

Report on the investigation of the
fatal man overboard from the potting vessel

***Pioneer* (NN200)**

south of Hastings, England

on 29 July 2021



**The United Kingdom Merchant Shipping
(Accident Reporting and Investigation)
Regulations 2012 – Regulation 5:**

“The sole objective of the investigation of an accident under the Merchant Shipping (Accident Reporting and Investigation) Regulations 2012 shall be the prevention of future accidents through the ascertainment of its causes and circumstances. It shall not be the purpose of an investigation to determine liability nor, except so far as is necessary to achieve its objective, to apportion blame.”

NOTE

This report is not written with litigation in mind and, pursuant to Regulation 14(14) of the Merchant Shipping (Accident Reporting and Investigation) Regulations 2012, shall be inadmissible in any judicial proceedings whose purpose, or one of whose purposes is to attribute or apportion liability or blame.

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GLOSSARY OF ABBREVIATIONS AND ACRONYMS

°C	-	degrees Celsius
CPR	-	cardiopulmonary resuscitation
DSC	-	digital selective calling
EPIRB	-	Emergency Position Indicating Radio Beacon
FISG	-	The Fishing Industry Safety Group
GMDSS	-	Global Maritime Distress and Safety System
HRU	-	hydrostatic release unit
ILB	-	inshore lifeboat
m	-	metre
“Mayday”	-	the international distress signal (spoken)
MCA	-	Maritime and Coastguard Agency
MGN	-	Marine Guidance Note
MGN 411 (M+F)	-	Training and Certification Requirements for the Crew of Fishing Vessels and their Applicability to Small Commercial Vessels and Large Yachts
MGN 570 (F)	-	Fishing Vessels: Emergency Drills
MGN 571 (F)	-	Fishing Vessels: Prevention of Man Overboard
MGN 588 (F)	-	Compulsory Provision and Wearing of Personal Flotation Devices on Fishing Vessels
MMSI	-	Maritime Mobile Service Identity
MOB	-	man overboard
MSIS	-	Marine Survey Instructions for the Guidance of Surveyors
MSN	-	Merchant Shipping Notice
MSN 1871 (F)	-	The Code of Practice for the Safety of Small Fishing Vessels of less than 15m Length Overall
Perspex	-	a strong clear plastic sometimes used instead of glass
PFD	-	personal flotation device
PLB	-	personal locator beacon
RNLI	-	Royal National Lifeboat Institution
Seafish	-	Sea Fish Industry Authority
SFVC	-	Small Fishing Vessel Certificate
UTC	-	universal time coordinated
VHF	-	very high frequency
W	-	watt

TIMES: all times used in this report are UTC+1 unless otherwise stated.



Pioneer

SYNOPSIS

On the morning of 29 July 2021, the skipper of the UK registered fishing vessel *Pioneer* (NN200) accidentally entered the water as the vessel was heading back to its beach standing in Hastings, England. *Pioneer's* sole deckhand was unable to pull him back on board and the skipper was later recovered from the water with the help of a rescue helicopter's winchman and airlifted to hospital, but he could not be revived.

The MAIB investigation found that *Pioneer* had a low bulwark at its aft deck, which did not prevent the skipper's fall into the water. At the time of the accident neither the skipper nor deckhand were wearing a personal flotation device, although two were available on board. Critical safety equipment was either missing, incorrectly fitted or out of date. There were no risk assessments held on board, emergency drills had not been practised and the skipper had not undertaken mandatory risk awareness training. Collectively, these deficiencies indicated that *Pioneer* was being operated with a low standard of safety management at the time of the accident.

Pioneer held a Small Fishing Vessel Certificate; however, a post-accident inspection carried out by the Maritime and Coastguard Agency found 21 safety critical deficiencies, five of which had been recorded during the previous vessel inspection 8 months before the accident. The investigation concluded that the instructions to Maritime and Coastguard Agency surveyors did not contain robust guidance to ensure that successive surveys were comparable and to a consistent standard.

Since the accident, the Maritime and Coastguard Agency has mandated that small fishing vessels have a minimum bulwark height of 1000mm and a means to recover an unconscious person from the water.

The MAIB has made a recommendation to the Maritime and Coastguard Agency to revise its guidance to surveyors to provide clear instructions on how to complete surveys and inspections, record the checklist used to identify findings and close out deficiencies.

SECTION 1 – FACTUAL INFORMATION

1.1 PARTICULARS OF *PIONEER* AND ACCIDENT

VESSEL PARTICULARS	
Vessel's name	<i>Pioneer</i>
Flag	UK
Classification society	Not applicable
IMO number/fishing numbers	NN200
Type	Potter
Registered owner	Privately owned
Manager(s)	Not applicable
Construction	glass reinforced plastic
Year of build	1988
Length overall	7.94m
Registered length	7.94m
Gross tonnage	Not applicable
Minimum safe manning	Not applicable
Authorised cargo	Fish/shellfish

VOYAGE PARTICULARS	
Port of departure	Hastings, England
Port of arrival	Hastings, England
Type of voyage	Fishing
Cargo information	Fish
Manning	2

MARINE CASUALTY INFORMATION	
Date and time	29 July 2021 at about 0853
Type of marine casualty or incident	Very Serious Marine Casualty
Location of incident	Hastings, England
Place on board	Aft main deck
Injuries/fatalities	1 fatality
Damage/environmental impact	None
Ship operation	Underway
Voyage segment	Mid-water
External & internal environment	Wind south-westerly force 5 to 7, clear; moderate seas, 2m swell; sea temperature 16°C to 17°C
Persons on board	2

1.2 NARRATIVE

1.2.1 The accident

At 0520 on 29 July 2021, the UK registered potter/gill netter *Pioneer* (NN200) set off from its beach standing at Hastings, England with the vessel's owner/skipper (the skipper) and a deckhand on board. The skipper was at the helm, and it took less than an hour for the vessel to reach its fishing grounds on Shingle Bank, about 6.3 nautical miles to the south of Hastings (**Figure 1**).

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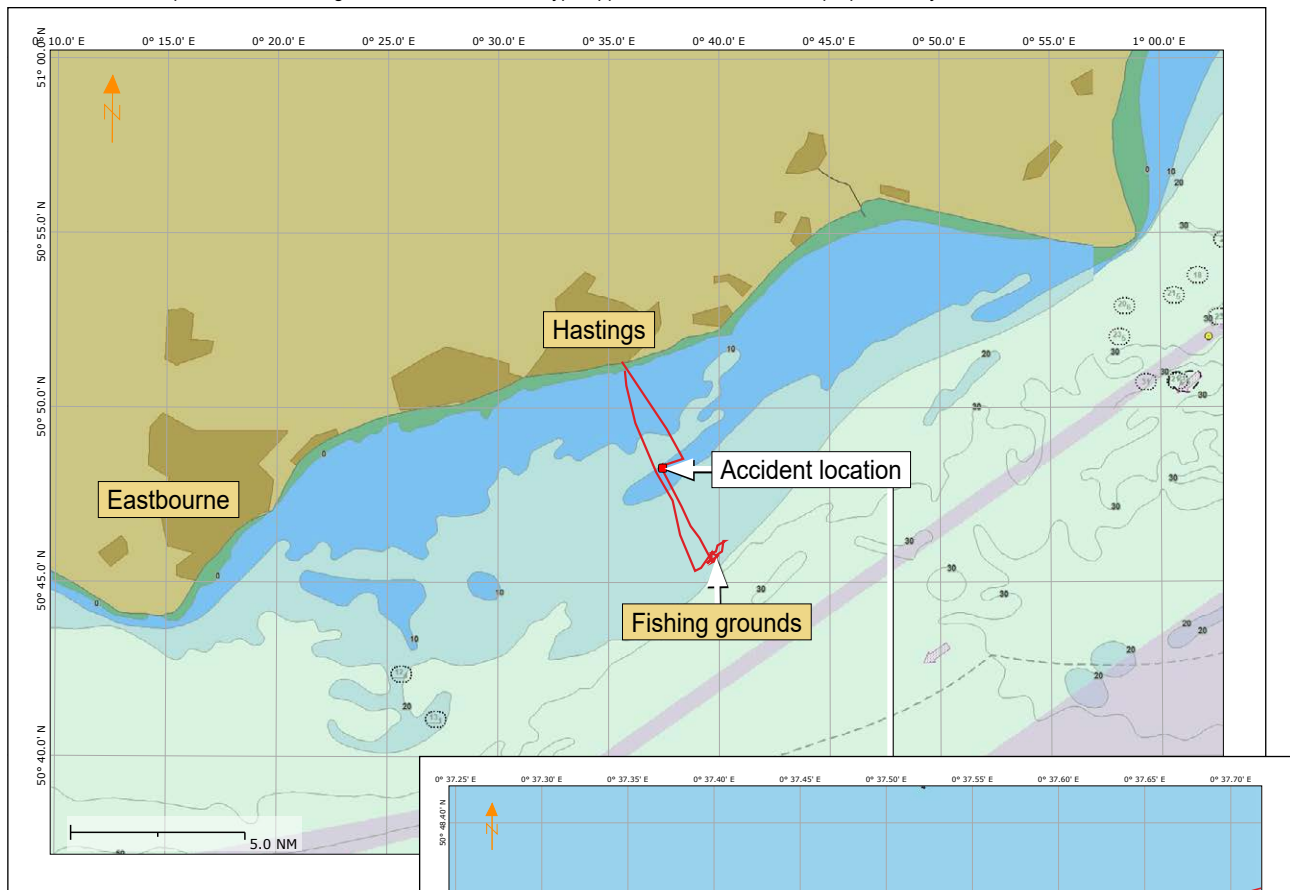


Figure 1: Location of accident and track of *Pioneer*

Pioneer was moving in a moderate 2m swell at the fishing grounds.

The skipper and deckhand shot away four gill nets before beginning to recover the four nets they had set during the previous fishing trip. The skipper and deckhand used the net hauler mounted on *Pioneer*'s bow to bring in three of the gill nets; the recovery of each net and the sorting of the catch took approximately 25 minutes. At about 0755, they started searching for the fourth net but were unable to locate its marker buoy. The skipper and deckhand removed their personal flotation devices (PFD), put them in the wheelhouse, and then stowed one of the gill nets in a storage bin.

The skipper and deckhand used the net hauler mounted on *Pioneer*'s bow to bring in three of the gill nets; the recovery of each net and the sorting of the catch took approximately 25 minutes. At about 0755, they started searching for the fourth net but were unable to locate its marker buoy. The skipper and deckhand removed their personal flotation devices (PFD), put them in the wheelhouse, and then stowed one of the gill nets in a storage bin.

At 0814, the sea conditions were becoming rough and the skipper decided to abandon the search for the fourth gill net and return to the beach standing, ahead of the predicted low tide.

The skipper set *Pioneer's* heading to a northerly direction and secured the helm with a rope lashing. The vessel was trimmed slightly by the bow¹ and so the skipper and deckhand moved a bin filled with nets from the forward part of the freeboard deck and jammed it against the aft port elevation of the wheelhouse. The deckhand then returned to the wheelhouse to adjust the vessel's course while the skipper remained outside on the aft deck.

At about 0853, the deckhand had just released the helm lashing when they heard the skipper cry out. The open door of the wheelhouse blocked the deckhand's view of the starboard side of the aft deck and, when they stepped out of the wheelhouse, they saw that the skipper was in the water some distance aft of the vessel. The skipper was struggling to stay afloat and was calling for help (**Figure 1**).

The deckhand immediately released the life ring that was stowed outside the wheelhouse and threw it towards the skipper. The life ring did not have a line attached to it and landed some distance away from the skipper, who managed to swim a few strokes towards it. Meanwhile, the deckhand returned to the wheelhouse and attempted to make a "Mayday" call on the very high frequency (VHF) radio but received no response. The deckhand then manoeuvred *Pioneer* around in a circle, bringing the skipper on to the vessel's windward side. By this time, the skipper was motionless with his face in the water.

The deckhand reduced *Pioneer's* engine speed to just above tick over as they approached the skipper and brought the boat to a stop. The deckhand used a boathook to pull the skipper to *Pioneer's* starboard aft quarter and made repeated attempts to haul him on board, but the skipper was too heavy for the deckhand to lift out of the water. The deckhand slipped a rope under the skipper's arms and tied it off to *Pioneer's* starboard aft quarter, then returned to the wheelhouse to call for help.

1.2.2 Emergency response

At 0921, the deckhand successfully transmitted a "Mayday" call using the VHF radio, passing details of the accident to the coastguard and requesting immediate assistance. The deckhand returned to the aft deck, unlashd the rope and pulled the skipper through the water to the starboard forward quarter. The deckhand secured the rope to a deck cleat and used a knife to cut away the skipper's oilskins before making further unsuccessful attempts to recover him on board. At 0939, the coastguard tasked a rescue helicopter and Royal National Lifeboat Institution (RNLI) inshore lifeboat (ILB) and all-weather lifeboat to the incident. At 0958, the helicopter arrived on scene and a winchman was lowered onto *Pioneer's* deck. The winchman and the deckhand recovered the unconscious skipper back on board the vessel and carried him to the aft deck. At 1013, the ILB arrived and transferred one of its crew onto *Pioneer*. At 1019, having airlifted the skipper and winchman from the vessel, the helicopter departed for Eastbourne District General Hospital.

The ILB crew member assisted the deckhand to navigate *Pioneer* back to Hastings where, at about 1100, the vessel was hauled onto its beach standing. At 1125, the skipper was declared deceased at the hospital.

¹ This occurs when the draught (water level) is higher at the bow of a vessel than it is at the stern.

1.2.3 Environmental conditions

The accident happened during daylight hours in good visibility and dry weather conditions. The sea conditions comprised moderate waves with a 2m swell and a water temperature of between 16°C and 17°C. The wind was south-westerly, Beaufort force 5 to 7.

1.3 THE CREW

Pioneer was normally operated by the skipper and one deckhand.

1.3.1 Skipper

Pioneer's skipper, Gary Cornelius, was a 58-year-old career fisherman who had owned several fishing vessels before he purchased *Pioneer* in 2016. He was able to swim and, with the exception of the Safety Awareness and Risk Assessment course, had completed the mandatory safety training required to serve on a UK fishing vessel.

At the time of the accident, the skipper was wearing casual clothing under his oilskins and boots. It was reported that he had been recovered from man overboard (MOB) incidents on three previous occasions, one of which had been from *Pioneer*.

1.3.2 Postmortem

The postmortem report recorded the skipper's approximate height as 172cm and weight as 71kg. Toxicology test results indicated a negative result for drugs and alcohol.

The skipper had no external injuries but there was evidence he had suffered a cardiac arrest and had underlying ischaemic heart disease². His cause of death was recorded as *ischaemic heart disease and dry drowning*.

1.3.3 Deckhand

The deckhand was 59 years old and had served on a variety of ships and fishing vessels throughout their career. Besides completing mandatory safety training the deckhand had obtained a Seafish Industry Authority (Seafish)³ Under 16.5m Skipper's Certificate (Restricted) in 2001 and had completed a Global Maritime Distress and Safety System (GMDSS) radio course in 2010.

The deckhand had known the skipper and his family for over 30 years and had joined *Pioneer* in December 2020, having also worked on board the fishing vessel during 2018 and 2019.

The deckhand had previously fallen over the side of a fishing vessel and been recovered back on board; they had also successfully recovered fellow crew members who had fallen overboard from small vessels they were working on.

² Narrowing of the arteries that feed the heart, more commonly known as coronary heart disease.

³ Seafish is a non-departmental public body that supports and provides training to the UK seafood industry.

1.4 *PIONEER*

1.4.1 General

Pioneer (**Figure 2**) was a 7.94m glass reinforced plastic vessel built in 1988 in Dover, England. The vessel was powered by a 63 kilowatt engine, which was housed in a compartment below a hatch forward of the wheelhouse on the freeboard deck.

Pioneer's freeboard deck was enclosed by a 600mm high bulwark (**Figure 3**). Port and starboard guardrails extended from the aft quarters to midships. Each rail comprised a horizontal pipe, supported between two vertical stanchions, that stood 370mm above the top of the bulwarks and were approximately 970mm above the freeboard deck. The nine freeing ports, located in the port and starboard bulwarks at freeboard deck level, allowed water to drain from the deck into the sea; there were no other bulwark openings. Forward of the guardrails, the height from the waterline to the top of the bulwark was approximately 930mm.

A pot hauler was mounted on the vessel's port bow and a net hauler was mounted opposite this on the starboard bow. The gill nets were stowed in plastic bins on the freeboard deck when not in use. Two rectangular metal grab handles were mounted externally, one above the other, on the port bow (see **Figure 2** inset).

Pioneer's enclosed wheelhouse was accessed by a door on its starboard side, which opened inwards. There was a small deck area aft of the wheelhouse.

The wheelhouse was equipped with the engine's throttle control, a helm, two global positioning system plotters and a fixed dual watch⁴ VHF radio set with digital selective calling (DSC⁵) capability, that enabled distress messages to be sent (**Figure 4**). The dual watch VHF radio had two power output settings: a low power 1 watt (W) setting that was used for short, local transmission ranges and a high power 25W setting that was used for long distance and distress transmissions. The Maritime Mobile Service Identity (MMSI)⁶ number could be programmed via the dual watch VHF radio's setup menu; instructions for how to do this were available online.

⁴ Dual watch enables VHF channel 16 and another preset VHF channel to be monitored simultaneously by switching between them.

⁵ Digital selective calling is a digital alerting system that, on the press of a single button, can send a vessel's identity, position and the nature of its distress to all DSC-equipped vessels and shore stations within range.

⁶ The MMSI number was a nine-digit sequence that was unique to each vessel and enabled any distress message sent via DSC to be attributed to it.

For illustrative purposes only: not to scale

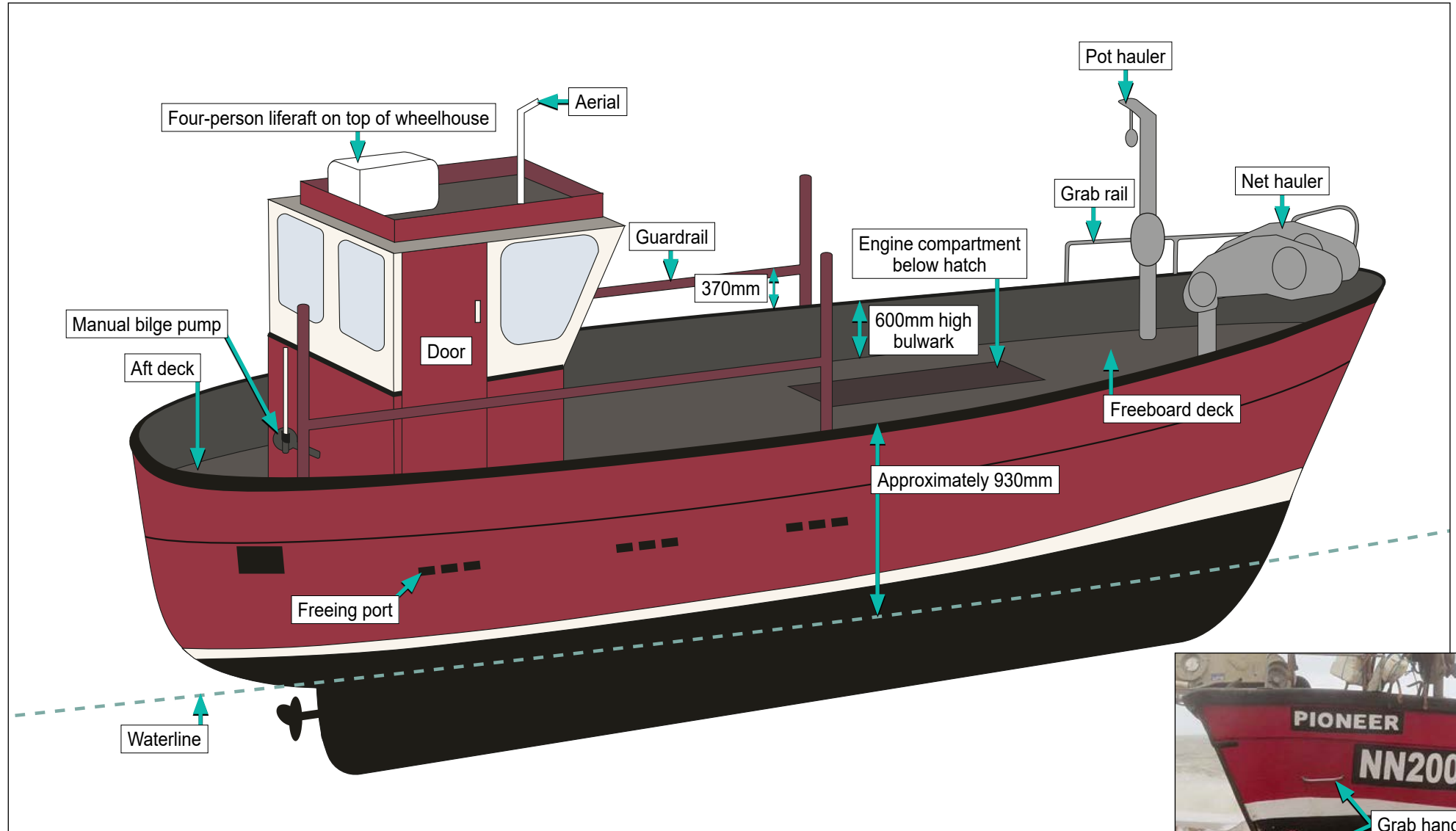


Figure 2: Pioneer's deck arrangement





Figure 3: View of aft deck bulwark with a person who is 172cm tall standing adjacent



Figure 4: Pioneer's VHF digital selective calling radio

1.4.2 Operation

Pioneer operated as a potter or a static/gill netting vessel and mainly fished for whelks and white fish such as cod, monkfish and haddock.

When gill netting, the crew typically shot the net from *Pioneer*'s aft deck by throwing the float, Danline rope and anchor into the water, followed by the net. The net was recovered by retrieving the float and heaving the Danline rope and net back on board using the bow-mounted net hauler. The catch was sorted into boxes and later landed in Hastings, where it was sold to a local fish merchant.

A shed that was located approximately 60m from *Pioneer*'s beach standing was used as an office and for storage of loose fishing equipment. *Pioneer* and other fishing vessels that used the beach standings had experienced theft and vandalism so it was common for owners to remove loose equipment from their beached vessels for safe storage elsewhere. Safety drills were not carried out on board *Pioneer*.

1.4.3 Post-accident inspection and equipment tests

Investigators examined *Pioneer* at its beach standing on 30 July and 31 July 2021.

The wheelhouse was fitted with three windows on its forward elevation (**Figure 5a**), two on its port side (**Figure 5b**), one on its starboard side (**Figure 5c**), and two on its aft elevation (**Figure 5d**). The window panes were made of Perspex⁷ and were all semiopaque, scratched and/or cracked. The window on the starboard side of the aft elevation became partially obscured when the wheelhouse door was open and tied back, limiting visibility to the aft deck.

Further inspection of the wheelhouse found that: the electrical switch panel for the lights was lying loose on the console above the helm (**Figure 6a**); the wire terminals of the 12-volt direct current battery were fully exposed (**Figure 6b**); a toolbox had been used to cover a hole in the deck (**Figure 6c**); and the contents of the first aid kit had expired (**Figure 6d**).

In the engine compartment, the engine's cooling water expansion cap was missing and a smoke and heat fire detector was lying on a shelf, having been detached from its base.

Two gill nets were lying loose on the freeboard deck (**Figure 7a**) and one net was stowed in a plastic bin (**Figure 7b**) on the port side of the aft deck. A 140mm hole in the deck just aft of the bin was missing its cover, exposing the access to the fuel filler.

Two 150N⁸ auto inflate PFDs were found hanging on the inside of *Pioneer*'s wheelhouse door (**Figure 8**), one of which was in a clear plastic pouch with a zip that was corroded and jammed. The outer fabric to both PFDs was torn and dirty and neither had been serviced since 2013.

⁷ A strong transparent plastic, which is sometimes used instead of glass.

⁸ A Newton is a metric measurement of force used to indicate lifejacket buoyancy.



Figure 5: Pioneer's wheelhouse windows



Figure 6: Pioneer's wheelhouse at time of MAIB examination

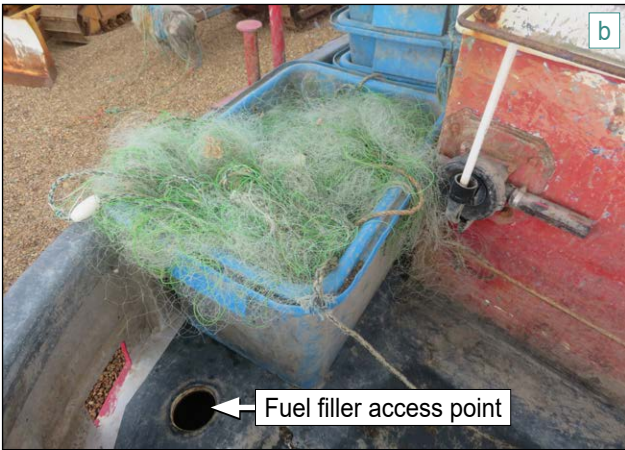


Figure 7: *Pioneer's* gill nets and fuel filler access point with cover missing



Figure 8: Personal flotation devices hanging on *Pioneer's* door

A four-person liferaft (**Figure 9**) was stowed on the port side of the wheelhouse roof and was due to be serviced in February 2022; it was unsecured, there was no hydrostatic release unit (HRU) and its painter was not attached.

A manual bilge pump (**Figure 10**) was mounted on the aft elevation of the wheelhouse. No pipework was attached to the pump. All of the distress flares had expired in December 2017. No safety documents were found on board *Pioneer*.



Figure 9: *Pioneer's* four-person liferaft

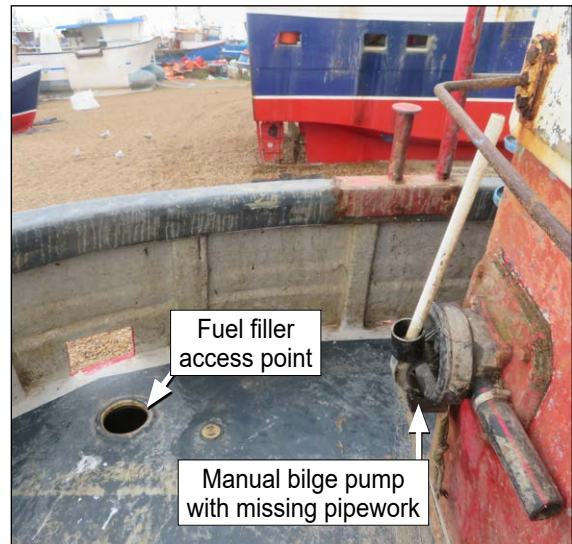


Figure 10: *Pioneer's* manual bilge pump

Some paperwork was kept in the skipper's beach storage shed. This included the Seafish safety folder, containing checklists, and templates and forms for documenting the vessel's risks and hazards, none of which had been completed. There was also a single page *Risk Assessment (Annex A)* comprising several generic statements about the operation of the vessel, including *ensure all persons on-board are wearing MCA approved PFDs and any defects to be reported immediately upon discovery.*

The investigation commissioned a specialist to carry out an assessment of the PFD that the skipper was reported to have been wearing just before the accident. The assessment determined that the PFD was *in worn condition* and confirmed it to be outside its service date. When tested the PFD was found to inflate manually with no gas leakage. It was deemed that it would *have automatically inflated and supported the wearer as designed.*

1.5 REGULATIONS AND GUIDANCE

1.5.1 General

Merchant Shipping Notice (MSN) 1871 (F) Amendment No.1, The Code of Practice for the Safety of Small Fishing Vessels of less than 15m Length Overall, (the Code), came into force on 31 December 2018. The Code included the requirement that unless measures were in place that eliminated the risk of fishermen falling overboard they should be provided with and must wear PFDs or safety harnesses. The Code also referred readers to Marine Guidance Notice (MGN) 588 (F) Compulsory Provision and Wearing of Personal Flotation Devices on Fishing Vessels. The MCA publication *Fishermen's Safety Guide* provided further advice on how to identify hazards, put in place control measures to mitigate them and improve safety on board fishing vessels. It identified hazards such as slipping or tripping and falling overboard and reiterated the Code's requirements on the wearing of PFDs and harnesses; it further asserted that fishermen *MUST wear a PFD or a safety harness* where risks could not be eliminated.

The Code required monthly emergency drills to be carried out to ensure all crew were familiar with the use of the equipment and referred the reader to MGN 570 (F) Fishing Vessels: Emergency Drills, which included a section on MOB drills that guided skippers and crew to:

Make sure the retrieval equipment is usable with the levels of manning on board – ensure it can be operated by the crew if one of them has gone overboard;

The Code further mandated that, by 23 October 2019, either an Emergency Position Indicating Radio Beacon (EPIRB) was to be carried on board fishing vessels under 10m or each crew member was to be provided with a personal locator beacon (PLB), which was to be worn while working on the open deck.

1.5.2 Man overboard

MGN 571 (F) Fishing Vessels: Prevention of Man Overboard provided information on the identification of hazards that might lead to an MOB situation and included a *Risk Review Document* designed to help fishermen assess and control the risks on board their vessels. Annex C of MGN 571 (F) provided guidance on how to prevent crew from falling overboard, including:

Bulwarks and Guardrails

Efficient bulwarks or guard rails shall be fitted on all exposed parts of the working deck and on superstructure decks if they are working platforms. The height of bulwarks or guard rails above deck shall be at least 1 m. There should be no gaps or lowpoints except when these are needed for operational reasons, and then they should only be open for the minimum time possible. [sic]; and

Visibility of working areas

From the wheelhouse it shall be possible to view all workplaces on the weather deck. Where it is necessary to ensure such visibility, the wheelhouse shall be provided with windows to the floor.

Both MGN 571 (F) and MGN 570 (F) cautioned that, unless a person was rescued within 5 minutes of falling overboard, it was highly likely that they would be either unable to help themselves or unconscious. During this period the effect of cold shock would result in hyperventilation, increase in blood pressure and an increased risk of drowning or heart failure.

The Fishing Industry Safety Group (FISG)⁹ *Home and Dry* safety campaign¹⁰ provided guidance to the fishing industry on the conduct of emergency drills, the use of PFDs, methods of reboarding vessels from the water and the importance of risk assessments.

The RNLI's website detailed the use of ladders for MOB recovery and showed alternative ways to reboard a vessel from the water, such as hanging tyres over the side.

1.5.3 Training

Fishermen serving on board UK registered fishing vessels were required to complete the mandatory safety training courses as detailed in MGN 411 (M+F) Training and Certification Requirements for the Crew of Fishing Vessels and their Applicability to Small Commercial Vessels and Large Yachts.

Safety training courses were organised and delivered by Seafish and, while equivalent approved training providers were accepted for some of the UK courses, none were considered to offer a comparable level of competency to the Safety Awareness and Risk Assessment course.

New entrants to fishing were required to complete the 1-day Basic Sea Survival training before starting work on board a UK fishing vessel and the Basic First Aid, Basic Fire Fighting and Prevention, and Basic Health and Safety 1-day courses were to be completed within 3 months of starting work as a fisherman. All fishermen with 2 or more years' experience were required to complete the Safety Awareness and Risk Assessment course, regardless of their nationality.

⁹ FISG was an industry stakeholder group, whose purpose was to improve the safety of commercial fishing at sea.

¹⁰ <https://www.homeanddry.uk/>

1.5.4 Safety management

The Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997, Regulation 5 stated that an employer had a general duty to:

ensure the health and safety of workers and other persons so far as is reasonably practicable

To fulfil their general duties, an employer was required to: avoid or minimise risks; evaluate unavoidable risks and take action to minimise them; and adopt safe working practices.

Further, the requirements of the Code stipulated that a vessel's on board safety equipment should be properly maintained and serviced and that an appropriate health and safety risk assessment must be completed.

1.5.5 New legislation

On 6 September 2021, approximately 5 weeks after the *Pioneer* accident, MSN 1871 Amendment No.2 came into force. For new and existing vessels, the amended Code required that:

The perimeter of an exposed deck should be fitted with bulwarks, guard rails or guard wires of sufficient strength and height for the safety of persons on deck; the height of tubular railings and guard wires being not less than 1000mm above the deck (915 mm where already fitted)... [sic]

The amended Code also stated:

Crewed Vessels must have an efficient means of recovering an unconscious person from the water and enable a person in the water to get back on board the Vessel, either by a permanent boarding ladder or means deployable by the crew. [sic]

1.6 SURVEY AND INSPECTION OF SMALL FISHING VESSELS

1.6.1 General

Fishing vessels under 15m length overall were inspected by the MCA to verify compliance with the Code and other applicable legislation, after which a Small Fishing Vessel Certificate (SFVC) was issued. The SFVC was valid for 5 years, after which a renewal inspection was required. Fishing vessel skippers were required to endorse the SFVC annually between MCA inspections to confirm their vessel's ongoing conformity with the Code; the MCA deemed the SFVC to be invalid if the vessel or its operation deviated from the letter of the Code. The 5-yearly SFVC inspection was non-chargeable; however, the MCA charged an hourly rate if a return visit to the vessel was required to check that defects had been rectified.

The MCA publication *Fishing Vessel Surveys and Inspections: How to prepare for your next MCA visit*¹¹ provided advice to help owners, skippers and fishermen ensure the successful outcome of an inspection or survey. The document specified the relevant Code requirements and listed the documents and evidence to be

¹¹ <https://www.gov.uk/government/publications/fishing-vessel-survey-guide-for-owners-and-operators>

available for inspection. This included crew training certificates, safety equipment awareness and risk assessment copies and noted that an MOB risk assessment *MUST be written*. The guide also advised that the condition of the vessel's windows would be checked and that blanks should be available for broken external windows.

1.6.2 Instructions to surveyors

The MCA provided its surveyors with *Marine Survey Instructions for the Guidance of Surveyors* (MSIS), detailing the frequency and conduct of vessel surveys and inspections. The applicable instructions in force at the time of *Pioneer's* most recent inspection were MSIS 27, Survey and Inspection of Fishing Vessels chapters 1 to 17 (October 2020), and MSIS 38, Instructions to Surveyors – Inspection Policy (July 2020).

1.6.3 Conduct of a survey

MSIS 27 comprised 17 chapters and 22 annexes and included specific guidance on fishing vessel safety equipment and MOB procedures:

Chapter 1, section 1.21.1 instructed that aide-memoire MSF 5549 must be used for the survey and inspection of fishing vessels under 15m; not all of the checkpoints on the aide-memoire were applicable to vessels under 10m. MSF 5549 also recommended that documented risk assessments should be carried on board and specified that there must be a record of a written MOB risk assessment. The attending inspector/surveyor was advised to take photographs of any defects identified during the inspection and forward these with their report.

Chapter 1, Annex 1, section 4.8.2 referenced the use of checklist MSF 1341, which was a record of the minimum safety equipment requirements for a *DECKED vessel of less than 10 metres (L)*.

Chapter 11 stated the requirement for regular emergency drills to be completed and instructed the surveyor to check that these had taken place. Where no such record could be produced, it was to be recorded as a deficiency.

Chapter 11, section 11.4.3 specified that at least two drills should be undertaken during an inspection of a crewed vessel, one of which was to be an MOB drill to check skipper and crew awareness, including the correct procedure for contacting the coastguard and how to use the MOB systems on board.

Chapter 11, section 11.18 addressed the prevention of fishermen falling overboard, specifically the identification of the areas where regular work activity takes place within 1m of deck edging and measures to control the associated risks. It also stated that an MOB risk assessment should set out whether a PFD or safety harness was to be worn if the control measures could not eliminate the risk of an MOB.

Appendix B stated that bulwarks and guardrails should be at least 1m above deck.

Annex 16 included both MSF 5549 and MSF 1341. In August 2021, to align with the incoming MSN 1871 Amendment No.2, new items were added to the MSF 1341 checklist.

1.6.4 Deficiencies

MSIS 38, Part B, chapter 1 required inspectors to complete MSF 1602/3 following an inspection to provide a snapshot of the vessel's condition. All deficiencies, including items identified and closed out during the survey, were to be recorded; however, inspectors were permitted to exercise limited discretion if the vessel was found to be in otherwise good condition.

An Improvement Notice, requiring remedial action within 3 months, would be served where it was identified during an inspection that a mandatory basic safety training course had not been completed by the crew on board. This excluded the Basic Sea Survival course, for which a Prohibition Notice would be issued.

1.6.5 Deficiency rectification

MCA surveyors recorded the fishing vessel's details and any identified deficiencies on handwritten reports following each inspection, a copy of which was passed to the vessel owner/skipper. The content of the inspection report would later be entered into PELORUS, the MCA's electronic ship inspection and survey database. Inspection documents and any photographs taken would be uploaded to the MCA's SharePoint storage system.

Vessel owners were required to notify their local MCA marine office when outstanding deficiencies had been rectified. MSIS 27, section 3.2.1, Annex 1 advised that an emailed digital image could be accepted as sufficient evidence that a deficiency had been rectified or to decide that a return visit to the vessel was required. MCA marine office staff would update PELORUS to reflect the outcome and, if applicable, issue a SFVC.

1.7 PIONEER SURVEY AND CERTIFICATION

1.7.1 History

Before the accident the MCA had last inspected *Pioneer* on 26 November 2020, at its beach standing in Hastings. The attending MCA surveyor completed checklist MSF 1341 (Revision 04/18) and identified seven deficiencies (**Annex B**), all of which were assigned action codes 17 and 98 and required rectification before the vessel could proceed to sea. The surveyor took one photograph of *Pioneer* during this inspection (**Figure 11**).

On 27 November 2020, the surveyor emailed MCA colleagues informing them of a conversation with the Hastings Fishermen's Protection Society to:

forewarn them that we may be carrying out GI's on FV's in Hastings randomly when in the area to check compliance with Safety equipment. [sic]; and

As part of this warning I have said enough is enough and from now on any vessel found not to be complying when the GI is carried out. Will be issued with a Prohibition Notice if deemed appropriate for the number of deficiencies or items found to be not on the vessel. [sic]

After the inspection the surveyor received copies of receipts from the skipper for the following purchases:

- an EPIRB and handheld VHF DSC radio (receipt dated 1 December 2020, and a delivery note);
- a carbon dioxide fire extinguisher and two battery-powered, radio-interlinked smoke and heat alarms (receipt dated 1 December 2020);
- an HRU for a 4 to 12-person liferaft (receipt dated 4 December 2020, and a delivery note); and
- the services of an electrical contractor, which the skipper reported was for the programming of a VHF DSC radio (receipt dated 13 January 2021).

On 27 December 2020, the surveyor updated PELORUS with a note that recorded:

Photos and various documents were provided covering all aspects of rectification of deficiencies noted on the survey. [sic]

On 10 January 2021, the surveyor issued an SFVC for *Pioneer*, which was dated 11 December 2020 and valid until 11 November 2025.

Later in 2021, before the accident, the MCA surveyor returned to the Hastings beach standing to inspect another fishing vessel; *Pioneer* was out fishing at the time.



Figure 11: *Pioneer* at time of the MCA survey (November 2020)

1.7.2 Maritime and Coastguard Agency post-accident inspection

On 30 July 2021, the day after the accident, a targeted post-accident inspection of *Pioneer* and its safety equipment was carried out by another MCA surveyor using a *Checklist of requirements* (based on MSN 1871 Amendment No.1) and aide-memoire MSF 5549. A total of 21 deficiencies were recorded during the inspection, five of which had previously been noted in the November 2020 inspection (**Annex B**). None of the equipment that the skipper had reported as being purchased after the November 2020 inspection was found either on board or in the beach storage shed. Further, *Pioneer*'s MMSI number had not been programmed into the VHF DSC radio and no EPIRB had been registered to the vessel.

The MCA surveyor detained *Pioneer* due to the number of safety critical deficiencies that the post-accident inspection had identified. During the inspection it was stated that the owners of some fishing vessels had, in the past, borrowed other vessels' safety equipment to enable them to pass an MCA inspection.

1.8 SIMILAR ACCIDENTS

1.8.1 *About Time* – person overboard

On 14 June 2011, the 11.9m potting vessel *About Time* was on passage in good weather when a deckhand was lost overboard. The investigation (MAIB report 5/2012¹²) found that the accident was most likely due to the deckhand tripping and falling over a low bulwark. A recommendation was made to the vessel's owner to improve the safety of the on board working practices and the crew's hazard awareness.

1.8.2 *St Amant* – person overboard

During the early hours of 13 January 2012, a deckhand was lost overboard from the 17.8m scallop dredger *St Amant* as it was on passage towards fishing grounds in Cardigan Bay. The investigation (MAIB Report 1/2013¹³) considered it likely that the deckhand fell over the vessel's aft bulwarks, probably while in the process of relieving himself, or had slipped on part of the fishing gear stowed on deck. He was not wearing a PFD at the time. The investigation established that the vessel had been granted an exemption from complying with the minimum height requirements for bulwarks, which had not been reviewed, and that a large proportion of the deficiencies identified during previous surveys and inspections had not been confirmed as rectified. The condition and the standard of housekeeping on board *St Amant* at the time of the accident were found to be poor.

Recommendations were made to the MCA to review and clarify aspects of its survey and inspection policy for fishing vessels. These included procedures for the review and deletion of exemptions; the management of outstanding deficiencies; and the introduction of a policy and procedure for conducting detailed inspections of fishing vessels following serious accidents.

¹² <https://www.gov.uk/maib-reports/person-overboard-from-potter-about-time-off-the-pembrokeshire-coast-wales-with-loss-of-1-life>

¹³ <https://www.gov.uk/maib-reports/person-overboard-from-scallop-dredger-st-amant-off-the-north-west-coast-of-wales-with-loss-of-1-life>

1.8.3 *Fram of Shieldaig* – person overboard

On 7 August 2018, a deckhand from the 9.8m potting vessel *Fram of Shieldaig* entered the water while manoeuvring a small tender alongside the moored fishing vessel. No one witnessed the deckhand enter the water, but the investigation (MAIB report 8/2019¹⁴) found that it was likely he slipped or stumbled as he moved forward from his seated helm position while preparing to pass the tender's painter to the potting vessel's skipper. The deckhand subsequently drowned because he was not wearing a lifejacket and the skipper was unable to recover him from the water unaided.

¹⁴ <https://www.gov.uk/maib-reports/man-overboard-from-potter-fram-of-shieldaig-with-loss-of-1-life>

SECTION 2 – ANALYSIS

2.1 AIM

The purpose of the analysis is to determine the contributory causes and circumstances of the accident as a basis for making recommendations to prevent similar accidents occurring in the future.

2.2 OVERVIEW

The skipper of *Pioneer* was standing on the vessel's aft deck adjacent to a low bulwark when he fell overboard. Once in the water, and without a PFD, the skipper attempted to swim to the life ring that had been thrown to him but struggled to stay afloat in the developing swell. *Pioneer's* deckhand brought the vessel alongside the skipper but was unable to recover him on board. The skipper was unresponsive when he was eventually rescued from the sea with the help of a coastguard rescue helicopter winchman.

This section of the report will consider the factors that caused the skipper to fall overboard, the inability to quickly recover him and the management of safety on board *Pioneer*. The condition and inspection of the vessel will also be analysed.

2.3 THE ACCIDENT

2.3.1 The fall overboard

The skipper was alone on *Pioneer's* aft deck just before the accident and it is possible that the vessel's movement in the 2m swell caused him to lose his footing, which in turn led his centre of gravity to momentarily act outboard of the bulwark and result in his fall overboard. It is also possible that an obstacle on *Pioneer's* relatively small aft deck, such as the net box or missing fuel filler cover, caused the skipper to trip and stumble over the vessel's side. Further, as the skipper had a pre-existing heart condition it cannot be ruled out that he suffered a non-fatal heart attack that caused him to fall overboard. In each of these scenarios the low bulwark height, which was approximately coincident with the skipper's knee height, offered little protection from a fall over the vessel's side. Similar to the *About Time* and *St Amant* accidents, a bulwark height of 1000mm, recommended in both MGN 570 (F) and MSIS 27 and now mandatory for fishing vessels of 15m or less length overall following Amendment No. 2 of the Code, combined with the wearing of a tethered safety harness would have mitigated the risk of falling overboard.

The deckhand was close by in the wheelhouse; however, the damaged windows and open door blocked the skipper from their view and the deckhand did not see the skipper enter the water, delaying their response to the MOB situation. The deckhand's options to effect an immediate rescue were further reduced because, by the time they became aware of the accident, *Pioneer* had travelled some distance from where the skipper had entered the water.

2.3.2 Survivability

The Code mandated the wearing of a PFD by each crew member while working on board *Pioneer* as no risk mitigation existed to prevent a fall overboard. The skipper was alive but in distress when the deckhand responded to his call for help; had he

been wearing his PFD, which was later proven to be operational, it would most likely have automatically inflated upon his entry into the water. Less effort would therefore have been required from the skipper to stay afloat while wearing oilskins and boots and it is likely his airway would have been kept clear of the water, lowering his risk of drowning. It is probable that the panic induced by the stress and exertion required by the skipper to stay afloat, combined with the shock of entering relatively cold water and his existing heart condition, caused a fatal heart attack and dry drowning.

2.3.3 The recovery

The life ring thrown to the skipper did not have a line attached to it so the deckhand would not have been able to pull the skipper back to the vessel even if he had been able to swim to it. Had the skipper remained conscious he might have been able to swim to and reboard *Pioneer* using the grab handles fitted to the port bow (see **Figure 2**). The lack of MOB recovery equipment meant the deckhand had limited options to recover the skipper other than to attempt to manually lift him back on board. Similar to the *Fram of Shieldaig* accident, the weight of the unconscious skipper in waterlogged clothing, combined with his inability to help in his own rescue and the height of the bulwark above the waterline, made it impossible for the deckhand to haul the skipper back on board. During the attempted recovery the deckhand placed themselves at considerable risk of falling overboard, which was not mitigated as they were neither wearing a safety harness tethered to *Pioneer* nor a PFD.

2.3.4 Raising the alarm

Pioneer's VHF DSC radio was equipped with an emergency distress alert function but the MCA's post-accident survey identified that the MMSI number had not been programmed into the radio. Had the deckhand attempted to use the alert function it would have been unclear to listening stations that *Pioneer* was the vessel in distress, thereby delaying potential assistance from any nearby vessels.

The deckhand attempted to make a "Mayday" call on the VHF DSC radio from the wheelhouse after throwing the life ring to the skipper in the water. The investigation could not establish whether this initial call went unheard because the radio was not transmitting on high power, thereby limiting its range, or if the dual frequency radio had not been set to transmit on VHF channel 16. The deckhand had completed their GMDSS training many years before the accident and so could have been unfamiliar with the VHF DSC radio system on board. This might have impeded the deckhand's ability to send a distress message at the first attempt during the highly stressful MOB situation.

The time difference between the deckhand's first attempt at making a "Mayday" call and the successful call was almost 30 minutes, which delayed the tasking and arrival on scene of the rescue helicopter and lifeboats. The deckhand made

every effort to recover the skipper during the intervening period; however, it cannot be known what effect the delay in tasking rescue support had on the outcome of this accident.

2.4 SAFETY MANAGEMENT

2.4.1 Vessel operation

The windows of *Pioneer's* wheelhouse were semiopaque and cracked, which limited visibility and was contrary to the MGN 571 (F) requirement that good visibility of deck areas should be maintained to facilitate early awareness of an MOB situation. Other safety critical defects and trip hazards on the aft deck were also present on the day of the accident, thereby increasing the risk of an MOB.

The SFVC issued to *Pioneer* in January 2021 had been rendered invalid as on board safety equipment was either missing or in poor condition. Although there was some evidence of the skipper's attempts to comply with the safety regulations, neither the EPIRB nor handheld VHF DSC, for which he had supplied purchase receipts, were found on board the vessel during the post-accident inspections. Collectively, these deficiencies indicated that the vessel was being operated with a low standard of safety management at the time of the accident.

2.4.2 Emergency preparedness

The Code introduced a mandatory requirement for the crew of fishing vessels to complete regular drills to ensure that they understood their emergency duties and were used to practising them. Because drills were not conducted on board *Pioneer* its crew missed an opportunity to identify the absence of documented procedures and MOB equipment, or to appreciate how difficult it would be for a lone crew member to effect an MOB recovery.

2.4.3 Perception of hazards and risk assessment

Of the documents found in the beach storage shed, the Seafish safety folder risk assessments had not been completed and the risk assessment document neither detailed individual hazards nor proposed how to guard against them. Consequently, controls such as the use of tethered safety harnesses were not put in place to mitigate the risk of falling overboard. Both the skipper and the deckhand were used to working on *Pioneer's* open deck and were probably aware of the low bulwark at the aft deck from where the gill nets were shot. The 970mm high tubular rail above the bulwark did not encircle the deck and so did not mitigate the risk of a fall overboard while working next to the pot hauler, the net hauler or on the aft deck. It is possible the crew did not frequently use the aft deck while at sea and so did not consider the low bulwark height to be a significant hazard in their daily operation. Both the skipper and the deckhand had previously experienced successful MOB recovery situations while fishing; it is possible, therefore, that they considered the risk of falling overboard to be part of normal fishing operations, and were overconfident in their ability to recover either themselves or each other back on board.

It is also possible that the skipper did not have a full appreciation of the risks involved when moving about a vessel of *Pioneer*'s design because he had not completed the Safety Awareness and Risk Assessment course.

2.5 MARITIME AND COASTGUARD AGENCY VESSEL INSPECTION

2.5.1 Instructions to surveyors

MCA surveyors were provided with an array of instructions with the aim that inspections were completed to a common standard. However, the system was designed to be a flexible framework that permitted the attending surveyor to apply their own expertise and judgement. It is possible that the volume of MSIS documents, combined with the need to use both a checklist and an aide-memoire to carry out inspections of fishing vessels, could lead to confusion among MCA surveyors.

MCA surveyors were not required or able to upload their inspection checklists to PELORUS. With relevant documents stored in two different systems, it is possible the differences in the application of the MSIS instructions went unnoticed, leading to unchecked variances across inspections and surveys.

2.5.2 *Pioneer* inspections

It is likely that the MCA's November 2020 inspection of *Pioneer* was not conducted using aide-memoire MSF 5549 and possibly resulted in a number of deficiencies being missed, including the low bulwark height and the poor visibility from inside the wheelhouse. Both of these deficiencies were contrary to MGN 571(F) and the instructions to surveyors, and were apparent in the photograph taken at the time of inspection. The lack of safety training certification for the skipper and absence of a written MOB risk assessment as required by the Code also went unrecorded.

The MCA inspection carried out in July 2021 was conducted using MSF 5549 and with the knowledge that a fatal MOB had occurred, so it is likely that this inspection was more rigorous. The condition of *Pioneer*, its safety equipment and risk assessment at the time of this inspection, was such that it was unlikely that the vessel's deterioration had occurred during the 8 months between inspections and probable that some of the deficiencies were pre-existing.

2.5.3 Deficiency management

It is evident that the MCA surveyor who conducted the November 2020 inspection was content with the evidence of purchase provided by the skipper and so chose not to return to *Pioneer* to close out deficiencies to avoid imposing considerable cost to the skipper for a second inspection. The instructions to surveyors did not explicitly require a revisit to the vessel to verify the remedial action taken.

It is unknown what happened to the safety equipment purchased by the skipper after the November 2020 inspection; however, the receipts and delivery notes submitted as evidence of their purchase provided the basis to close out the seven recorded deficiencies and issue the SFVC for the vessel. Whether the MCA surveyor was supplied with photographic evidence of the new safety equipment in position on board *Pioneer* could not be determined, although it is possible that this equipment could have been removed after any photographs had been sent.

It is apparent that the MCA surveyor was concerned about the Hastings fishing fleet's safety equipment, and it is likely they would have revisited *Pioneer* while carrying out fishing vessel inspections there in 2021. Had the surveyor been able to visit *Pioneer*, it is possible the apparent lack of deficiency rectification might have resulted in the vessel being issued with a notice prohibiting it from operating.

The instructions for surveyors required that sufficient evidence must be supplied for deficiencies to be closed out. While intended to provide a measurable level of assurance to surveyors that deficiencies had been adequately rectified, the system was open to wide interpretation and relied on trust. With the exception of an EPIRB, there was no requirement for safety equipment to either be registered to a specific vessel or labelled as belonging to that vessel, which was open to abuse as safety equipment had reportedly been moved between vessels solely to pass an inspection.

SECTION 3 – CONCLUSIONS

3.1 SAFETY ISSUES DIRECTLY CONTRIBUTING TO THE ACCIDENT THAT HAVE BEEN ADDRESSED OR RESULTED IN RECOMMENDATIONS

1. The low bulwark around the aft deck offered little protection from falling overboard, and the skipper was not wearing a tethered safety harness to mitigate the risk of falling overboard. [2.3.1]
2. The lack of an effective means of recovering an unconscious person and the absence of MOB drills impeded the deckhand's ability to recover the skipper from the water. [2.3.3, 2.4.2]

3.2 OTHER SAFETY ISSUES DIRECTLY CONTRIBUTING TO THE ACCIDENT

1. The skipper's fall into the water was not observed but could have been the result of the vessel's movement, a slip or trip, or a non-fatal heart attack. [2.3.1]
2. The skipper died because of immersion in the water leading to a heart attack and dry drowning. [2.3.2]
3. The skipper was not wearing a PFD and it would have taken considerable effort to remain afloat in the developing swell. [2.3.2]
4. The skipper had a pre-existing heart condition, which combined with the effect of cold water shock may have affected his ability to respond to this accident. [2.3.2]
5. The skipper had not completed the Safety Awareness and Risk Assessment course and so may not have had a full appreciation of the risks associated with his vessel's operation. [2.4.2, 2.4.3]

3.3 SAFETY ISSUES NOT DIRECTLY CONTRIBUTING TO THE ACCIDENT THAT HAVE BEEN ADDRESSED OR RESULTED IN RECOMMENDATIONS

1. The MCA's inspection of *Pioneer* in November 2020 did not identify that the bulwark height around the stern of the vessel was inadequate or that the wheelhouse windows were semiopaque. [2.5.2]
2. The inspection and survey guidance and close out of deficiencies for MCA surveyors did not result in the application of a consistent standard during these assessments. [2.5.1, 2.5.3]

3.4 OTHER SAFETY ISSUES NOT DIRECTLY CONTRIBUTING TO THE ACCIDENT

1. The effect of the delay in the receipt of the VHF "Mayday" call by the coastguard on the outcome of this accident cannot be known. [2.3.4]
2. *Pioneer's* wheelhouse windows were broken and semiopaque to the extent that all-round visibility was severely impaired, there were a number of trip hazards, and essential safety equipment was either out of date for service or missing. Collectively, these deficiencies indicated that the vessel was being operated with a low standard of safety management at the time of the accident. [2.4.1]

SECTION 4 – ACTION TAKEN

4.1 MAIB ACTIONS

The MAIB has issued a safety flyer to the fishing industry (**Annex C**).

4.2 ACTIONS TAKEN BY OTHER ORGANISATIONS

The **Maritime and Coastguard Agency** has:

- In September 2021, published MSN 1871 Amendment No.2 mandating a minimum bulwark height of 1000mm on fishing vessels and a means to recover an unconscious person from the water.
- In August 2021, updated checklist MSF 1341 to include, *Means of Recovering unconscious/helpless person from water and, if single handed, means of getting back on board Vessel, deployable from the water.* [sic]

SECTION 5 – RECOMMENDATIONS

The **Maritime and Coastguard Agency** is recommended to:

2024/169 Revise its instructions for the guidance of surveyors to provide clarity on the conduct and recording of fishing vessel surveys and inspections, and review its guidance on the closing out of deficiencies.

Pioneer's risk assement document

FISHING VESSEL NN200

RSS A19952, RADIO CALL SIGN 2DZP3.

RISK ASSESSMENT

This Risk Assessment is for the safe operation of this vessel for the purpose of commercial fishing in the areas outlined in the licence

The operator of the vessel whilst engaged in commercial fishing will be a holder of all relevant certificates in accordance to the requirements of the MCA

The operator will undertake the responsibilities of a day to day assessments with due regard to:

Inspection of the vessels condition, fuel requirements, SOLAS, and satisfy him/herself that the vessel is fit for that days task

Assess the Actual and Forecasted weather conditions and tides in the time scale expected for that day's task

Safe manning to facilitate the safe launch, the nature of that days task, and the beach recovery

To ensure all persons on-board are wearing MCA approved PFDs

When guests are on-board to ensure that they are adequately briefed as to the safety equipment and all life-saving equipment carried under SOLAS/MCA requirements

Any defects to be reported immediately upon discovery

No alcohol on-board

This list is not exhaustive and the operator should show a responsible attitude towards the vessel and the other vessels in the surrounding area whether commercial or otherwise, and to the environment.

Comparison of deficiencies recorded during MCA inspections before and after the accident

Deficiency Code	Action Code	November 2020 (pre accident) inspection summary of finding	July 2021 (post accident) inspection_ summary of finding	Action Code
Certificates	17&98	Radio license to produce		17&98
Seafarer's employment agreement	17&98	To be provide for each crewmember		17&98
Fire fighting equipment and appliances	17&98	New fire extinguishers to provide	Multi purpose fire extinguisher not onboard	17&98
VHF radio installation	17&98	MMSI Number to be programmed to main VHF and portable VHF required for lifeboat	VHF DSC set MMSI to program. Portable VHF set for use with liferaft not located on board	17&98
Fire detection and alarm system	17&98	Fire detectors to be linked between wheelhouse and engine room	Engine room/wheel house linked fire detectors not operational	17&98
Inflatable life rafts	17&98	Liferaft to be correctly installed	HRU missing painter not installed	17&98
Satellite EPIRB	17&98	PLBs for crew or EPIRB for vessel to be provided	EPIRB and/or GPS 406 MHz PLB per person not located on board	17&98
Lifejackets incl. provision and disposition			Abandon ship lifejackets not onboard	17&98
Distress flares			Distress flares as required not located on board	17&98
Fire fighting equipment and appliances			Fire bucket handle/lanyard not as required	17&98
Other (certificates)			No vessel certification available at time of inspection	17&98
Bilge pumping arrangements			Bilge pumps (including manual pump) and bilge alarms not operational	17&98
Other (machinery)			Electrical wiring not as required, loose cables and insecure connections	17&98
Other (machinery)			Battery terminals not covered and corroded	17&98
Lights shapes sound signals			Navigation shapes not on board	17&98

Emergency lighting, batteries and switches			Emergency torch not working	17&98
Medical equipment, medical chest, medical guide			Medical kit (Cat C) out of date	17&98
Lifebuoys incl. provision and disposition			1 lifebuoy missing ¹ lifeboat markings and reflective tape to renew and 18m line to be provided	17&98
Bulwarks and freeing ports			Stern bulwark insufficient height	17&98
Manholes and flush scuttles			Aft deck fuel filler access cover missing	17&98
Propulsion main engine			Main engine cooling system expansion cap missing	17&98
Navigation bridge visibility			Wheelhouse windows broken	17&98

¹ Presumed to been lost at sea during the accident

MAIB safety flyer to the fishing industry

SAFETY FLYER TO THE FISHING INDUSTRY

**Fatal man overboard from the potting vessel *Pioneer* (NN200)
south of Hastings, England, on 29 July 2021**



Pioneer

Narrative

At about 0853 on 29 July 2021, the skipper of the UK registered fishing vessel *Pioneer* fell overboard from the aft deck of the vessel. At the time of the accident, *Pioneer* was returning from its fishing grounds to its beach landing at Hastings in moderate sea conditions with a 2m swell.

Pioneer's sole deckhand was in the wheelhouse when they heard a shout; they immediately went out onto the deck and saw the skipper in the water some distance aft of the vessel. The skipper was not wearing a personal flotation device (PFD). The deckhand threw a life ring towards the skipper and saw him attempt to swim to it before returning to the wheelhouse and manoeuvring the vessel back towards the skipper. By this time the skipper was motionless with his face in the water. The deckhand tried in vain to manually haul the unconscious skipper back on board.

The deckhand raised the alarm by making a "Mayday" call to the coastguard using a VHF radio, then made further unsuccessful attempts to help the skipper. Forty minutes later, with the help of a rescue helicopter winchman who had been lowered onto the vessel, the skipper was recovered on board and then airlifted to hospital, where he was later declared deceased.

The investigation found that the bulwark around *Pioneer's* aft deck was low and the vessel's wheelhouse windows were semiopaque and cracked, restricting visibility from inside. Some items of mandatory safety equipment were missing, damaged or out of date, the Seafish risk assessment had not been completed, emergency drills had not been conducted and the skipper had not undertaken mandatory safety awareness training.

Safety lessons

1. Make sure your vessel is well maintained and fit to go to sea. Check that your safety equipment is in its correct position on board and in date for service.
2. Risk assessments provide the opportunity to take stock of a fishing vessel's normal working activities, identify hazards and put in place measures to mitigate them. Had *Pioneer* had a guardrail of adequate height, or had the skipper been wearing a tethered safety harness in this case, either would have offered protection against the risk of falling overboard. Make sure you have attended the Seafish Safety Awareness course and refer to the Maritime and Coastguard Agency publication *The Fishermen's Safety Guide* for advice on how to prepare risk assessments for your vessel.
3. The wearing of a PFD while working on deck improves the likelihood of survival should the unexpected happen and you fall overboard. PFDs are designed to keep you afloat with your airway clear of the water.
4. Conduct frequent emergency safety drills, including man overboard recovery, and practice using your safety equipment so you know what is available, how to operate it correctly, and whether it is adequate should a lone crew member be required to effect a recovery; do not wait until an accident happens to find out.

This flyer and the MAIB's investigation report are posted on our website: www.gov.uk/maib

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Extract from The United Kingdom Merchant Shipping (Accident Reporting and Investigation) Regulations 2012 – Regulation 5:

"The sole objective of the investigation of an accident under the Merchant Shipping (Accident Reporting and Investigation) Regulations 2012 shall be the prevention of future accidents through the ascertainment of its causes and circumstances. It shall not be the purpose of an such investigation to determine liability nor, except so far as is necessary to achieve its objective, to apportion blame."

NOTE

This safety flyer is not written with litigation in mind and, pursuant to Regulation 14(14) of the Merchant Shipping (Accident Reporting and Investigation) Regulations 2012, shall be inadmissible in any judicial proceedings whose purpose, or one of whose purposes is to attribute or apportion liability or blame.

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