Fishing 2003 Safety Digest

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Marine Accident Investigation Branch

The Marine Accident Investigation Branch (MAIB) is an independent part of the Department for Transport, (DfT) and is completely separate from the Maritime and Coastguard Agency (MCA). The Chief Inspector of Marine Accidents is responsible to the Secretary of State for Transport. The offices of the Branch are located at Carlton House, Carlton Place, Southampton, SO15 2DZ.

This Safety Digest draws the attention of the marine community to some of the lessons arising from investigations into recent accidents. It contains facts which have been determined up to the time of issue.

This information is published to inform the fishing industry, and the public of the general circumstances of marine accidents and to draw out the lessons to be learned. The sole purpose of the Safety Digest is to prevent similar accidents happening again. The content must necessarily be regarded as tentative and subject to alteration or correction if additional evidence becomes available. The articles do not assign fault or blame nor do they determine liability. The lessons often extend beyond the events of the incidents themselves to ensure the maximum value can be achieved.

Extracts can be published without specific permission providing the source is duly acknowledged.

The Safety Digest is only available from the Department for Transport, and can be obtained by applying to the MAIB. Other publications are available from the MAIB.

If you wish to report an accident or incident please call our 24 hour reporting line 023 8023 2527.

The telephone number for general use is 023 8039 5500.

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Safety Digests are available on the Internet: www.maib.gov.uk

Extract from

The Merchant Shipping

(Accident Reporting and Investigation)

Regulations 1999

The fundamental purpose of investigating an accident under these Regulations is to determine its circumstances and the cause with the aim of improving the safety of life at sea and the avoidance of accidents in the future. It is not the purpose to apportion liability, nor, except so far as is necessary to achieve the fundamental purpose, to apportion blame.
CHIEF INSPECTORS FOREWORD

This digest has one simple aim: to share with everyone in the fishing world some of the key lessons that we have learned recently from the tragic accidents we have investigated.

Sadly, the number of accidents, and deaths, shows no sign of reducing. In the first 2 months of this year alone, 6 British fishing vessels have been lost at sea, and 4 British fishermen have died. I believe it is essential that we continue to find out why these accidents are happening, and pass the lessons on to everyone involved in the industry. Awareness of the dangers we identify may just help save other fishermen's lives.

The role of the MAIB is to get right to the bottom of what happened, not just to look at the superficial "obvious" causes. Our role is not to look at blame, fault or liability, and we most certainly do not pass on any information we have been given to the police or any other prosecution/enforcement organisations.

I have only recently taken over as the head of the Marine Accident Investigation Branch (MAIB). I have spent most of the last 34 years at sea, but recognise that I have little experience of fishing, and so am woefully ignorant of the pressures under which you all work. I plan to meet as large a cross section of you as I possibly can over the next year or so, to try to get some understanding of your work and its very real difficulties. My wish is for the MAIB to work with the fishing industry to find sensible and affordable ways to reduce the current rate of accidents.

I hope that you find the digest interesting; we do try to write the articles in a readable style. We do not now identify the names of the vessels involved, which I hope will make people less concerned about reporting incidents to us. Please take a moment to think about these cases- it might just save your life.

Stephen Meyer
Chief Inspector of Marine Accidents
CASE 1
Near Misses Involving Fishing Vessels

Narrative 1

Having landed her catch, a fishing vessel was returning to the fishing grounds. It was dark, visibility was good, the sea moderate, and the wind south-south-west force 5. On leaving harbour, she was steering 135° at a speed of 7 knots and displaying sidelights, stern light and a masthead light.

When still within 2 miles of her port of departure, the skipper detected a radar contact 2 miles on his port bow, and shortly afterwards sighted masthead and starboard sidelights along the same bearing. He estimated this vessel, a general cargo ship, was on a southerly course at about 8.5 knots, and that a risk of collision existed.

By the time the two vessels closed to within 1 mile, the cargo vessel had failed to take any action as the give-way vessel. This prompted the skipper to call her on VHF radio, channel 16. Unable to get a response, he altered to starboard and eventually took all way off to prevent a collision. Radio contact was finally established when the vessels were very close and the merchant vessel’s OOW felt it was too late for him to alter course or stop. The OOW, who was alone on the bridge, had been working a 6-hour watch routine, and did not detect the fishing vessel by radar, or see her visually, until she was at close range.

Narrative 2

A stern trawler was south of Plymouth, towing her gear on a course of 180° at about 3 knots. She was displaying an appropriate shape to indicate that she was fishing. It was a clear sunny day, visibility was good and the sea was slight. There was little wind. A tanker was sighted about 6 miles on the port beam, on a westerly course and making good about 13 knots. She was on a steady bearing.

As the tanker closed, the trawler’s skipper became increasingly concerned and, when the range had closed to about 1 mile, tried calling her on VHF channel 16. There was no reply, and the skipper was forced to increase to maximum speed to pass ahead of the tanker, leaving it very close astern. Her OOW, who was alone on the bridge at the time, did not recollect being in a close-quarters situation, or hearing any calls on VHF radio.

The Lessons

These two instances are representative of many situations which will be familiar to anyone with extensive experience of watchkeeping. You find yourself the stand-on vessel, and detect another vessel on your port bow or beam closing on a steady bearing. The questions you find yourself asking are: has he seen me? and is he going to give way? Too often we find the answer to the first question is No because a proper lookout is not being kept and No to the second because he is unaware of your presence.

1. Keeping a good lookout and complying with the Rules of the Road are not just good seamanship requirements, but are also imperative to preventing very serious accidents. Had both fishing vessel skippers not maintained a proper lookout, or manoeuvred to prevent a collision, the MAIB would probably be investigating two serious accidents rather than near misses.
2. There are no new lessons about maintaining a proper and effective lookout. The requirements are well known. Watchkeepers must be alert, look out of the windows, use binoculars, monitor the radar on an appropriate range scale, and listen for sound signals and to the VHF radio. The factors which prevent keeping agood lookout will vary from vessel to vessel, but three reasons seem to feature over and over again. Too often watchkeepers use the opportunity of a seemingly quiet period to do something other than keep an efficient watch. It could be anything from progressing paperwork to reading a magazine. These second reason is being distracted by something such as monitoring GMDSS, making a lengthy telephone call, or spending an unusually long time at the chart table. And the third is the tendency for either a tired or very bored watchkeeper to fall asleep. If you are guilty of succumbing to any of these, you could be endangering peoples lives.

3. If you feel you are under pressure to do something that will prevent you keeping an efficient lookout, or you are too tired to do it properly, tell someone. The MAIB receives a number of reports from people in such a predicament, and each one is treated in total confidence. It provides the Branch with the ammunition to do something about it.

4. When the OOW is busy, a dedicated visual lookout is an invaluable safety net. When all is quiet, he is a second pair of eyes and ears, and helps to keep a tired OOW alert. You are required to have a dedicated lookout at night.

5. VHF radio is convenient, but it relies on the watchkeeper in the other vessel monitoring the appropriate channel, understanding what is being said, and bothering to reply. Not surprisingly, many calls go unanswered. But there are real dangers to using VHF when the identity of the other vessel is unknown. There are anumber of recorded incidents when either the misidentification of the other ship, or a lack of understanding, has contributed to the subsequent collision or incident.

6. If the situation allows, and you need to make your presence known to the other vessel use the wake up signal by whistle or horn, and by flashing light. The signal is required by the Rules of the Road and, although an inattentive OOW may not see or hear it, somebody else on board the other vessel might. Don't be shy; it's in your interest to be seen.

7. Navigation lights are no different to car headlights. They accumulate grime and salt in time. An occasional wipe does wonders to improve their effectiveness.
CASE 2  
**Fatality on Board Fishing Vessel**

**Narrative**

After a week's break, a beam scalloper sailed from an east coast Scottish port in the early hours of the morning to return to the fishing grounds. Later that day, while shooting her gear for the fourth time, one of the deckhands moved from a position of safety and was struck on the head by a towing bar. The sea conditions were rough, and the bar swung in board because of the vessel's movement. It will never be known why the deckhand made the move, but the blow killed him.

The deceased was an experienced fisherman, but had never sailed on this vessel before. He had only been onboard for 14 hours when he died.

Safety hats were available, but nobody onboard wore them.

**The Lessons**

This tragic accident will provoke a number of reactions among fishermen. Everyone will have the deepest possible sympathy for the family of the deceased. Many will, rightly, want to know what happened and whether anything could have been done to prevent it. Others will say it was one of those things which happen from time to time in this most hazardous of occupations. The reality is that similar accidents have occurred in the past and are likely to happen again unless measures are taken to prevent them.

Much can be done once people understand that accidents are rarely caused by a single event. It isn't just bad weather, a particularly high wave, an unfortunate swing of the towing bar, or that the victim was new to the vessel. Accidents happen through a combination of things, and it is important to learn from the lessons of this and similar accidents in the past.

1. No two vessels are the same. Variations in equipment, procedures, the way a skipper likes things to be done or even the vessel's motion in a seaway, will differ. When joining a vessel for the first time, nothing should be taken for granted. Make sure you are aware of the various hazards and safety precautions in force. Pay particular attention to anything that swings from aloft such as towing bars and blocks, and make a mental note of how they can be avoided at all times. It is unlikely things will be identical to your last vessel and you must not hesitate to ask questions if you are unsure of any procedures. Doing this does not question your ability or experience; it merely highlights your commonsense.

2. Every year a number of fishermen are either seriously injured, or killed, by being hit on the head. Someone, sooner or later, wants to know whether the consequences could have been prevented had the victim been wearing a safety helmet. The answer is no one knows, but even if wearing one could have prevented it, most people would be very reluctant to try it for a number of reasons. They are uncomfortable, get in the way, restrict vision, allow water to drip down the back of the neck and nobody else wears one. So other workers have said in the past. But now, wearing safety helmets has become second nature to those working on merchant ships or in the offshore sector. It is now so much in the culture that to not wear one feels uncomfortable. The fact remains they provide very good protection, reduce injury and save life. Wear a safety helmet.
3. When hauling or shooting, or conducting any operation on deck, keep an eye on your colleagues and do not hesitate to raise the alarm or stop a procedure if you see something dangerous developing. Safety is the responsibility of everyone on board.

4. When accidents happen at sea, expert medical assistance can often be faraway, and the well-being of a casualty is in the hands of others on board. In this case, although the injuries were severe and the efforts of the first-aid trained crew were sadly unsuccessful, the need for fishermen to complete the mandatory first-aid course was once again highlighted.

**Footnote**

In the past five years the MAIB has received a number of reports from certain sectors of the fishing industry stating that the wearing of safety helmets is on the increase. In nearly every instance, the catalyst for change was the death of a friend and colleague through a head injury incurred at sea. The sadness is that it takes such an event to make people change the habits of a lifetime. A far happier solution is to do something about it before you become the victim.

This incident was the subject of a full MAIB investigation. A comprehensive report, giving details of the causes, an analysis, and recommendations was published in August 2001.
CASE 3
For Appearances Sake

Narrative

Following a 12 hour search for fish, a large, 92.04m stern trawler, with a crew of 34 was preparing to shoot her nets in the English Channel, about 17 miles south of the Isle of Wight.

Four of her deck crew went aft to shoot the nets under the control of the fishing skipper who was in the wheelhouse. He was positioned at the winch controls overlooking the aft working deck. Shooting began. Two of the crew attached the head line transponder and then moved to two small pound areas at the stern from where they were to attach towing wires to the nets wings.

The man on the port side attached his wire, but then noticed his colleague was not where he had expected to see him, in the starboard pound. Thinking he had gone to the toilet, he moved across to starboard to attach the towing wire. At almost the same time the fishing skipper also noticed the man was missing. He went aft to investigate.

When they failed to find the missing crewman they realised he must have gone overboard. It was dark and the wind was force 4 to 5.

A Pan Pan message was broadcast, and the Solent coastguard initiated a search and rescue operation. The vessel recovered her nets and joined the search. A helicopter, a lifeboat and several merchant and fishing vessels also took part. The crewman was not found, but his self-inflating lifejacket was recovered. This was found inflated with its light illuminated and the buckle on its harness fastened.

Nobody saw him go over the side, but the circumstances suggest he was standing in the starboard pound to connect the towing wire to the net. A feature of the pound is its proximity to the stern roller, which rotates as the nets are paid out. It is impossible to say what happened, but the possibility exists that he was somehow taken overboard by the rotating roller.

The crewman had been wearing ordinary clothing: a hard hat and the inflatable lifejacket. Only the lifejacket was found and recovered. Once again, it is impossible to reconstruct exactly what happened, but a properly secured lifejacket should not have become detached. The evidence suggests it was not being worn correctly, and it is likely the victim slipped the lifejacket over his head without passing the harness around his waist. When he entered the water the lifejacket slipped off. The particularly sad feature was the relative ease with which the lifejacket was subsequently seen, but nothing was found of the man.
The Lessons

1. The aft boundary of the two sternpounds is the stern roller. Because this is able to rotate freely it cannot serve the same purpose as a guardrail or bulwark. Without a barrier between the pound and the roller, crew can easily come into contact with the roller. If it is turning, it might then drag them overboard. Stern rollers should be viewed in the same way as any rotating machinery. They are dangerous and must be guarded if personnel are likely to be very close by.

2. The crew generally recognised the importance of wearing a lifejacket while working on deck. The victim, however, apparently failed to don it properly, and did no more than slip it over his head. Perhaps he thought it was unnecessary as he was only expecting to be on deck for a few minutes. To the casual onlooker it would appear as if he was wearing one.

3. The value of a lifejacket is entirely dependent on it being worn properly and secured correctly. A snug fitting model is both comfortable and a life saver.

Accidents are no respecter of time. Dangers exist no matter how brief the stay on deck.

Footnote

This incident was the subject of a full MAIB investigation. A comprehensive report, giving details of the causes, analysis, and recommendations was published in August 2001.
CASE 4
Take Your Lifejacket and Phone with you

Narrative

A 5.8m Orkney fast liner open fishingvessel, which was powered by a 37.2kW(50HP) outboard, was being operated single handedly. The skipper was hauling crab pots, and had twelve on board when the line tightened on the hauler. A pot or line had snagged on the rocky bottom in a depth of 46 metres. A northerly force 3 wind was blowing, and the sea was slight with a chop and a southerly ebbing tide.

The normal practice in such situations was to throw the recovered pots back overboard, and then start the recovery from the opposite end of the string. The skipper began this process, but having paid out 2 fathoms of rope, found it had caught in the outboards propeller. Moments later, the rope came bar tight and the engine cut out. The skipper tried to raise the outboard, but the load on the rope prevented this.

The boat was, in effect, anchored. It was also lying with the stern so low that water had started to come inboard over the transom. The skipper attempted to lighten the boat by ditching some of the embarked pots, but this made little difference. He thought of diving down to cut the rope, but with the tide running, thought better of it and chose instead to contact the coastguard on VHF via a local vessel.

Meanwhile, water continued to be shipped over the stern. The skipper was wearing a lifejacket and, once in the water, began to recall the advice he had received in survival training. It served him well. About 10 minutes later he was recovered by another fishing vessel.

The Lessons

This incident could have turned out so very differently. The skipper owes his life to following the advice so frequently putout by the MAIB:

1. Wear a lifejacket at all times.

2. Let people know if you are in trouble before it is too late.

3. Don’t make matters worse by diving in, cutting the rope and then, perhaps, watching your craft drift gently away before you can re-board it.

4. Carry a VHF radio and make sure it works. If battery-operated, ensure the batteries are fully charged, or are connected to a suitable power source such as the boat’s batteries.

When looking back on his experiences afterwards, the skipper discussed the advantages of carrying a liferaft for use in such emergencies. As with many similar craft, there was very little room onboard as the pots took up most of the available space.

There is no doubt that when the chips are down, and there is every prospect of your vessel founderering, the existence of a liferaft could well make the difference between life and death. Skippers of smaller craft must make the choice. Take up commercially useful space or give yourself a good chance of survival. Friends, family and next-of-kin may have uncompromising views about which choice to make. Ask them.
CASE 5
Poor Watchkeeping on Fishing Vessel

Narrative

A fishing vessel was on passage between fishing grounds and in the vicinity of the Mallory gas field. Three crew were onboard. Two of the crew were carrying out various tasks including cooking breakfast, cutting up bait, pumping out the bilges and cleaning pump filters. They were also responsible for maintaining the watch and keeping a lookout. The third crew member, the skipper, was asleep on the deck of the wheelhouse. The vessel's planned track passed 0.35 miles from a rig, and the radar alarm was set on 13 of a mile. The vessel's VHF was turned off, as, in the skipper's opinion, there was too much unnecessary and distracting radio traffic.

The stand-by safety vessel on station in the area received a message from her sister vessel saying that she had been plotting the track of the fishing vessel since 0600, and she had been seen to pass close to the Santa FE Monarch rig. Despite the sister vessel putting her FRC alongside the fishing vessel, nobody could be seen on the bridge or on deck. On receipt of the message, the stand-by safety vessel also launched her FRC and intercepted the fishing vessel. The stand-by safety vessel and her FRC paralleled the course of the fishing vessel, and, despite both sounding their horns, they failed to attract any attention. There was no sign of life on board.

The track of the fishing vessel was estimated to be taking her to within 0.5 mile of the Mallory platform. Both the platform and the coastguard were informed, and the decision was taken to try to board the fishing vessel. The Mallory platform went to abandon platform stations as a precautionary measure. At 0800 the stand-by safety vessels FRC went alongside the fishing vessel, which was still making way at the time, and one crew member transferred. He went to the wheelhouse and found the skipper asleep in a sleeping bag.

The skipper was awakened and told to slowdown and steer way from the platform. He did so. He then protested about being awakened, and claimed the situation was under control. He said he generally slept in the wheelhouse in order to be instantly available if needed, and had two crew on watch. Furthermore, the vessel was just arriving at her next intended fishing ground, and at no time had a 500m exclusion zone around a rig been breached. He felt that the stand-by vessel had overreacted to the situation.

The Lessons

Readers can draw their own conclusions as to whether the stand-by vessel had overreacted on this occasion, and whether the watchkeeping arrangements in this fishing vessel were satisfactory.

1. Skippers should need no reminding that they have a paramount responsibility to ensure a proper lookout is maintained at all times. There is nothing fundamentally wrong with a skipper sleeping in the wheelhouse, provided somebody else is on watch and maintaining the lookout when he is doing so. Watchkeepers employed elsewhere on deck or below, are rarely in a position to keep a good lookout or to listen out on VHF. In some small craft it might be possible.

2. The Maritime and Coastguard Agency (MCA) has published MGN 84 (F) Keeping a Safe Navigational Watch on Fishing Vessels in which owners, operators, skippers and crews of fishing vessels are, among other things, reminded that:
A competent alert watchkeeper, keeping a proper all-round lookout at all times is absolutely essential.

The wheelhouse must not be left unattended at any time.

The lookout must give full attention to keeping a proper lookout and no other duties should be undertaken which could interfere with that task.

It goes without saying that the watchkeeper cannot keep the required continuous all-round lookout at the same time as cooking breakfast or cutting up bait.

3. Fishing vessels can legitimately work in the vicinity of rigs but if they choose to do so, they should ensure they keep a constant listening watch on Channel 16 VHF. When operating in the vicinity of a gas field, VHF traffic does not fall into the category of unnecessary.

4. Stand-by safety vessels carry out important guardship duties. If contact cannot be established with a vessel which is deemed to pose a potential threat, more direct action may be necessary to ensure the safety of all concerned. In such circumstances, a stand-by safety vessel cannot wait until a vessel breaches the 500m zone before taking action.
CASE 6
Tiredness Can Kill

Narrative

After 3 days fishing off the west coast of the Shetland Islands, a fishing vessel was returning to Scalloway to land her catch. The skipper, who had only managed about 3 hours sleep during the time on the fishing grounds, was alone and seated in the wheelhouse. From his chair he could see and reach all key equipment, including the watch alarm, which was set at a 10-minute interval. The vessel was in autopilot and the skipper was navigating by eye. The two remaining crew were down below; the engineer was having a coffee in the mess room, and the deckhand was in bed.

As she passed to the north of the Cheynies, at the entrance to the Middle Channel, the skipper adjusted the vessel's course a few degrees to starboard and reset the watch alarm. He then fell asleep. Less than 5 minutes later, the vessel was hard aground.

The Lessons

1. Although tiredness can kill is a well-used cliché, its as true as it ever was. Fishing is hard work but, on this occasion, the combination of fishing close inshore for 3 days, with several tows as short as 2.5 hours, and with a crew of only three, took its toll on the skipper. Fortunately there were no injuries, and damage was only superficial.

There are no hard and fast rules dictating how many crew a fishing vessel should carry to operate safely. It boils down to experience: what the vessel is doing and how long it will take, her size, the equipment fitted, and finally, but most important of all, commonsense.

2. Every wheelhouse watchkeeper has probably felt tired while on watch. Many, including some of the best, have probably fallen asleep. Fortunately, most of these have been lucky and have got away with it. What makes someone fall asleep is difficult to say.

Sometimes tired people want to sleep but can't; yet at other times, people who don't think they are tired doze off at the drop of a hat. Two things, however, are certain. A watchkeeper who is alone, sitting down, and doing nothing is more likely to fall asleep than one who is walking around the wheelhouse, getting fresh air, and using all the navigational aids available to him. The second is that if you are very, very tired and sitting down with nothing to stimulate you, there is nothing whatsoever you can do to stop falling asleep. It takes less than 10 seconds to do so.

3. With many watch alarms positioned within easy reach of the wheelhouse chair, it would not be surprising to discover that some wheelhouse watchkeepers can literally reset a watch alarm in their sleep. Enough said. And having reset it there is nothing to prevent that person falling asleep all over again.

4. The effectiveness of a watch alarm to wake a watchkeeper in time to prevent an accident depends on the time interval set. The longer the interval, the longer the opportunity for something to go wrong. After this grounding, a watch alarm with a 3-minute interval was installed. Had this alarm been fitted before the grounding, the vessel might have been able to land her fish as planned. What is the interval on your watch alarm?

5. Having a second person in the wheelhouse not only provides a second pair of eyes, but it also gives a tired watchkeeper somebody to chat to. This might prevent him from falling asleep.
Footnote
This incident was the subject of a full MAIB investigation. A comprehensive report, giving details of the causes, an analysis, and recommendations was published in February 2002.
CASE 7  
Grounding of a Fishing Vessel

Narrative

A fishing vessel was heading towards Cullivoe in the Shetland Islands to land her catch when she ran aground in the approaches to the northern entrance to Bluemull Sound in the early hours of themorning.

Her skipper, who had not slept for about 23 hours and had recently held a mobile telephone conversation with a friend, attempted to alter course while in the Sound. Using the joystick control, he failed to use the correct procedure for changing from automatic to manual steering, and did not realise the vessel was not turning as intended until immediately before the vessel grounded. By the time he did realise there was a problem it was too late for him to do anything about it. When the tide fell, the fishing vessel was embarrassingly high and dry. She was refloated the following day. There was no pollution, and damage to the vessel was minor.

The Lessons

1. Everybody makes mistakes, but we are more likely to do so when weve not had enough sleep. Tiredness makes it difficult to concentrate, and our ability to remain alert to what is happening around us is much reduced. Simple errors occur that would be unthinkable in normal circumstances. Drowsiness is the obvious symptom of fatigue. Other indicators which affect concentration, awareness and alertness are harder to identify, but are just as dangerous. Dont assume that just because a competent watchkeeper is awake that he can do the job. You only have to think what it is like to do a simple task at home at the end of a long day to know how difficult it can be. It is no different at sea even if you think you can do it. People who go without sleep for more than about 18 hours are less able to perform routine tasks than had they exceeded the drink drive limit.

2. A second person in the wheelhouse when in confined waters or entering harbour, when you have been up for over about 18 hours, will do much to prevent mistakes having unfortunate consequences. Many accidents occur between the hours of 0100 and 0600. This one took place at about 0330.

3. Problems or faults with the steering, particularly when changing from auto steering to hand steering need not be disastrous provided they are discovered in time. An instinctive glance at the rudder angle indicator each time you apply wheel, will give you early warning of a problem. If you find the rudder is not responding, and you are trying to alter course, the time available to do anything about it is often very limited. Taking the way off is a possibility. It is far better, however, to reduce the chances of anything going wrong by selecting and testing manual steering before you need it.

4. Mobile telephones have proved to be very beneficial at sea, and are widely used for both commercial and private reasons. As when driving a car, their use at certain times can be a
majordistraction. Many will argue that transiting confined waters when tired at 0330 constitutes a certain time.

Footnote

This incident was the subject of a full MAIB investigation. A comprehensive report, giving details of the causes, an analysis, and recommendations was published in March 2002.
**CASE 8**  
**Collision in the Dover Strait**

**Narrative**

At 0413 UTC, CNIS Dover detected a radar-contact crossing the south-west lane of the Dover Strait TSS on a heading of 010°. As the axis of the lane was 230°/050°, she was not crossing at right angles as required by Rule 10c of the Collision Regulations. Consequently, a preliminary broadcast was made on VHF channel 16, followed by a further broadcast on VHF channel 11 at 0416, warning all vessels of the contravening vessels position.

The vessel was later identified as a French stern trawler which was on passage from a French port to the fishing grounds in the vicinity of the South Falls Bank. A 17-year-old deckhand was alone in the wheelhouse, and had been instructed to follow the planned track of 010° across the Dover Strait at a speed of 11 knots. The vessel was in autopilot and the watch alarm was set to a 10 minute interval. Both the skipper and the deckhand were aware that the intended track contravened Rule 10c of the Collision Regulations, but the skipper was keen to get to the fishing grounds before his rivals.

CNIS Dover had previously reported this vessel five times since 1998 to the French administration for contravening Rule 10 of the Collision Regulations.

Shortly after crossing into the south-west traffic lane, the fishing vessel deckhandsaw a radar contact about 3 miles on the starboard bow. He initially saw a vessel’s port and starboard side lights, but soon after, his vessel crossed ahead of this other one, and only her starboard sidelight remained visible. Based on this information, and by monitoring two small radar displays, the deckhand assessed that the vessel would pass no closer than 1 mile to starboard. He was then either distracted, or fell asleep, and paid no further attention to the situation until he saw a large ship at very close range ahead.

The ship, a product tanker on passage to West Africa, was following the south-west lane of the Dover Strait TSS at a speed of about 11 knots with three other vessels close astern. Between 0413 and 0423 UTC, the OOW fixed the ship’s position and annotated the deck log. Although the bridge VHF radios were set to channels 11 and 16, he did not hear the broadcasts made by CNIS. The OOW was accompanied by a lookout, who remained at the helm for much of this period.

After finishing his work at the chart table, the OOW checked the radar display and saw a contact 2 miles on the port bow with a CPA of 1 cable to port. He visually identified the contact as a fishing vessel, and continued to monitor it for several minutes until it became apparent that the vessel was on a steady bearing and was not taking any action to avoid a collision. At this point, the OOW applied 10° of starboard helm and sounded 5 short blasts on the ships whistle. On hearing the sound signal the master, who had been working in his cabin, came to the bridge and saw the fishing vessel about 1 cable on the port bow. He immediately ordered the helm to be increased and repeated the 5 short blasts.

At about the same time, the deckhand on the fishing vessel attempted to avoid a collision by turning to starboard, but as automatic steering was selected, there was no response.

The fishing vessel collided with the ships port bow at about 0429 causing a 6m gash in the No 1 (port) tank, followed by lesser impacts amidships and in the vicinity of the accommodation. About 110 tonnes of oil leaked from the ruptured tank into the sea, before the contents of the tank were transferred.
The Lessons

A feature of this incident is how late each watchkeeper detected the other vessel. Once again it reminds people how important it is to keep a very good lookout, especially at night.

1. A fundamental purpose of a TSS is to improve safety by requiring vessels to behave in a predictable manner. Vessels following a traffic lane should be either overtaking or being overtaken, and the status of crossing vessels should be unambiguous. When vessels disregard the requirements of Rule 10, the benefits of a TSS, including those of the precautions of radar coverage and reporting schemes, are jeopardised. Familiarity, or regular use of waters, does not carry any particular rights or exceptions from complying with the Rules at all times. They are there for all ships to follow.

2. Maintaining an effective lookout in areas such as the Dover Strait, which are navigationally demanding, and have a high traffic density, is not easy and requires efficient time and bridge resource management. Remember, that with a closing speed of 20 knots, it only takes 3 minutes for vessels to close 1 mile, and an OOW cannot afford to take his eye off the ball for long periods. An OOW quickly checking the radar display, and looking out of the window between plotting a fix and writing up the deck log, can be the difference between detecting a rapidly developing close quarters situation in good time, and panic stations. When an OOW cannot maintain a lookout himself, it is good practice to make the lookout aware of what he is doing and, in any event, must ensure the lookout keeps a good watch, particularly ahead.

3. Dedicated lookouts are required at night. Keeping a lookout from the helm is not the way to meet the requirement.

4. When there are several vessels of different sizes in close proximity, it can be difficult to correctly associate radar echoes with the vessels sighted, particularly when there is no compass repeater available to take bearings. In such situations it is essential that all vessels are continuously monitored, both visually and by radar. Be aware of remaining in the same position on the bridge or in the wheelhouse for too long, as a vessel on a steady bearing can remain hidden behind a window Mullion from the horizon until just before it hits you.

5. Bridge watchkeepers are frequently tired, but precautions can be taken to keep them alert. These include drinking fresh water; ensuring they are well rested before taking over; that two people are always on the bridge or in the wheelhouse; that the frequency set on the watch alarm is appropriate to the situation and that watchkeepers are discouraged from remaining seated for long periods.
6. The MAIB is aware that recreationalequipment, such as CD players, featureas aids to relieve boredom in somevessels. If a master or skipper sanctionstheir use, so be it, but they are a majordistraction in confined waters, and canprevent the OOW monitoring VHFtransmissions. Switch them off,especially in the Dover Strait TSS.

7. A warning broadcast via VHF radio isworthless if it is not heard or understood. Always ensure that aproper listening watch is maintained on the VHF radio.

8. A competent master would prefer to be called to arrive on the bridge to find avessel at a distance of 2 miles and closing, rather than a vessel at 1 cable with collision imminent.

9. Vessels transiting the Dover TSS shouldbe aware that the fishing vessel they see crossing the lane in front of them might well be in the charge of a 17 year old who may be well trained, but is unlikely to have much experience.

10. Whether or not the belief that fishingvessels often wait until the last possiblemoment before taking action to avoid acollision is true, this should not influence the application of Rule 17 of the Collision Regulations. This rule allows a stand-on vessel to manoeuvreas soon as it becomes apparent that the give-way vessel is not taking appropriate action to avoid a collision. It is better to use this rule to goodeffect, and remain clear of give-way vessels bent on maintaining their course and speed, rather than get involved in what could be a risky game of chicken. It is dangerous to assume another vessel is aware of your presence; we might be right, but we dont want to be dead right!

11. When appropriate, use the wake up signal as soon as possible and as frequently as needed. The use of the ships whistle, and any associated light, costs nothing and, if another vessel is not aware of your presence, the sooner it is used, the more time the other vessel may have to take appropriate action.

12. When at close quarters, and taking avoiding action, dont nibble. By the time it is realised that more helm is needed to avoid a collision, it is often too late to be effective. The helm can always be eased once the risk of collision has passed.

Footnote

The BEAmer also investigated the accident and cooperated with the MAIB with goodeffect.

This incident was the subject of a full MAIB investigation. A comprehensivereport, giving details of the causes, an analysis, and recommendations was published in February 2002.
CASE 9
EPIRB Saves Two Lives

Narrative

A 15.73m-long wooden vessel was trawling about 35 miles off the coast of north Yorkshire one night in April, when she became fast. A crew of two was onboard. The wind was from the south-east force 3 and the sea was slight.

While trying to release the trawl by heaving with the winch, a hydraulic pipe burst. An attempt to repair it failed, but shortly afterwards they came free. Because the winch was not working, the trawl could not be recovered. Not wanting to lose their gear, the crew decided to leave the gear out and make for port at slow speed.

After they had been steaming for a while, the skipper told the deckhand to go below and get some rest. When the deckhand opened the hatch to the cabin he discovered flooding. The skipper turned on the electric bilge pumps, but didn’t think it necessary to contact the coastguard. After about half an hour the floodwater disabled the electrical supply which, in turn, stopped the electric bilge pumps. Realising the situation was becoming critical, the skipper tried to contact the coastguard using the fixed radios, but there was no electricity supply, so was unable to do so. The skipper did not think to use the portable VHF radio carried onboard.

Soon afterwards, the fishing vessel capsized and foundered. The crew found themselves in the water where the temperature was between 8°C and 9°C. The liferaft went down with the sinking vessel, but two lifebuoys, a gas bottle and three or four pound boards floated to the surface. The survivors managed to grab the lifebuoys.

One further item had also broken free, the EPIRB. It started to transmit once on the surface and alerted the SAR authorities. The crew were in the sea for over an hour before a rescue helicopter arrived, having homed in on the EPIRB signal.

The crew were successfully rescued, and owe their lives to the coastguard, the helicopter crew, many others in support and, above all, the EPIRB.

The Lessons

1. This is a classic example of how the EPIRB can save lives! Fishing vessel owners often complain about the cost of safety equipment, but this demonstrates how valuable an investment the EPIRB can be.

2. If flooding is discovered, always call the coastguard. You will not be disturbing them unnecessarily. They much prefer to be informed at an early stage, than later when things get desperate.

3. Fishing vessels of this size are required to have a portable VHF radio. If the crew abandon to the liferaft, they should take the portable VHF radio with them; this is its primary purpose. The portable VHF radio can also be used if all other radios have failed.

4. There is little point in speculating why the liferaft didn’t float free, but the next time you walk along the jetty looking at your fellow fishing vessels, count the number of times you see liferafts so firmly secured that they will never break free. Then go away and think about it.
Footnote

This incident was the subject of a full MAIB investigation. A comprehensive report, giving details of the causes, analysis, and recommendations was published in February 2002.
CASE 10
The Thinking Man!

Narrative 1
A 251gt fishing vessel had recently undergone routine maintenance, during which time the turbo charger on the main engine had been overhauled and refitted. Once the maintenance was complete, the vessel prepared to return to the fishing grounds. She sailed, and had been on passage for only a short time when the turbo charger bearings seized, and a small fire broke out in the area of the exhaust manifold. The fire was quickly put out and arrangements made to tow the vessel back to port.

On investigation, it was found that the turbo charger failed because of a basic error during re-assembly:

a. The bearing oil supply pipe had been connected to the casing cooling water inlet;

b. The cooling water supply had been connected to the bearing oil inlet.

Narrative 2
A ro-ro ferry was on passage to Portsmouth, and the opportunity was taken to install a new security box in the emergency generator room for the Halon release lever and alarm. The release wire had been disconnected while the work was being carried out to give easy access. With the job nearing completion, it was decided to re-connect the release wire before the final electrical connections were made. In doing so, the crewman moved the operating lever to one side, causing the release lever of the 60kg Halon bottle to activate, discharging the gas into the emergency generator room.

The crewman left immediately, the space was ventilated, and the work was completed once the area was safe to enter. There were no injuries to either passengers or crew.

Narrative 3
A cruise ship was in dry dock, in the USA when her crew were alerted to the presence of heavy smoke in the vicinity of the frozen meat room. The alert was sounded, with contractors and nonessential crew being told to muster ashore. Preparations were made for boundary cooling, while the deck fire party entered the store room wearing breathing apparatus. After reporting that they had found smouldering wiring on the deckhead, they withdrew, leaving the second fire party from the engine room to investigate the surrounding area. This party entered the void space outside the store room, and found no evidence of the fire having spread to, or having originated in, an adjacent space.

The local fire brigade was now in attendance, and entered the store room. A Class A fire was put out. Smouldering and fire-damaged goods were removed, and the fire confirmed as being out shortly afterwards.

The cause of the fire was put down to boxes of meat being stowed in contact with hot unprotected compressor pipework. This resulted in the cardboard containers drying out, heating up and smouldering to start a chain reaction. Nobody was injured.
The Lessons

A common theme links these three events. They happened in very different circumstances, and on differing types of vessel, but they each demonstrated what can happen when a course of action is not thought through to its logical conclusion. If you don't think things through you will probably be the one who suffers.

1. After any machinery overhaul, check that all connections are both made and tightened. Ideally, water and oil connections should be either different colours, type of connections or marked in some way. Always check the work of contractors. If something is set up incorrectly, it is highly likely that you will be the one who eventually has to sort it out.

2. When undertaking work on a gas release mechanism, always fit safety devices to prevent accidental release. But remember to remove and confirm that it has been removed once the work has been completed.

3. When loading stores, look at the space first so that you know what access difficulties there are in the space allocated, and what problems could be encountered. If there are areas such as exposed and unprotected hot pipes, get them insulated and protected.

No matter what vessel you are on, spend time checking out the pitfalls that you or your fellow seafarers are likely to meet during the course of your job. Risk assessment, as it is now called, can save you a lot of time and worry.
CASE 11
I Will if you Wont!

Narrative

A fishing vessel was trawling north-west at 2.2 knots. A coaster was steaming north-east at 10 knots. It was daylight and the fishing vessel was displaying an inappropriate shape for a vessel engaged in fishing. The weather was calm and the visibility was good.

The fishing vessel’s sole watchkeeper sighted the coaster when she was 4 miles away, and determined that a close quarters situation was developing. When the coaster’s range had closed to half a mile, and she had not taken any action, the watchkeeper altered course hard to port and increased to full speed.

The report is based solely on evidence provided by the fishing vessel, since the coaster’s evidence is that no such incident occurred.

The Lessons

There can be few fishing vessel skippers or short sea traders who do not recognise incidents such as this. There is often a tendency to blame the other vessel for not doing more to keep out of the way.

1. In the fishing vessel skippers experience, approaching vessels tend not to alter course until the last minute. This has led fishermen to delay taking action themselves until it becomes apparent that the give-way vessel has no intention of doing so. The reluctance of fishermen to take action themselves is compounded by the restrictions imposed by their trawl gear. Although a stand-on vessel is not required to take action until collision cannot be avoided by the action of the give-way vessel alone, it may do so as soon as it becomes apparent that the other vessel is not giving way. In view of their restricted nature, and the reduced margin of safety in taking late action, vessels engaged in trawling should be prepared to act much earlier than they would do otherwise.

2. It was the coasters masters experience that fishing vessels tend to display a fishing shape when they are not engaged in fishing. The assumption is justified, as anyone who has seen a fishing vessel in harbour can testify. The practice of having shapes permanently displayed does undermine the value of being recognised as a burdened vessel, and can lead to dangerous assumptions being made by other, give-way vessels. Having said that, it is totally wrong to assume a fishing vessel showing shapes is not engaged in fishing. In this particular incident, the coaster was still the give-way vessel because she apparently had the fishing vessel on her own starboard side and was crossing. As a give-way vessel, she was required to take early and substantial avoiding action.

3. We have here a skipper and a master who, fundamentally, do not entirely trust the other because of their past experiences. It is a sad reflection of how the traditional manners of the sea have declined. Shipping must keep an eye open for fishermen, and must take early avoiding action so that trawlers and others are not forced to manoeuvre with their gear still out. Fishermen, for their part, must realise that flouting the regulations, and having their day time shapes permanently rigged, undermines the trust that other seafarers have in their actions.

4. There are a couple of other points. The Collision Regulations require a vessel which fails to understand the intentions or actions of another, or is in doubt as to whether sufficient action is being taken by the other, to sound a warning signal of at least five short and rapid blasts. Had the fisherman done so in this instance, it might have alerted the coaster. Although the minimum audible range
required fora vessel the size of the fishing vessel is 0.5 mile, the distance at which the watchkeeper decided to take action himself, making a sound signal might just might, be the difference between a collision and a near miss.

5. This article has focussed, in part, on shippings interpretation of fishing vessels shapes. It is an old debate, with every prospect of continuing. The fact remains that any experienced mariner in unreasonable visibility can tell by looking at a fishing vessel, using binoculars if necessary, whether it is actually engaged in fishing. The watchkeeper glued to the radar cannot. The moral of the story: lookout of the window. Please.
CASE 12
He Who Hesitates

Narrative
A French fishing vessel collided with a UK aggregates dredger in the north-east traffic lane of the Dover TSS. The fishing vessel was not fishing and had been the give-way vessel under the Collision Regulations. Both vessels suffered minor damage.

The fishing vessel had been crossing the north-east traffic lane on a southerly heading making 9 knots. The dredger was steering 050° in the traffic lane and making a speed of 11.7 knots. She had been overhauling two vessels which were close ahead of her. The headings and speeds of both vessels had been steady for 10 to 12 minutes before the collision.

The second officer was on watch on the dredger. He was aware that the fishing vessel was approaching on a collision course. Experience had taught him to expect fishing vessels to leave it until the last minute before altering course. He continued to monitor the situation, but did nothing at that stage to attract the attention of the fishing vessel watchkeeper.

The fishing vessel's skipper was on watch. He had seen the dredger, but did not think that there was a risk of collision.

In the event, the dredger did not alter to starboard to avoid the collision until about a minute before the collision, when the fishing vessel was at a range of a quarter of a mile or less. At about the same time, her skipper put her engine full astern. These actions proved too little, too late.

The Lessons
Anyone reading this brief narrative will be asking what new lessons can possibly be learned in this oldest of all situations. Two vessels are approaching one another in such a way that the risk of collision exists. The one thinks he knows that the other will delay giving way until the last minute, while the other doesn't think of collision exists. Ancient mariners the world over will be thinking Here we go again. Most will instinctively say they would never, ever, leave things so late. These lessons are not, therefore, for them but for that watchkeeper in a million whom might, just might, get it wrong. The problem is that it keeps happening, so perhaps we should never stop learning.

1. If a risk of collision exists, and you are the officer of the watch in the stand-on vessel, never assume that the give-way vessel has seen you. Until she shows, by positive action, that she has the situation under control, it is safer to assume she has not.

2. Rule 17 permits the stand-on vessel to act as soon as it becomes apparent to her that the vessel required to keep out of the way is not taking appropriate action in compliance with these rules. In this case it was apparent, when the range between the two vessels was about 1 mile, that the fishing vessel was not taking early and substantial action to keep well clear as she was obliged to do under Rule 16. At this time the dredger should have used her signalling light and whistle to alert the fishing vessel. If this did not prompt immediate action from her, the dredger should have made a broad alteration to starboard to avoid the collision. She was permitted to do this under Rule 17a (ii) and, it could be argued, required to do it under Rule 2.

3. If the fishing vessel's skipper really thought there was no risk of collision, he was demonstrably wrong. It doesn't matter who you are, or in what type of vessel, the person in charge has
afundamental responsibility to determine whether a risk of collision exists and do something about it when it does. Radar, the compass, commonsense, seamans eye, and knowledge of the Rules are the tools available to achieve this. The oldest guidance of all is still the best. If the compass bearing of the approaching vessel does not appreciably change, then risk of collision exists.

Footnote
This incident was the subject of a full MAIB investigation. A comprehensive report, giving details of the causes, an analysis, and recommendations was published in April 2002.
CASE 13
Ideas for Tackling Flooding

Narrative

A 21.9m wooden vessel fishing vessel was heading north-north-east from her homeport to pair trawl with her partner. The wind was south, force 4 and the visibility was moderate to good. A crew of six was onboard.

While on passage, the main engine temperature was seen to be rising. An investigation revealed the problem to be a blocked sea water inlet. The mate closed the seacock as best he could before taking the cover plate off the adjacent strum box. Onlooking inside, he saw a black plastic bag jammed in the valve. He opened it and pulled the bag out but, no sooner had he done so, when water started to pour through. The mate did his best to shut the seacock, but the linkage came off. Despite frantic efforts to contain the flooding, all attempts failed. Bilge pumps were used to pump out the floodwater, but couldn’t keep pace. The hand pump was hardly effective.

The only power-driven bilge pump used, was the one fitted to the auxiliary engine. A second one, driven by the main engine, was available but not used. The main engine drew its cooling water from the open seacock, and both skipper and mate assumed they couldn’t start the main engine because there was no cooling available. There was a pipe from the bilge system capable of feeding seawater direct to the main engine for cooling. The mate was aware of this but, because he had never used it before, thought it shouldn’t be used as it would damage the engine. The nature of the emergency left little scope for lateral thinking.

A coastguard helicopter flew out to the vessel with two portable salvage pumps, but before these could be put into action, the position on board deteriorated to the extent that the decision to abandon ship was taken. The crew evacuated to the partner trawler, leaving the flooding vessel to sink about three hours later.

The Lessons

An incident like this demonstrates that flooding can occur at any time, in any place and is no respecter of a vessel’s age. The lessons focus on two aspects: preventing the flooding in the first place, and containing it to prevent the vessel sinking.

It is also sobering to think that the origin of this loss was a plastic bag.

1. Opening up a seacock when afloat is not advisable. Unless there is some way of isolating an inlet safely at sea, remedial work should only be attempted in harbour. Apart from the obvious solution of slipping the vessel to ensure there is nowhere for flooding to take place, it is impossible to open up a seacock by berthing in a tidal harbour and waiting for the tide to go out. Once it is safe to do so, the seacock can be opened up and the blockage cleared. Should there then be a problem restoring the system to normal, there should be sufficient time to deal with the situation.

2. The US coastguard trains repair teams so that ships can be kept operational after limited damage. A large softwood wedge is driven into an open pipe. Those doing so will confront an even greater quantity of spurting water initially, but smaller softwood wedges are then driven in between the main wedge and the pipe until the flow is choked off. The tops of the wedges are trimmed with a saw, before a wood shore is placed between the tops of the wedges and the nearest part of the ships
structure. The US coastguard encourages fishing vessel skippers to carry softwood wedges and shores for this purpose. Why not do the same?

3. In extremes, it might just be possible to contain the flooding by resorting to the traditional option of fitting an emergency tingle. By lowering a weighted canvas or plastic sheet over the side in the vicinity of the inlet, it is possible it will cover the hole and substantially reduce the rate of flooding. This in turn might provide additional time for other actions to be more effective. It might sound farfetched, but in days gone by was tried with conspicuous success.

4. The main engine could have been started once the flooding had developed. The cooling water was available and plenty of it; the floodwater inside the vessel. This would have helped to pump the vessel out since the cooling water was discharged overboard once it had been cycled through the heat exchanger. Starting the main engine would also have meant that the second bilge pump could be used.

5. The sea water pipe from the bilge system could also have been used for main engine cooling. Seawater fed directly to an engine, rather than through a heat exchanger, can cause damage by blocking passages with salt deposits. However, in situations such as this, the risk of any problems is minimal. In an emergency, it is a perfectly acceptable step to take.

6. Had a portable salvage pump been carried on board, it could have helped save the fishing vessel. Consider it.

Footnote

The MAIB receives a number of reports of flooding incidents to fishing vessels. The reasons are not always identified, but what does become evident, is how often it seems that more could have been done to prevent the vessel from sinking had damage control actions been better handled. The instinctive reaction is, invariably, to request additional pumps. This is right and proper, but far more needs to be done to contain, or even stop, the flooding using alternative means.

This article is largely directed at stimulating discussion on how this might be achieved. One final thought. Next time you allow inadvertently of course a plastic bag to drop overboard in harbour, don't. It could be the one to jam someone's seacock. The really sobering thought is it might be yours!

This incident was the subject of a full MAIB investigation. A comprehensive report, giving details of the causes, an analysis, and recommendations was published in June 2002.
CASE 14
Engine Room Flooding causes Another Fishing Vessel Loss

Narrative

A 23.99m twin-rig steel trawler was fishing off the Yorkshire coast when her nets became fast on the seabed.

While trying to haul back the starboard net, a hydraulic pipe, from the winch to the hydraulic motor burst. All three crew then spent the next several hours on deck replacing the burst section of pipe.

While they were on deck, the vessel suffered substantial flooding to the engine room. The flooding was not discovered until one of the crewmen went down the engine room for a section of hydraulic hose. Because the wheelhouse was left unattended, the bilge alarm went unnoticed.

By the time the flooding was discovered, the level of floodwater was well above the engine room floor plates. With the engine room in virtual darkness, because of the failure of the 24V electrical system, it was not possible to locate and open the valve chest to operate the engine-driven bilge pumps.

After unsuccessful attempts were made to regain power to the 24V electrical system, and to transmit a Mayday, the crew abandoned the vessel in the liferaft. The vessel capsized soon after.

Shortly after boarding the liferaft, the crew managed to activate the EPIRB, which they had taken with them. Three hours later they were rescued by a coastguard helicopter.

The Lessons

1. The investigation of this accident revealed that the vessel’s loss was one, or a combination of, the following factors:
   - a breach in the hull plating,
   - failure of a non-return valve in an overboard discharge resulting in backflooding, or
   - engine room seawater piping failure caused by erosion or corrosion.

2. The condition of the hull plating should be checked on a regular basis, in addition to the 4-yearly ultrasonic testing required under survey. This is especially important if the vessel has suffered any kind of impact damage, no matter how slight.

3. Non-return valves should also be checked regularly, to ensure they are functioning correctly.

4. The failure of engine room seawater piping is a common occurrence on fishing vessels, and has accounted for many flooding incidents. This has, in some cases, led to the actual loss of the vessel. In light of this, it is wise to carry out simple regular checks on all pipework, especially in the engine room and in places which may at first appear to be inaccessible. A simple check for signs of corrosion or weeping pipework, culminating in the repair or replacement of the piping, may well prevent the vessel from being lost.

5. While at sea, the wheelhouse should never be left unattended. Had it been manned, the bilge alarm would have been heard, and would have given the crew sufficient time to deal with the problem and
contain the flooding. In all probability, it would have been possible to prevent the vessel from foundering.

The ingredients of this incident are not untypical. There have been a number of recent founderings in which the circumstances have been very similar. There is a late discovery of flooding, and the crew have insufficient time to contain it. The vessel then fills with water and sinks. The saving grace in many of the more recent incidents is that the crew has usually been rescued, thanks to the skill and dedication of the search and rescue organisations.

Yet the fact remains that in all probability, the loss was caused by a relatively small hole, perhaps measuring no more than 5 to 10 cm across, through which the flooding was taking place. If it is possible to stop the water coming in at the point where the pipe penetrates the hull, it is very likely the vessel, and perhaps its crew, can be saved. The fact remains, that with forethought and the sharing of experiences, it is possible to reduce or even stop the flooding by a number of ways, providing you know how to do it.

By adopting the oldest technique in the book, lowering a weighted canvas sheet over the position of the engine room inlets on the affected side, the rate of flooding can be substantially reduced.

**Footnote**

This incident was the subject of a full MAIB investigation. A comprehensive report, giving details of the causes, an analysis, and recommendations was published in November 2001.
CASE 15
Fisherman Saved by Lifejacket

Narrative

A 4.95m GRP vessel was being used for creeling off the coast of Northern Ireland on an April afternoon. The wind was from the south-west force 4, the sea and swell were slight, and the visibility was good. She was being operated single-handedly.

While hauling creels about half a mile offshore, the skipper heard a thump and realised that a rope was caught around the vessel's propeller. He attempted to cut the rope free and, in the process, noticed floodwater coming up through the floorboards.

Alarmed at how quickly his vessel was taking on water, the skipper pulled the release toggle to inflate his lifejacket. Less than five minutes later the vessel disappeared beneath the surface. The skipper had had no time to call for help or fire distress flares. Buoyed by his lifejacket, he slowly drifted inshore and, about an hour later, was able to stagger ashore. He walked home, took a hot bath and then notified the coastguard of his experience.

The vessel was subsequently recovered. When examined, it became apparent that the rope had wrenched the propeller away, along with a section of the hull.

The Lessons

1. This skipper had a very lucky escape indeed, especially given that the sea is extremely cold in April, and there can be no doubt that the lifejacket saved his life. The MAIB has consistently advised fishermen to wear inflatable lifejackets when working, and this case illustrates very well that by doing so, you will greatly increase your chances of survival.

   An EN 396 inflatable lifejacket can cost as little as £60, a worthwhile investment. One of this type satisfies the regulatory requirement for vessels of less than 12m in length (an inherently buoyant lifejacket is not required if a self-inflating lifejacket is carried).

2. The risks multiply when sailing alone, so it is particularly important to wear a self-inflatable lifejacket when doing so. This skipper owes his life to the fact that he took this most basic of safety precautions.

3. The skipper should have paid a little more attention to communication. Had the drift been offshore, the outcome might have been very different. Mobile phones are not ideal; they are not waterproof and a signal isn't always available offshore. Lone fishermen should always carry a waterproof portable VHF radio, the cost of which is about £300. Although this may seem a little pricey, few would argue that if it saves your life, it is money very well spent.
CASE 16
See No Vessel, Hear No Vessel!

Narrative

A potter of 10m registered length was hauling a fleet of pots in thick fog. She was exhibiting navigation lights and was displaying an appropriate shape forward. The skipper and his crew were all involved in the operation on deck and the wheelhouse was left unattended. A radar was operating on a 0.5 mile range scale.

A 1,441gt cargo vessel was steaming at about 7 knots. The chief officer was on watch with operational radar and, she too was exhibiting navigation lights.

The fishing vessel's skipper first became aware of the cargo vessel when he heard her wash in the fog; he then saw her emerge from the fog and approach his port side. He entered the wheelhouse immediately and applied full astern propulsion, while his crew quickly threw the fleet of pots overboard.

The cargo vessel passed close ahead of the fishing vessel and has no record of the incident.

The Lessons

1. Neither vessel was aware of the other in sufficient time to prevent a close quarters situation. In the prevailing fog, the cargo vessel's chief officer was reliant on radar and sound to detect the fishing vessel, and the fishing vessel's skipper was reliant only on sound, since he had chosen to leave the wheelhouse unattended. It is uncertain whether or not the cargo vessel sounded her whistle. What is known, however, is that the crew of the fishing vessel did not hear one. In view of her length, the fishing vessel was not required to be fitted with a whistle. She carried a bell, but didn't use it.

In the absence of radar detection, effective sound signals are essential if close quarters situations are to be avoided.

2. Both vessels had operational radar, but each failed to detect the other. The fishing vessel was placing much reliance on the larger vessel detecting her by radar and taking the appropriate avoiding action. She didn't. In fact, she didn't even see the smaller fishing vessel on her radar, and was totally unaware of the entire near miss situation. If you are fishing in dense fog, be aware that you may not be seen.

It is uncertain why the cargo vessel's chief officer did not observe the fishing vessel on radar, or sight her visually at close range. Possible reasons include a sub-standard lookout, and poor radar return caused by the fishing vessel's fibreglass construction and a possibly ineffective radar reflector.

The fishing vessel's skipper has since fitted a larger radar reflector to his vessel, which will assist in his vessel being detected in the future. He will also remember not to leave his wheelhouse unattended, since by doing so he is removing his ability to detect approaching vessels by radar.

3. Many seafarers will relate to this incident, which underlines the need for a proper lookout to be kept at all times, to maintain a full appraisal of the situation, and to enable action to be taken at an early stage. In this case, although late, the prompt emergency action taken by the skipper and his crew was effective in preventing a disaster.
CASE 17  
Things that go Bump in the Night

Narrative

A wooden stern trawler landed her catch in Mallaig, then sailed in the early hours of the next day to return to fishing grounds to the south. The prawn fishing was good and, accordingly, the workload high. The watch alarm was not working and had been landed ashore for repair, and the vessel was sailing one man short of her normal complement.

The deckhand, who was alone on watch, noted another, slower outbound vessel on the port side. Two other vessels were inbound, and they passed by safely. The deckhand was feeling tired, having managed only 5 hours sleep in the previous 24 hours, and having had no sleep for 17 hours. This was in addition to his having worked the previous 4 days with a similar disrupted sleep pattern. He sat down in the wheelhouse chair.

The deckhand had known he would be taking the first watch after departure Mallaig, but had, nonetheless, opted to join his colleagues for an evening at a bar ashore, rather than taking the opportunity of a well-earned rest.

While ashore, he drank a moderate two pints of beer. However, given his lack of sleep and increased workload, the alcohol probably had a greater adverse effect than he realised.

At around 0230, the waypoint for the next alteration of course was reached. Owing to the close proximity of the other vessel being overtaken on the port side, the deckhand altered course to port only about 10°. He intended altering the full amount once the other vessel had been passed safely. The other deckhand was due to be called about 10 minutes later for his watch. Shortly after making the alteration, the deckhand fell asleep.

At 0320 he was awoken suddenly by a series of bumps and bangs. The vessel had grounded.

The vessel was refloated at high water later that day, with the assistance of Mallaig lifeboat. She had sustained superficial hull damage, and water damage to the accommodation and engine room. There were no injuries or pollution as a result of the grounding.

The vessel was later repaired and re-entered service.

The Lessons

1. The workload was high on this trip, owing to the good fishing and the fact that the vessel sailed a man short of her normal complement. This resulted in the skipper deciding to have only one man on watch, instead of the normal two. Having another person in the wheelhouse would have not only provided a second pair of eyes, but it would also have given the deckhand company and kept him more alert.

2. The deckhand had chosen to go ashore in Mallaig, rather than opting to get some much needed rest. While ashore, he had a few drinks and, later, had sat down in a comfortable chair while on watch and feeling very tired. This combination of circumstances resulted in him falling asleep and failing to make the required alteration of course. The result, a very rude awakening.

The effects of drinking alcohol can occur more quickly when tired, and be more pronounced, than expected. Avoid alcohol if you are tired, and if tired, don’t take the watch!
3. Had the watch alarm been working, it is probable the deckhand would have awoken before the vessel grounded. It had been sent ashore previously and had not been returned to the vessel. The watch alarm is a fundamental piece of safety equipment, especially on a vessel with a high workload, and one that is sailing short-handed.
CASE 18
A Wooden Vessel Floods and then Sinks

Narrative

A 23.99m wooden fishing vessel, built in 1982, was trawling about 75 miles from her home port. The wind was from the north-north-east, force 5 and visibility was moderate to good. A crew of four was on board.

At about midday, the port net became snagged on a seabed obstruction. The crew spent the next few hours trying to haul the net, sometime during which the vessel started to flood. Damage caused by a contact between the port trawl door and the hull is considered to be the most likely source of the ingress, although flooding via the pipework cannot be ruled out.

The two main bilge pumps were electrically-driven and both were disabled when the floodwater reached the transformer box. Both pumps received electricity from the same source, which meant that if one was disabled, both pumps were lost. They should have been independently-driven, but they were not.

Although the flooding filled the engine room, the bilge alarm didn’t alert the crew because the audible signal was not working at the time. By the time the floodwater was discovered, it was too deep for its source to be identified.

The crew were unable to contain the flooding, so were forced to abandon the vessel. The batteries for the fixed VHF radio were disabled by the floodwater, so the portable VHF radio was used for communication in the latter stage of the rescue. Help arrived in the form of a fast rescue craft from an oil-rig guard ship, just seconds before the vessel sank by the stern. All crew were rescued, unhurt.

The Lessons

1. Defective bilge alarms have been a factor in the loss of many fishing vessels. The MAIB, and others concerned with marinesafety, have repeatedly emphasised the importance of a correctly functioning bilge alarm. Ensure that yours is working before sailing, since without it, you and your crew’s lives are at risk. Consider the time it would take to repair one which is defective often minutes the time it took for this vessel to sink.

2. The electrical supply for bilge pumps should be independently-driven. This will ensure that if the supply to one pump is lost, the other will continue functioning.

3. This article clearly demonstrates the value of the portable VHF radio. Had the skipper of this vessel lost communication with the guard ship, the rescue might have been delayed, leaving the crew onboard when the vessel sank.
CASE 19

Look After Your Tonnage Valves

Narrative

A 15.24m-long steel fishing vessel was twintrawling near an offshore platform in the North Sea at midday. The wind was force 5, the sea moderate with a 2m swell and visibility was 8 miles. An experienced crew of five was on board. The fishing operation was to be the vessel's last before she returned to her home port.

When the trawl was hauled, it became clear there was a good catch in the nets; enough to fill the hopper up to the shelter deckhead. The full hopper caused an angle of list of about 9 degrees to starboard. While gutting the catch, the crew became alarmed at the sight of floodwater starting to build up inside the shelter. This floodwater caused the vessel to slowly capsize to starboard. She sank in 140m deepwater and has not been recovered.

All crew members were rescued by the fast rescue craft from a nearby stand-by vessel.

A tonnage valve had been fitted either side of the vessel's shelter, to discharge deckwater. These were freeing ports fitted with a flap, which should have allowed water to flow out, but not in. It is possible the tonnage valve on the starboard side became jammed open, perhaps by a piece of fish offal. This would have allowed the vessel's shelter to flood if her stability had been sufficiently degraded by the weight of the fish in the hopper, high up on the starboard side.

The deckwash supplied seawater to the shelter so that the fish could be washed before they were stowed in the hold. Had the tonnage valve been blocked, or seized closed, it would have taken about 30 minutes for sufficient seawater to build up to capsize the vessel, if the deckwash was on. Given either of these scenarios, the tonnage valve on the starboard side malfunctioned, something surveyors find all too frequently.

The Lessons

1. If your fishing vessel is fitted with tonnage valves, inspect them regularly preferably between each trip and remember to keep the spindle lubricated so that the flap moves freely.

2. When fish are being gutted, the tonnage valves should be checked regularly to ensure they have not become blocked by fish offal; this is especially important when the deckwash is running. If water starts to build up in the shelter, check the deckwash immediately to ensure that it is turned off.

3. Tonnage valves should be screwed shut, unless the deckwash is on. Never wedge them open.
CASE 20
Skippers Last-Minute Action Saves Lives

Narrative

An 18m-long stern trawler was trawling in the St Georges Channel in association with four other fishing vessels when she noticed a container vessel approaching from astern. The 116m-long container vessel was on passage between Liverpool and Portugal. It was a warm summer evening, with a light breeze and excellent visibility.

The trawler was towing a bottom trawl at about 1.5 knots on a heading of 220°. Her skipper had first noticed the container vessel on radar at a range of about 2 miles. He had monitored the approach of the other vessel on a collision course until the range between them had reduced to 0.5 mile.

The container vessel was making a speed of about 15 knots on a course of about 190°. The master had been alone on her bridge and had been aware of his vessel's approach to a number of fishing vessels. The containers on deck hampered his close-range visibility from the wheelhouse. As he had neared the other vessels he altered course to avoid them, but found that close passing was inevitable.

The trawler's skipper considered the other vessel was not going to alter course sufficiently, and that his vessel was at risk. He therefore immediately instructed his crew to come out from the cabin to the comparative safety of the deck. The skipper released the fishing gear and, at the same time, put the helm hard to starboard.

The container vessel passed about 6m clear on the trawler's port side.

The Lessons

1. We are all taught to drive a motor vehicle defensively, and to be prepared for the unexpected. Fishing vessel skippers are also advised to heed this sound advice. Consider the possibility that give-way vessels just might not have seen you, or that perhaps they have been hampered by other vessels or for a myriad of other reasons. Prepare a contingency plan, just in case the other vessel doesn't take appropriate anti-collision action.

2. This skipper did well, and saved the day. He is particularly commended for calling his crew out on deck. He realised the situation was potentially dangerous, and he addressed the issue immediately. Failing to take such action under similar circumstances has resulted in many fishermen being trapped on board their vessels, and losing their lives as a consequence.

3. The container vessel's master had been aware of his vessel's approach to a number of fishing vessels. He was also aware that the cargo on deck posed limitations to his visibility. Given these conditions, he should have taken early action to keep well clear of the group of fishing vessels, or slowed his vessel and navigated with extreme caution until clear of them.
CASE 21

No Redundancy!

Narrative

A fishing vessel was leaving port. It was dark and the weather was calm. The skipper was alone in the wheelhouse. Once clear of immediate dangers, he engaged the autopilot, forgetting that it had an unresolved fault, and then studied his fishing charts. The vessel deviated from the intended track and grounded.

The Lessons

1. The departure followed a regular routine. The skipper was alone in the wheelhouse, while his crew cleared away the ropes and fenders on deck. It was to be a normal days fishing.

Having operated satisfactorily for 14 years, the autopilot had developed a fault prior to arriving at the port, and although the skipper had attempted to have it repaired, the fault remained unresolved. He was aware of the wisdom of checking the autopilot against the compass heading, but apparently failed to do so on this occasion. With no obvious indication to remind him that the autopilot was not working, he engaged it with misplaced confidence, based on its 14 years of good service.

Apart from monitoring the compass, the skipper had no means fitted to alert him to the fact that the vessel was deviating from the intended heading. Relevant and necessary check procedures should be followed at all times to guard against complacency.

2. In deciding to look at his fishing charts, the skipper was unable to rely on anyone else to maintain a proper lookout. A second person on watch would have enabled the autopilot malfunction to be identified, and remedial action to be taken. With no redundancy, the skipper was reliant on the correct operation of the navigational equipment and his ability to maintain a proper lookout. A measure of built-in redundancy is required in any navigational operations so as to ensure that an error by one person, or the failure of a single item of equipment, does not result in an irreversible dangerous situation.
**CASE 22**

**Collision Between Fishing Vessel and a General Cargo Ship**

**Narrative**

In clear visibility, slight seas and force 4 to 5 winds, a small fishing vessel began to haul her nets while heading into a westerly wind. She had been on the same westerly heading for about 3 hours. Before hauling, the skipper had seen a merchant vessel on the port side, heading in anotherly direction.

When the trawling gear reached the sea surface, the crew found it to be fouled with a large piece of timber. The skipper, therefore, kept the vessel making way through the water to avoid the trawl fouling the propeller, and the timber causing damage to the vessel.

The skipper decided to help the crew and, before leaving the wheelhouse, anticipated there would be no problem in the ship avoiding his vessel. However, while busy retrieving the gear, the skipper heard one blast from the cargo ship's whistle. The two vessels collided.

The cargo ship was on a heading of 304° and travelling at a speed of 8 knots. Using VHF radio, the chief officer had tried in vain to call the fishing vessel on his starboard bow. He then called the master who, on reaching the bridge, saw that the fishing vessel was on a collision course. The master reduced the ship's speed and turned the helm hard to port. He then sounded the whistle, but his action failed to prevent a collision.

The fishing vessel ran along the starboard side of the cargo ship, before clearing. The skipper's first response was to call the ship on VHF radio channel 16, but he received no reply. He then noticed water running across the accommodation deck, so went below to check for leaks. Water was present, so he moved the batteries to a higher position.

The fishing vessel was able to reach port safely.

**The Lessons**

1. The skipper thought the ship didn't pose a problem, based partly on his knowledge that it was approaching from his port side, and partly because he was fishing with the appropriate signals displayed. An assumption that any vessel, whether fishing or merchant, will meet her obligation to keep out of the way when there is risk of collision, is a dangerous one to make. Many have made this assumption and, when avoiding action has eventually been taken, it has been too late. Some collisions in similar circumstances have resulted in loss of life, sometimes considerably so. The need to keep a proper lookout so as to maintain a full appraisal of the situation is paramount.

2. The obligation of the chief officer was clear under the International Regulations for Preventing Collisions at Sea. He had to keep out of the way of the fishing vessel, which was engaged in fishing. We don't know why the chief officer wasted time trying to contact the fishing vessel by VHF radio, why there was apparent doubt as to his obligations, and why he felt it necessary to call the master, whose subsequent actions were too late to prevent a collision.
CASE 23
Fishing Vessel Capsizes with Loss of Life

Narrative
A 10m-long stern trawler left port in the south coast of England, with three crew members on board. She headed for popular grounds off Gilkicker Point, unfamiliar to her skipper and crew. The weather was fine with a west-northwesterly wind of force 4 and good visibility.

During the first trawl of the day she picked up part of a WW2 torpedo, as well as a quantity of mud and shells. The skipper was aware that a heavy load had been caught, so he and the crew decided to try and recover it so that they could then decide how to deal with the situation. They managed to raise the net to the surface fairly easily, but when they tried to lift the cod end clear of the water, the weight was too much for the trawl winch. As the winch struggled to lift the cod end by the gilson rope led through a block on the A frame, at a height above the deck of about 4.8m, the vessel took an increasing list to starboard. The load snagged on the starboard quarter and, with the winch's relief valve blowing, it could neither be pulled inboard, nor lowered back into the water.

The situation seemed to stabilise with the vessel listed to starboard, and with freeing ports on the aft starboard side underwater. As the crew member cut the net to release the unwanted load, the vessel encountered the wash from a passing vessel. She rolled, took water over the starboard bulwark and capsized rapidly. Within minutes, she inverted and foundered.

The crew of a nearby yacht witnessed the event. They rescued the skipper and his son quickly from the water and raised the alarm. Other rescue craft were soon on scene. The crew member who, with the skipper, co-owned the vessel, was discovered floating face-down in the water. He was airlifted to hospital but, despite continuous attempts to resuscitate him, was eventually pronounced dead. He was believed to have been a non-swimmer and had not been wearing a lifejacket.

The Lessons
1. It is essential that skippers have a good basic understanding of ship stability so that they can make informed decisions when extraordinary events occur.

2. Once again, we are reminded of the need for fishermen to heed the advice the MAIB so frequently issues: always wear a lifejacket when working on the open deck even in seemingly benign weather and sea conditions.

Accidents are rarely caused by a single event. All too often, several factors combine and tragedy strikes; leaving a bereaved relative grieving and leaving a vessel without a valued crew member. This case was no exception. The removal of anyone of the following four situations might have averted the accident:

- Picking up part of a WW2 torpedo while fishing. The area off Gilkicker Point is known to contain a substantial amount of ordnance. Anyone fishing there should be aware of this hazard and should make contingency plans in the event they are unlucky enough to catch more than they bargained for.

- The decision to try and lift the load on deck using a lifting point 4.8m above the deck. This action raised the vessel's centre of gravity and resulted in the capsize. Having raised the load to the surface, and having realised that it was very heavy, the skipper and crew should have decided on the safer option of releasing the net and buoying it for recovery by a specialist
Alternatively, they could have dragged the load into shallow water for inspection at low tide.

- The snagging of the load on the fishing vessels' quarter. This left the crew unable to lower the net into the water to reduce the list and increase the stability. The MAIB is unsure exactly how the net became caught.

- Finally, encountering the wash from a passing vessel. This area is close to the main routes used by many ferries, high-speedcraft and merchant vessels. It is, therefore, not unusual for a vessel to encounter wash from a passing craft.
Statistics

**Fishing Vessel Losses**

*Figures for 2002 are provisional at time of publication. (March 2003)*

**Deaths**

*Figures for 2002 are provisional at time of publication. (March 2003)*

**Fishing Vessel Accident Statistics 1990-2002**

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* Figures for 2002 are provisional at time of publication. (March 2003)*
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* Figures for 2002 are provisional at time of publication. (March 2003)
Major Accident Locations

Footnote:
1. Although Kirsteen Anne 1 was lost on New Year’s Eve 2002, it is not shown on this chart as the MNB was not notified of her loss until early 2003.
2. Two crewmen were lost from Tallegarry Law and one other non-crew.
PUBLISHED REPORTS

List of fishing vessel accident reports published since 1999

Alma C - report on death of Michael John Beedie a fisherman from the fv Alma C on Turbot Bank about 55 miles west-bysouth of Thyboron in Denmark on 25 January 2001

Amber Rose - foundering of fishing vessel with loss of one life off the Isle of Man on 15 October 1998

Angela - capsize and foundering of fv in North Sea on 6 February 2000

Annandale - flooding and foundering of fv 16 miles NNE of the Shetland Islands on 23 March 2000

Arco Arun - grounding, off Broadness Point, River Thames on 13 October 1998

Arosa - grounding and total loss of UK fv on Doonguddlerock off the west coast of Ireland with the loss of 12 crew members 3 October 2000

Astra II - loss of two crewmen attempting to board the vessel while berthed at Carbost pier, Loch Harport, Isle of Skye on 2 April 2000

Atlantic Princess - man overboard incident from vessel in the English Channel on 23 November 2000

Aurelia - flooding and loss of fv Aurelia 78 miles west of St Kilda 13 August 2001

Be Ready - fire on board the fishing vessel while fishing 30 miles north-west of the Orkney Islands on 22 January 2000

Betty James - grounding and subsequent loss of fv off Isle of Rhum on 10 July 2000

fv Beverley Ann II - collision between vessels on 9 March 1999 Cypress Pass

Blue Hooker - loss of the fishing vessel with two lives off Blackchurch Rock, North Devon on 12 November 1998

Catrina - capsize of the UK registered fishing vessel south of Newhaven on 13 October 1998

Celtic King/De Bounty - collision between UK registered feeder container ship Celtic King and Belgian registered fv DeBounty vessels to the south of The Smalls traffic separations scheme off the south-west coast of Wales on 19 March 2000

Charisma - capsize of the fishing vessel Charisma (OB588) with the loss of one crew member Carlingford Lough 30 January 2002

Christine Nielsen - flooding and foundering of fishing vessel 120 miles north-east of River Tyne on 18 March 2001

Constancy - sinking of fishing vessel on 30 July 1998 with loss of one life

Constant Faith - loss of Constant Faith about 100 miles north-east of Peterhead on 30 June 2001
Crimond II - loss of vessel 30 miles north-east of Scarborough on 24 April 2001

De Kaper - fire on board trawler off Hanstholm, Denmark on 12 February 1999

Donna M - capsize of fishing vessel off the Orkney Islands with loss of two lives on 31 August 1999

Dunan Star - fatal accident on board fv 1.5 miles south-west of the Isle of Arran on 10 August 2000

mv Elm/mfv Suzanne - near miss incident on 11 February 1999

European Tideway and Vrouw Grietje - collision between vessels in North Sea 16 October 2000


Fleur de Lys - explosion on board vessel which then foundered 18 miles south-east of Portland Bill on 16 April 2000

Fraoch Ban - capsize of fv off coast of Shetland Islands 15 August 1999

Geeske - death of one person while fishing off Beachy Head on 9 December 1998

Gemma Fidelis - fatal accident on board Gemma Fidelis 9 miles east of the River Tees on 23 October 2001

Girl Alice - loss of skipper from vessel 1.5 miles south-east of Burnmouth 19 November 2000

Gradeley - man overboard fatality off the west coast of the Island of Mull on 28 October 1999

Gudermes and Saint Jacques II - collision between vessels in the Dover Strait on 23 April 2001

Harbour Lights - loss of fv off Polperro, Cornwall on 8 January 2000 with loss of one life

Horizonte Claro - grounding of fv vessel on Soyea Island, Loch Inver, 21 October 2000

Jasper III - foundering of vessel 90 miles north-east of Fraserburgh on 10 September 1999

Lomur - grounding of Lomur in the approaches to Scalloway, Shetland Islands 14 June 2001

Lord Trenchard - explosion on board vessel in Poole Harbour on 30 June 1999

Luc and Toisa Puffin - collision between the two vessels 8.5 miles east of the river Tyne on 13 June 1999

Lysfoss - grounding of Lysfoss in Sound of Mull, Scotland 7 May 2001

Mariama K - carbon monoxide poisoning on vessel in Douarnenez, France 10 June 2000 - one fatality

Mathilda and Lady Hamilton of Helford - near miss incident between Mathilda and Lady Hamilton of Helford, 7 miles east-south-east of Lizard Point, Cornwall on 28 June 2001

Opportune - man overboard fatality from mfv Opportune 35 miles east of Wick on 23 February 2000
Osprey - fatal accident to a man overboard from the fishing vessel Osprey in Lochinver Harbour on 20 April 2002

Our Nicholas - grounding and loss of the crabber Our Nicholas near the entrance to Stornoway Harbour on 24 July 2001

Our Sarah Jayne/Thelisis - collision between vessels in the Thames Estuary on 20 June 2001

Pescalanza - sinking of the fishing vessel with the loss of six lives on 2 November 1998

Philomena - fatal accident on board vessel in the Moray Firth on 6 March 2001

Primrose - grounding of Primrose on the Island of Rhum on 15 June 2001

Purbeck II - injury of crew member on board on 7 June 1999

Purdy - man overboard fatality from angling boat at Shipwash Bank off Harwich, on 17 July 1999

Rachel Harvey - grounding and loss of fishing vessel off Peninnis Head on 1 October 1999

Radiant - capsize and foundering of Radiant PD298 about 45 miles north-west of the Isle of Lewis with the loss of one life on 10 April 2002

Radiant Star III - foundering of fishing vessel 60 miles northeast of Fraserburgh on 6 August 1999

Random Harvest - flooding of fishing vessel south-west of Brighton on 3 July 1999

Rebecca Kay - loss of fishing vessel Rebecca Kay on 20 April 2001 off Bideford Bar Buoy

Resplendent - grounding of Resplendent in Bluemull Sound Shetland Islands on 13 June 2001

Ross Alcedo - fire on board vessel while underway about 32 miles north-west of the Isles of Scilly on 16 January 2000

Sally Jane - capsize alongside in Shoreham Harbour on 27 July 1998

mv Sand Heron and fv Celtit - collision between vessels NETraffic Lane, Dover TSS on 30 July 2001

Sharona - flooding and foundering of fishing vessel 80 miles north-east of Peterhead on 3 August 1999

Silvery Sea/Merkur - collision between Merkur/Silvery Seawhich then foundered about 35 miles west of Esbjerg, Denmark with the loss of five lives on 14 June 1998

Solstice II - investigation of a fatal accident to a crew member, 25 miles south-west of Rockall on 13 May 2000

Sundance - capsize and foundering of Sundance off Gilkicker Point, East Solent with the loss of one life on 10 September 2001

Suzanne - see Elm

Tullaghmurry Lass - sinking of fishing vessel Tullaghmurry Lass with loss of three lives in the Irish Sea on 14 February 2002
Union Arbo/Philomena - collision between Bahamian cargoship Union Arbo and UK fv Philomena about 10 miles south of Newlyn, Cornwall on 2 September 1999

Van Dijck - loss overboard of a fisherman from fishing vessel while fishing 30 miles south-west of Guernsey on 16 April 2001

Vertrauen - investigation of the loss of Vertrauen about 75 miles north-east of Peterhead 19 July 2001

Wakil II - investigation of an accident to skipper of fv 3.5 miles south-west of St Bees Head on 10 April 2000

**SAFETY DIGEST**

MAIB Safety Digest 1/2002 - Published April 2002

MAIB Safety Digest 2/2002 - Published August 2002

MAIB Safety Digest 3/2002 - Published December 2002

Copies of the Safety Digest publication can be obtained, free of charge, on application to the Marine Accident Investigation Branch (Mrs J Blackbourn (023 8039 5509)).
GLOSSARY of abbreviations

BEAmer Bureau Enquêtes Accidents/mer
CNIS Channel Navigation Information Service
CPA Closest Point of Approach
EPIRB Emergency Position Indicating Radio Beacon
GMDSS Global Maritime Distress Safety System
OOW Officer of the Watch
Pan Pan Urgency Call
TSS Traffic Separation Scheme
VHF Very High Frequency
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