

Part 2 – Fishing Vessels



“Oh no! It’s the bloke from the MCA!”

In 2001 the Maritime and Coastguard Agency took the bold decision to open an office in Newlyn dedicated to Fishing Vessel surveying. The idea of having an

office actually on the quay was viewed by many with some scepticism. In the early days it was indeed a lonely existence, but very gradually industry came to accept that I hadn’t been put in place to beat them with a big stick and make life difficult. I consider my role to be a privilege and know that certainly in the South West the relationship between ‘them’ and ‘us’ has improved. I’m now able to show that all regulations aren’t necessarily as onerous as they may first appear and do have a purpose in making their lives at sea safer. One thing that has had most impact has been the phrase; “The Fishing Vessel MOT man”. It’s a concept to which fishermen can relate. Their cars are looked at every year, why not the boat? If they keep things up to scratch the costs are minimal and we don’t charge for inspections on the smaller vessels, a pleasant surprise to many! I’m also able to work closely with the local producer’s organisation and the fisheries resource centre to point fishermen towards the various grants that are available.

One of the major problems that the fishing industry has is image. “Old, scruffy, poorly maintained vessels manned by untrained drunken layabouts”. Not my words but a member of the general public on the quay in Newlyn! Nothing could be further from the truth. Fishing has a totally different culture. It’s not a down market version of the Merchant Navy. Fishing is a very dangerous business and carried out by professional seamen who are also the last of the hunter-gatherers. Fishing vessels are largely maintained within the requirements of the various regulations. Paint

doesn’t catch fish! It’s true that the nicely painted boat may look more efficient than the unkempt one alongside it, but it may not be any better in terms of compliance.

I’m not sure that we in our various former guises have always served industry very well, but at least some of our hierarchy are more aware of the problems faced on both sides, and recent changes in legislation have shown a more pragmatic approach.

Sadly we still get too many incidents involving fishing vessels and their crews as the following articles will testify. The Marine Accident Investigation Branch work tirelessly to ensure that incidents are systematically examined. They then produce objective reports. They do not point the finger or apportion blame. Any one of us reading these reports, be they owner, skipper, crew, surveyor or even my interested member of the public, will probably be able to see instantly what went wrong, will shake their head and deny it would, or could happen to them. But these incidents are real. Alcohol and the sea have always been uneasy bed fellows and every year accidents to which drink can be attributed are still too prevalent, and in two of these reports alcohol was a contributory factor. In two other reports the first principle of being at sea is ignored. Failure to keep a good lookout is I suspect in part due to the increased reliance on electronic aids and also the diminishing number of crews aboard. Lessons can be learnt from these and other incidents, but they mainly boil down to a lack of good seamanship.

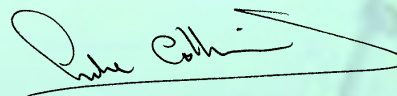
Being situated as we are, close to the main shipping lanes in and out of Europe, I am constantly being apprised of close quarters situations involving merchant and fishing vessels. I would remind all factions of the International Rules for the Prevention of Collision at Sea. A collision is never attributable to just one vessel. A full understanding of the Rules and good seamanship dictates the need to avoid close quarter situations. Hopefully the advent of AIS will improve matters further.

Whilst on the subject of Rule of the Road, it may be timely to remind skippers that the fishing signal defined in Rule 26 signifies “A vessel engaged in fishing”, not as some seem to think, a fishing vessel, whatever it’s doing, and whether at sea or in port. Please take the signal down when you’re not actively fishing.

I commend these reports to you. Let us ensure that we read and discuss them. We can, and maybe should be openly critical of each other, but ultimately we must remember that what we are all trying to achieve is a much safer Fishing Industry.

There is still much to be done, but I am confident that we are on the right track. Try and think Safety and act safely all the time.

Good Fishing!

A handwritten signature in black ink that reads "Mike Collier". The signature is written in a cursive style and is positioned above a faint background image of a fishing vessel at sea.

Mike Collier, MBE

Mike Collier was educated at HMS Conway MN Cadet School and joined Ellerman’s Hall Line in 1964 for a career at sea involving world wide trade. Following a spell on the Coast with Stevenson-Clarks, he joined Hudson Steamship Company. He moved to the North Sea as Mate with Offshore Marine in 1974. The lure of the dollar then took him to Zapata Marine Service as Master, and he later became Shorebase Manager South East European Operations based in Sicily.

He joined HM Coastguard in 1984 serving at Belfast, Falmouth and latterly the Isles of Scilly. In 1999 he was part of a pilot scheme to bring Fishing Vessel surveyors closer to Industry, and he opened the Newlyn office in 2001. He was awarded an MBE in the 2007 New Years Honours list for Services to the Fishing Industry.

Crush Stop!



Narrative

A 30m beam trawler left her berth after being given all the necessary clearances from the harbour authorities. Fifteen minutes later, in poor visibility, she ran “head on” into an oil tanker jetty, at almost full speed.

There were no injuries to the crew, and the damage to both vessel and jetty was relatively minor. Fortunately there was no oil tanker alongside the jetty at the time, otherwise the outcome could have been much worse.

After her impact with the jetty, the trawler headed seawards, passing very close to other inward bound vessels, before the port authorities were able to establish contact and persuade the skipper to return to port.

Once back in the port, the vessel’s skipper was breathalysed for alcohol and was found to be over the legally prescribed limit. The skipper was arrested and imprisoned, then released on bail pending the results of a blood sample

analysis to confirm alcohol levels. Following the results of the blood tests, the skipper was prosecuted and found guilty under section 78 of the Railways and Transport Safety Act – *Navigating a vessel under the influence of drink.*

At the time of the accident, the port authorities’ VTS staff were distracted from their primary function (monitoring and controlling marine traffic) by a routine telephone call and administrative duties, and failed to notice the trawler deviating from her expected route until it was too late. As a result, no intervention took place that might have averted the accident, although any such intervention might have been ineffectual. Following the collision, the VTS centre did not inform other traffic that a “rogue” vessel was at large, and the port’s routine carried on as normal.

The resulting investigation concluded that the accident was caused by impaired judgment of the trawler skipper, probably brought about by



alcohol consumption. Although the harbour authorities' VTS centre played no part in

causing the accident, they could have taken action to intervene in an attempt to prevent it.



The Lessons

1. Don't drink and drive! The dangers are no fewer in a boat than they are in a car. Alcohol dulls the senses, interferes with judgment and slows reactions. This in turn endangers the lives of all those in the vicinity.
2. The skipper was alone in the wheelhouse. Regardless of the alcohol issue, a second person in the wheelhouse, to act as lookout, is sensible when navigating close to shore. We are all human, if the man at the wheel loses control due to ill health, or any other reason, then the vessel is inevitably going to end up on the beach, or even worse.
3. The vessel was travelling at an unsafe speed in relation to the circumstances and prevailing conditions. When travelling in confined waters close to the shore, a reduced speed gives time to weigh up the situation, make a balanced judgment and react appropriately and, in the worst event, an accident at slow speed will do far less damage than one at high speed.
4. Harbour authorities play a major role in safe navigation within their jurisdiction. On this occasion, the VTS team were distracted from their main purpose and, although an attempt to intervene might have proved futile, it would have at least alerted other harbour users that a serious situation was developing. Alerting other vessels to the presence of a "rogue vessel" could prevent other potentially dangerous situations occurring.

Better to be Safe Than Sorry



Narrative

First incident:

On a Tuesday morning, a 28m, wooden-hulled, 60-year old beamer sailed from her home port to her fishing grounds. The weather was good but was forecast to become south-westerly force 6 to 8 for the weekend. By the Saturday, the wind had increased to near gale force.

While gutting the fish, under the whaleback, the deckhand/engineer noticed small globules of oil in the crab tank, which were coming out of one of two deck wash hoses. He went to the engine room and tried a number of valves in the deck wash/bilge systems, but the amount of oil being discharged out of the systems increased further. Soon afterwards, the bilge alarm alerted the crew to an increased water level in the engine room. The crew could not discharge the water from the space and, deciding it was better to be safe than sorry the skipper called the coastguard to tell them of the situation.

The coastguard sent a rescue helicopter, carrying a portable pump, to the vessel, and this was used to discharge the water from the

engine room. By that time, the fishing vessel had hauled her nets and was making her way back to her home port, where she arrived safely the following morning.

The next day, a shore engineer found that the overboard discharge non-return valve for the engine room bilge pump was closed, and the crossover valve to the deck wash line was cracked open. The flooding was therefore attributed to the engineer not having opened the overboard discharge valve to the engine room bilge pump.

Second incident:

The following Tuesday, the fishing vessel sailed again towards her fishing grounds, this time with a different crew on board. The weather was good and the winds were light.

Two days later, the electric submersible pump in the forward net store failed. Using the emergency pump, which was driven by the auxiliary engine, the deckhand/engineer tried to pump out the store. However, the auxiliary engine failed because of an oil leak, which could not be repaired at sea.

Unhappy that the net store could not be pumped out, the skipper elected to haul in the nets and set a course to return to the home port. At about midnight on Friday, the engine room bilge alarm sounded because the bilge pump could not discharge the water that had accumulated in the space. Once again, feeling it was better to be safe than sorry, the skipper called the coastguard to inform them of the situation.

The local lifeboat was launched, carrying a portable pump, and it rendezvoused with the fishing vessel. They made for the nearest port, where the fire brigade pumped out the flooded spaces. The engineer found that two wires had become detached from the electric submersible pump, so he reattached them and the pump worked satisfactorily. Later that morning, the fishing vessel returned safely to her home port, under the watch of the coastguard.

The following actions were taken to prevent another serious incident:

- To improve the hull's watertight integrity, areas of the hull were recaulked.
- Crew members who were designated as engineers received improved training.
- The auxiliary engine and the engine bilge pump were renewed.
- Large sections of bilge pipe system were renewed, and improved routing was introduced.
- The overboard discharge valves for the emergency and bilge pumps were raised from beneath water level to lead over the top of the deck.
- A diesel-driven, portable salvage pump was placed on board.
- A working sea trial was carried out in moderate sea conditions to test the new improvements; all were found to be satisfactory.

The Lessons

1. It is not good practice to rely on bilge alarms and/or operate bilge pumps continuously while at sea, no matter how reliable you think they are. It is important that crew members regularly check compartments for any ingress of water. The Marine Guidance Note 165(F) provides very useful advice on the risk of flooding to fishing vessels, and is well worth a read.
2. Skippers and owners should ensure that crew members are familiar with sea

water side valves and bilge systems on board their fishing vessels. A displayed bilge system diagram is a good reminder when identifying the layout of pipe lines, pumps and valves.

3. The skippers were concerned about the free surface effect of bilge water on the stability of the vessel, and that major spaces could not be pumped out. Both skippers wisely called the coastguard early, before the situations had gone beyond the point where the vessel's survival could have been in doubt. Such decisions save lives.

A Rude Awakening



Narrative

A 23m fishing boat was engaged in pair trawling with another vessel of a similar size. The boats were owned by brothers, and were fishing their normal fishing grounds in the North Sea. As is common practice, one of the skippers was always on watch while fishing, and on this occasion the tow had started at about 0200 with the skipper of the starboard boat on watch. The watch on the port boat was

being taken by the engineer. He was new to the boat and this was his first towing watch on board. It was a calm night, with a low southerly swell, and the visibility had started to reduce at about midnight. By 0500 visibility was about 0.5 mile. Both vessels were fitted with two radars: one was kept on the 0.25 mile range to keep position on the other vessel; the other was kept on the 3 or 6 mile range for look ahead. No fog signals were being sounded.





At about 0509, a vessel was noted at about 5 miles on the starboard side. The skipper of the starboard boat confirmed with the port boat's watchkeeper that he also held it on radar; both began to plot the approach on radar. It soon became apparent that the approaching vessel would pass close ahead of the starboard boat, but was on a collision course with the port boat.

The approaching vessel was a supply boat on its regular run to a number of oil rigs. The OOW and a lookout should have been on the bridge, as required by the master. However, the OOW was alone. VDR records show that the two fishing boats appeared on the radar screen at about 9 miles. They were not plotted with the ARPA, and it does not appear that the OOW noticed them at all. Although the visibility was reduced, no fog signals were being sounded and the sound reception equipment on the Monkey Island was not in use.

About 30 seconds before the collision, the starboard boat's skipper tried to call the supply vessel. But he received no reply. The watchkeeper of the port boat attempted to alter to starboard, but only managed to alter

through 15 – 20 degrees before the collision occurred. Moments before, the OOW on the standby vessel had looked up and seen the fishing boat appear in front of him at about 50 metres. He reacted by turning the main thrusters athwartships, the quickest way to stop the vessel.

The impact rolled the port boat onto her port side, throwing the remaining crew out of their bunks. A split had been made in the hull, allowing water into the fish hold, and the bulkhead between the fish hold and engine room had been ruptured, allowing water to flow freely between the two spaces. Pumps were started, and although they were coping with the water in the engine room, it was clear that the fish hold was filling fast.

The liferafts were launched and the crew put on their immersion suits; they didn't all don their lifejackets.

On board the supply ship, the master arrived on the bridge fewer than 30 seconds after the impact. Noting that the fishing boat was alongside, and that the towing wire was leading under his vessel, he de-clutched the thrusters so that they did not become



entangled in the wire. As the tension eased in the wire, it cleared from under his vessel, and he decided to move his vessel clear and standby to offer assistance. Meanwhile, other members of the crew were preparing the FRC and checking their own ship for damage. Apart from some denting and scrapes to the ship's

side, damage was limited to a hole above the waterline in the forepeak tank.

As the fishing boat began to sink, the crew got into the liferaft and were subsequently rescued by the other pair trawler without having to enter the water.

The Lessons

1. The OOW on the supply vessel was on watch alone. It was dark and visibility was reduced by fog; both factors requiring the presence of an additional lookout on the bridge. Had the lookout been on the bridge, it is likely that the fishing boats would have been seen in sufficient time for effective collision avoidance action to have been taken.
2. In fog or other conditions of reduced visibility, vessels involved in a close quarters situation have an obligation, under Rule 19, to keep clear of each other.
3. Neither vessel was sounding fog signals. Had the sound reception equipment on the supply vessel been operational, and the fishing vessels been sounding fog signals, the supply vessel might have been alerted to the presence of the fishing vessels early enough to take action to avoid a collision.
4. The immersion suits in use had integral buoyancy and would certainly have assisted in keeping the crew members afloat if they had been required to enter the water. However, an immersion suit will not turn an unconscious person onto their back, so it is essential that a lifejacket is also worn.

Poor Beam Trawler Practice Costs Three Lives



Image courtesy of MCA

Narrative

On a late winter's afternoon, in calm sea conditions, a beam trawler caught her port trawl gear on a fastener. During the ensuing attempts to free the gear the vessel listed rapidly and capsized. There was only one survivor from the four crewmen on board.

After the trawler became fast, the starboard trawl gear was hauled to the surface, the derrick was raised and the net and beam brought clear of the water. The port gear, with its derrick in the normal horizontal towing position, was hauled until the warp was tight, causing the vessel to list to port. The three crewmen, who were on deck, moved to the starboard side of the vessel as water came through the freeing ports and then over the port bulwark.

The skipper, who was in the wheelhouse, shouted to the crewmen through an open window, saying that he was unable to do anything more. He did not operate the emergency winch release system which was fitted to his, and similar, beam trawlers. The starboard derrick, with the trawl gear suspended from it, probably then swung

inboard and the trawler rapidly capsized to port. The crew found themselves in the water. None of them were wearing a lifejacket.

The youngest member of the crew swam to the upturned hull and managed to climb on to it. He saw the other two deck crew float past, face up, but was unable to pull them on board the hull, and they floated away. It soon got dark, and the survivor saw a number of ships pass by, but he was unable to signal to them. Neither the vessel's liferaft nor her EPIRB came to the surface.

The following morning, a passing ship saw the upturned hull and the survivor, and raised the alarm. An intensive search and rescue operation began immediately, coordinated by the Coastguard. The survivor was rescued by a Coastguard helicopter, and a search by military and civilian vessels located and recovered the bodies of the two crewmen. The skipper's body was also located a short distance away by other search units. However, it sank before it could be recovered, and he has not been seen since.

The upturned trawler began to drift, and she sank 2 days later.

The Lessons

1. The trawler met all the applicable stability conditions. However, in the situation where her port derrick was horizontal, its gear anchored to the seabed, and her starboard derrick raised to a large angle, she was extremely vulnerable, and capable of capsizing with less than 5 tons of winch force on the port side. Hauling the gear on one side, and lifting the derrick before trying to free the snagged gear on the other, is contrary to good beam trawler practice. Leaving the derrick on the opposite side horizontal will help balance the forces, and would have been a safer way of maintaining stability in this case.
2. The investigation found that the skipper and crew had worked long hours before and during the voyage. Long hours and hard physical work are common in the industry, making a fishing vessel a dangerous work place. Fatigue can affect us all – even the experienced, and its effects can be difficult to recognise. It can be dangerously long before you actually fall asleep, and can adversely affect: concentration; memory; response times; and the attitude to safety and risk taking. Improving the quality of rest, and taking regular rest periods will reduce fatigue levels and could prevent that ultimate mistake being made.
3. The emergency winch release system was misunderstood and not trusted. However, it was an effective system to lower the derricks and beams under control. Had it been used in time, it might have prevented the capsize. Ensure that all your vessel's safety systems are maintained, tested and understood by those on board – you never know when they might be needed.
4. When deciding on the best location for liferafts and EPIRBs, the possibility that they may become trapped in rigging, or on other fitments if the vessel rapidly capsizes should be considered.

In Drink and in the Drink

Narrative

Does this scenario sound familiar to you?

You've been fishing for a week and not had much sleep because the weather has been foul. In the early morning, your boat enters port to land the catch. During the day alongside, you help discharge the fish hold, load ice and fuel and carry out repairs on the fishing gear. The skipper decides to stay in harbour for the night and, once cleaned up, and having had something to eat, you go ashore to the pub with the crew.

After having a good amount to drink in the pub to celebrate the good earnings from the catch, it is closing time and you leave to return to the boat. On the way back, you decide to call into the local takeaway, while the others go on ahead. You buy your takeaway meal and continue on back towards the boat. When you arrive, you try to board, by reaching out for a stay to steady yourself and stepping from the quay onto the top of the gunwale before jumping on to the deck. You have done this many times before, and had no difficulties. However, on this occasion, as you try to step from the quay to the top of the gunwale, you miss your footing and say to yourself, "*Oops, missed!*" This is the last thought you will ever

have, because your head hits the gunwale and your body continues to fall between the boat and the quay, into the water.

Sometime later on board the boat, someone asks where you are and, after searching, the crew realise that you are missing. The skipper then notifies the coastguard that you are missing and a search is started. Later that morning, after the dock has been searched by divers, without result, the boat is moved away from the quay and your body floats to the surface. It is in the early stages of rigor mortis and beginning to bloat. Not a pretty sight. With some difficulty, your body is heaved onto the quay so that it can be taken to the local mortuary.

Not only has the incident involved coastguard search units, the ambulance service, paramedics and divers, but also the police, the MAIB, MCA, HSE and the coroner (procurator fiscal in Scotland). The coroner has to order a postmortem examination on your body to establish the cause of death, and sometime later he holds an inquest in the local court. More tragically, someone has the terrible task of telling your wife and four kids that you have had a fatal accident, and has to explain how it happened.

The Lessons

1. You may think that it is rare for someone to fall between a vessel and the quay while boarding a fishing vessel, and perhaps even more so for a fisherman to lose his life in the process. During the last 10 years, 13 fishermen have lost their lives when returning from the pub; the circumstances in which all these fatalities occurred reflect closely the scenario given above. Alcohol and fatigue can be a fatal combination.
2. The Marine Guidance Note MGN 268 (M+F) reminds vessel owners and others

of the need to ensure that safe means of access are provided to fishing vessels and other small vessels. It also identifies some of the hazards that may be encountered and advises on protective measures that can be taken to minimise the risk.

So if you are responsible for providing a safe means of access, it is important that you carry out a risk assessment to identify the hazards and then try to remove them, or at least minimise them.