SHERIFFDOM OF GRAMPIAN, HIGHLAND AND ISLANDS

[2022] FAI 8

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DETERMINATION

ΒY

SHERIFF PRINCIPAL DEREK C W PYLE

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

into the deaths of

PAUL ALLISTON, MARTIN JOHNSTONE AND CHRISTOPHER MORRISON

2 March 2022

Introduction

[1] This is the third major fatal accident inquiry over which I have presided within the last ten years. There have been others, not least those colloquially known as the Glasgow bin lorry crash and Clutha. All of these inquiries have been subject to intense scrutiny and comment by the media and, on occasion, parliamentarians. Doubtless, there will be similar inquiries in the future.

[2] Before I consider the circumstances of the loss of the three members of the crew of the Louisa, it might be useful for the participants if I comment on some general themes common to all fatal accident inquiries but particularly to this inquiry and the two earlier North Sea helicopter accidents. [3] There are other interests which I mention later, but as a matter of common humanity it must be accepted that the primary interest during the inquiry is with the family and friends of those who lost their lives. Sometimes they want those responsible held to account by way of a criminal prosecution and, understandably, they often have difficulty understanding why the Crown decides not to proceed with one. But above all they just want to know what happened and why. In many cases they will, I suspect, be unable to move on with their own lives, insofar as they can at all, until an independent judge adjudicates upon the evidence.

[4] But there is a danger of raising false hopes. As has been said many times, the purpose of a fatal accident inquiry is not to find fault. If it is discovered, the sheriff or sheriff principal will state it, but the real purpose of the inquiry is to identify the cause of death and, looking ahead, what if anything should be done to avoid the same thing happening again. And, particularly for accidents at air or sea, before the inquiry begins there will have been extensive research and investigation by statutory independent bodies – the Air Accident Investigation Branch or the Marine Accident Investigation Branch (MAIB) of the Department for Transport. Their reports will already have been published. In those circumstances, it is likely that the cause or causes of death have already been established and any recommendations for reform of industry practices and processes will have already been made and implemented or, particularly for those with an international dimension, be subject to current negotiation and discussion.

[5] Before and during the passage of the Bill which resulted in the present Act of the Scottish Parliament which governs fatal accident inquiries, there was much discussion

about whether the presiding sheriff or sheriff principal should have a role in monitoring whether or not the recommendations he or she made were implemented. It was eventually accepted that this was impractical. Thus, the findings in the determination, while obviously important, do not mean that change occurs. There are often many reasons for that, but for now I mention just one: inevitably the inquiry focusses upon the accident itself. Expert evidence is often led about it, but it is seldom, if at all, that the evidence is directed to the overall industry effect of any proposed change, never mind the complication of international interests where matters such as geopolitics come into play. Even on a domestic level, the inquiry cannot expect to have before it the evidence of all of the interests, sometimes competing, of those involved in the relevant industry. As will be seen, in this inquiry the reasons for the particular practices of inshore fishing, specifically those of share fishermen, are complex, even before the international context is taken into account.

[6] That is not to suggest that a fatal accident inquiry is unimportant; on the contrary, the opportunity it affords to lead evidence about the causes of an accident is vital information for those who have to decide the future practices and processes within an industry – and indeed the tools and equipment required for it to be conducted safely. But the limitations of the inquiry process should be recognised.

[7] Apart from those closest to the deceased, the other interests in a fatal accident inquiry are, first, those, whether companies or individuals, who were directly or indirectly involved and who might be the subject of criticism; secondly, the industry itself; and, finally, the public interest which is represented by the Lord Advocate. The first two, like

the deceased's family, have a personal interest in the outcome – and it is the reason that they, particularly the first group, are often represented in the inquiry. Unlike the deceased's family though, all three groups have or learn to have detailed knowledge of what can often be very technical subjects of inquiry. That technical understanding is not available to the families.

[8] So, bearing in mind the disparate interests involved I intend to set out in as plain and non-technical language as I can the salient facts surrounding the sinking of the Louisa. But one crucial matter will remain unproved: the reason why the Louisa became so flooded that it foundered. That is because, as will be seen, I am unable on the evidence to come to any firm conclusion.

[9] As a preliminary matter, I set out the timeline of the investigations which took place after the sinking. That will explain why it has taken so long to reach the stage where the inquiry could begin. I have in the past not been shy in holding the Crown to account for the time it takes to reach a position where evidence can be led. But, as in the Sumburgh helicopter inquiry, the Crown accepted the offer to explain what steps it required to take.

Investigation Timeline

[10] The sinking of the Louisa occurred on 9 April 2016. The MAIB immediately began their inquiries, which included salvaging the wreck, transporting it to the River Clyde and a full inspection of it by the Maritime and Coastguard Agency (MCA) and the MAIB. The MCA also took possession of the life-saving equipment for inspection. It was

15 months before the MAIB published its report. Given the complexity of the investigation that it took that long is unremarkable. But it was only then that the Crown could begin its own investigation. That began in November 2017. During the course of 2018 the Crown required to seek the assistance of the MCA to obtain essential evidence. It appears that for whatever reason the documentation was not available and faced with that the Crown eventually decided to proceed with a decision on whether there should be a criminal prosecution on the basis of the available material. Crown counsel was instructed in April 2019. Over the next eight months discussion took place between the senior procurator fiscal depute and Crown counsel, which incidentally resulted in consideration of other parties for prosecution and further investigation. In the event, Crown counsel advised in December 2019 that there should be no criminal proceedings. There then followed a review of that decision, which is a statutory right of victims or victims' families. Thus it was not until the spring of 2020 that the Crown could commence preparations for the fatal accident inquiry. The preparations were inevitably affected by the pandemic and the fixing of dates for the preliminary hearings and the inquiry itself was delayed - never mind the need to take into account the availability of counsel and solicitors for the parties who wished to participate.

[11] In these circumstances, I am satisfied that the Crown's investigation of the accident and its preparations for the inquiry were conducted with proper dispatch. Indeed, the senior procurator fiscal depute performed an excellent job in presenting the key evidence and it was clear to me that in his investigation he left no stone unturned to get to the crucial facts. Both this inquiry and the Sumburgh one have shown that there is no

quick way to investigate such accidents, where evidence of the utmost complexity requires to be ingathered. For what it is worth, having heard the evidence I well understand why the Crown eventually decided not to proceed with any criminal prosecutions.

The Accident

[12] The Louisa sailed late evening on Monday, 4 April 2016 from Uig on the Isle of Skye. There were four crew, the skipper being Paul Alliston. He was the regular skipper. By the following Friday evening, the crew had been fishing every day for about 20 hours each day. The skipper decided that they were too tired to continue and anchored in Mingulay Bay to get some rest – some 200 metres from the shore. After having a meal, the crew retired to the sleeping accommodation.

[13] In the early hours of the Saturday morning, 9 April 2016, the crew awoke suddenly to discover that the vessel was down by the head and foundering bow first. Wearing only light clothing they made their way to the aft deck, by which time the bow was fully submerged and water was encroaching into the wheelhouse windows. The Emergency Position Indicating Radio Beacon (EPIRB) was activated and the crew collected the lifejackets. They then proceeded to launch the liferaft, but its CO² inflation cylinder failed with the result that the liferaft did not inflate. The crew put plastic buoys into the liferaft to give it buoyancy, but when they attempted to get on the liferaft it began to sink. Martin Johnstone decided to swim to the shore. After several minutes, the remaining crew realised that the liferaft was drifting out to sea. Lachlan Armstrong decided to swim to the shore, which he achieved. The two remaining crew stayed with the liferaft.

[14] Meanwhile, an alert from the Louisa's EPIRB was detected by a search and rescue satellite which automatically passed it to the UK Mission Control Centre which informed the Coastguard Operations Centre at Falmouth, which in turn made their colleagues in Stornoway aware of the alert. They were unable to establish contact with the Louisa or its owners. There was some time lost in confirming the exact location of the vessel, which I discuss below, but the point was eventually reached that having obtained that location Stornoway paged the crew of the Barra lifeboat which was launched within seven minutes. At the same time Stornoway requested the launch of an SAR helicopter which happened to be on the island. The lifeboat arrived at Mingulay Bay at 0413 UTC, just over 30 minutes after the launch.¹ The crew discovered the skipper and Christopher Morrison near the uninflated liferaft. Both were unresponsive and face down in the water. Mr Morrison's body was recovered but in trying to recover the skipper's body it slipped away. Despite an extensive search over the following days his body was never recovered. Martin Johnstone's body was recovered 50 metres from the shore. Lachlan Armstrong was rescued from nearby rocks by the helicopter which arrived on the scene at 0510 UTC.

¹ The timings are taken from the MAIB report, although Donald McIntyre, one of the lifeboat crew, in his evidence said that from the paging to the arrival in the bay took longer. But on any view the performance of the crew was impressive.

Cause of the Sinking

[15] There is no dispute that the direct cause of the sinking of the vessel was flooding of the hold. The more difficult question is what caused the flooding. The MAIB looked in detail at possible causes. Following extensive trials and testing, it was concluded that water probably entered the hold from the deck wash hose, that when the crew went for their meal the deck wash pump was probably running and that the hose flailed around the deck and eventually became wedged between bait boxes, which allowed water to spray against the open hatch cover and fall into the hold. The water could have accumulated to a critical point within an hour.

[16] It was accepted by Nicolas Hance, a senior inspector and a naval architect and chartered engineer with twenty years' service with the MAIB and who gave evidence to the inquiry, that the MAIB investigations into the cause of the flooding were inconclusive. The theory was put in further doubt by the evidence of David Brown, the relief skipper of the Louisa, and Mr Armstrong, both of whom said that the switch for the electric pump which powered the hose was situated in the engine room and when not in use was switched off. Moreover, Mr Brown said that the hose had become shorter over time due to wear and tear and by the time of the sinking its length was such that it could not extend into the hold and merely overlapped the top of the hatch by some six inches.

[17] The Crown led an expert witness, Iain MacLeod, a naval architect. He had not been able to inspect the vessel, it having been sold by the time he was instructed. But having studied the available evidence he concluded that there were five possible scenarios,

three of which he readily discounted. One of the remaining ones was the scenario accepted by the MAIB. It was plain that he had serious reservations about it, not least because of the evidence of Mr Brown and Mr Armstrong. The last scenario was a problem with the valves to the sea suction bilge manifold. It required that the main valve on the suction line was partially open, not having been fully closed, and that a non-return valve was open, possibly caused by a small piece of wood or string being stuck or jammed there. This would result in an unimpeded passage from the sea into the hold. He cited in support of this the previous near loss of a fishing boat at Kyle of Lochalsh where the main valve was not shut and a piece of debris jammed a non-return valve open. He was careful to say that if that had happened it could not be said to be caused by any act of negligence of the crew. During his evidence, Mr Hance pointed out that during the MAIB investigation all the valves had been inspected and were found to be in working order.

[18] Mr Hance said that he had experience of other cases where the cause of the loss of vessels remained unknown. In my opinion, the loss of the Louisa is another one. I agree with the Crown that even on the balance of probabilities the evidence does not support either scenario as being the one to be preferred. Accordingly, the reason for the flooding of the hold remains unknown.

Cause of the deaths

[19] While the cause of the sinking of the Louisa remains uncertain, the direct cause of the deaths of three of the crew is clear. The cause of death in a medical sense was

drowning, but the cause of them being in the sea without being able to survive was directly due to the failure of the liferaft to inflate. I discuss later the effectiveness of the lifejackets, but if the crew had been able to climb aboard an inflated liferaft they almost certainly would have survived, given that the general weather and sea conditions were benign.² It is also beyond doubt that the reason the liferaft did not inflate was because the CO² cylinder did not work. It is that crucial matter to which I now turn.

The CO² cylinder³

[20] Louisa's liferaft was on hire to the owners, Duncan and Murdo Kennedy, from Comtalk (Leasing) Limited, trading as Premium Liferaft Services. Refurbishment of the CO² cylinder was sub-contracted to Thameside Fire Protection Company Limited. The MAIB concluded that the reason the cylinder did not work was because it had not been filled after the refurbishment, which had not been noticed when its filled weight was written on the cylinder. Other defects were recorded: there were surface cracks in the valve attachment thread at the neck of the cylinder and the valve assembly had not been tightened into the neck to the manufacturer's recommended torque setting.
[21] I agree with the Crown that to accept the MAIB conclusion is relatively straightforward. It begins with the failure of the liferaft to inflate, the admitted mislabelling of the cylinder by Thameside, the irreconcilable values on the label – again by Thameside – and its dysfunctional internal processes. Moreover, I was impressed by

² That was the view of Professor Tipton, Professor of Human Applied Psychology at Portsmouth University.

³ The cylinder was charged with a small quantity of nitrogen as well as CO² gas.

the evidence of Andrew Wade who has worked for Premium Liferaft Services for 33 years. He was adamant that the cylinder was weighed during its services in 2012 and 2014. The significance of that is that given that the label was in error, as admitted by the Thameside witnesses, its weight recorded by Mr Wade would inevitably be the weight on the label which was the weight without gas in it. Thus, if he is to be believed it inevitably follows that when the cylinder was returned by Thameside to Premium Liferaft Services it had no gas in it. The MAIB organised various tests of the cylinder. When tested by Survitec (the original manufacturer of the liferaft), in the presence of the MAIB inspectors, the cylinder was found to be capable of holding a charge of gas. It was also inspected by Materials Technology Limited. They reported that there was no evidence that the two cracks in the internal threads in the cylinder neck extended into the body of the cylinder or had progressed through the cylinder wall. This again supported the conclusion that the cylinder was capable of holding a charge of gas. During their evidence it was also conceded by Martin Faux of Thameside, who might have been responsible for the task of filling the cylinder although it could have been a fellow worker, and Neil Cannon, the Thameside service director, that it was possible that the cylinder left their premises without a charge of gas.

[22] An alternative opinion was given in evidence by Thomas Ainsley, a chartered marine engineer with the Brooks Bell Marine Consultancy. He accepted that the cylinder was empty of gas at the point of the attempted activation by the Louisa crew, but considered that there must have been an escape of gas between its last service in 2011 and the date of the accident. He was the only expert who had examined the cylinder

with a borescope, which allowed a visual check of the interior of the cylinder. He found evidence of a colour change boundary which had occurred due to the presence of a small amount of contaminant, such as water or hydrocarbons, mixing with the carbon dioxide. This boundary represented the level to which the cylinder had been filled with carbon dioxide in 2011. Having satisfied himself that the cylinder had been filled with a charge of gas, he looked for causes of the gas leak and decided it was likely to have occurred through the threads of the neck, caused by crevice corrosion, which would also have caused a failure of the tape seal around the threads of the filling valve. He expressly discounted the incorrect torqueing of the filling valve as a potential cause of the leak.

[23] In my opinion, the Crown has proved to the necessary standard that the reason that the cylinder was empty of gas was because of the failure of Thameside to fill it during the service. I found Mr Ainsley to be an impressive witness who well understood his role as an expert, there to assist the inquiry in an independent manner. In particular, I do not agree with the submission of the senior procurator fiscal depute that Mr Ainsley's evidence was "a carefully constructed and elaborate explanation intended to divert attention from a simple and logical conclusion". Nevertheless, I agree that to accept his theory I have to discount the evidence of Mr Wade that he weighed the cylinder on two occasions. I found him to be a credible and reliable witness and am satisfied that he did indeed do what he was supposed to do. That alone is sufficient for me to reject Mr Ainsley's theory. But I also agree with the submission by counsel for the MAIB that, first, Mr Ainsley could not exclude the possibility that the apparent correlation between

the internal level mark and corrosion on the outside of the cylinder was a coincidence; secondly, that other lines and levels could be drawn on the cylinder; and, thirdly, that Mr Faux by chance wrote down a weight which corresponded very closely to the tare weight of the cylinder, being the weight of the cylinder before gas was added. I also accept the submission by the solicitor advocate for Premium Liferaft Services that Mr Ainsley's theory is predicated on Thameside overfilling the cylinder with gas – by 80g above the recommended tolerance level. On the evidence of Mr Faux on how he would conduct the filling and, in particular, the manner in which he carefully watched the gauge that seems unlikely.

[24] I do not accept the submission of senior counsel for Thameside that Mr Wade would have noted a ringing sound if the cylinder was empty when he handled it. I find that to be too vague a scenario. The liferaft manual did provide for a test to check that the syphon tube was still flexible, but that test was that the difference would be a "dull ringing sound" if full of gas and just "a ringing sound" if empty. That difference is not obvious. Mr Wade said that he would handle the cylinder with care and would not shake it. He also explained that his workshop was a noisy environment. Moreover, he said that the syphon tube in some cylinders would be rigid, not flexible, which would mean that the suggested shake test would be inappropriate.

[25] I do acknowledge the criticism of senior counsel for Thameside that the documentary evidence of the test instructed and supervised by the MAIB in June 2016 was inadequate. Mr Hance recognised that, but in my opinion it does not detract from the fundamental conclusions of the then MAIB inspectors as recorded in the report,

which as Mr Hance pointed out is in its draft form subject to peer review and observations of those affected by it. As he acknowledged, when carrying out investigations the MAIB inspectors have to strike a balance between the work they need to do and the detail of the recording of it. It would have been better that the inspectors had compiled a more comprehensive record of the test, but I also recognise that the extent of written recording is ultimately a matter for the individual inspector applying his experience and expertise. Moreover, Mr Hance in giving his evidence was using his own expertise in speaking to the report, such experience including over 20 investigations of fishing vessels. Indeed he was a member of the team of inspectors of the Louisa, albeit his focus was on other areas. I also recognise that Mr Wade accepted that there was no formal checklist for the weighing of cylinders, but for me that did not detract from his evidence. As he said, the weighing of the cylinder was a simple act which took only 30 seconds and would be done when the liferaft was being inflated with air using a compressor. There was therefore no reason for *not* doing it. [26] During the course of his evidence I had a brief discussion with Mr Hance on

whether, with the benefit of hindsight, the MAIB should have carried out an examination of the cylinder with a borescope as done by Mr Ainsley. He fairly pointed out that the MAIB could always carry out more and more tests. I agree that it is a question of professional judgment for the inspectors to decide what tests to do and what tests not to do, not least in the context of the MAIB's primary duty to discover the cause of accidents and to recommend changes for the future. More tests might feasibly inform the inspectors' conclusions but also might just cause further delay. In the light of the

conclusion I have reached, I am satisfied that it was a reasonable decision by the inspectors to make findings on the cause of the accident without carrying out further tests.

[27] I add at this juncture that counsel for the MAIB made a submission and indeed a supplementary submission about the status of their reports in the context of the coroner system in England and Wales. I do not find it necessary to add to the comments I made in my determination in the first Super Puma inquiry as well as the comments made by Sheriff Principal Turnbull in Clutha. As he noted, the system for the investigation of deaths in England and Wales is very different. In Scotland, the Crown is careful to lead evidence even on undisputed matters which are contained in the investigators' reports, not least so that the families have the opportunity of hearing the evidence first hand. I commend that approach.

The Liferaft

[28] It is true that when tested by the MAIB the liferaft itself, as opposed to the cylinder, was in working order. But that does not excuse the owners of the Louisa. Rule 85(2) of the Fishing Vessels (Safety Provisions) Rules 1975 required that the liferaft be serviced at regular intervals of not more than 12 months. The service record disclosed that it should have been serviced in March 2015 and again in March 2016. (There were two other past occasions when the liferaft on the Louisa was there for longer than twelve months.) In practice, that would have meant that the liferaft would have been replaced at the point of service by Premium Liferaft Services. Because it was not previously dispatched to the

owners until September 2014, it having remained in storage for collection from the March of that year, it could be argued that the date for replacement was September 2015. But it is beyond argument that by the date of the accident its replacement was long overdue. The cylinder was purportedly charged in November 2011 and was first associated with the liferaft on the Louisa in April 2012. It should have been inspected no later than November 2016, five years after charging. The solicitor advocate for Premium Liferaft Services observed that the fact that the cylinder was empty would almost certainly not have been picked up at the annual replacement of the liferaft. But that does not assist the owners, in that the cylinder is an integral part of the liferaft and on its replacement at the due service dates a charged cylinder would have accompanied the replacement. The empty cylinder would have remained with the original liferaft. Thus the failure of the owners to follow the service requirements contributed directly to the deaths of the deceased. When one also takes into account, as the MAIB found, that the hydrostatic release unit was working but overdue for replacement, as were the EPIRB battery and the personal flotation devices, it is plain that the owners were not maintaining the vessel in a satisfactory manner. I accept that, as Duncan Kennedy fairly acknowledged, he had found that managing the Louisa had proved to be more difficult than he had expected, particularly as he was also working another boat at the time. I also record that he and his brother had introduced a number of safety improvements and additions to the vessel, including fitting a snatch block to prevent the crew being dragged overboard, putting floodlights on the phone mast and fitting a bilge alarm sounder in the sleeping accommodation (which someone unknown disabled because it

went off too often when the vessel was underway). Nevertheless, the fact is that while the owners did not directly cause the deaths, they could have prevented them by properly discharging their responsibilities to maintain the vessel. Their failures underline the importance for all owners of fishing vessels to follow the rules on their maintenance.

[29] Finally under this heading, I should add that I am unimpressed with the idea that it was for Premium Liferaft Services to send out reminders to owners about when liferafts should be replaced. MGN 499 placed the onus firmly on the owners. It seems to me that to suggest otherwise is just to blur the lines of responsibility and could create as many problems as it would solve. As it happens, Premium Liferaft Services have tightened up their processes in the light of the accident, such that it would now be very unlikely indeed that an empty cylinder would find its way on to a vessel. Thameside ceased this line of business immediately after the accident.

Lifejackets

[30] It is clear that the lifejackets used by all of the crew failed to maintain a patent airway, such that the deceased were observed by the rescuers "as if standing up in the water, with their faces pushed into the water". The lifejackets were being worn in the correct fashion. The following week after the accident, one of the lifeboat crew, Donald McIntyre, carried out his own experiments with the same type of lifebelt and found the same problem, which was avoided only by a fellow crewman, his father, pulling the waist strap so tight that breathing was restricted. In its report the MAIB recommended

that the MCA urgently conduct research to confirm the effectiveness of the lifejacket of the type used by the crew. The MAIB's concerns about them were confirmed in the research which was conducted. Gwilym Stone, Assistant Director (Ship Standards) of the MCA, in his evidence explained what steps the MCA have taken to review at international level the safety of this type of lifejacket. The United Kingdom plays a leading role in the International Maritime Organisation (IMO), a specialised agency of the United Nations, the UK being a signatory to the International Convention for the Safety of Life at Sea. In that role, the UK has recommended to the IMO that all lifejackets of the type used by the crew (what are called abandonment solid fill lifejackets) should have a minimum 150 Newtons buoyancy, that the testing regime should be more robust and realistic and that on manufacture they should have a retention device and sprayhood fitted as standard. Mr Stone had hoped that these changes would come into force by 2024, but that may be affected by the pandemic. The UK has not recommended the retrospective fit of a retaining strap or sprayhood, by way of a product recall. As the senior depute procurator fiscal observed, this may be in light of the extensive nature of the IMO's membership and its pace of progress in the roll out of newly manufactured modified garments.

Crew fatigue

[31] There was ample evidence before the inquiry that Mr Alliston demanded both of himself and his crew that they work long hours – longer than the relief skipper, David Brown. The Crown submitted that I should make a finding that there was a failure

properly to guard against the effects of fatigue, that it should be regarded as a defect in the system of working and that it contributed to the accident.

[30] The issue of fatigue is directly linked to the decision by Mr Alliston not to maintain a lookout during the hours that the crew slept. The Crown submitted that this too should be regarded as a defect in the system of working and that it contributed to the accident.

[32] I have some reservations about these submissions.

[33] The first point is that we simply do not know if having a lookout would have made any difference. Mr Hance made the general point that the longer the time the crew had to deal with any flooding in the hold the more likely that they might have resolved the problem. That must be true, but it is only of significance if we know what steps the crew could have taken at an earlier stage to avoid the vessel sinking. Given that we do not know the cause of the flooding, it is in my view idle (and unfair to Mr Alliston's memory) to speculate that he could have prevented the sinking. I accept that if the problem was the hose or, perhaps, defective valves, he might have been able to do something about them. But the reality is that we simply do not know that either of these was the cause of the flooding. Indeed the evidence suggests that they were not. [34] Perforce we do not have the benefit of Mr Alliston's explanation for the practice he operated. For all we know, he may have been able to satisfy me that, accepting as I am bound to do that fishing is not an industry without risk, it was reasonable for him to instruct the crew to work what, I agree, on the face of it appear to be excessive hours. But I did not have the benefit of evidence from representatives of the industry as to

general practice and, in particular, what was at the time generally regarded as safe and what was not. In 2016 the rules on working time regulations expressly excluded share fishermen.

[35] On the need to have a proper lookout, the reality was, and is, that share fishermen are not lawyers and while skippers must be expected to understand the rules it is unrealistic, but also unfair, to expect them to apply to them the same jurisprudential analysis that a lawyer might. While I accept that the regulations are now clearer, at the time of the accident there was uncertainty, even for lawyers, on whether that requirement applied when a vessel was at anchor. The reality was that on the night of the accident the sea and weather conditions were benign in Mingulay Bay. There were no other vessels in the vicinity and if the vessel had not flooded for a reason which is unexplained there is no evidence that the lack of a lookout would have caused a problem at all.

[36] The Crown prayed in aid the grounding of the vessel in 2014 when Mr Alliston was the skipper. Some evidence was given on this incident, but we did not have the benefit of detailed evidence about it; nor did we have the evidence of Mr Alliston about its circumstances. I do not regard it as reasonable – or fair – to conclude from that accident a pattern of behaviour which might be applied to the sinking of the Louisa. The fact is that the owners continued to employ Mr Alliston after that incident. The Crown suggested that this might be for financial reasons, but that is in my opinion no more than speculation. In his evidence, Duncan Kennedy said that on as many as ten occasions he had told the crew to make sure they get rest. But he and his brother did not

insist upon it, nor record such insistence in written form. Nor did they check that it was done. If they had done so, one can reasonably speculate that either Mr Alliston would have changed his ways or they would have stopped employing him. Neither occurred. [37] The main purpose of this inquiry is about loss of life, not loss of a boat. If the liferaft had inflated there would have been no drownings. That had nothing to do with the actions, correct or otherwise, of Mr Alliston.

[38] In saying that however, I do not ignore the more general issue about the safety of share fisherman. It is not obvious to me that there are good reasons why they were regarded as an exception. In any event matters have moved on, in that they are included in the current regulations which require proper rest periods - Merchant Shipping Notice 1884 (F), International Labour Organization Work in Fishing Convention (No 188): Working Time Application of the Fishing Vessels (Working Time: Sea-fishermen) Regulations 2004 as amended and in particular Regulation 3.1.

Search and rescue operation

[39] In its report, the MAIB analysed the search and rescue operation in detail and concluded with a recommendation that the MCA update and enhance its response to satellite distress beacon alerts. During the inquiry I had the benefit of evidence from Emma Watkins who was formerly employed as a Coastguard Watch Assistant at Falmouth Maritime Rescue Coordination Centre; Jaqueline Mackenzie who is the Senior Maritime Officer at Stornoway MRCC; and Julie Ann Wood who is Assistant Director, Policy Standards and International, at the MCA. I also had the evidence in a joint minute of admissions of Jenna Parry who was on duty with Ms Watkins at Falmouth on the night of the accident.

[40] It is unnecessary for the purpose of this determination to set out their evidence in detail – none of it was contradicted and the salient events on the night are set out in the MAIB report. The important point which emerged from the evidence is that problems over the accuracy of coordinates and their supply to relevant parties might have caused some 15 minutes of delay in the search and rescue assets reaching the Louisa, but that on the evidence of Professor Tipton it would have made no difference to the outcome.
[41] However, the MCA have learned lessons from the accident. Mrs Wood explained that the following changes have been made:

• The Mission Control Centre at RAF Kinloss is now the responsibility of the MCA and a new computer system has been installed, which is faster and more accurate in determining beacon locations;

• The MCA's standard operating procedures have been revised so that if a beacon alert is received and the MCA regard it as a distress call the search and rescue assets are immediately mobilised and dispatched to the area of the coordinates in the expectation that more accurate information gathering will proceed at the same time.

Formal Determination

[42] In accordance with the provisions of Section 26 of the Inquiries into Fatal Accidents and Sudden Deaths etc. (Scotland) Act 2016, I make the following determination:

When and where each of the deaths occurred

Paul Alliston, born on 4 October 1973, who resided in Claitir, Isle of Lewis, died between 0300 hours UTC and 0400 hours UTC on 9 April 2016 within the tidal waters of Mingulay Bay, Outer Hebrides.

Martin Johnstone, born on 20 November 1986, who resided in Halkirk, Thurso, Caithness, died between 0300 hours UTC and 0400 hours UTC on 9 April 2016 within the tidal waters of Mingulay Bay, Outer Hebrides.

Christopher Morrison, born on 24 December 1988, who resided in Stornoway, Isle of Lewis, died between 0300 hours UTC and 0400 hours UTC on 9 April 2016 within the tidal waters of Mingulay Bay, Outer Hebrides.

When and where the accident occurred

The accident resulting in the deaths of Paul Alliston, Martin Johnstone and Christopher Morrison occurred at or about 0232 hours UTC on 9 April 2016 when the fishing vessel Louisa SY30 sank within the tidal waters of Mingulay Bay, Outer Hebrides, at 56°48.73 N, 007°37.40 W.

The cause or causes of each of the deaths

The cause of the death of Paul Alliston was drowning. The cause of the death of Martin Johnstone was drowning.

The cause of the death of Christopher Morrison was drowning.

The cause or causes of any accidents resulting in the deaths

The cause of the sinking of the fishing vessel Louisa SY 30 was flooding of the hold which caused it to sink by the bow and founder.

The cause of the flooding is unknown.

An additional cause of the deaths was the failure of the liferaft to inflate, the cause of which was the failure by Thameside Fire Protection Limited to charge the CO² cylinder with gas during the last service of the cylinder.

An additional cause of the deaths was the failure of the owners of the Louisa to have the liferaft replaced at its service dates, the CO² cylinder being an integral part of it. An additional cause of the deaths was the failure of the deceased's lifejackets to maintain the deceased in a position where they could maintain an airway if they were unconscious or incapacitated.

Any precautions which could reasonably have been taken and, had they been taken, might realistically have resulted in the deaths, or the accident resulting in the deaths, being avoided.

Thameside Fire Protection Limited ought to have ensured that the CO² cylinder on the Louisa was charged with gas when returned to Comtalk (Leasing) Limited, trading as Premium Liferaft Services.

The owners of the Louisa ought to have ensured that the liferaft, with cylinder attached, was replaced annually.

Any defects in any system of working which contributed to the death or any accident resulting in the deaths.

Thameside Fire Protection Limited ought to have established and maintained a safe system of working for charging of CO² cylinders with gas, which would have ensured that the cylinder on the Louisa was in working condition on the date of the accident. The owners of the Louisa ought to have established and maintained a safe system of working for the checking of the service intervals of equipment on the Louisa and for taking the steps necessary for the servicing of such equipment.

Any other facts which are relevant to the circumstances of the deaths.

The MCA is encouraged to pursue its proposal to the International Maritime Organisation that all new abandonment (solid fill) lifejackets should have a minimum 150 Newtons buoyancy, that their testing regime be more robust and realistic and that they be fitted as standard with a retention device and sprayhood.

The MCA has acted appropriately and with proper dispatch to change its processes and procedures to improve the means by which upon receipt of an EPIRB satellite signal it is acted upon, notwithstanding that any delay in the establishment of the coordinates of the Louisa would not have resulted in the rescue of the deceased.

All relevant supervisory bodies should monitor carefully the compliance by the fishing industry with Merchant Shipping Notice 1884 (F), International Labour Organization Work in Fishing Convention (No 188): Working Time Application of the Fishing Vessels (Working Time: Sea-fishermen) Regulations 2004 as amended, and in particular Regulation 3.1 and in particular for share fishermen.

Conclusion

[43] It will remain a disappointment, particularly for the families of the deceased and Lachlan Armstrong, that it has not proved possible to identify a cause of the flooding which caused the foundering of the Louisa, despite the extensive efforts of the MAIB and the Crown, both of which acted with proper dispatch. The direct cause of the deaths of the three fishermen was the failure of the liferaft to inflate due to failures by Thameside Fire Protection Limited. The direct cause of that was the failure of one member of staff, but it should be noted that all the other gas cylinders on the relevant date were found to have been charged correctly and the ultimate responsibility for the failure rests with the management of the company for not establishing and monitoring a safe system of work. In turn, if the owners of the Louisa had complied with the annual servicing requirements for the liferaft it would have been replaced with a liferaft with a properly functioning cylinder well before the date of the accident. Added to that was the failure of the lifejackets, but it remains in doubt whether the absence of that failure would have avoided the deaths. Lessons have been learned both for that and for the sea rescue services, although the improved systems for the latter would not have resulted in a different outcome.

I commend in particular the performance of the crew of the Barra lifeboat, who acted with impressive dispatch from the moment they were notified of the accident. It was a great sadness for them not to recover the skipper's body, particularly given the close knit nature of the fishing community in the Hebrides.

During the course of the inquiry, evidence was given by Naomi Fulton who had been the partner of Christopher Morrison for four years before the accident. It was courageous of her to be prepared to give me an insight into the effects on the deceased's families. She told me that the last time she spoke to Christopher was the Thursday before the accident. He had told her that they had a good catch and that he was looking forward to a hotel getaway for their anniversary. She described the effect of her loss on her ("I felt like my whole future had been taken away from me.") and on her 11 year old daughter ("She had to grow up very quickly.") Her main hope was that more safety measures would be put in place, so that nothing like this will happen again. I express my condolences to the families and friends of the deceased.