



# **Recommendations Annual Report 2004**

Responses to safety recommendations issued  
by the Marine Accident Investigation Branch

26 July 2005

*Department for*  
**Transport**



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## **Chief Inspector's Report**

### **Background**

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

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

Recommendations are made to a variety of addressees who may have been involved in, or have an interest in, the incident or accident. These may range from those organisations which have a wider role in the maritime community such as the Maritime and Coastguard Agency (MCA) or the International Chamber of Shipping (ICS) to which numerous recommendations may be addressed, through to commercial operators and vessel owners/operators who may have specific issues to address on their vessels.

It is the firm belief of the MAIB that, in the maritime world, additional regulation should be the recommendation of last resort. In most safety issues identified from accident investigation, the MAIB looks to the industry to identify the issue and to take appropriate action to mitigate the risk to a satisfactory degree. It is normally only where this approach does not or cannot work, or where organisations fail to accept responsibility, that we advocate regulation.

Prior to January 2004, recommendations were made and responses recorded, but less emphasis was placed on the need for the addressee to fully inform the MAIB of their intentions. If a reply was not received from an addressee, the recommendation would remain outstanding and no further correspondence would be pursued.

In January 2004, a "closed-loop" recommendation system was introduced, so that the Secretary of State for Transport, to whom the Chief Inspector is responsible, could monitor the implementation of MAIB recommendations. This allows the Secretary of State to have confidence that lessons from accidents were being given due weight by all elements of the industry. It also serves to indicate the effectiveness of MAIB investigations.

The closed-loop system requires the person/organisation to whom the recommendation was addressed to consider the recommendation, and to reply to the Chief Inspector within 28 days on the plans to implement the recommendation or, if it was not going to be implemented, an explanation as to why not. Implemented voluntarily from January 2004, it became a legal requirement on 18 April 2005 through the Merchant Shipping (Accident Reporting and Investigation) Regulations 2005. The Regulations also require the Chief Inspector “to inform the Secretary of State of those matters” annually, and to make the matters publicly available.

## **Recommendations 2004**

This is the first Recommendations Annual Report to be produced by the MAIB. It is submitted to the Secretary of State for Transport and addresses all recommendations made between 1<sup>st</sup> January 2004 and 31<sup>st</sup> December 2004. This report presents information which was not subject to the 2005 regulations, meaning that addressees were not legally obliged to provide MAIB with any response to recommendations made to them.

Annexes B-D to this report present the recommendations made throughout 2004, concentrating on those which have been rejected, partially accepted or those which have not had a reply. The recommendations have been broken down into three categories:

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

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

At Annex F there is a short statistical analysis of recommendations made by the MAIB prior to 2004.

## **Recommendation Response Statistics 2004**

177 recommendations were issued in 2004. Of these, the 6 at Annex E were addressed to multiple companies or organisations, and so are not included in the statistics.

Of the 171 remaining recommendations:

Total No.	Accepted Action Implemented	Accepted Action yet to be Implemented	Partially Accepted	Rejected	Reply Not Received
171	93	52	11	11	4

Of the 171 recommendations issued throughout 2004;

- 91.2% have been accepted; of those
  - 59.6% have been fully implemented
  - 33.3% are planned to be implemented
  - 7% are partially accepted
- 6.4% have been rejected
- 2.3% of recommendations have not received a reply.

Details of all these recommendations are at Annexes B-D.

## **Analysis**

In view of this being the first report of its kind, and responses being voluntary, it is not considered appropriate to analyse these results too deeply. However, it is encouraging to note that over 90% of recommendations have been accepted, of which nearly 60% have already been implemented.

Nevertheless there are a number of serious safety issues highlighted by the responses:

1. Recommendation 206 (page B4). This is an important strategic recommendation aimed at addressing the global concern of fatigue at sea by ensuring an improved manning standard in smaller ships. While MCA has fully accepted the recommendation, made in July 2004, progress has stalled, with the UK paper being withdrawn from IMO following objections received at a very late stage from the European Commission, on competence grounds. This will mean at least a 2-year delay between the recommendation being accepted and first consideration of the issue by the IMO.
2. Recommendation 186 (page B3) and recommendation 250 (page C6). Fishing vessels under 15m in length currently operate under a semi-voluntary Code. A succession of, often fatal, accidents clearly demonstrates that the Code is only having a limited effect on safety in this sector of the fishing community. Improvements, particularly in stability, survey/inspection and safety equipment, are urgently required. At the time of writing, MAIB is about to publish a report into the fatal losses of 3 more "Code" boats, which will contain strong recommendations to the MCA and others to help address this high accident rate.
3. Recommendations 177 and 178 (pages B2&3). The maritime sector has been slow to grasp that High Speed Craft have more in common with operating aircraft than ships. They are operated at high speeds by operators seated in cockpits surrounded by a bank of monitors and equipment. Yet the requirements for equipment, and bridge layout differ little to conventional craft. For example, in a digital age, it is absurd that for navigation, such craft need only have paper charts at the back of the bridge. Accidents over the last 10 years, including one with 16 fatalities, have clearly demonstrated the need for change. The Chief Executive of the MCA has agreed to consider how this is best taken ahead.



**Stephen Meyer**  
**Chief Inspector**

## ANNEX A METHODOLOGY

Annexes B-D list all recommendations issued in Levels 1-3 respectively. Each annex is divided into:

1. Recommendations rejected
2. Recommendations partially accepted
3. Response not received.
4. General recommendations
  - accepted – yet to be implemented
  - accepted – implemented
5. Commercial vessels
  - accepted – yet to be implemented
  - accepted – implemented
6. Fishing vessels
  - accepted – yet to be implemented
  - accepted – implemented
7. Leisure vessels
  - accepted – yet to be implemented
  - accepted – implemented

Level 1 and 2 recommendations that have been rejected or only partially accepted show the response received by the MAIB, together with MAIB comment.

## ANNEX B LEVEL 1 RECOMMENDATIONS

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

### Summary Table

	No. of Recommendations Issued	Accepted Action Implemented	Accepted Action yet to be implemented	Partially Accepted	Rejected	Reply Not Received
<b>General</b>	<b>9</b>	<b>5</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Commercial</b>	<b>9</b>	<b>4</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>0</b>
<b>Fishing</b>	<b>5</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>0</b>
<b>Leisure</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total</b>	<b>23</b>	<b>10</b>	<b>10</b>	<b>1</b>	<b>2</b>	<b>0</b>

## Level 1 Recommendations - Breakdown

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

Rejected			
Number	Investigation	Addressed To	Recommendation
177	HC Katia	MCA	<p>You are recommended to take forward the following issue at the appropriate committees and subcommittees of the IMO:</p> <p>The introduction of a requirement that a minimum of two type rated people shall be required to navigate an HSC except where the vessel's voyage is a short line-of-sight passage. Each of the navigators should have navigation/control stations within the operating compartment.</p>
		MCA Response	<p>The MCA recognises and accepts recommendation 2004/177 insofar as is practicable to type rated personnel on vessels of class and already in operation. However, since it is not possible to issue or gain type rating certificates for a new vessel that is the first of a class, in these cases the level of competence and training considered necessary in respect of the Master and crew shall be determined by the MCA in respect of the particular type or model of craft and intended service.</p> <p>The requirement for a minimum of 2 navigational officers and one engineer officer was already stipulated by MCA and complied with by the owners. The intended meaning of the final sentence of the recommendation is not clear. A requirement for "navigation, manoeuvring, control, communication and other essential instruments" to be available to an "assisting officer" is largely already stipulated in paragraph 15.4.4 of the 2000 HSC Code. It is suspected however, that this may be open to differing interpretations as to whether the assistant is either another navigator or perhaps the marine engineer officer. Such problems of interpretation would be cleared up as a successful outcome to MCA acceptance of Recommendation 179, where the MCA would be given an early role and consulted in the design of the operating compartment.</p> <p>The MCA is of the view that UK ships are adequately covered and that available resources must be prioritised and applied dealing with safety issues affecting UK ships first, international issues where we have a good opportunity of success second and then other issues. In this case if we were to take it to the IMO, we believe that consideration of the issue would be opposed because the accident happened whilst the vessel was on sea trials. For these reasons we feel that resources can be more effectively utilised on other issues.</p>
		MAIB Comment	<p>The MAIB believes that the recommendation is still valid. It therefore remains open, and the Chief Executive of the MCA has agreed to have a meeting to consider how this can be taken ahead.</p>

178	HC Katia	MCA	You are recommended to take forward the following issue at the appropriate committees and subcommittees of the IMO: The introduction of a requirement for a global standard layout of navigational instrumentation for the operating compartment of all high speed craft.
		MCA Response	The MCA is of the view that our acceptance of Recommendation 179 will enable us to pursue, at IMO, the early involvement of administrations in the design approval of operating compartments and this should achieve improved operating compartments suitable to the vessel and its operating area.  Whilst understanding the thoughts behind a global standard layout it is thought that this may well be seen by many as stifling innovation and would inevitably in the early stages be a compromise. The involvement of administrations to ensure suitable operating compartments should lead to best practice being adopted and a standard layout evolving.
		MAIB Comment	The MAIB believes that the recommendation is still valid. It therefore remains open, and the Chief Executive of the MCA has agreed to have a meeting to consider how this can be taken ahead.

### Partially Accepted

186	Chelaris J	MCA	Develop a mandatory course, which must include good visual and practical elements, to raise practical stability awareness among fishermen.
		MCA Response	The MCA intends developing this course in conjunction with Sea Fish who have already begun course development. Whilst the MCA will encourage participation by all fishermen we do not intend making this a mandatory course. However, with the development of new regulations the MCA intend introducing legislation that will require certification for bridge watchkeepers on vessels over 10m LOA. We would intend including stability knowledge as one of the requirements towards such certification and this course may be one vehicle for the delivery of such knowledge.
		MAIB Comment	Legislation for fishing vessels over 10m is under consideration however, the MAIB believe that all fishermen should have a basic understanding of stability. A large proportion of fishing vessel fatalities attributable to stability occur in under 10m vessels.

## General

Accepted – Yet to be Implemented			
Number	Investigation	Addressed To	Recommendation
155	Lady Bay Loch Ryan	Galloway Local Authority	Take the lead role in establishing a statutory harbour authority responsible for all of Loch Ryan to a northern boundary defined by a line between Finnart's Point and Milleur Point. You should take account of existing harbour responsibilities and usage, and reflect the interests of all stakeholders, including other local authorities, existing ferry operators, fishermen, small boat users and all other persons following marine or leisure-related activities on, in and around Loch Ryan.
206	Bridge watchkeeping Study	MCA	Through IMO review guidelines on safe manning to ensure the minimum of master and two watchkeepers on ships greater than 500gt.
207	Bridge watchkeeping Study	MCA	Through IMO review requirements within Standards of Training and Certification of Watchkeepers on maintaining look-out at sea.
208	Bridge watchkeeping Study	MCA	Through IMO review requirements of Standards of Training and Certification of Watchkeepers to improve utilisation of look-out.

Accepted – Implemented – Recommendation closed by MAIB			
124	Breakaway 5	British Standards Institute	Propose to the International Standards Organisation, that ISO 12217 Parts 1 and 3 should be reviewed with the intention of introducing a margin of safety within the methodology of its offset load test, and take into account the probability of a person's weight exceeding 75kg.
125	Breakaway 5	MCA	Raise with IMO and ISO respectively, the validity of the use of 75kg to represent a person's mass when determining criteria and limits based on the weights of individuals.
126	Breakaway 5	British Standards Institute	Raise with IMO and ISO respectively, the validity of the use of 75kg to represent a person's mass when determining criteria and limits based on the weights of individuals.
143a	Eihanan T	MCA	Ensure maritime rescue co-ordination centres can communicate with MOD search and rescue helicopters.
143b	Eihanan T	Ministry of Defence	Ensure maritime rescue co-ordination centres can communicate with MOD search and rescue helicopters.

## Commercial Vessels

### Accepted – Yet to be Implemented

Number	Investigation	Addressed To	Recommendation
127	Breakaway 5	MCA	Review the stability tests currently required within all its codes of practice for small craft with a view to introducing a margin of safety in their methodology, and to take into account the probability of a person's weight exceeding 75kg.
179	HC Katia	MCA	Propose to IMO measures designed to ensure early involvement of Flag State during high speed craft design approval.
266	Pride of Provence	International Association for Classification Societies	Review Unified Requirements S-16 and Unified Requirements S-8.

### Accepted – Implemented – Recommendation closed by MAIB

104	Trident VI	States of Guernsey	Implement a Domestic Safety Management Code based on that practiced in the UK.
176	HC Katia	MCA	Take forward the following issue at the appropriate committees and subcommittees of the IMO: The introduction of a requirement for all high-speed craft to be fitted with navigational instruments designed to cope with the unique requirements of high-speed craft. In particular, a display such as ECDIS or ENC, which gives an instantaneous indication of charted position, to be fitted on all vessels except those solely engaged on line-of-sight voyages.
263	Pride of Provence	Lloyds Register	Carry out an in depth investigation to establish the underlying cause of any failure of critical equipment (or repeated repair).
267	Pride of Provence	International Association for Classification Societies	Review policy on use of an early warning system in respect to bow door problems.

## Fishing Vessels

### Accepted – Yet to be Implemented

Number	Investigation	Addressed To	Recommendation
183	Chelaris J	States of Guernsey	Introduce Codes of safe working practices and Guidance for all Guernsey registered fishing vessels.
185	Chelaris J	States of Guernsey	Introduce mandatory safety training for Guernsey fishermen.
187	Chelaris J	SeaFish Industry Authority	Develop mandatory course on stability for fishermen.

### Accepted – Implemented – Recommendation closed by MAIB

184	Chelaris J	States of Guernsey	Establish effective regime for the survey of Guernsey fishing vessels.
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## ANNEX C LEVEL 2 RECOMMENDATIONS

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

### Summary Table

	No. of Recommendations Issued	Accepted Action Implemented	Accepted Action yet to be Implemented	Partially Accepted	Rejected	Reply Not Received
<b>General</b>	21	13	5	1	1	1
<b>Commercial</b>	30	24	2	4	0	0
<b>Fishing</b>	23	8	11	2	2	0
<b>Leisure</b>	3	0	3	0	0	0
<b>Total</b>	<b>77</b>	<b>45</b>	<b>21</b>	<b>7</b>	<b>3</b>	<b>1</b>

## Level 2 Recommendations - Breakdown

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

<b>Rejected</b>			
<b>Number</b>	<b>Investigation</b>	<b>Addressed To</b>	<b>Recommendation</b>
193	Elegance	International Association of Classification Societies	Develop best practice guidance and/or rules on the design of sea water systems for new build fishing vessels. These should include reducing the number of hull penetrations and access to/remote closure of sea valves.
		IACS Response	The subject vessel was not classed by an IACS member and was not built to class with an IACS member. Much of what is recommended would be covered by class rules and applied had the vessel been classed. Nonetheless, there are lessons to be learned from any incident and the report and its recommendations will be studied.
		MAIB Comment	It is accepted that Class rules and guidance on the design of sea water systems already exist for class fishing vessels. Recommendation CLOSED by MAIB.
196	Elegance	International Association of Classification Societies	Develop best practice guidance and/or rules on critical pipework systems, to include flexible couplings, material melting point and fire retardant standards.
		IACS Response	See response to recommendation 193.
		MAIB Comment	Comment as for recommendation number 193 above. Recommendation CLOSED by MAIB.
229	Stena Pioneer	Manufacturer	Ensure that the MAIB are informed, in writing, when any hardware or software changes are made to your voyage data recorders that could affect data retrieval.
		Manufacturers Response	Hardware & software changes are approved by the type approval authority – Qinetiq. To date there have been 358 agreed, controlled changes, many affecting data retrieval. It would not be practical to agree to this recommendation. VDR owners enter into a contractual relationship with us for the provision of support and hardware and software upgrades.
		MAIB Comment	The manufacturer deems this to be an impractical option due to the number of software changes made. The MAIB accept this view point and have successfully taken the issue of data retrieval to the IMO. Recommendation CLOSED by MAIB.

**Partially Accepted**

128	Breakaway 5	British Marine Federation	Encourage boat builders to arrange for an independent competent audit of their methods used to certify a boat's conformity with the essential requirements of the Recreational Craft Directive.
		British Marine Federation Response	The recommendation to BMF to encourage boat builders to arrange for an independent competent audit of their methods is not one which I can fully action without definitive legal advice from DTI as to the legality of such inspections. The RCD does not provide for, nor require, a boat builder building a boat in design category D to employ such additional inspection methods and I am therefore unable to either encourage, recommend or require that our members do so until the full legal implication of such an action are understood.
		MAIB Comment	The BMF appear to be suggesting regulation, rather than establishment of best practice, is the better way to improve safety in this area. As explained in page 1 of this report, MAIB would prefer to see industry take action, rather than wait for regulation.
167a	Donald Redford	British Ports Association	Issue guidance to its members that, when considering whether to issue a pilotage exemption certificate, due account is taken of statutory hours of work regulations, ship manning levels and the route/trade of the vessel concerned.
		British Ports Association Response	As this is a matter beyond the direct competence of CHAs [Competent Harbour Authorities] we cannot issue this advice – this is really MCA territory and we look to them to ensure that the rules are known and complied with.
		MAIB Comment	Notwithstanding the formal response from BPA, MAIB is aware that significant elements of its membership are now applying the principle of this recommendation.

167b	Donald Redford	UK Major Ports Group	Issue guidance to its members that, when considering whether to issue a pilotage exemption certificate, due account is taken of statutory hours of work regulations, ship manning levels and the route/trade of the vessel concerned.
		UK Major Ports Group Response	<p>Ship manning levels are set out in the Minimum Safe Manning Certificate issued by the flag state, and we do not see that it can be a function of a CHA to interfere with them. Recommendation 168 suggests that in their risk assessments undertaken under the PMSC harbour authorities should address manning levels. Our risk assessments assume that a vessel entering or leaving a port is in all respects trading legally and is seaworthy in all respects as declared by the master. The measures in our Safety Management Systems are designed to protect a compliant vessel from the dangers of operating in the harbour. We do not, and cannot, assess individual vessels in the manner suggested. If it comes to our attention that a vessel has a problem either with manning or with equipment that may potentially impact on safety or safety of navigation we would alert the MCA.</p> <p>Similar considerations apply with the hours of work regulations. Again, if it comes to our attention that a vessel appears to be in breach of the regulations we would draw this to the attention of the MCA. But we have no power to inspect, and of course the Regulations do not necessarily apply to non-EU flag vessels.</p> <p>Turning now to PECs there is a further problem that, as we see it , it would be contrary to the Pilotage Act for a CHA to refuse a PEC to a bona fide ships master of first mate who was qualified in all respects, on the grounds that the use of a PEC might expose the crew to undue fatigue. However we would certainly agree that if it came to our notice in the course of an examination of a PEC applicant that the trading pattern of a vessel was likely to place undue strain on the crew we would raise the matter with the MCA or the ship owner as appropriate.</p>
	MAIB Comment	Again, MAIB is aware that elements of this recommendation are being complied with.	
168a	Donald Redford	British Ports Association	The British Ports Association is recommended to issue guidance to its members that risk assessments, undertaken under the Port Marine Safety Code, should take into account manning levels and should address the requirement for dedicated lookouts on ships operating in their ports.
		British Ports Association Response	We are unsure about the practicalities of taking into account manning levels generally; we can make a recommendation on the 'dedicated lookouts' issue.
		MAIB Comment	Recorded as Partially Accepted.

168b	Donald Redford	UK Major Ports Group	Issue guidance to its members that risk assessments, undertaken under the Port Marine Safety Code, should take into account manning levels and should address the requirement for dedicated lookouts on ships operating in their ports.
		UK Major Ports Group Response	Although the wording of STCW might not be as clear as one would wish, the MCA guidance on the point [lookouts] is unambiguous. We are prepared to use our powers to seek to assist with the enforcement of statutory requirements, as defined by the MCA. We can accept the recommendation in that sense.
		MAIB Comment	Recorded as partially accepted.
191	Elegance	MCA	Develop best practice guidance and/or rules on the design of sea water systems for new build fishing vessels. These should include reducing the number of hull penetrations and access to/remote closure of sea valves.
		MCA Response	Partially accepted. The design, materials and layout of seawater piping systems on new fishing vessels are to the requirements of Class Societies and SEAFISH. The MCA is reviewing the Banff & Buchan Critical Pipework Study addressing issues on fishing vessels and other related information with a view to issuing guidance and possibly reviewing the minimum standards laid down in the codes for new and existing vessels.
		MAIB Comment	This effectively ignores some elements of the recommendation and is dealing with other elements in a disappointingly slow timescale.
250	Kingfisher II	MCA	Examine the quality of "Code" inspections to ensure that risk assessment and self-certification procedures are followed and to identify defects which may affect the safety of the vessel and crew.
		MCA Response	Partially accept. MCA will examine current arrangements for the inspection of U15m fishing vessels to determine where improvements could be made to the quality of inspection. This will include a consideration of the scope of the inspection and the training and guidance given to those conducting the inspections. The scope of the inspection will need to be balanced against the need to use the available resource in the coming year to target those vessels which have not already inspected.
		MAIB Comment	This does not satisfy the MAIB's concerns of the safety of "Code" boats. MAIB is currently investigating 3 fatal losses of under 15m fishing vessels, and will be readdressing this issue with the MCA on conclusion of these investigations.
<b>No Response Received</b>			
222	Scot Venture	Royal Danish Administration for Navigation and Hydrography	Review the positioning of the lateral marks at the southern end of the Drogden Channel, along with the information and guidance available with regard to tidal streams and routing, with the purpose of reducing the high number of contacts between ships and Number 16 buoy.

## General

### Accepted – Yet to be Implemented

Number	Investigation	Addressed To	Recommendation
123	Breakaway 5	MCA	Form working group to include local authorities & DTI to draw on current best practice to: <ol style="list-style-type: none"> <li>a. Agree on licensing regimes.</li> <li>b. Develop a national code of safe practice.</li> <li>c. Clarify the impact of the Recreational Craft Directive.</li> </ol>
166a	Donald Redford	British Ports Association	Issue guidance to members on application of Part 4 of Railways and Transportation Act
166b	Donald Redford	UK Major Ports Group	Issue guidance to members on application of Part 4 of Railways and Transportation Act
234	Lord Nelson	Port of London Authority	Introduce procedure for transiting Tower Bridge that requires contingency planning.
144	Elhanan T	MCA	Consider ways to encourage users of life saving appliances to improve their maintenance of them.

### Accepted – Implemented – Recommendation closed by MAIB

129	Breakaway 5	dti	Raise awareness of Recreational Craft Directive among boat builders.
130	Breakaway 5	dti	Ensure local authority Trading Standards Departments are aware of their responsibilities as enforcement authorities with regard to the application of the Recreational Craft Regulations.
154	Lady Bay Loch Ryan	Galloway Local Authority	Perform risk assessment on hazards associated with the shoreline of Loch Ryan.
235	Lord Nelson	Port of London Authority	Introduce regular liaison meetings between Port of London Authority Pilots and Tower Bridge management/control room staff.
236	Lord Nelson	Port of London Authority	Review risk assessment to identify Tower Bridge as a specific and separate hazard.
202	Elegance	MCA	Advise owners of emergency towing vessels on importance of properly debriefing crews from abandoned vessels.
205	Elegance	International Salvage Union	Issue advice to members on importance of properly debriefing crews of abandoned vessels.
158	Loch Ryan Dory	MCA	Review organisation and training of coastguard officers - ensure manager has overview.
159a	Loch Ryan Dory	MCA	Revisit and reinforce communications protocol and discipline during search and rescue operations.
159b	Loch Ryan Dory	RNLI	Revisit and reinforce communications protocol and discipline during search and rescue operations.
160a	Loch Ryan Dory	MCA	Optimise use of search rescue units on search and rescue operations before committing to other tasks.
160b	Loch Ryan Dory	RNLI	Optimise use of search rescue units on search and rescue operations before committing to other tasks.
163a	Loch Ryan Dory	MCA	Ensure harbour authorities are aware of high speed craft/wash issues and to consider appropriate actions.

## Commercial Vessels

### Accepted – Yet to be Implemented

Number	Investigation	Addressed To	Recommendation
164	Donald Redford	Chamber of Shipping	Issue guidance to ship owners that encourage them to establish procedures providing the master with support and specific guidance in the event that the hours of work regulations cannot be complied with. This may take the form of, for example, anchoring the vessel so that the crew can be rested.
224	Dart 8	MCA	Review M 718 then issue new MGN on mooring, towing and hauling equipment.

### Accepted – Implemented – Recommendation closed by MAIB

163	Donald Redford	Chamber of Shipping	Revise guidelines on alcohol misuse.
165	Donald Redford	Chamber of Shipping	Issue guidance encouraging its members to include, in seafarers' contracts of employment, a requirement for the company to be notified when the medical condition of the seafarer changes, for instance if long-term medication is prescribed that carries a warning that the patient should not drive or operate moving machinery.
180	HC Katia	MCA	Consider limitations of bridge design when issuing high speed craft trial exemption certificates.
209	Hoo Finch	Chamber of Shipping	Remind members of the importance of passage planning. Revise passage plans on regular basis. Avoid areas of high density traffic if possible.
210	Hoo Finch	International Chamber of Shipping	Remind members of the importance of passage planning. Revise passage plans on regular basis. Avoid areas of high density traffic if possible.
211	Hoo Finch	International Shipping Federation	Remind members of the importance of passage planning. Revise passage plans on regular basis. Avoid areas of high density traffic if possible.
212	Hoo Finch	Chamber of Shipping	Draw member's attention to cumulative effect of fatigue. Need to establish contingencies such as lay overs/anchoring of vessel.
213	Hoo Finch	International Chamber of Shipping	Draw member's attention to cumulative effect of fatigue. Need to establish contingencies such as lay overs/anchoring of vessel.
214	Hoo Finch	International Shipping Federation	Draw member's attention to cumulative effect of fatigue. Need to establish contingencies such as lay overs/anchoring of vessel.
215	Hoo Finch	Chamber of Shipping	Draw member's attention to the need for effective crew management to ensure load is shared on board where minimum manning crew carried.
216	Hoo Finch	International Chamber of Shipping	Draw member's attention to the need for effective crew management to ensure load is shared on board where minimum manning crew carried.
217	Hoo Finch	International Shipping Federation	Draw member's attention to the need for effective crew management to ensure load is shared on board where minimum manning crew carried.
218	Hoo Finch	Chamber of Shipping	Remind members that a separate look-out is required at night and during day when in reduced visibility, high traffic intensity, close to land, and coastal waters.
219	Hoo Finch	International Chamber of Shipping	Remind members that a separate look-out is required at night and during day when in reduced visibility, high traffic intensity, close to land, and coastal waters.

220	Hoo Finch	International Shipping Federation	Remind members that a separate lookout is needed at night in all cases and during the day when: in reduced visibility, in an area of high traffic density, or, in close proximity to land or navigational hazards. While in coastal waters, it should only be in exceptional cases that the lookout is stood down during the day.
223	Scot Venture	International Chamber of Shipping	Encourage its shipping companies to promote more effective use/training of look-outs together with better training of Officer on watch to manage resources.
228	Stena Pioneer	Manufacturer	Ensure users of Broadgate voyage data recorders are aware of procedures to verify units are running properly.
230	Reno / Ocean Rose	International Chamber of Shipping	Reinforce the unacceptability of the Officer on watch leaving the bridge when on watch through audit, training etc.
231	Reno / Ocean Rose	International Chamber of Shipping	Stress importance of realistic drills to ensure adherence to procedures. Test personnel including the Master.
232	Reno / Ocean Rose	International Chamber of Shipping	Highlight to membership the need to review effects of nationality/cultural mix with regard to training, procedures and ship operation.
233	Reno / Ocean Rose	International Shipping Federation	Highlight to membership the need to review effects of nationality/cultural mix with regard to training, procedures and ship operation.
264	Pride of Provence	International Association of Classification Societies	Get members to review reporting procedures for bow door accidents so that detailed records can be maintained and passed on with change of class.
265	Pride of Provence	International Association of Classification Societies	Advise membership to amend survey procedures to ensure bow doors do not foul any fixed structure that might lead to excessive loading during operation.
266	Pride of Provence	International Association of Classification Societies	Get members to review reporting procedures for bow door accidents so that detailed records can be maintained and passed on with change of class.

## Fishing Vessels

### Accepted – Yet to be Implemented

Number	Investigation	Addressed To	Recommendation
119	Onward Star	SeaFish Industry Authority	Complete the Seafish Acceptability Trials (lifejacket and buoyancy devices).
192	Elegance	SeaFish Industry Authority	Develop best practice guidance and/or rules on design of sea water systems for new build fishing vessels.
194	Elegance	MCA	Develop best practice guidance and/or rules on critical pipework systems.
195	Elegance	SeaFish Industry Authority	Develop best practice guidance and/or rules on critical pipework systems.
197	Elegance	MCA	Review advice to fishermen on the operation of fixed CO <sub>2</sub> extinguishing systems & associated safety precautions.
199	Elegance	MCA	Review advice to fishermen on importance of conducting functionality checks on remotely operated valves and dampers.
200	Elegance	MCA	Instruct surveyors to verify that specific operating instructions for CO <sub>2</sub> fixed extinguishing systems are on board fishing vessels & crew conversant in operation of system.
201	Elegance	MCA	Review regulations for the fitting of fire detection sensors with respect to use of smoke detectors.
204	Elegance	SeaFish Industry Authority	Develop on board safety training.
248	Kingfisher II	MCA	Specify qualifications and training requirements for fishing vessel skippers.
249	Kingfisher II	MCA	Consider how best to improve understanding of how to conduct risk assessments and how to effectively monitor compliance.

### Accepted – Implemented – Recommendation closed by MAIB

120	Onward Star	MCA	Ensure applicable fishing vessels comply with minimum bulwark heights.
121	Onward Star	MCA	Issue instructions and advice regarding bulwark heights to surveyors.
145a	Elhanan T	MCA	Training of boat/aircrew - Issue guidance on the unpredictability of flooding vessels.
145b	Elhanan T	RNLI	Training of boat/aircrew - Issue guidance on the unpredictability of flooding vessels.
145c	Elhanan T	Royal Navy	Training of boat/aircrew - Issue guidance on the unpredictability of flooding vessels.
145d	Elhanan T	Royal Air Force	Training of boat/aircrew - Issue guidance on the unpredictability of flooding vessels.
198	Elegance	SeaFish Industry Authority	Review advice to fishermen on the operation of fixed CO <sub>2</sub> extinguishing systems & associated safety precautions.
203	Elegance	SeaFish Industry Authority	Review Fire Fighting and Fire Prevention at Sea course syllabus to provide greater emphasis on maintenance, operation and personal safety with respect to fixed systems.

**Leisure Vessels****Accepted – Yet to be Implemented**

<b>Number</b>	<b>Investigation</b>	<b>Addressed To</b>	<b>Recommendation</b>
146	Forth Speedboat	MCA	Review availability of safety guidance to non commercial fishing/small boat owners/users.
147	Forth Speedboat	RNLI	Programme of visiting slipways to disseminate safety information to small boat owners.
148	Forth Speedboat	RNLI	Review dissemination of information to small boat owners not affiliated to boat club/organisation.

## ANNEX D LEVEL 3 RECOMMENDATIONS

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

### Summary Table

	No. of Recommendations Issued	Accepted Action Implemented	Accepted Action yet to be implemented	Partially Accepted	Rejected	Reply Not Received
<b>General</b>	3	1	1	0	0	1
<b>Commercial</b>	45	25	13	3	4	0
<b>Fishing</b>	23	12	7	0	2	2
<b>Leisure</b>	0	0	0	0	0	0
<b>Total</b>	<b>71</b>	<b>38</b>	<b>21</b>	<b>3</b>	<b>6</b>	<b>3</b>

### Level 3 Recommendations - Breakdown

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

<b>Rejected</b>			
<b>Number</b>	<b>Investigation</b>	<b>Addressed To</b>	<b>Recommendation</b>
102	La Belle Trois	Owner	Ensure that electrical wiring and equipment is fit for marine use, is installed correctly and regularly tested.
108	Titania	Owner	Review the guidance to operating staff and crew members on the handling of passengers during emergency situations.
114	Titania	Owner	Instruct masters that the VHF radio volume is to remain turned up at all times to ensure that crews are alert to dangers and requests. Should it be determined that this may alarm passengers then immediate consideration should be given to equipping masters with headsets and boom microphones.
131	Ann Marie	Owner	Equip your vessel with a liferaft (suitable, inexpensive models can now be readily obtained).
136	Sea Riss	Unitor UK	Make some provision for clearly indicating the correct position for CO <sub>2</sub> bottle valve shipping pins.
255	Sea Challenger	Owners	The MAIB recommends that you consider using hog wires that are lashings strung between the uprights and laid between each tier of timber packages to help reduce the chances of cargo shift.

<b>Partially Accepted</b>			
109	Titania	Owner	Formalise and conduct risk assessment procedures for incidents on the water especially where changes to the tour water space occur i.e. where new permanent (piers/jetties) or temporary structures (moorings) are involved.
111	Titania	Owner	Develop a tour strategy to ensure that vessels always fully comply with the "Plying Limits and Conditions" set out in the MCA's Passenger Certificate for a Class V Ship as applicable to the Company's vessels dated 28 July 2003. Of particular note is: a. The limitation for daytime use only. b. That the freeboard marks must not be submerged at any time. c. That operation is permitted up to one hour after dusk in exceptional circumstances only.
254	Sea Challenger	Owners	Those packages that are loaded on deck should be wrapped in high friction waterproof covers. The plain plastic waterproof covers on the packages involved in this accident are not considered to have provided sufficient friction.

<b>No Response Received</b>			
156	Loch Ryan Dory	Loch Ryan Advisory Management Forum	Consider more appropriate signs at public access points, stressing the need for boat owners to be aware of the dangers associated with the frequent ferry operations within the loch. The signs should also stress the dangers of taking a boat on to the water without adequate lifesaving equipment, and the need to ensure that the boat is suitable, bearing in mind that sea conditions can change. The free SEACheck service offered by the RNLI could also be advertised.
246	Kingfisher II	Owners	You are recommended to conduct a risk assessment of the operation of your vessels in accordance with MSN 1756(F) - The Fishing Vessel Code of Practice for the Safety of Small Fishing Vessels under 12 metres in length. Particular attention should be given to the risks associated with carrying large numbers of creels, especially with respect to keeping escape routes and access to emergency equipment clear.
247	Kingfisher II	Owners	Establish self-certification procedures in accordance with MSN 1756(F) - The Fishing Vessel Code of Practice for the Safety of Small Fishing Vessels under 12 metres in length.

## General

<b>Accepted – Yet to be Implemented</b>			
<b>Number</b>	<b>Investigation</b>	<b>Addressed To</b>	<b>Recommendation</b>
153	Lady Bay Loch Ryan	Galloway Local Authority	Replace existing signage.

<b>Accepted – Implemented – Recommendation closed by MAIB</b>			
157	Loch Ryan Dory	Safety on the Sea Group	<p>Consider how best to communicate to casual boat users that:</p> <ol style="list-style-type: none"> <li>Modifications and maintenance may have compromised the safe design of the boat.</li> <li>Dangers can arise from the wash of passing vessels.</li> <li>Properly fitting lifejackets should be carried for all persons on board.</li> <li>Small boats are not easily seen from the bridge of a ship.</li> <li>Boats made or coated with, highly visible materials will be much more easily seen.</li> <li>Appropriate signs at slipways might remind boat users of the above lessons.</li> </ol>

## Commercial Vessels

<b>Accepted – Yet to be Implemented</b>			
<b>Number</b>	<b>Investigation</b>	<b>Addressed To</b>	<b>Recommendation</b>
106	Titania	Owner	Review the need for an experienced person to manage marine operations.
107	Titania	Owner	Develop recording methods to ensure that each of the requirements under the DSM System can be fully and easily audited.
110	Titania	Owner	Improve the quality and content of the pre-water tour briefing.
113	Titania	Owner	Provide unambiguous instructions to masters that accidents are to be reported in accordance with the Port of London Authority Byelaws.
115	Titania	Owner	Ensure that all notifiable accidents are reported to the Marine Accident Investigation Branch.
238	Viking Victor	Owners	Provide guidance on the need to keep doors and hatches closed to prevent the spread of flood water, fire and smoke.
239	Viking Victor	Owners	Specify the mandatory and early use of the general alarm to alert the crew of an incident.
241	Viking Victor	Owners	Bring to the attention of crew the importance of prompt isolation of engine room systems in the event of an engine room fire.
243	Vanguard	Master	Ensure principals of safe passage planning are applied. For guidance use the Bridge Procedures Guide.
244	Vanguard	Master	Ensure you have designated lookout on the bridge.
245	Vanguard	Master	Undertake a small vessels navigation and radar course.
252	Sea Challenger	Owners	Apply high friction coatings to hatch covers of vessels loading timber deck cargoes.
253	Sea Challenger	Owners	Use additional dunnage between tiers of deck cargo when loading pre-slung packages.

<b>Accepted – Implemented – Recommendation closed by MAIB</b>			
103	Trident VI	States of Guernsey	Encourage operators to install fluxgate compasses.
105	Trident VI	Owner	Consult a company of professional naval architects, with the aim of improving the vessel's manoeuvrability.
112	Titania	Owner	Arrange for masters and crew members to sign the DSM System documentation stating that they have read and understood the contents.
132	Sea Riss	Owner	Ensure combustible material is stored away from hot surfaces and in metal containers.
133	Sea Riss	Owner	Documentation - supply manufacturer's instructions.
134	Sea Riss	Owner	Training - provide guidance on deployment of CO <sub>2</sub> .

135	Sea Riss	Owner	Fire fighting systems - ensure all emergency systems are fully working before ship sails.
138	Dart 9	Owner	Review of safety management system - safe working practices.
139	Dart 9	Owner	Review safety management system - effectiveness of defect reporting system.
169	Supidana / Orient	Master, Supidana	Keep proper look-out at all times in accordance with Rule 5 of collision regulations.
170	Supidana / Orient	Master, Supidana	Ensure look-out is posted at night in accordance with international regulations.
171	Supidana / Orient	Master, Supidana	Arrange navigation watches so that at least one certificated officer is on bridge when vessel is underway.
221	Hoo Finch	Owner, Hoo Finch	Ensure the function of VHF is regularly checked by Officer on watch. Any faults to be quickly rectified.
225	Dart 8	Owners	Review current operational procedures with respect to Chief Officer leaving bridge during mooring operations.
226	Dart 8	Owners	Ensure routine/emergency communications are conducted in common language.
227	Dart 8	Owners	Review and ensure ship's staff are fully familiar with the company's anchoring/mooring instructions.
237	Lord Nelson	Owners	Introduce clear guidance and instructions to masters on responsibility for opening bridges/locks and early anticipation of emergency situations.
240	Viking Victor	Owners	Issue instructions - no flammable materials to be stowed in funnel spaces/other spaces that constitute risk of ignition. Risk assessment to be done when stowing flammables.
242	Viking Victor	Owners	Reconsider the policy of supplying large quantities of oil drums that have not been ordered by ship's staff, especially to vessels with limited storage capacity.
251	Sea Challenger	Owners	Promulgate contents of MAIB Timber Deck Cargo Safety Study to fleet.
258	Anglian Way	Owners	Ensure masters regularly review and appraise conduct and actions taken by junior watchkeepers during navigational watches.
259	Anglian Way	Owners	Ensure passage plan for any voyage is authorised by vessel's command and also master's standing orders. Specific on extent of permitted deviation from plan.
260	Pride of Provence	Owners	Renew and amend existing ISM Code procedures to ensure managers are notified whenever remedial work carried out on critical equipment and establish a record of trends.
261	Pride of Provence	Owners	Establish procedures to analyse underlying root cause of failure occurring on critical equipment.
262	Pride of Provence	Owners	Pass findings of analysis into failures affecting critical equipment on to class.

## Fishing Vessels

### Accepted – Yet to be Implemented

Number	Investigation	Addressed To	Recommendation
117	Onward Star	Owner	Increase the height of bulwarks in accordance with the Code of Safe Working Practice.
140	Elhanan T	Owner	Establish procedures for shutting off seacocks.
141	Elhanan T	Owner	Ensure that all pipework and jointing on their vessels is appropriate and well maintained.
149	Atlantic D	Owner	Conduct a risk assessment for those activities that require work to be carried out whilst aloft.
151	Atlantic D	Owner	Fit safety chains to guardrail access openings on both mast platforms.
152	Atlantic D	Owner	Apply a non-slip finish to the forward and after mast platforms.
257	Faith Anne	Owners	Introduce a system whereby incapacitation of watchkeeper does not place vessel in peril.

### Accepted – Implemented – Recommendation closed by MAIB

101	La Belle Trois	Owner	Consider the dangers involved in unattended operational machinery and live electrical circuits. Ensure that an efficient port watch is maintained.
116	Onward Star	Owner	Conduct a risk assessment.
118	Onward Star	Owner	Provide constant wear buoyancy aids) for use by the crew.
142	Elhanan T	Owner	Consider the benefits of ensuring that another crew member has sufficient engineering knowledge to be of assistance in any future incident. Consider supplying all vessels with a damage control kit.
150	Atlantic D	Owner	Ensure when working aloft personnel wear a safety harness.
172	Supidana / Orient	Skipper, Orient	Keep proper look-out at all times in accordance with Rule 5 of collision regulations.
173	Supidana / Orient	Skipper, Orient	Be fully aware of insidious dangers of fatigue & plan work accordingly.
174	Supidana / Orient	Skipper, Orient	Wear a lifejacket and carry a radio at all times when at sea.
175	Supidana / Orient	Skipper, Orient	Arrange to attend a Fishing Safety awareness course.
188	Julian Paul	Owner, Julian Paul	Inflatable liferafts - quick release arrangements.
189	Julian Paul	Owner, Julian Paul	Individuals - ensure all crew have basic safety training.
256	Faith Anne	Owners	Ensure all liferafts carried on board vessels have MCA type approval.

## ANNEX E RECOMMENDATIONS TO MULTIPLE RECIPIENTS

Number	Investigation	Addressed To	Recommendation
M122	Breakaway 5	Local Authorities	Assume responsibility for ensuring that hire boats operate safely within their area of interest by arranging the introduction of licensing regimes supported by the inspection of hire craft by competent bodies.
M161	Loch Ryan Dory	Ferry Operators	Review operational guidelines regarding the most effective bridge lookout when detecting signs of distress.
M162	Loch Ryan Dory	RO/RO Operators	Consider the potential impact for ferries proceeding within critical range. Do risk assessment passage plan if appropriate.
M181	HC Katia	UK HSC Builders	Appoint trials masters with current commercial operating experience and who hold a pilot exemption certificate.
M182	HC Katia	UK HSC Builders	Ensure manoeuvrability tests are completed early in trials programme.
M190	Elegance	Installers of CO <sub>2</sub> Systems	Ensure ship specific on board operating instructions are posted/fully briefed to skipper/owner on system operation.

## ANNEX F ANALYSIS OF RECOMMENDATION STATISTICS PRIOR TO 2004

Year	Fully Accepted	Qualified Acceptance	No Response Received	No Response Required <sup>①</sup>	Rejected	Total
1989	0	1	0	0	0	1
1990	35	0	0	0	4	39
1991	80	6	0	0	13	99
1992	102	8	0	0	7	117
1993	91	9	0	0	13	113
1994	144	13	6	0	12	175
1995	149	15	7	0	13	184
1996	65	14	3	0	17	99
1997	132	8	2	0	9	151
1998	74	14	8	0	3	99
1999	89	5	14	12	10	130
2000	97	14	13	3	11	138
2001	105	11	22	0	13	151
2002	115	13	25	6	4	163
2003	137	14	11	7	7	176
<b>Total</b>	<b>1415</b>	<b>145</b>	<b>111</b>	<b>28</b>	<b>136</b>	<b>1835</b>

① This field has been removed from the closed loop system.

Of the 1835 recommendations issued by MAIB prior to 2004:

- 85% have been accepted; of those
  - 90.7% have been fully accepted.
  - 9.3% have a qualified acceptance.
- 7.4% have been rejected.
- 6% of recommendations have not received a reply.
- 1.5% required no response.