SHERIFFDOM OF NORTH STRATHCLYDE AT DUMBARTON

[2021] FAI 17

B274/20

DETERMINATION

BY

SHERIFF F McCARTNEY

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

into the death of

BOGUSLAW KOPEC

Dumbarton, 8 March 2021

The Sheriff, having considered the information presented at an Inquiry on 1 and 2 December 2020 under sections 2(1) and 2(3) of the Inquiries into Fatal Accidents and Sudden Deaths etc. (Scotland) Act 2016, Finds and Determines:

1. That in respect of paragraph (a) of section 26(2), Mr Boguslaw Kopec, born 24 April 1964, died on 13 March 2011 at 2112 hours at Crosshouse Hospital, Kilmarnock.

2. That in respect of section 26(2) paragraph (b), the accident took place on 13 March 2011 between approximately 1820 hours and 1912 hours onboard the vessel the Forth Guardsman, south of Jura.

3. That in respect of section 26(2) paragraph (c), the cause of death was severe blunt force chest trauma.

4. That in respect of section 26(2) paragraph (d), the causes of the accident were the absence of using a stopper or other method to prevent a mooring line from moving during the shackling process, the subsequent movement of the vessel position during the mooring operation, Mr Kopec standing in an open bight of rope or wire, which tightened, pulling him against the deck railing, and difficulties in communicating with the bridge from the deck, meaning the tension on the wire was not released.

5. I make the following findings under paragraph (e) (precautions which (i) could reasonably have been taken, and (ii) had they been taken might realistically resulted in the death being avoided):

(a) That the crew of the Forth Guardsman could have tied in to a mooring using a stopper or other means of preventing the mooring line from moving during the connection process;

(b) maintaining the vessel's position during the mooring process, or alternatively having an effective means of understanding whether the vessel was moving;

(c) an effective method of working so that Boguslaw Kopec was supervised during the mooring process, to prevent him from standing in an open bight;

(d) providing an effective risk assessment and method statement, and thereafter, tool box talk or other effective means of communication to the crew regarding the mooring operation, including specifying which crew

members would be involved in carrying out the task and who would supervise the task;

(e) providing supervision for those carrying out the mooring task on deck;

(f) providing an effective method of communication between the crew carrying out the task and the Captain steering the vessel.

6. I make the following findings under paragraph (f), (any defects in the system of working which contributed to the death or any accident resulting in the death):

(1) Failure to follow the Code of Safe Working Practices for Merchant Seaman 2010 including:

(i) the failure to secure the lines with a stopper during the shackling process;

(ii) the failure to maintain the vessel's position during the mooring connection and the absence of an effective means of communication between deck and bridge should the vessel move;

(iii) the lack of supervision of Boguslaw Kopec;

(iv) the position in which Boguslaw Kopec was standing in an open bight of a rope.

7. I make the following findings under paragraph (g) (any other facts which are relevant to the circumstances of the death)

(1) That Boguslaw Kopec was not wearing a life jacket at the time of the accident;

(2) That the Captain did not follow the overboard recovery and emergency procedures in place at the time of the accident.

Recommendations

8. No recommendations are made under section 26(1) (b) and (4).

NOTE

Introduction

[1] This is a mandatory public Inquiry into the death of Mr Boguslaw Kopec in terms of the Fatal Accidents and Sudden Deaths etc. (Scotland) Act 2016 ("the 2016 Act"), given that the death happened at his place of work. Mr Kopec was employed by Briggs Marine Contractors Limited as an Able Seaman, and died off the coast of Jura on 13 March 2011. The purpose of the Inquiry was to establish the circumstance of the death and to consider what steps, if any, might be taken to prevent other deaths in similar circumstances.

The participants and their representatives at the Inquiry

[2] The Procurator Fiscal issued a notice of the Inquiry on 24 August 2020. This was 9½ years after Mr Kopec's death. Not only is that a significant delay for Mr Kopec's family, but, as will be explained, that delay has had a significant impact on the

availability of evidence to the Inquiry. There were only two participants to the Inquiry. Miss Jamieson, Procurator Fiscal Depute appeared for the Crown. Miss Anderson appeared on behalf of Briggs Marine Contractors Limited (hereinafter referred to as "Briggs Marine"). Briggs Marine were Mr Kopec's employers at the time of his death, and operated the vessel on which the death occurred. Mr Kopec was living with a partner at the time of his death who was entitled to participate in the Inquiry (section 11 (1) (a) of the 2016 Act). The Crown confirmed that contact had been made with her, and she did not wish to take any part in the Inquiry.

[3] Agents were able to agree an extensive joint minute of admissions, and, in addition, the Crown prepared an extensive bundle of numbered productions in a way that avoided the need for Briggs Marine to lodge a separate bundle. I am grateful to agents for their co-operation. When I refer to productions, I have referred to the production number and the page within the production bundle for ease of reference.

The evidence

[4] The joint minute of admissions was formally entered into the evidence on 3 December 2020. Only three witnesses were available to give evidence: Captain Alan Marsh, who was the investigation officer at the time with the Marine and Coastguard Agency (referred to as the "MCA"), Alan Henderson, Marine Operations Superintendent from Briggs Marine, and Danny McLaren, Group Safety Environmental and Quality Manager from Briggs Marine.

The legal framework

[5] The Inquiry was held under section 1 of the 2016 Act. The relevant procedural rules are found in the Act of Sederunt (Fatal Accidents Inquiries Rules 2017) ("the 2017 Rules"). The purpose of the Inquiry is defined by section 13 of the 2016 Act, and is to:

(a) establish the circumstance of the death, and:

(b) consider what steps, if any, might be taken to prevent other deaths in similar circumstances.

[6] Section 26 of the 2016 Act requires the Sheriff to make a determination in relation to the circumstances of the death (section 26(1) (a)) and recommendations on certain matters (section 26(1) (b)). Section 26(2) sets out the factors that the Sheriff must consider as to what constitutes the circumstances of the death, including the causes of any accident and the precautions that might have been taken, defects in the system of working and any other factors relevant to the death. Section 26(4) sets out the issues for consideration as to whether any recommendations could be made which might realistically prevent other deaths in the future.

Summary

[7] I had before me a number of witness statements, taken either by Police Officers or the Marine and Coastguard Agency in the days, weeks and months following the accident on the Forth Guardsman on 13 March 2011. Some statements were detailed, but most were relatively short. I did not have the benefit of hearing any oral evidence

from anyone on board the Forth Guardsman on 13 March 2011 at the time that the accident happened. One witness, Alan Henderson, had been on board the vessel earlier that day but had left by the time the incident happened. At the preliminary hearing, I had been addressed by the Procurator Fiscal as to the Crown's attempts to trace the witnesses who were on board the vessel at the time of the incident. All the crew members, including the deceased Mr Kopec, were from Poland. The nature of the work allowed crew members to live on the vessel during their weeks on shift, returning home to Poland for a number of weeks whilst off rota. None of the remaining crew members continued to work for, or have any association with, Briggs Marine by the time of the preliminary hearing. It appeared unlikely that any crew members would be traced, given it was probable that either crew members had returned to live and work in Poland, or, if working in the same industry, were likely to be at sea.

[8] Whilst the investigations carried out by the Marine and Coastguard Agency ("MCA"), the Marine Accident Investigation Branch ("MAIB"), the police, and Briggs Marine all provide an understanding of the mechanics of how the accident occurred, what was missing was evidence to help understand why the systems in place did not prevent the accident from occurring. A risk assessment had been drawn up for the mooring task. A toolbox talk took place amongst crew members. Whilst the witnesses from whom I heard evidence assisted the court as much as they could, it would have been valuable to hear direct evidence from the crew members on board at the time, particularly those involved in the risk assessment process. It appears that whilst the risk assessment identified that three persons were required for the mooring task, it failed to

identify that all three of those persons were required on deck. It appears that the risk assessment assumed only two persons on deck.

[9] The following is uncontroversial. The Forth Guardsman is a specialist marine vessel. In March 2011, Briggs Marine were contracted in a project to lay a power cable between Islay and Jura. Due to tide conditions there were specific time windows as to when that work could be carried out. Trials as to how the power cable might be laid were underway. On the 13 March 2011, the Forth Guardsman had been involved in the trials, along with two other ships operated by Briggs Marine, the Forth Constructor and Forth Sentinel. Alan Henderson, the Briggs Marine's Superintendent had been on board the Forth Guardsman that day, with riggers and surveyors, until around 1800 hours.. Due to a lack of available moorings in either the north end of Islay or the south end of Jura, Briggs Marine had laid its own mooring to the north of Jura. With a change in the wind during the course of the day, the decision had been taken to move the mooring to a location between the north of Islay and the south of Jura. The change of the location of the mooring, and change to the method of mooring, was discussed between the Captain, Janusz Piotr Zebrowski, and Alan Henderson at some point during the day.
Mr Henderson and other workers left the Forth Guardsman at Port Askaig on Islay around 1800 hours. The Forth Guardsman proceeded to the mooring south of Jura to tie up for the evening.

[10] A risk assessment and method statement for the mooring task was prepared by Grzegorz Krywuc. Mr Krywuc was the First Mate on the Forth Guardsman. That risk assessment and method statement had noted that three persons would be involved in

the task of attaching the Forth Guardsman to the mooring. A toolbox talk took place between crew members prior to the mooring operation commencing, which was attended by some, but not all, of the crew members on board the vessel.

[11] Once the mooring operation commenced, Grzegorz Krywuc and Boguslaw Kopec were on the deck. The Captain of the Forth Guardsman, Janeusz Zebrowski, was on the bridge assisted by the Chief Engineer, Tadeusz Chojnowski. It was dark. The mooring operation was to take place on a different area on the vessel than usually used for a mooring operation. Usually the forward area of the deck was used. However, as that area of the vessel had cable laying equipment on it and there was a risk of the line snagging on such equipment, the risk assessment and method statement detailed that the crew would use the main deck. The anchor was attached to a yellow cylindrical buoy. That buoy, in turn, was connected to a black line and a messenger line (a lighter line). The end of the messenger line had an eye (a closed loop, used for securing the line to another line or attachment). Together those items formed the mooring line. The mooring line would be pulled in by the vessel by one of the crew using a boat hook to pick up the end of that line, i.e. the eye or loop at the end of the messenger line. Once the messenger line was on board, the black line would be pulled on board, and then connected to the deck by a shackle with wire from a winch. The method statement detailed that the connection would be made by the vessel going astern in the wind.

[12] The vessel arrived at the general location of the mooring buoy. The Captain was given direction by Grzegorz Krywuc via VHF. Boguslaw Kopec attempted to throw a

line onto the mooring and missed on the first attempt. The vessel manoeuvred around the mooring to allow him to try again. On this occasion he managed to catch the mooring and the line was dragged on board. During the process of Grzegorz Krywuc, the First Mate, attempting to finish secure the mooring, Boguslaw Kopec stood in the open bight (bend) of a rope, between the rope and the railings of the boat. Mr Krywuc began connecting the mooring line to the winch line. That is done by passing a shackle (a connection) between the two eyes or loops in each rope. However, the vessel drifted from its position. As it did so, the messenger line (the line connected to the mooring) came under tension. Whilst it was unclear whether or not the vessel was attached to the buoy, because the winch line had been looped around the ship's rail on the deck, tension occurred either way once the vessel drifted from its original position. As that rope tightened, it pinned Mr Kopec against the railings of the boat. Mr Krywuc attempted to tell the bridge to move the vessel to release the tension on the rope. However, given that the handrails are relatively low, Mr Kopec was dragged or pushed overboard by the tension in the rope. Another crew member managed to reach him and hold his head out of the water. Another boat also operated by Briggs Marine vessel quickly attended, with a diver. Mr Kopec was rescued from the water and resuscitation was commenced. However, Mr Kopec never regained consciousness and was formally pronounced dead later that evening in Crosshouse Hospital, Kilmarnock.

[13] A post mortem examination was carried out on 21 March 2011. The cause of death was found to be 1a Blunt force chest injury due to 1b Accident at work (production 14 at p147). A toxicology report found a low level of alcohol in the

deceased's blood, consistent with having been produced by post-mortem decomposition. Analysis of blood and urine for use of acidic and basic drugs, benzodiazepines, paracetamol and illicit drugs was negative.

[14] Immediately following the accident, Scenes of Crime Officers attended at the vessel and police officers also interviewed crew members. Statements were taken from crew members on board the vessel at the time of the incident. That initial investigation was to establish whether there had been any foul play. Subsequently the MCA was involved in a more detailed investigation (following notification by the Coastguard). Captain Allan Marsh, enforcement officer with the MCA, commenced investigations on 23 March 2011 by an initial discussion with Danny McLaren of Briggs Marine. Danny McLaren is the Safety, Environmental and Quality Manager. In addition to the investigation by the MCA, the MAIB also carried out an investigation into the accident. The MAIB produced and published a report in September 2011.

[15] The MCA and MAIB have distinct functions. The MCA are required to investigate such incidents and, if required, submit a report to the Procurator Fiscal with a potential for a criminal prosecution to be considered. By contrast, the MAIB's work is designed to implement Regulation 5 of the Merchant Shipping (Accident Reporting and Investigation) Regulations 2005. That regulation requires that an investigation under the 2005 Regulations is to seek to prevent future accidents, and not to apportion liability or blame.

[16] The MCA completed its investigation and sent a report to the Procurator Fiscal recommending that Captain Zebrowski should be considered for prosecution. No

prosecution has taken place. The reason or reasons for the Procurator Fiscal's decision not to prosecute Captain Zebrowski are unknown. The basis on which the MCA recommended such a prosecution are unknown.

[17] The MAIB's report concluded that insufficient manpower had been assigned to the mooring operation, that some risks were not properly identified, that seamanship practices on board the vessel were poor, that Mr Kopec had stood in an open bight of rope, which closed around him, and that communication procedures were inadequate. The MAIB's report also noted that the First Mate's method statement for mooring omitted important stages of the task, and those shortcomings had not been identified during discussions held earlier in the day between the Marine Superintendent of Briggs Marine (Mr Alan Henderson), the Captain, and the First Mate (production 15 at p156). It also noted the shortcomings were not identified in the toolbox talk held with the crew. The MAIB's report noted that "the mate did not follow this guidance as he did not fully understand it and had not received any training regarding risk assessment". The MAIB did not make any formal recommendations on the basis that Briggs Marine had itself taken a number of actions after the accident. The actions taken by Briggs Marine were detailed in the MAIB's report to be:

- developing procedures for single point moorings
- instructing all single point moorings to be conducted by three people
- reminding its crew to follow the MCA's Code of Safe Working Practices
- carrying out a review of vessel procedures

- carrying out a review of risk assessment procedures and training in production of risk assessments, method statements and toolbox talks for all staff members
- adaptation of monthly directors' visits to company vessels to include an audit of toolbox talks on board
- altered man overboard drills to include touch tests, to test the bridge response, and to include the launch of rescue boats and recovering casualties, including when a vessel moves to a new location
- providing the Forth Guardsman with a satellite telephone and an additional VHF set with a distress button, close to the conning position
- instructing lifejackets to be worn at all times on open deck
- a planned review of its crisis management plan.

Issues for the Inquiry and parties' submissions

[18] I heard evidence from three witnesses; firstly from Captain Allan Marsh of the MCA, and then two employees of Briggs Marine; Alan Henderson, Marine Superintendent, and Danny McLaren, Quality and Safety Manager. Much of the evidence and subsequent submissions centred on the risk assessment and method statement carried out for the mooring operation. In general terms, there was no real dispute as to the mechanics of how the accident occurred.

[19] What was less clear was why the risk assessment, method statement and subsequent toolbox talk did not identify the flaws, particularly as to the use of only

two persons on deck during the mooring. Captain Marsh's evidence was that it was very likely the accident would have been avoided if three persons had been on deck rather than two. In his opinion, a third person, acting in a supervisory role, would have been likely to notice that Mr Kopec was standing in the bight of a rope and instructed him to move. There should have been two persons attaching the two pieces of rope together, given it was a job that required them using both hands. Accordingly a third person should have had the task of communicating with the bridge, given that the radios needed a free hand to operate, and also supervising the other two for obvious dangers such as positioning themselves in an open bight. The decision to only have two crew members on deck appears to have been deliberate; the Chief Mate Mr Krywuc's second statement (taken on 3 June 2011) narrates that "[t]he three persons involved in the operation were the skipper, me and the able seaman". There were others on board who could have been deployed on deck; for example, the cook Mr Krawczynski was available to assist and he had experience of helping on deck (from his statement taken on 21 August 2012 (production 24 at p221 and p222)).

[20] All the witnesses also agreed that the risk assessment was flawed by its failure to identify that the mooring rope should have been stoppered during the process of connecting the vessel to the buoy. A stopper refers to a safety arrangement that should have been considered during the shackling process. The shackling process was the securing of the rope from the ship and the mooring rope, by inserting a pin through both to secure both ropes together. A stoppering arrangement would allow both ropes to be tied or pinned together, but would also allow the ropes to be quickly released in an

emergency if required. This was often done by using a knot such as a rolling hitch, which could be quickly released under tension.

[21] There was no proposed use of a stopper in the risk assessment, or during the mooring process itself. The mooring took place in the hours of darkness, with a wind registering at 6 on the Beaufort scale (that is a wind at around 25 to 30 mph). The vessel had begun drifting from its position during the time it took for Mr Kopec and Mr Krywuc to pull the messenger line on board. Both men then pulled the messenger line towards the wire on the winch. The winch wire was already threaded through a fairlead (a metal ring fixed on deck to guide the wire) and the deck's handrails, with an eye to allow it to be connected with a shackle to the eye from the messenger line. As Mr Krywuc was preparing to make the connection between the two eyes, Mr Kopec had positioned himself between the handrail and the winch wire. As the connection was made and the vessel continued to drift, the winch wire suddenly pulled tight. Mr Kopec was caught by the tension in the rope, and was pinned against the handrails. Mr Krywuc attempted to tell the bridge to move forward to release the tension via the VHF radio, but the handrail buckled and Mr Kopec fell overboard.

[22] The use of a stoppering knot would have, in all likelihood, prevented the death as it would have allowed Mr Krywuc to quickly release the tension on the line. It was not mentioned within the risk assessment or method statement. The paperwork associated with the toolbox talk had a space to record comments from others; no comments were noted by any other crew members (production 8 at p124). Briggs Marine produced checklists to help with the preparation of risk assessments and method

statements, including one for mooring to buoys (production 9 at p129), which could have been adapted for the circumstances.

[23] Captain Marsh was fairly blunt in his assessment of the inadequacies of the risk assessment and method statement. He considered the method statement should have been a step by step account of the task. He thought that Mr Krywuc had not understood all the terms used on it. In his view, the risk assessment was not sufficiently detailed, and the forms used some generic codes which were not easily identifiable.
Mr Henderson was less critical of the risk assessment itself, but was clear that a third person should have been on deck which would have been likely to avoid Mr Kopec standing in the bight of the rope. Mr Henderson thought there was a straight forward way of providing a stopper, by putting the eye or a surplus of rope over one of the set of bitts (posts that are used to secure lines).

[24] It is fair to say that the consideration by the court of those issues has been hampered by the absence of evidence of anyone who was on board the Forth Guardsman at the time of the incident. As there were some aspects of the documentary productions that could not be easily reconciled, it would have been helpful to hear from Janeusz Zebrowski (the Captain) and Grzegorz Krywuc (the Chief Mate or Officer). The Crown made various unsuccessful attempts to trace both witnesses. However, late in the Inquiry, the Crown reported that Grzegorz Krywuc had belatedly contacted the Crown to report he was on board a vessel at sea. The Crown were unable to say where in the world he was, or whether if the Inquiry was to be delayed or further continued, he would be available. Given that uncertainty, and the delays that had

already occurred, I considered it best to proceed with the evidence available to the Inquiry.

[25] The documentation for the risk assessment and toolbox talk did not appear to be on all fours with some of the statements from crew members. The statement of Ryscard Nadol (Second Engineer) was taken on 21 August 2011 by Captain Allan Marsh (production 23). Mr Nadol's statement narrates that he finished work at 1700 hours. He had supper, and then went to his cabin. He heard shouts at 1800 hours when the incident happened, and immediately went to the deck, assisting in an attempted rescue. Mr Nadol's statement ends "I do not remember the Chief Officer taking a discussion with the crew". That might have been the case, given he might have been off shift at the time of the toolbox talk, but if so, it is not clear why Mr Nadol's signature appears on the list of persons attending the toolbox talk (at p124 of the productions).

[26] The Chief Mate, Grzegorz Krywuc, gave a second statement (production 20 at p208) indicating he prepared the risk assessment and method statement on the "afternoon of 13 March 2011". If that is correct, that would have been at the time that Alan Henderson would have been on board the vessel. The MAIB report notes:

> "[t]he master, superintendent (a former Forth Guardsman master) who was on the board for the trials, and the mate discussed the options for securing to the mooring buoy. They decided that handling and connecting the mooring line on the raised forward mooring deck could be difficult, and there was a risk of line snagging on the adjacent cable laying equipment or tyre fendering" (production 15 at p2 of the report, p152 of the bundle).

The MAIB report also notes, in considering the risk assessment and method statement that "[t]he shortcomings were not identified during the discussions held earlier that day

by the superintendent, master and mate" (production 15 at p156). Mr Henderson's evidence to the Inquiry was that there was a discussion about the mooring between himself and the Captain and First Mate. He described the discussion as short; "not war and peace". The source of the information that the MAIB rely upon is not clear. Again without hearing evidence from those on board at the time of the incident there is some uncertainty, in particular, as to the Captain's involvement in the preparation of the risk assessment and toolbox talk. It appears that the Captain was not present for the toolbox talk (see statements of Tadeusz Chojnowski, production 22 at p214, and the statement of the cook, Leszek Krawczynski, production 24 at p214). Despite that, the Captain's signature appears on the top of the list of those attending at the toolbox talk (production 8 at p124). He was not asked about the risk assessment process or the tool box talk in his subsequent statement.

[27] The MAIB's report notes that the toolbox talk was attended "by all six crew" and "was held during the morning" (production 15 at p3 of the report, and p153 of the bundle). From the other statements, it is not clear if that is correct.

[28] The absence of evidence from those on board leaves a number of unanswered questions about why the risk assessment process did not properly identify, in particular, the risk of too few personnel on deck and the inadequate communication between the deck and the bridge. Further is the comment in the MAIB report that the First Mate did not understand the risk assessment process. It is not known who is said to have made that comment to the MAIB.

[29] Mr Henderson had no reason to doubt that the personnel on the vessel understood the risk assessment process. His role, as Marine Superintendent, was to oversee the safe operation of all of Briggs Marine's vessels. Part of that was ensuring that the Code of Safe Working Practices (referred to as "the bible" for seafarers) was understood and adhered to by all staff. Mr Henderson's role involved hands on time on the company's vessels, auditing risk assessments and carrying out spot checks to ensure safety procedures were adhered to. He had seen both the Captain and the First Mate operating on Briggs Marine's vessels before. He had no reason to think that either of them did not understand their role, and was satisfied about their qualifications and experience.

[30] When Mr Henderson was asked about the MAIB report in his evidence, he appeared somewhat defensive. I detected that there may have been a "what if" element to his evidence, having been on the vessel that day, and with a temptation to blame himself for not having involved himself in the risk assessment process. He did not see it before he disembarked (which suggests that the MAIB report is wrong, insofar as the toolbox talk did not take place whilst Mr Henderson was on board). There is no criticism of Mr Henderson for not reviewing it, assuming it had been written before he disembarked from the vessel. That was not his function; ultimately it was for the Captain to take responsibility for the mooring operation, as with all day to day operations. Mr Henderson's role is of oversight of all the Briggs Marine vessels, rather than the day to day operations. Mr Henderson said that if the Captain or First Mate had not been happy with the proposed mooring, he would have stayed on board the vessel

to assist. He spoke about the need to be available to the crew, and for the crew to feel looked after. I accept his evidence.

[31] I also note that Briggs Marine did not accept the MAIB report was accurate in its terms, both at the time it was published, and at the time of the Inquiry. Although Captain Marsh's evidence was that the MAIB generally had a meeting with the relevant parties with a draft of their report to allow for comment and corrections, Mr Henderson's evidence was that the MAIB did not, at least on that occasion, follow a process to allow Briggs Marine to input into the draft.

[32] I have some concerns as to how far the MAIB report can be relied upon. It notes that "the mate did not follow this guidance as he did not fully understand it and had not received any training regarding risk assessments". The reference to "guidance" refers to Briggs Marine's guidance on completion of risk assessments. That is not entirely accurate if it is suggesting that the guidance was not at all followed and no risk assessment was carried out. As a matter of fact, Grzegorz Krywuc had completed a risk assessment, although it was a flawed assessment. The source of that information is not specified, and nor does the report detail which crew members were interviewed. Whilst it was published relatively quickly after the accident (in September 2011), the officer who prepared it has left the MAIB. Any other witness from the MAIB would not be able to go beyond the terms of the report.

[33] The Code of Safe Working Practice for Merchant Seaman does not require formal training to be provided for any seaman on the preparation of risk assessments. Rather, the risk assessment process is envisaged to be learned on the job, through experience.

Briggs Marine is to be commended for providing risk assessment training to all its staff immediately following the incident. Whether that should be a requirement for all seamen is a different issue. It might have been that, by hearing evidence, this would have been an area that the Inquiry could have considered. However, given the uncertainty of the information in the MAIB report, and the absence of evidence, it would be speculation to consider the matter any further. Captain Marsh had not received formal training in risk assessment, and nor had Alan Henderson or Danny McLaren. I heard evidence about the system within Briggs Marine to give support to those drafting risk assessments whilst off-shore. The draft could be sent to Mr Henderson or another senior member of staff on-shore for guidance and feedback. I cannot say with any certainty whether the absence of formal risk assessment training amongst the crew members contributed to the death. At best all that can be said is that these passages of the MAIB report highlight the desirability for FAIs to take place within a reasonable time period, so it is more likely that relevant witnesses are able to give evidence to allow such matters to be properly contemplated.

[34] As such, the findings of this Inquiry are limited to the factors already outlined; the need for three, rather than two, crew members to be on deck during the mooring task; the error in not stoppering the mooring line as soon as it was on board the vessel to prevent the winch wire coming under tension; the error by the deceased in standing in the open bight of the line and, lastly, the failure of the risk assessment procedure as a whole to identify flaws in the process.

[35] Whilst there was some discussion during the evidence as to other factors that may have assisted in preventing the incident, there are no other relevant precautions that could have been taken. There was some evidence as to whether a search light could have been placed on the buoy to assist the Captain in keeping the vessel in one location whilst the mooring operation was being carried out. Captain Marsh seemed to favour that; Mr Henderson thought that for a light to be of sufficient strength to assist, it may be too heavy for the buoy. I did not hear sufficient evidence to allow any such findings to be considered.

[36] There was general agreement amongst all witnesses that lifejackets should have been worn by both crew members whilst they were on deck. That was not company policy at the time, but the risk assessment did set out that the crew would wear lifejackets and thermal floating suits (production 8 at p128). Despite that, neither Mr Kopec nor Mr Krywuc were wearing lifejackets. It was a matter of agreement that company policy was changed the day after the accident so that lifejackets became mandatory in all areas of the deck. However, in the circumstances of 11 March 2011, a lifejacket would not have prevented Mr Kopec's death, given the cause of death was a crushing injury. Sadly it appears that Mr Kopec was already fatally injured when hitting the water. The issue of the lifejacket is a relevant fact in relation to the circumstances of the death in terms of section 26(2) (g).

[37] Whilst the Captain had not called the emergency services, for reasons that were not clear, any delays did not contribute to the cause of death. Mr Henderson gave evidence that he called the coastguard, thinking that the Captain had not done so and it

being better to have two calls made than none. Whilst the Crown categorised the failure to contact the coastguard under the heading of "inadequate man overboard recovery and emergency procedures", I do not consider that I heard evidence suggesting that the procedures were inadequate, but rather that the procedures were not followed. Briggs Marine had clear company procedures to be followed in an emergency (production 5 at p93). Captain Marsh's evidence was that the coastguard should have been called by using channel 16 on the VHF radio, or the use of a DSC button (which automatically alerts the coastguard). Danny McLaren gave evidence that Briggs Marine had altered the position of the DSC button on its vessels so that the Captain now had it within arm's reach, and had installed satellite phones for when the vessel was in remote locations. There is no evidence that the failure of the Captain to contact the emergency services contributed to Mr Kopec's death.

Conclusions

[38] Following my consideration of the submissions and all the evidence before me, I consider the precautions set out at finding 5 above, could reasonably have been taken, and, had they been taken, I consider that in terms of section 26(2)(e) might realistically have resulted in Mr Kopec's death being avoided. I also find that the defects of working identified in finding 6 contributed to Mr Kopec's death. I have found other facts relevant to the circumstances of his death in finding 7.

[39] I wish to express my sincere condolences to Mr Kopec's family and friends.