

Extract from The Merchant Shipping (Accident Reporting and Investigation) Regulations 2005

The sole objective of the investigation of an accident under these Regulations shall be the prevention of future accidents through the ascertainment of its causes and circumstances.

It shall not be the purpose of an investigation to determine liability nor, except so far as is necessary to achieve its objective, to apportion blame.

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Contents

Chief Inspector's Report	1
Part 1 - Full Investigations and Report Publications	5
Part 2 - Recommendations	10
Background	12
Recommendation response statistics	13
Recommendations methodology	14
Section A - Level 1 Recommendations	15
Section B - Level 2 Recommendations	19
Section C - Level 3 Recommendations	28
Section D - Recommendations to multiple recipients	44
Section E - Withdrawn recommendations	45
Section F - Recommendations brought forward from previous years	47
Part 3 - Statistics	52
UK vessel accidents involving loss of life	54
UK merchant vessels >= 100gt	58
UK merchant vessels < 100gt	63
UK non-commercial vessels	64
UK fishing vessels	65
Non-UK commercial vessels	70
Annex - Statistics Coverage	71
Glossary of abbreviations and acronyms	73

Chief Inspector's Report

1. This report amalgamates what have, in previous years, been two separate documents: The MAIB Annual Report and the Recommendations Annual Report.

Its aim is to meet the MAIB's legal obligations and to provide the information required by the industry and researchers, in one succinct document.

ACCIDENT OVERVIEW

Merchant Vessels

2. The number of accidents involving merchant vessels has reduced for the second year running. Assuming no increase in underreporting, this is a very pleasing outcome, although it is not yet statistically justifiable to consider this a significant trend. Against this, the twelve fatalities reported in merchant vessels (over 100gt) in 2007 is the highest number of crew deaths since MAIB was established, and more than twice the number of deaths in any of the previous 15 years. Six of the twelve deaths occurred in just two accidents, but even disregarding those deaths, the number was higher than for many years.
3. The highest profile investigation in 2007 was into the hull failure of *MSC Napoli*. This investigation (report published in April 2008), together with the MAIB investigation of the collapse of a stack of containers on board *Annabella*, has led to a major review of the operating practices of the container industry. The results of this review are due to be taken to the IMO by the end of 2008. The *MSC Napoli* investigation also identified some key structural concerns, which are being taken ahead as a matter of urgency by Classification Societies.
4. The tragic death of three crew in a chain locker on board *Viking Islay* came at a time of increasing concern about the rising rate of similar accidents worldwide. The hazards of enclosed spaces should be fully recognised by all seafarers, and systems should be in place to ensure safe entry into such compartments. However, the tragedy on board *Viking Islay*, and two subsequent fatal accidents reported to the MAIB in 2008, clearly indicates that this is not so. Unfortunately, despite the evidence to the contrary, some authorities seem to believe that they have no need to act on this problem; the MAIB considers such complacency to be unacceptable.
5. The sinking, in December, of the tug *Flying Phantom*, with the loss of three of her crew, has brought into question the effectiveness of the Port Marine Safety Code. The accident occurred only nine months after the MAIB's report into a near catastrophic accident in the Port of Liverpool, and replicates a near identical accident on the Clyde in 2000. The MAIB will need to take a view on whether the current ports' system is effective in ensuring that safety lessons are learned from previous accidents.

Fishing Vessels

6. The number of accidents to fishing vessels and fishermen is pleasingly one of the lowest in recent years. Even more gratifying is that in 2007 the number of fatalities in the industry (8) is half the high 2006 figure (16), and equals the lowest figure in recent years. It would be nice to think that this represented the start of a downward trend, but it is too soon to tell. And any improvement must be judged against the fishing industry fatality rate being the highest in any UK workforce.¹

¹ MCA Research Project 578 http://www.mca.gov.uk/c4mca/rp_578_final_report_revsion_2-2.pdf.

7. In 2007, the MAIB started an in depth Safety Study into fishing vessel accidents. It is intended to publish the Study in autumn 2008, with the aim of helping focus future fishing safety initiatives.

Leisure

8. Unlike 2005 and 2006, in 2007 the MAIB did not carry out a proactive collation of accident data. There is no legal requirement for accidents to leisure craft to be reported to the MAIB, and the exercises in 2005 and 2006 made clear that the very small number of leisure accidents reported each year to the MAIB represents a tiny percentage of accidents occurring. Any table of leisure accidents reported to the MAIB would therefore be statistically misleading. Therefore the only leisure data produced in this report is the list of fatalities, of which there were 52 in 2007.
9. The report into the loss of the yacht *Ouzo* was published in April 2007. Its publication was widely and responsibly reported in yachting magazines, and led to a significant improvement in safety awareness. Unfortunately the clear safety message was slightly muddled later in 2007, during the criminal trial of the Officer of the Watch of the ferry concerned. It is important to make clear that the MAIB's report, including its conclusions and recommendations, remains totally valid.

RECOMMENDATIONS

10. With 136 recommendations issued in 2007, the MAIB has continued its policy of limiting recommendations wherever possible. We firmly believe that where organisations, companies or individuals can be encouraged to take sufficient corrective action in the days or weeks following an accident, this can be reflected in the MAIB reports and will reduce the need for recommendations.
11. The very high acceptance rate (only one rejection, one partial acceptance and two non-replies) is largely due to the effort the MAIB puts in to working with the industry. By helping stakeholders to understand the issues involved, and using their expertise to help frame the wording, the MAIB has enjoyed growing impact with our recommendations.
12. Nevertheless, every recommendation is pursued, and each response considered:
 - a. The only addressee to reject a recommendation in 2007 was the British Wind Energy Association (BWEA). With the rapid growth in the offshore wind industry, there is concern that its safety culture may not be as mature as, for example, the offshore oil and gas industry. It is therefore very disappointing that the BWEA has not been receptive to advice in this case.
 - b. The partial acceptance is by the Scottish Fishing Federation Services Ltd (SFF), which co-ordinates the provision of fishing vessels to act as guard vessels to offshore installations. The lack of a longer range weather forecast than the routine shipping forecast was one of the main safety concerns identified in the loss of the fishing vessel *Meridian*, with all hands, in 2006. SFF has failed to address this issue.
 - c. The two recommendations to which no response has been received were both addressed to small companies overseas. It is to be hoped that their lack of response indicates that neither Maritime Management AS nor Konstuktiebedrijf De Jong BV remain within the maritime business.

MAIB

13. 2007 has been another busy year for the MAIB. The *MSC Napoli* investigation has generated a considerably higher workload than most accidents. Another 42 Preliminary Examinations and 20 Full Investigations have commenced, and 25 investigation reports have been published.
14. One particularly demanding investigation was into the deaths of at least 60 economic migrants in a sloop that had been intercepted by a police launch in the Turks and Caicos Islands. Conducted under extremely difficult conditions, it became a highly sensitive issue in the region. As a result of a unique focus of effort on to this one investigation, the final MAIB report was published within three months of the accident.
15. The MAIB has continued to develop the most advanced technical capability of any marine accident organisation in the world. We are the acknowledged centre of expertise in the exploitation of technical data, and enjoy a close working relationship with our international colleagues.

Training/Promoting Awareness

16. With the introduction of both a mandatory IMO Code and an EU Directive on Marine Accident Investigation pending, the MAIB has had many requests to assist in the setting up of similar bodies in other countries, and the training of investigators. The MAIB has also developed a training tool to help maritime colleges around the UK raise safety awareness in their courses. Additionally, MAIB inspectors are invited to give presentations at colleges and to many other maritime groups around the UK.
17. After years of successful growth in the readership of MAIB's Safety Digest, the cost of production was becoming a concern. After conducting our own survey of all the readership, the MAIB has developed a more cost-effective tailored service, giving web access and email notification to most readers, while still providing hard copies to those who need them.

FINANCE

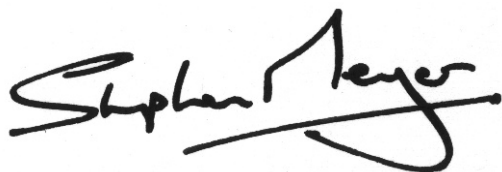
18. This Annual Report deals principally with the calendar year of 2007. However, for ease of reference, the figures below are for the 2007/08 financial year, which ended on 31 March 2008; MAIB's funding from the Department for Transport is provided on this basis, and this also complies with the Government's business planning programme.

£ 000s	Budget	Outturn
Costs	3,592	3,701
Receipts*	60	179
Totals	3,532	3,522

* The MAIB gains receipts from investigations carried out on behalf of other administrations, and from the provision of technical services and training provided on behalf of EMSA and the IMO.

FINAL ASSESSMENT

19. 2007 has been a busy and successful year for the MAIB. The Branch is well placed to meet the challenges of 2008 and beyond.

A handwritten signature in black ink that reads "Stephen Meyer". The signature is written in a cursive style with a long horizontal stroke at the bottom.

Stephen Meyer
Chief Inspector of Marine Accidents

PART 1

FULL INVESTIGATIONS AND REPORT PUBLICATIONS

PART 1 - FULL INVESTIGATIONS LIST

Full Investigations started in 2007					
Date	Name Of Vessel	Type Of Vessel	Nationality	Size	Nature of Incident
18 Jan	MSC Napoli	Container ship	U.K.	53409 gt	Structural failure in severe weather in English Channel.
20 Jan	Lindy Lou	Narrowboat	U.K.	17 m	Fire resulting in one fatality.
03 Feb	Alaska Rainbow/ Sea Express 1	Bulk carrier/ Fast ferry	Greece/ U.K.	13898 gt/ 3003 gt	Collision in fog on River Mersey.
03 Feb	Hooligan V	Sailing yacht	U.K.	11 m	Keel failure in English Channel resulting in one fatality.
26 Feb	Annabella	Container ship	U.K.	9981 gt	Collapse of stack of containers in heavy weather in Baltic Sea.
14 Apr	Leonis/ Audacity	General cargo/ Oil tanker	Panama/ U.K.	4649 gt/ 2965 gt	Collision in fog at entrance to River Humber.
16 Apr	Gas Monarch/ Whispa	LPG carrier/ Sailing yacht	Bahamas/ U.K.	4402 gt/ 15 m	Collision in dense fog off Lowestoft.
* 4 May	Haitian Sloop/ Sea Quest	Unnamed sloop/ Police launch	Unregistered/ Turks and Caicos	11 m 16 m	Capsize of vessel off Turks and Caicos Islands resulting in at least 60 fatalities.
* 20 Jun	Logos II	Passenger ship	Malta	4804 gt	Contact with quayside in St. Helier, Jersey.
26 Jun	Young Lady	Oil tanker	Isle Of Man	56204 gt	Dragged anchor and damaged gas pipeline off Teesport.
10 Jul	Pacific Star	Cruise ship	U.K.	35144 gt	Heavy weather damage on passage from New Zealand to Vanuatu.
† 28 Jul	HD1/ Condor Express	Fast ferry Fast ferry	Bahamas/ Bahamas	2357 gt/ 5005 gt	Contact by HD1 with moored vessel in St. Helier, Jersey.
28 Jul	Lady Candida	Large commercial motor yacht	U.K.	143 gt	Fire and subsequent sinking off Corsica.

Date	Name Of Vessel	Type Of Vessel	Nationality	Size	Nature of Incident
3 Aug	Rigid Raider	Army Cadet Force rigid raider	U.K.	8 m	Capsize in Outer Hebrides resulting in one fatality.
7 Aug	Dublin Viking	Ro-Ro ferry	U.K.	21856 gt	Parting of mooring line in Dublin resulting in one fatality.
23 Sep	Viking Islay	Standby safety vessel	U.K.	928 gt	Accident involving the death of three crew members in confined space.
03 Oct	Lady Hamilton of Helford/ Blithe Spirit	Gill netter/	U.K./	9 m/	Collision in Falmouth Bay.
		Rod fishing vessel	U.K.	5 m	
13 Nov	Ursine/ Pride Of Bruges	Dry cargo/ Ro-Ro passenger ferry	Belgium/ Netherlands	16947 gt/ 31598 gt	Contact by <i>Ursine</i> with moored vessel in Hull.
23 Nov	Last Call	Cabin cruiser	U.K.	7.34 m	Capsize off Whitby with three fatalities.
6 Dec	Figaro	Car carrier	Singapore	50681 gt	Accidental release of CO ₂ in SW approaches to English Channel, leading to ship being disabled.
19 Dec	Flying Phantom	Tug	U.K.	287 gt	Capsize of tug on River Clyde with three fatalities.

*The MAIB carries out a small number of investigations on behalf of other states at their request. The investigations are conducted in accordance with standard MAIB operating procedures and the costs are met by the requesting administration.

†Joint investigation in which the Bahamas Maritime Authority, as the flag state, took the lead and published a report.

PUBLICATIONS LIST

Reports of Full Investigations published in 2007			
Vessel Name (Report No)	Vessel Type	Accident Type	Accident Date
Merchant Vessels			
Alaska Rainbow/ Sea Express 1 (22/2007)	Bulk carrier/ Fast ferry	Collision in fog on River Mersey.	3 Feb 2007
Annabella (21/2007)	Container ship	Collapse of stack of containers in heavy weather in Baltic Sea.	26 Feb 2007
Apollonia/ Maersk Dover/ Maersk Vancouver (9/2007)	Tanker/ Ro-Ro passenger ferry/ Container vessel	Close-quarters situation in the Dover Straits.	17 Oct 2006
Aqua-boy (14/2007)	Live fish carrier	Grounding in the Sound of Mull.	11 Nov 2006
Arctic Ocean/ Maritime Lady/ Sunny Blossom (2/2007)	Container/ Dry cargo/ Chemical/products tanker	Collision between <i>Arctic Ocean</i> and <i>Maritime Lady</i> , capsizing of <i>Maritime Lady</i> and contact with wreck of <i>Maritime Lady</i> by <i>Sunny Blossom</i> , and its subsequent grounding in the Elbe River.	5 Dec 2005
Ennerdale (10/2007)	LPG carrier	Major LPG leak while alongside Fawley Marine Terminal.	17 Oct 2006
FR8 Venture (16/2007)	Crude oil tanker	Vessel shipped two large waves resulting in two fatalities and one serious injury, Pentland Firth.	11 Nov 2006
Gas Monarch/ Whispa (25/2007)	LPG carrier/ Sailing yacht	Collision in dense fog off Lowestoft.	16 Apr 2007
Haitian sloop/ Sea Quest (17/2007)	Unnamed sloop/ Police launch	Capsizing of vessel off Turks and Caicos Islands resulting in at least 60 fatalities.	4 May 2007
Harvest Caroline (13/2007)	General cargo ship	Grounding off Tanera More, Summer Isles, north west coast of Scotland.	31 Oct 2006
Hilli (4/2007)	LNG Carrier	Boiler explosion resulting in one fatality and one serious injury onboard LNG tanker alongside in Grand Bahama Shipyard.	10 Oct 2003*
Maersk Doha (15/2007)	Container ship	Machinery breakdown and subsequent fire onboard vessel in Chesapeake Bay, off Norfolk, Virginia, USA.	2 Oct 2006

Vessel Name (Report No)	Vessel Type	Accident Type	Accident Date
Octopus/ Harald (18/2007)	Jack-up barge/ Tug	Grounding of a jack-up barge while being towed by a tug, Stronsay Firth, Orkney Islands.	8 Sep 2006
Prospero (24/2007)	Oil/chemical tanker	Loss of control and subsequent heavy contact with jetty, Milford Haven.	10 Dec 2006
Samskip Courier/ Skagern (6/2007)	General cargo vessel/ Container ship	Collision in the Humber Estuary in dense fog.	7 Jun 2006
The Calypso (8/2007)	Cruise ship	Engine room fire 16 miles south of Beachy Head.	6 May 2006
Thomson Celebration (11/2007)	Cruise ship	Fatal accident to person on board tender while ship was at anchor in St Peter Port, Guernsey, Channel Islands.	26 Sep 2006
Thunder (12/2007)	General cargo ship	Grounding at the approaches to the Dee Estuary.	10 Aug 2006
Fishing Vessels			
Brothers (1/2007)	Stern trawler	Grounding off Eilean Trodday with two fatalities.	1 Jun 2006
Danielle (5/2007)	Scallop dredger	Major injury sustained by crew member 17 miles south-south-east of Falmouth.	6 Jun 2006
Meridian (20/2007)	Pair seiner	Loss of fishing vessel 160 miles due east of Aberdeen with four fatalities.	26 Oct 2006
Sian Elizabeth (3/2007)	Cockle dredger	Injury to crew member 3 miles north of Kings Lynn.	14 Sep 2006
Leisure Craft			
Gas Monarch/ Whispa (25/2007)	Details listed in Merchant Vessel section.		
Hooligan V (19/2007)	Sailing yacht	Keel failure in English Channel resulting in one fatality.	3 Feb 2007
Lindy Lou (23/2007)	Narrowboat	Fire resulting in one fatality.	20 Jan 2007
Ouzo (7/2007)	Sailing yacht	Loss of sailing yacht south of the Isle of Wight, resulting in three fatalities.	20-21 Aug 2006

*This accident was not reported to MAIB until July 2006.

PART 2 RECOMMENDATIONS

RECOMMENDATIONS

Responses to safety recommendations issued by the Marine Accident Investigation Branch.

This report is submitted to the Secretary of State for Transport in accordance with The Merchant Shipping (Accident Reporting and Investigation) Regulations 2005, regulation 15(5).

Background	Page 12
Recommendaton response statistics	13
Recommendations methodology	14
Section A - Level 1 Recommendations	15
Section B - Level 2 Recommendations	19
Section C - Level 3 Recommendations	28
Section D - Recommendations to multiple recipients	44
Section E - Withdrawn recommendations	45
Section F - Recommendations brought forward from previous years	47

For details of abbreviations and acronyms used in this Section please refer to the Glossary on page 73.

BACKGROUND

Recommendations are the prime output of MAIB investigations. They are made to promulgate the lessons from accidents and incidents investigated by the MAIB, with the aim of improving the safety of life at sea and the avoidance of future accidents. The issue of a recommendation shall in no case create a presumption of blame or liability.

Following a preliminary examination (PE) or full investigation the MAIB will, normally, make a number of recommendations. These may take the form of a Chief Inspector's letter following a PE or, in the case of a full investigation, be contained within the published report. Urgent safety recommendations may also be made in Safety Bulletins that can be published at any stage of a PE or full investigation. It is of no consequence whether a recommendation is made as a result of a PE or full investigation, as they are processed in the same manner.

Recommendations are made to a variety of addressees who may have been involved in, or have an interest in, the incident or accident. These may range from those organisations which have a wider role in the maritime community such as the Department for Transport (DfT), Maritime and Coastguard Agency (MCA) or an international organisation, through to commercial operators and vessel owners/operators who may have specific issues to address on their vessels.

It is required by the Merchant Shipping (Accident Reporting and Investigation) Regulations 2005 that the person/organisation to whom a recommendation is addressed, consider the recommendation, and reply to the Chief Inspector within 28 days on the plans to implement the recommendation or, if it is not going to be implemented, an explanation as to why not. The Regulations also require the Chief Inspector "to inform the Secretary of State of those matters" annually, and to make the matters publicly available. This report to the Secretary of State for Transport fulfils this requirement.

RECOMMENDATION RESPONSE STATISTICS 2007

137 recommendations were issued in 2007. Of these, one recommendation, at Section E, has been *withdrawn* and is not included in these statistics. The percentage total of all recommendations that are either *accepted* or *accepted yet to be implemented* is **97.1%**.

Throughout the report recommendations are categorised under four broad headings according to the industry sector to which they apply, General Maritime, Commercial Shipping, Fishing Vessels and Leisure Vessels.

Focus	subtotal % of total	Accepted -Action Implemented	Accepted -Action yet to be Implemented	Partially Accepted	Rejected	No Response Received
General Maritime	38 27.9%	35	3	0	0	0
Commercial Shipping	69 50.7%	54	13	0	1	1
Fishing Vessels	16 11.8%	9	6	1	0	0
Leisure Vessels	13 9.5%	11	1	0	0	1
subtotal	136	109	23	1	1	2
% of total	100%	80.2%	16.9%	0.7%	0.7%	1.5%

Details of all these recommendations are at Sections A-C.

RECOMMENDATION RESPONSE STATISTICS 2004, 2005 and 2006

The following table shows the equivalent status of recommendations issued in 2004, 2005 and 2006 as published in the MAIB's previous Recommendations Annual Reports.

Year	Total	Accepted Action Implemented	Accepted Action yet to be Implemented	Partially Accepted	Rejected	No Response Received
2006	139	103	30	3	3	0
2005	140	122	14	1	1	2
2004	171	93	52	11	11	4

Since the 2004, 2005 and 2006 reports were published, of the 96 recommendations *accepted – yet to be implemented*:

- **78.1%** have now been *fully implemented*
- **21.9%** remain *planned to be implemented*.

Details of the recommendations still to be implemented are at Section F.

RECOMMENDATION METHODOLOGY

Sections A-E to this report present the recommendations made throughout 2007, Sections D and E are not included in the statistics. Section F lists the remaining recommendations that are outstanding **accepted – yet to be implemented** from the previous Recommendation Annual Reports 2004, 2005 and 2006.

The recommendations have been broken down into three levels, shown in Sections A-C. These are then further divided, as shown below. Emphasis has been given to those recommendations which have been **rejected** and **partially accepted** and their entries include the response received by the MAIB, together with an MAIB comment.

Section A	Level 1 Recommendations These have the broadest importance, and may include the requirement for new legislation or changes in policy.	Rejected, Partially accepted, No Response Received
		Accepted - yet to be implemented
		Accepted - implemented
Section B	Level 2 Recommendations Addressed to industry bodies and organisations which may call for changes or reinforcement of best practice.	Rejected, Partially accepted, No Response Received
		Accepted - yet to be implemented
		Accepted - implemented
Section C	Level 3 Recommendations Those which are addressed to individual owners or companies which are specific to their vessel or company.	Rejected, Partially accepted, No Response Received
		Accepted - yet to be implemented
		Accepted - implemented
Section D	Recommendations to multiple recipients Lists the small number of recommendations that have been addressed to large multiple recipients. As a result, it has not been possible to track responses under the closed-loop system. Such multiple addressee recommendations are now avoided whenever possible and there are no entries in this report.	
Section E	Withdrawn recommendations.	
Section F	Recommendations brought forward from previous years. Lists the ongoing outstanding recommendations shown as accepted – yet to be implemented in previous reports.	

Section A

LEVEL 1 RECOMMENDATIONS

These have the broadest application, and may include the requirement for new legislation or changes in policy.

Summary Table

Focus	Total	Accepted Action Implemented	Accepted Action yet to be Implemented	Partially Accepted	Rejected	No Response Received
General Maritime	3	2	1	0	0	0
Commercial Shipping	9	5	4	0	0	0
Fishing Vessels	0	0	0	0	0	0
Leisure Vessels	0	0	0	0	0	0
Total	12	7	5	0	0	0

Level 1 Recommendations – Breakdown

Responses to recommendations which have **not been accepted** have been grouped together and presented first. Those which have been **accepted** are presented secondly and broken down into their vessel type.

Accepted – Yet to be Implemented

Number	Focus	Investigation	Addressed To	Recommendation
144	Commercial Shipping	Thunder	Department for Transport	In considering its decisions on the Harbour Revision Orders submitted by the Environment Agency and Mostyn Docks Limited, take into account the need to clarify the status of the Mostyn Outer Channel, such that the responsible authority has the necessary powers to ensure the safety of navigation in the channel. Predicted implementation date - Work in progress
165		Octopus / Harald		Review the future work schedule for the UK Civil Hydrography survey programme, taking into account the priorities identified by MCA Research Project 512, the Committee on Shipping Hydrography and the MCA, particularly in light of the increasing use by large cruise vessels of sea areas not surveyed to modern standards.
165a	Commercial Shipping		Department for Transport	Predicted implementation date - work in progress Discussions are continuing over future funding of the UK Civil Hydrography Programme. MCA has in the meantime, taken steps to make better use of their existing resources, along with increasing collaboration with other organisations.
165b	Commercial Shipping		MCA	Predicted implementation date - 1 January 2009
166b	General Maritime	Octopus / Harald	MCA	Agree wording and put forward to the IHO/IMO a proposal that the relevant working groups investigate ways of ensuring that ECDIS displays provide a clear warning or indication to the mariner whenever the survey data used to produce the electronic chart in use is of poor quality. Predicted implementation date - Not given

Number	Focus	Investigation	Addressed To	Recommendation
176	Commercial Shipping	Annabella	International Chamber of Shipping	<p>Work with industry to develop, then promote adherence to, a best practice safety code to ensure that (inter alia):</p> <ul style="list-style-type: none"> • Effective communications and procedures exist between all parties involved in the planning and delivery of containers to ensure ship's staff have the resources and the opportunity to safely oversee the loading and securing of cargo. • Cargo securing manuals are comprehensive and in a format which provides ready and easy access to all relevant cargo loading and securing information. • Loading computer programmes incorporate the full requirements of a vessel's cargo securing manual. Such computers should be properly approved to ensure that officers can place full reliance on the information provided. • The availability or otherwise of a reliable, approved, loading computer programme is a factor to be included in determining an appropriate level of manning for vessels on intensive schedules. • The resultant increase in acceleration forces and consequent reduction in allowable stack weights when a vessel's GM is increased above the value quoted in the cargo securing manual is clearly understood by vessels' officers. The consequential effect on container stack weight, height and lashing arrangement for changes in the vessel's GM should be readily available and clearly displayed to ships' staff. • Those involved in container operations are aware that containers with allowable stack weights below the ISO standard are in regular use and must be clearly identified at both the planning and loading stages to avoid the possibility of such containers being crushed. • With respect to cargo planning operations: <ul style="list-style-type: none"> • cargo planners have appropriate marine experience or undergo training to ensure ship safety considerations are fully recognised cargo planning software provided is able to recognise and alert planners to the consequences of variable data e.g GM, non standard container specifications lessons learned from problems identified during container planning operations are formally reviewed and appropriate corrective measures put in place ships' staff are provided with sufficient time to verify/approve proposed cargo plans. <p>Predicted implementation date - 31 December 2008</p>

Accepted – Implemented – Recommendation closed by MAIB

Number	Focus	Investigation	Addressed To	Recommendation
136	Commercial Shipping	Ouzo	MCA	In light of the findings of this investigation on the detrimental effect on watchkeeping of bridge lookouts wearing glasses with photochromic lenses at night, institute measures to: <ul style="list-style-type: none"> Eliminate the practice on UK registered vessels, and Raise awareness of the dangers internationally.
155		Harvest Caroline		Review the effectiveness of instructions to auditors (Flag State, and Recognised Organization) on the implementation of the International Safety Management Code to include consideration of the scope of all verification audits and what additional assurance is required to take into account factors such as: <ul style="list-style-type: none"> recent changes in ownership, register and class; the marine experience of the company; the knowledge of the company in operating the ship type; and degree of familiarity with the safety management system procedures in use.
155a	Commercial Shipping		MCA	Take forward the results of the reviews to the International Maritime Organization for inclusion in the Guidelines on implementation of the ISM Code by Administrations.
155b	Commercial Shipping		The St Vincent and the Grenadines Maritime Administration	
156	Commercial Shipping	Harvest Caroline	MCA	Review your procedures for flagging in ships to the UK Register to assist in the promotion of the quality of ships operating predominantly in UK territorial waters.
157	Commercial Shipping	Harvest Caroline	The International Naval Surveys Bureau	Adopt measures to ensure that there is no conflict of interest during the review of safety management systems provided by your worldwide network of agents.
159	General Maritime	Haitian Sloop	Turks & Caicos Islands' Marine Police Unit	Improve the ability of police launch crews to convey instructions to sloop crews and passengers with the specific aim of warning them of the dangers of passengers crowding on deck. <ul style="list-style-type: none"> Avoid taking sloops laden with passengers in tow, or any other action, such as going alongside, that could precipitate a loss of stability. Equip its police launches with high capacity liferafts for use in marine emergencies
166a	General Maritime	Octopus/ Harald	UK Hydrographic Office	Agree wording and put forward to the IHO/IMO a proposal that the relevant working groups investigate ways of ensuring that ECDIS displays provide a clear warning or indication to the mariner whenever the survey data used to produce the electronic chart in use is of poor quality.

SECTION B

LEVEL 2 RECOMMENDATIONS

These recommendations are addressed to industry bodies and organisations which may call for changes or reinforcement of best practice.

Summary Table

Focus	Total	Accepted Action Implemented	Accepted Action yet to be Implemented	Partially Accepted	Rejected	No Response Received
General Maritime	11	10	1	0	0	0
Commercial Shipping	19	11	7	0	1	0
Fishing Vessels	8	3	5	0	0	0
Leisure Vessels	1	1	0	0	0	0
Total	39	25	13	0	1	0

Level 2 Recommendations – Breakdown

Responses to recommendations which have **not been accepted** have been grouped together and presented first. Those which have been **accepted** are presented secondly and broken down into their vessel type.

Rejected

Number	Focus	Investigation	Addressed To	Recommendation
167d	Commercial Shipping	Octopus / Harald	British Wind Energy Association	Through its membership, promulgate to ship owners the safety lessons identified in this report in order for them to emphasize to their shipmasters and navigating officers the need to carefully consider chart source data and “Category of Zone of Confidence” (CATZOC) when planning and executing navigational passages.
			Response	<i>British Wind Energy Association (BWEA) has not accepted this recommendation as its members are not ship owners or operators and when chartering ships often use brokers. Because of this the members are two steps away from the masters and navigating officers to which the recommendation is directed</i>
			MAIB Comment	Although MAIB understand the points raised by BWEA nevertheless we find this response unhelpful. BWEA could have at least undertaken to pass the recommendation on to its members for further promulgation to the brokers and agents that they use.

Accepted – Yet to be Implemented

Number	Focus	Investigation	Addressed To	Recommendation
112	Fishing Vessels	Sian Elizabeth	MCA	Ensure the effective inspection and survey of under 15m fishing vessels to ensure compliance with the Code. Predicted implementation date - 31 December 2008
114	Fishing Vessels	Sian Elizabeth	MCA	Implement The Merchant Shipping and Fishing Vessels (Provision and Use of Work Equipment) Regulations 2006 and amalgamate the provisions of the regulations into guidance for fishing vessel inspectors and surveyors. Predicted implementation date - Not given
117	Fishing Vessels	Danielle	MCA	Provide details of the hazards associated with “tipping” and whipping drums on board scallop dredgers in the next revision of MGN 265 (F). Predicted implementation date - 30 August 2008
118	Fishing Vessels	Danielle	MCA	Introduce a section in the statutory documentation associated with the survey and inspection regime for fishing vessels to ensure that the status of each vessel’s risk assessment is recorded by surveyors. Predicted implementation date - 31 December 2008
119	Fishing Vessels	Danielle	MCA	Amplify and expand on current advice contained in MSN 1768 (M&F) such that fishermen are reminded: <ul style="list-style-type: none"> • medical scale requirements provide the minimum levels of medical stores only. Additional stores may be provided at the skipper’s/owner’s discretion. Predicted implementation date - 31 December 2008
132	Commercial Shipping	Prudence	British Waterways Yorkshire	Together with Ouse Pilots Ltd. and a reputable supplier of navigation aids within harbour areas, research, source and install navigation aids which will assist pilots and masters in ships to safely transit the Goole railway bridge in all appropriate conditions of visibility. Predicted implementation date - Not given but work in progress
133	Commercial Shipping	Prudence	British Waterways Yorkshire	In consultation with Ouse Pilots Ltd., agree and implement with Network Rail modifications to the Goole railway bridge with respect to its visibility, and the provision of fendering, in order to minimise the risk to transiting vessels and the environment. Predicted implementation date - Not given but work in progress

Number	Focus	Investigation	Addressed To	Recommendation
135		The Calypso		<p>Draft and present to the appropriate IMO sub-committee, a paper which will result in the production of an IMO circular on:</p> <ul style="list-style-type: none"> • The design of control stations for CO2 systems covering: • Identification of critical system components (eg distinguishing between timer and pilot bottles) • The location and identification of any non-essential system components (which are not required to release the CO2) to prevent confusion; • The need for clear indication that the discharge mechanism of each reservoir has been activated. <p>The required crew actions following the use of fixed installation CO2 systems, aimed at improving the general knowledge of these systems, including inspections and checks of the system status after use.</p>
135a	Commercial Shipping		Cyprus Maritime Administration	<p>Predicted implementation date - 31 December 2008 Cyprus will support MCA's initiative</p>
135b	Commercial Shipping		MCA	<p>Predicted implementation date - 31 December 2008</p>
142	Commercial Shipping	Thunder	Port of Mostyn Ltd	<ul style="list-style-type: none"> • Reinstate the recommended pilotage service from the North Rhyl buoy, and ensure that all applicable charts and hydrographic publications are amended accordingly. Predicted implementation date - Subject to 2007/144 • Amend its port passage plan to provide comprehensive guidance for masters of vessels using the channel and anchoring in the approaches to Mostyn. Implemented • Review its emergency response procedures for marine accidents, ensuring that the necessary actions for each emergency are identified, and that port and harbour personnel are trained and familiar with the requirements. Implemented

Number	Focus	Investigation	Addressed To	Recommendation
153	Commercial Shipping	Thomson Celebration	MCA	Recognising the need for additional training, to achieve a level of competence appropriate to operating large capacity passenger tenders, develop and take forward to IMO, through the most appropriate channels, competency requirements for passenger ship tender coxswains and crew. Predicted implementation date - 31 May 2009
198	General Maritime	Gas Monarch / Whispa	MCA	Review the requirement for training and qualification for skippers and crew of small commercial vessels including, but not limited to, radar training, taking into consideration the current requirements for Inland Waterways and Limited Coastal Operations, Boatmasters' Qualifications. Predicted implementation date - 31 December 2008
201	Commercial Shipping	Wizard	Council of the Isles of Scilly	Risk assess the night time operation of small commercial vessels operating in the waters of the Scilly Isles then review the adequacy of the Council of the Isles of Scilly's Boatman's Licence assessment procedures. Predicted implementation date - 1 May 2008 Last chased up 15 July 2008 - No reply to date

Accepted – Implemented – Recommendation closed by MAIB

Number	Focus	Investigation	Addressed To	Recommendation
103	General Maritime	Arctic Ocean, Maritime Lady, Sunny Blossom	Federal Ministry of Transport, Building and Urban Affairs	Review, in light of its ongoing PEC re-assessment, the minimum number of navigation officers required on the bridges of vessels transiting German Pilotage waters.
104	General Maritime	Arctic Ocean, Maritime Lady, Sunny Blossom	Federal Ministry of Transport, Building and Urban Affairs	Introduce a requirement for all vessels entering the Elbe River from Brunsbüttel Locks to be given a safety briefing covering river activity relevant to their intended movements.
105	General Maritime	Arctic Ocean, Maritime Lady, Sunny Blossom	Federal Ministry of Transport, Building and Urban Affairs	Develop its existing emergency procedures into a comprehensive Safety Management System. This should, as a minimum, include: <ul style="list-style-type: none"> • A system for the review of safety, including the analysis of incidents and accidents, to ensure safety controls and procedures are continuously updated. • Establishing guidance and procedures to ensure that safety margins are not eroded as normal operations are resumed following an accident.
113	Fishing Vessels	Sian Elizabeth	MCA	Verify that fishing vessel owners are compliant with The Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Employment of Young Persons) Regulations 1998.
120	Fishing Vessels	Danielle	Seafish	Extend the use of Seafish Group Training Association Officers to provide practical on board guidance to UK fishermen in completing fishing vessel risk assessments.
123	Commercial Shipping	Skagern/ Samskip Courier	Port Marine Safety Code Steering Group	Highlight to Port Authorities the risks in using mobile telephones for passing operational information. They should emphasise the need for pilots to use mobile telephones only under controlled situations, and avoid the exchange of operational information which should more appropriately be transmitted by radio
134	General Maritime	Prudence	British Waterways Yorkshire	Expedite the development and introduction of the port's safety management system, paying particular attention to: <ul style="list-style-type: none"> • The duties and responsibilities of the Harbourmaster. • Pilot authorisation and qualifications. • The requirement and procedures for hydrographic survey. • The provision of passage plans to ships. • Emergency call-out and response. • Accident and incident reporting and investigation.

Number	Focus	Investigation	Addressed To	Recommendation
137		Ouzo		Promulgate, by the most effective means, the lessons to be learned from this investigation, and the research being carried out on MAIB's behalf by QinetiQ Funtington, on the ineffectiveness of many radar reflectors and the inability of ships' radars to detect small yachts in moderate sea conditions.
137a	General Maritime		MCA	
137b	Leisure Vessels		RYA	
139	Commercial Shipping	Ouzo	ICS	In the next revision of the 'Bridge Procedures Guide', to include: <ul style="list-style-type: none"> • Clear guidance to watchkeepers on the time of adjustment needed to ensure adequate adaptation for night vision on the takeover of a watch; • Clear guidance on the absolute need for good bridge blackout procedures; Advice on the fact that exposure to white light effectively sets the adaptation to night vision clock back to zero, and the effect that this knowledge should have on watchkeepers who periodically work in lit chartrooms.
138	General Maritime	Ouzo	British Standards Institute	Consider the likelihood that during an emergency, lifejackets will not be fitted tightly and that, therefore, to be effective, a crotch strap should be standard supply with every lifejacket.
143	Commercial Shipping	Thunder	MCA	Conduct a PMSC verification check on the Port of Mostyn. As a minimum, the check should encompass the safety of navigation of vessels arriving and departing the port, the port passage plan, and emergency response procedures for marine accidents.
150	Commercial Shipping	Ennerdale	Lloyds Register	Take forward a proposal to IACS on the development of unified requirements (URs) on sampling arrangements for liquefied gas carriers. The standards should, as a minimum, address the relevant shortfalls identified in this investigation, especially with regard to the provision of two valve separation from the cargo system and the avoidance of screw couplings.
151	Commercial Shipping	Ennerdale	Lloyds Register	Take forward a proposal to IACS regarding the operation and design of ESD valves which: <ul style="list-style-type: none"> • Stipulates a requirement for ESD valves to be tested and inspected during class surveys to verify effective closure. • Ensures that the IGC Code requirement for local manual closure means the ESD valve can be positively closed by hand. Requires arrangements for the indication of the status of ESD valves to accurately mimic whether the valve is open or closed.

Number	Focus	Investigation	Addressed To	Recommendation
158	Commercial Shipping	Harvest Caroline	The International Naval Surveys Bureau	Ensure auditors follow your instructions regarding the familiarity of senior officers and managers with the safety management system in use during SMC and DOC verifications.
162	General Maritime	Haitian Sloop	Turks And Caicos Police Force	<p>Review your procedures for the interception of Haitian sloops along the following lines:</p> <ul style="list-style-type: none"> • Immediate, until effective procedures are developed: cease actions that are likely to precipitate a sloop's capsizing. Initial recommendations addressing this issue have been made by the MAIB in Safety Bulletin 1/2007, reproduced at Annex B to the report. • Short term: work with the UKSAT MTU to develop standard operating procedures that can be implemented within present resource limitations to facilitate the safe interdiction of sloop traffic. • Medium term: identify and procure the assets and establish the procedures necessary to achieve the safe interdiction of Haitian sloop traffic.
163	General Maritime	Haitian Sloop	Turks And Caicos Police Force	<p>Take steps to improve the islands' maritime SAR capability by:</p> <ul style="list-style-type: none"> • Improving the emergency and lifesaving equipment on the TCI patrol launches and other State vessels. • Establishing the maximum number of passengers that can be safely embarked on State vessels likely to become involved in SAR operations. • Ensuring that vessels operating off the coast are able to raise the alarm and communicate effectively between each other and with the authorities ashore. For MPU vessels, this could be done by repairing the police band radio relay stations. However, a more universal solution would be through provision of a VHF channel 16 and DSC alerting service. <p>Developing a maritime SAR alerting and coordination plan that can be put into force quickly and effectively once the alarm is raised. For simplicity, responsibility for enacting this would best be co-located with the monitoring of the designated radio circuit.</p>

Number	Focus	Investigation	Addressed To	Recommendation
167		Octopus / Harald		Through its membership, promulgate to ship owners the safety lessons identified in this report in order for them to emphasize to their shipmasters and navigating officers the need to carefully consider chart source data and "Category of Zone of Confidence" (CATZOC) when planning and executing navigational passages.
167a	Commercial Shipping		Cruise Lines International Association	
167b	Commercial Shipping		Passenger Ship Association	
167c	Commercial Shipping		International Marine Contractors Association	
183	Fishing Vessels	Lindy Lou	British Standards Institution	Propose to the International Standards Organisation that BS EN ISO 9094 Parts 1 and 2 should be reviewed regarding the fitting of smoke alarms on habitable small craft.
188	General Maritime	Sea Express 1 / Alaska Rainbow	Mersey Docks and Harbour Company	<p>Complete your review of compliance with the requirements of the PMSC with particular reference to:</p> <ul style="list-style-type: none"> • VTS operations, ensuring that an effective fog routine is established and that the VTS station is sufficiently manned to absorb the additional workload that operation in restricted visibility demands, and that VTSOs are proactive in ascertaining further information in the event of incident; • Pilotage best practice, highlighting the need for pilots to proactively communicate with approaching vessels and VTS at an early stage to avoid unnecessary development of a close quarters situation; to be proactive in requiring support from the ship's bridge team; and to sound appropriate fog signals in restricted visibility.
189	General Maritime	Sea Express 1 / Alaska Rainbow	Mersey Docks and Harbour Company	Following satisfactory completion of your review into PMSC compliance, invite the MCA to conduct a PMSC verification visit to the Port of Liverpool.
190	Commercial Shipping	Sea Express 1 / Alaska Rainbow	Mersey Docks and Harbour Company	Review the Mersey Channel Collision Rules with respect to sound signals required by vessels manoeuvring in close proximity during periods of restricted visibility.
196	Commercial Shipping	Prospero	Swedish Maritime Administration	Review the current safe manning requirements for Donsötank vessels that operate complex, diesel-electric and podded propulsor systems, taking into consideration the need for specialist electro-technical expertise on these particular ships.

SECTION C

LEVEL 3 RECOMMENDATIONS

These are addressed to individual organisations, owners or companies that are specific to their area, vessel or company. They have no direct impact on the shipping industry as a whole, although the lessons are promulgated through the individual investigation reports, though media coverage of the report and through the MAIB's Safety Digests.

Summary Table

Focus	Total	Accepted Action Implemented	Accepted Action yet to be implemented	Partially Accepted	Rejected	No Response Received
General Maritime	24	23	1	0	0	0
Commercial Shipping	41	38	2	0	0	1
Fishing Vessels	8	6	1	1	0	0
Leisure Vessels	12	10	1	0	0	1
Total	85	77	5	1	0	2

Level 3 Recommendations – Breakdown

Responses to recommendations which have **not been accepted** have been grouped together and presented first. Those which have been **accepted** are presented secondly and broken down into their vessel type.

Partially Accepted

Number	Focus	Investigation	Addressed To	Recommendation
175	Fishing Vessels	Meridian	Scottish Fishing Federation Services Limited	<ul style="list-style-type: none"> • Include the safety lessons of this accident in all pre-departure briefings to skippers who are about to take up guard ship duties. • Require companies, who contract the services of guard vessels through SFF Services Ltd, to provide long range warning of severe weather directly to those vessels in time to assist the skipper in any decision to seek shelter.
			Scottish Fishing Federation Services Limited Response	<ul style="list-style-type: none"> • Accepted - implemented • <i>It is accepted that every fishing vessel, those on guard ship duty and those fishing, should have the best weather forecasting possible. But SFF do not believe that it is appropriate to require contracting companies to provide long-range forecasts. Instead the general sharing of weather forecasts by North Sea installations is being encouraged.</i>
			MAIB Comment	SFF's comments are noted. The action that is proposed in relation to the second bullet does not fully address the shortfall highlighted by the investigation.

No Response Received

Number	Focus	Investigation	Addressed To	Recommendation
101b	Commercial Shipping	Arctic Ocean, Maritime Lady, Sunny Blossom	Maritime Management AS	<p>Provide guidance to masters, on the need to adopt manning levels appropriate to their area of navigation, taking into account the increased risks of grounding and collision inherent to navigating in pilotage waters. If appropriate, consider offering masters a period of suitable training in the effective use and management of bridge personnel, teams and resources. Last chased up 16 May 2008 – Maritime Lady was declared a constructive total loss after the accident and Maritime Management no longer has any vessel registered in Gibraltar. No reply has been received from the company</p>
171	Leisure Vessels	Hooligan V	Konstuktiebedrijf De Jong BV	<p>Revise its manufacturing procedures to:</p> <ul style="list-style-type: none"> • Ensure that components manufactured for fitting to boats built under RCD criteria fully meet the RCD requirements, are supported by calculations and have the appropriate Safety Factor applied. • Refer to component designers when considering changes to a design to ensure that safety is not compromised, especially by the addition of welds in stress critical areas. • Where appropriate, specify weld fatigue procedures to relieve stresses in critical weld areas. <p>Last chased up 11 June 2008 - No reply to date Information from the Netherlands Shipping Inspectorate indicates that this company may no longer have any responsibilities under the RCD</p>

Accepted – Yet to be Implemented

Number	Focus	Investigation	Addressed To	Recommendation
129e	General Maritime	Hilli	The Institute of Chemical Engineers	<p>Promulgate to your membership and surveyors, where appropriate, the following safety issues, which have been identified in this investigation report:</p> <ul style="list-style-type: none"> • The risk of hydrogen generation when using sulphamic acid to clean steel structures. • The need to ensure that ventilation is effective and unobstructed during chemical cleaning. • The importance of Method Statements and risk assessments. • The need for strict adherence to confined space entry routines. <p>Predicted implementation date - 31 December 2008</p>
131	Fishing Vessels	Evening Star	J Thomson	<p>Attend, at the earliest opportunity, a Sea Fish Industry Authority "Intermediate Fishing Vessel Stability Awareness Course" offered free of charge by Group Training Associations.</p> <p>Predicted implementation date - 30 July 2007 Last chased up 24 June 2008 - No reply to date Seafish records indicate that the training has not yet been undertaken</p>
149a	Commercial Shipping	Ennerdale	Society of International Gas Tankers and Terminal Operators	<p>Review and revise guidance provided to the industry on sampling arrangements, taking due account of any standard required by classification societies</p> <p>Predicted implementation date - Work in progress</p>

Number	Focus	Investigation	Addressed To	Recommendation
169	Leisure Vessels	Hooligan V	Max Fun Boats	<p>Review its obligations and procedures as a manufacturer to ensure that the following RCD requirements are met:</p> <ul style="list-style-type: none"> • Declarations of Conformity are provided for each boat. • Boats declared to meet the RCD requirements are identified by the CE marking of conformity. • A Builder's Plate is permanently affixed to boat. • Processes - including those of sub-contractors - are sufficiently robust to ensure that the design of the Max Fun 35 meets the appropriate standards. <p>Predicted implementation date - 31 December 2007 Last chased up July 2008 - No reply to date</p>
193	Commercial Shipping	Prospero	Rederei AB DonsoÖtrank	<p>Revise its current management and operating procedures to ensure:</p> <ul style="list-style-type: none"> • Specialist technical training, accredited by the manufacturers of the SSP system, is provided for all technical staff that are involved in the operation, maintenance and repair of the SSP systems operated by Donsötrank. • Specialist ship handling training, accredited by the manufacturers of the SSP system, is provided for all nautical staff that are involved in the operation of the SSP systems operated by Donsötrank. The training should pay particular attention to the back-up and emergency modes of operation. • Accurate, comprehensive manuals and documentation are available on board vessels in its fleet fitted with SSP systems. • Clear instructions are provided with respect to actions which need to be taken by ships' staff wherever a 'condition of class' is issued. The amended procedures should include the need to brief port authorities and pilots prior to entering or leaving harbour. • Safety critical information is promptly circulated to all vessels in its fleet. A positive feedback arrangement should be implemented to verify that safety critical information is being received by the target audience. • Vessels in its fleet equipped with SSP systems are appropriately manned. <p>The need to include dedicated electro-technical officers on board should be considered as part of any manning review.</p> <p>Predicted implementation date - 31 December 2008</p>

Accepted – Implemented – Recommendation closed by MAIB

Number	Focus	Investigation	Addressed To	Recommendation
101a	Commercial Shipping	Artic Ocean/ Maritime Lady/ Sunny Blossom	Reedereigruppe Freese	Provide guidance to masters, on the need to adopt manning levels appropriate to their area of navigation, taking into account the increased risks of grounding and collision inherent to navigating in pilotage waters. If appropriate, consider offering masters a period of suitable training in the effective use and management of bridge personnel, teams and resources.
102	General Maritime	Artic Ocean/ Maritime Lady/ Sunny Blossom	UK Hydrographic Office	Review the sections of its 'Admiralty Sailing Directions' (North Sea (East Pilot) covering the Elbe River, with a view to removing any possible ambiguity in the wording that sets out the right of way of a vessel in a fairway.
106	Commercial Shipping	Artic Ocean/ Maritime Lady/ Sunny Blossom	Laurin Maritime (America) Inc.	Review its safety management system to ensure that degradations in its vessels' performance, particularly those associated with Conditions of Class, are identified, and suitable risk control measures implemented. Specifically, external authorities such as VTS, harbour authorities and pilots should be notified of operating limitations so that they can apply appropriate risk control measures as necessary.
107	Commercial Shipping	Fehn Mistral	Fehn Bereederungs GmbH & Co. KG	Implement a regime of unscheduled ship inspections to ensure that correct cargo securing arrangements are being met at all times.
108	Fishing Vessels	Sian Elizabeth	John Lake (Shellfish) Ltd	Comply with the requirements of the Code, and specifically: <ul style="list-style-type: none"> • Complete, or arrange completion of, an assessment of the health and safety risks arising in the normal course of work activities or duties of the vessel. Certify annual compliance with the Code, by declaring that the safety equipment has been properly maintained and surveyed and that an up to date health and safety risk assessment has been completed.

Number	Focus	Investigation	Addressed To	Recommendation
109	Fishing Vessels	Sian Elizabeth	John Lake (Shellfish) Ltd	Ensure all skippers and crew are trained as required by statute.
110	Fishing Vessels	Sian Elizabeth	John Lake (Shellfish) Ltd	Ensure that young persons are familiarised, trained and assessed, with consideration given to their age prior to working on board.
111	Fishing Vessels	Sian Elizabeth	John Lake (Shellfish) Ltd	Ensure that the riddle arrangement and all other equipment within its fleet comply with The Merchant Shipping and Fishing Vessels (Provision and Use of Work Equipment) Regulations.
115	Fishing Vessels	Danielle	The Mermaid Trawler Company Limited	Review the current arrangement of the framework in the vicinity of the whipping drums on Danielle, and consider the introduction of an alternative framework arrangement that is less hazardous to personnel, as adopted on other similar vessels.
116	Fishing Vessels	Danielle	The Mermaid Trawler Company Limited	Review the provision of emergency stop facilities for the whipping drums on Danielle, and ensure that an accessible stop button is available to a crew member should he/she become trapped in the area of the whipping drum.
121	Commercial Shipping	Skagern/ Samskip Courier	Port Marine Safety Code Steering Group	Promulgate to pilots, by way of Port Authorities, a reminder on the importance of abiding by the International Collision Regulations at all times, and in particular Rule 6, Safe Speed, when navigating in confined waters in restricted visibility.
122	Commercial Shipping	Skagern/ Samskip Courier	Port Marine Safety Code Steering Group	Promulgate to Port Authorities the need for pilots to maintain dialogue with the bridge team regarding the conduct and execution of the passage plan, thus ensuring the team is kept fully involved, and informed, at all times.
124	Commercial Shipping	Skagern/ Samskip Courier	ABP Humber Estuary Services	Discourage its pilots from using mobile telephones for discussing operational matters pertinent to the safe navigation of vessels when VHF radio is available.

Number	Focus	Investigation	Addressed To	Recommendation
125	Commercial Shipping	Skagern/ Samskip Courier	ICS	Through your member organisations, emphasise the need for shipowners to ensure masters are given clear guidelines which detail the importance of effective dialogue with pilots, and identifies the need for masters to challenge or question decisions or actions taken by pilots at an early stage so that, when required, effective corrective action can be taken to prevent accidents.
126	Commercial Shipping	Mounts Bay	Royal Fleet Auxiliary	Undertake an urgent review of Fast Rescue Craft operations, with particular emphasis on the Bay Class RFAs, in light of my letter to Captain Graeme Turner of 24 February 2006, and taking into account the safety issues identified at Annex A to this letter.
127		Hilli		Review your inhibited sulphamic acid, chemical cleaning procedural guidance and Product Data Sheets to:
127a	General Maritime		Nalco	<ul style="list-style-type: none"> • Reflect that hydrogen can be produced during the chemical cleaning process.
127b	General Maritime		Drew Marine (UK) Ltd	<ul style="list-style-type: none"> • Stress the importance of checking ventilation arrangements to ensure they are unobstructed during chemical cleaning.
127c	General Maritime		Unitor	<ul style="list-style-type: none"> • Advise that the boiler ventilation terminals fitted during cleaning, be tested for the presence of hydrogen.
127d	General Maritime		Eazychem	<ul style="list-style-type: none"> • Advise that the boiler is emptied and refilled with fresh water, to purge it of gases, before opening the steam drum door.
128		Hilli		Include the risk of hydrogen generation when formulating Material Safety Data Sheets to comply with the European legislation on the management of risks from chemicals (Registration, Evaluation, Authorisation of Chemicals) which is due to enter force on 1 June 2007.
128a	General Maritime		Nalco	
128b	General Maritime		Drew Marine (UK) Ltd	
128c	General Maritime		Unitor	
128d	General Maritime		Eazychem	

Number	Focus	Investigation	Addressed To	Recommendation
129		Hilli		<p>Promulgate your membership and surveyors, where appropriate, the following safety issues, which have been identified in this investigation report:</p> <ul style="list-style-type: none"> • The risk of hydrogen generation when using sulphamic acid to clean steel structures. • The need to ensure that ventilation is effective and unobstructed during chemical cleaning. • The importance of Method Statements and risk assessments. • The need for strict adherence to confined space entry routines.
129a	General Maritime		MCA	
129b	General Maritime		HSE	
129c	General Maritime		The Chemical Industries Association	
129d	General Maritime		British Association of Chemical Specialities	
129f	General Maritime		The Chartered Institute of Building Service Engineers	
129g	General Maritime		The Institute of Marine Engineering, Science & Technology	
130	General Maritime	Hilli	MCA	<p>Review the content of the Code of Safe Working Practices, to:</p> <ul style="list-style-type: none"> • Reflect the risk of hydrogen being generated when using sulphamic acid to clean steel structures. <p>Recommend testing for hydrogen when conducting confined space entry routines following any chemical clean.</p>
140		Kocapete S		<p>In co-operation with Associated British Ports South Wales, establish arrangements to improve the ship knowledge of the local fire-fighters that could become involved in shipboard fire fighting in your area.</p>
140a	Commercial Shipping		ABP South Wales	
140b	Commercial Shipping		South Wales Fire & Rescue	

Number	Focus	Investigation	Addressed To	Recommendation
141	Commercial Shipping	Thunder	Reederei Erwin Strahman	<p>Revise your SMS to ensure that masters:</p> <ul style="list-style-type: none"> • Are aware of their obligation to report an accident in accordance with national and local regulations. • Follow and understand the instructions for keeping a safe navigational watch at anchor, provided in STCW. • Understand the fundamental principles of anchoring.
145	Commercial Shipping	Maersk Dover	Maersk Marine Services	<p>Introduce procedures to ensure that before an OOW keeps his/her first unsupervised watch:</p> <ul style="list-style-type: none"> • They have been assessed by the master to confirm they are fully competent to keep a safe navigation watch, • They have been fully trained and locally assessed on type specific bridge equipment.
146	Commercial Shipping	Maersk Dover	Maersk Marine Services	<p>Identify sources of distraction for bridge watchkeepers, and introduce measures to minimise these. Such measures should include procedures for handling routine commercial message traffic away from the bridge.</p>
147	Commercial Shipping	Maersk Dover	Maersk Marine Services	<p>Review the tasks and workload of masters, to allow them to spend as much time on the bridge as circumstances require.</p>
148	Commercial Shipping	Maersk Dover	Maersk Marine Services	<p>In light of the increasing speed of ferries and of transiting traffic in the Dover Strait, and in view of the enhanced arrangements utilised by high speed craft, risk assess the route to determine the optimum arrangements for the maintenance of safe navigation.</p>

Number	Focus	Investigation	Addressed To	Recommendation
149		Ennerdale		Review and revise guidance provided to the industry on sampling arrangements, taking due account of any standard required by classification societies
149b	Commercial Shipping		OCIMF	
149c	Commercial Shipping		Chemical Distribution Institute	
152	Commercial Shipping	Thomson Celebration	Lloyds Register	Propose and develop within IACS agreed standards for the issuing of lifeboat /passenger tender certificates.
154	Commercial Shipping	Thomson Celebration	Columbia Ship Management Ltd	Put in place and enforce procedures that will prevent unauthorised maintenance being carried out on passenger tenders.
160	Commercial Shipping	Aqua Boy	Aqua Ship ANS	Provide formal instructions to the master of Aqua-boy which will require him/her to keep the vessel alongside a safe berth if it becomes apparent that the statutory minimum hours of rest requirements are not likely to be achieved.
161	Commercial Shipping	Retainer	Cory Environmental	<p>Review and revise your company operating procedures to ensure:</p> <ul style="list-style-type: none"> • Danger areas on board company tugs are effectively highlighted and formal instructions are issued to tug crews regarding the need to keep clear of lines under tension. • Tug crews are provided with guidance on the roles and responsibilities of individual crew members, ensuring one crewman is nominated to have responsibility for monitoring the safety of operations. <p>A system of positive feedback and reporting between tug crews and barge personnel is implemented to ensure information and/or warnings about potentially hazardous situations is effectively promulgated between them.</p>
164	Commercial Shipping	Tor Futura	ABP Immingham	Identify the key bollards in Immingham Lock that are used for high-sided vessels and modify or replace them with bollards of an appropriate design.

Number	Focus	Investigation	Addressed To	Recommendation
168b	Commercial Shipping	Octopus/ Harald	Orkney Towing Limited	Fully consider, when planning the passage of deep draught vessels: <ul style="list-style-type: none"> the quality of survey data. the potential effect of tidal conditions.
170	Leisure Vessels	Hooligan V	Max Fun Boats	Ensure that the appropriate Safety Factor is applied to designs, and that the standard to which the boat is built is fully documented.
172	Leisure Vessels	Hooligan V	The International Council of Marine Industry Associations	Propose the following amendment to the Recreational Craft Sectoral Group Guidelines 2006: <ul style="list-style-type: none"> Add the term “keel construction” to Section E.A.3 Part 5.d
173		Hooligan V		Promulgate to your membership, owners, surveyors, and repairers/maintainers where appropriate, the following safety issues, which have been identified in this investigation report: <ul style="list-style-type: none"> The need to rigorously follow the standards selected for design criteria, especially where these include Safety Factors. The importance of referring to original and revised drawings when considering modifications to ensure that proposals will not compromise safety. The need for quality systems to be in place to properly check the product against the design criteria. The importance of examining keels for signs of fatigue cracking, especially where hollow fabricated steel keels are fitted, and to consider using non-destructive examination techniques whenever there is doubt about the integrity of the appendage.
173a	Leisure Vessels		Royal Yachting Association	
173b	Leisure Vessels		Royal Ocean Racing Club	
173c	Leisure Vessels		British Marine Federation	
173g	Leisure Vessels		The Yacht Designers and Surveyors Association	
173d	General Maritime		Royal Institution of Naval Architects	
173e	General Maritime		International Council of Marine Industry Association	
173f	General Maritime		Institute of Marine Engineers and Science and Technology	

Number	Focus	Investigation	Addressed To	Recommendation
174		Hooligan V		<p>Promulgate, where appropriate, the following comment at page 7 of the RSG Guidelines 2006:</p> <ul style="list-style-type: none"> • "RSG urges the industry and Notified Bodies to use EN Standards".
174a	Leisure Vessels		Royal Yachting Association	
174b	Leisure Vessels		Royal Ocean Racing Club	
174c	Leisure Vessels		British Marine Federation	
174g	Leisure Vessels		The Yacht Designers and Surveyors Association	
174d	General Maritime		Royal Institution of Naval Architects	
174e	General Maritime		International Council of Marine Industry Association	
174f	General Maritime		Institute of Marine Engineers and Science and Technology	
177	Commercial Shipping	Annabella	Döhle (IOM) Limited	Ensure that, on promotion to senior rank, deck officers receive sufficient familiarisation so as to be fully conversant with the contents of the vessel's cargo securing manual before taking responsibility for loading and securing cargo.
178	Commercial Shipping	Annabella	Döhle (IOM) Limited	Carefully consider the demands imposed on its crews by the loading schedules of vessels within its fleet to ensure manning levels are appropriate, such that the requirements of the company's safety management system can be fully met.

Number	Focus	Investigation	Addressed To	Recommendation
179	Commercial Shipping	Annabella	Unifeeder A/S	Revise your current operating procedures to ensure lessons learned from problems identified during container planning operations are formally reviewed and, when appropriate, corrective measures put in place.
180	Commercial Shipping	Harlingen/ Prinkipo	Navigia Shipmanagement BV	Review and revise company operating procedures to ensure: <ul style="list-style-type: none"> • Masters are trained and competent in the use of all bridge equipment before taking command. • Masters are familiar with the principles of Bridge Resource Management, and understand the company's requirement for utilizing bridge personnel effectively.
181	Commercial Shipping	Harlingen/ Prinkipo	Navigia Shipmanagement BV	Review and revise the company's shipboard ISM procedures to ensure: <ul style="list-style-type: none"> • Information is immediately available to facilitate prompt and effective responses to emergency situations. • Realistic drills are routinely carried out to prepare ship's staff for potential emergency situations.
182	Commercial Shipping	Harlingen/ Prinkipo	Navigia Shipmanagement BV	Review its Voyage Data Recorder (VDR) procedures to: <ul style="list-style-type: none"> • Routinely verify VDRs' functionality and performance. • Provide instructions to ensure data is saved effectively following an incident.
185	Commercial Shipping	Sea Express 1/ Alaska Rainbow	The Isle of Man Steam Packet Company Limited	Review your Safety Management System with particular respect to: <ul style="list-style-type: none"> • using ground stabilised radar display in the confined waters of a river transit; • improving external communications in the event of an emergency in terms of urgency and detail.
186	Commercial Shipping	Sea Express 1/ Alaska Rainbow	The Isle of Man Steam Packet Company Limited	Ensure that the passenger safety instruction card illustrates the lifejacket to be found under the seat for which the card is provided.

Number	Focus	Investigation	Addressed To	Recommendation
187	Commercial Shipping	Sea Express 1 / Alaska Rainbow	J G Goumas (Shipping) Co S.A	<p>Ensure your masters are given clear guidelines which detail the importance of effective dialogue with pilots and identify the need for the ship's bridge team to:</p> <ul style="list-style-type: none"> • be proactive in providing support to pilots; • challenge decisions or actions taken by pilots at an early stage so that, when required, effective corrective action can be taken to prevent accidents.
191	Commercial Shipping	Velazquez	Smit Harbour Towage Liverpool	<p>Review and revise your company operating procedures to ensure:</p> <ul style="list-style-type: none"> • Clear visual communications are maintained between tug crews and ship mooring parties, particularly during the operation of making a tug line fast. • Effective communications are maintained between the tug crew positioned on the aft deck and the tug master. <p>Tug crews are provided with guidance on the roles and responsibilities of individual crew members, ensuring one crewman is nominated to have responsibility for monitoring the safety of operations.</p>
192	Commercial Shipping	Nordsee	Reederei Uwe Jess	<p>Review and revise its company operating procedures and check lists to ensure:</p> <ul style="list-style-type: none"> • Sufficient manpower is made available for work to be undertaken in a safe and effective manner. • Anchoring operations are supervised by suitably trained crew familiar with, and experienced in, the use of the equipment. • A routine maintenance schedule is developed for checking, and if necessary, marking both anchor cables.
194	Commercial Shipping	Prospero	Rederei AB DonsoÖtank	<p>Establish formal arrangements for an on-going service-support/maintenance package, employing suitable experts who are fully familiar with all aspects of the SSP system.</p>

Number	Focus	Investigation	Addressed To	Recommendation
195	Commercial Shipping	Prospero	Rederei AB DonsoÖtank	Facilitate and cooperate in all respects with the various PES, FMEA and human-machine interface improvement and validation projects; to be undertaken with technical assistance provided by DNV and Siemens-Schottel, as detailed in section 4 above.
197	Commercial Shipping	Prospero	Swedish Maritime Administration	Undertake an ISM Code audit of the Donsötank company and all of its ships fitted with the SSP system, with particular attention being paid to the matters raised in the investigation report.
199	General Maritime	Gas Monarch/ Whispa	Comité International Radio-Maritime	Encourage your members who make or supply radars for non-SOLAS convention vessels to emphasise to all small vessel radar users, wherever possible, the need to obtain appropriate training in its use, thus gaining best possible advantage from the equipment.
200	Commercial Shipping	Wizard	St Mary's Jet Boat Service Ltd	Conduct a review of your operating procedures. The review should include: <ul style="list-style-type: none"> • Particular emphasis on the company's policy on operations in darkness and the introduction of specific safe courses and speed as appropriate. • Verification of the effectiveness of the company's operating policy through the introduction of an audit procedure. • Introduction of appropriate measures to ensure that: <ul style="list-style-type: none"> • Manning levels comply with the vessels Workboat Certificate • Safety briefs are given in accordance with The Code of Practice for Safety of Small Workboats & Pilot Boats (Brown Code). • Lifejackets are immediately accessible.

SECTION D

RECOMMENDATIONS TO MULTIPLE RECIPIENTS

Lists the small number of recommendations that have been addressed to large multiple recipients. As a result, it has not been possible to track responses under the closed-loop system. Such multiple addressee recommendations are now being avoided wherever possible, so as to make the closed-loop system as effective as possible.

There were no multiple recommendations issued in 2007.

SECTION E
WITHDRAWN RECOMMENDATIONS

WITHDRAWN RECOMMENDATIONS (not included in these statistics)

Number	Investigation	Addressed To	Recommendation
168a	Octopus/ Harald	Melbourne Marine Services	Fully consider, when planning the passage of deep draught vessels: <ul style="list-style-type: none"> • the quality of survey data. • the potential effect of tidal conditions.
		Response	<i>Since Melbourne Marine Services has recently been purchased our core business no longer involves this type of operations. Therefore as a company we will no longer be tendering for such contracts.</i>
		MAIB Comment	SPT Marine Services formerly Melbourne Marine Services response is noted.

SECTION F

RECOMMENDATIONS BROUGHT FORWARD FROM PREVIOUS YEARS

Lists the ongoing outstanding recommendations shown as ***accepted – yet to be implemented*** in previous reports.

RECOMMENDATIONS BROUGHT FORWARD FROM PREVIOUS YEARS

Recommendations are listed by year/number.

Accepted – Yet to be Implemented

Number	Investigation	Addressed To	Recommendation
2006/ 230a	Neermoor	MCA	Review your requirements for the design approval, survey and inspection of vessels fitted with portable bulkhead systems. The review should, in addition, ensure that Safety Management Systems for the efficient maintenance and safe operation of portable bulkhead systems are checked for effectiveness. Predicted implementation date – 30 September 2008
2006/ 228	Neermoor	Germanischer Lloyd	Conduct a full review of the SMS procedures and instructions relating to the operation and maintenance of portable bulkhead systems fitted to all ships of the Kapitan Siegfried Bojen Schiffsahrtsbetrieb fleet that are classed with Germanischer Lloyd. Predicted implementation date – 30 August 2007 Last chased up – 2 July 2008 Work in progress
2006/ 227	Neermoor	Germanischer Lloyd	Conduct a comprehensive review of the survey and certification requirements relating to portable bulkhead systems on both new build and in-service vessels. This review should include the need for effective maintenance and safe operating procedures to be incorporated into vessel Safety Management Systems. The findings of this review should be further promulgated through IACS. Predicted implementation date – 30 September 2007 Last chased up – 2 July 2008 Work in progress
2006/ 211	Corona/ Walzberg	MCA	Amend the proposed Code of Practice for the Safety of Small Fishing Vessels, to reflect the mandatory requirement to fit radar reflectors. Partially completed as per the revision of MSN 1813 (published 16 July 2007). Full implementation expected 1st quarter 2009

Number	Investigation	Addressed To	Recommendation
2006/ 200	P&O Nedlloyd Genoa	MCA	Use the data from the current MCA/HSE study into container damage, to review: <ul style="list-style-type: none"> • container structural strength and rigidity standards; and • the need to improve container inspection regimes. Predicted implementation date – Not given work in progress
2006/ 199	P&O Nedlloyd Genoa	MCA	Consult with the United Kingdom Chamber of Shipping and representatives from the marine insurance industry, with the objective of including in ships' stability information, for the use by the ship's crew, vessel specific parametric rolling data. Predicted implementation date – 16 August 2008
2006/ 196	P&O Nedlloyd Genoa	Maersk Ship Management BV (formerly Blue Star Ship Management)	Undertake a risk assessment on the vulnerability of its vessels to parametric rolling. Should significant risk exist, implement control measures to include vessel specific guidance to masters on when parametric rolling may be encountered, and instructions on how to avoid it. Predicted implementation date – in progress May 2008 Last chased up 11 July 2008
2006/ 192	Greenhill		Include damage control and actions to be taken in various emergency situations in future safety videos produced for the fishing industry.
192a		FISG	Predicted implementation date – 31 August 2008
192b		SeaFish	Predicted implementation date – 31 August 2008
2006/ 161	Ocean Harvest II	MCA	Require the regular insulation testing of electrical systems to be introduced for all UK fishing vessels and establish measures for confirming this has taken place. (MCA Ministerial Target #4, 2006-07 refers) Predicted implementation date – 31 December 2008

Number	Investigation	Addressed To	Recommendation
2006/ 147	Mollyanna	The British Standards Institution	Propose to the International Standards Organisation that the requirements of the wind stiffness test in EN ISO 12217-2 and EN ISO 12217-3 be reviewed, particularly regarding onboard signage and the information to be included in owner's manuals, with a view to providing users with a more comprehensive knowledge of a craft's limitations, and of the appropriate precautions to be taken. In this review, consideration should be given to limiting the application of this test to boats of greater than a defined medium displacement or length. Predicted implementation date - 8 June 2008
2006/ 133	Carrie Kate & Kets	Department for Transport	Work closely with the RYA, MCA and other relevant stakeholders to realise the urgent introduction of national regulations to establish limits on the amount of alcohol which may be consumed by operators of leisure vessels. The DfT announced its intention to introduce alcohol limits for leisure mariners in June 2007. Work is in hand to achieve this aim.
2006/ 117	Auriga	MCA	Provide guidance to the fishing industry, and organisations supplying liferafts, of the importance of ensuring HIRU operating range is compatible with the liferafts carried. Predicted implementation date – 31 December 2008
2005/ 217b	BOC Canoe	British Canoe Union	Include in powerboat and canoe training courses syllabi instruction on appropriate techniques for towing rafted canoes Predicted implementation date – 31 March 2007 Last chased up 1 July 2008 - No reply to date
2005/ 164	Kathryn Jane/ Jan Denise/ Emerald Dawn	FISG	Agree, develop and implement measures to ensure <15m Code fishing vessels are "fit for purpose". Measures should, as a minimum, take due cognisance of, and define appropriate limits on: <ul style="list-style-type: none"> • Areas of operation • Stability • Mode of operation • Outfit and equipment • Periodic owner checks. Predicted implementation date – 31 December 2008

Number	Investigation	Addressed To	Recommendation
2005/ 155	Swan	Government Interdepartmental Group on Water Safety	Through the Government Interdepartmental Group on Water Safety, build on the work being carried out by the Maritime and Coastguard Agency as a result of recommendations made after the capsizing of Breakaway 5 (Recommendation 2004/123) to determine the navigation and/or licensing authority for all fully navigable inland waterways in the UK. Where it is determined that no navigation/licensing authority has responsibility for any stretch of fully navigable waterway, it should encourage the relevant government department to take appropriate steps to ensure that a navigation/licensing authority is established. Predicted implementation date – 30 June 2008
2004/ 248	Kingfisher II	MCA	In its current work in defining future Standards of Training, Certification and Watchkeeping (Fishing), specify qualifications and training requirements for fishing vessel skippers. Predicted implementation date – Not given
2004/ 200	Elegance	MCA	Instruct surveyors to verify that specific operating instructions for CO ₂ fixed extinguishing systems are on board fishing vessels & crew conversant in operation of system. Predicted implementation date – 31 December 2008
2004/ 155	Lady Bay Loch Ryan	Galloway Local Authority	Take the lead role in establishing a statutory harbour authority responsible for all of Loch Ryan to a northern boundary defined by a line between Finnart's Point and Milleur Point. You should take account of existing harbour responsibilities and usage, and reflect the interests of all stakeholders, including other local authorities, existing ferry operators, fishermen, small boat users and all other persons following marine or leisure-related activities on, in and around Loch Ryan. Predicted implementation date – 31 December 2008
2004/ 127	Breakaway 5	MCA	Review the stability tests currently required within all its codes of practice for small craft with a view to introducing a margin of safety in their methodology, and to take into account the probability of a person's weight exceeding 75kg. Predicted implementation date – Further delayed until 2009 season
2004/ 123	Breakaway 5	MCA	Form working group to include local authorities & DTI to draw on current best practice to: <ul style="list-style-type: none"> a. Agree on licensing regimes. b. Develop a national code of safe practice. c. Clarify the impact of the Recreational Craft Directive. Predicted implementation date – Further delayed until 2009 season

PART 3 STATISTICS

STATISTICS

	Page
UK vessel accidents involving loss of life	54
UK merchant vessels \geq 100gt	58
UK merchant vessels $<$ 100gt	63
UK non-commercial vessels	64
UK fishing vessels	65
Non-UK commercial vessels	70

For details of reporting requirements and terms used in this Section please see Annex - Statistics Coverage on page 71.

UK vessel accidents involving loss of life

Table 1 - UK Vessel Accidents involving Loss of Life					
Date	Name of Vessel	Type of Vessel	Location	Accident	Deaths
Merchant Vessels 100gt and over ①					
10 Mar	<i>Gimi</i>	LNG tanker	On passage, Mediterranean	A contracted worker who was carrying out maintenance operations onboard was fatally injured when he fell from scaffolding.	1
03 Apr	<i>Retainer</i>	Port service tug	Thames	Crewman was fatally injured when he was hit in the chest by a tow rope.	1
17 Jun	<i>Hyundai Independence</i>	Container ship	Los Angeles	A deck cadet was fatally injured after falling from a height.	1
07 Aug	<i>Dublin Viking</i>	Ro-Ro passenger ferry	Dublin	The Second Officer onboard a Ro-Ro passenger ferry preparing to leave her normal berth was fatally injured when, in the process of letting go, he was hit by the stern line which had parted.	1
08 Aug	<i>MSC Colombia</i>	Container ship	On passage, Atlantic	An Electrical Engineering Cadet was fatally injured when carrying out repairs to the passenger lift.	1
23 Sep	<i>Viking Islay</i>	Standby safety vessel	North Sea	Three crewman died after entering the enclosed space of the chain locker.	3
17 Nov	<i>Vos Viper</i>	Standby safety vessel	Montrose	The chief officer fell down stairs and was fatally injured.	1
19 Dec	<i>Flying Phantom</i>	Port service tug	Glasgow	Three crewmen died when their tug capsized on the Clyde.	3
Merchant Vessels under 100gt ①					
19 Mar	<i>Conquest</i>	Fish farm work boat	Sullom Voe	Crewman lost overboard from a fish farming vessel.	1
20 Mar	<i>Herman Jr</i>	Port service Tug	Burnham-on-Crouch	Crewman lost overboard while vessel was alongside.	1
07 Jul	Woodford Star Hire Cruiser	Small commercial motor vessel	Lower Lough Erne, Northern Ireland	A person on a hire cruiser was killed by cleat pulled from deck by line under strain while under tow.	1
29 Jul	-	Small work boat	Waterfoot, County Antrim	Occupant (non-crew) found drowned.	1
22 Aug	Buccaneer of Upnor	Small commercial sailing yacht	South west of St Albans Head	Crewman died after being struck during an uncontrolled gybe.	1

Date	Name of Vessel	Type of Vessel	Location	Accident	Deaths
Fishing Vessels ①					
17 Feb	<i>Margaret Jane</i>	Fishing vessel	Off Peterhead	Crewmember lost overboard.	1
17 Mar	<i>Breadwinner</i>	Fishing vessel	Littlehampton	Single-handed crewman fell overboard and drowned after a net became snagged on an obstruction.	1
12 May	<i>Helenus</i>	Stern trawler	Fraserburgh Harbour	Crew member fell into the water and drowned when trying to board the vessel.	1
01 Aug	<i>Ellie May</i>	Fishing vessel	North East Scotland	Downflooding and sinking resulting in death of singlehanded fisherman.	1
16 Aug	<i>Boy Joshua</i>	Potter	North East Scotland	Singlehanded fisherman lost overboard.	1
03 Sep	<i>Apollo</i>	Stern trawler	North Sea	Crew member died after being dragged overboard by a trawl net during routine hauling operations.	1
03 Oct	<i>Nadine II</i>	Fishing vessel	Off Aberdeenshire	Skipper of a single-handed creel boat is presumed dead after the vessel was found broken up on rocks.	1
11 Oct	<i>Flourish</i>	Fishing vessel	Off Humberside	Death of the skipper following collision with the merchant vessel <i>Nautica</i> .	1
Pleasure Craft (Non-Commercial) ①②					
01 Jan	-	Canoe	River Stour	Canoeist drowned after capsizing.	1
03 Jan	-	Canoe	River Lune	Two person canoe capsized. The instructor died.	1
20 Jan	<i>Lindy Lou</i>	Narrowboat	Adlington Basin, Poynton	Fire onboard resulting in one fatality.	1
30 Jan	<i>Blue Moon</i>	Narrowboat	Shardlow Marina	Fire onboard resulting in one fatality.	1
03 Feb	<i>Hooligan V</i>	Sailing yacht	English Channel	Keel failure and capsize resulting in one fatality.	1
19 Feb	<i>Haley</i>	Sailing yacht (catamaran)	On passage, Atlantic	Capsize with one fatality.	1
25 Mar	-	Canoe	Balmedie Beach, Aberdeen	Canoe overturned and the male occupant was found drowned.	1

① See definitions in Annex

② Not all accidents involving pleasure craft (as defined in Annex) and recreational craft hired on a bareboat basis are required to be reported to the MAIB. While we would encourage all such accidents/incidents to be reported, we do not consider this to be a definitive or comprehensive register of waterborne fatal accidents.

UK vessel accidents involving loss of life

Date	Name of Vessel	Type of Vessel	Location	Accident	Deaths
28 Mar	<i>Drunken Duck</i>	Inland waterway cruiser	Shropshire Union Canal	Two fatalities from carbon monoxide poisoning.	2
07 Apr	-	Canoe	Castlewellan inland lake, County Down	Canoe capsized throwing the three occupants into the water. One made it ashore and raised the alarm but the other two did not survive.	2
16 Apr	-	Canoe	Ardfern	Canoe capsized. One of the two occupants died of hypothermia.	1
27 Apr	Tender to yacht <i>Lucky Puffin</i>	Tender	Poole	Lone crewmember drowned, lost overboard from the yacht's tender.	1
30 Apr	Newfoundland Dory	Sailing dinghy	Solway Firth	The crew of two drowned after their dinghy capsized.	2
01 May	<i>Beatrice</i>	Narrowboat	Oxford canal	Owner of a residential narrowboat was found dead in the water.	1
05 May	<i>Bumble Foot</i>	Cabin cruiser	Great Ouse, Norfolk	The skipper sustained a fatal head injury when his vessel was passing under a bridge.	1
31 May	<i>Colros</i>	Sailing yacht	High seas, Atlantic	Death presumed of male skipper after his single-handed yacht was found abandoned.	1
04 Jun	-	Canoe	Island of Lewis	Father and son were killed after their canoe capsized in the surf.	2
10 Jun	-	RIB	Littlehampton	Father and young son were killed, the son of hypothermia and the father of drowning. They had been separated from their RIB but it is not known how they came to be in the water.	2
16 Jun	-	Dory type	Stromness	Dory capsized. Lone occupant drowned.	1
20 Jun	<i>Piriac</i>	24ft cabin cruiser	River Leven, Dunbartonshire	Two crew from pleasure craft suffered burns following explosion on board. Both managed to swim to shore. One died as a result of the accident.	1
26 Jun	-	Pleasure craft (non-commercial)	Inland waterway, Motherwell	Two males fell out of boat. One swam to safety, body of the other later recovered.	1
28 Jun	-	Sailing dinghy	Fosdyke Canal, Sheffield	Male fell from a dinghy. His body was later recovered by police divers.	1
18 Jul	-	RIB	Off Bembridge, Isle of Wight	Two occupants of RIB thrown into water. Both died.	2
24 Jul	-	Canoe	Loch Mhor, Scotland	Canoe capsized throwing the two occupants into the water with one fatality.	1
25 Jul	-	Canoe	Off Scilly Isles	Canoe found without occupant, body recovered almost 3 weeks later.	1

Date	Name of Vessel	Type of Vessel	Location	Accident	Deaths
30 Jul	-	Laser 4000	Tremadoc, near Abersoch	Crewmember was drowned after becoming trapped following the vessel's capsize.	1
04 Aug	-	5m Angling vessel	Lower Lough Erne, Northern Ireland	Two men were thrown overboard from the motor cruiser after making a sudden turn at speed. The bodies of the men were later recovered.	2
19 Aug	-	16ft boat	Off Island Davaar, Campbeltown	Three crew were thrown into the water when their angling boat was swamped. Two were rescued but the third had become trapped in the cabin and subsequently died.	1
19 Aug	<i>Umbra</i>	Narrowboat	Trent and Mersey Canal, Staffordshire	Galley fire with one fatality.	1
25 Aug	-	10ft Dinghy	River Waverley, Norfolk Broads	Drowning following capsize close to shore.	1
26 Aug	<i>Pepe 2</i>	Open motor boat	Isles of Scilly	Capsize with one fatality.	1
01 Sep	-	16ft Sea Kayak	Rye Harbour, East Sussex	Evidence suggests that the sole occupant of a kayak had been drowned after capsizing.	1
07 Sep	-	Open boat	Loch Watten, Scotland	Capsize with one fatality.	1
02 Oct	<i>Shayne</i>	Angling vessel	South Wales coast	Swamping with two fatalities.	2
07 Oct	-	14ft Open boat	Cromore, Isle of Lewis	Fatality following a fall into water during launching.	1
15 Oct	<i>Night Hawk</i>	Cabin cruiser	Birmingham and Fazeley Canal	Fire with one fatality.	1
19 Oct	-	Canoe	River Eden, Cumbria	Capsize with one fatality.	1
27 Oct	-	Angling vessel	Loch Lomond	Vessel with five persons onboard swamped and capsized with two fatalities.	2
11 Nov	-	Dory type, tender	River Deben, Felixstowe Ferry	Two yachtsmen were drowned when attempting to return to their yacht in a tender at night.	2
23 Nov	<i>Last Call</i>	Cabin cruiser	Whitby	Capsize with three fatalities.	3
07 Dec	<i>Avocet</i>	Sailing yacht	High seas, Atlantic	Fatal head injury following a fall against a winch.	1
Others					
03 Aug	-	Army cadet force rigid raider	South Uist, Scotland	Capsize resulting in one fatality.	1

UK merchant vessels \geq 100gt^①

Table 2 - Merchant Vessel Total Losses 2007

Date	Name of Vessel	Type of Vessel	Age	gt	LOA Metres	Nature of Accident
18 Jan	<i>MSC Napoli</i>	Container ship	16	53 409	275.70	Hull failure
21 Jan	LASH Barge 1	Barge		360	-	Contact
28 Jul	<i>Lady Candida</i>	Large commercial motor yacht	33	143	29.90	Fire
* 20 Aug	<i>Smit Cymyran</i>	Survey/research	18	105	23.94	Grounding
* 19 Dec	<i>Flying Phantom</i>	Tug	26	287	37.95	Capsize

* Constructive Total loss

Table 3 – Merchant Vessel Losses: 1996-2007

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Number lost	1	1	1	-	1	1	1	-	2	6	-	5
UK Fleet Size	1 066	1 055	1 072	1 035	1 050	1 047	1 210	1 343	1 406	1 443	1 480	1 518
gt lost	382	869	3 476	-	12 778	11 217	671	-	832	1 575	-	54 304

Table 4 - Merchant Vessels in Accidents: 1996-2007

	Vessels	UK fleet size	Accidents/1 000 vessels
1996	249	1 066	234
1997	237	1 055	225
1998	217	1 072	202
1999	160	1 035	155
2000	140	1 050	133
2001	134	1 047	128
2002	128	1 210	106
2003	145	1 343	108
2004	145	1 406	103
2005	194	1 443	134
2006	127	1 480	86
2007	115	1 518	76

① See definitions in Annex

Table 5 - Merchant Vessels in Accidents by Nature of Accident and Vessel Category

	Dry cargo	Passenger	Passenger cargo	Tanker/combination carrier	Other commercial	Total
Capsize/Listing	-	-	-	-	2	2
Cargo Handling Failure	1	-	-	-	-	1
Collision	4	3	-	2	5	14
Contact	7	13	1	1	8	30
Escape of Harmful Substance	-	1	-	-	1	2
Fire/Explosion	-	2	-	1	3	6
Flooding/Foundering	1	1	-	-	-	2
Grounding	7	1	-	-	3	11
Heavy Weather	2	1	-	-	1	4
Machinery Failure	15	10	-	2	9	36
Person Overboard	1	4	-	-	2	7
Total	38	36	1	6	34	115

Table 6 - Merchant Vessels in Accidents by Nature of Accident: 1996-2007

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Capsize/Listing	5	-	-	1	-	1	-	-	2	1	-	2
Cargo Handling Failure	2	2	2	1	8	1	1	3	1	1	2	1
Collision	26	30	23	10	25	16	18	12	16	37	26	14
Contact	31	24	23	18	14	13	25	37	28	33	19	30
Escape of Harmful Substance	20	15	27	15	4	11	-	-	4	2	1	2
Fire/Explosion	22	26	24	19	18	21	26	22	24	22	7	6
Flooding/Foundering	3	4	3	3	2	3	1	3	3	6	4	2
Grounding	18	21	20	16	7	18	14	13	15	26	21	11
Heavy Weather	12	2	4	2	5	1	4	3	4	1	6	4
Machinery Failure	41	50	55	48	50	39	28	41	42	50	31	36
Person Overboard	12	15	8	11	5	10	9	8	5	12	9	7
Other	57	48	28	16	2	-	2	3	1	3	1	-
Total	249	237	217	160	140	134	128	145	145	194	127	115

Table 7 - Deaths and Injuries of MV Crew Members by Place

Where	Number of people
Accommodation space - crew	37
Accommodation space - passengers	12
Cargo or other tank space	7
Complete vessel	8
Dry cargo space	2
Engine room	29
External stairway/ladder/gangway	10
External working deck/shelter	24
Galley	16
Hotel service areas	9
Internal stairway/ladder	8
Mooring deck	15
Navigation/communication control space	4
Overside/aloft	4
Ro-Ro vehicle deck/ramp	9
Ship's boat	8
Store space	2
Workshop	3
Other external deck	6
Other internal deck/space	14
Other machinery space	4
Other	12
Total	243

Table 8 - Deaths and Injuries of MV Crew Members by Rank

Rank/specialism	Number of people
Master/skipper	4
Chief engineer	10
Officer	2
Officer, Deck	22
Officer, Electrical	2
Officer, Engineering	19
Rating	5
Rating, Deck	68
Rating, Engineering	26
Rating, General purpose	15
Other crew	70
Total	243

Table 9 - Deaths and Injuries of Merchant Vessel Crew Members by Injury

Main injury	Number of people
Amputation of hand/fingers/toe	8
Bruising	37
Burn/shock - electrical	1
Burns/scalds - other	5
Concussion/unconsciousness due to head injury	5
Crush injury	16
Cuts/wound/lacerations	28
Death - confirmed	12
Dislocations	9
Eye injuries	5
Fracture - of the skull/spine/pelvis/major bone in arm or leg	18
Fracture - other	47
Hypothermia	1
Strains - other strains/sprains/torn muscles/ligaments	28
Strains - strained back	18
Other	5
Total	243

Table 10 - Deaths and Injuries to Merchant Vessel Crew: 1996-2007

	Crew injured	Of which resulted in death
1996	403	3
1997	327	5
1998	330	2
1999	288	4
2000	301	3
2001	296	3
2002	302	5
2003	288	3
2004	307	4
2005	247	2
2006	231	3
2007	243	12

Table 11 - Deaths and Injuries to Passengers by Injury

Main injury	Number of people
Bruising	6
Burns/scalds	1
Concussion/unconsciousness due to head injury	4
Cuts/wound/lacerations	2
Death - confirmed	-
Dislocations	8
Fracture - of the skull/spine/pelvis/major bone in arm or leg	52
Fracture - other	27
Strains - other strains/sprains/torn muscles/ligaments	1
Unknown	4
Total	105

Table 12 - Deaths and Injuries to Passengers: 1996-2007

	Number of injuries	Of which resulting in death
1996	97	2
1997	94	-
1998	120	2
1999	80	1
2000	137	1
2001	137	1
2002	134	-
2003	186	-
2004	145	-
2005	107	1
2006	114	1
2007	105	-

UK merchant vessels <100gt^①

Table 13 - UK Flagged Merchant Vessels Under 100gt - Losses

Date	Name of vessel	Type of vessel	LOA metres	Nature of accident
20 Mar	<i>Alpha Beta</i>	Dive boat	13.70	Foundering
29 May	<i>Blue River</i>	Pleasure launch	6.40	Foundering
04 Aug	-	Speed boat	7.62	Grounding

Table 14 - UK Flagged Merchant Vessels Under 100gt - by Nature of Accident and Vessel Category

	Passenger					Other commercial								Overall Total	
	HSC/passenger ferry	Other ferry	Other passenger vessel	Others	Total	Associated with offshore industry	Naval support & RFA	Port service	Small commercial motor vessel	Small commercial sailing vessel	Survey/research	Workboat	Other/Unknown		Total
Capsize/Listing	-	-	-	-	0	-	-	-	2	-	-	-	-	2	2
Collision	-	-	4	1	5	1	-	1	4	1	-	-	1	8	13
Contact	1	-	-	2	3	-	1	6	3	2	-	-	2	14	17
Fire/Explosion	-	-	1	-	1	-	-	4	1	-	-	-	-	5	6
Flooding/Foundering	-	-	1	-	1	-	-	1	5	-	-	1	-	7	8
Grounding	-	1	1	2	4	-	-	3	17	10	-	3	-	33	37
Machinery Failure	-	2	10	1	13	-	-	2	30	6	1	4	3	46	59
Person Overboard	-	-	1	1	2	-	-	1	2	1	-	2	-	6	8
Total	1	3	18	7	29	1	1	18	64	20	1	10	6	121	150
Injured ^③	-	1	13	2	16	-	2	17	17	12	1	9	2	60	76
Deaths ^③	-	-	-	-	-	-	-	1	1	1	-	2	-	5	5

① See definitions in Annex

③ This table includes injuries and deaths on vessels where the vessel itself was not involved in an accident.

UK non-commercial vessels^①

Table 15 - UK Non-Commercial in accidents by Nature of Accident and Vessel Category				
Other (non-commercial)				
	Naval craft ^④	RNLI lifeboat	others	Total
Capsize/Listing	-	3	1	4
Collision	1	-	-	1
Fire/Explosion	-	-	1	1
Flooding/Foundering	-	-	1	1
Grounding	-	-	1	1
Machinery Failure	-	2	2	4
Person Overboard	-	2	-	2
Total	1	7	6	14
Injuries^③	2	23	1	26
Deaths^③	-	-	1	1

① See definitions in Annex

③ This table includes injuries and deaths on vessels where the vessel itself was not involved in an accident.

④ Naval Craft accident/injuries are outside the remit of the MAIB, unless involved with non naval vessel.

UK fishing vessels^①

There were 6,330 UK-registered fishing vessels at the end of 2007. During 2007, 316 accidents involving these vessels were reported to the MAIB. Figures in the following tables are accidents and injuries involving UK-registered vessels that were reported to the MAIB in 2007.

21 fishing vessels were reported lost (0.3% of the total fleet) and there were 8 fatalities to crew.

Table 16 - Fishing Vessel Total Losses

	Date	Name of vessel	Age	gt	Nature of accident
Under 15m Length Overall (loa)					
*	19 Feb	<i>Wings of the Morning</i>	34	14.49	Grounding
	27 Apr	<i>Misty Blue</i>	23	2.34	Foundering
*	04 Jun	<i>Salar</i>	-	4.20	Listing
	20 Jun	<i>Swiftly</i>	-	0.88	Machinery
	05 Jul	<i>Luci</i>	19	18.73	Foundering
	17 Jul	<i>Breydon Warrior</i>	-	11.00	Collision
	18 Jul	<i>Petrel</i>	23	0.71	Capsize
*	12 Aug (approx)	<i>Ellie May</i>	28	7.23	Foundering
*	14 Sept	<i>Successor</i>	28	3.27	Fire
	25 Sept	<i>Patricia D</i>	28	13.15	Heavy Weather Damage
	03 Oct	<i>Nadine II</i>	12	2.99	Grounding
*	03 Oct	<i>Blithe Spirit</i>	19	0.85	Collision
	03 Oct	<i>Lady Hamilton of Helford</i>	35	6.73	Collision
	11 Nov	<i>My Charon</i>	11	6.87	Heavy Weather Damage
	30 Nov	<i>Spes Nova</i>	36	18.44	Contact
*	15 Dec	<i>Osprey</i>	16	8.66	Machinery Failure
15m Length Overall - Under 24m Registered Length (reg)					
	27 Jan	<i>Evening Star</i>	24	118.00	Foundering
*	20 Mar	<i>Ocean Quest</i>	32	183.00	Fire
*	01 Jun	<i>Westerdale</i>	27	153.00	Contact
	11 Oct	<i>Flourish</i>	37	40.11	Collision
	21 Oct	<i>Prolific</i>	28	50.00	Foundering
24m Registered Length (reg) and Over					
No total losses of fishing vessels of 24m or more reported					

* Constructive Total Loss

① See definitions in Annex

UK fishing vessels

Table 17 - Fishing Vessel Losses: 1996-2007

	Under 15m loa	15m loa to <24m reg	24m reg and over	Total lost	UK registered	% Lost
1996	19	5	1	25	8 064	0.31
1997	12	10	1	23	7 779	0.30
1998	12	5	4	21	7 605	0.28
1999	17	10	6	33	7 460	0.44
2000	15	18	7	40	7 194	0.56
2001	16	17	1	34	7 200	0.47
2002	7	6	5	18	7 046	0.26
2003	16	8	4	28	6 731	0.42
2004	16	9	-	25	6 693	0.37
2005	20	11	3	34	6 314	0.54
2006	11	7	1	19	6 346	0.30
2007	16	5	-	21	6 330	0.33

Table 18 - Fishing Vessels in Accidents

Nature of Accident	Number of vessels involved	Incident rate per 1 000 vessels at risk
Capsize/Listing	3	0.5
Collision	18	2.8
Contact	4	0.6
Fire/Explosion	9	1.4
Flooding/Foundering	32	5.1
Grounding	24	3.8
Heavy Weather Damage	5	0.8
Machinery Failure	213	33.6
Person Overboard	7	1.1
Pollution	1	0.2
Total	316	49.9

Table 19 - Fishing Vessels in Accidents by Nature of Accident: 1996-2007

Nature of accident	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Capsize/Listing	9	8	11	15	4	3	5	4	2	6	5	3
Collision	25	22	20	15	25	17	15	17	12	23	12	18
Contact	6	4	-	7	2	6	1	7	3	3	3	4
Fire/Explosion	19	17	11	15	16	10	13	13	19	16	15	9
Flooding/Foundering	68	51	62	54	59	46	40	50	40	54	34	32
Grounding	64	44	40	31	40	29	26	38	29	19	24	24
Heavy Weather Damage	2	1	2	4	4	-	2	1	2	3	1	5
Machinery Failure	327	316	247	232	174	212	181	221	202	232	240	213
Missing Vessel	-	-	1	-	1	-	-	1	1	-	1	-
Person overboard	8	14	8	8	11	11	6	6	6	11	12	7
Other	-	-	1	-	1	-	-	1	1	1	-	1
Total	528	477	403	381	337	334	289	359	317	368	347	316

UK fishing vessels

Table 20 - Fishing Vessels in Accidents - by Nature of Accident		
Nature of accident	Number of vessels involved	Incident rate per 1 000 vessels at risk
Under 15m Length Overall (loa) - Vessels at risk (5 599)		
Capsize/Listing	3	0.5
Collision	10	1.8
Contact	3	0.5
Fire/Explosion	5	0.9
Flooding/Foundering	25	4.5
Grounding	15	2.7
Heavy Weather Damage	3	0.5
Machinery Failure	166	29.6
Person Overboard	4	0.7
	234	41.8
15m loa - 24m reg (533)		
Collision	7	13.1
Contact	1	1.9
Fire/Explosion	4	7.5
Flooding/Foundering	7	13.1
Grounding	7	13.1
Heavy Weather Damage	1	1.9
Machinery Failure	39	73.2
Person Overboard	2	3.8
	68	127.5
24m reg or more (198)		
Collision	1	5.1
Grounding	2	10.1
Heavy Weather Damage	1	5.1
Machinery Failure	8	40.4
Person Overboard	1	5.1
Pollution	1	5.1
	14	70.7
Fleet total	316	49.9

Table 21 - Deaths and Injuries to Fishing Vessel Crew by Injury

Main Injury	Number of People
Amputation of hand/fingers/toe	6
Bruising	4
Burns/scalds - other	2
Concussion/unconsciousness due to head injury	5
Crush injury	6
Cuts/wound/lacerations	9
Death - confirmed	6
Death - presumed	2
Dislocations	1
Eye injury	1
Fracture - of the skull/spine/pelvis/major bone in arm or leg	4
Fracture - other	9
Hypothermia	3
Strains - strained back	1
Strains - other strains/sprains/torn muscles/ligaments	3
Other	1
Unknown	1
Total	64

Table 22 - Deaths and Injuries to Fishing Vessel Crew by Vessel Length (of which, deaths shown in brackets) 1996-2007

	Under 15m loa		15m loa - under 24m reg		24m reg and over		Total	
1996	24	(10)	34	(2)	59	(8)	117	(20)
1997	22	(9)	72	(16)	41	(4)	135	(29)
1998	30	(12)	34	-	51	(14)	115	(26)
1999	16	(4)	28	(2)	37	(3)	81	(9)
2000	20	(4)	42	(9)	43	(19)	105	(32)
2001	11	(2)	42	(3)	34	(5)	87	(10)
2002	12	(3)	24	(4)	19	(1)	55	(8)
2003	27	(8)	25	(2)	18	(1)	70	(11)
2004	27	(9)	20	(1)	23	-	70	(10)
2005	20	(3)	27	(3)	15	(3)	62	(9)
2006	21	(6)	30	(8)	18	(2)	69	(16)
2007	25	(4)	24	(3)	15	(1)	64	(8)

Non-UK commercial vessels^①

Table 23 - Non-UK Commercial Vessels Total Losses in UK Waters

Date	Name of vessel	Type of vessel	Nationality	Age	gt	loa metres	Nature of accident
23-24 Oct	<i>Long Sands</i>	Dumb barge	No flag	-	190	33	Machinery

Table 24 - Non-UK Vessels in UK Waters - by Nature of Accident and Vessel Category

	Dry cargo	Passenger	Passenger cargo	Tanker/ combination carrier	Fishing vessel	Other commercial	Pleasure craft (non commercial)	Total
Capsize/ Listing	2	-	-	-	-	-	-	2
Cargo Handling failure	1	-	-	-	-	-	-	1
Collision	8	-	-	5	2	4	-	19
Contact	13	2	1	8	-	1	-	25
Escape Of Harmful Substance	2	-	-	-	-	-	-	2
Fire/ Explosion	1	-	-	-	-	-	-	1
Flooding/ Foundering	-	-	-	-	1	-	-	1
Grounding	23	3	-	3	4	2	1	36
Heavy Weather Damage	-	-	-	-	-	1	-	1
Machinery Failure	21	-	-	3	-	4	1	29
Person Overboard	1	-	-	-	1	1	-	3
Pollution	-	-	-	1	-	1	-	2
Total	72	5	1	20	8	14	2	122
Injuries ^③	6	15	2	6	4	5	-	38
Deaths ^③	-	-	-	-	-	-	-	-

① See definitions in Annex

③ This table includes injuries and deaths on vessels where the vessel itself was not involved in an accident.

Non-UK Flagged vessels are not required to report accidents to the MAIB unless they are within a UK port/harbour or within UK 12-mile territorial waters and carrying passengers to or from a UK port. However, the MAIB will record details of, and may investigate, significant accidents of which we are notified by bodies such as the Coastguard.

ANNEX STATISTICS COVERAGE

Reporting Requirements

United Kingdom ships are required by the Merchant Shipping (Accident Reporting and Investigation) Regulations 2005 to report accidents to ships and accidents to persons to MAIB.

Non-UK flagged vessels are not required to report accidents to the MAIB unless they are within a UK port/harbour or within UK 12 mile territorial waters and carrying passengers to or from a UK port. However, the MAIB will record details of, and may investigate, significant accidents of which we are notified by bodies such as the Coastguard.

The Maritime and Coastguard Agency, harbour authorities and inland waterway authorities also have a duty to report accidents to MAIB.

For full details of reporting requirements please refer to the Regulations which are available at: www.maib.gov.uk/resources/index.cfm

In addition to the above, MAIB monitors news and other information sources for relevant accidents.

Data is presented by the year the incident was reported to MAIB. Historic data tables contain information from 1996; since that time the reporting requirements have changed in 1999 and 2005. Significant changes include:

1999 - Requirement for most types of incident previously reportable by Merchant Ships of 100gt or more as "Dangerous Occurrences" to be reported as accidents by all vessels except pleasure vessels.

2005 – Introduction of requirement for recreational craft on bareboat hire and various small vessels of less than eight metres to report a limited range of accidents: Death, Major Injury, Capsize (of a power-driven craft), Fire, Explosion or Pollution causing significant harm to the environment.

Vessel Definitions

UK merchant vessels ≥ 100 gt	Merchant vessels on the UK register with a gross tonnage of 100gt or more
UK merchant vessels < 100 gt	Merchant vessels on the UK register with a gross tonnage of less than 100gt. Includes pleasure craft of all types being operated commercially (charter/hire, operated by schools and other training establishments etc).
UK pleasure craft (non-commercial)	Privately owned and operated pleasure vessels of all types.
UK other craft (non-commercial)	Navy vessels (when involved in collisions with non-Navy vessels), RNLI lifeboats, non-RNLI lifeboats, public service vessels (police, fire, ambulance).
UK fishing vessels	Commercial fishing vessels registered with the UK Maritime and Coastguard Agency's Register of Shipping and Seamen.
Non-UK vessels in UK waters	Non-UK vessels involved in an accident or incident in UK territorial waters (12-mile limit)

Meaning of “Accident to Vessels”

The ship:

- causes any material damage
- is lost or is presumed to be lost
- is abandoned
- is materially damaged by fire, explosion, weather or other cause
- grounds
- is in collision
- is disabled or
- causes significant harm to the environment

Any person falls overboard from, the ship or one of its ship’s boats

And additionally, if the occurrence might have caused serious injury or damage to the health of any person:

- the collapse or bursting of any pressure vessel, pipeline or valve
- the collapse or failure of any lifting equipment, access equipment, hatch-cover, staging or bosun’s chair or any associated load-bearing parts
- the collapse of cargo, unintended movement of cargo or ballast sufficient to cause a list, or loss of cargo overboard
- the snagging of fishing gear which results in the vessel heeling to a dangerous angle
- contact by a person with loose asbestos fibre except when full protective clothing is worn, or
- an escape of any harmful substance or agent.

Meaning of “Accident to Person”

Accidents to Persons are those incidents that resulted in deaths or injuries but did not involve an accident to the vessel. More than one person may be killed or injured in an Accident to Person (or Accident). Persons are categorised as crew, passengers or others (pilots etc).

Meaning of “Injury”

- any fracture, other than to a finger, thumb or toe;
- any loss of a limb or part of a limb;
- dislocation of the shoulder, hip, knee or spine;
- loss of sight, whether temporary or permanent;
- penetrating injury to the eye; or
- any other injury-
 - (i) leading to hypothermia or to unconsciousness,
 - (ii) requiring resuscitation, or
 - (iii) requiring admittance to a hospital or other medical facility as an in-patient for more than 24 hours.

And any other injury, to a person employed or carried in a ship which occurs on board or during access which results in incapacity for more than three consecutive days excluding the day of the accident, or as a result of which the person concerned is put ashore and the ship sails without that person, unless the incapacity is known or advised to be of three consecutive days or less, excluding the day of the accident.

Meaning of “Hazardous Incident”

Hazardous Incidents are any events, other than accidents, associated with the operation of a ship which involve circumstances indicating that an accident nearly occurred.

GLOSSARY OF ABBREVIATIONS AND ACRONYMS

ABP	-	Associated British Ports
BS	-	British Standard
BWEA	-	British Wind Energy Association
CATZOC	-	Categorization of Zones of Confidence
CE	-	Conformité Européene
COLREGS	-	International Regulations for the Prevention of Collisions at Sea
DfT	-	Department for Transport
DNV	-	Det Norske Veritas
DOC	-	Document of Compliance
DTI	-	Department of Trade and Industry
ECDIS	-	Electronic Chart Display and Information System
EN	-	European Norm (standard)
ESD	-	Emergency shut down (valve)
FISG	-	Fishing Industry Safety Group
FMEA	-	Failure Modes and Effects Analysis
GM	-	Metacentric height
gt	-	gross tonnage
HRU	-	Hydrostatic Release Unit
HSE	-	Health and Safety Executive
IACS	-	International Association of Classification Societies
ICS	-	International Chamber of Shipping
IGC	-	International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk, 1993 Edition.
IHO	-	International Hydrographic Organization
IMO	-	International Maritime Organization
ISM	-	International Safety Management
ISO	-	International Organization for Standardization
loa	-	length overall
m	-	metres (length overall unless otherwise stated)
MCA	-	Maritime and Coastguard Agency

MGN	-	Marine Guidance Note
MOB	-	Man overboard
MSN	-	Merchant Shipping Notice
MTU	-	Military Training Unit
nm	-	nautical mile
OCIMF	-	Oil Companies International Marine Forum
OOW	-	Officer of the Watch
PE	-	Preliminary Examination
PEC	-	Pilot Exemption Certificate
PES	-	Programmable Electronic Systems
PMSC	-	Port Marine Safety Code
RCD	-	Recreational Craft Directive
reg	-	registered length
RFA	-	Royal Fleet Auxiliary
RSG	-	Recreational Craft Sectoral Group
RYA	-	Royal Yachting Association
SAR	-	Search and Rescue
SFF	-	Scottish Fishing Federation Services Ltd
SMC	-	Safety Management Certificate
SMS	-	Safety Management System
SOLAS	-	International Convention for the Safety of Life at Sea
SSP	-	Siemens-Schottel Propulsor (the podded drive system)
STCW	-	Standards of Training, Certification and Watchkeeping or Seafarers
TCI	-	Turks and Caicos Islands
UKSAT	-	United Kingdom Security Advisory Team
UR	-	Unified Requirements
VDR	-	Voyage Data Recorder
VHF	-	Very High Frequency
VTS	-	Vessel Traffic Services / System