



CORONERS COURT OF QUEENSLAND

FINDINGS OF INVESTIGATION

CITATION: **Non-inquest findings into the death of Mahsan Muhammad**

TITLE OF COURT: Coroners Court

JURISDICTION: BRISBANE

DATE: 20/08/2024

FILE NO(s): 2020/2530

FINDINGS OF: Carol Lee, Coroner

CATCHWORDS: CORONERS: Domestic commercial fishing vessel- Use of personal flotation devices in coastal waters-Noncompliance with procedures for onboard operational safety requirements.

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Introduction

Mr Mahsan Muhammad was a 48-year-old Indonesian national; having been born on 12 December 1971. He was last seen alive at approximately 03:30 hours on 18 May 2020 onboard the commercial fishing trawler, the K-VERN FPHA-T 12445QB (K-VERN) in Queensland waters.

The Queensland Police Service (Police) provided a Missing Person- Suspected Reportable Death report (report) to the State Coroner on 17 June 2020. In accordance with the direction of the State Coroner, a Coroner was appointed to investigate Mr Muhammad's suspected death, as the circumstances fitted within the definition of a reportable death pursuant to section 8(2)(a) and 8(3)(b) and (e) of the *Coroners Act 2003 (CA)*, and in accordance with section 7.7 of the State Coroners Guidelines 2013. I took over the carriage of the matter in February 2024.

The role of a coroner is to investigate reportable deaths to establish, if possible, the cause of death and how the person died. The purpose of a coronial investigation is to establish the facts, not to cast blame or determine criminal or civil liability.

Circumstances

Mr Muhammad was a married man who divided his time between his family in the Pao Pampang hamlet of Labuan Haji village, East Lombok, Indonesia and working to support them on trawlers in Australia. At the time of his disappearance, he was on a temporary working Visa in Australia.

He was reportedly a fit and healthy man and one who was also considered to enjoy good mental health.

Mr Muhammad had worked on fishing boats for many years and had a number of deck hand qualifications which permitted him to work on commercial boats. He was employed as a deckhand on a prawn trawler, K-VERN and based in Tin Can Bay. K-VERN is owned and operated by Lee Seafoods of Tin Can Bay. Mr Muhammad was employed by Lee Seafoods for 5 years and he worked on K-VERN for all of that time. He was well familiar with the trawler. The owners and operators of the K-VERN, Mr Kevin Lee and his wife Ms Vera Lee, were very good friends with Mr Muhammad, having worked with him for approximately 8 years in both Australia and Indonesia.

On 18 May 2020, Mr Muhammad was working on the prawn trawler, K-VERN, at Barwon Banks in the Coral Sea off the Sunshine Coast. Mr Muhammad was last seen alive around 03:30 hours when the K-VERN was operating in waters off the coast of Queensland, 25 nautical miles ('nm') East, Northeast ('ENE') of Point Arkwright, Queensland. The weather conditions at the time were described as '*rough seas*'. The crew onboard consisted of four people in total: Mr Muhammad, Mr Lee (the Master), Mrs Lee and Mr Glenn Clark.

At about 03:30 hours, Mr Muhammad climbed out on one of the starboard boom arms of the trawler, that was horizontally extended outboard of the vessel, attempting to reconnect a recovery rope to one of the otter boards. The boards were ten metres outboard and three metres above the water level.

Mr Muhammad was reportedly wearing waterproof waders and gumboots. He was not wearing a Personal Flotation Device ('PFD') or lifejacket, nor was he tethered to the vessel. Mr Lee as the Master of the K-VERN supervised this '*activity from a midship position on the starboard side of the vessel*'. The K-VERN was reportedly struck by a large wave side-on, which caused the vessel to roll sharply, dunking Mr Muhammad under the water for a few seconds. While under the water, Mr Muhammad let go of the fishing net and disappeared after the vessel '*righted*'. Shortly after, Mr Muhammad was seen lying face up in the water. He appeared unconscious. Attempts to grab Mr Muhammad from the water were unsuccessful due to the large swells and Mr Muhammad floated away from the vessel quickly. The crew of the K-VERN lost sight of Mr Muhammad shortly after.

The Australian Maritime Safety Authority ('AMSA') report notes that '*upon reaching the boards, Muhammad re-attached the rope. When returning to the boom he deviated from normal practice and came up in the front of the boards. This left nothing under him should he fall. The Master saw Muhammad's feet slip. Muhammad attempted to pull himself up but he fell. The Master threw a nearby life-ring into the water. Muhammad came up under the net and threw his hands over the net. The Master*

ran into the wheelhouse, steering full lock to port to have the sea following. He made a man-over-board ('MOB') call on the Marine VHF that was received by Brisbane Vessel Traffic Services ('VTS'). Whilst inside the wheelhouse steering to port the master saw Muhammad rise and fall with the roll of vessel (about 1.5m) and not come up after being submerged. After making the turn, Muhammad was seen floating in the water beside the port bow. Mast spotlights were lit to illuminate the immediate area. Other crew maintained a view of Muhammad. The Master threw the port side life-ring with light and let him float down the side of the vessel so he could be retrieved. However, as Muhammad drifted aft his body moved away from the vessel and outside the reach to be brought on board. The Master turned again but the deckhand was unable to be relocated'.

The Police report notes that Mr Clark, a fellow deckhand witnessed Mr Muhammad fall off the boom arm, backwards into the sea. Mr Clark saw Mr Muhammad grab onto the attached fishing nets that the K-VERN was dragging. Mrs Lee assisted by looking out from the top deck of the vessel with a waterproof torch, to try to spot Mr Muhammad in the water. Mrs Lee observed Mr Muhammad lying face up in the water. He appeared unconscious. Mr Clark made attempts to grab Mr Muhammad from the water, however due to the large swells, Mr Muhammad floated away from the vessel quickly. Two life-rings and a waterproof torch were thrown overboard to try to assist Mr Muhammad.

There were no further sightings of Mr Muhammad by the crew of the K-VERN, despite conducting a surface search of the last known position. Given that Mr Muhammad was wearing waterproof waders, gumboots and no PFD or lifejacket, it is thought highly likely that Mr Muhammad was weighed down by his clothing and sank.

To date, there have been no further signs of life and the body of Mr Muhammad has not been recovered.

The incident was reported to the AMSA by VTS.

Investigation

Air and Sea search

At approximately 03:40 hours on 18 May 2020, the MOB call was raised by the Master of the K-VERN informing authorities that a crew member had fallen overboard 25nm ENE of Point Arkwright (26°30S 153°34E).

An air and sea search of a 550 nm area was initiated by the State Water Police (Sunshine Coast Water Police onboard PV Norm Watt) and Joint Rescue Coordination Centre ('JRCC') Canberra.¹ The air and sea search lasted for three days. Shoreline searching was conducted for a further two days.

Despite the rough seas, the search was considered to be 'highly effective' as the two life rings thrown overboard by the crew of the K-VERN acted as datum markers and provided a real-time drift pattern for the body of water in the search area. The finding of the life rings also validated the search.

At approximately 16:00 hours on 18 May 2020, all aerial and surface craft began returning to their respective bases and the K-VERN returned to port at the Tin Can Bay Marina.

Several searches were conducted over the following days by aerial assets, the Water Police and other vehicles, off the coastline between Noosa Heads and Double Island Point where one of the K-VERN's life rings and a torch were recovered on the beach on Wednesday 20 May 2020.

The life rings and torch were located 15km north of the third beach access for vehicles. Drift modelling confirmed this to be the most likely landing area for a body or debris to be washed up. No further debris associated with the incident have been located. The body of Mr Muhammad has not been recovered.

Time frame for Survival ('TFFS')

Dr Paul Luckin, a consultant in survival medicine provided Police with an opinion of a potential time

¹ The JRCC co-ordinated aerial assets and Rescue 511 was dispatched from the Sunshine Coast airport.

frame for survival in the circumstances Mr Muhammad was in. Based on the physical condition of Mr Muhammad, the sea state and weather, Mr Muhammad's swimming ability and the lack of a PFD, Dr Luckin opined there was a 0% chance of survival for a person in the water, after a period of seven hours.

Calculated Probability of Detection ('POD')

The POD within the search area, for all aircraft² and surface vessels was calculated at 94%. For individual search areas, some had a POD as high as 95-97%. As noted above, the location of the two life rings and torch from the K-VERN validated the search effort.

QPS Proof of life checks

Police conducted proof of life checks following Mr Muhammad's disappearance. Checks conducted with Australian Border Force, Centrelink, Medicare, Interstate Police, and Banks have all failed to produce any evidence to indicate that Mr Muhammad is alive.

Police findings

Police assisted in the search and rescue (SAR) response over the period of 5 days. Police took statements from witnesses and liaised with external agencies, particularly, AMSA.

The following numbered points below provides a number of findings by Police surrounding the disappearance and the eventual termination of the SAR response by Police:

1. The weather conditions within the search area at the time of the man overboard were suitable for a fishing vessel but not so for an unsupported person in the water. The waves and associated whitecaps would have made it extremely difficult for a swimmer to remain afloat.
2. While the conditions were not conducive to swimming, they did not hamper the large aerial search of the area. The aerial search did locate several objects, including life rings, from the vessel concerned.
3. Mr Muhammad was seen to fall from the fishing net boom. Multiple floatation items were thrown to him, but he was unable to reach them. One of these items included an EPIRB, which, for some unknown reason, failed to transmit a signal. Mr Muhammad was kept in sight for a short time before going out of view.
4. Mr Muhammad was seen clinging to the fishing net boom before the vessel rolled, causing Mr Muhammad to be dunked underwater. As the vessel righted Mr Muhammad was no longer seen clinging to the boom, but floating face up and displaying no signs of consciousness.
5. A search effort was commenced immediately the alarm was raised, with aerial and surface assets on scene shortly after daybreak. The combination of rotary and fixed wing aircraft ensured that the entire search area was able to be covered within the first day of searching, providing the maximum chance for Mr Muhammad to be located. The POD for the search was in excess of 94% and was validated by the finding of the life rings on several occasions.
6. The life rings augmented the computer drift modelling, showing a general drift of north-west, back towards the coastline.
7. A survival time was sought from Dr Paul Luckin. His advice was that there was zero chance of survival beyond noon on the day Mr Muhammad went overboard.
8. Subsequent coastline searches failed to locate any evidence of Mr Muhammad, suggesting that he was not on the surface shortly after disappearing.
9. Marine predation is prevalent in this area, more so as the vessel was a trawler, likely being followed by predatory fish.
10. There is now no likelihood of Mr Muhammad being located alive and very little chance of any evidence of him coming ashore.

² Eight aircraft in total were deployed – both rotary and fixed wing.

Australian Maritime Safety Authority ('AMSA') Investigation and Report

The AMSA investigated the loss of Mr Muhammad. On 19 May 2020, AMSA representatives inspected the K-VERN after it returned alongside a Tin Can Bay berth. The following occurred:

- a. *'The vessel was inspected and an AMSA 756 – Simplified Report of Inspection was completed. Two minor deficiencies were noted that were not contributors to the incident.'*
- b. *An electronic version of the SMS for the vessel was obtained.*
- c. *An electronic version of the Stability Book was obtained.*
- d. *Log entries were obtained.*
- e. *A video and audio recorded conversation was had with the Master and deckhand Glenn Clark, recalling the events of the incident.*
- f. *A number of photographs were obtained'.*

On 25 May 2020, the Safety Management System ('SMS')³ was assessed by Safety Management Systems, Principal Advisor (Errol Milevskiy) who noted the SMS *'appeared to meet the requirements of the MO504'*. The K-VERN had a valid Certificate of Survey (COS-86658-002) (valid to 3 October 2021), and a valid Certificate of Operation (COO: 900029910) (valid 16 March 2018 to 15 March 2023). The Master, Mr Lee was interviewed.

On 22 May 2020, a press release was issued by the AMSA urging commercial vessel operators and their crew to ensure they wear lifejackets while working on the decks of their vessels.⁴

On 28 May 2020, AMSA issued further guidance to seafarers: *'Life jackets must be available and easily accessible to each person on board your commercial vessel. The national law requires you to have either Safety of Life at Sea ('SOLAS') or coastal lifejackets on your vessel, depending on your operational area. SOLAS and coastal lifejackets are designed to be worn while abandoning a vessel. They are bulky, with flotation material at the front so an unconscious person will automatically roll onto their back. They also have reflective tape and a whistle to attract attention. SOLAS and coastal lifejackets are made to different standards, with SOLA Lifejackets designed to help people stay afloat in water for longer periods of time, while awaiting rescue. Certain models of inflatable lifejackets also meet the MSCV standard for coastal lifejackets – it they are manufactured to the correct standard. Because they are less cumbersome to wear than a traditional coastal and SOLAS lifejacket, this makes them ideal to wear during normal activities on a vessel to reduce the risk of drowning if you fall overboard'*.⁵

Procedures for Onboard Operations

At the time of the incident, the K-VERN had in place a SMS that Mr Lee assisted in the development of. Mr Muhammad had been inducted onto the vessel and while Mr Muhammad undertook the activity that resulted in the fall from the vessel, Mr Lee was supervising him.

In respect of the activity undertaken by Mr Muhammad resulting in his fall from the vessel, the relevant Procedures for Onboard Operations were:

- a. **Procedures for Onboard Operations 7.47.0 – Working over the side:**
 - i. Point 5 required the deckhand to wear a coastal PFD (Mr Muhammad did not do so despite PFD's being on board the vessel).
 - ii. Point 10 required the activity to take place in smooth waters when the vessel was not underway (the vessel was underway, and the sea was 1-1.5m).
- b. **Procedures for Onboard Operations 7.45.0 – Working aloft (at height):**
 - iii. Point 5 required the deckhand to wear a safety harness (Mr Muhammad did not).

The AMSA report found:

³ <https://www.amsa.gov.au/vessels-operators/domestic-commercial-vessels/safety-management-systems> as at 1 June 2024.

⁴ See <https://www.amsa.gov.au/news-community/news-and-media-releases/amsa-urges-crew-wear-lifejackets-after-trawler-tragedy> as at 7 April 2023.

⁵ See <https://www.amsa.gov.au/safety-navigation/safety-equipment/what-lifejacket-do-i-need> as at 11 June 2024

- a. *'Procedure 7.47.0 – Working over the side exists in the SMS for the K-Vern. The procedure identifies safe work practices and requires inter-alia the wearing of a coastal PFD, being in smooth waters and the vessel not being underway during that work. In this instance the crewman was not wearing a coastal PFD and the vessel was underway in offshore waters'.*
- b. *'Notwithstanding the prescriptive steps in the procedure, there is also an over-riding statement that 'when working over the side the Master is responsible for ensuring safe work practices are followed at all times.' By not applying the steps within the procedure or considering appropriate options to reduce risk, Lee failed to do all that was reasonably practicable to ensure the safety of the crewmember'.*
- c. *'A prima facie case exists to consider action against the Master for contravening section 18(1) of the National Law insofar that he did not so far as is reasonably practical implement or comply with the safety management system for the vessel...an infringement notice is preferred on this occasion'.* The AMSA report noted that the death of Mr Muhammad had had a profound effect on Mr Lee and that Mr Muhammad was a respected crewman and friend.

The report further noted: *'An AMSA Guidance Notice should be promulgated. The content of which should refresh Marine Safety Awareness Bulletin, Issue 4, September 2016 to re-enforce the importance of working over the side procedures in a vessels SMS and to avoid repeated poor practices over time being seen as a low risk'.*

Prosecution of Mr Kevin Lee

Mr Lee was subsequently prosecuted. On 31 May 2022, Mr Lee appeared in the Gympie Magistrates Court and entered a plea of guilty before Magistrate C.J Callaghan to the following charge:

- a. *On or about the 18th of May 2020 at a place in the waters off the coast of Point Cartwright in the State of Queensland, you Kevin Scott Lee, did commit an offence contrary to subsection 18(3) of schedule 1 of the Marine Safety (Domestic Commercial Vessel) National Law Act 2012, in that you were the master of a domestic commercial vessel, namely the K-VERN, and omitted to do an act, such omission being in contravention of section 17, subsection (1) of the said Act, negligent as to whether the omissions was a risk to the safety of a person or the said vessel.*

Mr Lee was fined \$6,000 and a conviction was recorded. The prosecutor submitted that Mr Muhammad was operating over the side, away from the vessel and operating at height. As such *'he should have been wearing a life jacket ('PFD') or in some way been restrained or harnessed onto the vessel to avoid exactly this situation where it seems that he slipped in wet conditions and finished up in the ocean when they weren't able to pull him out and recover the board'*⁶ The prosecutor noted that Mr Lee had been very co-operative with authorities throughout the investigation, giving a full record of interview.

Changes to operational safety requirements

On 1 August 2023, changes to **Marine Order 504 (Certificates of operation and operation requirements)** came into force.⁷ The changes are summarised as follows:

- a. *Crewing provisions will better align with the certificate of competency arrangements in the revised Marine Order 505 [1] (Certificates of competency) which came into force on 1 January 2023, while the minimum crewing requirements table in Marine Order 504 has been simplified.*
- b. *Fatigue must be adequately addressed when determining risk-based crewing levels.*
- c. *Risk assessment (including the appropriate crewing determination) must be accessible to the master, crew and enforcement personnel.*
- d. *The master and crew (if applicable) must be consulted on the development of the vessel's risk assessment.*
- e. *A copy of the vessel's safety management system must be kept onboard (if practical) and*

⁶ Transcript (day 1) at page 1-5, line 34-39.

⁷ See <https://www.amsa.gov.au/marine-order-504-operational-safety-changes> as at 1 June 2024.

- with onshore personnel.*
- f. *Additional onboard training and drilling will become a requirement for emergency procedures which must be addressed in the vessel's safety management system, and associated record-keeping must be undertaken.*
 - g. *There must be clear and direct reporting pathways for the escalation of issues to the designated person, these must be understood by crew and master and incorporated into the safety management system which must be working as intended.*
 - h. ***Lifejacket wear must be addressed in the vessel's risk assessment and a written procedure must be included in the safety management system.***

Such a change is evident of the value of lifejacket use in respect of the safety of crews.

Conclusion

After considering the material obtained during the coronial investigation, I consider that I have sufficient information to make the necessary findings in relation to Mr Muhammad's suspected death in accordance with section 45 (2) of the CA, and that an Inquest is not required.

I am satisfied that there has been a comprehensive investigation into the circumstances of Mr Muhammad's disappearance. The evidence suggests that Mr Muhammad's death may have been preventable had he been wearing a PFD or wearing a harness connecting him to the vessel. However, in the absence of Mr Muhammad's body, it is difficult to determine in accordance with the requisite standard of proof whether the use of such safety measures would have allowed for recovery of the body, as opposed to preventing the loss of life in its entirety. An inquest would not further resolve this issue.

I note the actions taken by the relevant authority as a result of the investigation, including safety alerts and changes to operating requirements. Additionally, a criminal prosecution has taken place and Mr Lee has been convicted and fined.

I extend my condolences to Mr Muhammad's family and friends for their loss.

Findings required by s.45

Identity of the deceased – Mahsan Muhammad

How he died – Mr Muhammad was last seen alive around 03:30 hours onboard the commercial fishing trawler, the K-VERN which was operating in waters off the coast of Queensland. The weather conditions at the time were described as 'rough seas'. Mr Muhammad climbed out on one of the boom arms of the trawler attempting to reconnect a recovery rope to one of the otter boards. He was reportedly wearing waterproof waders and gumboots. He was not wearing a Personal Flotation Device ('PFD'). Mr Muhammad fell off the boom arm, backwards into the sea where he grabbed onto the attached fishing nets that the K-VERN was dragging. The K-VERN was struck by a large wave side-on, which caused the vessel to roll sharply, dunking Mr Muhammad under the water for a few seconds. While under the water, Mr Muhammad let go of the fishing net and disappeared after the vessel 'righted'. Shortly after, Mr Muhammad was seen lying face up in the water. He appeared unconscious. Attempts to grab Mr Muhammad from the water, were unsuccessful due to the large swells and Mr Muhammad floated away from the vessel quickly. The crew of the K-VERN lost sight of Mr Muhammad shortly after. He was not seen again. It is unknown whether Mr Muhammad suffered any injuries when he slipped and fell into the water. Mr Muhammad was described by witnesses as floating, unconscious, lying face up in the water. Given Mr Muhammad was wearing waterproof

waders, gumboots and no PFD, it is highly likely that he has been weighed down by his wet clothing and drowned.

Place of death –

Waters off the coast of the State of Queensland, approximately 27 nm offshore of Point Arkwright (26°30S 153°36E).

Date of death–

18 May 2020

Cause of death –

Undetermined. However, noting the circumstances of the death, it is most likely Mr Muhammad has drowned at sea.

I close the investigations.



Carol Lee
Coroner
CORONERS COURT OF QUEENSLAND
11 June 2024