SHERIFFDOM OF GRAMPIAN, HIGHLAND AND ISLANDS AT LERWICK

[2024] FAI 15

LER-B4-23

DETERMINATION

BY

SHERIFF IAN HAY CRUICKSHANK

UNDER THE INQUIRIES INTO FATAL ACCIDENTS AND SUDDEN DEATHS ETC (SCOTLAND) ACT 2016

into the death of

EDISON JOSEPH CARRERA LACASTE

LERWICK, 23 APRIL 2024

Determination

The Sheriff having considered the information presented at the inquiry determines in terms of section 26 of the Inquiries into Fatal Accidents and Sudden Deaths etc. (Scotland) Act 2016 ("the 2016 Act") that:

(1) In terms of section 26(2)(a) of the 2016 Act Edison Joseph Carrera Lacaste ("Edison Lacaste") was pronounced dead at or about 05.15 hours on 18 February 2021 at Gilbert Bain Hospital, Lerwick.

(2) In terms of section 26(2)(b) of the 2016 Act , an accident resulting in the death of Edison Lacaste occurred at or about 03.00 hours on 18 February 2021 on the fishing vessel FV Copious LK985 ("the Copious"). The Copious was trawling for white fish

approximately 30 nautical miles south east of Shetland in the North Atlantic. The fishing operations at the time of the accident were in the area with coordinates 59.37.7N, 00.34.2W.

(3) In terms of section 26(2)(c) of the 2016 Act the cause of death was:

I. (a) Complications of immersion in sea water

(4) In terms of section 26(2)(d) of the 2016 Act the cause of the accident resulting in the death of Edison Lacaste was that whilst he was on the lower work deck of the Copious, and whilst engaged in assisting in the repair of a break in the fishing gear he lost his footing and fell into the sea. In particular, whilst assisting the skipper of the Copious in replacing a hammerlock fitting on the central line of the fishing gear, Edison Lacaste attempted to replace a shackle on the centre chain. Edison Lacaste was holding onto the chain when a big swell caused a downward motion at the rear of the vessel which was sufficient to pull him into the water. At this time Edison Lacaste was standing on a part of the transom or bulwark located aft of the vessel and his feet were therefore not on the lower deck itself.

(5) In terms of section 26(2)(e) of the 2016 Act, a precaution could reasonably have been taken. Had this precaution been taken, it might realistically have resulted in death, or any accident resulting in death, being avoided. The precaution which could reasonably have been taken was;

(a) Had Edison Lacaste not been standing on the transom or bulwark located aft of the vessel he would not have fallen into the sea.

(6) In terms of section 26(2)(f) of the 2016 Act, there were no defects in the system of working which contributed to the death or the accident resulting in the death.

(7) In terms of section 26(2)(g) of the 2016 Act, there were other factors relevant to the circumstances of death in this case. These factors relate to the effects on the impact of immersion in cold water and the effect of cold water shock on a casualty with the resultant difficulties or complications that this brings to a successful recovery.

Recommendations

In terms of section 26(1)(b) of the 2016 Act the court makes no recommendations. In the particular circumstances of the death of Edison Lacaste there are no recommendations which can properly be made in relation to the matters referred to in terms of section 26(4) of the 2016 Act.

NOTE

Introduction

[1] This is a mandatory Fatal Accident Inquiry in terms of section 2 of the Fatal Accidents and Sudden Deaths etc. (Scotland) Act 2016 ("the 2016 Act"). In terms of section 2(3) of the 2016 Act Edison Lacaste was acting in the course of his employment or occupation as at the date of his death.

[2] The death of Edison Lacaste was reported to COPFS on 19 February 2021.

[3] The date of the preliminary hearing in relation to this inquiry was 19 May 2023. The preliminary hearing was continued to 14 July 2023 when the inquiry was assigned

to commence on 22 January 2024. On Crown motion, which was unopposed, the date for commencement of the inquiry was adjourned with agreement of all parties to 8 April 2024. This was assigned as an "in person" hearing at Lerwick Sheriff Court, with 9-11 April 2024 being reserved as further dates.

[4] The Crown was represented at the inquiry by Mr Glancy, Principal Procurator Fiscal Depute. 60 North Fishing (Shetland) Limited, the Company who owned and operated the Copious, was represented at the inquiry by Mr Sinclair, Solicitor. The Maritime and Coastguard Agency was represented by Miss Toner, Advocate. No other interested parties were present or represented.

[5] At commencement of the inquiry the Crown lodged an application in terms of Rule 4.2(b) of the Act of Sederunt (Fatal Accident Inquiry Rules) 2017 seeking an order that the manner in which information was to be presented at the inquiry should be by way of manuscript or typewritten statements, documentary productions, labelled productions and Joint Minutes of Agreement. A schedule was attached to the application which included confirmation of the witnesses from whom the Crown sought to lead oral evidence. Separately the solicitor for 60 North Fishing (Shetland) Limited lodged an application under Rule 4.2(b) seeking an order that signed witness statements of 3 named witnesses be admitted as evidence and taken alongside any oral evidence lead from these witnesses. There being no objections both applications were granted.

[6] In the course of the inquiry the parties helpfully entered into a Joint Minute of Agreement. The facts agreed in terms thereof are incorporated into my findings in fact.

[7] As a result of the above procedures, the inquiry had before it the following evidence, and in the following format:

1. Oral evidence given by Andrew John White, skipper of the Copious.
2. Oral evidence of Mark Vincent Flavell, a senior investigator with the Regulatory Compliance Investigation Team of the Maritime and Coastguard Agency ("MCA").
3. Oral evidence of Howard Alan Flegg, an inspector with the Marine Accident Investigation Branch ("MAIB").
4. Statements taken or given by police officers, admitted in terms of the Crown's Rule 4.2(b) application, being:
    a. Statement of Andrew John White, skipper of the Copious, dated 18.02.21
    b. Statement of Dr Eilidh Farquhar, Dr at Gilbert Bain Hospital, dated 19.02.21
    c. Statement of Erik Santorcas Siva, deckhand on Copious, dated 18.02.21
    d. Statement of Paul Akweteh, deckhand on Copious, dated 18.02.21
    e. Statement of Rommel Montiel, deckhand on Copious, dated 18.02.21
    f. Statement of Steve Pottinger, engineer/deckhand on Copious, dated 18.02.21
    g. Statement of Stephen Michael Vickery, winchman/paramedic, dated 19.02.21
    h. Statement of Detective Sergeant Bruce Peebles dated 26.02.21
    i. Statement of Police Constable Caroline Robertson dated 26.02.21
    j. Statement of Detective Constable Daniel MacArthur dated 03.03.21
    k. Statement of Police Constable Michael Greshon dated 26.02.21

5. Additional statements of Andrew John White, Steve Pottinger and Erik Sivas admitted in terms of the Rule 4.2(b) application on behalf of 60 North Fishing (Scotland) Limited.
6. Affidavit of David Stephen Bruce Fenner, Fishing Vessel Safety Team Leader with the MCA dated 5 April 2024, the terms of which were treated as parole evidence in terms of the Joint Minute of Admissions.

[8] The Crown lodged 24 productions. 60 North Fishing (Shetland) Limited lodged an inventory containing 6 productions. The Maritime and Coastguard Agency lodged an inventory containing 9 productions. There was some duplication of the productions lodged by the various parties.

[9] The inquiry also had before it a number of labelled productions variously lodged by either the Crown or 60 North Fishing (Shetland) Limited. In particular there was produced, and spoken to in evidence, a hammerlock fitting, a shackle fitting, the Personal Floatation Device ("PFD") which had been worn by Edison Lacaste and a new style 275N PFD being the type now worn by the crew of the Copious.

The legal framework

[10] This inquiry was held under section 1 of the 2016 Act. Mr Lacaste died in the course of his employment or occupation. Accordingly, in these circumstances, the inquiry was a mandatory inquiry in terms of section 2 of the 2016 Act.

[11] The inquiry and relevant procedure is further governed by the Act of Sederunt (Fatal Accident Inquiry Rules) 2017.

[12] In terms of section 1(3) of the 2016 Act, the purpose of this inquiry is to establish the circumstances of the death of Edison Lacaste, and to consider what steps (if any)

might be taken to prevent other deaths in similar circumstances. Section 26 of the 2016 Act sets out what must be determined by the inquiry.

[13] A Fatal Accident Inquiry is an inquisitorial process and it is not the purpose of the inquiry to establish civil or criminal liability.

[14] The manner in which evidence may be presented to an inquiry is not restricted. Information may be presented to an inquiry in any manner and the court is entitled to reach conclusions based on that information.

Summary

[15] I found the following facts to be admitted or proved:

Edison Joseph Carrera Lacaste

1. Edison Joseph Carrera Lacaste ("Edison Lacaste") was on born 20 March 1975. He was known by some of his work colleagues as Joseph. He was a Filipino national and ordinarily resided with his wife and family at Luzon, Philippines.

2. Edison Lacaste was forty-five years of age at the time of his death. He married his wife Reina on 29 February 2006 and was the father of two daughters, Rhona, now aged fifteen years and Rhianne, now aged twelve years. One of the children has been diagnosed with autism.

3. Mrs Lacaste indicates that her husband had worked on fishing vessels for the last fourteen years and would work away from home for up to ten months per year. He was the sole contributor to the family's finances and was diligent in sending money home to his family and also provided financial support to whichever one of his three brothers or

five sisters required it. Mrs Lacaste described Edison as being a good husband and the best father to his daughters that he could have been. They all miss him and they visit his grave every Sunday.

4. Edison Lacaste originally sought work in Shetland via an agency. He became a regular member of crew of the FV Copious LK985 ("the Copious") in December 2015 on successive work agreements. When working he would stay on board the Copious. He would work for between 8 and 10 months at a time and would return to the Philippines at the end of each work contract for between 2 and 3 months. The most recent work agreement was dated 17 September 2019. Crown Production number 2 is a copy of said work agreement.

5. Edison Lacaste was liked by his fellow crew members. He was an experienced fisherman and was well acquainted with the working practices aboard the Copious. His main duties included operating the port net drum, gutting fish, helping in the hold and occasionally taking a watch at the wheelhouse. He was regarded by the owners of the Copious as a good worker and reliable crewman. His English was good and there were no communication difficulties. He had the ability to effect repairs to fishing gear when necessary and could work under his own initiative.

The Copious and method of fishing

6. The Copious, being the vessel bearing that name at the time of the accident, was built in 2006. It was registered under LK985. It was an 18.5 metre twin rig trawler which was used to fish for white fish. It was purpose built to trawl with three towing wires. The two outer wires towed the trawl doors to hold the net mouths open. The

middle towing wire towed the clump weight with a central wheel which was designed to keep the trawl nets on the seabed.

7. The towing wires came off of a winch located forward of the main deck. The weight of the trawl was transferred to a banana bar, located on the upper deck, when trawling. This was referred to as the "poor man's auto trawl". The middle towing wire consisted of two sections of wire joined by a link. As the middle towing wire was payed out, the banana bar chain was connected to this link by means which included the use of a hammerlock fitting.

8. The Copious could be operated by a crew of 4. The owners of the vessel had a larger crew of 6 to make operations easier and safer. The crew would comprise the skipper, an engineer and 4 deckhands. The members of crew would rotate from trip to trip. There were Shetland locals in the crew and also foreign nationals including men from Latvia, the Philippines and Ghana.

9. The crew on the Copious would fish for 2 weeks at a time. This would include returns to port to unload fish, restock and refuel. The Copious would trawl 4 times in a 24 hour period. The nets would be shot and there would be a 5 hour period until hauled. During that time the crew could rest or have food.

10. On 18 February 2021, Detective Constable McArthur attended at Mair's Pier, Lerwick, where the Copious was berthed, boarded said vessel and took a quantity of photographs. These photographs are lodged in the following Crown Productions:

a. Production number 2, which contains Photographs 32 to 80,

b. Production number 23, which contains Photographs 81 to 140, and

c. Production number 24, which contains Photographs 141 to 206.

11. The vessel named the Copious at the time of the incident has been sold. A new vessel has been built and came in to service in 2023. The new vessel continues to bear the name Copious and remains registered as LK985. It is a larger boat at 24.9 metres in length.

12. As at the date of the accident, and for some time prior to that, there was a policy operated on the Copious regarding the wearing of Personal Flotation Devices ("PFDs"). PFDs were purchased by the boat owners and made available to all crew members. The Copious had a requirement that all members of crew wore a PFD whilst working on deck.

13. Crown Production number 4 includes manufacturer's instructions for the donning of the 150N PFD used on board the Copious at the time of the accident. To ensure that the PFD was the correct size for each wearer these instructions included that the top waist strap should be pulled tight to ensure a secure fit. Further, these instructions confirm that the crotch strap provided on the PFD should be fastened and then ensured by the wearer to be a tight but comfortable fit.

14. Prior to the accident the crew of the Copious performed man overboard ("MOB") drills and exercises. These were generally performed whilst the boat was in harbour. There were numerous such MOB drills recorded in the log books kept for the Copious over a number of years as evidenced by entries in various MCA official log books (Crown Production number 1). In particular, in the month's leading up to the accident,

the Copious undertook a MOB drill using a search light on 17 November 2020 and a further MOB drill on 18 January 2021.

15. At the time of the accident the Copious was fitted with a number of MOB recovery aids including life buoys and a Markusnet MS.10.

Circumstances leading up to the accident

16. The Copious left Lerwick at 22.30 hours on 16 February 2021. The crew consisted of skipper Andrew White, engineer Steve Pottinger and deckhands Erik Siva, Paul Akweteh, Montiel Rommel and Edison Lacaste. Mr Siva, Mr Rommel and Mr Lacaste were from the Philippines. Mr Akweteh was from Ghana.

17. On leaving Lerwick the Copious steamed to where it was intended to trawl. The Copious travelled about 30 nautical miles south east of Sumburgh shooting its first nets at 4am on 17 February 2021 and hauled at 9am. Thereafter the vessel shot its nets at 10am, hauling at 3pm, shot its nets at 4.30pm and hauled at 9.15pm. The nets were then shot at 10pm on 17 February 2021 and the crew were called to haul in at 3am on 18 February 2021. The towing speed of the vessel was about 2.1 knots.

18. At 3 am on 18 February 2021 skipper Andrew White was in the wheelhouse. Edison Lacaste was on the port side stern of the working deck with Paul Akweteh on the starboard side stern of the working deck. Erik Siva was on the working deck ready to assist Edison Lacaste and Paul Akweteh put the shooting pins in place.
Montiel Rommel was on the winch located at the front of the vessel. Steve Pottinger was readying himself to go on deck.

19. At 3am on 18 February 2021 the sea temperature in the waters of the North Atlantic was seven degrees Celsius. The wind had dropped to a force 4 or 5. The swell was running at 3-4 metres in height. The Copious was in the area of the North Atlantic with coordinates 59.37.7N, 00.34.2W.

20. Having disconnected the side wires from the "poor man's auto trawl" it was observed that the middle wire had disconnected from the winch as a result of a hammerlock fitting having failed. This necessitated a repair to be effected. Such a repair was not commonly encountered but could happen from time to time during trawling operations. Andrew White proceeded to deal with this repair and was assisted by Edison Lacaste. Andrew White intended effecting the repair from beside the banana bar on the upper deck. Edison Lacaste returned to the working deck and called upon Andrew White to pass him a shackle fitting. The shackle fitting was duly passed down to Edison Lacaste.

21. Whilst on the working deck, and whilst attempting to attach the shackle fitting to the chain connected to the "poor man's auto trawl", Edison Lacaste held onto said chain with his right hand. He had climbed onto the transom or aft bulwark of the Copious. As he held the chain a big swell caused the back of the vessel to go down. This movement meant the chain went up and as a result Edison Lacaste lost his footing and fell from the vessel into the water.

Attempts at recovery of Edison Lacaste

22. On impact with the water Edison Lacaste's PFD deployed and inflated. He immediately began to panic. Andrew White put the boat out of gear and then ran to the stern of the vessel where he lowered a mooring rope down to Edison Lacaste in the hope that he would place the loop at the end of the rope around his body. Instead Edison Lacaste tried to climb the rope but without success. Whilst Edison Lacaste continued to hold onto the rope he was manoeuvred successfully to the port side ladder. It became obvious that he would struggle to get onto the ladder unaided and Andrew White descended the ladder and partially entered the water to assist. Andrew White succeeded in getting hold of Edison Lacsate's left arm. Edison Lacaste managed to grab a rung of the ladder but shortly thereafter Edison Lacaste was washed off the ladder by a wave.

23. Further efforts were made by all members of the crew to recover Edison Lacaste. He became weaker and increasingly incapacitated. At 03.19 a "Mayday" distress call was transmitted. A lifebuoy was thrown to Edison Lacaste and although it landed near him there was no attempt made to grab it. Thereafter several attempts were made by Steve Pottinger to recover Edison Lacaste with a grappling hook but although the hook caught, the PFD was seen to move and efforts were discontinued in the fear that further attempts could dislodge or remove the PFD completely and lead to the loss of Edison Lacaste to the sea.

24. Edison Lacaste's PFD was seen to have risen up and was covering his face. His head appeared to be lying close to the water. He quickly became motionless. The

Copious continued to monitor the whereabouts of Edison Lacaste, using search lights, until other vessels answering the "Mayday" call and the HM Coastguard search and rescue helicopter arrived on scene.

25. At approximately 03.50 hours on 18 February 2021 around fifty minutes after Edison Lacaste had entered the water, an HM Coastguard search and rescue helicopter arrived on scene and ten minutes later, at around 04.00 hours, he was recovered into said helicopter and flown to Gilbert Bain Hospital, Lerwick, and admitted there at 04.38 hours or thereby.

26. In spite of the efforts of medical staff to resuscitate him, the life of Edison Lacaste was pronounced extinct at 05.15 hours on 18 February 2021.

27. On 18 February 2021, Detective Constable Dan McArthur, Police Scotland, attended Gilbert Bain Hospital, Lerwick, and took a quantity of photographs of Edison Lacaste, now deceased which are contained within Crown Production number 21.

28. On 18 February 2021, Detective Constable McArthur attended HM Coastguard Operations Centre, Lerwick, where he seized the PFD worn by the deceased when he entered the water. This item (now Label 1) was also photographed. These photographs are contained within Crown Production number 21.

29. The PFD worn by the deceased was found to have had the crotch strap taped up. The crotch strap had not been in use at the time of the accident. After the accident the waist band of the PFD was measured at 52 inches.

Post mortem and other medical findings

30. The post mortem examination of said Edison Lacaste ("the deceased") took place at Aberdeen Mortuary on 25 February 2021, conducted by Tamara Mary McNamee and Leighanne Margaret Deboys, both consultant forensic pathologists. Crown Production number 7A is a copy of their report.

31. The pathologists recorded that the deceased was five feet seven inches tall, weighed eleven stones twelve pounds and was of slim build. His waist measurement was 32 inches. During their examination of the deceased, they noted that the trachea was unremarkable with frothy fluid exuding from the bronchi, and that the lungs were heavy and fluid filled and crepitant to palpate, which are non-specific yet recognised findings in drownings. No evidence of significant natural disease that would have accounted for, or hastened death, were found.

32. The pathologists, in their conclusions opined the following:

> "Taking into consideration the history and circumstances surrounding death, findings at post mortem examination and laboratory investigations, death is attributed to the complications of immersion in water.
>
> There are other risk factors for sudden death due to immersion in water aside from drowning. Inadvertent inhalation/aspiration of cold water which can result in laryngospasm resulting in constriction of the internal airways. Prolonged periods of immersion in cold water along with the hyperadrenergic 'fight or flight response' due to stress and exertion from swimming/ trying to keep afloat can result in a phenomenon known as 'autonomic conflict' whereby activation of the sympathetic and parasympathetic nervous systems can predispose an individual to a fatal cardiac arrhythmia, even in a morphologically normal heart. There was no natural disease, injury or toxicological cause which would have prevented the deceased from self-rescuing or hasten his demise."

33. The pathologists determined that the cause of death was "complications of immersion in water".

34. Samples of blood, urine and vitreous humour, taken from the deceased during the post mortem examination were analysed between 25 February 2021 and 8 March 2021, both dates inclusive, at Aberdeen Royal Infirmary by Doctor Duncan Stephen and Bernard Croal, Forensic Scientists, who found no trace of any alcohol or controlled drugs. Crown Production number 7B is a copy of their report.

Effects of immersion in cold water

35. Immersion in water temperatures beneath 15°C can lead to death in one of three ways, namely;

a. Cold Shock Response, whereby 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 to 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,

b. Cold Incapacitation, which usually occurs within 2 to 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 restricted blood flow to

the extremities, 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 correctly worn, death by drowning occurs because of impaired swimming, and

c. Hypothermia, which occurs when the human body's core temperature drops below 35°C (it is normally around 37°C), which can occur after 30 minutes dependent on circumstances. The body's core temperature can continue to drop after the casualty has been recovered from the water if rewarming efforts are ineffective.

Marine Accident Investigation Branch ("MAIB") report into the accident

36. Following the accident an investigation was carried out by the MAIB. An accident report was published following that investigation in June 2023 under Report No 3/2023. Crown Production 20 is a copy of said report.

37. The report acknowledged the steps taken by the owners of the Copious since the accident. This included the purchase of MOB recovery equipment that would provide efficient means of recovering an unconscious person from the water. The Copious had also undergone MOB drills at sea with RNLI involvement which had focussed on recovery of an unconscious casualty. The PFDs on the Copious had been upgraded to 275N buoyancy. Immersion suits for all crew had been issued for MOB emergency and abandon ship situations. Additional or extra immersion suits had also been purchased.

38. The report further acknowledged that the MCA had published an amendment to MGN 588 (F) which introduced minimum acceptable performance levels for PFDs and the requirement that all PFDs must be worn in accordance with manufacturer's instructions. It was further acknowledged that the MCA had issued new instructions to surveyors and an updated aide-memoire to include references to checking of PFD readiness, including presence and usability of crotch straps, and to further emphasise the recovery of unconscious casualties in MOB procedures.

39. The report made a recommendation to the MCA. The recommendation was to amend commercial fishing regulations to ensure that there was an explicit requirement for fishing vessels to have an efficient means to recover an unconscious person from the water that would be demonstrable during surveys and inspections.

MAIB – Life-jackets review

40. Crown Production number 8 is a review carried out by the MAIB. It is entitled "Lifejackets: a review". It was published in November 2016. The purpose of the document was to evaluate the success of initiatives aimed at encouraging commercial fishermen to wear PFDs on the working decks of fishing vessels whilst at sea.

41. The review contains MAIB statistics from its database of cases where marine accidents led to persons falling into the water from fishing vessels between 2000 and 2015. The summary on page 5 of the review states:

> "The casualty statistics show that an MOB incident is between five and eight times more likely to result in a fatality when the casualty is not wearing a PFD. This is further corroborated by the findings of the MCA-led Casualty Review

> Panel establishing that 148 lives could have been saved in a 7-year period had the casualties used some form of buoyancy aid."

42. The review acknowledged that a number of organisations had attempted to alter behaviour in the fishing industry by encouraging commercial fisherman to wear PFDs whilst working on deck. These included campaigns by the RNLI, SEAFISH and the MCA.

Maritime and Coastguard Agency ("MCA")

43. The MCA is an executive agency and has its Headquarters in Southampton. The MCA has the role of a regulator and to oversee safety in the merchant and commercial fishing fleet. They promote legislation and issue guidance on maritime safety.

44. The MCA is involved in the production of Merchant Shipping Notices ("MSNs") and Marine Guidance Notes ("MGNs"). MSNs contain the technical information that is associated with Regulations (Statutory Instruments) laid down by Parliament. MGNs provide guidance on safety and pollution prevention matters. Identifying letters on these publications show whether it is addressed to merchant shipping (M), the fishing industry (F) or both (M + F).

45. MSNs are part of the regulatory system and must be adhered to. MGNs provide guidance on how to apply a regulation in practice. An MGN is not binding and skippers do not need to follow them if they have in place equivalent means to achieve the same level of safety. There may be instances however where failure to comply with an MGN could lead to a regulatory breach. The onus is on the owners and skippers of each

vessel to comply and each needs to be aware of the relevant MSNs or MGNs in force from time to time.

46. MSNs and MGNs can be updated or amended in response to individual incidents. If either is amended all previous versions of the MSN or MGN will be superseded.

47. The MCA employs investigators to investigate matters for potential prosecution. The MCA also employs surveyors who carry out regular surveys of vessels to ensure ongoing compliance with both MSNs and MGNs.

48. The MCA acted upon the recommendation relevant to it as contained in the MAIB's report into the accident involving the Copious and Edison Lacaste. Surveyors are now prompted to apply their mind to the correct use of crotch straps of PFDs. Both the MCA's instructions for the guidance of surveyors on protection of crew (MSIS27.9; Production number 2 for the MCA) and the surveyor's aid memoire (MSF5550; Production 1 for the MCA) were both updated with pertinent amendments made in September 2021.

49. The MCA is making ongoing efforts to ensure compliance with MSNs and MGNs which relate to the use of PFDs. This includes the use of reconnaissance flights to monitor the use of PFDs on vessels whilst at sea.

MSNs and MGNs of relevance and their evolution

50. MSNs and MGNs pertinent to the circumstances and of relevance in this case have been amended and updated prior to and following the accident on board the

Copious. The following MSNs and MGNs are of relevance in the circumstances of this case.

MSN 1870 (M+F) Amendment 1

51. Crown Production number 9 is a Merchant Shipping Notice, being MSN 1870 (M+F) Amendment 1. The MSN provided updated safety standards applicable to Personal Protective Equipment ("PPE"). It was published in September 2019 and required ship owners and employers to ensure that PPE was provided to seafarers and other workers. It stated that PPE had to be "suitable" which definition (at section 2.2) included that the PPE should correctly fit or be capable of being adjusted to fit.

MSN 1870 (M+F) Amendment 2

52. Crown Production number 10 is a Merchant Shipping Notice, being MSN 1870 (M+F) Amendment 2. It was published in January 2021, shortly prior to the accident on board the Copious, and replaced Amendment 1. Section 4.1 required ship owners and employers to ensure as far as practicable that PPE was used as instructed and that it was put on and worn correctly.

MSN 1870 (M+F) Amendments 3 and 4

53. Crown Productions number 11 and 12 are Merchant Shipping Notices, being MSN 1870 (M+F) Amendment 3 and Amendment 4 respectively. They were published in December 2021 and December 2022 respectively. Both contain an Annex which gives

the design standards for PPE in use on board ships and for specified work activities and situations. Section 4.1 is in unaltered terms in both of these versions of the MSN.

MSN 1872 Amendment 1 (F)

54. Crown Production number 13 is a Merchant Shipping Notice, being MSN 1872 (F) Amendment 1. It was published in November 2018 and provided a Code of Safe Working Practices for the Construction and Use of Fishing Vessels of 15 metres to less than 24 metres. Section 7 relates to life-saving appliances. Section 7, amongst other requirements, states that life-saving appliances to be provided shall include a "means of recovering a person from the water" (paragraph 7.1.2.1(iv)). Section 8 of the MSN relates to emergency procedures and states that the times, dates and particulars of inspections and drills shall be recorded and available for future inspection.

55. The summary of the MSN confirms the wearing of PFDs is mandatory unless a written risk assessment demonstrates that the risk of going overboard has been eliminated. MSN 1872 (F) Amendment 1 contains a summary on the wearing and use of PFDs for fishermen working on open decks of a fishing vessel whilst at sea (see paragraph 6.1.1.3). This MSN is still in force.

MGN 570 (F)

56. Crown production 14 is a copy of MGN 570 (F) which is entitled "Fishing Vessels: Emergency Drills". It was published in October 2017. Paragraph 3 relates to MOB procedures. The MGN states that "unless a person is rescued within 5 minutes, it

is highly likely that they will be either unable to help themselves or unconscious" (see paragraph 3.3). As time is vital there should be a plan for recovering both a conscious and unconscious person from the water (paragraphs 3.4(1) and 3.4(2)).

57. MGN 570 (F) provides guidance on the prevention of MOB situations. The Note discusses why cold water shock and hypothermia can affect MOB casualties. Guidance is provided on the assessment of risks of a MOB and how to prevent it. The MGN provides guidance on the wearing of PFDs and safety lines.

MGN 571 (F)

58. Crown production 15 is a copy of MGN 571 (F) which is entitled "Fishing Vessels: Prevention of Man Overboard". It was published in October 2017. MGN 571 (F) provides guidance on different types of emergency drills. The dangers of cold water shock and hypothermia are acknowledged.

MGN 587 (F) Amendment 1

59. Crown production 16 is a copy of MGN 587 (F) Amendment 1. It refers to the responsibilities of fishing vessel owners, managers, skippers and fishermen in relation to health and safety on board vessels. It was published in March 2019.

MGN 588 (F)

60. Crown Production 17 is a copy of MGN 588 (F) and was published in November 2018. It is entitled "Compulsory Provision and Wearing of Personal Flotation

Devices on Fishing Vessels". It is to be read in conjunction with MGN 570 (F) and MGN 571 (F).

61. Section 6 of MGN 588 (F) states as follows:

> "6.1 In view of the evidence in section 1 above of the risk of falling overboard, and the increased risk of drowning when a PFD is not worn, the MCA requires that, unless measures are in place which eliminates the risk of fishermen falling overboard, all fishermen must be provided with and must wear PFDs or safety harness. The measures preventing Man Overboard must be documented in a written risk assessment.
>
> 6.2 The MAIB in their Safety Digest 1/2017 published the following advice:
>
> Always wear a lifejacket when working on the open decks. If you end up in the water it can save your life by:
>
> - Reducing the load on your heart as you won't have to struggle to swim.
> - Keeping you afloat and your face clear of the water, allowing you to breathe.
> - Assisting those recovering you to by providing them with something to grab onto.
> - Increasing your visibility in the water, helping your rescuers find you."

62. Following publication of MGN 588 (F), the failure to ensure the provision and wearing of PFDs and/or fall restraint harness by all fishermen where there is a risk of falling overboard a warning was given that the MCA would consider this to be a breach of health and safety legislation (see summary of the MGN). In terms of MGN 588 (F) the only exception to the wearing of a PFD and/or fall restraint harness is where the fishing vessel owner can demonstrate, through a documented risk assessment, that the risk of falling overboard has been eliminated by other measures.

MGN 588 (F) Amendment 1

63. Crown Production number 18 is a copy of MGN 588 (F) Amendment 1. It was published in October 2021. This came into force after the accident on board the Copious involving Edison Lacaste. The amendments incorporated were as a direct result of the death of Edison Lacaste. Paragraph 7.5 was updated and amended to include the following guidance:

> "7.5.3 PFDs must always be worn in accordance with manufacturer's donning instructions, which should be displayed in a prominent place. For example, where the PFD requires it to be fitted with a crotch strap to meet the requirements of safe wear, ensure that:
>
> a. The crotch strap is in place and is in good condition;
>
> b. The crotch strap is not tied up with tape, tie wraps or any other means which would indicate it is not being used;
>
> c. The crotch strap is used whilst wearing the PFD;
>
> d. correct adjustment/fitting to suit the wearer is essential, every time the PFD is donned (especially if the PFD is used by the other crew members).
>
> 7.5.4 Crew should be provided with training in the correct donning of their PFDs during their familiarisation training."

64. MGN 588 (F) Amendment 1 remains in force at the present time.

Summary on the above facts

65. As at the date of the accident on 18 February 2021 all members of the crew of the Copious were required to wear a PFD whilst working on deck. The Copious complied with the requirements of the MSNs and MGNs then in force at that time. Following

investigation into the circumstances of the accident no prosecution was considered appropriate or necessary in relation to the owners or skipper of the vessel.

66. Many fishermen have hitherto preferred not to wear PFDs during the course of their employment. There has previously been a culture whereby fishermen have elected to work without wearing lifejackets or PFDs. When wearing PFDs not all fishermen have worn these in accordance with manufacturer's instructions. Fishermen have been known to wear PFDs but not engage the crotch strap. This is no longer permissible in terms of current MGNs.

67. The MCA and other fishing industry bodies or organisations continue in their efforts to educate, and ensure compliance, on the correct use of PFDs. The cultural attitude towards the wearing of PFDs is improving.

68. In assisting with the repair to the fishing gear Edison Lacaste acted on his own initiative. In the course of that repair, and in stepping onto the transom or bulwark whilst assisting in the repair, Edison Lacaste either should have not done so or should have either taken the precaution of securing himself to the vessel or, in any event, should have remained on the lower deck. Had he done so, his death should have been avoided.

69. In the case of Edison Lacaste a PFD was worn by him when he fell into the sea. The PFD was not worn in accordance with the manufacturer's instructions as the crotch strap was taped up. Edison Lacaste quickly succumbed to the effects of immersion in extremely cold water. It is more probable than not that he became unconscious or incapacitated within a very short period of time. Had the crotch strap been worn

correctly there is no evidence to support the conclusion that it would have saved the life of Edison Lacaste.

Submissions

[16] Mr Glancy, Mr Sinclair and Miss Toner each provided me with detailed written submissions. I am very grateful to them for their efforts in this respect.

[17] The circumstances which all parties invited me to find in my determination were similar in most respects. All parties agreed on the circumstances which required to be determined in relation to section 26(2)(a) – (d) of the 2016 Act. Based on the evidence as presented I found the circumstances established in line the parties' respective submissions.

[18] In relation to the circumstances to be determined in terms of section 26(2)(e) of the 2016 Act Miss Toner, from the perspective of the MCA, submitted that there was no evidence of any reasonable precaution which could have been taken by the MCA which, had it been taken, might realistically have resulted in the death, or any accident resulting in death, being avoided. Both Mr Glancy and Mr Sinclair, in relatively similar terms, submitted that, in stepping onto the transom or bulwark whilst assisting in a repair, Edison Lacaste should have not done so or should have either taken the precaution of securing himself to the vessel or, in any event, should have remained on the lower deck. Had he done so, his death may have been avoided. From the differing perspectives of each participant I accepted these submissions as, based on the evidence, I found that to have been established.

[19] In relation to the circumstances to be determined in terms of section 26(2)(f) all parties submitted that there were no defects which had been identified in any system of working which contributed to the death or any accident resulting in death. Based on the evidence I was in agreement with these submissions. There was ample evidence to support the conclusion that the owners of the Copious had taken safety very seriously prior to the date of the accident. They had carried out many MOB drills. They were diligent in ensuring that all crew members wore the PFDs they had been provided with when on deck.

[20] In terms of the circumstances to be found in terms of section 26(2)(g) of the 2016 Act Miss Toner proposed no findings should be made. Mr Glancy addressed the matter of the correct wearing of PFDs under this subsection. Mr Sinclair submitted that the effects of immersion in cold water and Edison Lacaste's reaction and likelihood of suffering from cold water shock were relevant facts to the circumstances of death. I outline my conclusions in respect of these submissions in the discussion and conclusions which follow.

Discussion and conclusions

[21] The evidence led before this inquiry leads to the determination I have made in relation to the death of Edison Lacaste. It is based on that evidence, and what it supports in fact, that I have reached my findings in relation to the various circumstances as listed in section 26(2)(a)-(g) of the 2016 Act.

[22] It will be noted that I have made no recommendations as to any of the matters mentioned in section 26(4) of the 2016 Act. When making recommendations in this respect it is recognised that there must be a real or likely possibility that the matters recommended may prevent other deaths in similar circumstances in the future rather than leading to a remote chance that a similar death might be prevented. Based on the evidence in this case I was unable to conclude that there could be any recommendation which I could make to serve that purpose.

[23] A focus of this inquiry was on the correct use of PFDs and the role that device would play in MOB situations. In that respect, this inquiry had to consider facts which differed from a number of previous inquiries into deaths of fishermen. There had been a number of inquiries where death had resulted in situations where fishermen had fallen overboard whilst not wearing a PFD. I had myself issued a determination following an FAI into the death of Darren James Rennie whilst working on the Scallop dredger FV King Challenger on 23 June 2016 (LER-B47-18). It was during the course of that inquiry that MGN 588 (F), in its original form, was published.

[24] I primarily considered the issue of the correct use of PFDs under section 26(2)(f) and that based on the criticisms stated by the MAIB in their report into the incident. The base line for me was that, setting aside the comments of Mr Fenner in his affidavit to the effect that the owners of the Copious had regulatory responsibility to ensure crew members correctly wore a PFD and therefore shouldered a degree of responsibility, I did not conclude that the evidence supported that conclusion. The owners of the Copious had generally complied with the MSNs and MGNs in force at the time of the accident.

Separately, and in any event, the evidence did not establish that death would have been avoided as a result of wearing the crotch strap in this particular case.

[25] On the issue of the effects of cold water shock on Edison Lacaste I concluded that it was more probable than not that he had succumbed to this very quickly. It was a relevant factor which had contributed to the difficulties encountered in the recovery operation. As such I considered it was a factor which related to the circumstances of death.

[26] I was also conscious of the MAIB conclusion that tiredness could have been a contributing factor. Based on the evidence I heard, which included Mr Flavell's opinion that this was not a material consideration in this case, I was not convinced that there was an evidential basis to support that this was a contributory factor or defect when the system of work was considered.

[27] In relation to the issue of the width of the waist strap of Edison Lacaste's PFD, and the cause of this, other than to find that it was measured at 52 inches after the accident, I could not make any further findings in fact. There was no evidence to assist in calculating the effect that the layers of clothing worn could have affected the required width of the waist strap as against Edison Lacaste's natural waist measurement. Further, there was the possibility that the recovery operation may have loosened the waist strap. To make a distinct finding on either matter would have been speculative only.

[28] The only realistic recommendation that I could have made as a result of this inquiry would have been to recommend that further efforts were made to ensure that

PFDs were always worn in accordance with manufacturer's instructions. That of course has already been addressed by the MCA and has led to the amendments to the relevant MGN which is now MGN 588 Amendment 1. In that respect the evolution of the relevant MGN appears to have reached a stage where further evolution would be of little relevance or assistance. On that basis any recommendation I could make on this matter would serve no useful purpose.

Publication and distribution of this determination

[29] Section 27(1)(a) of the 2016 Act provides that The Scottish Courts and Tribunals Service ("SCTS") must publish, in such manner as it considers appropriate, each determination made under section 26(1). In terms of section 27(1)(b) of the 2016 Act, SCTS must give a copy of each such determination to:

(i) The Lord Advocate,

(ii) each participant in the inquiry,

(iii) each person to whom a recommendation made in the determination is addressed, and

(iv) any other person who the sheriff considers has an interest in a recommendation in the determination.

[30] Accordingly, a copy of this determination will be published as SCTS considers appropriate, including publication on their website. Furthermore, SCTS will give a copy of this determination to the Lord Advocate and the participants of the inquiry. I do not

consider it is necessary to order a copy of this determination be provided to any other party.

Postscript

[31] I would wish to record the fact that, in my judgement, all members of the crew of the FV Copious did all that they could to recover Edison Lacaste from the water as quickly as possible. Andrew White's personal actions displayed a great deal of bravery. The crew attempted Edison Lacaste's recovery in difficult circumstances.

[32] Mr Glancy, Mr Sinclair and Miss Toner extended their condolences during the inquiry and in their written submissions. I also wish to record my condolences to all who have been affected by the sad loss of Edison Joseph Carrera Lacaste. He was an experienced fisherman, respected member of the crew of the Copious, and a well-loved husband and father who is dearly missed by his family and friends.