile phone and losing control of the vessel.

10 Other Cargo Ship
Whilst moored alongside in port conducting cargo operations the vessel was struck by another vessel manoeuvring into an adjacent berth in front of the vessel causing structural damage to the vessel.

11 Offshore/Supply Vessel – Death Case
A rigger was working on the main deck whilst lifting operations by crane were being conducted on the main deck area. During the lifting operations a section of removable bulwark slid towards the rigger who then fell overboard as he attempted to move away from the sliding bulwark. The rescue boat was deployed and the rigger retrieved to the main deck of the vessel where first aid was administered by the vessel's medic. Despite best efforts the rigger later passed away.

12 Passenger RORO – Injury Case
Whilst mooring a member of the forward mooring party was injured when he became pressed against the mooring bitts by a mooring line when tension came onto the line.

13 Oil Tanker – Death Case
The master died and a cadet suffered asphyxiation when entering an empty cargo oil tank with dangerous atmosphere to retrieve a broken sample bucket. After measuring the tank atmosphere as dangerous the ship procedures for safe tank entry were not complied with.

The master and cadet were retrieved to deck by an emergency rescue team and first aid was given. The cadet later recovered on board following resuscitation.

This case was the subject of an Isle of Man casualty investigation.

14 Bulk Carrier – Injury Case

Whilst checking timber deck cargo lashings at sea a cadet fell several metres from the top of the wet logs to the main deck when attempting to reach an access ladder. The vessel was diverted and the cadet was airlifted to a shore hospital.

15 Gas Carrier – Injury Case

Whilst inspecting an inert gas compressor chamber to check for a suspected leakage the chief engineer opened up the compressor with the motor running. He put his hand inside the chamber where the turning fan blades cut his 5 fingers on his left hand. First aid was given on board. The vessel was diverted and the chief engineer was sent ashore to the hospital.

16 Offshore/Supply Vessel – Injury Case

Whilst manually retrieving a pilot ladder onto the main deck a rating experienced a sharp pain in his lower back. He lay down and radioed for assistance. He was subsequently unable to move his body below the waist. The rating was airlifted to hospital. Not enough crew members were involved with the task and incorrect manual handling techniques were used.

17 Gas Carrier

A fire broke out in a garbage bin storage area in the aft main deck directly under the free fall lifeboat. The fire was extinguished without injury. The lifeboat was destroyed by fire and some deck equipment and mooring lines were damaged beyond repair. An investigation could not determine the exact cause of the fire however likely causes were suspected to be either sparks from the funnel or smoker's materials contained within the garbage.

18 Commercial Yacht

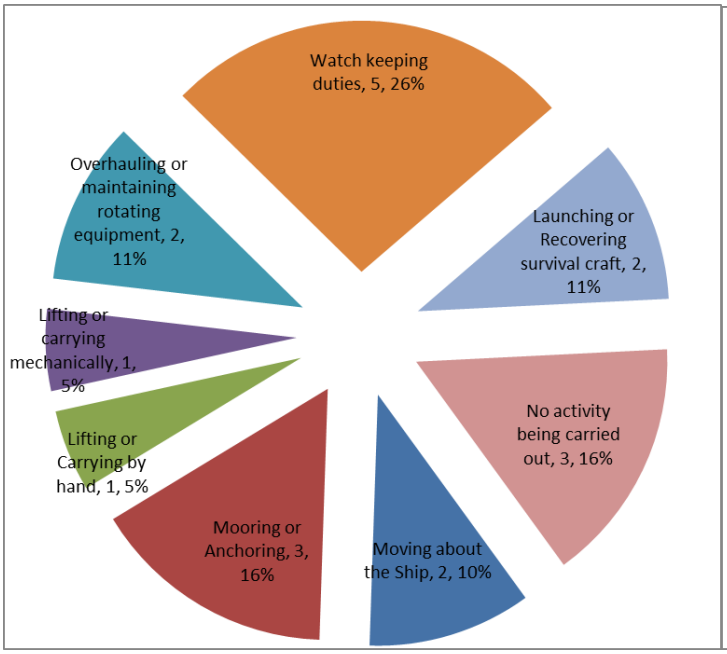
Whilst on passage in heavy weather the bilge alarm sounded. The bilge was investigated and found dry but the bow thruster locking pin housing was observed to be moving. The compartment was secured and monitored. A subsequent investigation was carried out hours later where water ingress through cracked welds in the locking pin housing was observed. The bow thruster was secured using strapping and the water was continually pumped out whilst the vessel headed for the nearest port.

19 Gas Carrier – Injury Case

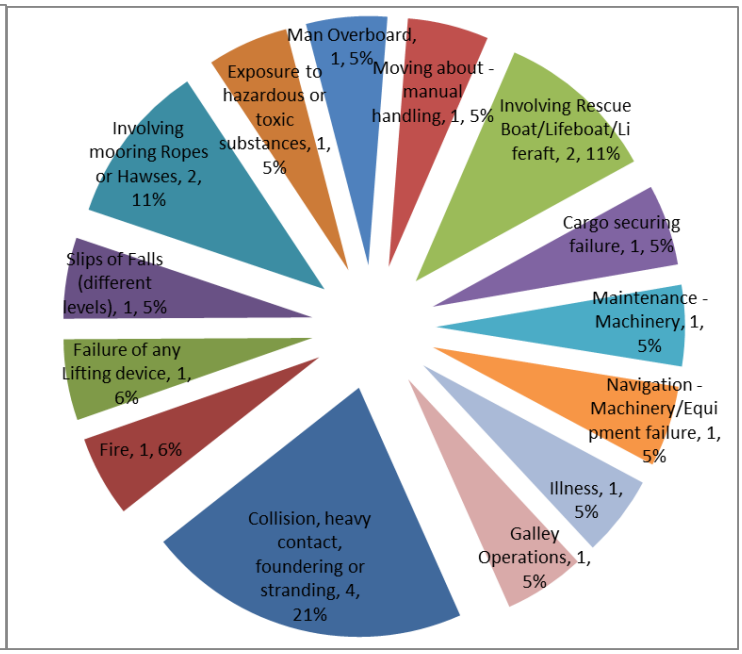
During a lifeboat drill in calm seas and low swell the free fall lifeboat was lowered to the water with no one inside. Whilst a crew member was accessing the lifeboat they became crushed between the lifeboat and the ship's hull as the vessel rolled in the swell. The crewman was retrieved on board and later taken ashore to hospital.

5.2 Casualty Chart Representations

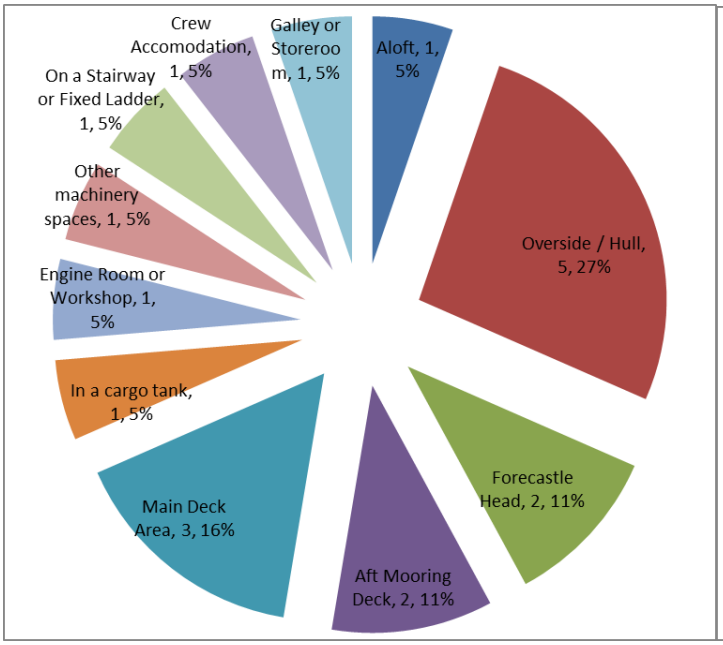
2013 Casualty Activities



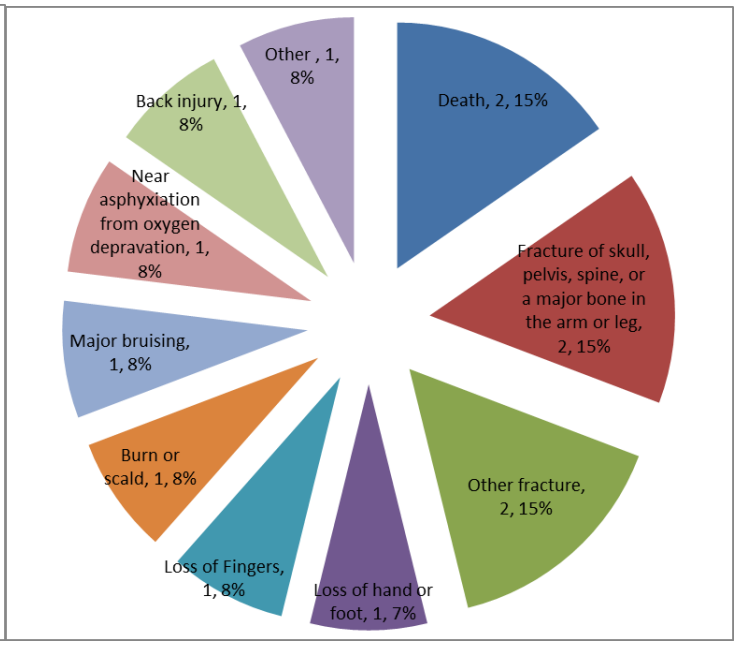
2013 Casualty Types



2013 Casualty Places



2013 Casualty Injuries



6 Accidents in 2013

A total of 39 accident cases were reported in 2013 and are outlined below.

Accidents	Berthed to quay/In shipyard	At anchor/ Anchoring/ Weighing Anchor	Mooring/ Unmooring	Making way in port/ Confined Waters	Making way - open Sea	Stopped– Drifting/DP	Total
Passenger	1	0	1	0	1	0	**3**
Oil	1	2	2	1	1	0	**7**
Chemical	0	0	0	0	0	0	**0**
Gas	2	3	0	0	0	0	**5**
Bulk	0	2	0	1	1	0	**4**
Offshore/Standby	1	1	0	0	7	0	**9**
Other Cargo Vessel	2	1	1	4	0	0	**8**
Comm. Yacht	3	0	0	0	0	0	**3**
Pleasure Vessel	0	0	0	0	0	0	**0**
Fishing Vessel	0	0	0	0	0	0	**0**
Total	**10**	**9**	**4**	**6**	**10**	**0**	**39**
Injury cases	8	6	3	3	5	0	**25**

6.1 Brief Summary of Selected Accidents in 2013

1 Offshore Supply Vessel

A rating reported severe abdominal pains and was sent ashore to the doctor for examination. It was determined that the rating had in the previous days been involved with manual heavy lifting.

2 Gas Carrier

Whilst inspecting the incinerator's fan belt the engineer trapped his finger between the fan belt and motor wheel causing a severe laceration and bone fracture.

3 Oil Tanker

On completion of bunkering operations with another vessel the vessel let go its mooring lines and proceeded to manoeuvre into the channel. The effect of the prevailing wind and current set the other vessel back onto the vessel causing minor shell and railing damage to both vessels. No injuries or pollution occurred.

4 Oil Tanker

The vessel was alongside in port in fog where the master agreed to move the vessel to another berth a short distance away. When the vessel moved off the berth the visibility deteriorated further. As the vessel moved astern contact was made with another vessel on an adjacent berth causing minor shell damage. No injuries or pollution occurred.

5 Commercial Yacht

Whilst sanding an area of wood on the main deck a rating felt sanding dust go into his eyes. He felt eye irritation and began rubbing his eyes vigorously with his hands covered in more sanding dust. He was then given first aid and sent ashore to an ophthalmologist to have his eyes scraped clean.

6 Other Cargo Ship

Whilst manoeuvring in port the vessel made heavy contact with the quay after the main engine stopped due to engine failure. Minor damage to the hull and a shore structure resulted. No injuries or pollution occurred.

7 Passenger Ship

A rating was moving about in an adequately lit deck area where he failed to notice a mooring line lying on the deck. The rating stepped on the mooring line twisting his ankle causing him to fall over. The rating was sent to the hospital for assessment.

8 Other Cargo Ship

During hatch cover opening a rating placed his hand between 2 hatch covers resulting in severe lacerations. He was given first aid on board and sent to the shore hospital.

9 Oil Tanker

During hot water washing of a boiler pipe system a cadet suffered burns to his leg when the high pressure washing hose ruptured and sprayed hot water onto his leg. The cadet was airlifted to a shore hospital for medical treatment.

10 Other Cargo Ship

During cargo discharge operations some burning and grinding was required to remove some of the cargo securing. A hot work permit was issued. As the cutting commenced the sparks fell to the lower part of the hold and onto some plastic tarpaulin. The tarpaulin caught fire immediately which damaged some of the cargo it was covering. The fire was quickly extinguished by use of a portable fire extinguisher.

11 Bulk Carrier

Whilst letting go the tug boat messenger line the tug boat winch operator retrieved the line at very high speed. A rating who was handling the line received a major whiplash causing him major bruising.

12 Bulk Carrier

During loading and securing of ship's stores a rating attempted to pick up a large coil of manila rope by himself and felt a sharp pain in his lower back. Following this he could not bend over to pick anything else up. It was determined an incorrect method with an insufficient number of people to pick up a heavy load was used by the rating.

13 Offshore/Supply Vessel

The fire alarm sounded in the incinerator room when excessive temperatures set fire to part of the lagging. The emergency fire party activated the fire flaps and fuel cut-offs and commenced boundary cooling. With hotspots continuing in the surrounding area the water mist system was also activated and later forced air fans used to reduce the temperature of the space. After the fire was extinguished a fire watch was posted to monitor the space and the temperature. The excessive temperature is thought to be the result of a flue gas fan failure.

14 Other Cargo Ship

Following unmooring a rating reported that his arm had been injured when a mooring line whipped into it. When the vessel arrived in the next port he was sent to hospital where it was discovered he had broken his wrist.

15 Other Cargo Ship

Whilst conducting offshore bunkering operations the vessel was coming alongside the bunker vessel at slow speed as the crew were retrieving a buoy using a messenger line with a hook. As the line was being heaved aboard using a winch drum the vessel rolled and the hook slipped off the buoy. The tension on the line whipped the hook striking a crew member on the helmet. The helmet broke on impact and the crew man suffered cuts and bruising to his head.

16 Other Cargo Ship

A cadet ran to the aft mooring deck to assist with heaving the tug line onto the mooring deck. As he ran on the mooring deck he failed to notice the aft anchor hawse pipe exposed after the hawse pipe cover had been removed. His leg fell into the open hawse pipe and he injured his knee on the main deck.

17 Offshore/Supply Vessel

A steward had finished cleaning a cabin bathroom when he stepped out of the bathroom and slipped over on the deck injuring his back. The steward was treated by the ship's medic and sent ashore to the hospital.

18 Passenger Ship

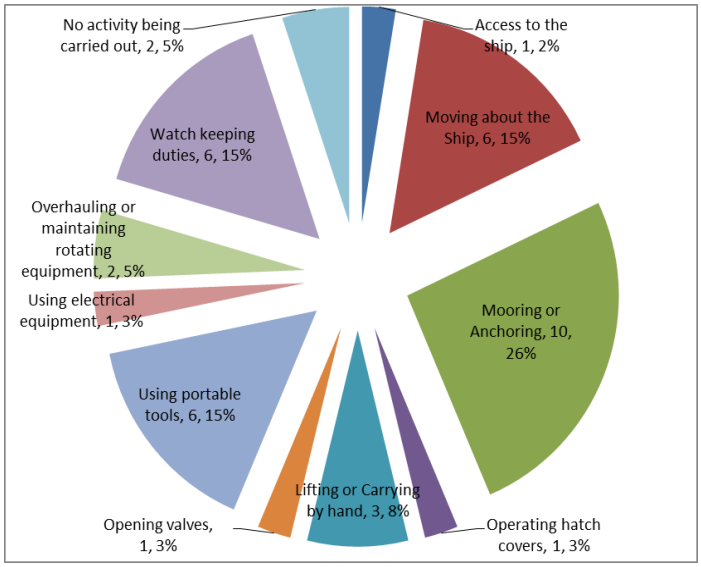
While in port the fire alarm sounded and smoke was observed emerging from a machinery compartment. A power cable feeding an electrical heat lamp melted which in turn caused a hydraulic hose to sever resulting in a small fire and a lot of smoke. An emergency party entered the space with breathing apparatus and extinguished the fire using a portable fire extinguisher.

19 Commercial Yacht

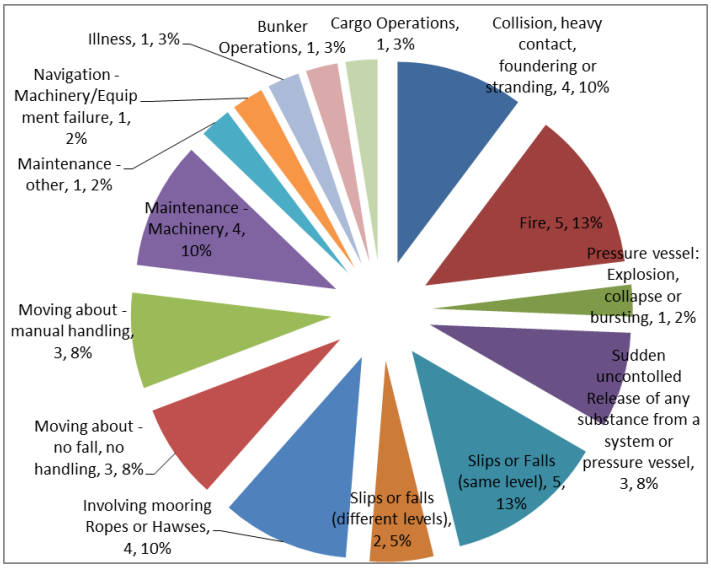
A visitor to the yacht attempted to board the yacht in a hurry by jumping from the quayside onto the swim platform before the yacht had completed mooring. The visitor misjudged the vessel movement in the choppy sea and landed hard against the edge of the swim platform fracturing her foot and cutting her leg. First aid was applied on board and the visitor was soon taken to hospital.

6.2 Accident Chart Representations

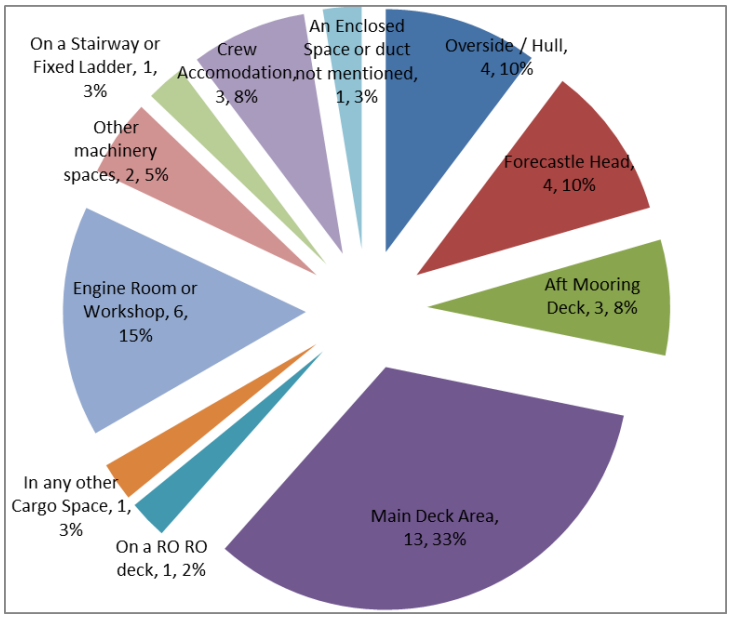
2013 Accident Activities



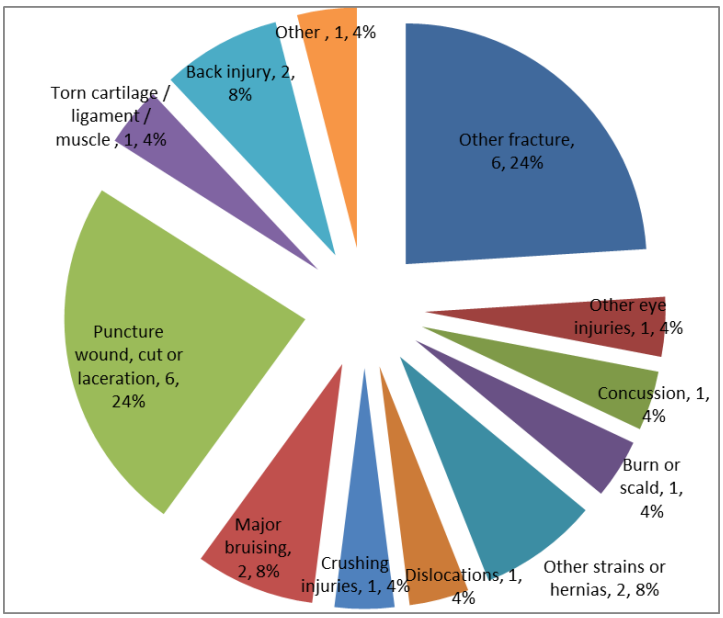
2013 Accident Types



2013 Accident Places



2013 Accident Injuries



7 Incidents in 2013

A total of 26 incident cases were reported in 2013 and are outlined below.

Incidents	Berthed to quay/ in ship yard	At Anchor/ Anchoring/ Weighing Anchor	Mooring/ Unmooring	Making Way in Port/ Confined Waters	Making Way Open Sea	Stopped– Drifting/DP	Total
Passenger	0	0	0	0	0	0	**0**
Oil	1	4	1	2	1	0	**9**
Chemical	0	0	0	0	0	0	**0**
Gas	0	0	0	1	1	0	**2**
Bulk	0	2	0	1	0	0	**3**
Offshore/Standby	0	0	0	0	1	1	**2**
Other cargo Vessel	3	0	0	2	2	1	**8**
Comm Yacht	0	1	0	0	0	0	**1**
Pleasure Vessel	0	0	0	1	0	0	**1**
Fishing Vessel	0	0	0	0	0	0	**0**
Total	**4**	**7**	**1**	**7**	**5**	**2**	**26**

7.1 Brief Summary of Selected Incidents in 2013

1 Oil Tanker

Whilst approaching the berth the master ordered astern on the main engine. Main engine start failure occurred on separate attempts. Berthing approach was suspended and the vessel proceeded to an anchorage for investigation.

2 Other Cargo Ship

Whilst on passage in heavy weather a routine check of the cargo lashings found that a flat trailer had shifted due to cargo lashing failure. The trailer was secured using temporary lashings until the vessel reached port.

3 Oil Tanker

Whilst retrieving the rescue boat following a drill (with no one in the boat) it was observed that the lifeboat stopped during hoisting 12m above the water. It was noticed that a few strands of wire rope had parted and were entangled in the sheave. Attempts to lower the boat to the water failed due to further wire entanglement. The boat was temporarily secured until repairs could be made by shore contractors.

4 Other Cargo Ship

Whilst conducting cargo operations at anchor the load got in a spin in the prevailing weather conditions and impacted on the crane dislodging some of the lifting equipment. The deck area was cleared of personnel due to the potential of falling objects from the crane.

5 Commercial Yacht

The RIB was connected to the crane hook in preparation for launching ahead of guest water-sport activities. As the RIB was hoisted a loud bang was heard and the RIB fell a few centimetres back into its stowage blocks. The wire rope had parted inside the crane mechanism.

6 Offshore/Supply Vessel

Whilst on passage the vessel was the 'stand on' vessel in a crossing situation under the COLREGS. The 'give way' vessel failed to take adequate avoiding action as prescribed by the COLREGS and the vessel had to take avoiding action to avoid collision.

7 Other Cargo Ship

Whilst in port conducting cargo operations with the stern ramp down it was noticed that the ship was creeping ahead along the berth and the forward spring line had parted. The mooring winches were set to "self-tensioning". The stern ramp slipped off the quay. The vessel's main engine and bow thruster were started and all mooring winch brakes were applied. The vessel soon came to a stop and the harbour authorities were informed. No injuries or pollution occurred.

8 Oil Tanker

Whilst trying to weigh anchor in heavy weather and severe rolling of the vessel the windlass motor became damaged. The master decided the anchor cable should be slipped from the bitter end. Due to the weight of the cable it could not be released from the bitter end. It was then decided the cable should be cut using oxyacetylene. The cable was eventually cut free and other vessels in the vicinity and local authorities were informed.

9 Oil Tanker

Whilst recovering the free-fall lifeboat following a drill the boat started to swing and made contact with the ship's stern dislodging the lifeboat's rudder and propeller cowling.

10 Bulk Carrier

Whilst at anchor off Indonesia a crew member on patrol was seized by 3 intruders armed with knives. The intruders tied up the patrolman and proceeded to loot the focsle storeroom. When the intruders noticed other crew members approaching they fled to their waiting speed boat.

11 Other Cargo Ship

Whilst on passage in confined waters the bridge suffered complete power failure which resulted in loss of steering control. As the vessel was slowing the emergency steering was activated and the anchor was let go. The vessel eventually came to rest on a soft mud bank before being later refloated with the assistance of tug boats. No injuries, pollution or damage occurred.

12 Oil Tanker

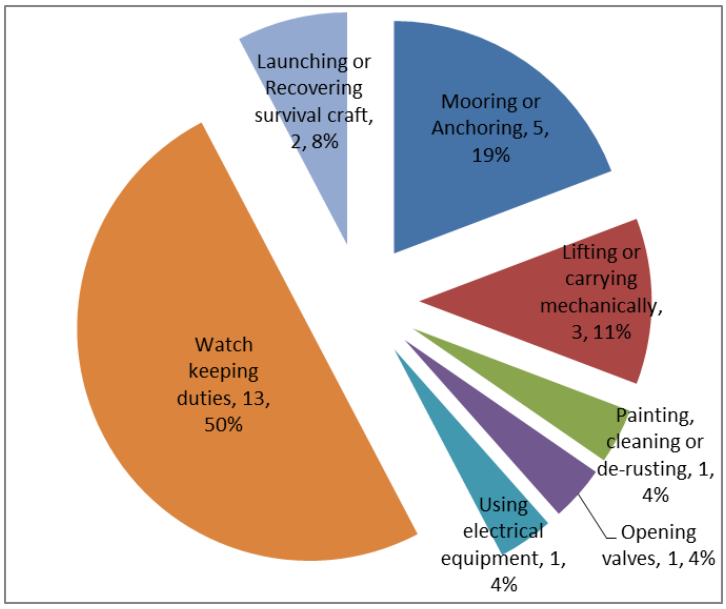
Whilst berthing with the assistance of tug boats the vessel made heavy contact with the fenders causing minor indents to the vessel's hull.

13 Other cargo Ship

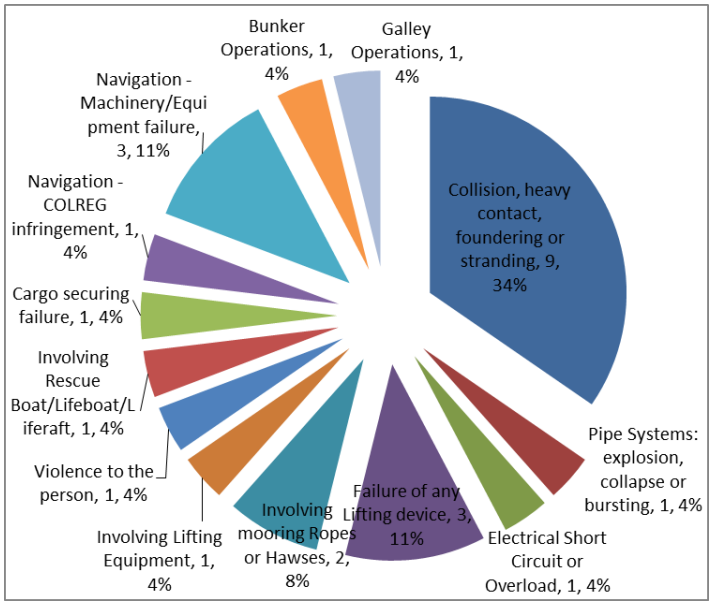
Whilst making way in a narrow channel and bad weather the vessel's main engine failed. The vessel eventually let go the anchor and managed to stop before going aground.

7.2 Incident Chart Representations

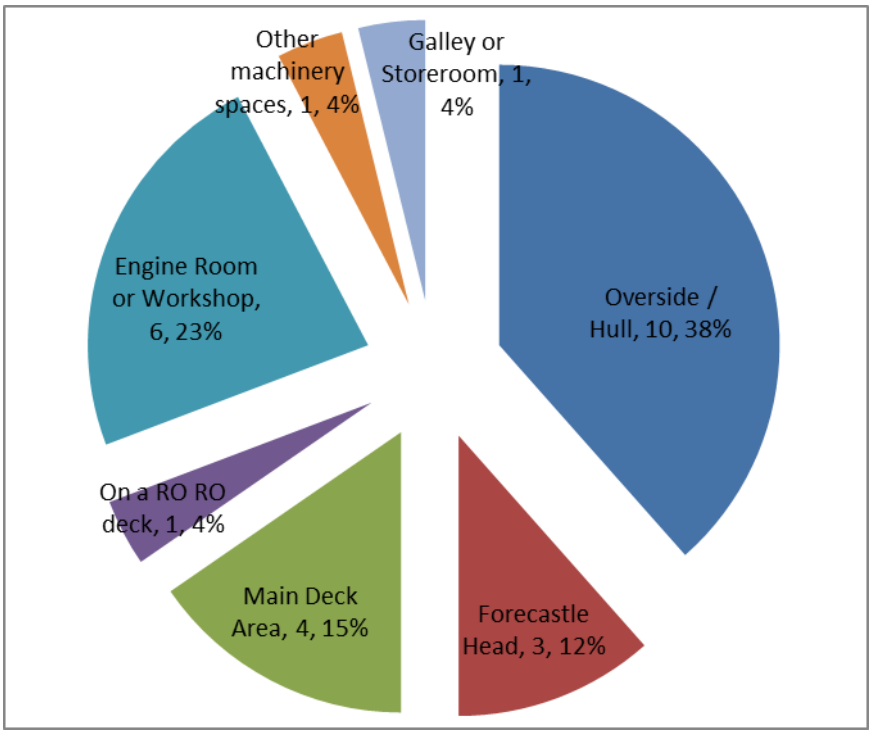
2013 Incident Activities



2013 Incident Types



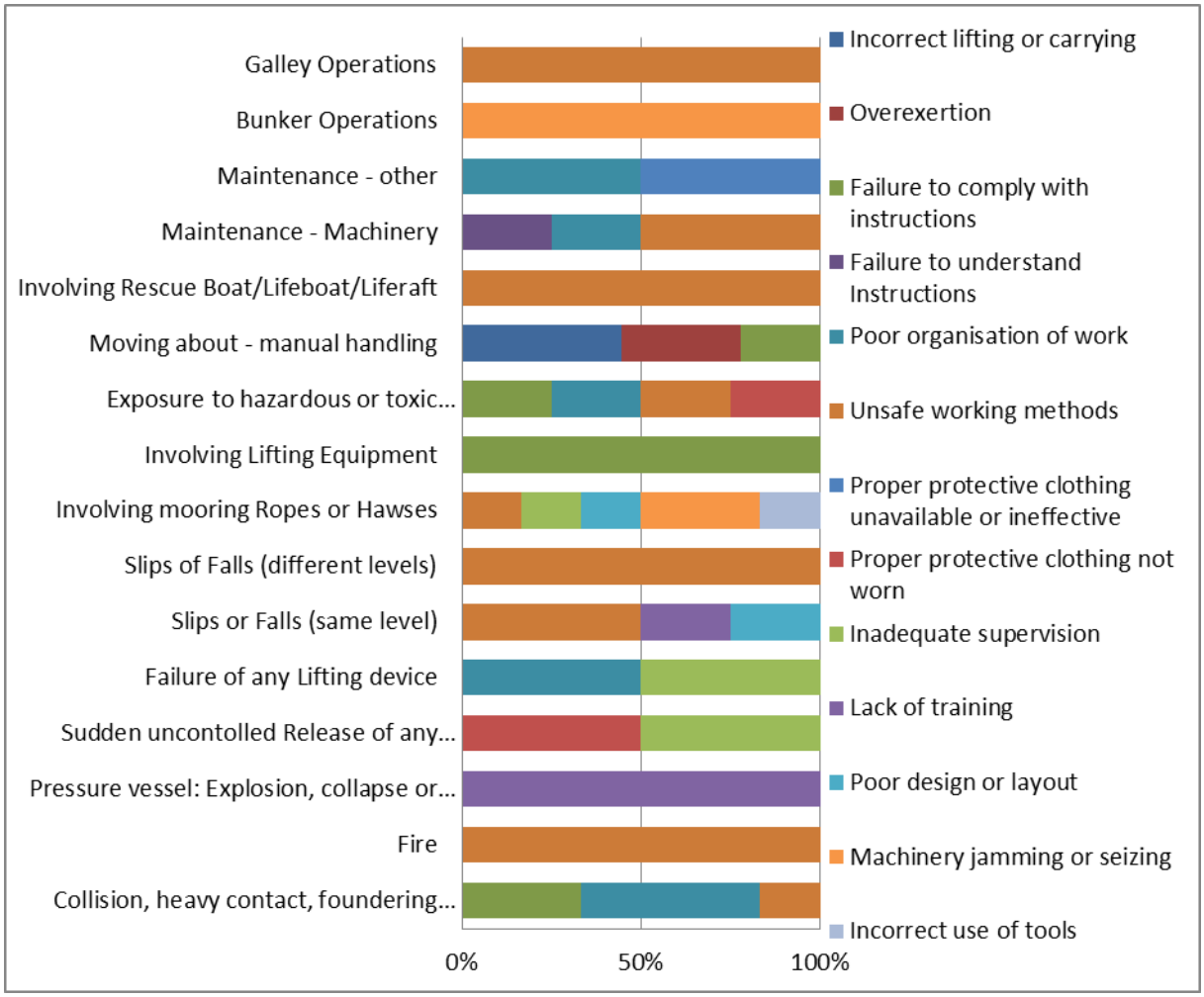
2013 Incident Places



8 Breakdown of Occurrences in 2013 by Cause

The following charts represent a breakdown of all the occurrences by cause divided into several categories represented on the ARF Form. Determination of the cause is following an investigation into the occurrence by ship's staff, company investigators or an external investigating body. **It is important to remember that an occurrence may be the result of several causes across different categories**.

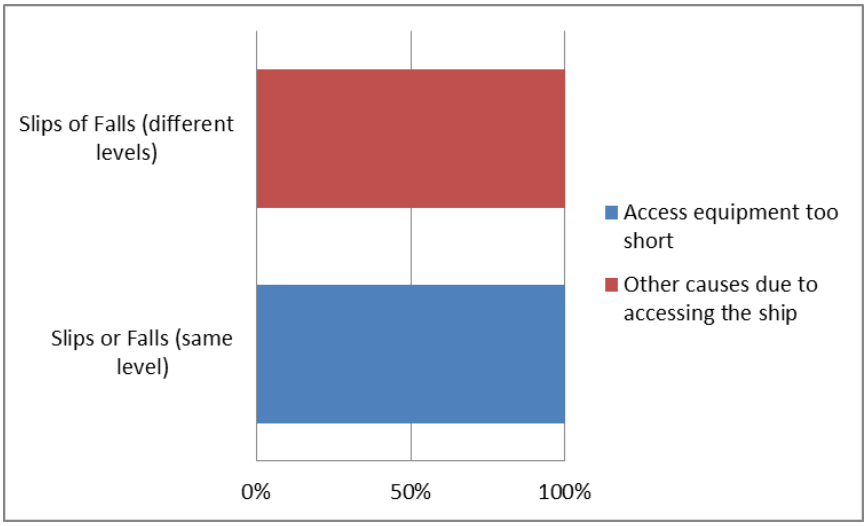
8.1 Occurrences by Working Method



The chart above shows that the predominant working method cause has been attributed to "unsafe working methods". Seafarers should avoid taking shortcuts in order to complete the job more quickly. This highlights the importance of effective work planning and risk assessment. A seafarer should not feel they must put themselves in a dangerous situation to complete the job or to save a few minutes of time. Stop and re-evaluate!

Poor organisation of work stresses the need for effective planning and execution with good communication. Where poor organisation of work led to a collision or grounding this highlights the need for effective bridge team management.

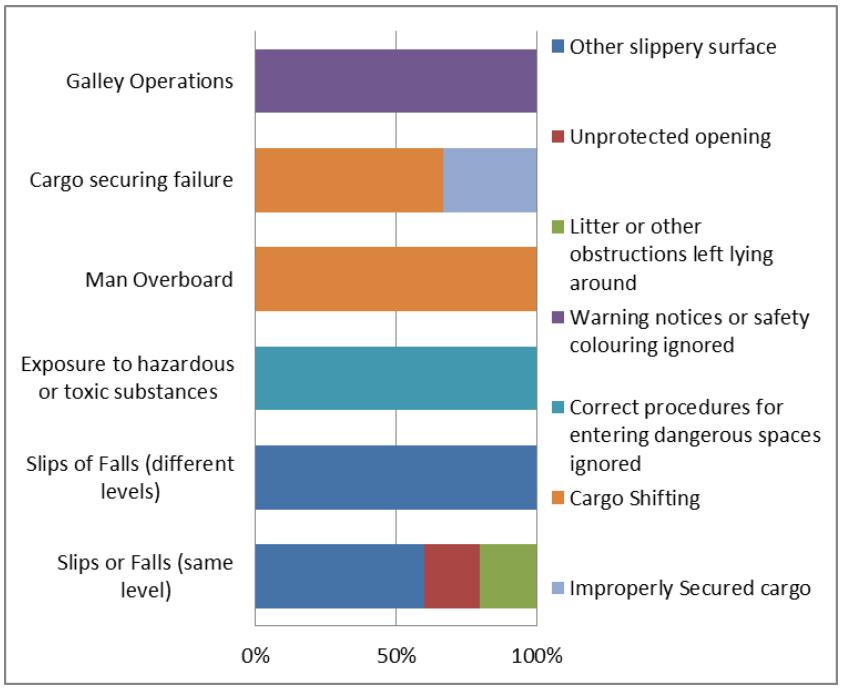
8.2 Occurrences by Ship Access



The "other causes" occurrence in the chart above relates to an accident where a visitor attempted to board a commercial yacht in a hurry by jumping onto the swim platform before the yacht had completed tying up. The visitor fell hard on the edge of the swim platform and fractured her foot.

All personnel boarding a vessel are required by the Regulations to use the means of access provided. The Master is required to ensure that a safe means of access is provided to the vessel at all times and to ensure that it is maintained in a safe condition. Everyone intending to board or leave the vessel should be strongly encouraged by the ship's staff to use the safe means of access provided even if a shortcut appears to be an easier or shorter journey. Crew members joining the vessel from a launch boat are strongly encouraged to wear appropriate lifejackets and only consider the transfer under suitable conditions taking into account the weather conditions and vessel motion.

8.3 Occurrences by Movement About the Ship

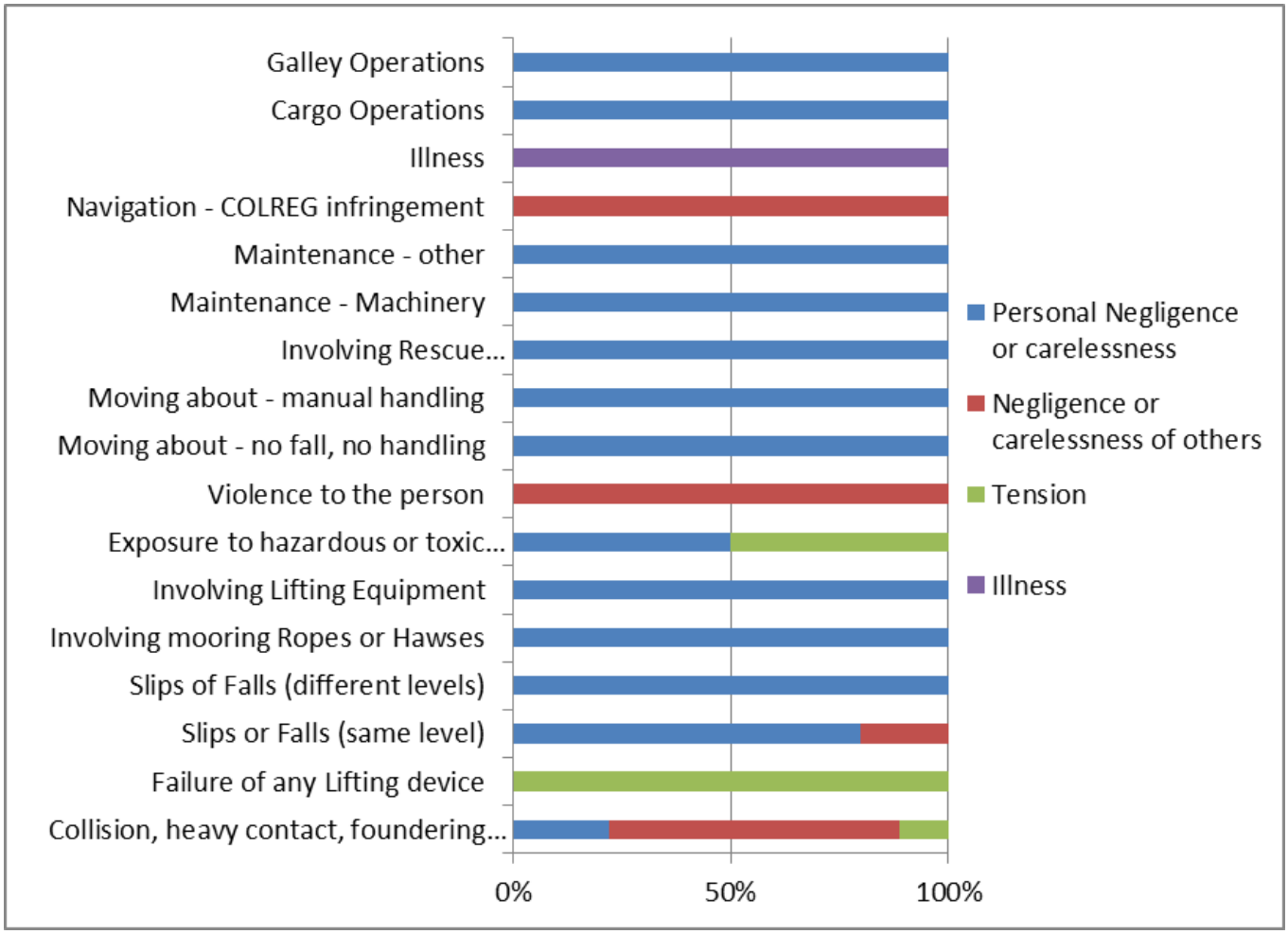


The previous chart shows a variety of causes associated with moving about the vessel. Slips and falls on slippery surfaces are still a predominant cause of injuries. Crew members should be aware of any associated risks of slipping when moving about the ship under various conditions.

Cargo shifting was also prevalent in 2013. This emphasises the need for adequate lashing systems secured effectively appropriate to the cargo securing manual and foreseeable weather conditions.

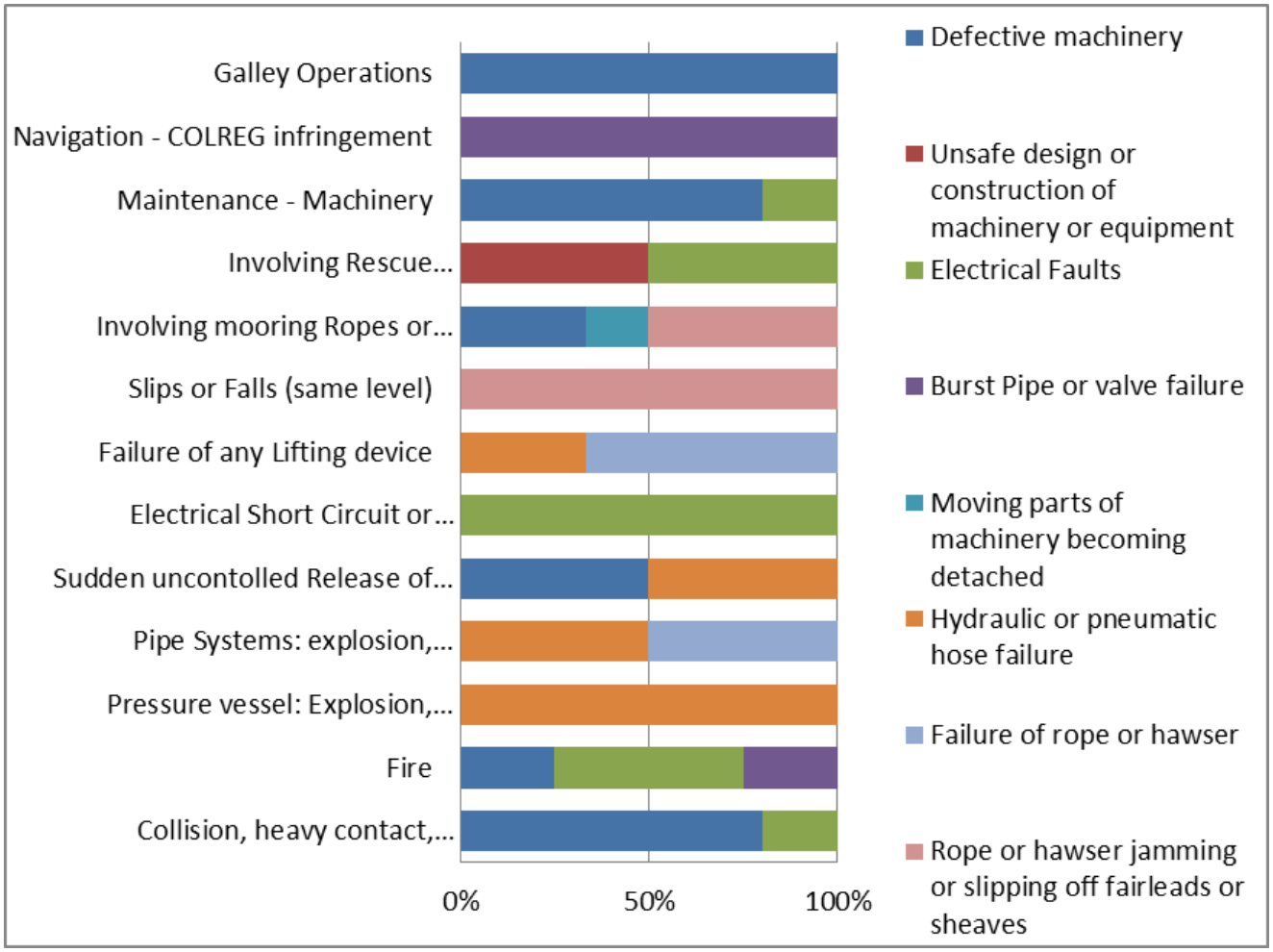
Injuries sustained through unprotected openings can be avoided by effective barriers, signs and communication.

8.4 Occurrences by Human Factor



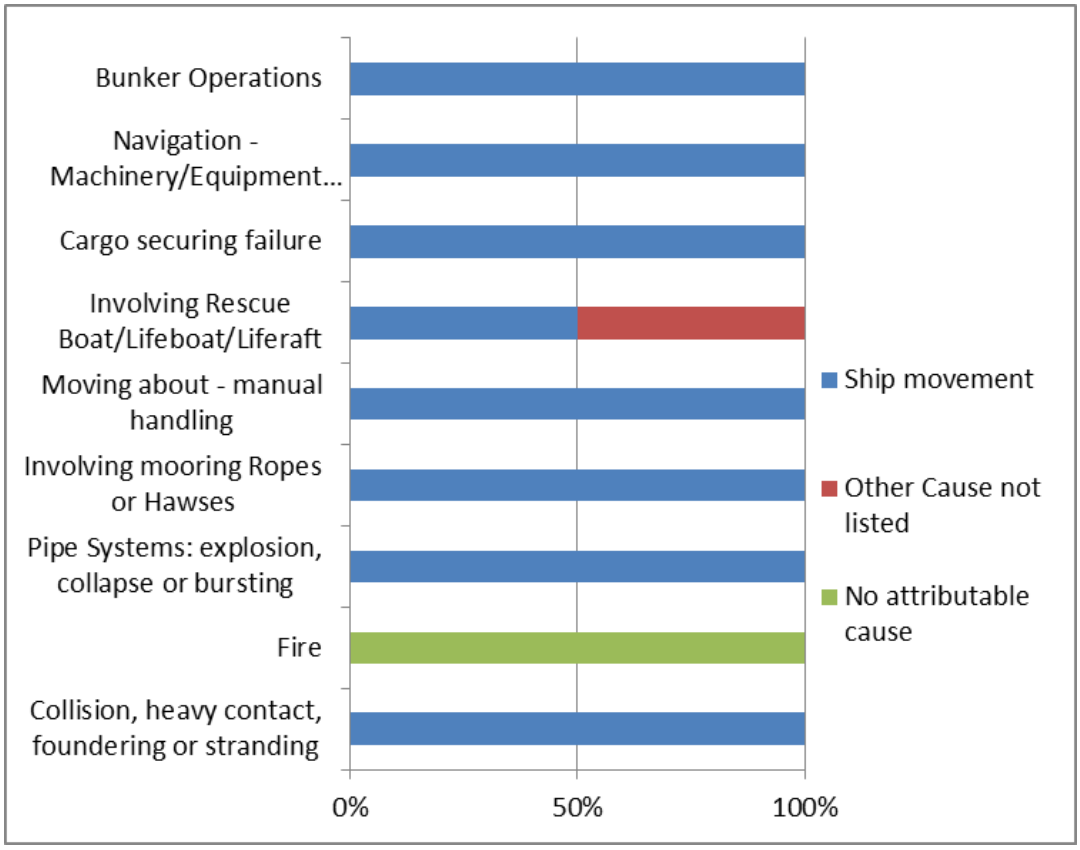
The chart above shows the predominant human factor cause has been attributed to "personal negligence or carelessness". By "human factor" we mean the act or omission of a person to do something that leads to the occurrence happening. This stresses the need for adequate knowledge and training associated with the particular work activity, for the crew member to be made aware of any associated risks and for the crew member to pay attention to what they are doing.

8.5 Occurrences by Mechanical & Other Equipment



The chart above shows a variety of causes associated with mechanical and other equipment. Defective machinery and equipment failure stresses the need for effective inspection and maintenance to ensure they are in good condition and fit for purpose. Electrical malfunctions were a significant source of small fires.

8.6 Occurrences by Other Miscellaneous Causes



The chart above shows the predominant 'other miscellaneous cause' has been attributed to ship movement. Crew members should take into consideration the movement of the vessel when planning and carrying out work activities. If the movement of the vessel is too great the work activity should not be attempted or consideration should be given to manoeuvring the vessel to reduce the vessel's movement to an acceptable level.

The cause of the fire could not adequately be determined as highlighted in casualty case 17.

9 Conclusion

Many of the ARFs received show that a large proportion of occurrences are attributed to the human factor whereby personal negligence and carelessness remains prevalent and therefore highlights the importance of effective care and attention. Occurrences involving slips and falls (same and different levels) features heavily each year, again highlighting the importance of effective care and attention.

2013 saw a significant number of cases involving mooring operations and cases involving back injuries. When mooring and unmooring the vessel, crew members should always be aware of how mooring lines will react when tension is applied or removed and position themselves accordingly. The cases involving back injury demonstrate the importance of effective manual handling techniques and crew members should be trained to assess and lift the load effectively.

It is the responsibility of the master or skipper to ensure that all activities carried out on board are conducted safely, with an acceptable level of risk. Where vessels have technical managers ashore, then the technical managers should ensure that the master or skipper is given the necessary support and resources on board to determine the risk and to reduce the risk to an acceptable level.

Seafarers should be aware of their own abilities and limitations and the limitations of the equipment they use. Seafarers should not attempt any work activity where they perceive the risks to be unacceptable. Should unacceptable risks present themselves, then the work should not commence until the risks are investigated and measures introduced to reduce the risks to an acceptable level. Risk assessments are designed to be used for this purpose. If the vessel has an appointed safety officer then he or she should be informed and the circumstances investigated. It is important to remember that if the risks cannot be reduced to an acceptable level then the work activity should not go ahead. Should this occur, then specialist advice should be sought.

Seafarers should not take any unnecessary risks with their safety in order to get the job done or take unsafe shortcuts in order to get the job done more quickly. Safety on board a vessel should be everyone's concern. Seafarers should be able to observe and monitor their own safety effectively and where possible the safety of those around them.

Where a vessel has established safety procedures, it is important that these are observed correctly. Appropriate personal protective equipment (PPE) should always be worn and used correctly. Any dedicated safety equipment should be regularly maintained and inspected before use. The Code of Safe Working Practices for Merchant Seamen is always a valuable reference source for most work activities conducted on board and should be consulted frequently. Risk assessments, Permits to Work and plain old common sense are all important factors in reducing the level of risk posed by work activities.

If you are in any doubt about the safety concerned with a particular work activity, stop and re-evaluate.

10 Additional Information

- Manx Shipping Notice 003 – Accident Reporting
- Maritime Labour Notice 4.3E
- Code of Safe Working Practices for Merchant Seamen published by the UK Maritime and Coastguard Agency
- Master's / Yacht Master's Handbook (available free on the IOMSR website)
- Merchant Shipping (Accident Reporting and Investigation) Regulations 2001 SD815/01 (available free on the IOMSR website)
- Isle of Man Ship Registry website – www.iomshipregistry.com
- Contacting the Isle of Man Ship Registry – email marine.survey@gov.im

The Isle of Man Ship Registry welcomes any feedback concerning this report. If you have comments or suggestions for future reports please contact the Isle of Man Ship Registry at the email address above.

The information in this report can be provided in large print or on audio tape, on request.