MAIB
MARINE ACCIDENT INVESTIGATION BRANCH

ACCIDENT REPORT

VERY SERIOUS MARINE CASUALTY | REPORT NO 12/2021 | SEPTEMBER 2021

This investigation was carried out by the UK Marine Accident Investigation Branch (MAIB) on behalf of the Gibraltar Maritime Administration, in accordance with the Memorandum of Understanding between the MAIB and the Red Ensign Group Category 1 registries of Isle of Man, Cayman Islands, Bermuda and Gibraltar.

Extract from The Gibraltar Merchant Shipping (Accident Reporting and Investigation) Regulations 2012 – Regulation 4(2):

"Investigations under these Regulations shall not be concerned with apportioning blame nor with determining civil or criminal liabilities. The sole objective of the investigation of an accident under these Regulations shall be the prevention of future accidents through ascertainment of its causes and circumstances. It shall not be the purpose of an investigation to determine liability nor, except so far as is necessary to achieve its objectives, to apportion blame."

NOTE
This report is not written with litigation in mind and, pursuant to Regulation 19(10) of The Gibraltar Merchant Shipping (Accident Reporting and Investigation) Regulations 2012, shall be inadmissible in any judicial proceedings whose purpose, or one of whose purposes is to attribute or apportion liability or blame.

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Fatal crush accident while a gantry crane was moving a hatch cover on board the general cargo vessel *Cimbris*, at Antwerp, Belgium, on 14 July 2020

SUMMARY

A port stevedore on board the Gibraltar registered general cargo vessel *Cimbris* was fatally crushed when he became trapped between the vessel's gantry crane and a cargo hatch cover during cargo discharge operations at the Antwerp Bulk Terminal, Belgium. No one saw the stevedore position himself between the moving gantry crane and the hatch cover, but his likely intent was to assess the progress being made by his team working in the hold. The chief officer did not have a full view of the crane's path from his control position and, contrary to the vessel's documented procedures, a second crew member was not used to act as a lookout or banksman.

The hatch cover lifting operation was not properly planned, adequately supervised, or executed in a safe manner. Communication between the ship's crew and port stevedores was poor and the safety culture demonstrated by both was weak.

The vessel's manager, Briese Dry Cargo GmbH & Co. KG, has taken action to improve its guidance on the safe conduct of gantry crane lifting operations and the port stevedore federation, Centrale der Werkgevers aan de Haven van Antwerpen, has reviewed its safety procedures for stevedore operations. Recommendations have been made to Briese Dry Cargo GmbH & Co. KG and Centrale der Werkgevers aan de Haven van Antwerpen, aimed at improving the safety culture on board their vessels and among their port workers respectively.

Image courtesy of FleetMon (www.fleetmon.com)

Cimbris

FACTUAL INFORMATION

Narrative

At 2100 on 13 July 2020, the general cargo vessel *Cimbris* moored starboard side to berth 753 at the Antwerp Bulk Terminal. The vessel was scheduled to discharge its cargo of 3926 tonnes of fine coke, known as 'coke breeze'. *Cimbris* had a trim of 0.6-1.0m aft, and a 1° list to starboard. It was cloudy, with light rain or drizzle, the air temperature was 12°C and there was a gentle breeze from the north.

Between 0000 and 0600 (14 July) the on watch third officer (3/O) used the vessel's gantry crane **(Figure 1)** to stack hatch covers number 1, 2, 3 and 4 on top of hatch cover 5 and hatch covers 8, 9, 10 and 11 on top of hatch cover 7 **(Figure 2)**, as required by the cargo unloading plan **(Figure 3)**.

Figure 1: *Cimbris*' hatch cover gantry crane (photograph taken from the vessel's starboard side, looking forward)

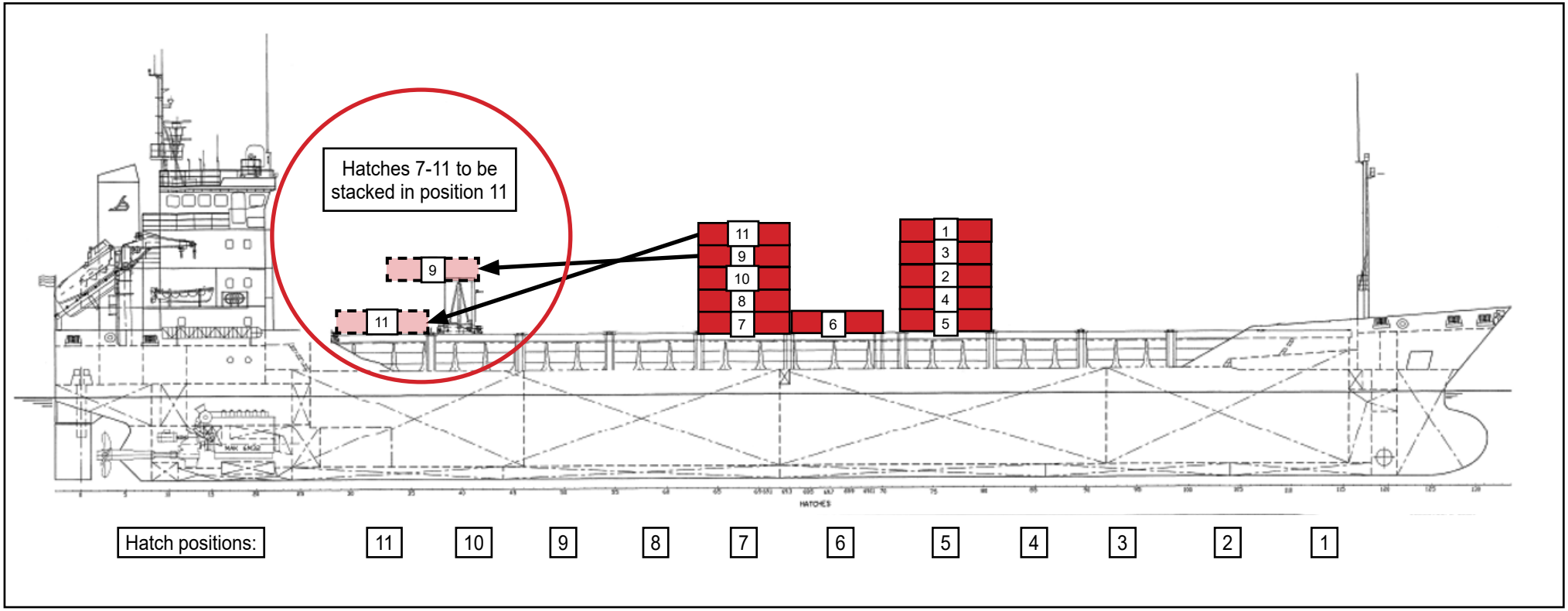

Figure 2: Hatch configuration before and at the time of the accident

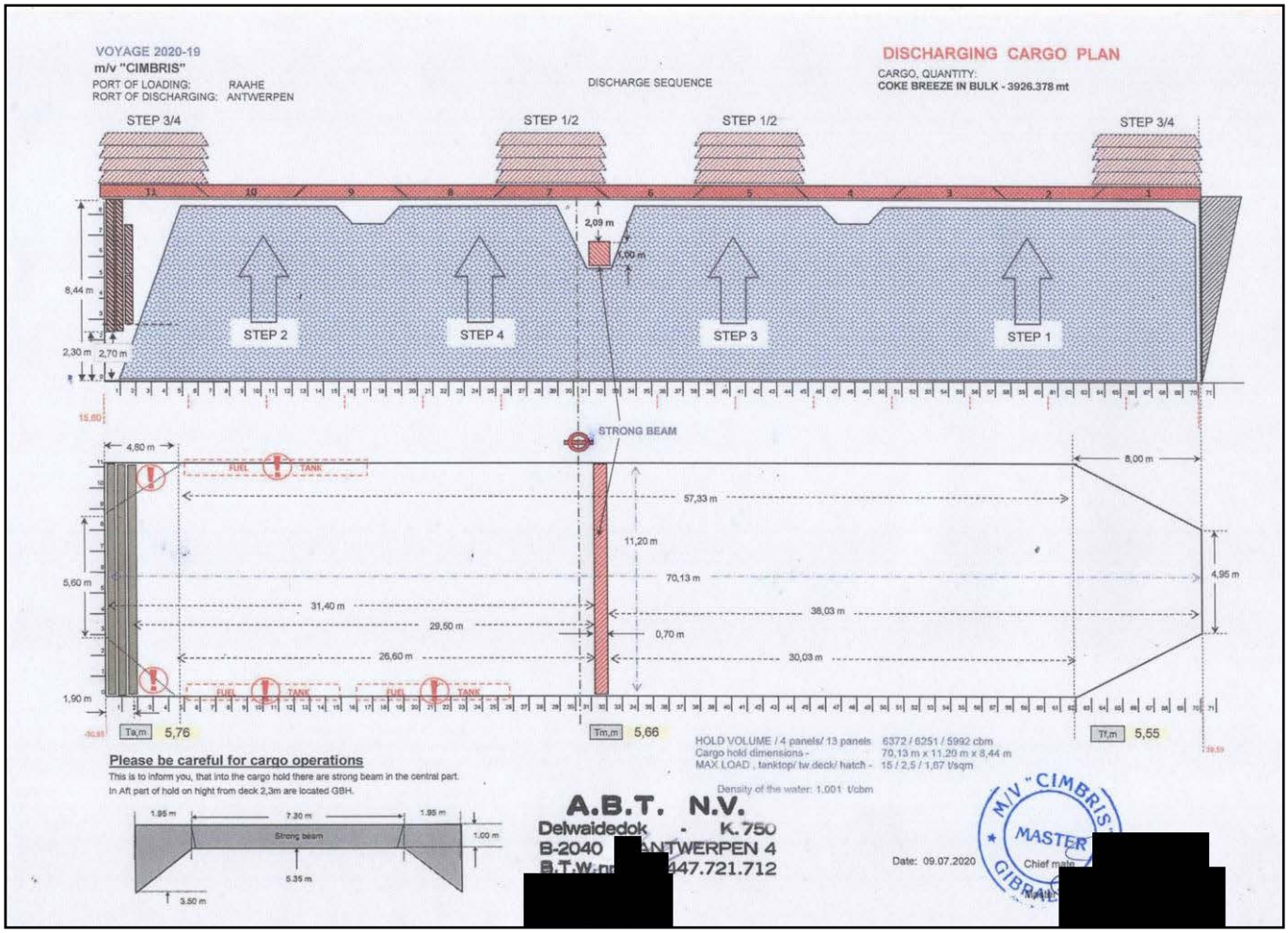

Figure 3: *Cimbris*' cargo discharge plan

At 0600, five port stevedores boarded *Cimbris* to discharge the cargo. The team, all Belgian nationals, comprised a foreman, a stevedore coordinator, a front-end loader[1] driver, and two general dockworker/ cleaners. A sixth team member remained ashore to operate the discharge grab crane; it was the role of the stevedore coordinator to liaise between the crane operator and those working in the cargo hold. The foreman discussed the discharge plan with the chief officer (C/O) in English and then briefed the other stevedores. The foreman explained that the aft end of the hold would be unloaded first and informed his team that hatch covers 7 to 11 would be moved aft once the area was unloaded and the front-end loader embarked. The foreman then went ashore while the stevedore coordinator, front-end loader driver, and dockworker/cleaners remained on board.

Cargo discharge commenced in the after part of the hold. The stevedore coordinator directed the shoreside grab crane operator from the vessel's port side walkway via handheld radio. To see into the hold, he climbed up the vessel's fixed ladders and leaned over the top of the 2m high hatch coaming. *Cimbris*' C/O and an able-bodied seaman (AB) were on duty on deck. The C/O was monitoring the cargo operations and the list and trim of the vessel, and ballasting as required. The AB was maintaining a security watch at the gangway and was monitoring the vessel's mooring lines and timber fendering, and adjusting them as necessary.

[1] A front-end loader is a wheeled machine used to move bulk cargo materials around the hold so as to make them accessible to the shore crane.

Shortly before 0900, the discharge of the aft part of the hold neared completion. The stevedore coordinator confirmed with the C/O that, once the front-end loader had been lifted into the hold by the shore crane, hatch covers 7 to 11 would be moved aft and stacked at the hatch cover 11 position **(Figure 4)**. The stevedore coordinator supervised the transfer of the front-end loader, which was disconnected from the lifting chains by its driver and the two dockworker/cleaners who had already made their way into the aft part of the hold. Once this had been completed, the C/O made his way to the ship's gantry crane and the stevedore coordinator walked along the port walkway towards the forward end of the hold.

Cimbris' C/O checked the gantry crane's path was clear on both sides of the main deck and climbed up to the crane's control position. He then moved the crane forward until it was over the hatch covers stacked on top of hatch cover 7. The C/O connected hatch cover 11 to the gantry crane, raised it clear of the stack, drove the crane aft and lowered the hatch cover into position. He then climbed down to the main deck and walked around the hatch cover to confirm it had seated correctly on both sides. The C/O climbed back up to the gantry crane's control position and moved the gantry crane forward to collect hatch cover 9.

At about the same time, the shore crane took its first load from the forward part of the hold. After observing this, the stevedore coordinator told the shore crane operator to continue working on his own while he went to check on the progress of his colleagues in the aft part of the hold. The coordinator then walked aft along the port walkway.

Meanwhile, *Cimbris*' C/O looked aft to check that the port and starboard walkways and coamings were clear. On seeing that the intended path was clear, the C/O lifted the hatch cover and started to drive the gantry crane aft. At about the same time, the stevedore foreman boarded *Cimbris*.

Figure 4: Photograph taken by ship's crew prior to front-end loader being lowered into aft end of cargo hold

At about 0900, as the C/O drove the gantry crane over hatch cover position 10, the crane suddenly stopped **(Figure 5)**. The C/O did not know why the crane had stopped, but the stevedore foreman, who saw the stevedore coordinator's head appear above hatch cover 11 on the port side, immediately realised that there had been an accident and shouted up to the C/O. The C/O climbed down from the crane and ran with the foreman to the port aft walkway, where they found the stevedore coordinator wedged between the aft leg of the gantry crane and hatch cover 11, a gap of approximately 130mm **(Figure 6)**.

Figure 5: Gantry crane (in accident position) with hatch cover 9 suspended

The foreman instructed his team to stop the discharge operation and leave the vessel. He also alerted the terminal operations supervisor by radio, while the C/O alerted the master. The terminal operations supervisor called the emergency services and the port's mobile emergency unit arrived quickly.

The stevedore coordinator suffered catastrophic injuries and was declared deceased at the scene. His death was ruled as accidental and, in accordance with Belgian law, there was no requirement for a postmortem examination, and one was not undertaken.

Post-accident tests and inspections

The gantry crane was inspected and its emergency stops, movement warning bell and flashing light were tested and found to be operating correctly. The warning bell was loud and, although it was not possible to replicate the sound of the front-end loader engine in the hold, it was considered unlikely that the bell would have been drowned out by the ambient noise at the time of the accident. The gantry crane flashing light was clearly visible, even in daylight, but the suspended hatch cover obscured it from the position the stevedore coordinator was found as the crane and suspended hatch cover approached. When in motion, the crane caused significant vibration, which could be felt when leaning over the hatch coaming.

Figure 6: View of location where stevedore coordinator was discovered with inset showing position of emergency stop button

At the start of the operation to move hatch cover 9, there was a clear line of sight from the gantry crane's control position to the area of hatch coaming where the stevedore coordinator was crushed **(Figure 7)**. Visibility of the crush site became obscured by the suspended hatch cover as the gantry crane approached hatch cover position 10. There was a 20m distance from the start position to the point where the gantry crane structure aligned with hatch cover 11, trapping the stevedore coordinator. During a reconstruction, it took 45 seconds for the gantry crane to travel from the hatch cover 7 position to the hatch cover 11 position. The crush site was not visible from the crane's control position for approximately the final 20 seconds of travel.

Vessel

Cimbris was owned and operated by Briese Dry Cargo GmbH & Co. KG (Briese) and registered in Gibraltar. The vessel mainly operated in European waters, carrying a wide variety of general cargoes. The vessel was in-date for all surveys and its Safety Management Certificate was valid until May 2024.

Crew

Cimbris had a crew of nine: six Russians, including the master, C/O, 3/O, chief engineer, motorman and deck cadet; and three Russian-speaking Ukranians, including the two ABs and a cook. The official working language on board was English, which the C/O spoke well.

The C/O joined the vessel on 5 July for his first contract in this role. He had 10 years' seagoing experience, all with Briese, and had worked his way up from AB. He had worked on *Cimbris* and an identical sister vessel as a 3/O and was experienced in operating gantry cranes. He had completed a 3-day handover with the outgoing C/O, covering familiarisation and training on all key systems, including the gantry crane and relevant safety procedures.

Figure 7: View from gantry crane control position toward location where stevedore coordinator was discovered

The two ABs kept the gangway security watches in port, with 6-hour watches being the norm. The duty AB and the duty officer could communicate via handheld radio.

At the time of the accident, the on watch AB was at the gangway and the deck cadet was carrying out garbage duties. The 3/O and the other AB were due to leave the vessel and were standing in the vicinity of the gangway with their reliefs and the master.

The stevedores

The casualty was a 59-year-old Belgian national who had trained as a stevedore coordinator (locally referred to as a 'deckhand') in 2005. He was experienced in the discharge operations undertaken and had completed 54 operations for Antwerp Bulk Terminal in 2019 and 47 in 2020. At the time of the accident, he was wearing safety boots and high-visibility work clothes.

The foreman, coordinator, shore crane driver, front-end loader driver and one of the dockworker/cleaners carried handheld radios. The stevedores and ship's crew could not communicate with each other via radio as they did not have a common channel. The stevedores all spoke Flemish. Their English proficiency was sufficient for cargo-handling matters, and the foreman could speak English well.

Cargo hold hatch covers and the gantry crane

Cimbris was constructed with a single cargo hold and equipped with a pontoon-type hatch cover system. The hatch covers were numbered 1 to 11, with hatch cover 1 being the most forward. The hatch covers were hoisted, lowered, and relocated by means of a dedicated electrically-powered gantry crane. The gantry crane had a safe working load of 13,500kg and was fitted with two steel wheels on each side, which ran on tracks on top of the hatch coaming **(Figure 1)**. The top of the hatch coaming was 2m above the deck, 0.4m wide, and was fitted with ladders to enable visibility into the hold during cargo operations.

The gantry crane was able to operate with a vessel trim of up to 1.5° and was driven from a forward-facing control position on its starboard side by means of three levers. Power was supplied from a trailing cable, and operators had to ensure the cable did not foul the crane's wheels. The gantry crane was in date for its 5-yearly Class inspection. It was fitted with a loud warning bell and flashing light, which operated when the crane was in motion. Emergency stops were fitted just forward of the aft wheel on each side of the crane **(Figure 6)** and at the control position.

Hatch cover 9, suspended on the gantry crane at the time of the accident, measured 6,092mm x 11,150mm x 500mm and weighed 12,500kg.

Safety management

Briese provided *Cimbris* with a generic safety management system (SMS) document that gave direction on the safe operation of the vessel and its equipment. The SMS contained focused risk assessments, which covered cargo and gantry crane operations as well as other hazardous activities.

The SMS documents directed that, for safety reasons, two people were always to be engaged in hatch cover operations. The gantry crane operations risk assessment identified limited visibility from the gantry crane's control position as a hazard and, to mitigate this, a dedicated lookout or banksman was required, with good communications established with the gantry crane operator. The SMS also made clear that no one should be on or under the hatch covers during repositioning operations.

Port labour and stevedore operations

Port labour in Antwerp was organised in a pool system, with workers allocated tasks on a daily basis. The port was municipally owned, but all services were delivered by private sector companies using registered workers to provide stevedoring services. These companies had to be members of an umbrella organisation known as Centrale der Werkgevers aan de Haven van Antwerpen (CEPA). CEPA delivered worker training programmes and was responsible for investigating industrial accidents within the port.

Stevedoring service companies were contracted by the vessel's charterer and required to unload cargo as quickly and efficiently as possible. As the stevedores could not move hatch covers themselves, vessels' crews were required to move the covers whenever the stevedores were ready. Any delay could result in the master receiving a letter of protest for delaying cargo operations. In practice, this meant that the on watch deck team were at the disposal of the stevedores throughout loading and discharging operations.

Regulation and guidance

The Gibraltar Maritime Administration has adopted the majority of UK marine legislation and guidance, and its vessels are required to comply with the UK Merchant Shipping and Fishing Vessels (Lifting Operations and Lifting Equipment) Regulations 2006 (LOLER). LOLER required that every lifting operation involving lifting equipment be properly planned, appropriately supervised, and carried out by competent persons in a safe manner. Regulation 10(3)(e) required the use of a banksman or lookout with appropriate means of communication if the full path of a load, either directly or by means of auxiliary devices, cannot be observed by the lifting equipment operator. The UK Maritime and Coastguard Agency (MCA) provided guidance on the interpretation of LOLER in its Marine Guidance Note (MGN) 332 (M+F). It also provided detailed guidance and additional information on lifting equipment and operations in its Code of Safe Working Practices for Merchant Seafarers (COSWP).

The International Labour Organization (ILO) code of practice, *Safety and health in ports*, explained that it was the responsibility of everyone directly or indirectly involved with work in ports to develop safe and healthy systems of work and ensure that they were put into practice. It also stated that:

> *Ships' officers should cooperate with shore personnel as necessary. This should include:*
>
> - *ensuring that the activities of the ship's crew do not give rise to hazards to safety or health on the ship*; *and*
> - *ensuring that if the crew work together with port workers, joint safe systems of work are followed to protect the safety and health of all involved.*

The ILO code of practice section on handling hatch covers also stated that:

> *Hatch covers, beams and pontoons should not be removed or replaced while work is going on in the hold under the hatchway.*

Similar guidance was provided in MGN 332 (M+F) and the COSWP.

Unsafe working practices observed and recorded by crew

During *Cimbris*' visit to Antwerp, the vessel's crew witnessed the port stevedores carrying out several unsafe acts. On the day of the accident, these included the failure to wear hard hats **(Figure 4)** and climbing over the coaming and sliding down the cargo to access the holds. The day after the accident, the replacement stevedore coordinator was observed sitting on the hatch coaming with no form of fall restraint **(Figure 8)**.

Figure 8: Photograph taken by ship's crew after the cargo operations resumed, showing stevedores working in the forward end of the cargo hold with a stevedore coordinator sat on top of the cargo hatch coaming

Previous accidents involving cargo hatch cover gantry cranes

In May 2019, the second officer (2/O) of the UK registered general cargo vessel *Karina C* died when he was crushed between the vessel's gantry crane and a stack of hatch covers. The 2/O's intentions in placing himself in such a dangerous position are not known, but the MAIB investigation report[2] identified that, despite other crew members working on deck, no one was allocated to support hatch cover operations. The officer driving the gantry crane was unaware of the 2/O's approach and mistakenly assumed that it was safe to continue operations. In addition to installing additional emergency stop buttons on its gantry cranes, *Karina C*'s operating company revised its operating procedures and SMS. Recommendations were made to *Karina C*'s operators to take action to improve the safety culture on its vessels, in particular to ensure compliance with established safe systems of work.

On 4 April 2008, an AB on board *Cimbris* was fatally injured while standing on a hatch cover that was being lifted by the vessel's gantry crane. One of the gantry crane's lifting wires parted, and the spreader bar fell onto the AB. The Gibraltar Maritime Administration's (GMA) investigation[3] identified that the lifting wire was significantly corroded and gantry crane maintenance and inspection regimes were inadequate. The GMA's investigation also concluded that the planning and supervision of the lifting operation was ineffective. The GMA made a recommendation to Briese Schiffahrts GmbH & Co.KG to ensure that its lifting operations were properly planned, supervised and carried out in a safe manner. It also issued Shipping Information Notice 17: *Requirements for Lifting Equipment Inspection and Certification*, which reminded its vessel owners and managers of the need to comply with LOLER.

ANALYSIS

The accident

The entrapment of the stevedore coordinator was not witnessed by those on board. However, it was evident that he was fatally crushed because he had positioned himself in the direct path of the moving gantry crane and its operator did not see him. This section of the report will consider the likely mechanism of entrapment and the reasons why this situation was allowed to develop during a routine cargo hatch cover lifting operation. The safe conduct of cargo operations on board *Cimbris* and the strength of the safety culture demonstrated by the ship's crew and the port's stevedores will also be discussed.

Mechanism of entrapment

When the C/O moved the first hatch cover aft (hatch cover 11), the stevedore coordinator was working at the forward end of the cargo hold. At about the time the C/O was preparing to move the second hatch cover, the stevedore coordinator walked aft to check on the team working in the aft part of the hold. At some point before the accident, the stevedore coordinator must have climbed up the side of the hatch coaming and positioned himself between the moving gantry crane and hatch cover 11. Once trapped, he was unable to alert the C/O or stop the crane. This was probably because he had little time to react and was unable to reach the emergency stop positioned on the outer side of the crane structure **(Figure 6)**.

Exactly when and why the stevedore coordinator placed himself in the path of the moving crane is unclear. However, it is most likely that his intention was to lean over the hatch coaming and communicate with, or assess the progress made by, the stevedores working in the hold. The port workers could communicate with each other using their handheld radios; however, it was standard practice for the stevedore coordinators to climb onto the hatch coaming to observe and shout down to the team working in the holds below **(Figures 4** and **8)**.

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[2] MAIB report 18/2020: www.gov.uk/maib-reports/crush-incident-on-general-cargo-vessel-karina-c-with-loss-of-1-life

[3] Report on the investigation of the failure of the hatch cover gantry crane on board *Cimbris* alongside in the port of Tekirdag, Turkey, resulting in one fatality on 4 April 2008.

It took about 45 seconds for the gantry crane to travel from the hatch cover 7 position to the accident site and post-accident trials indicated that the stevedore coordinator should have been aware that the crane was moving aft towards him. This was because he had a clear view of the gantry crane from the deck walkway, its warning bell would have been sounding continuously and its warning light was flashing. It is possible that the noise generated in the open hold by the front-end loader might have drowned out or obscured the sound of the warning bell. Nevertheless, the stevedore coordinator should have felt the hatch coaming vibrate during the gantry crane's approach. Furthermore, the stevedore coordinator had agreed with the C/O that the hatch covers would be repositioned once the front-end loader was in the hold, and one hatch cover had already been moved aft.

It is most likely that the stevedore coordinator was aware that the crane was moving aft and simply misjudged its rate of approach. He was probably confident that he had plenty of time to climb on to the hatch coaming, check on his team's progress and then move out of the way of the crane. It is also possible that, once on the hatch coaming, his ability to move clear was hampered by an unanticipated occurrence such as a snagging incident or a medical event. However, there were few obvious snagging hazards on top of the coaming and there was no evidence to indicate the stevedore coordinator had suffered a medical event. There was also no evidence to suggest his judgement might have been impaired by drugs or alcohol.

Visibility from the gantry crane control position

Prior to lifting the second hatch cover (hatch cover 9) and driving the gantry crane aft, the C/O checked the main deck walkways and the whereabouts of the vessel's crew. The crane's controls did not restrict his ability to vary his position and he had a clear line of sight from the crane's control position to the area where the accident occurred. He knew the stevedore coordinator was on the port walkway and assumed he was overseeing the cargo discharge operation at the forward end of the hold. When the C/O lifted the hatch cover a large section of the crane's path of travel along the port walkway became obscured and the area where the accident occurred would not have been visible to him during the last 20 seconds of the lifting operation.

While it might have been difficult to spot a person standing on or walking along the port walkway **(Figure 7)** from the gantry crane control position, the stevedore coordinator would have been clearly visible had he climbed on to or leant over the top of the hatch coaming. This was particularly so given that the stevedore was wearing high-visibility clothing. It is therefore unlikely that the stevedore coordinator was on the hatch coaming before the C/O started repositioning the second hatch cover.

If the stevedore coordinator had walked past the gantry crane as the hatch cover was being lifted, he would not have been visible to the C/O. Similarly, if the stevedore coordinator had climbed onto the hatch coaming during the gantry crane's last 20 seconds of travel, he would have been obscured by the suspended hatch cover. It is therefore most likely that the coordinator climbed on to the hatch coaming while the gantry crane was moving aft and, possibly, during the period his position was obscured by the suspended load.

The lifting operation

It was evident that the lifting operation was not properly planned, supervised or executed in a safe manner. The C/O did not know the whereabouts of the stevedore coordinator and could not observe the full path of the crane or its suspended load from his control position. Furthermore, stevedores were allowed to work in the hold while the lifting operation was taking place above them.

As it was not possible from the gantry crane's control position to see the hatch cover's full path of travel, the crane operator should have employed at least one lookout or banksman and put in place suitable means of communication. This requirement was made clear in the vessel's SMS, which stated that a second person was required to safely operate the gantry crane.

With short-crewed vessels, allocating sufficient crew to ensure safe operation can often be challenging and reprioritisation will frequently be required to maintain safe systems of work. There were two 3/Os and three ABs on deck at the time of the accident; the master was also on deck and the cadet was carrying out garbage duties. None were tasked to assist the C/O as, on board *Cimbris*, it had become accepted practice for either the C/O or 3/O to operate the gantry crane alone. This was inherently unsafe and the use of a lookout or banksman on the port walkway would have prevented this tragic accident, regardless of any unsafe actions by the stevedore coordinator.

Working with stevedores and the control of safety on deck

Most cargo vessels require help with cargo operations in port and their deck crews are regularly required to work together with port stevedores. In such circumstances, the overall responsibility for each deck operation, whether with a ship's officer or stevedore foreman, should be established and made clear to all involved. Regardless of who has control of a deck operation, the safety of all on board remains the responsibility of the master, and it is vital that shore workers such as stevedores are made aware of hazards and adhere to procedures required by the vessel's SMS.

In addition to the vessel's SMS, CEPA had an extensive set of generic safety procedures, encompassing the wide variety of vessels and berths that the stevedores had to service. Despite this, no or little effort was made during the pre-work discussions to agree common safe systems of work for the discharge. The stevedores did not wear safety helmets on deck or on the quayside and routinely climbed on top of, or over, the open hatch coamings without safety harnesses. They also slid down the heaped coke breeze into the hold rather than using the cargo hold access trunks.

The ship's crew had concerns about the working practices adopted by the stevedores and took photographs of some of their unsafe acts. However, it was apparent that they did not feel empowered to insist that these practices be stopped. A more formal, documented, pre-work discussion that included safety management would have significantly improved the levels of safety on board and reduced the likelihood accidents.

Safety culture

Safety culture defines the ways in which safety is managed and is reflected in the shared attitudes, beliefs, perceptions and values of workers in relation to safety. Employers, managers and supervisors have the pivotal role of embedding and driving a strong safety culture among their workers. If they do not portray a positive approach towards safety management, then it is likely their crew or workers will adopt similar attitudes, resulting in a poor safety culture.

The strength of the prevailing safety culture within an organisation or on board a vessel can often be difficult to measure or quantify. The way people carry out work tasks when left alone or unsupervised can provide a powerful indication of both localised and widespread safety culture. Other typical indicators include accident rates, levels of procedural compliance, and the priority given to cost and time over safety.

Briese had provided a safety management structure, which addressed ISM Code compliance and the safe operation of its vessels. This was understood by the crew; however, it was evident that the safety culture on board *Cimbris* was weak. This was the second fatal hatch cover gantry crane accident on board *Cimbris* and, despite the lessons identified by GMA in its investigation report, priority was given to getting the job done, rather than implementing the vessel's documented safe working practices. It was also clearly evident that the port workers' safety culture was very weak.

CONCLUSIONS

- The stevedore coordinator was fatally crushed between the gantry crane and number 11 hatch cover because he placed himself in the path of the moving crane and the crane did not stop.
- The stevedore coordinator almost certainly knew the gantry crane was moving but was probably confident that he could achieve his objective and move out of its path.
- The ship's gantry crane operator did not stop the crane because he did not know the stevedore coordinator was on the crane track.
- The cargo hatch cover lifting operation was not properly planned, supervised or executed safely; a lookout or banksman was not used and stevedores were working under the suspended load.
- The levels of safety culture demonstrated by the ship’s crew and among the port workers was weak and unsafe acts and conditions were widespread.

ACTION TAKEN

Actions taken by other organisations

Briese Dry Cargo GmbH & Co. KG has revised its safety management system to make it clear that it is mandatory that there is a second person to act as safety sentry during the operation of cranes, gantry cranes or hatch cover machinery to ensure safety.

Centrale der Werkgevers aan de Haven van Antwerpen has reviewed its safety procedures for stevedore operations and issued a safety instruction card, defining the role of safety lookout for all crane operations.

RECOMMENDATIONS

Briese Dry Cargo GmbH & Co. KG is recommended to:

2021/126 Take appropriate actions to improve the level of safety culture on board *Cimbris* and its other managed vessels.

Centrale der Werkgevers aan de Haven van Antwerpen is recommended to:

2021/127 Take appropriate actions to improve the level of safety culture among its registered workers.

2021/128 Review compliance with safe working practices on board customer vessels, to better ensure the safety of its registered workers and vessel crews.

Safety recommendations shall in no case create a presumption of blame or liability

VESSEL PARTICULARS	
Vessel's name	*Cimbris*
Flag	Gibraltar
Classification society	Det Norske Veritas – Germanischer Lloyd (DNV GL)
IMO number	9281786
Type	General Cargo Vessel
Registered owner	Briese Schiffahrt GmbH & Co. MS 'Osterriff'
Manager(s)	Briese Dry Cargo GmbH & Co. KG
Year of build	2003
Construction	Steel
Length overall	98.9m
Registered length	92.75m
Gross tonnage	3173t
Minimum safe manning	8
Authorised cargo	General cargo

VOYAGE PARTICULARS	
Port of departure	Raahe, Finland
Port of arrival	Antwerp, Belgium
Type of voyage	Short international
Cargo information	Coke breeze
Manning	9

MARINE CASUALTY INFORMATION	
Date and time	14 July 2020 at 0900
Type of marine casualty or incident	Very Serious Marine Casualty
Location of incident	Antwerp Bulk Terminal, Antwerp
Place on board	Port aft hatch coaming
Injuries/fatalities	1 fatality
Damage/environmental impact	Not applicable
Vessel operation	Discharging cargo
Voyage segment	Alongside
External & internal environment	Wind: F3 northerly, cloudy, intermittent rain, 12°C
Persons on board	15