MAIB
MARINE ACCIDENT INVESTIGATION BRANCH

ACCIDENT REPORT

VERY SERIOUS MARINE CASUALTY | REPORT NO 8/2019 | JUNE 2019

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 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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Fatal man overboard from the tender of *Fram of Shieldaig* Loch Torridon off Ardheslaig, Scotland 7 August 2018

SUMMARY

At approximately 0800 on 7 August 2018, a deckhand from the fishing vessel *Fram of Shieldaig*, entered the water while manoeuvring a small tender alongside the moored fishing vessel in Loch Torridon, Scotland. No-one witnessed the deckhand enter the water, but it is likely that he slipped or stumbled as he moved forward from his seated helm position in preparation for passing the tender's painter to the fishing vessel's skipper. It is also likely that the deckhand was knocked unconscious by a bang to the head as he fell into the water.

The deckhand subsequently drowned because he was not wearing a lifejacket and the skipper was unable to recover him from the water unaided. The deckhand was under the influence of alcohol at the time of the accident, and this probably contributed to his fall.

This was the fifth fatal person overboard accident investigated by the MAIB since October 2015 involving fishing vessels based in remote Scottish locations. In all these cases lifejackets were not worn. Alcohol consumption was considered to be a contributing factor in 17 of 24 other fatal accidents between 1994 and 2016 involving fishermen boarding fishing vessels.

Fram of Shieldaig's owner has reviewed the vessel's risk assessments and introduced a policy requiring his crews to wear lifejackets at all times while working on deck and boarding and leaving the vessel. The owner has been recommended to introduce and enforce a strict alcohol and drugs policy.

Fram of Shieldaig

FACTUAL INFORMATION

BACKGROUND

Fram of Shieldaig (*Fram*) was a 9.8m UK registered fishing vessel that was rigged to operate as a self-shooting potter. It was crewed by a skipper and a deckhand and used during daylight hours to fish for langoustines.

Fram was secured overnight to a swinging mooring in Loch Torridon, Scotland **(Figure 1)** and its crew used a small tender to board and leave the vessel **(Figure 2)**. The tender was also used to land the catch ashore and transport partially filled langoustine tube boxes (partials) between the vessel and a local fishermen's storage raft **(Figure 1)**.

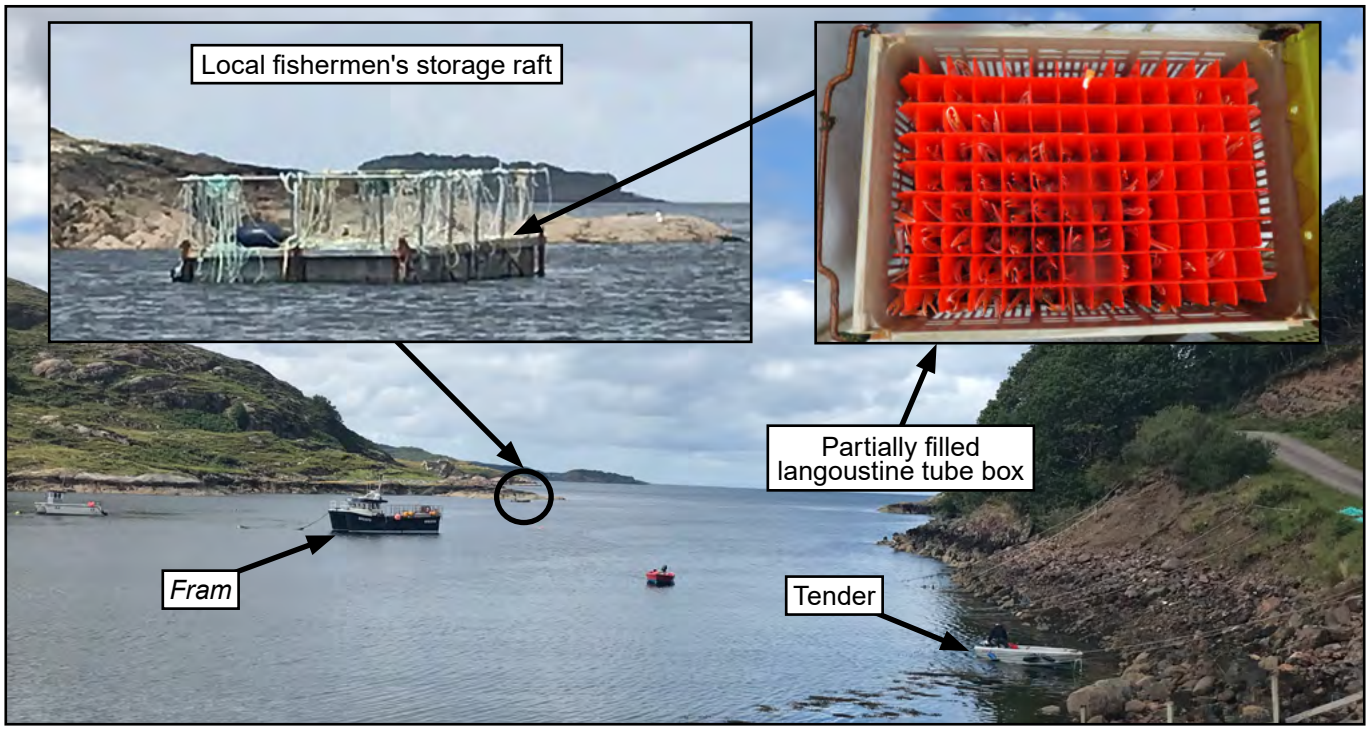

Figure 1: Location of *Fram of Shieldaig*, its tender and the local fishermen's storage raft

NARRATIVE

At about 0715 on 7 August 2018, *Fram*'s skipper and deckhand, Duncan Matheson, left the skipper's house and drove to Ardheslaig. About 15 minutes later, they arrived at the beach adjacent to the vessel's mooring and donned their oilskin trousers and wellington boots. The deckhand went to collect *Fram*'s tender from its beach mooring while the skipper collected the vessel's empty tube boxes and bait.

After loading the boxes and bait, the crew boarded the tender and motored the short distance across the bay to *Fram*'s mooring. The deckhand manoeuvred the tender up to the fishing vessel's port side and put the throttle of its outboard engine to neutral. The skipper climbed on board *Fram* and the deckhand passed him the boxes and bait.

Once all the boxes and bait had been landed on board, the deckhand motored across to the storage raft in the tender to collect two partials that had been stowed there the previous night. The skipper remained on board *Fram* and began to prepare the vessel for sea.

At about 0800, the skipper saw the tender approaching from the stern. By this time, *Fram*'s engines were running and its navigational equipment and very high frequency (VHF) radios were switched on.

The skipper walked to the port side of the vessel to help secure the tender alongside and load the partials on board. When he looked out over the fishing vessel's side, he saw the tender drifting away with its engine at tick-over; the two partials were in the tender, but the deckhand was not. The skipper then

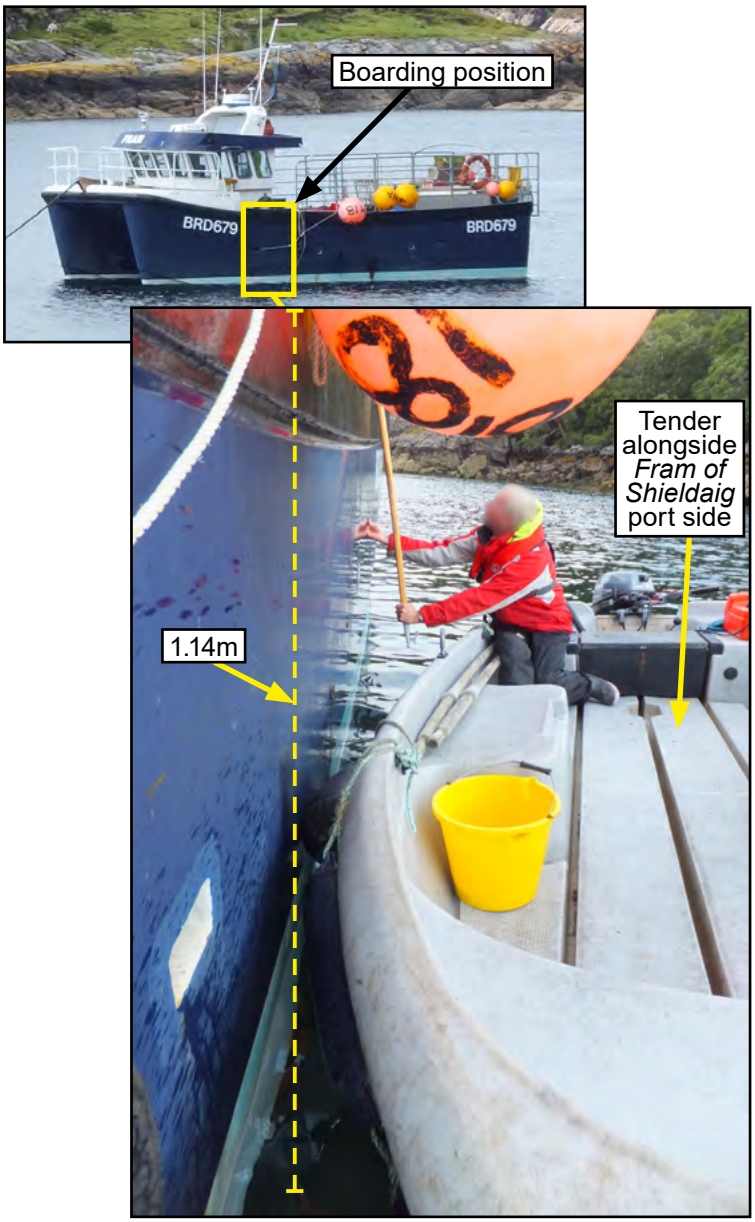

Figure 2: Boarding *Fram of Shieldaig* from the tender

saw the deckhand floating motionless in the water between the tender and *Fram*. He was immersed in an almost vertical position with the top of his head out of the water.

The skipper shouted out to the deckhand as he ran aft to release a lifebuoy. The lifebuoy landed close to the deckhand, but he did not respond. The skipper noticed a cut to the back of the deckhand's head and realised that he was unconscious.

Using a boathook, the skipper caught the back of the deckhand's oilskin trousers and pulled him alongside. The skipper then tried to haul him on board, but the deckhand was too heavy for him to lift out of the water alone. Thinking it would be easier to lift the deckhand out of the water from the storage raft, the skipper decided to manoeuvre *Fram* up to the raft. To prevent the deckhand sinking or drifting away, the skipper jammed the upper part of the boathook between the vessel's bulwark railings **(Figure 3)**. He then released *Fram* from its mooring and, using the main engine controls on the starboard side of the main deck, slowly manoeuvred the fishing vessel alongside the storage raft.

Figure 3: Boathook jammed in railings

Once *Fram* was secured to the raft, the skipper used the boathook to move the deckhand to an opening in the raft's railings and tried again to pull him out of the water. Although the freeboard of the raft was lower, the skipper was still unable to lift the deckhand out of the water.

Unable to recover the deckhand on his own, the skipper decided to go ashore to seek help. He tied the deckhand to the stowage raft's handrails and used *Fram* to collect the drifting tender. The skipper then secured *Fram* to its mooring and returned to the beach in the tender.

When the skipper arrived at the beach he alerted another fisherman, who was loading his own boat. The skipper quickly explained the situation and the two men went to the raft, where they attempted, unsuccessfully, to lift the deckhand onto it. They then returned to the beach, where the skipper ran to a nearby cottage and recruited the assistance of a third fisherman. At about 0835, the three men headed back to the raft and the third fisherman's partner telephoned 999 and requested assistance from the coastguard.

On arrival at the raft, the three fishermen lifted the deckhand on to the raft and then placed him in the tender. He was not breathing and showed no signs of life. They returned to the beach and waited for the emergency services.

At 0914, a rescue helicopter arrived on scene shortly followed by an ambulance crew. On arrival, the paramedics from the helicopter and ambulance immediately began cardio-pulmonary resuscitation (CPR), but the deckhand could not be revived and was later declared deceased at the scene.

ENVIRONMENTAL CONDITIONS

It was a clear dry day; the winds were light and the water in the bay was calm. The sea temperature was 12.8°C.

FRAM OF SHIELDAIG

Fram was a GRP hulled catamaran. It was built in 2004 by Gemini Workboats Ltd in Essex, England, and was purchased by its owner as a new build. *Fram* was fitted out for potting by Buckie Shipyard Ltd in Buckie, Scotland.

Fram's stern shooting gate was located on the port side of the vessel, where the freeboard was 0.78m. The boarding position was also on the port side and the crew always used it when boarding and leaving *Fram* **(Figure 2)**. The height of the bulwark from the waterline at the boarding position was 1.14m. Except at the boarding, shooting gate and hauler positions, the working deck was enclosed by high railings extending to a height of 1.90m above the deck.

Fram's tender was a 4.5m long Pioner 15 open boat, built in Norway. It was constructed from moulded polyethylene and had a freeboard aft of 0.5m. The tender was fitted with a Yahama four stroke tiller-controlled 6 horsepower[1] outboard engine. Forward of the helming position there was a deck well that measured 27cm x 19cm **(Figure 4)**.

Figure 4: *Fram of Shieldaig* tender

[1] Equivalent 4.4 kilowatts

CREW

Fram's skipper was 51 years old and had been involved in the fishing industry since he was a teenager. He had been *Fram*'s permanent skipper for more than 10 years and had completed the fishing vessel mandatory safety awareness, sea survival, fire-fighting and first-aid training courses. He had also attended stability, engineering and watchkeeping training courses, and held a VHF radio licence.

Fram's deckhand, Duncan Matheson, was 62 years old and was a career fisherman. He had also completed the mandatory fishing vessel courses. He was 1.85m tall and weighed 67kg, and was described as being a physically fit non-swimmer. At the time of the accident, he was wearing casual clothing under his oilskins that included a woollen jumper. He had a history of alcohol addiction, and following the accident a hip flask was found in his clothing. The flask was almost full of a clear alcohol spirit.

The vessel's owner was an experienced fisherman and occasionally sailed as *Fram*'s skipper, and he had previously worked with both the permanent skipper and the deckhand. Both the crew and the owner lived locally and were well known in the small community. They were all engaged as share fishermen.

POSTMORTEM EXAMINATION REPORT

The postmortem examination report identified Duncan Matheson's cause of death as drowning. It also described several abrasions to the left side of his face and a cut to the back of his head.

Toxicology test results showed Duncan Matheson's blood alcohol concentration (BAC) to be 276 milligrams per 100 millilitres[2]. The postmortem report concluded that he was under the influence of alcohol at the time of his death.

SAFETY EQUIPMENT

In accordance with the Fishing Vessels (Code of Practice for the Safety of Small Fishing Vessels) Regulations 2001 (SI 2009 No 1), *Fram* was required to comply with the requirements set out in the *Code of Practice for the Safety of Small Fishing Vessels* (SFV Code). The SFV Code contained guidance on health and safety risk assessment, safety training, vessel stability and vessel inspections. It also listed the minimum levels of life-saving appliances and safety equipment required to be carried on board.

As stipulated in the SFV Code, *Fram* was equipped with two emergency use, solid-filled (inherently buoyant) lifejackets, two lifebuoys (one with a 10m buoyant line attached), distress flares, and a DSC[3] VHF radio. In addition, *Fram* carried two 150N auto-inflatable lifejackets (designed for continuous use while working), a person overboard rescue sling **(Figure 5)**, two 1.4m long boathooks and a four-person liferaft. The inflatable lifejackets were unused and still inside their original packaging.

VESSEL SAFETY MANAGEMENT

In accordance with Regulation 5 of the *Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997*, an employer has a general duty to ensure the health and safety of workers and other persons so far as is reasonably practicable. In order to fulfil their general duties, an employer was required to:

- avoid or minimise risks,
- evaluate unavoidable risks and take actions to minimise them, and
- adopt safe work patterns and procedures.

[2] Under the Railway and Transport Act 2003, the blood alcohol content (BAC) limit for seafarers is 50 milligrams per 100 millilitres (the same as the drink driving limit in Scotland).

[3] Digital Selective Calling - a DSC distress call can be sent automatically by the pressing of a button. It allows the operator to transmit a substantial amount of information, including the vessel's position, to the coastguard and nearby vessels without the need for voice communication.

Figure 5: Person overboard rescue sling and lifebuoy with 18m rope line

The SFV Code placed an onus on *Fram*'s owner to ensure that he, or other competent persons employed by him, inspected the vessel annually to confirm that:

- Safety equipment carried on board the vessel had been suitably maintained and serviced in accordance with the manufacturers' instructions.
- Safety and other specified equipment continued to comply with the checklists set out in the code (appropriate to the length and construction of the vessel).
- Health and safety risk assessments had been completed.
- On completion of the annual inspection, a self-certification declaration form was signed.
- The vessel was presented to the Maritime and Coastguard Agency (MCA) for inspection on first registration and at intervals not exceeding 5 years.

To help manage these obligations and operate *Fram* safely, the owner used the Sea Fish Industry Authority's (Seafish) online safety folder. The safety folder contained generic checklists, templates and forms to help document vessel specific health and safety, and alcohol and drugs policy statements; emergency procedures and drills; crew details and induction training; muster plans; risk assessments; records of equipment inspections; and stability information. A paper copy of the online document was held on board.

Fram's health and safety policy statement made reference to the *Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997* but did not include an alcohol and drugs policy.

The Seafish safety folder contained 13 generic risk assessments covering the most common activities undertaken on board fishing vessels; these included a risk assessment for boarding and leaving the vessel. One of the methods listed in the generic risk assessment was boarding and leaving the vessel via a dinghy or tender. The types of risk listed for this task were:

> *Launching dinghy leading to minor injuries;* ***Falling into the water leading to*** *hypothermia or* ***drowning****; Losing power leading to loss of vessel and* ***drowning****; and Dinghy capsizing leading to hypothermia or* ***drowning****.*

The control measures and risk level columns in the generic risk assessments were left blank for vessel owners to complete.

Fram's safety folder contained five of the 13 generic risk assessments. These were for the activities related to general working on board; shooting and hauling; handling the catch; vessel safety; and potting. A risk assessment for boarding and leaving the vessel using the tender had not been carried out and the use of lifejackets as a control measure had not been listed in any of *Fram*'s five risk assessments. *Fram's* risk assessments were last reviewed by the owner on 16 February 2018.

Fram was last inspected by the MCA on 19 August 2016. During the inspection, the MCA surveyor discussed the use of personal flotation devices (PFDs)[4] and drew the owner's attention to additional safety measures that would be required when the new SFV Code[5] came into force. The new SFV Code (MSN 1871) implemented the requirements set out in the *Fishing Vessels (Code of Practice) Regulations 2017*, the *Merchant Shipping (Work in Fishing Convention) Regulations 2018* and the International Labour Organization's (ILO) *Work in Fishing Convention* (ILO 188). It came into force on 31 December 2018 and will be fully enforceable for existing vessels from October 2019.

PERSONAL FLOTATION DEVICES

The Merchant Shipping and Fishing Vessels Personal Protective Equipment Regulations 1999 require employers to ensure that appropriate personal protective equipment (PPE) is provided for their workers when they are engaged in, or at risk from, a hazardous work activity on board a UK registered ship. In circumstances where there is a foreseeable risk of crew falling overboard, the recognised PPE includes PFDs. These regulations also require that seafarers and other workers wear and use the PPE that has been supplied.

MSN 1871 explained that:

> *unless measures are in place which eliminate the risk of fishermen falling overboard, all fishermen must be provided with and must wear, PFDs or safety harnesses. The measures eliminating the risk of Man Overboard must be documented in a written risk assessment.*

EMERGENCY DRILLS

The MCA provided guidance on several emergency drill scenarios, including person overboard in its Marine Guidance Note (MGN) 570(F) *Fishing Vessels: Emergency Drills*. The Fishermen's Safety Guide[6] also contained guidance on emergency drills, including the following:

> *Emergency Drills should be completed regularly on all FV's, a well-run and safe vessel of any size should be conducting emergency drills at least monthly.*

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[4] PFDs are divided into the following two main classes: those that provide face up in-water support to the user regardless of physical conditions (lifejackets); and those that require the user to make swimming and other postural movements to position their face out of the water (buoyancy aids).

[5] Merchant Shipping Notice (MSN) 1871 Amndt 1 (F): *The Code of Practice for the Safety of Small Fishing Vessels of Less Than 15 Metres Length Overall*.

[6] https://www.gov.uk/government/publications/fishermens-safety-guide

Under the new SFV Code emergency drills must, as a minimum, be completed on a monthly basis and a record of the drills kept. *Fram*'s Seafish safety folder contained a *Person Overboard* recovery checklist but its crew did not complete periodic person overboard drills.

SAFETY INITIATIVES

In recent years, the MAIB, MCA, RNLI[7], Seafish and several fishing federations have supported safety initiatives aimed at improving safety for fishermen and to encourage commercial fishermen to wear PFDs and improve fishing practices. The campaigns included the distribution of printed brochures, trials of PFDs by volunteers, and the distribution of free lifejackets and training to commercial fishermen.

SIMILAR ACCIDENTS

This is the fifth fatal person overboard accident involving fishing vessels based in remote Scottish locations that the MAIB has investigated since 1 August 2015. The previous four were: *North Star* (report no 19/2018); *Varuna* (report no 13/2017); *Apollo* (report no 23/2016); and *Annie T* (report no 21/2016). In each of these accidents, the crew did not regularly carry out person overboard recovery drills, and none wore PFDs, even when they were available on board.

The MAIB's investigation report into the fatal person overboard accident from the potter *Annie T* included a review on the use of PFDs and the campaigns and measures used to encourage their use among commercial fishermen. This review concluded that campaigns succeed in changing entrenched behaviours only when backed by mandatory regulations.

Alcohol consumption was a contributing factor to fatal person overboard accidents involving the fishing vessels *Horizon II* / *New Dawn* (report no 23/2014) on 9 November 2013, *Constant Friend* (report no 4/2018) on 23 September 2017 and *Illustris* (report no 15/2018) on 12 November 2017. It was also considered to be a contributing factor in 17 of 24 other fatal accidents between 1994 and 2016 involving fishermen boarding UK fishing vessels.

ANALYSIS

THE ACCIDENT

Duncan Matheson drowned because he was not wearing a lifejacket when he entered the water from the tender, and the skipper was unable to recover him on board.

ENTRY INTO THE WATER

The precise circumstances of the accident are unknown as the skipper, who was on deck at the time, did not see or hear the deckhand enter the water. The skipper last saw the deckhand when the tender left the raft after collecting the partials. Although the skipper saw the tender pass *Fram*'s stern, he could not see the helming position at that time, and he next saw the unmanned tender adjacent to *Fram*'s port side with its outboard engine on tick-over.

The deckhand's location in the water, between the tender and *Fram*, suggested that he entered the water either as he rose from his seated position by the outboard engine or as he moved forward to pass the boat's painter to the skipper. It is possible that the deckhand's foot became caught in the deckwell just forward of his seated position or that he tripped over the partials. It is also possible that he just lost his balance or slipped on the deck.

[7] RNLI – Royal National Lifeboat Institution

CAUSE OF DROWNING

Immersion in cold water (water under 15ºC) can lead to death in one of the following three ways:

1. Cold shock response
   On immersion in cold water the sudden lowering of skin temperature causes a rapid rise in heart rate, and therefore blood pressure, accompanied by a gasp reflex followed by uncontrollable rapid breathing. The onset of cold shock occurs immediately, peaking within 30 seconds and lasts for 2-3 minutes. If the head goes underwater during this stage, the inability to hold breath will often lead to water entering the lungs in quantities sufficient to cause death. Cold shock response is considered to be the cause of the majority of drowning deaths in UK waters.

2. Cold incapacitation
   Cold incapacitation usually occurs within 2-15 minutes of entering cold water. The blood vessels are constricted as the body tries to preserve heat and protect the vital organs. This results in the blood flow to the extremities being restricted, causing cooling and consequent deterioration in the functioning of muscles and nerve ends. Useful movement is lost in hands and feet, progressively leading to the incapacitation of arms and legs. Unless a lifejacket is worn, death by drowning occurs as a result of impaired swimming.

3. Hypothermia
   Hypothermia onset occurs when the human body's core temperature drops below 35ºC (it is normally about 37ºC). Depending on circumstances, this can occur after 30 minutes. The body's core temperature can continue to drop even after the casualty has been recovered from the water if the re-warming efforts are not effective.

The deckhand was a non-swimmer and was not wearing a lifejacket when he entered the water. This meant that his continued survival depended on his limited ability to keep himself afloat and the skipper's ability to recover him on board in a timely manner.

As the sea temperature was 12.8°C, despite his warm clothing the deckhand would almost certainly have experienced a cold shock response upon immersion. However, when the skipper saw him moments after he had entered the water, he was already floating motionless in a vertical position with his airways under the water. This, and the cut to the top of his head, suggests that he was knocked unconscious by a bang to his head as he fell or resurfaced from under the water.

A lifejacket would have provided the buoyancy necessary to keep the deckhand's airways clear of the water. This, in turn, would have provided the time necessary for the skipper to recover him ashore.

USE OF PERSONAL FLOTATION DEVICES

Fram's safety folder did not include a risk assessment for boarding and leaving the vessel, and the use of PFDs was not included as a control measure in the vessel's risk assessments for working on deck. This was due to the presence of the deck guardrails and there being no requirement for the crew to be on deck when shooting the gear. Nevertheless, *Fram*'s owner had provided 150N auto-inflatable lifejackets for crew use when there was a reasonably foreseeable risk of falling or being dragged overboard.

Fram's crew, including its owner, had been boarding and leaving the fishing vessel using a tender for over 10 years without incident. However, as foreseen by Seafish, the risk of falling into the water from the tender, or while stepping between it and the fishing vessel, and drowning, was ever present, therefore PFDs should have been worn.

Regardless of the risk, it was evident that the auto-inflate lifejackets provided for the safety of *Fram*'s crew were never worn. Despite the frequency with which UK fishermen have lost their lives in similar circumstances, and the many campaigns launched to promote the use of PFDs, including the provision of over 8000 specially designed compact auto-inflate lifejackets free of charge, *Fram*'s owner and crew probably thought this type of accident could never happen to them.

This accident further demonstrates the difficulty of changing the working behaviours of many experienced fishermen. However, it is hoped that the introduction and enforcement of the enhanced requirements set out in MSN 1871, following the UK's adoption of the ILO's *Work in Fishing Convention* (ILO 188), will be instrumental in improving safety standards in general and the use of PFDs in particular.

EMERGENCY RESPONSE

In order to minimise the consequences of a marine accident, a fishing vessel and crew need to be prepared to deal with a variety of emergency situations. Vessels are prepared through design and the provision of safety equipment. Fishing vessel owners/skippers prepare their crews by providing them with guidance and procedures, and through the delivery of training. To ensure training has been effective and emergency procedures are fully understood, fishing vessel crews should conduct realistic emergency response drills on a regular periodic basis. *Fram* was well equipped, its crew had attended the required mandatory safety training for UK fishermen and its safety folder contained a person overboard recovery procedure, but regular drills were not completed.

The *Person Overboard* checklist contained in *Fram*'s Seafish safety folder prompted the crew to carry out the following tasks:

- Throw a life-ring in to the sea as close as possible to the person overboard.
- Raise the alarm by shouting.
- Commence recovery procedure.
- Inform the coastguard via DSC and/or VHF ch 16 Mayday.

Fram's person overboard rescue sling, like its lifebuoys, required the person in the water to assist in their own recovery. As the deckhand was unconscious, the skipper had to use one of the vessel's boathooks to recover him alongside. Once alongside, the deckhand was too heavy and *Fram*'s freeboard too high for the skipper to recover him from the water unaided.

Given the deckhand was non-responsive in the water, it was absolutely urgent he was recovered from the water and CPR commenced immediately. When the accident occurred, the skipper focused all his efforts on preventing the deckhand from sinking under the water and attempting to recover him on board, and he omitted to alert the coastguard. By the time the alarm was raised by the partner of one of the fishermen who came to help, the deckhand had been immersed in the water for about 30 minutes. Although CPR was initiated by the paramedics once they reached the scene, this was at least 75 minutes after the deckhand first entered the water. Had the skipper pressed the DSC alert button when he first saw the deckhand in the water, the paramedics would have been on scene 30 minutes earlier. However, given the circumstances in this case it is unlikely that this would have changed the outcome of the accident.

Nevertheless, had *Fram*'s crew conducted regular, realistic person overboard drills, they would have fully appreciated the difficulty of recovering an unconscious person back on board and the effectiveness and usefulness of the vessel's procedures and person overboard recovery equipment.

ALCOHOL CONSUMPTION

Mr Matheson's BAC at the time of the postmortem examination was 276 milligrams per 100 millilitres of blood, over five times the UK BAC limit for seafarers and commercial fishermen. The high BAC and presence of the hip flask strongly indicates that he had intended to consume alcohol during the working day.

Given Mr Matheson's known history of alcohol addiction, he might have appeared to be functioning normally before he boarded the tender. However, it is almost certain that his alcohol consumption was a significant factor in this accident. Mr Matheson's BAC would have adversely affected his risk perception, reaction time and co-ordination.

CONCLUSIONS

- The deckhand, Duncan Matheson, drowned because he was not wearing a lifejacket when he fell into the water, and *Fram of Shieldaig*'s skipper was unable to recover him on board.
- The deckhand probably fell overboard from the tender as he moved forward to secure it alongside the fishing vessel.
- It is likely that the deckhand struck his head as he entered the water.
- The deckhand either lost consciousness as a result of the bang to his head or through the effects of cold-water immersion.
- The deckhand's chances of survival would have been significantly increased had he been wearing a lifejacket.
- *Fram*'s crew had not completed regular emergency drills, and the difficulty of recovering an unconscious person from the water had not been recognised.
- The skipper focused on recovering the deckhand from the water and omitted to broadcast a "Mayday". This led to a 30-minute delay in the attendance of paramedics, but probably did not alter the tragic outcome of the accident.
- The deckhand was under the influence of alcohol and this almost certainly contributed to the accident.

ACTION TAKEN

The **MAIB** has:

- Issued a Safety Flyer to the Fishing Industry highlighting the lessons to be learned from this accident.

***Fram of Shieldaig*'s owner** has:

- Purchased new compact 150N automatic inflation lifejackets and implemented a policy that crew must always wear them while working on deck, and while boarding and leaving the vessel.
- Ceased the practice of lone working in the tender.

RECOMMENDATIONS

***Fram of Shieldaig*'s owner** is recommended to:

2019/116 Add an alcohol and drugs policy statement, similar to the one provided as an example by Seafish, to *Fram of Shieldaig*'s safety management folder, and ensure it is adhered to.

SHIP PARTICULARS	
Vessel's name	*Fram of Shieldaig*
Flag	UK
Classification society	Not applicable
IMO number/fishing numbers	BRD 679
Type	Fishing vessel - potter
Registered owner	Privately owned
Manager(s)	Not applicable
Year of build	2004
Construction	GRP
Length overall	9.83m
Registered length	9.40m
Gross tonnage	10.08
Minimum safe manning	Not applicable
Authorised cargo	Not applicable
VOYAGE PARTICULARS	
Port of departure	Ardheslaig
Port of arrival	Ardheslaig
Type of voyage	Near coastal
Cargo information	None
Manning	2
MARINE CASUALTY INFORMATION	
Date and time	7 August 2018, Approximately 0800
Type of marine casualty or incident	Very Serious Marine Casualty
Location of incident	Loch Torridon, off Ardheslaig
Place on board	Overside
Injuries/fatalities	1 fatality
Damage/environmental impact	None
Ship operation	Moored
Voyage segment	Departure
External & internal environment	Lt airs, calm seas, good visibility and sea water temperature 12.8°C
Persons on board	2