



# **Contents**

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|   |           |
|---|-----------|
| <b>Chief Inspector's Report</b>                                 | <b>1</b>  |
| <b>Part 1 - Full Investigations and Report Publications</b>     | <b>5</b>  |
| <b>Part 2 - Recommendations</b>                                 | <b>11</b> |
| Background  | 13        |
| Recommendation response statistics                              | 14        |
| Recommendation methodology and summary tables                   | 15        |
| Section A - 2012 recommendation responses                       | 17        |
| Section B - Recommendations to multiple recipients              | 38        |
| Section C - Recommendations brought forward from previous years | 40        |
| Section D - Changes to previously reported recommendations      | 52        |
| <b>Part 3 - Statistics</b>                                      | <b>55</b> |
| UK vessel accidents involving loss of life                      | 57        |
| UK merchant vessels greater than or equal to 100gt              | 59        |
| UK merchant vessels less than 100gt                             | 64        |
| UK fishing vessels  | 65        |
| Non-UK commercial vessels                                       | 70        |
| <b>Annex - Statistics Coverage</b>                              | <b>71</b> |
| <b>Glossary of Abbreviations and Acronyms</b>                   | <b>73</b> |

# Chief Inspector's Report

2012 has been a year of consolidation for the Branch. New working practices, which were developed in the wake of the headcount and budget cuts of 2011, have been fine-tuned and the work of the MAIB continues to receive praise from industry stakeholders. However, our resilience to further change is much reduced. Staff turnover and sickness, or other unplanned events, are now less easy to absorb and all MAIB staff are working under tremendous pressure to deliver valuable, well-structured and intellectually rigorous investigation reports to tight deadlines. That they continue to do so is testament to the collective spirit of the Branch and I am indebted to every member of my team for their commitment, hard work and professionalism.

July 2012 saw the introduction of new regulations: the Merchant Shipping (Accident Reporting and Investigation) Regulations 2012. The primary purpose of these was to transpose Directive 2009/18/EC which establishes fundamental principles of marine accident investigation across the European Union. In particular, the Directive requires member states to investigate all very serious marine casualties (i.e. accidents that lead to loss of life, the loss of a vessel or severe pollution) involving commercially operated craft and fishing vessels of 15m or more in length. However, the Branch has been operationally compliant with the requirements of the Directive since 2011 and therefore the introduction of new regulations has had a limited impact on our work. That said, during 2012 a new Branch database has been developed which shares the same taxonomy as the European Marine Casualty Information Platform (EMCIP). The Directive requires member states to populate the EMCIP with comprehensive marine casualty data, which is potentially a very labour intensive task. The new Branch database has the ability to automatically populate the EMCIP, which will optimise the time spent transferring the data.

One manifestation of a more challenging working environment is that the average time taken to produce published reports has been increasing slightly from just under 8.5 months in 2011 to 8.6 months in 2012. Some, such as the highly detailed "*Tombarra*" reports (MAIB reports 19A & 19B/2012) have taken in excess of 12 months to complete. Looking ahead there is little prospect of additional resources being available in the medium term and so the Branch is exploring how digital technology might be used more effectively to promulgate its product – reports and safety lessons – to its stakeholders. For example, the MAIB can now be found on Twitter (please follow us!). In order to improve production times and reduce cost, the use of password protected soft copies of draft and final reports is likely to become the norm with much less reliance being placed on hard copy print runs. Similarly, work will be progressed to enable stakeholders' comments during consultation periods to be received and processed electronically.

Thirty investigation reports were published in 2012 compared with 29 in 2011. Two editions of the Safety Digest were also published. 26 investigations were commenced during the year compared with 43 in 2011. The decrease in the number of investigations launched during 2012 reflects a more considered approach to deployments in the field which has been developed to closely manage the Branch workload. The range of investigations conducted

during the year has been diverse, ranging from the foundering of small inland waterway craft through to major collisions between large cargo vessels. A number of issues identified during MAIB investigations are worthy of note:

- A collision between the cargo vessels *Seagate* and *Timor Stream*, which occurred in March 2012, was one of several similar accidents reported to the MAIB where experienced seafarers either ignored or did not know the requirements of the COLREGS. In this case, the investigation quickly identified that the watchkeepers on the two vessels, both of whom were senior officers, did not maintain even the most rudimentary level of watchkeeping. Of particular concern is the message this behaviour sends to junior officers and how it may influence the next generation of master mariners. One of the biggest challenges faced by ship managers is ensuring that company safety management systems are being adhered to at all times. Part of the solution requires a real commitment to the safety management system from the highest echelons of management, together with a concerted effort to instil the company's safety culture within ships' senior staff. Robust audit regimes, preferably conducted during voyages, are useful but only provide snapshots of how ships are being operated. The random scrutiny of voyage data and other ship-generated records can also help to gauge compliance with company procedures and provide managers with early warnings should shipboard routines present a risk to safety when not under the scrutiny of an auditor.
- The excessive consumption of alcohol by watchkeepers on commercial vessels is a persistent problem. This was typified by the collision between the coaster *Union Moon* and the passenger ferry *Stena Feronia* (MAIB Report 26/2012) in which the master, who was alone on the bridge of *Union Moon*, was found to be drunk. Alcohol was also an issue when the feeder container vessel *Karin Schepers* grounded off the Cornish coast (MAIB Report 10/2012.) In both cases the companies concerned operated drug and alcohol policies that were weak and ineffective.
- The small fishing vessels *Heather Anne*, *Purbeck Isle* and *Sarah Jayne* were tragically lost, partly because they were overloaded. There is currently no requirement for small (ie <15m length overall) fishing vessels to be assessed for stability and the skippers of these boats often have little or no understanding about the importance of stability and freeboard. Accordingly, when non-quota restricted fish, such as Cornish sardine, are plenty, there is tremendous pressure to maximise the catch and fill up the fish hold. The crew may do this several times without incident until bad luck and different sea conditions cause their vessel to founder or capsize. The MAIB's investigations into the above three accidents have confirmed there is a compelling need for small fishing vessels to be provided with stability and loading information. Also compelling, is the need for fishermen to be better informed about the dangers of overloading.

The MAIB continues to be regarded as one of the world leaders in its field, but the Branch needs to continuously evolve and improve if it is to continue to enjoy that status in the future. Our good reputation is important – it allows other stakeholders to work with the MAIB with confidence and trust during investigations which, in turn, enables the Branch to conduct its business in the most efficient way. During 2012, MAIB staff have regularly exchanged views and shared best practice with our international counterparts through organisations such as the Marine Accident Investigators' International Forum, The EU Permanent Cooperation Framework and working groups within the Flag State Implementation Committee of the

International Maritime Organization. The Branch also works closely with its sister Accident Investigation Branches, the RAIB and the AAIB to share best practices, but also to identify synergies and savings where appropriate. We learn as much as we teach during these exchanges and the Branch becomes stronger from the fresh ideas that this dialogue generates.

## RECOMMENDATIONS

54 Recommendations were issued during 2012, of which 94.4% were accepted. This compares with 93.0% in 2011.

1 recommendation was rejected. This was made to the Department for Transport following the collision between *Morfil* and *Sun Clipper* on the River Thames (MAIB Report 8/2012 see page 22). One recommendation (to the owner of a fishing vessel) has not been responded to. The MAIB operates a closed loop follow-up process which keeps outstanding recommendations under constant review.

Of the 214 recommendations that had been accepted, but had not been implemented between 2004 and 2011, 87.4% were reported to be fully implemented at the time this report was published.

## STATISTICS

For the third year in succession there were no UK registered ship losses of vessels  $\geq 100\text{gt}$ . The number of accidents, as a ratio of the size of the fleet, has increased from 76/1000 vessels in 2011 to 92/1000 vessels in 2012. However, this ratio is slightly lower than the statistical average for the last 10 years (94/1000 vessels).

There were 3 deaths of merchant vessel crew on vessels of  $\geq 100\text{gt}$  compared to 5 in 2011.

The number of injuries to passengers (50) is at a 10 year low but this may be largely due to a reduction in the number of large passenger vessels registered in the UK.

Perhaps the most encouraging statistic for 2012 is that the number of fishing vessels lost (9 vessels) is at a 10 year low. The main improvement appears to be in the <15m loa sector, where 5 vessels were lost in 2012 compared to 17 in 2011.

Machinery failures account for by far the greatest number of reported accidents concerning fishing vessels. In 2012 there were 174 reported cases of machinery failure across the UK fishing fleet. Flooding and foundering accounted for the next most common cause of accidents (24 reported cases). Machinery failures do not necessarily lead to death or injuries to the crew, but they often tie up the resources of the SAR authorities and other responders. It can be expensive to service and maintain machinery to ensure in-service reliability, but the cost involved in towing or escorting vessels back into port following a breakdown can be significant. Fishermen need to develop better knowledge of mechanical issues and maintenance procedures if the level of machinery failures is to be reduced.

## FINANCE

The annual report deals principally with the calendar year 2012. However, for ease of reference, the figures below are for the financial year 2012/13, which ended on 31 March 2013. The MAIB's funding from the Department for Transport is provided on this basis, and this complies with the Government's business planning programme.

| £ 000s          | 2012/13 Budget | 2012/13 Outturn |
|-----------------|----------------|-----------------|
| Costs – Pay     | 2551           | 2508            |
| Costs – Non Pay | 1078           | 982             |
| <b>Totals</b>   | <b>3629</b>    | <b>3490</b>     |



Steve Clinch.

**Steve Clinch**  
**Chief Inspector of Marine Accidents**



**PART 1**  
**FULL INVESTIGATIONS AND**  
**REPORT PUBLICATIONS**

# FULL INVESTIGATIONS LIST

| Full Investigations started in 2012 |  |   |                     |                               |   |
|-------------------------------------|--|---|---------------------|-------------------------------|---|
| Date                                | Name of Vessel                                       | Type of Vessel                                    | Flag State          | Size                          | Nature of Incident  |
| <b>Merchant Vessels</b>             |  |   |                     |                               |   |
| 16 Jan                              | <i>Dette G</i>                                       | Container ship                                    | Antigua and Barbuda | 3999 gt                       | Fatal man overboard during cargo operations while alongside in Queen Elizabeth Dock, Hull |
| 7 Mar                               | <i>Stena Feronia/Union Moon</i>                      | Ro-ro ferry/General cargo vessel                  | UK/Cook Islands     | 21856 gt<br>1543 gt           | Collision in Belfast Lough, Northern Ireland  |
| 10 Mar                              | <i>Seagate/Timor Stream</i>                          | General cargo vessel/Refrigerated cargo vessel    | UK/Liberia          | 17590 gt<br>9307 gt           | Collision approximately 25nm north of the Dominican Republic coast                        |
| 24 Mar                              | <i>Spring Bok/Gas Arctic</i>                         | General cargo vessel/LPG tanker                   | Netherlands/Malta   | 12113 gt<br>2985 gt           | Collision in English Channel 6nm south of Dungeness, English Channel                      |
| 29 Mar                              | <i>Saga Sapphire</i>                                 | Cruise ship                                       | Malta               | 37301 gt                      | Two men overboard while conducting a lifeboat drill alongside in Southampton              |
| 3 Apr                               | <i>Carrier</i>                                       | General cargo vessel                              | Antigua and Barbuda | 1587 gt                       | Grounding off the North Wales coast   |
| 10 Jun                              | <i>E.R. Athina</i>                                   | Platform supply ship                              | Liberia             | 4488 gt                       | Fatal injury to a crew member while at anchor off Aberdeen                                |
| 2 Jul                               | <i>Coastal Isle</i>                                  | General cargo vessel                              | Antigua and Barbuda | 3125 gt                       | Grounding while on passage off Greenock   |
| 1 Aug                               | <i>Alexander Tvardovskiy/UKD Bluefin/Wilson Hawk</i> | General cargo vessel/Dredger/General cargo vessel | Russia/UK/Barbados  | 2319 gt<br>4171 gt<br>2811 gt | Collision involving three vessels in Immingham Dock, Lincolnshire                         |
| 19 Sep                              | <i>Vixen</i>   | Small inland waters passenger vessel              | UK                  | 6 m                           | Flooding and foundering on Loch Lomond. No injuries                                       |
| 2 Oct                               | <i>Wah Shan</i>                                      | Bulk carrier                                      | Panama              | 91165 gt                      | Fatal injury to crewman during mooring operations in Immingham, Lincolnshire              |
| 15 Nov                              | <i>Amber</i>   | Bulk carrier                                      | Malta               | 10490 gt                      | Contact with moored barges followed by grounding on River Thames at Gravesend             |

| Date   | Name of Vessel        | Type of Vessel           | Flag State | Size     | Nature of Incident  |
|--------|-----------------------|--------------------------|------------|----------|---|
| 21 Nov | <i>Windcat 9</i>      | Wind farm support vessel | UK         | 17.25 m  | Contact with a buoy off the Norfolk coast causing damage that led to flooding                                 |
| 21 Nov | <i>Island Panther</i> | Wind farm support vessel | UK         | 16.8 m   | Contact with wind turbine tower off Norfolk coast causing damage that led to flooding and some minor injuries |
| 25 Nov | <i>Timberland</i>     | Bulk carrier             | UK         | 13066 gt | Fatal man overboard involving two crewmen in North Sea  |
| 5 Dec  | <i>Arklow Meadow</i>  | General cargo vessel     | Ireland    | 9682 gt  | Escape of toxic cargo fumigant while discharging at Warrenpoint, Northern Ireland                             |
| 12 Dec | <i>Beaumont</i>       | General cargo vessel     | UK         | 2545 gt  | Grounding near Cabo Negro, north Spain  |

**Fishing Vessels**

| Date   | Name of Vessel      | Type of Vessel  | Flag State | Size   | Nature of Incident  |
|--------|---------------------|-----------------|------------|--------|---|
| 13 Jan | <i>St Amant</i>     | Scallop dredger | UK         | 17.8 m | Loss of a crewman off the north-west Wales coast  |
| 29 Jan | <i>Zenith</i>       | Trawler         | UK         | 21.4 m | Fatal man overboard in the Irish Sea, 29 miles south-east of Kilkeel  |
| 11 Apr | <i>Onward</i>       | Trawler         | UK         | 21.3 m | Fire, 60nm off the north coast of Scotland resulting in the loss of the vessel. There were no injuries            |
| 17 May | <i>Purbeck Isle</i> | Potter          | UK         | 11.6 m | Vessel lost with all three crew 9nm south of Portland Bill, English Channel                                       |
| 9 Jul  | <i>Denarius</i>     | Trawler         | UK         | 22.4 m | Fire and abandonment in the North Sea 83nm NNE of Kinnaird Head. There were no injuries                           |
| 23 Jul | <i>Betty G</i>      | Beam trawler    | UK         | 9.9 m  | Capsize in Lyme Bay while recovering beam gear. Crew were safely recovered from liferaft                          |
| 10 Aug | <i>Audacious</i>    | Trawler         | UK         | 27.6 m | Flooding and sinking in the North Sea 45nm east of Aberdeen. Crew abandoned to liferaft and were safely recovered |

## Full investigations list

| Date   | Name of Vessel     | Type of Vessel | Flag State | Size   | Nature of Incident   |
|--------|--------------------|----------------|------------|--------|--|
| 1 Sep  | <i>Chloe T</i>     | Trawler        | UK         | 26.2m  | Flooding and sinking in the English Channel, 17nm south of Bolt Head, Devon. Crew abandoned to liferafts and were safely recovered |
| 11 Sep | <i>Sarah Jayne</i> | Trawler        | UK         | 14.94m | Foundering in the English Channel off Brixham. Two crew were rescued but the skipper drowned                                       |

## PUBLICATIONS LIST

## Reports of Full Investigations published in 2012

| <b>Merchant Vessels</b>                   |  |  |               |
|---|--|--|---------------|
| Vessel Name<br>(Report No)                | Vessel Type  | Accident Type  | Accident Date |
| <i>CSL Thames<br/>(No 2/2012)</i>         | Bulk carrier   | Grounding in the Sound of Mull, West Scotland  | 9 Aug 11      |
| <i>Clonlee<br/>(No 6/2012)</i>            | Feeder container vessel                              | Electrical blackout and subsequent grounding on the River Tyne   | 16 Mar 11     |
| <i>Blue Note<br/>(No 7/2012)</i>          | Dry cargo vessel                                     | Derailment of the hatch-lid gantry crane while alongside in Londonderry, Northern Ireland                                    | 22 Jul 11     |
| <i>Sun Clipper/Morfil<br/>(No 8/2012)</i> | Passenger vessel/<br>rigid-hulled<br>inflatable boat | Collision by Blackfriars Road Bridge, River Thames, London   | 1 Jun 11      |
| <i>Saffier<br/>(No 9/2012)</i>            | Cargo vessel   | Failure of the controllable pitch propeller resulting in heavy contact with a berthed tug in Immingham harbour, Lincolnshire | 25 Jun 11     |
| <i>Karin Schepers<br/>(No 10/2012)</i>    | Container vessel                                     | Grounding at Pendine, Cornwall   | 3 Aug 11      |
| <i>Dette G<br/>(No 11/2012)</i>           | Container vessel                                     | Fatal man overboard during cargo operations while alongside in Queen Elizabeth Dock, Hull                                    | 16 Jan 12     |
| <i>Chiefton<br/>(No 12/2012)</i>          | Tug  | Collision, capsize and foundering, with the loss of one crew member at Greenwich Reach, River Thames                         | 12 Aug 11     |
| <i>Scot Pioneer<br/>(No 13/2012)</i>      | Cargo vessel   | Fatal injury to a crewman during cargo operations at Belview Port, Waterford, Republic of Ireland                            | 27 Oct 11     |
| <i>Cameron<br/>(No 14/2012)</i>           | Mooring vessel                                       | Serious injury to a chief officer, Crosby Channel, Liverpool   | 21 Nov 11     |

| Vessel Name<br>(Report No)  | Vessel Type               | Accident Type  | Accident Date |
|---|---------------------------|--|---------------|
| <i>Clipper Point</i><br><b>(No 16/2012)</b>                                     | Ro-ro cargo ferry         | Contact between ferry and two berthed ships at the Port of Heysham, Lancashire   | 24 May 11     |
| <i>Pride of Calais</i><br><b>(No 18/2012)</b>                                   | Ro-ro vessel              | Machinery failure leading to contact with the berth in Calais, France  | 22 Oct 11     |
| <i>Tombarra Part A</i><br>The weight of the rescue boat<br><b>(No 19A/2012)</b> | Car carrier               | Fatality to a rescue boat crewman, Royal Portbury Docks, Bristol   | 7 Feb 11      |
| <i>Tombarra Part B</i><br>The failure of the fall wire<br><b>(No 19B/2012)</b>  | Car carrier               | Fatality of a rescue boat crewman, Royal Portbury Docks, Bristol   | 7 Feb 11      |
| <i>Tempanos</i><br><b>(No 20/2012)</b>  | Container vessel          | Fatal accident on board the container vessel while berthed in the Port of Felixstowe, UK   | 17 Dec 11     |
| <i>Moon Clipper</i><br><b>(No 21/2012)</b>                                      | High-speed catamaran      | Steering control failure and subsequent contact with Tower Millennium Pier on the River Thames, London resulting in injuries to 14 passengers and 2 crew | 5 Oct 11      |
| <i>Ernest Bevin</i><br><b>(No 22/2012)</b>                                      | Ferry                     | Fatal accident of a crew member on the Woolwich ferry on the River Thames, London  | 3 Aug 11      |
| <i>SD Nimble</i><br><b>(No 23/2012)</b>   | Tug                       | Accidental discharge of carbon dioxide resulting in serious injury to a shore-based service engineer at HM Naval Base Faslane, West Scotland             | 23 Aug 11     |
| <i>Springbok/Gas Arctic</i><br><b>(No 24/2012)</b>                              | Cargo ship/LPG tanker     | Collision in the English Channel 6nm south of Dungeness  | 24 Mar 12     |
| <i>Saga Sapphire</i><br><b>(No 25/2012)</b>                                     | Cruise ship               | Two men overboard while conducting a lifeboat drill alongside No 106 berth, Southampton  | 29 Mar 12     |
| <i>Stena Feronia/Union Moon</i><br><b>(No 26/2012)</b>                          | RoPax vessel/cargo vessel | Collision in Belfast Lough, Northern Ireland   | 7 Mar 12      |
| <i>Norcape</i><br><b>(No 28/2012)</b>   | Ro-ro cargo ferry         | Windlass damage, grounding and accident to person, Firth of Clyde and Troon Harbour, West Scotland   | 26-27 Nov 11  |

## Publications list

| <b>Fishing Vessels</b>                    |  |   |                      |
|---|--|---|----------------------|
| <b>Vessel Name<br/>(Report No)</b>        | <b>Vessel Type</b>                             | <b>Accident Type</b>  | <b>Accident Date</b> |
| <i>Vellee<br/>(No 1/2012)</i>             | Trawler  | Flooding and foundering in the Little Minch, West Scotland  | 6 Aug 11             |
| <i>Golden Promise<br/>(No 3/2012)</i>     | Scallop dredger                                | Grounding off the Island of Stroma, North Scotland  | 7 Sep 11             |
| <i>About Time<br/>(No 5/2012)</i>         | Potter   | Fatal man overboard off Pembrokeshire   | 14 Jun 11            |
| <i>Starlight Rays<br/>(No 15/2012)</i>    | Trawler (working as guard vessel)              | Fatal accident to a crewman 126nm NNE of Aberdeen   | 25 Aug 11            |
| <i>Moyuna<br/>(No 17/2012)</i>            | Scallop dredger                                | Grounding at the entrance to Ardglass Harbour, Northern Ireland                                       | 21 Nov 11            |
| <i>Onward<br/>(No 27/2012)</i>            | Stern trawler                                  | Fire on board fishing vessel 60nm off the north coast of Scotland resulting in the loss of the vessel | 11 Apr 12            |
| <b>Small Craft</b>                        |  |   |                      |
| <i>Lion<br/>(No 4/2012)</i>               | Reflex 38 yacht                                | Fatal man overboard 14.5 miles south of Selsey Bill, West Sussex                                      | 18 Jun 11            |
| <i>Morfil/Sun Clipper<br/>(No 8/2012)</i> | <i>See Merchant vessel section for details</i> |   |                      |



## 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 2012, regulation 16(5).

|   | Page |
|---|------|
| Background  | 13   |
| Recommendation response statistics                              | 14   |
| Recommendations methodology                                     | 15   |
| Section A - 2012 recommendation responses                       | 17   |
| Section B - Recommendations to multiple recipients              | 38   |
| Section C - Recommendations brought forward from previous years | 40   |
| Section D - Changes to previously reported recommendations      | 52   |

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

## BACKGROUND

Recommendations are a key element of MAIB investigations. They are made to promulgate the lessons from accidents 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 full investigation the MAIB will, normally, make a number of recommendations. These will be contained within the published report but will also be addressed to the individuals or senior executives of organisations concerned, in writing, by the Chief Inspector. Urgent safety recommendations may also be made in Safety Bulletins that can be published at any stage of an investigation.

Recommendations are made to a variety of addressees who might have been involved in, or have an interest in, the accident. These may range from those organisations which have a wider role in the maritime community such as the Department for Transport (DfT), the 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 board their vessels.

It is required by the Merchant Shipping (Accident Reporting and Investigation) Regulations 2012 that the person or organisation to whom a recommendation is addressed, consider the recommendation, and reply to the Chief Inspector within 30 days on the plans to implement the recommendation or, if it is not going to be implemented, provide 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 Annual Report to the Secretary of State for Transport fulfils this requirement.

## RECOMMENDATION RESPONSE STATISTICS 2012

54 recommendations were issued in 2012. Of these, the percentage of all recommendations that are either ***accepted*** or ***accepted yet to be implemented*** is **94.4 %**.

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 or Leisure Vessels.

| Focus               | Subtotal | Accepted Action Implemented | Accepted Action yet to be Implemented | Partially Accepted | Rejected | No Response Received |
|---------------------|----------|-----------------------------|---------------------------------------|--------------------|----------|----------------------|
| Commercial Shipping | 36       | 27                          | 9                                     | -                  | -        | -                    |
| Fishing Vessels     | 7        | 5                           | -                                     | -                  | -        | 2                    |
| Leisure Vessels     | 3        | 2                           | -                                     | -                  | 1        | -                    |
| General Maritime    | 8        | 7                           | 1                                     | -                  | -        | -                    |
| Total               | 54       | 41                          | 10                                    | -                  | 1        | 2                    |

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

## RECOMMENDATION RESPONSE STATISTICS 2004 to 2011

The following table shows the equivalent status of recommendations issued in 2004 to 2011 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 |
|------|-------|-----------------------------|---------------------------------------|--------------------|----------|----------------------|
| 2011 | 57    | 33                          | 21                                    | 2                  | -        | 1                    |
| 2010 | 50    | 36                          | 14                                    | -                  | -        | -                    |
| 2009 | 117   | 74                          | 29                                    | 7                  | -        | 7                    |
| 2008 | 110   | 71                          | 31                                    | 5                  | -        | 3                    |
| 2007 | 136   | 109                         | 23                                    | 1                  | 1        | 2                    |
| 2006 | 139   | 103                         | 30                                    | 3                  | 3        | -                    |
| 2005 | 140   | 122                         | 14                                    | 1                  | 1        | 2                    |
| 2004 | 171   | 93                          | 52                                    | 11                 | 11       | 4                    |

Of the 214 recommendations listed as ***accepted – yet to be implemented*** (at time of publication of relevant annual report):

- **87.4%** have now been ***fully implemented***
- **12.6%** remain ***planned to be implemented***.

## RECOMMENDATION METHODOLOGY

**SECTION A** - 2012 recommendation responses.

**SECTION B** - Recommendations to multiple recipients (not included in the statistics).

**SECTION C** - Recommendations brought forward from previous years.

**SECTION D** - Changes to previously reported recommendations.

Section A presents all of the recommendations issued in 2012 in ascending numerical order. Each one is accompanied by the vessel/accident type, level and industry focus of the recommendation. Where it is appropriate MAIB has included a comment alongside the recommendation narrative.

Section C lists recommendations issued in previous years that remain open; they are presented in descending numerical order under the year in which they were issued. The actions being taken to meet these recommendations are ongoing, so each one is accompanied by a target date for implementation and a comment if needed.

## KEY

### Levels

The level of the recommendation refers to the type of action required by the recipient. There are three levels of recommendation:

|                                |   |
|--------------------------------|---|
| <b>Level 1 recommendations</b> | These have the broadest importance, and may include the requirement for new legislation or changes in policy. |
| <b>Level 2 recommendations</b> | Addressed to industry bodies and organisations which may call for changes or reinforcement of best practice.  |
| <b>Level 3 recommendations</b> | Those which are addressed to individual owners or companies which are specific to their vessel or company.    |

### Focus

The focus refers to the sector of industry that the recommendation was applied to:

|                                |   |
|--------------------------------|---|
| <b>C (Commercial Shipping)</b> | Merchant vessels and small commercial craft.                            |
| <b>FV (Fishing Vessel)</b>     | Registered fishing vessels holding a DEFRA fishing vessel licence.      |
| <b>L (Leisure)</b>             | Recreational vessels, whether operated commercially or privately owned. |
| <b>G (General Maritime)</b>    | Recommendations that have wider application.                            |

Colour coding

**Green** : The actions included in these recommendations have been fully accepted by the recipient, and the changes have been fully implemented.

**Yellow** : These recommendations have been accepted by the recipient, but the actions needed to close the recommendation are outstanding. Where known, target dates for full implementation are given.

**Red** : These recommendations have either been partially accepted or rejected by the addressee, or no response has yet been received by the MAIB. Partially accepted and rejected recommendations include comments in the Annual Report and offer the opportunity to comment to the addressee.

**SUMMARY TABLE FOR LEVEL 1, 2 AND 3 RECOMMENDATIONS**

| Focus               | Total |    |    | Accepted Action Implemented |   |    | Accepted Action yet to be Implemented |   |   | Partially Accepted |   |   | Rejected |   |   | No Response Received |   |   |
|---------------------|-------|----|----|-----------------------------|---|----|---------------------------------------|---|---|--------------------|---|---|----------|---|---|----------------------|---|---|
|                     |       |    |    | 1                           | 2 | 3  | 1                                     | 2 | 3 |                    |   |   |          |   |   |                      |   |   |
| Level               | 1     | 2  | 3  | 1                           | 2 | 3  | 1                                     | 2 | 3 | 1                  | 2 | 3 | 1        | 2 | 3 | 1                    | 2 | 3 |
| Commercial Shipping | 4     | 7  | 25 | -                           | 4 | 23 | 4                                     | 3 | 2 | -                  | - | - | -        | - | - | -                    | - | - |
| Fishing Vessels     | 0     | -  | 7  | 1                           | - | 5  | -                                     | - | - | -                  | - | - | -        | - | - | -                    | - | 2 |
| Leisure Vessels     | 2     | 1  | -  | 1                           | 1 | -  | -                                     | - | - | -                  | - | - | 1        | - | - | -                    | - | - |
| General Maritime    | -     | 2  | 6  | -                           | 1 | 6  | -                                     | 1 | 0 | -                  | - | - | -        | - | - | -                    | - | - |
| Total               | 6     | 10 | 38 | 2                           | 6 | 34 | 4                                     | 4 | 2 | -                  | - | - | 1        | - | - | -                    | - | 2 |

## **Section A**

### **2012 RECOMMENDATION RESPONSES**

| Case | Investigation  | Vessel/Accident type  | Narrative and Addressee  | Focus                       | Level   |
|------|----------------|---|--|-----------------------------|---------|
| 101  | Vellee         | Fishing vessel<br><br>Flooding & foundering.<br>(Report 1/2012)                           | Made to: Vessel owner<br><br>Improve the planned maintenance and inspection regimes on all vessels in which they hold an interest, with particular focus on the integrity of sea water systems, hull fittings and identification and prevention of electrolytic corrosion.   | Accepted, fully implemented | FV<br>3 |
| 102  | CSL Thames     | Bulk carrier<br><br>Grounding in the Sound of Mull, West Scotland.<br>(Report 2/2012)     | Made to: Alfa Ship and Crew Management GmbH<br><br>Introduce written instructions and guidance to its fleet and carry out verification visits to its vessels as necessary to ensure that: <ul style="list-style-type: none"><li>• Its bridge watchkeeping officers have a clear understanding of how ECDIS should be used on board the company's vessels.</li><li>• Its officers and crew understand the vessel's emergency procedures, and the need to properly evaluate routine operations after an accident to ensure that any new risks are identified and mitigated as appropriate.</li></ul> | Withdrawn                   | C<br>3  |
| 103  | Golden Promise | Fishing vessel<br><br>Grounding on the Isle of Stroma, North Scotland.<br>(Report 3/2012) | Made to: John MacAlister (Oban Ltd) Ltd<br><br>Enhance the safety management of its vessels by: <ul style="list-style-type: none"><li>• Referring to and applying the best practice guidance for keeping a safe navigational watch on fishing vessels promoted in MGN 313 (F), including arrangements for ensuring the fitness for duty of watchkeepers and provision of an effective watch alarm.</li><li>• Ensuring all crew members have completed all mandatory safety training courses.<sup>①</sup></li></ul>   | No response received        | FV<br>3 |

<sup>①</sup>Awaiting update from recipient at time of publication

| Case | Investigation     | Vessel/Accident type  | Narrative and Addressee   | Focus                             | Level |
|------|-------------------|---|---|-----------------------------------|-------|
| 104  | <i>Lion</i>       | Fatal man overboard.<br>(Report 4/2012)                       | Made to: Royal Ocean Racing Club<br><br>Promulgate the following safety issues to its respective memberships and to the offshore racing community: <ul style="list-style-type: none"><li>• The importance of nominating a person to take over from the skipper in the event of his/her incapacitation.</li><li>• The use of long and short tethers/safety lines, as appropriate, to prevent a man overboard situation.</li><li>• Procedures in dealing with, and the difficulties associated with recovering a conscious and unconscious man overboard while tethered to the vessel.</li></ul>  | Accepted, fully implemented<br>L  | 2     |
| 105  | <i>About Time</i> | Fishing vessel<br><br>Fatal man overboard.<br>(Report 5/2012) | Made to: Vessel owner<br><br>Refer to the available industry best practice guidance and review the risk assessment for <i>About Time</i> and any other vessels he may own, to identify measures to improve onboard safety by: <ul style="list-style-type: none"><li>• Identifying the hazards posed during the transportation of fishing gear on deck and ensuring the effective segregation of the crew from the gear;</li><li>• Ensuring the use of appropriate footwear at all times;</li><li>• Evaluating the hazards posed by low bulwarks;</li><li>• Appraising the use of personal flotation devices (PFDs) and personal locator beacons (PLBs);</li><li>• Ensuring all crew have completed the mandatory safety training courses.</li></ul> | Accepted, fully implemented<br>FV | 3     |

| Case | Investigation | Vessel/Accident type  | Narrative and Addressee   | Focus | Level |
|------|---------------|---|---|-------|-------|
| 106  | Clonlee       | Feeder container vessel<br><br>Electrical blackout and subsequent grounding.<br>(Report 6/2012) | Made to: North Atlantic Shipping Ltd<br><br>Accepted, fully implemented | C     | 3     |

- Carry out a comprehensive review of its Safety Management System, which should, as a minimum:
- Ensure onboard working practices make best use of the crew resources available, and comply with all appropriate international, Flag State and local maritime regulatory requirements.
  - Ensure its instructions and procedures are achievable, are adhered to on board, and reflect the machinery and control systems fitted to its vessels.
  - Ensure all its vessels are provided with manufacturers' instruction manuals, in the designated working language, for all critical equipment and systems on board.
  - Review onboard training, and take appropriate action to improve its crews' emergency response performance. Particular consideration should be given to promoting crew resource management and improving the standards of internal communications.
  - Develop a robust process for managing safety-related observations made by external bodies and recording any related corrective actions taken.

| Case | Investigation | Vessel/Accident type   | Narrative and Addressee  | Focus                       | Level |
|------|---------------|--|--|-----------------------------|-------|
| 107  | Blue Note     | Dry cargo vessel<br><br>Derailment of the hatch-lid gantry crane while alongside.<br>(Report 7/2012) | Made to: Reederei-Meyering GmbH<br><br>Ensure that crews on its vessels comply with the intent of the International Safety Management Code and applicable national and international lifting equipment regulations by: <ul style="list-style-type: none"><li>• The establishment of formal, written risk assessments of shipboard activities.</li><li>• The provision of equipment planned maintenance schedules and systems for recording maintenance of repairs.</li><li>• Ensuring that all relevant manufacturers' manuals for operating and maintaining equipment are provided on board its vessels.</li><li>• The introduction of a requirement for specific training and a competence check for those crew members involved in the operation of gantry cranes to fulfil the requirement for familiarisation training.</li></ul> | Accepted, fully implemented | C 3   |
| 108  | Blue Note     | Dry Cargo vessel<br><br>Derailment of the hatch-lid gantry crane while alongside.<br>(Report 7/2012) | Made to: Mariner Ship's Equipment<br><br>Revise its gantry crane design to: <ul style="list-style-type: none"><li>• Provide a facility for the crew to safely and efficiently check that the hooks are fully engaged into the hatch-lid's side sockets.</li><li>• Notwithstanding actions already taken, provide clear indication when the hooks are not engaged to warn operators not to carry on lifting (such as by painting the ends of the hooks in a highly visible colour, or by other means).</li></ul>  | Accepted, fully implemented | C 3   |

| Case | Investigation        | Vessel/Accident type   | Narrative and Addressee  | Focus    | Level |
|------|----------------------|--|--|----------|-------|
| 109  | Morfil / Sun Clipper | Rigid-hulled inflatable boat and passenger vessel<br><br>Collision.<br>(Report 8/2012) | <p>Made to: Department for Transport</p> <p>Expedite the commencement of the subsections to Section 80 of the Railways and Transport Safety Act 2003 in order to implement the limits on the amount of alcohol which may be consumed by persons in charge of pleasure vessels.</p> <p><b>Department for Transport response:</b></p> <p>The MCA and the Department have had positive meetings with the RYA on the subject of educating the public about the risks of drinking whilst near or on the water. The principal areas of work being progressed are:</p> <ol style="list-style-type: none"> <li>1. To formulate the messages to be promoted.</li> <li>2. To identify the statistics and evidence about the issue.</li> <li>3. To explore online promotional material.</li> <li>4. To engage other national governing bodies and the RNLI in the initiative.</li> </ol> <p>If this new advice is effective, and there continues to be no significant alcohol-related accidents involving leisure users, then there is no immediate need for legislation.</p> <p><b>MAIB comment:</b></p> <p>The Department's decision to address the problem of the consumption of alcohol by non-professional mariners through a programme of education, rather than legislation is noted. It is hoped that this approach will deliver the desired outcome. However, the MAIB continues to believe that the introduction of appropriate, proportionate legislation is a prerequisite to changing the attitudes of a small minority of non-professional mariners who are content to take to the water after consuming excessive quantities of alcohol.</p> | Rejected | L     |

| Case | Investigation               | Vessel/Accident type  | Narrative and Addressee  | Focus                            | Level |
|------|-----------------------------|---|--|----------------------------------|-------|
| 110  | <i>Morfil / Sun Clipper</i> | Rigid-hulled inflatable boat and passenger vessel<br>Collision.<br>(Report 8/2012)  | Made to: Port of London Authority<br><br>Take action to further enhance the safe navigation of all vessels on the River Thames, taking into account the increased activity expected on the river in 2012, by: <ul style="list-style-type: none"><li>• Introducing as quickly as possible a mandatory speed limit on the areas of the River Thames where such limits have been determined to be necessary by risk assessment.</li><li>• Exploring and implementing further means of effectively promulgating local regulations and navigational and safety advice to the recreational users of the River Thames, particularly those who are not members of, or affiliated to, the river's established clubs and associations.</li></ul> | Accepted, fully implemented<br>L | 1     |
| 111  | <i>Saffer</i>               | Cargo vessel<br><br>Failure of the controllable pitch propeller.<br>(Report 9/2012) | Made to: De Bock Maritiem B.V.<br><br>Review <i>Saffer</i> 's safety management system in order to: <ul style="list-style-type: none"><li>• Improve ship's officers' induction procedures and training for the main propulsion system and its manoeuvring controls.</li><li>• Ensure a full range of ahead and astern pitch tests are carried out prior to port departure and arrival.</li><li>• Clarify anchoring and anchor readiness procedures.</li><li>• Require ship's crew to carry out periodic drills to practise the correct response to propulsion system failures.</li><li>• Regularly test the arrangements provided for the operation of propulsion systems in an emergency.</li></ul>                                   | Accepted, fully implemented<br>C | 3     |
| 112  | <i>Saffer</i>               | Cargo vessel<br><br>Failure of the controllable pitch propeller.<br>(Report 9/2012) | Made to: MAN Diesel and Turbo SE<br><br>Enhance the appearance and labelling of the backup control button on Alphatronic 2000 Propulsion Control Systems so that during an emergency its function is more readily apparent.  | Accepted, fully implemented<br>C | 3     |

| Case | Investigation  | Vessel/Accident type   | Narrative and Addressee  | Focus                           | Level |
|------|----------------|--|--|---------------------------------|-------|
| 113  | Saffier        | Cargo vessel<br><br>Failure of the controllable pitch propeller.<br>(Report 9/2012)                | Made to: Bureau Veritas<br><br>Make a submission to IACS to introduce a unified requirement for controllable pitch propeller systems to be subjected to a full range of tests in both ahead and astern directions during the commissioning trials of new and existing systems.<br><br><b>Target date for completion - not given<sup>①</sup></b>  | Accepted, yet to be implemented | C 3   |
| 114  | Karin Schepers | Container vessel<br><br>Grounding at Pendine, Cornwall.<br>(Report 10/2012)                        | Made to: MCA<br><br>Provide operational guidance to coastguard officers on the use of powers of direction to prevent a vessel from leaving UK waters in circumstances where the powers delegated to the SOSREP have not been invoked.  | Accepted, fully implemented     | G 2   |
| 115  | Karin Schepers | Container vessel<br><br>Grounding at Pendine, Cornwall.<br>(Report 10/2012)                        | Made to: MCA<br><br>Assess the desirability of, and, where appropriate, develop operational guidelines for using Automatic Identification Systems (AIS) data to monitor marine traffic movements. Special consideration should be given to using AIS data to monitor marine traffic movement in areas of high traffic concentrations, including traffic separation schemes, where there is limited or no radar coverage. | Accepted, yet to be implemented | G 2   |
| 116  | Chiefton       | Tug<br><br>Collision, capsise and foundering with the loss of one crew member.<br>(Report 12/2012) | Made to: MCA<br><br>Advise certifying authorities to ensure their survey checklists reflect the content of Sub-section 25.2.2 of the Small Commercial Vessel and Pilot Boat Code, by including a requirement to check the efficient operation of the emergency release system from all operating positions.<br><br><b>Target completion date - December 2013</b>   | Accepted, yet to be implemented | C 2   |

<sup>①</sup>Awaiting update from recipient at time of publication

| Case | Investigation | Vessel/Accident type | Narrative and Addressee   | Focus                           | Level |
|------|---------------|----------------------|---|---------------------------------|-------|
| 117  | Chiefton      | Tug                  | Made to: MCA<br><br>Provide additional guidance relating to the following elements of combined push/pull towage operations: <ul style="list-style-type: none"><li>• Tug selection to ensure that bollard pull is appropriate for the intended operation.</li><li>• The importance of effective communications to ensure control of towing operations at all stages.</li><li>• The assessment and adjustment of tow length to avoid the risk of overrun and, specifically, include these elements in the "Underpinning Knowledge" syllabi of the draft Marine Guidance Note - Towage Endorsements.</li></ul> <b>Target completion date - August 2013</b> | Accepted, yet to be implemented | C 2   |
| 118  | Chiefton      | Tug                  | Made to: BTA, NWA, BPA, UKMPG<br><br>Promulgate MAIB's Safety Flyer at Annex J to their membership.   | Accepted, fully implemented     | C 2   |
| 119  | Chiefton      | Tug                  | Made to: Palmer Marine Services Ltd<br><br>Collision, capsizing and foundering with the loss of one crew member.<br>(Report 12/2012)  | Accepted, fully implemented     | C 3   |

| Case | Investigation         | Vessel/Accident type   | Narrative and Addressee   | Focus                       | Level |
|------|-----------------------|--|---|-----------------------------|-------|
| 120  | <i>Starlight Rays</i> | Fishing vessel<br><br>Fatal accident to crewman.<br>(Report 15/2012)                       | Made to: Owner/skipper of vessel<br><br>Improve the standard of occupational safety and protection for crew working on their vessel by: <ul style="list-style-type: none"><li>• Ensuring that the use on board of any portable engine-driven pumps is in accordance with the guidance provided by the MCA.</li><li>• Educating and supervising crew to prevent them from using dangerous working practices.</li></ul>   | Accepted, fully implemented | FV 3  |
| 121  | <i>Cameron</i>        | Mooring vessel<br><br>Serious injury to crewman.<br>(Report 14/2012)                       | Made to: Briggs Marine Contractors Ltd<br><br>Introduce measures to improve the safety of deck operations conducted on board its vessels, by ensuring that: <ul style="list-style-type: none"><li>• All tasks are appropriately planned and briefed.</li><li>• Supervising officers and ratings maintain an objective overview of the work being undertaken.</li><li>• Risks associated with lifting operations are identified, assessed, and have appropriate control measures in place, and</li><li>• All crew are familiar with, and adhere to, applicable regulations and guidance.</li></ul> | Accepted, fully implemented | C 3   |
| 122  | <i>Clipper Point</i>  | Ro-ro cargo vessel<br><br>Contact between ferry and two berthed ships.<br>(Report 16/2012) | Made to: Seatruck Ferries Ltd<br><br>Work with other stakeholders in the Port of Heysham, and develop and implement a programme to ensure that their bridge teams are properly trained and supported to enable them to improve their performance to avoid one person's error leading to an accident.  | Accepted, fully implemented | C 3   |

| Case | Investigation | Vessel/Accident type | Narrative and Addressee  | Focus   | Level                       |     |
|------|---------------|----------------------|--|---|-----------------------------|-----|
| 123  | Clipper Point | Ro-ro cargo vessel   | Made to: Heysham Port Ltd<br><br>Review the implementation of the Port Marine Safety Code in the Port of Heysham to ensure that: <ul style="list-style-type: none"><li>• Its risk assessment is an accurate assessment of the port's risks.</li><li>• Communication between the port's managers and the port's users is effective and proactive.</li><li>• A risk-based procedure, that requires ferry operators to demonstrate how the potential hazards from vessels that routinely use the port can be controlled, is established.</li><li>• The provision of towage services is appropriate.</li></ul> | Accepted, fully implemented   | G 3                         |     |
| 124  | Clipper Point | Ro-ro cargo vessel   | Made to: MCA<br><br>Contact between ferry and two berthed ships.<br>(Report 16/2012)   | Liaise closely with Heysham Port Limited to agree a schedule to conduct a Port Marine Safety Code "health check" as soon as is practicable during 2013; to assess and provide advice on PMSC compliance, once current measures being taken by the port authority to enhance its safety management procedures have been implemented. | Accepted, fully implemented | G 3 |

| Case | Investigation          | Vessel/Accident type   | Narrative and Addressee   | Focus                       | Level   |
|------|------------------------|--|---|-----------------------------|---------|
| 125  | <i>Moyuna</i>          | Fishing vessel<br><br>Grounding at the entrance to Ardglass harbour, Northern Ireland.<br>(Report 17/2012) | Made to: Vessel owner<br><br>Take the following actions to improve navigational practices on board <i>Moyuna</i> : <ul style="list-style-type: none"><li>• Ensure skippers and crew are familiar with and follow the guidance contained in MGN 313 (F) (Keeping a Safe Navigational Watch on Fishing Vessels).</li><li>• Ensure the vessel is adequately equipped with navigation charts and port information.</li><li>• Encourage skippers to undertake voluntary training in line with MGN 411 (M+F) to refresh navigational skills.</li><li>• Reinforce the correct use of the DSC VHF radio alert to ensure distress messages are received by the Coastguard.</li></ul> | Accepted, fully implemented | FV<br>3 |
| 126  | <i>Moyuna</i>          | Fishing vessel<br><br>Grounding at the entrance to Ardglass harbour, Northern Ireland.<br>(Report 17/2012) | Made to: NIFHA<br><br>In conjunction with the Commissioners of Irish Lights, complete its intended review of navigational aids in Ardglass Harbour, to ensure they are: <ul style="list-style-type: none"><li>• Effective and reliable.</li><li>• Well publicised to local harbour users.</li></ul>   | Accepted, fully implemented | FV<br>3 |
| 127  | <i>Pride of Calais</i> | Ro-ro vessel<br><br>Machinery failure.<br>(Report 18/2012)   | Made to: P&O Ferries Holdings Ltd<br><br>Take steps to improve the effectiveness of its crews when dealing with mechanical emergencies, taking into account the need to drill machinery breakdowns as realistically as possible, and the importance of technical emergency situation check cards being accurate, fully considered and verified.   | Accepted, fully implemented | C<br>3  |

| Case | Investigation     | Vessel/Accident type   | Narrative and Addressee  | Focus                           | Level |
|------|-------------------|--|--|---------------------------------|-------|
| 128  | Tombarrä (part A) | Car carrier<br>Fatality of rescue boat crewman.<br>(Report 19a/2012) | Made to: MCA<br><br>Submit to IMO proposals for the LSA Code to: <ul style="list-style-type: none"><li>• Reflect a requirement for a 'system approach' to davit and winch installations with the aim of eliminating the possibility of any component being overstressed to the point of failure.</li><li>• Provide clarification on the fitting and use of 'safety devices' on davit and winch systems, using a goal-based approach to their application.</li></ul> <b>Target completion date - Not given<sup>②</sup></b>  | Accepted, yet to be implemented | C 1   |
| 129  | Tombarrä (part A) | Car carrier<br>Fatality of rescue boat crewman.<br>(Report 19a/2012) | Made to: MCA<br><br>Submit to the IMO a proposal to mandate a maximum height of the davit head used in conjunction with rescue boats and survival craft fitted on board both cargo and passenger ships, based upon: <ul style="list-style-type: none"><li>• Recognition of the severe difficulties faced by the crews of high-sided vessels such as <i>Tombarrä</i> when attempting to launch rescue boats in a seaway.</li><li>• The increased hazards to which the crews of rescue boats and survival craft are exposed when operating at height.</li><li>• The action taken by Wilhelmsen Lines Car Carriers Ltd to change the design of its future vessels to lower the height of the rescue boat davit head (<b>Figure 14 of Investigation report</b>).</li></ul> <ul style="list-style-type: none"><li>• The maximum height of davit heads used in conjunction with survival craft already recommended for passenger vessels in SOLAS III/24; and,</li><li>• The guidance provided in MSC Circ 1094 regarding the height of davit heads used for fast rescue boats on board passenger ships.</li></ul> <b>Target completion date - not given<sup>②</sup></b> | Accepted, yet to be implemented | C 1   |

<sup>②</sup>Follow-up letter written to Chief Executive of Maritime and Coastguard Agency

| Case | Investigation            | Vessel/Accident type   | Narrative and Addressee   | Focus                       | Level |
|------|--------------------------|--|---|-----------------------------|-------|
| 130  | <i>Tombarra</i> (part A) | Car carrier<br>Fatality of rescue boat crewman.<br>(Report 19A/2012) | Made to: ILAMA<br>Review its designs of davit and winch installations to ensure that the possibility of any component being over-stressed to the point of failure is eliminated by fully considering key factors, particularly the winch capability under stall conditions and single point failures.   | Accepted, fully implemented | C 2   |
| 131  | <i>Tombarra</i> (part A) | Car carrier<br>Fatality of rescue boat crewman.<br>(Report 19A/2012) | Made to: ILAMA<br>Ensure that the type, number and positioning of 'safety devices' used on winch and davit installations is critically assessed, taking into account: <ul style="list-style-type: none"> <li>• Manufacturers' guidance</li> <li>• The marine environment</li> <li>• System design, and</li> <li>• The consequences of malfunction.</li> </ul>   | Accepted, fully implemented | C 2   |
| 132  | <i>Tombarra</i> (part A) | Car carrier<br>Fatality of rescue boat crewman.<br>(Report 19A/2012) | Made to: Umoe Schat-Harding AS<br>Work with the owners of vessels fitted with the SA1.5/1.75 davits/W50RS winch/15/20kW electric motor combinations, to ensure that the fall wire or any part of the davit structure cannot be overloaded to the point of failure.  | Accepted, fully implemented | C 3   |
| 133  | <i>Tombarra</i> (part A) | Car carrier<br>Fatality of rescue boat crewman.<br>(Report 19A/2012) | Made to: Umoe Schat-Harding AS<br>Review and revise: <ul style="list-style-type: none"> <li>• The suitability and use of proximity switches as 'final stop' devices on man-lifting equipment such as davits.</li> <li>• Its internal quality assurance systems to ensure that all equipment it supplies to vessels complies with the conditions of the equipment's certification.</li> <li>• Its davit and winch operating manuals in order to make clear the need to cease hoisting before the davit arm reaches the davit proximity switch, and that the requirements for the replacement components is unambiguous.</li> </ul> | Accepted, fully implemented | C 3   |

| Case | Investigation        | Vessel/Accident type   | Narrative and Addressee  | Focus                                | Level |
|------|----------------------|--|--|--------------------------------------|-------|
| 134  | Tombarra<br>(part B) | Car carrier<br>Fatality of rescue boat crewman.<br>(Report 19B/2012) | Made to: MCA<br>Submit to the IMO proposals to amend the LSA Code designed to: <ul style="list-style-type: none"><li>• Ensure any water entering foam-filled buoyancy chambers within the enclosed hulls of rescue boats and lifeboats can be easily removed.</li><li>• Require the actual weight of the rescue boat or lifeboat supplied to the vessel, rather than its prototype, to be provided in its certification.</li></ul> <b>Target completion date - not given②</b>  | Accepted, yet to be implemented<br>C | 1     |
| 135  | Tombarra<br>(part B) | Car carrier<br>Fatality of rescue boat crewman.<br>(Report 19B/2012) | Made to: MCA<br>Submit to the IMO proposals to amend MSC.1/Circ.1206/Rev.1 designed to require the annual weighing of rescue boats and lifeboats which use buoyancy foam within internal spaces, as soon as is practicable.<br><b>Target completion date - not given②</b>  | Accepted, yet to be implemented<br>C | 1     |
| 136  | Tombarra<br>(part B) | Car carrier<br>Fatality of rescue boat crewman.<br>(Report 19B/2012) | Made to: ILAMA<br>Promulgate guidance to its members, on the potential that an increase in the weight of a rescue boat or lifeboat could adversely affect its structure and performance, and could result in over-loading the host vessel's davits. Such guidance should emphasise that: <ul style="list-style-type: none"><li>• It is best practice to weigh rescue boats and lifeboats to check for weight growth during annual servicing;</li><li>• Where a rescue boat or lifeboat is found to be overweight then corrective action must be taken;</li><li>• Drainage of water from foam-filled buoyancy spaces is extremely difficult unless specifically provided for in the design of the rescue boat or lifeboat;</li></ul> <ul style="list-style-type: none"><li>• The internal quality control standards required by SOLAS and the MED, and strict adherence to foam suppliers' instructions, are essential to ensure that buoyancy foam is produced to the required level of quality.</li></ul> | Accepted, fully implemented<br>C     | 2     |

②Follow-up letter written to Chief Executive of Maritime and Coastguard Agency

| Case | Investigation       | Vessel/Accident type  | Narrative and Addressee   | Focus | Level |
|------|---------------------|---|---|-------|-------|
| 137  | <i>Tempanos</i>     | Container vessel<br><br>Fatality from fall into cargo hold.<br>(Report 20/2012) | Made to: Southern Ship Management Co. S.A Accepted, fully implemented | C     | 3     |
| 138  | <i>Tempanos</i>     | Container vessel<br><br>Fatality from fall into cargo hold.<br>(Report 20/2012) | Made to: Hutchison Ports UK Accepted, fully implemented               | G     | 3     |
| 139  | <i>Moon clipper</i> | High speed catamaran<br><br>Steering control failure.<br>(Report 21/2012)       | Made to: Collins River Enterprises Ltd Accepted, fully implemented    | C     | 3     |

| Case | Investigation       | Vessel/Accident type   | Narrative and Addressee  | Focus                           | Level |
|------|---------------------|--|--|---------------------------------|-------|
| 140  | <i>Moon clipper</i> | High speed catamaran<br>Steering control failure.<br>(Report 21/2012)                              | Made to: MCA<br><br>Assess the actions taken by Collins River Enterprises Ltd as a result of the safety issues identified in the report including, specifically: <ul style="list-style-type: none"><li>• Seeking reassurance that the company's steering control system changes have been subjected to an appropriate technical review process.</li><li>• Verifying that the manning and competency levels on board Thames Clippers' River Runner 150 vessels are appropriate.</li></ul> | Accepted, fully implemented     | C 3   |
| 141  | <i>SD Nimble</i>    | Tug<br><br>Accidental discharge of carbon dioxide resulting in serious injury.<br>(Report 23/2012) | Made to: Lloyd's Register<br><br>Propose to IACS that UR Z17 be amended to reflect the importance of service suppliers' procedures being sufficiently robust to ensure that safe systems of work are agreed and implemented with ships' crews prior to commencing work on board vessels.<br><br><b>Target completion date - not given❶</b>   | Accepted, yet to be implemented | C 2   |
| 142  | <i>SD Nimble</i>    | Tug<br><br>Accidental discharge of carbon dioxide resulting in serious injury.<br>(Report 23/2012) | Made to: Ocean Engineering (Fire) Ltd<br><br>Take steps to improve the monitoring and safety of its service engineers, and the adoption of safe systems of work, taking into account the lessons to be learned from this accident, particularly: <ul style="list-style-type: none"><li>• The availability of system information</li><li>• The storage of CO<sub>2</sub> cylinders below decks</li><li>• Vessel movements and activities</li><li>• The requirements of UR Z17.</li></ul>  | Accepted, fully implemented     | C 3   |
| 143  | <i>Ernest Bevin</i> | Ferry<br><br>Fatal accident of a crew member.<br>(Report 22/2012)                                  | Made to: Serco Limited Marine Services<br><br>Evaluate the suitability of its workboats for retrieving unconscious persons from the water and ensure they are appropriately equipped for such eventualities.   | Accepted, fully implemented     | C 3   |

❶ Awaiting update from recipient at time of publication

| Case | Investigation                   | Vessel/Accident type  | Narrative and Addressee   | Focus                           | Level |
|------|---------------------------------|---|---|---------------------------------|-------|
| 144  | <i>Springbok and Gas Arctic</i> | Cargo vessel and LPG tanker<br>Collision.<br>(Report 24/2012)                               | Made to: Seatrade Groningen B.V<br><br>Review vessel manning and watch routines to ensure that its masters and officers are able to take sufficient hours of rest when making frequent port calls.  | Accepted, fully implemented     | C 3   |
| 145  | <i>Springbok and Gas Arctic</i> | Cargo vessel and LPG tanker<br>Collision.<br>(Report 24/2012)                               | Made to: Seatrade Groningen B.V<br><br>Conduct a review of its safety management system and associated controls to ensure the following: <ul style="list-style-type: none"><li>• Access to the bridge and sources of distraction are properly managed during periods of pilotage and increased hazard.</li><li>• OOWs are cognisant of and take appropriate action to mitigate the hazards of visual blind sectors on the bridge.</li><li>• Bridge teams understand the importance and rigorously apply the company requirements for navigating in reduced visibility, with particular emphasis on:<ul style="list-style-type: none"><li>• Provision of an additional lookout</li><li>• Safe speed</li><li>• Use of fog signals</li><li>• The company's requirements for alcohol testing following an accident are strictly adhered to.</li></ul></li></ul> | Accepted, fully implemented     | C 3   |
| 146  | <i>Saga Sapphire</i>            | Cruise ship<br><br>Two men overboard while conducting a lifeboat drill.<br>(Report 25/2012) | Made to: Acromas Shipping Ltd<br><br>Seek formal approval from the Malta Administration and the appropriate classification society in respect to: <ul style="list-style-type: none"><li>• The use of the welded bar modification, fitted to the tender lifting plates, as means of securing the bowing tackle rope.</li><li>• The use of the jackline safety harness tether, securing arrangements currently in use on <i>Saga Ruby</i>'s tenders.</li></ul> <b>Target completion date - July 2013</b>  | Accepted, yet to be implemented | C 3   |

❶ Awaiting update from recipient at time of publication

| Case | Investigation                       | Vessel/Accident type  | Narrative and Addressee   | Focus                       | Level |
|------|-------------------------------------|---|---|-----------------------------|-------|
| 147  | <b>Saga Sapphire</b>                | Cruise ship<br><br>Two men overboard while conducting a lifeboat drill.<br>(Report 25/2012) | Made to: Acromas Shipping Ltd<br><br>Review the operating instructions for the bowing and tricing arrangements fitted as part of the launching system for all tenders and lifeboats across the Saga fleet, to ensure they are consistent and accord with best practice.   | Accepted, fully implemented | C 3   |
| 148  | <b>Saga Sapphire</b>                | Cruise ship<br><br>Two men overboard while conducting a lifeboat drill.<br>(Report 25/2012) | Made to: Acromas Shipping Ltd<br><br>Review the following project management and ship-related procedures for bringing a vessel into service: <ul style="list-style-type: none"> <li>• Integration of the key training requirements into the project management plan, in particular for training that is equipment-dependent.</li> <li>• Timely establishment of the ship's safety management organisation with respect to risk assessments, recording and, where appropriate, tests/inspection of personal protective equipment.</li> <li>• Management, reporting lines and communication arrangements for training during non-operational (refit/docking), transitional and operational phases to ensure that:               <ul style="list-style-type: none"> <li>• All crew receive training appropriate to their tasks.</li> <li>• An effective and consistent level of training oversight is maintained.</li> </ul> </li> </ul> | Accepted, fully implemented | C 3   |
| 149  | <b>Stena Feronia and Union Moon</b> | RoPax vessel and cargo vessel.<br><br>Collision.<br>(Report 26/2012)                        | Made to: Northern Marine Management Ltd<br><br>Amend its SMS to make clear the roles and responsibilities of the bridge team when conducting pilotage with a PEC holder who is not part of the normal ship's complement and is performing an act of pilotage.   | Accepted, fully implemented | C 3   |

| Case | Investigation | Vessel/Accident type   | Narrative and Addressee   | Focus                       | Level |
|------|---------------|--|---|-----------------------------|-------|
| 150  | Onward        | Fishing vessel<br><br>Fire resulting in the loss of the vessel.<br>(Report 27/2012)                            | Made to: Mithcowie Fishing Company Limited<br><br>Ensure that the crews on board any vessels it may own in the future are fully prepared to effectively deal with emergency situations, taking into account, inter alia: <ul style="list-style-type: none"> <li>The requirement to conduct periodic emergency drills and the importance of emergency drills to a vessel's safety.</li> <li>The need for all early warning devices such as fire detection systems and bilge alarms to be properly maintained and tested, and that crews fully understand their operation.</li> <li>The need for crews to have a good knowledge of all onboard safety-related systems and equipment, and that routine safety precautions such as the closing of fire doors are taken at all times.<sup>①</sup></li> </ul> | No response received        | FV 3  |
| 151  | Norcape       | Ro-ro cargo ferry<br><br>Windlass damage, grounding and accident to person, West Scotland.<br>(Report 28/2012) | Made to: Associated British Ports<br><br>Undertake a formal review of the need for compulsory pilotage in Troon.  | Accepted, fully implemented | G 3   |
| 152  | Norcape       | Ro-ro cargo ferry<br><br>Windlass damage, grounding and accident to person, West Scotland.<br>(Report 28/2012) | Made to: Associated British Ports<br><br>Review the formal safety assessment for marine operations in Troon harbour to ensure that: <ul style="list-style-type: none"> <li>Towage guidelines are developed in conjunction with port users.</li> <li>Its anemometer is placed in an optimum location to provide accurate, reliable wind information which is accepted by port users as a basis for its control measures.</li> <li>Port users are aware of any locally agreed sound signals, which should be such that they cannot be confused with those required to be used by the Colregs.</li> </ul>  | Accepted, fully implemented | G 3   |

<sup>①</sup>Awaiting update from recipient at time of publication

| Case | Investigation  | Vessel/Accident type | Narrative and Addressee   | Focus  | Level |
|------|----------------|----------------------|---|--|-------|
| 153  | <i>Norcape</i> | Ro-ro cargo ferry    | Made to: MCA<br><br>Liaise with Associated British Ports and arrange a Port Marine Safety Code "health check" visit to Troon on completion of the harbour authority's formal safety assessment for the port (see 2012/152).   | Accepted, fully implemented  | G 3   |
| 154  | <i>Norcape</i> | Ro-ro cargo ferry    | Made to: P&O Ferries<br><br>In relation to passage planning, monitoring and manoeuvring: <ul style="list-style-type: none"><li>• Review the weather advice available for its ports of call, and provide guidance to its masters on the most appropriate sources to use.</li><li>• Remind its bridge teams of the value of using passage plan abort positions as formal triggers for validating the decision to enter port.</li><li>• Review the provision of information to manoeuvring consoles to ensure that officers manoeuvring their vessels are able to retain full situational awareness.</li></ul> | Accepted, fully implemented  | C 3   |
| 155  | <i>Norcape</i> | Ro-ro cargo ferry    | Made to: P&O Ferries<br><br>Windlass damage, grounding and accident to person, West Scotland.<br>(Report 28/2012)   | Carefully review its emergency response arrangements to ensure all feasible recovery options are proactively evaluated so as to provide its ships' staff and incident management response teams with the data needed to take informed decisions. | C 3   |

## SECTION B

### **RECOMMENDATIONS TO MULTIPLE RECIPIENTS**

Lists the small number of recommendations that have been addressed to 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.

**No recommendations were made to multiple recipients in 2012**

## SECTION C

### RECOMMENDATIONS BROUGHT FORWARD FROM PREVIOUS YEARS

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

**2011**

| Case     | Investigation     | Vessel/Accident type  | Narrative and Addressee  | Focus                           | Level |
|----------|-------------------|-----------------------|--|---------------------------------|-------|
| 2011/152 | Queen Mary 2      | Passenger ship        | Made to: Lloyd's Register<br><br>Review and clarify its rules on the installation of fixed water-based local application fire-fighting systems in compartments containing high voltage systems and, through IACS, propose the appropriate amendments to incorporate this guidance in the FSS Code<br><br><b>Target date for completion - work is ongoing</b>   | Accepted, yet to be implemented | C 2   |
| 2011/144 | Commodore Clipper | Ro-ro passenger ferry | Made to: Bahamas Maritime Authority<br><br>Develop a joint paper with the Maritime and Coastguard Agency for submission to the IMO to consider a requirement for all vessels, whose principal means of access is via a single ramp to a vehicle, special category or ro-ro space, to assess how an alternative means of pedestrian access to shore could be improved in an emergency.<br><br><b>Target date for completion - not given. Previous target date: November 2012①</b> | Accepted, yet to be implemented | C 1   |
| 2011/143 | Commodore Clipper | Ro-ro passenger ferry | Made to: Bahamas Maritime Authority<br><br>Make a submission to the IMO to consider a requirement for all existing ro-ro passenger vessels to be fitted with, or have ready access to, means of determining the effect of damage or entrained water from fire-fighting on the vessel's stability.<br><br><b>Target completion date - not given①</b>  | Accepted, yet to be implemented | C 2   |

① Awaiting update from recipient at time of publication

| Case     | Investigation                                 | Vessel/Accident type  | Narrative and Addressee  | Focus                           | Level       |
|----------|---|---|--|---------------------------------|-------------|
| 2011/134 | Sapphire II and Silver Chord                  | Fishing vessels<br><br>Collision resulting in the foundering of <i>Sapphire II</i> off Stornoway, Scotland.<br>(Report 21/2011) | Made to: MCA<br><br>Ensure its surveyors verify during survey and/or inspection that the field of visibility from fishing vessel wheelhouses complies with the criteria laid down in MGN 314(F) and, where necessary, owners are directed to take action to ensure that adequate visibility is afforded.<br><br><b>Target completion date - August 2013</b>  | Accepted, yet to be implemented | FV<br><br>2 |
| 2011/126 | Jack Abry II                                  | Fishing vessels<br><br>Grounding on the Isle of Rum.<br>(Report 14/2011)  | Made to: Scapeche SA<br><br>Enhance the safety management of its vessels by: <ul style="list-style-type: none"><li>• Providing specific operational instructions and guidance with respect to: the management of hours of work and rest, taking into account travelling time when changing crew; watchkeeping best practice, including passage planning and the appropriate use of navigational equipment, watch alarms and lookouts; and the conduct and frequency of drills.</li><li>• Increasing onboard oversight to ensure compliance with its instructions and guidance, risk assessments, and statutory regulations.</li></ul><br><b>Target completion date - not available, work in progress</b> | Accepted, yet to be implemented | FV<br><br>3 |
| 2011/121 | Princes Club Water Sports Park fatal accident | Inflatable banana boat<br><br>Fatal accident at Princes Club Water Sports Park in Bedfont, Middlesex.<br>(Report 11/2011)       | Made to: MCA<br><br>Take appropriate action to improve the safety of towed inflatable rides by: <ul style="list-style-type: none"><li>• Considering the British Water Ski and Wakeboard Club Driver's Award as a standard for commercially operating boats towing inflatables, and including it in the list of suitable alternative qualifications to the Boatmaster's Licence</li><li>• At its next review, amending the 'Inland Waters Small Passenger Boat Code', Annex 5, so that the guidance is relevant to the boats operating on inland waters and not just beach craft.</li></ul><br><b>Target completion date - December 2015</b>  | Accepted, yet to be implemented | G<br><br>2  |

| Case     | Investigation                                 | Vessel/Accident type   | Narrative and Addressee  | Focus                           | Level |
|----------|---|--|--|---------------------------------|-------|
| 2011/120 | Princes Club Water Sports Park fatal accident | Inflatable banana boat Fatal accident at Princes Club Water Sports Park in Bedfont, Middlesex. (Report 11/2011)                    | Made to: HSE<br>Include oversight of the activity of riding on towed inflatables into the arrangements that are currently being considered to replace the Adventure Activities Licensing Authority.<br><b>Target completion date - Work is ongoing</b>   | Accepted, yet to be implemented | G 2   |
| 2011/111 | Yeoman Bontrup                                | Bulk carrier Fire and explosion on board <i>Yeoman Bontrup</i> at Glensanda Quarry, Loch Linnhe, western Scotland. (Report 5/2011) | Made to: MCA<br>Improve its existing guidance on the stowage of ship's use chemicals.<br><b>Target completion date - August 2013</b>   | Accepted, yet to be implemented | C 2   |
| 2011/109 | Yeoman Bontrup                                | Bulk carrier Fire and explosion on board <i>Yeoman Bontrup</i> at Glensanda Quarry, Loch Linnhe, western Scotland. (Report 5/2011) | Made to: Bahamas Maritime Authority<br>The Bahamas Maritime Authority, supported by the MCA, is recommended to submit proposals to the IMO: for self-unloading vessels to: <ul style="list-style-type: none"><li>• Review and improve fire detection, containment and extinguishing standards for cargo-handling areas.</li><li>• Develop standards for conveyor belt fire resistance properties.</li></ul> <b>Target completion date - not available❶</b> | Accepted, yet to be implemented | C 1   |
| 2011/101 | Delta RIB                                     | RIB Injury to passenger on the River Thames, London. (Report 1/2011)   | Made to: MCA   | Accepted, yet to be implemented | G 2   |

❶Awaiting update from recipient at time of publication

**2010**

| Case     | Investigation      | Vessel/Accident type  | Narrative and Addressee  | Focus                                     | Level |
|----------|--------------------|---|--|---|-------|
| 2010/123 | <i>Olivia Jean</i> | Fishing vessel<br><br>Injury to fisherman<br>17nm SSE of Beachy Head in the English Channel.<br>(Report 10/2010)                              | Made to: MCA<br><br>Consider the findings of this investigation when assisting the Department for Transport to address MAIB recommendation 2010/112, including the need to improve fishing vessel standards and occupational safety by: <ul style="list-style-type: none"><li>• Reviewing the application of LOLER, PUWER, risk assessment and working time regulations on board fishing vessels to ensure that they are suitable for the task of improving safety and reducing accidents.</li><li>• Providing clear and robust guidance to its surveyors and the fishing industry at large.</li><li>• Ensuring accurate records are maintained such that surveyors are provided with the information required to survey fishing vessels effectively.</li><li>• Improving its recording of accidents on vessels' SIAS records to identify trends and act upon them.</li></ul><br><b>Target completion date - August 2013</b> | FV<br><br>Accepted, yet to be implemented | 2     |
| 2010/120 | <i>Bro Arthur</i>  | Oil and chemical tanker<br><br>Fatality of a shore worker in No.2 cargo tank while alongside at Cargill Terminal, Hamburg.<br>(Report 9/2010) | Made to: ICS<br><br>Include guidance on the following in the respective International Chamber of Shipping publications during their next periodic review: <ul style="list-style-type: none"><li>• TSGC - management of contractors and sub-contractors with emphasis on the master's and other officers' and crew members' related health and safety responsibilities.</li><li>• TSGC and ISGOTT - the need for the provision of lightweight, portable casualty recovery equipment suitable for recovery from deep cargo tanks and for the crew to be fully trained in its use.</li></ul><br><b>Target completion date - December 2014</b>   | C<br><br>Accepted, yet to be implemented  | 3     |

| Case     | Investigation                       | Vessel/Accident type   | Narrative and Addressee  | Focus | Level |
|----------|-------------------------------------|--|--|-------|-------|
| 2010/119 | <i>Bro Arthur</i>                   | Oil and chemical tanker  | Made to: MCA<br><br>Accepted, yet to be implemented  | C     | 2     |
|          |                                     | Fatality of a shore worker in No.2 cargo tank while alongside at Cargill Terminal, Hamburg.<br>(Report 9/2010) | <p>Provide additional guidance on the following:</p> <ul style="list-style-type: none"> <li>• Management of contractors and sub-contractors with emphasis on the master's and other officers' and crew members' related health and safety responsibilities.</li> <li>• The need for the provision of lightweight, portable casualty recovery equipment suitable for recovery from deep cargo tanks, and for the crew to be fully trained in its use.</li> </ul> <p><b>Target completion date - December 2013</b></p> | FV    | 1     |
| 2010/112 | <i>Korenblom/ Osprey III/ Optik</i> | Fishing vessels  | Made to: DfT<br><br>Accepted, yet to be implemented  | FV    | 1     |
|          |                                     | Fatal man overboard accidents.<br>(Report 6/2010)  | <p>Recognise the consistent and disproportionate rate of fatalities in the UK fishing industry and take urgent action to develop a comprehensive, timely and properly resourced plan to reduce that rate to a level commensurate with other UK occupations.</p> <p><b>Target completion date - work is ongoing; the MCA has developed an overall strategy for improving safety in the fishing industry, which is awaiting ministerial approval</b></p>   |       |       |

**2009**

| Case     | Investigation    | Vessel/Accident type | Narrative and Addressee   | Focus | Level |
|----------|------------------|----------------------|---|-------|-------|
| 2009/183 | <i>Jo Eik</i>    | Chemical tanker      | <p>Made to: ICS</p> <p>Accepted, yet to be implemented</p> <p>Include the following safety issues identified in this report in the next periodic review and amendment of the Tanker Safety Guide Chemicals:</p> <ul style="list-style-type: none"> <li>• Emphasise the need for the cargo-specific MSDS to be held on board as supplied by the shipper.</li> <li>• That the cargo specific MSDS is promulgated to receivers (terminal or transhipment ships/barges) either directly from the ship or via the ship operator or agent so that risk control measures are based on accurate information.</li> <li>• That areas of the deck which fall into the IMO's definition of an Enclosed Space are identified, and that appropriate control measures are in place following risk assessment.</li> </ul> <p><b>Target completion date - publication expected 2013/2014</b></p> | C     | 3     |
| 2009/141 | <i>Abigail H</i> | Grab hopper dredger  | <p>Made to: MCA</p> <p>Accepted, yet to be implemented</p> <p>Introduce a mandatory requirement, for all vessels greater than 24m length and less than 500 gross tonnes, for the fitting of bilge alarms in engine rooms and other substantial compartments that could threaten the vessel's buoyancy and stability if flooded. These, and any other emergency alarms should sound in all accommodation spaces when the central control station is unmanned. In addition to functioning in the vessel's normal operational modes, alarms should be capable of operating when main power supplies are shut down, and be able to wake sleeping crew in sufficient time for them to react appropriately.</p> <p><b>Target completion date - September 2014</b></p>   | G     | 1     |

| Case      | Investigation  | Vessel/Accident type | Narrative and Addressee  | Focus                           | Level |
|-----------|----------------|----------------------|--|---------------------------------|-------|
| 2009/128a | Celtic Pioneer | RIB                  | Made to: LACORS<br><br>When available, promulgate the approved code of practice for thrill-type boat operators, and strongly encourage local authorities within the United Kingdom to require operators to adhere to the code as a condition of licensing.<br><br><b>Target completion date - will promulgate when new code of practice is available (2009/126a)</b>   | Accepted, yet to be implemented | G 3   |
|           | 2009/128b      |                      | Made to: Institute of Licensing<br><br>When available, promulgate the approved code of practice for thrill-type boat operators, and strongly encourage local authorities within the United Kingdom to require operators to adhere to the code as a condition of licensing.<br><br><b>Target completion date - will promulgate when new code of practice is available (2009/126a)</b>   | Accepted, yet to be implemented | G 3   |
| 2009/126a | Celtic Pioneer | RIB                  | Injury to a passenger on board the RIB <i>Celtic Pioneer</i> , in the Bristol Channel.<br>(Report 11/2009)<br><br>Made to: MCA<br><br>Review and revise the deck manning and qualification requirements of the harmonised SCV Code taking into account the speed of craft and the type of activity intended in addition to the distance from shore and environmental conditions.<br><br><b>Target completion date - April 2014</b> | Accepted, yet to be implemented | G 1   |

**2008**

| Case      | Investigation               | Vessel/Accident type | Narrative and Addressee  | Focus | Level |
|-----------|-----------------------------|----------------------|--|-------|-------|
| 2008/177a | Fishing vessel safety study | Fishing vessel       | Made to: MCA<br>Accepted, yet to be implemented<br><br>Review the current requirements for safety training with particular reference to training assessment and refresher training.<br><br><b>Target completion date - May 2015</b>  | FV    | 1     |
| 2008/175a | Fishing vessel safety study | Fishing vessel       | Made to: DfT<br>Accepted, yet to be implemented<br><br>Work closely together and with the fishing industry safety representatives, to ensure pragmatic safety concerns are integrated into conservation policy measures.<br><br><b>Target completion date - Taken forward as part of new fishing vessel strategy, expected by 2015</b> | FV    | 1     |
| 2008/174a | Fishing vessel safety study | Fishing vessel       | Made to: DfT<br>Accepted, yet to be implemented<br><br>Agree the coherent resourced plan for reducing the fatality rate in the fishing industry (see Recommendation 2008/173).<br><br><b>Target completion date - April 2015</b>   | FV    | 1     |
| 2008/174b |                             |                      | Made to: MCA<br>Accepted, yet to be implemented<br><br>Agree the coherent resourced plan for reducing the fatality rate in the fishing industry (see Recommendation 2008/173).<br><br><b>Target completion date - April 2015</b>   | FV    | 1     |

| Case     | Investigation               | Vessel/Accident type | Narrative and Addressee  | Focus | Level |
|----------|-----------------------------|----------------------|--|-------|-------|
| 2008/173 | Fishing vessel safety study | Fishing vessel       | <p>Made to: MCA</p> <p>Accepted, yet to be implemented</p> <p>In developing its plan to address the unacceptably high fatality rate in the fishing industry, identified in its study of statistics for the years 1996 to 2005, in addition to delivering the actions outlined at 6.2, the MCA is recommended to consider the findings of this safety study, and in particular to:</p> <ul style="list-style-type: none"> <li>• Clarify the requirement for risk assessments to include risks which imperil the vessel such as: environmental hazards, condition of the vessel, stability etc.</li> <li>• Work towards progressively aligning the requirements of the Small Fishing Vessel Code, with the higher safety standards applicable under the Workboat Code.</li> <li>• Clarify the requirements of The Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997 to ensure that they apply in respect of all fishermen on board fishing vessels, irrespective of their contractual status.</li> <li>• Ensure that the current mandatory training requirements for fishermen are strictly applied.</li> <li>• Introduce a requirement for under 15m vessels to carry EPIRBs.</li> <li>• Review international safety initiatives and transfer best practice to the UK fishing industry with particular reference to the use of PFDs and Personal Locator Beacons.</li> <li>• Conduct research on the apparent improvement in safety in other hazardous industry sectors, such as agriculture, construction and offshore, with the objective of identifying and transferring best safety practice from those industries to the fishing industry.</li> </ul> <p><b>Target completion date - April 2016</b></p> | FV    | 1     |

| Case     | Investigation     | Vessel/Accident type  | Narrative and Addressee  | Focus | Level |
|----------|-------------------|---|--|-------|-------|
| 2008/130 | <i>MSC Napoli</i> | Container ship<br><br>Structural failure while in the English Channel.<br>(Report 9/2008) | Made to: IACS<br><br>Research and review the technological aids available which would assist masters to measure hull stresses in port and at sea.<br><br><b>Target completion date - December 2014</b>   | C     | 2     |
| 2008/128 | <i>MSC Napoli</i> | Container ship<br><br>Structural failure while in the English Channel.<br>(Report 9/2008) | Made to: IACS<br><br>Review the contents of UR S11 (Longitudinal Strength Standard) to ensure: <ul style="list-style-type: none"><li>• Hull girder strength and buckling checks are carried out at all critical sections along the entire length of the hull.</li><li>• An evaluation of the suitability of current UR S11 design wave bending moment criteria for vessels with low block coefficient is undertaken.</li><li>• Member societies use common methodologies when complying with the requirements of this rule.</li></ul><br><b>Target date for completion - December 2014</b> | C     | 1     |

**2007**

| Case     | Investigation  | Vessel/Accident type  | Narrative and Addressee  | Focus | Level |
|----------|----------------|---|--|-------|-------|
| 2007/144 | <i>Thunder</i> | General cargo vessel<br><br>Grounding at the approaches to the Dee Estuary.<br>(Report 12/2007) | Made to: DfT<br><br>In considering 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.<br><br><b>Target completion date - July 2013</b> | C     | 1     |

## **SECTION D**

### **CHANGES TO PREVIOUSLY REPORTED RECOMMENDATIONS**

| Case     | Investigation     | Vessel/Accident type   | Narrative and Addressee  | Focus | Level |
|----------|-------------------|--|--|-------|-------|
| 2011/140 | Commodore Clipper | Ro-ro passenger ferry<br>Fire on main vehicle deck while on passage to Portsmouth.<br>(Report 24/2011) | <p>Made to: MCA</p> <p>Accepted, yet to be implemented</p> <p>Work with its stakeholders to produce industry guidelines for maritime emergency responders to consider when providing fire-fighting or other emergency support to ships in UK waters. The guidelines should include, inter alia:</p> <ul style="list-style-type: none"> <li>• Best practice command and control principles.</li> <li>• Information gathering and liaison on scene.</li> <li>• Safety of passengers and crew.</li> <li>• Ship-specific risks and considerations with particular emphasis on issues associated with passenger ro-ro vessels and vessels carrying hazardous cargoes.</li> <li>• Factors to be considered in deciding whether to bring a vessel into port/ alongside.</li> <li>• Specialised equipment and other resources.</li> </ul> <p><b>MCA response:</b></p> <ul style="list-style-type: none"> <li>• Mission conduct is now standard practice within HM Coastguard and has enhanced incident command and control.</li> <li>• Procedural guidance has been updated in the following areas:<br/>information gathering, on-scene liaison and mission conduct, situational awareness, the provision of assistance for fire-fighting, chemical and industrial incidents.</li> <li>• New entry Maritime SAR courses have been reviewed to include ro-ro operations and ship specific risks and considerations.</li> <li>• Future Coastguard training courses are currently being designed and developed.</li> <li>• Revised guidance for the deployment of a Maritime Casualty Officer has been issued.</li> </ul> <p><b>MAIB comment:</b><br/>The MCA has taken internal action to improve the training and guidance given to Coastguard staff in order to enhance their ability to provide direction and coordination according to the nature of the incident. The MCA has not worked with its stakeholders to proactively develop contingency plans relevant to stakeholder areas, but it is hoped that this objective will have been achieved through recommendation 2011/141, made to the Port Marine Safety Code Steering Group.</p> | C     | 2     |

| Case     | Investigation               | Vessel/Accident type | Narrative and Addressee   | Focus    | Level  |
|----------|-----------------------------|----------------------|---|----------|--------|
| 2006/133 | <b>Carrie Kate and Kets</b> | Powerboats           | <p>Made to: DfT</p> <p>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. Expedite the commencement of the subsections to Section 80 of the Railways and Transport Safety Act 2003, in order to implement the limits on the amount of alcohol which may be consumed by persons in charge of pleasure vessels.</p> <p><b>Department for Transport response:</b></p> <p>The MCA and the department have had positive meetings with the RYA on the subject of educating the public about the risks of drinking while near or on the water. The principal areas of work being progressed are:</p> <ol style="list-style-type: none"> <li>1. To formulate the messages to be promoted.</li> <li>2. To identify the statistics and evidence about the issue.</li> <li>3. To explore online promotional material.</li> <li>4. To engage other national governing bodies and the RNLI in the initiative.</li> </ol> <p>If this new advice is effective, and there continues to be no significant alcohol-related accident for leisure users, then there is no immediate need for legislation.</p> <p><b>MAIB comment:</b></p> <p>The department's decision to address the problem of the consumption of alcohol by non-professional mariners through a programme of education, rather than legislation, is noted. It is hoped that this approach will deliver the desired outcome. However, the MAIB continues to believe that the introduction of appropriate, proportionate legislation is a prerequisite to changing the attitudes of a small minority of non-professional mariners who are content to take to the water after consuming excessive quantities of alcohol.</p> | Rejected | L<br>1 |



# PART 3 STATISTICS

## STATISTICS

|  | Page |
|--|------|
| UK vessel accidents involving loss of life | 57   |
| UK merchant vessels $\geq 100\text{gt}$    | 59   |
| UK merchant vessels $< 100\text{gt}$       | 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 |
|--|------------------------------|----------------------------|---|---|--------|
| <b>Merchant Vessels 100gt and over</b> ① |                              |                            |   |   |        |
| 24 Jul                                   | <i>Cape Kestrel</i>          | Bulk carrier               | Off Durban, South Africa                                | Crewman died from injuries after falling from pilot ladder during crew transfer | 1      |
| 25 Nov                                   | <i>Timberland</i>            | Bulk carrier               | North Sea   | Fatal man overboard involving two crewmen                                       | 2      |
| <b>Merchant Vessels under 100gt</b> ①    |                              |                            |   |   |        |
| 14 Aug                                   | <i>Jean Elaine</i>           | Dive workboat              | 15 miles off Cape Wrath                                 | Fall resulting in fatality  | 1      |
| <b>Fishing Vessels</b> ①                 |                              |                            |   |   |        |
| 13 Jan                                   | <i>St Amant</i>              | Scallop dredger            | Off the coast of north-west Wales                       | Person overboard  | 1      |
| 29 Jan                                   | <i>Zenith</i>                | Trawler                    | Irish Sea, 29nm SE of Kilkeel                           | Person overboard  | 1      |
| 17 May                                   | <i>Purbeck Isle</i>          | Potter                     | 9nm south of Portland Bill                              | Vessel foundered with the loss of all crew                                      | 3      |
| 11 Sep                                   | <i>Sarah Jayne</i>           | Trawler                    | English Channel, off Brixham                            | Vessel foundered. Two crew were rescued but the skipper was lost                | 1      |
| <b>Small Craft (Non-Commercial)</b> ②    |                              |                            |   |   |        |
| 1 Jan                                    | -                            | Canoe                      | Golitha Falls, River Fowey near Liskeard, Cornwall      | Capsize leading to fatality   | 1      |
| 2 Jan                                    | -                            | Canoe                      | River Teme, Downton-on-the-Rock, Herefordshire          | Capsize leading to fatality   | 1      |
| 18 Jan                                   | <i>Cena</i>                  | Sailing yacht              | Kilbrannan Sound, off the Isle of Arran, Firth of Clyde | Yacht found drifting and abandoned  | 1      |
| 1 Apr                                    | <i>Mayfly</i>                | Pleasure craft             | Loch Lomond   | Fall leading to man overboard resulting in fatality                             | 1      |
| 15 Apr                                   | <i>Elish</i>                 | Cabin cruiser              | River Avon  | Fire  | 2      |
| 23 Apr                                   | <i>Aquarius</i>              | Privately owned former tug | North coast of Brittany                                 | Foundering. Two crew survived   | 1      |
| 9 May                                    | <i>Musketeer of Sutton</i>   | Recreational craft         | Poole Bay   | Capsize of tender resulting in fatality   | 1      |
| 12 May                                   | -                            | Row boat                   | Barford, River Avon                                     | Drowning following capsise  | 1      |
| 25 May                                   | <i>Kayak Red</i>             | Kayak                      | Isle of Seil, nr Oban                                   | Kayaker missing   | 1      |
| 2 Jun                                    | <i>RS Marine Day Cruiser</i> | Recreational craft         | Greenock Ocean Terminal                                 | Drowning following capsise  | 1      |

| Date   | Name of Vessel             | Type of Vessel     | Location                              | Accident  | Deaths |
|--------|----------------------------|--------------------|---------------------------------------|---|--------|
| 10 Jun | -                          | RIB                | West coast of Scotland                | Contact resulting in fatality   | 1      |
| 19 Jul | -                          | Motorboat          | Shepperton, Thames                    | Capsize resulting in fatality   | 1      |
| 20 Jul | <i>Solent RIB</i>          | RIB                | Needles, Isle of Wight                | Fall overboard resulting in fatality (needs confirmation following coroners report) | 1      |
| 7 Aug  | -                          | Kayak              | Bradwell-on-Sea                       | Missing kayaker   | 1      |
| 25 Aug | <i>Tern</i>                | Recreational craft | Island of Coll                        | Person overboard  | 1      |
| 26 Aug | <i>Canadian kayak</i>      | Kayak              | Off North West Gairloch               | Capsize resulting in fatalities   | 4      |
| 16 Sep | <i>Unknown powerboat</i>   | Recreational craft | Weymouth Bay, Dorset                  | Capsize resulting in fatality   | 1      |
| 14 Oct | <i>Seagair</i>             | Recreational craft | Between Mousehole and Bideford, Devon | Vessel wreckage found but single-handed skipper missing                             | 1      |
| 28 Oct | <i>Brigand</i>             | Recreational craft | Rocken End, Isle of Wight             | Yacht found with missing crew   | 1      |
| 24 Nov | <i>Tarbert kayak</i>       | Kayak              | Loch Fyne, Scotland                   | Capsize leading to fatality   | 1      |
| 17 Dec | <i>Unnamed rowing boat</i> | Recreational craft | Thorpe Bay, Essex                     | Capsize leading to fatality   | 1      |
| 23 Dec | <i>Puddleduck</i>          | Recreational craft | Poole Harbour                         | Capsize leading to fatality   | 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 merchant vessels >= 100gt<sup>①</sup>

**Table 2 - Merchant Vessel Total Losses 2012**

|  | Date | Name of Vessel | Type of Vessel | Age | gt | LOA Metres | Nature of Accident |
|--|------|----------------|----------------|-----|----|------------|--------------------|
|--|------|----------------|----------------|-----|----|------------|--------------------|

There were no total losses of Merchant Vessels reported to MAIB in 2012

**Table 3 – Merchant Vessel Losses: 2003-2012**

|             | Number lost | UK fleet size | gt lost  |
|-------------|-------------|---------------|----------|
| 2003        | -           | 1343          | -        |
| 2004        | 2           | 1406          | 832      |
| 2005        | 6           | 1443          | 1579     |
| 2006        | -           | 1480          | -        |
| 2007        | 5           | 1518          | 54 304   |
| 2008        | 2           | 1578          | 645      |
| 2009        | 1           | 1564          | 274      |
| 2010        | -           | 1520          | -        |
| 2011        | -           | 1521          | -        |
| <b>2012</b> | <b>-</b>    | <b>1450</b>   | <b>-</b> |

**Table 4 - Merchant Vessels in Accidents: 2003-2012**

|             | Vessels    | UK fleet size | Accidents/1 000 vessels |
|-------------|------------|---------------|-------------------------|
| 2003        | 146        | 1343          | 109                     |
| 2004        | 144        | 1406          | 102                     |
| 2005        | 197        | 1443          | 137                     |
| 2006        | 130        | 1480          | 88                      |
| 2007        | 116        | 1518          | 76                      |
| 2008        | 131        | 1578          | 83                      |
| 2009        | 128        | 1564          | 82                      |
| 2010        | 141        | 1520          | 93                      |
| 2011        | 115        | 1521          | 76                      |
| <b>2012</b> | <b>133</b> | <b>1450</b>   | <b>92</b>               |

<sup>①</sup> See definitions in Annex

**Note:** Historical data may contain revisions

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

|                             | Dry cargo | Passenger | Tanker/<br>combination carrier | Other commercial | Total      |
|-----------------------------|-----------|-----------|--------------------------------|------------------|------------|
| Cargo handling failure      | 1         | -         | -                              | -                | 1          |
| Collision                   | 3         | 8         | 2                              | 9                | 22         |
| Contact                     | -         | 14        | 3                              | 10               | 27         |
| Fire/explosion              | 5         | 6         | -                              | 3                | 14         |
| Flooding/foundering         | -         |           | -                              | 1                | 1          |
| Grounding                   | 10        | -         | 2                              | 6                | 18         |
| Heavy weather               | 3         | -         | -                              | -                | 3          |
| Hull failure                | 1         | -         | -                              | -                | 1          |
| Machinery/equipment failure | 9         | 14        | 4                              | 11               | 38         |
| Person overboard            | 3         | 1         | -                              | 3                | 7          |
| Pollution                   |           | 1         |                                |                  | 1          |
| <b>Total</b>                | <b>35</b> | <b>44</b> | <b>11</b>                      | <b>43</b>        | <b>133</b> |

**Table 6 - Merchant Vessels in Accidents by Nature of Accident: 2003-2012**

|                             | 2003       | 2004       | 2005       | 2006       | 2007       | 2008       | 2009       | 2010       | 2011       | 2012       |
|-----------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Capsize/listing             | -          | 2          | 1          | -          | 2          | -          | -          | -          | -          | -          |
| Cargo handling failure      | 3          | 1          | 2          | 2          | 1          | 4          | 3          | 2          | 1          | 1          |
| Collision                   | 12         | 16         | 37         | 25         | 14         | 21         | 24         | 28         | 20         | 22         |
| Contact                     | 38         | 29         | 34         | 20         | 29         | 27         | 31         | 38         | 24         | 27         |
| Escape of harmful substance | -          | 4          | 2          | 1          | 2          | 1          | -          | -          | 1          | -          |
| Fire/explosion              | 21         | 22         | 19         | 6          | 8          | 8          | 3          | 6          | 13         | 14         |
| Flooding/foundering         | 3          | 3          | 6          | 4          | 2          | 4          | 4          | 3          | 3          | 1          |
| Grounding                   | 13         | 15         | 27         | 21         | 11         | 26         | 19         | 24         | 18         | 18         |
| Heavy weather               | 3          | 4          | 1          | 5          | 4          | 4          | 5          | 3          | 3          | 3          |
| Machinery/equipment Failure | 41         | 42         | 51         | 31         | 36         | 23         | 24         | 25         | 21         | 38         |
| Person overboard            | 9          | 5          | 13         | 12         | 7          | 11         | 10         | 7          | 10         | 7          |
| Other                       | 3          | 1          | 4          | 3          | -          | 2          | 5          | 5          | 1          | 2          |
| <b>Total</b>                | <b>146</b> | <b>144</b> | <b>197</b> | <b>130</b> | <b>116</b> | <b>131</b> | <b>128</b> | <b>141</b> | <b>115</b> | <b>133</b> |

**Note:** Historical data may contain revisions

UK merchant vessels &gt;= 100gt

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

| <b>Place</b>                  | <b>Number of people</b> |
|-------------------------------|-------------------------|
| Accommodation space           | 31                      |
| Bridge                        | 3                       |
| Cargo or other tank space     | 14                      |
| Engine room                   | 12                      |
| Stairway/ladder/gangway       | 15                      |
| External working deck/shelter | 53                      |
| Galley                        | 9                       |
| Overside/aloft                | 2                       |
| Ro-ro vehicle deck/ramp       | 5                       |
| Ship's boat                   | 8                       |
| Other machinery space         | 7                       |
| Other                         | 27                      |
| <b>Total</b>                  | <b>186</b>              |

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

| <b>Rank/specialism</b> | <b>Number of people</b> |
|------------------------|-------------------------|
| Master/skipper         | 2                       |
| Officer, deck          | 21                      |
| Officer, engineering   | 22                      |
| Rating                 | 56                      |
| Other crew             | 85                      |
| <b>Total</b>           | <b>186</b>              |

**Table 9 - Deaths and Injuries of MV Crew by Injury**

| Main injury                                   | Number of crew |
|---|----------------|
| Amputation of hand/fingers/toe                | 4              |
| Burns/scalds/frostbite                        | 6              |
| Concussion/unconsciousness due to head injury | 3              |
| Cuts/wound/lacerations                        | 39             |
| Death - confirmed                             | 3              |
| Dislocations/sprains/strains                  | 37             |
| Eye injuries                                  | 3              |
| Fracture                                      | 66             |
| Other   | 25             |
| <b>Total</b>                                  | <b>186</b>     |

**Table 10 - Deaths and Injuries to Merchant Vessel Crew: 2003-2012**

|             | Crew injured | Of which resulted in death |
|-------------|--------------|----------------------------|
| 2003        | 289          | 3                          |
| 2004        | 310          | 4                          |
| 2005        | 246          | 2                          |
| 2006        | 233          | 3                          |
| 2007        | 243          | 12                         |
| 2008        | 224          | 5                          |
| 2009        | 199          | 6                          |
| 2010        | 222          | 3                          |
| 2011        | 185          | 5                          |
| <b>2012</b> | <b>186</b>   | <b>3</b>                   |

**Note:** Historical data may contain revisions

UK merchant vessels &gt;= 100gt

**Table 11 - Deaths and Injuries to Passengers by Injury**

| Main injury   | Number of passengers |
|---|----------------------|
| Concussion/unconsciousness due to head injury                 | 2                    |
| Cuts/wound/lacerations  | 5                    |
| Dislocations/sprains/strains                                  | 6                    |
| Fracture - of the skull/spine/pelvis/major bone in arm or leg | 35                   |
| Other   | 2                    |
| <b>Total</b>  | <b>50</b>            |

**Table 12 - Deaths and Injuries to Passengers: 2003-2012**

|             | Number of passengers | Of which resulting in death |
|-------------|----------------------|-----------------------------|
| 2003        | 186                  | -                           |
| 2004        | 147                  | -                           |
| 2005        | 110                  | 1                           |
| 2006        | 114                  | 1                           |
| 2007        | 106                  | -                           |
| 2008        | 170                  | 2                           |
| 2009        | 115                  | 1                           |
| 2010        | 92                   | 2                           |
| 2011        | 109                  | 1                           |
| <b>2012</b> | <b>50</b>            | -                           |

**Note:** Historical data may contain revisions

## UK merchant vessels <100gt<sup>①</sup>

**Table 13 - UK Flagged Merchant Vessels Under 100gt - Losses<sup>②</sup>**

|   | Date  | Name of vessel | Type of vessel | loa metres | Nature of accident |
|---|-------|----------------|----------------|------------|--------------------|
| * | 3 Mar | Viper          | RIB            | 9          | Fire               |

\* Constructive Total Loss

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

|                     | Associated with offshore industry | Passenger | Other commercial* | Overall Total |
|---------------------|-----------------------------------|-----------|-------------------|---------------|
| Collision           |                                   | 6         | 8                 | 14            |
| Contact             | 2                                 | 4         | 5                 | 11            |
| Fire/explosion      |                                   | 1         | 7                 | 8             |
| Flooding/foundering |                                   | 1         | 2                 | 3             |
| Grounding           |                                   | 2         | 7                 | 9             |
| Machinery failure   | 2                                 | 16        | 11                | 29            |
| Person overboard    |                                   | 1         | 6                 | 7             |
| <b>Total</b>        | <b>4</b>                          | <b>31</b> | <b>46</b>         | <b>81</b>     |
| <b>Injured</b> ③    | <b>3</b>                          | <b>6</b>  | <b>30</b>         | <b>39</b>     |
| <b>Deaths</b> ③     | <b>-</b>                          | <b>-</b>  | <b>1</b>          | <b>1</b>      |

① See definitions in Annex

② For 2012 this table excludes commercially operated leisure craft.

③ These rows include accidental injuries and deaths on vessels where the vessel itself was not involved in an accident. These figures include crew, other workers (non-crew) and passengers.

## UK fishing vessels<sup>①</sup>

There were 5834 UK registered fishing vessels at the end of 2012. During 2012, 260 accidents involving these vessels were reported to the MAIB. Figures in the following tables show accidents and injuries involving UK registered vessels that were reported to the MAIB in 2012.

Nine fishing vessels were reported lost (0.15% of the total fleet) and there were 6 fatalities to crew.

**Table 15 - Fishing Vessel Total Losses**

|   | Date   | Name of vessel      | Age | gt    | Nature of accident |
|---|--------|---------------------|-----|-------|--------------------|
| <b>Under 15m length overall (loa)</b>                         |        |                     |     |       |                    |
|   | 17 May | <i>Purbeck Isle</i> | 52  | 5.5   | Foundering         |
|   | 23 Jul | <i>Betty G</i>      | 11  | 13.96 | Capsizing          |
|   | 11 Sep | <i>Sarah Jayne</i>  | 33  | 23.62 | Capsizing          |
|   | 22 Oct | <i>Paulanda</i>     | 31  | 10    | Foundering         |
|   | 23 Oct | <i>Snowdonia</i>    | 43  | 24.83 | Foundering         |
| <b>15m length overall - under 24m registered length (reg)</b> |        |                     |     |       |                    |
|   | 11 Apr | <i>Onward</i>       | 12  | 202   | Fire               |
| *   | 09 Jul | <i>Denarius</i>     | 53  | 113   | Fire               |
| *   | 10 Aug | <i>Audacious</i>    | 13  | 437   | Foundering         |
|   | 01 Sep | <i>Chloe T</i>      | 44  | 136   | Foundering         |

\* Constructive Total Loss

① See note 10 of the definitions in Annex. Two losses, that were not in connection with the operation of the vessel are not included in the following tables.

## UK fishing vessels

**Table 16 - Fishing Vessel Losses: 2003-2012**

|             | Under<br>15m loa | 15m loa to<br><24m reg | 24m reg<br>and over | Total<br>lost | UK registered | % lost      |
|-------------|------------------|------------------------|---------------------|---------------|---------------|-------------|
| 2003        | 16               | 8                      | 4                   | 28            | 6731          | 0.42        |
| 2004        | 16               | 9                      | -                   | 25            | 6693          | 0.37        |
| 2005        | 20               | 11                     | 3                   | 34            | 6314          | 0.54        |
| 2006        | 11               | 7                      | 1                   | 19            | 6346          | 0.30        |
| 2007        | 16               | 5                      | -                   | 21            | 6330          | 0.33        |
| 2008        | 14               | 4                      | 3                   | 21            | 6763          | 0.31        |
| 2009        | 11               | 4                      | -                   | 15            | 6222          | 0.24        |
| 2010        | 11               | 3                      | -                   | 14            | 5902          | 0.24        |
| 2011        | 17               | 7                      | -                   | 24            | 5974          | 0.40        |
| <b>2012</b> | <b>5</b>         | <b>4</b>               | <b>-</b>            | <b>9</b>      | <b>5834</b>   | <b>0.15</b> |

**Table 17 - Fishing Vessels in Accidents**

| Nature of accident             | Number of vessels involved | Incident rate per 1 000<br>vessels at risk (to one<br>decimal place) |
|--------------------------------|----------------------------|--|
| Capsize/listing                | 5                          | 0.9  |
| Collision                      | 16                         | 2.7  |
| Contact                        | 4                          | 0.7  |
| Fire/explosion                 | 11                         | 1.9  |
| Flooding/foundering            | 23                         | 3.9  |
| Grounding                      | 21                         | 3.6  |
| Heavy weather damage           | 1                          | 0.2  |
| Machinery/equipment<br>failure | 174                        | 29.8   |
| Person overboard               | 5                          | 0.9  |
| <b>Total</b>                   | <b>260</b>                 | <b>44.6</b>  |

**Note:** Historical data may contain revisions

**Table 18 - Fishing Vessels in Accidents by Nature of Accident: 2003-2012**

| Nature of accident   | 2003       | 2004       | 2005       | 2006       | 2007       | 2008       | 2009       | 2010       | 2011       | 2012       |
|----------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Capsize/listing      | 4          | 2          | 6          | 5          | 2          | 2          | 2          | 6          | 7          | 5          |
| Collision            | 17         | 12         | 23         | 12         | 18         | 17         | 10         | 15         | 11         | 16         |
| Contact              | 7          | 3          | 2          | 3          | 4          | 2          | 6          | 4          | 4          | 4          |
| Fire/explosion       | 13         | 19         | 16         | 15         | 9          | 11         | 7          | 10         | 15         | 11         |
| Flooding/foundering  | 50         | 40         | 54         | 34         | 33         | 34         | 31         | 25         | 26         | 23         |
| Grounding            | 38         | 29         | 20         | 24         | 24         | 28         | 26         | 16         | 25         | 21         |
| Heavy weather damage | 1          | 2          | 3          | 1          | 5          | -          | 3          | 1          | 1          | 1          |
| Machinery failure    | 221        | 202        | 232        | 240        | 213        | 156        | 140        | 184        | 195        | 174        |
| Missing vessel       | 1          | 1          | -          | 1          | -          | -          | -          | -          | -          | -          |
| Person overboard     | 7          | 6          | 11         | 14         | 8          | 7          | 13         | 9          | 15         | 5          |
| Other                | 1          | 1          | 1          | -          | 1          | -          | -          | 2          | -          | -          |
| <b>Total</b>         | <b>360</b> | <b>317</b> | <b>368</b> | <b>349</b> | <b>317</b> | <b>257</b> | <b>238</b> | <b>272</b> | <b>299</b> | <b>260</b> |

**Note:** Historical data may contain revisions

## UK fishing vessels

**Table 19 - Fishing Vessels in Accidents - by Nature of Accident**

| Nature of accident  | Number of vessels involved | Incident rate per 1000 vessels at risk<br>(to one decimal place) |
|---|----------------------------|--|
| <b>Under 15m length overall (loa) - vessels at risk: 5200</b>       |                            |  |
| Capsize/listing   | 5                          | 1.0  |
| Collision   | 7                          | 1.3  |
| Contact   | 1                          | 0.2  |
| Fire/explosion  | 6                          | 1.2  |
| Flooding/foundering   | 17                         | 3.2  |
| Grounding   | 12                         | 2.3  |
| Heavy weather damage  | 1                          | 0.2  |
| Machinery failure   | 130                        | 25.0   |
| Person Overboard  | 3                          | 0.6  |
|   | <b>182</b>                 | <b>35.0</b>  |
| <b>15m loa - 24m registered length (reg) - vessels at risk: 473</b> |                            |  |
| Collision   | 6                          | 12.7   |
| Contact   | 3                          | 6.3  |
| Fire/explosion  | 5                          | 10.6   |
| Flooding/foundering   | 5                          | 10.6   |
| Grounding   | 8                          | 17.0   |
| Machinery failure   | 37                         | 78.2   |
| Person overboard  | 2                          | 4.2  |
|   | <b>66</b>                  | <b>139.5</b>   |
| <b>24m reg and over - vessels at risk: 161</b>                      |                            |  |
| Collision   | 3                          | 18.6   |
| Fire/explosion  | 1                          | 6.2  |
| Grounding   | 1                          | 6.2  |
| Machinery failure   | 7                          | 43.5   |
|   | <b>12</b>                  | <b>74.5</b>  |
| <b>Fleet total</b>  | <b>260</b>                 | <b>44.6</b>  |

**Table 20 - Deaths and Injuries to Fishing Vessel Crew by Injury**

| Main injury                                   | Number of crew |
|---|----------------|
| Amputation of hand/fingers/toes               | 6              |
| Concussion/unconsciousness due to head injury | 4              |
| Crush injury                                  | 4              |
| Cuts/wounds/lacerations                       | 5              |
| Death - confirmed                             | 6              |
| Dislocations/sprains/strains                  | 2              |
| Eye injuries                                  | 1              |
| Fractures                                     | 16             |
| Other   | 6              |
| <b>Total</b>                                  | <b>50</b>      |

**Table 21 - Deaths and Injuries to Fishing Vessel Crew by Vessel Length  
(of which, deaths shown in brackets) 2003-2011**

|      | Under 15m loa |        | 15m loa - under 24m reg |     | 24m reg and over |     | Total   |      |
|------|---------------|--------|-------------------------|-----|------------------|-----|---------|------|
|      | 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)  |
| 2008 | 19            | (3)    | 22                      | (4) | 19               | (1) | 60      | (8)  |
| 2009 | 32            | (5)    | 30                      | (7) | 13               | (1) | 75      | (13) |
| 2010 | 22            | (4)    | 10                      | -   | 13               | (1) | 45      | (5)  |
| 2011 | 20            | (7)    | 27                      | (1) | 11               | -   | 58      | (8)  |
| 2012 | 21            | (4)    | 22                      | (2) | 7                | -   | 50      | (6)  |

**Note:** Historical data may contain revisions

## Non-UK commercial vessels<sup>①</sup>

**Table 22 - Non-UK Commercial Vessels Total Losses in UK Waters**

| Date  | Name of vessel | Type of vessel | Nationality       | Age | gt   | loa metres | Nature of accident |
|-------|----------------|----------------|-------------------|-----|------|------------|--------------------|
| 3 Apr | Carrier        | Dry cargo      | Antigua & Barbuda | 27  | 1587 | 82         | Grounding          |

**Table 23 - Non-UK Vessels in UK Waters - by Nature of Accident and Vessel Category**

|                         | Dry cargo | Passenger | Tanker/<br>combination carrier | Fishing vessel | Other commercial | Total      |
|-------------------------|-----------|-----------|--------------------------------|----------------|------------------|------------|
| Collision               | 8         | -         | 6                              | 2              | 5                | 21         |
| Contact                 | 17        | 1         | 1                              | -              | 5                | 24         |
| Fire/<br>Explosion      | 3         | -         | -                              | 1              | 1                | 5          |
| Flooding/<br>Foundering | 1         | -         | -                              | 1              | -                | 2          |
| Grounding               | 22        | 1         | 1                              | -              | 1                | 25         |
| Machinery Failure       | 15        | 2         | 6                              | 4              | 3                | 30         |
| Person Overboard        | 3         | 1         | -                              | 1              | 2                | 7          |
| <b>Total</b>            | <b>69</b> | <b>5</b>  | <b>14</b>                      | <b>9</b>       | <b>17</b>        | <b>114</b> |
| <b>Injuries ③</b>       | <b>17</b> | <b>26</b> | <b>6</b>                       | <b>4</b>       | <b>6</b>         | <b>59</b>  |
| <b>Deaths ③</b>         | <b>3</b>  | <b>-</b>  | <b>-</b>                       | <b>-</b>       | <b>1</b>         | <b>4</b>   |

① See definitions in Annex

③ These rows include accidental injuries and deaths on vessels where the vessel itself was not involved in an accident. These figures include crew, other workers (non-crew) and passengers.

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 notified to us by bodies such as the Coastguard.

# ANNEX

## STATISTICS COVERAGE

### Reporting Requirements

1. From January to June 2012 United Kingdom ships were required by the Merchant Shipping (Accident Reporting and Investigation) Regulations 2005 to report accidents to ships and accidents to persons to the MAIB.
2. From July 2012 United Kingdom ships are required by the Merchant Shipping (Accident Reporting and Investigation) Regulations 2012 to report accidents, which has a new, wider, definition (see below) to the MAIB.
3. Data for the whole of 2012 is presented in this report using the 2005 definition of accident in a format comparable with data in the MAIB's previous Annual Reports.
4. 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 notified to us by bodies such as the Coastguard.
5. The Maritime and Coastguard Agency, harbour authorities and inland waterway authorities also have a duty to report accidents to the MAIB.
6. For full details of reporting requirements please refer to the Regulations, which are available via: [www.maib.gov.uk/resources/index.cfm](http://www.maib.gov.uk/resources/index.cfm)
7. In addition to the above, the MAIB monitors news and other information sources for relevant accidents.
8. Data is presented by the year in which the incident was reported to the MAIB. Historic data tables contain information from 2003; since that time the reporting requirements have changed - in 2005 and 2012.

Significant changes include:

9. 2005 – Introduction of a requirement for recreational craft on bareboat hire and various small vessels of less than 8 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.
10. 2012 - The most substantive change is in the definition of Accident. In contrast to the 2005 Regulations, Accident incorporates Hazardous Incidents, which are now known as Marine Incidents. Accidents are now defined as being Very Serious Marine Casualties, Serious Marine Casualties, Marine Casualties or Marine Incidents, depending on their severity. Data in this 2012 Annual Report uses the 2005 definition of Accident. With the exception that 2012 figures exclude accidents that were not in connection with the operation of a vessel. This has had an effect on tables 15 and 16 showing UK fishing vessel losses, which, had such cases been included, would have shown 11 fishing vessel losses reported in 2012.

### Vessel Definitions

|                                    |   |
|------------------------------------|---|
| UK merchant vessels >=100gt        | Merchant vessels on the UK register with a gross tonnage of 100gt or more   |
| UK merchant vessels <100gt         | Merchant vessels on the UK register with a gross tonnage of less than 100gt.<br>For 2012 note that this table does NOT include leisure craft.   |
| UK leisure craft                   | Commercially operated recreational craft (charter/hire, operated by schools and other training establishments etc)  |
| UK pleasure craft (non-commercial) | Privately owned and operated recreational craft of all types.   |
| UK non-commercial vessels          | Non-commercial vessels (other than pleasure craft), Naval vessels (when involved in collisions with non-Naval 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 “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, or
  - (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 3 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 3 consecutive days or less, excluding the day of the accident.

### Meaning of “Marine Incident”

A Marine Incident is an event or sequence of events which is not a Marine Casualty which has occurred directly in connection with the operation of a ship that endangers, or if not corrected would endanger the safety of a ship, its occupants or any other person or the environment. .

## GLOSSARY OF ABBREVIATIONS AND ACRONYMS

|                 |   |   |
|-----------------|---|---|
| AIS             | - | Automatic Identification System                                 |
| BPA             | - | British Ports Association                                       |
| BTA             | - | British Tugowners Association                                   |
| CO <sub>2</sub> | - | Carbon Dioxide  |
| Colregs         | - | International Regulations for Preventing Collisions at Sea 1972 |
| DEFRA           | - | Department for Environment, Food and Rural Affairs              |
| DfT             | - | Department for Transport  |
| DSC             | - | Digital Selective Calling                                       |
| ECDIS           | - | Electronic Chart Display and Information System                 |
| EPIRB           | - | Emergency Position Indicating Radio Beacon                      |
| FMEA            | - | Failure Modes and Effects Analysis                              |
| FSS Code        | - | International Code for Fire Safety Systems                      |
| gt              | - | gross tonnage   |
| HSE             | - | Health and Safety Executive                                     |
| IACS            | - | International Association of Classification Societies           |
| ICS             | - | International Chamber of Shipping                               |
| ILAMA           | - | International Life-Saving Appliance Manufacturers Association   |
| IMO             | - | International Maritime Organization                             |
| ISGOTT          | - | International Safety Guide for Oil Tankers and Terminals        |
| kW              | - | kilowatt  |
| LACORS          | - | Local Authority Coordinators of Regulatory Services             |
| loa             | - | length overall  |
| LOLER           | - | Lifting Operations and Lifting Equipment Regulations            |

|       |   |  |
|-------|---|--|
| lpg   | - | Liquid Petroleum Gas                                   |
| LSA   | - | Life Saving Appliance                                  |
| m     | - | metre  |
| MCA   | - | Maritime and Coastguard Agency                         |
| MED   | - | Marine Equipment Directive                             |
| MGN   | - | Marine Guidance Note                                   |
| MSC   | - | Maritime Safety Committee                              |
| MSDS  | - | Material Safety Data Sheet                             |
| MSN   | - | Merchant Shipping Notice                               |
| NIFHA | - | Northern Ireland Fishery Harbour Authority             |
| nm    | - | nautical mile  |
| NWA   | - | National Workboat Association                          |
| OOOW  | - | Officer of the Watch                                   |
| PAN   | - | Product Advisory Note                                  |
| PEC   | - | Pilotage Exemption Certificate                         |
| PFD   | - | Personal Flotation Device                              |
| PLA   | - | Port of London Authority                               |
| PLB   | - | Personal Locator Beacon                                |
| PMSC  | - | Port Marine Safety Code                                |
| PUWER | - | Provision and Use of Work Equipment Regulations (1998) |
| reg   | - | registered length                                      |
| RNLI  | - | Royal National Lifeboat Institution                    |
| RoPax | - | Roll on/roll off passenger vessel                      |
| Ro-ro | - | Roll on, Roll off vessel                               |

|        |   |                                     |
|--------|---|-------------------------------------|
| RYA    | - | Royal Yachting Association          |
| SCV    | - | Small Commercial Vessel Code        |
| SIAS   | - | Ship Inspections and Surveys        |
| SMS    | - | Safety Management System            |
| SOLAS  | - | Safety of Life At Sea               |
| SOSREP | - | Secretary of State's Representative |
| TSGC   | - | Tanker Safety Guide (Chemicals)     |
| UKHMA  | - | UK Harbour Masters' Association     |
| UKMPG  | - | United Kingdom Major Ports Group    |
| UR     | - | Unified Requirements                |
| VHF    | - | Very High Frequency                 |

