MARITIME FEEDBACK

CHIRP

An independent and confidential reporting system for the Maritime industry

Issue 73
Winter 2023

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www.chirp.co.uk or via our app

The key ingredients of safety

Adam Parnell
Director (Maritime)

Welcome to our latest newsletter, which once again is full of real-life reports submitted by seafarers and companies like you. These help us to raise awareness of key human factors critical for safety in the maritime industry, and we humbly thank you for your reports. Please keep them coming!

Regular readers will recognise many of the factors that are highlighted in this edition because they frequently feature in the reports that we receive.

As ever, effective communication tops our list. Whether it's swiftly alerting the Bridge to a galley fire or ensuring clear and unambiguous instructions for ferry passenger evacuation drills, communication is critical to safety.

Teamwork is another common feature, and our reports demonstrate that when crewmembers work together effectively, accidents can be averted or mitigated. Encouraging a shared approach to safety not only contributes to stronger teams, it can enhance well-being and reduces risks too!

Situational awareness (being alert to your surroundings) are also crucial to proactive incident prevention, as demonstrated in our reports related to dry-dock operations as well as gangway usage.

The importance of good equipment design once again features in several of our reports, particularly the ease of inspection and maintenance. Even newly-built vessels can suffer from this!

This will be the final Maritime FEEDBACK edition for 2023. We will shortly be publishing our Annual Digest, containing all of the reports we've published this year, in case you missed any of our back-copies. Don't forget that you can access all of our reports on our website and on our app, and you can also subscribe to get them delivered to your email in-box too!

Until the next edition in 2024, stay safe!

Yours,
The CHIRP Maritime team.

Please note all reports received by CHIRP are accepted in good faith. Whilst every effort is made to ensure the accuracy of any editorials, analyses and comments that are published in FEEDBACK, please remember that CHIRP does not possess any executive authority.

M2167

Galley fire

Initial Report

As a chef was leaving the galley area, having closed it down after the meal, they noticed smoke seeping from a door in a smaller, less frequently used section of the galley. Concerned, the chef investigated and found that several pizza boxes had caught fire. These had been stored under heating lamps, which, unknown to anyone, had been inadvertently switched on during the cleaning process. Acting promptly, the chef immediately reported the fire to the bridge using the radio communication system, then turned off the heating lamps and retreated to a safe distance near the doorway.

Responding swiftly, the duty deckhand arrived at the scene without delay. Their initial attempt to suppress the fire using the high fog system was met with challenges due to the fire's growing intensity. Meanwhile, another chef joined the effort, moving the burning pizza boxes away from other items to contain the fire's spread. With the escalating situation, the duty deckhand used a foam extinguisher to effectively put out the flames on the pizza boxes and the area surrounding the heating lamps.

Additional crewmembers quickly arrived and took decisive emergency measures, shutting down all electrical systems and ventilation in the galley to prevent the heat from the fire from spreading. Simultaneously, nearby doors were promptly closed to curtail the spread of smoke to other parts of the ship.

The ship's engineers discussed the manual operation of the ventilation system from the engine control room (ECR), aiming to extract the lingering smoke from the galley area efficiently.

From the moment the fire was reported to the bridge, the containment and control of the fire took approximately six minutes.

CHIRP Comment

CHIRP praises the crew and the management for having a well-trained crew which handled a potentially dangerous situation swiftly. However, there are a couple of points worth highlighting. The bridge was notified by radio and responded to the incident. Anyone discovering a fire should always raise a loud vocal alarm (eg shouting 'Fire, Fire, Fire'), and the fire alarm, if fitted, should always be sounded. Both of these alert everyone in the vicinity that there is a fire so that they can assist in tackling it. The ventilation should be stopped if not done automatically. The use of high-fog as an extinguishing medium was ineffective and, in this case, raises the question of whether it is the right application for a fire that has taken hold.

Heat energy transference from an energy light source can be extremely high, and direct contact is not necessary to start a fire. Materials such as cardboard and plastic coverings will quickly smoulder or melt, even in close contact with normal shipboard lighting sources. A minimum distance warning sign should be positioned near any heat lamp so that flammable material cannot be heated to combustion, or a suitable guard should be placed around the lamp to provide a physical barrier that meets the minimum safe distance if applicable.

Light switches should be properly labelled and positioned in sensible locations close to the storerooms they serve. They should also be clearly labelled. If in doubt, ask the electrical officer to check the function of the switch in question.

Storage of any material should always be considered from the point of view of fire risk and how to control that risk. Eliminating the hazard is the best way to reduce risk. If, after the debrief for this incident, the heating lamps are found to serve no operational function, consideration should be given to isolating the circuit. Hence, they become non-operational and labelled as such.

The incident underscores the importance of crew members' vigilance and highlights effective teamwork and everyone's critical role in ensuring the ship's and its occupants' safety and security. Different crew members' collaborative and swift actions - from the chef's initial discovery to the coordinated response efforts - ultimately contained and extinguished the fire.

The ISM Code Section 8, Emergency Preparedness, mandates regular exercises and drills for emergencies. This concise response highlights its value, and whilst there were areas for improvement, the crew contained and extinguished the fire. It is a valuable lesson for maritime safety and emphasises the importance of continuous training and preparedness.

Factors related to this report

Situational awareness – The crew's response to the emergency was swift and appropriate. There needed to be more awareness of the switch's function (controlling the heat lamp) by the crew. It was very likely that the heat lamps had been switched on before with no consequence. However, this time, pizza boxes were stored near the lamps and combusted due to radiated heat from the lamps.

Communication – This switching arrangement was likely similar in other ships of the same class. Communicating the possible hazards to other ships of the same type by labelling the switch and providing safeguards for preventing contact with flammable materials is required. How does your company communicate design hazards?

Design – Better design at the new building stages, providing built-in safeguards for heat contact and switches in the same room, as the lamps would help prevent accidental use.

M2175

Damaged cargo securing equipment

Initial Report

When inspecting the cargo securing equipment, our reporter discovered that a large number of base locks and twist-locks were worn and no longer fit for purpose. They reported this to the master, but no requisition was raised to the company.

Our reporter remained concerned because stevedores from other countries frequently reported issues with automatic twist lock malfunctions during cargo operations, resulting in delays. Moreover, the company had lost many containers overboard only a few years beforehand. Despite these ongoing concerns, the base lock issue remained unresolved. The nautical and safety superintendent was unaware of the twist lock conditions on the ship, and there had been no requisition raised in the planned maintenance system (PMS) program for some time.

Our reporter approached CHIRP for assistance because they were worried that containers could be lost overboard if they were not correctly secured. CHIRP approached the company, which cited a breakdown in communications with the ship and immediately arranged for the replacement parts to be sent to the ship.

CHIRP Comment

According to the World Shipping Council, in 2022 there were 661 containers lost at sea. Although this is a tiny percentage of the 250 million containers transported annually, each represents a hazard to the ship, and a general navigation and environmental pollution risk, quite apart from the financial loss of the contents.

The security of the cargo is a significant safety factor for the ship, crew, and the environment. It requires the highest level of attention to ensure it is carried out correctly. Internal and external safety management audits should identify equipment falling below acceptable standards. Additionally, ship manager visits should focus on these areas of cargo security. They must also adhere to and check the proper maintenance history in a PMS, and establish a realistic reordering stock level for cargo securing equipment.

The reluctance by the ship to report the state of the cargo-securing equipment to their management indicates the company's poor reporting and safety culture. Given that container security issues in the past had been a problem, CHIRP notes that this should have been a high-priority matter. The reporting culture should be addressed promptly. Encouraging employees to speak out about safety concerns is vital and should be encouraged. A crew and other stakeholders that prioritise safety should be considered an asset to any company in the maritime industry. Safety should always be a top priority, and organisations must promote a culture where safety concerns can be raised freely.

The management company, Flag and the P&I Club were all informed of this report with a request that they check on the status of the cargo-securing equipment on this and other ships in the fleet.

Guidance on securing containers, published by the Standard Club, can be found here: 3368203-sc-mg-container-securing-2020-final.pdf (standard-club.com)

CHIRP is happy to report that the company took positive action to address all the issues concerning cargo-securing equipment and has thanked CHIRP for bringing this matter to their attention.

Factors related to this report

Communications – How easily can you raise a concern to management concerning a safety matter? How well do they respond to your concerns?

Teamwork – Encourage a shared mental model for cargo safety and alert each other when issues arise. This is needed on a large ship where checking on cargo securing items cannot be left to one person due to the sheer size of the vessel.

Alerting – Create a positive alerting culture so that risks for all operations are raised and actioned.

Culture – The company should look at how issues are raised with the company and evaluate the current state of its safety culture.

M2172

RoRo crewmember hit by vehicle while unloading

Initial Report

This report was submitted by the company, who are to be commended for being so willing to share this incident report to enable others to learn from their experience.

The incident involved a distressing personal near-miss incident on a RoRo cargo ferry. The crewmembers responsible for the daily task of overseeing freight movements were experienced and qualified individuals. During the incident, the reporting crewmember positioned himself in a blind spot in front of a freight vehicle. Unfortunately, he was knocked over when the freight driver misinterpreted a "thumbs-up" signal from the linkspan operator. This signal indicated that the freshwater hose had been successfully connected. However, the freight driver incorrectly interpreted this gesture as a cue to proceed with discharge. This misinterpretation occurred despite the presence of red flashing lights that were meant to signal that it was not yet safe for vehicles to move.

The incident unfolded in a generally favourable environment with mild and dry conditions, good visibility, and moderate background noise from fans and vehicle engines. Noise from fans was also audible within the driver's cabin.

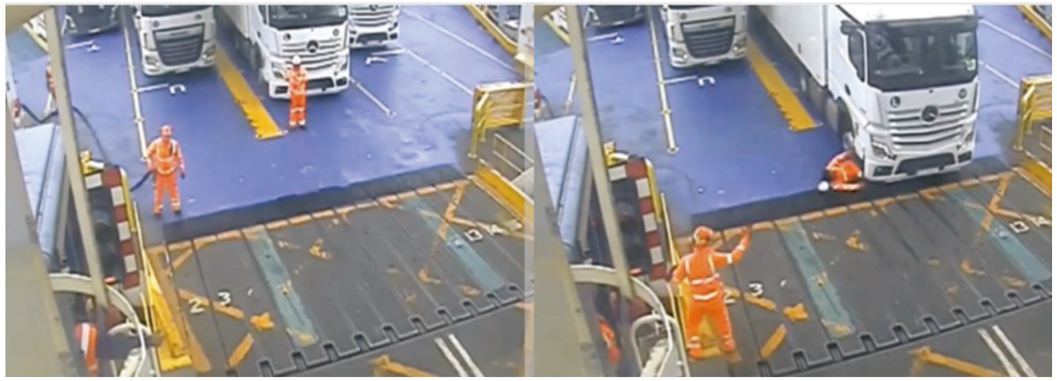
The Linkspan area was adequately staffed within the organisation with three crewmembers. A senior rating led this team, overseeing the deck and the discharge process.

The equipment used in the incident was functioning correctly. However, concerns were raised about the effectiveness of the red flashing lights as a control measure. Past instances have shown that these lights can sometimes be disregarded, indicating a weakness in their ability to influence behaviour and prevent accidents.

CHIRP's comment

Conflicting work activities were taking place when the incident occurred, and there was no common situational awareness.

The incident's beginning lies in certain assumptions made by both the crewmembers and the freight driver. The crewmembers operated under the assumption that freight movement would only commence upon explicit instructions from the designated authority figure. Their belief in the red flashing lights being an effective safety measure to regulate freight movement created overconfidence, contributing to the incident. Additionally, they trusted that the presence of the bosun in the freight vehicle's path would deter any untimely movement of the freight vehicle. However, the bosun, who was in the blind sector of the freight vehicle,



Ultimately, the incident serves as a reminder that even skilled crewmembers and freight drivers can face danger during routine tasks

could not be seen by the freight driver, so he did not provide any physical deterrence.

Conversely, the experienced freight driver held his assumptions. Upon seeing a thumbs-up signal from the linkspan operator (which actually confirmed the freshwater hose had been connected), the driver interpreted it as a clear directive to proceed, ignoring the red flashing lights.

The presence of the bosun in a blind spot, invisible to the driver, cancelled out the intended human barrier to prevent movement. CHIRP advocates using physical barriers instead of relying on human presence – even a coloured rope is better than nothing. CHIRP also recommends that the linkspan operators who are not ship's staff should wear different coloured surcoats/hi-vis tabards.

Several significant takeaways emerged from this incident. It highlighted the inherent hazards linked with vehicle decks and underscored the importance of addressing blind spots. Direct eye contact with drivers emerged as a fundamental communication strategy, but one which can be mistaken by the freight drivers, emphasising the importance of unambiguous signals.

The incident also demonstrated that in the absence of a physical barrier, drivers might initiate movement at their discretion, regardless of control measures like the red flashing lights. The incident highlighted the normalisation of risk, underscoring the necessity of sustained vigilance, even for familiar and routine operations.

Ultimately, the incident serves as a reminder that even skilled crewmembers and freight drivers can face danger during routine tasks. It underscores the importance of clear and universally understood communication, particularly within hazardous environments on RoRo cargo ferries. Thankfully, the bosun did not suffer any physical injuries.

An IMCA video highlighting the risks of placing yourself in front of a hazard can be found here: Line of fire – IMCA (imca-int.com)

CHIRP strongly commends the management of the RoRo ferry for such an open and honest review of this incident report. Such incidents are rare, but CHIRP is sure that the company's safety culture has improved, and the lives of those working on the ferries will be safer.

Factors related to this report

Alerting – Everyone involved in the operation must be reminded of the hazards of movement across the linkspan. The normalisation of risk must not be allowed to become embedded. Regular training is required both for linkspan operators and freight drivers.

Local Practices – It's vital that the company standardise theoperating practices on all their RoRo ferries..

Situational Awareness – All operators working in the linkspan environment must know they are working near hazards and potential blind spots. Before the transfer operations begin, this risk should be highlighted in the toolbox talk.

Distractions – Operating procedures must ensure that nobody is subjected to distractions, given the hazardous environment of large freight vehicles operating across the linkspan.

Fatigue – All operators working within the linkspan area must be adequately rested. Fatigue will lead to poor concentration and risk-taking if allowed to become the norm. Are your crew meeting compliance with the Hours of Work and Rest (HWR) regulations?

M2173

Near Miss – object falls to dry dock bottom

Initial Report

Whilst in drydock, the vessel underwent a change of Flag. As part of that change, all lifebuoys needed to be re-marked with the new port of registry. As the day's first job, the Chief Officer instructed the deck crew to collect all the lifebuoys. An AB attempted to retrieve the port side man overboard (MOB) lifebuoy. Holding onto the line which connects the lifebuoy to the smoke float, he released the pin. Failing to anticipate the weight of the buoy, the line slipped from his grip, and the buoy fell, contacting the corner of the dock quayside before falling to the dock bottom.

The combined weight of 7.6 kg fell 22m to the dock bottom below. At the time, dock personnel were working on the dock bottom but, fortunately, not close to the point of impact. An immediate halt was called to all work in the dock bottom and onboard the vessel. All personnel left the dock bottom whilst the smoke float discharged its contents.

CHIRP Comment

Seafarers are used to being at sea, but drydock operations require another level of risk management.

Had this incident, had the float hit a person as it fell, it would have caused a severe injury or fatality. The undesired event occurred despite a risk assessment and a toolbox meeting, which should have mitigated this risk.

The risk assessment and the toolbox meeting only captured some risk factors. An inexperienced crewmember was used to do the job, increasing the risk of the lifebuoy falling. Removing a man overboard lifebuoy is risky, especially in a dry dock where dry dock workers often have to undertake tasks below the bridge wings.

A useful IMCA video on the hazards of dropped items can be found here: 0 Saipem DROPS – choice not chance – IMCA (imca-int.com)

Factors related to this report

Capability – Assigned work in dry docks must be allocated based on the knowledge and experience of the individual crew member. A buddy system should be used for those new to dry dockings. When you are assigned to a vessel that will dry-dock, how well are you briefed on dry-dock safety?

Does your company have a specific section on drydock safety in the safety management system? Is there a company training video highlighting all the hazards? Are you aware of it?

Teamwork – All drydocks are unfamiliar and dangerous places, and collaboration is required to ensure everyone looks out for each other. When jobs are being assigned, calculate the resources based on the risks of doing the work.

Pressure – Do not let outside factors interfere with safety performance. The work will get done, and it must be done safely. This should be a daily mantra for those on board.

M2178

Near Miss – unsecured pilot ladder

Initial Report

The inbound vessel embarked the pilot at sea. The vessel had a freeboard of 6m and had rigged a pilot ladder. The pilot, upon reaching the deck of the vessel, discovered that the ladder had not been secured in accordance with the regulations and had been tied to the railings on either side of the pilot embarkation station and 'secured' to the ladder by a spliced eye wrapping around the side ropes.

It quickly became apparent that neither of these lashings had secured the ladder at all, and the ladder had been held by the fortunate accident that the ladder step had jammed against the securing points on the rounded fishplate.

Upon arriving on the bridge, the pilot discussed the issue with the master, who seemed disinterested in the near miss that had just occurred. The vessel was reported to the Designated Person Ashore (DPA) and Port State Control due to the non-compliant pilot ladder.

CHIRP Comment

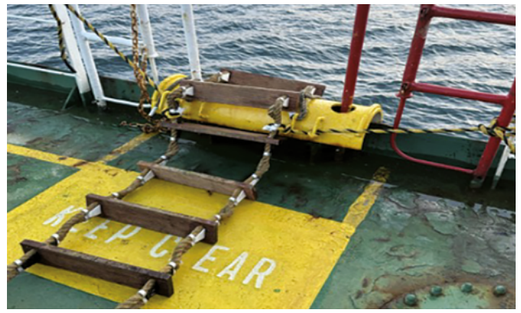
This arrangement is a classic example of poor training and leadership and a vessel that could be more compliant by design. Ideally, certified (≥48kN) lashing points should be positioned on the deck, more than 0.95m from the fishplate. This effectively prevents the pilot from accidentally grabbing hold of a loose section of lashing or ladder as they gain access to the deck. It allows the crew to secure effectively using a rolling hitch.

This vessel was eventually allowed to sail after providing a suitable securing arrangement and is likely to be removed from the list of approved vessels for the terminal operators.

A costly mistake that thankfully didn't cost the pilot his life.

CHIRP notes that some ports refuse to put a pilot onto a vessel until non-compliance has been rectified. However, greater sharing of pilot incident data is required. Many pilot jurisdictions have an app for collecting data, but this data is only sometimes shared with other pilotage authorities and only sometimes passed on to the next port. The best practice is to inform the next port so that they are forewarned.

CHIRP contacted the DPA and received a very encouraging response, confirming that training on the vessel had been undertaken in adequately securing the pilot ladder and that the fleet had also been advised of the near miss to prevent it from happening again.



Factors related to this report

Culture – The master appeared disinterested. Does your company respond only when an accident or incident occurs? Does your crew have the confidence to speak up when operations are not carried out safely? If a pilot is injured, or worse, because of non-compliance with securing a pilot ladder, how would you respond when asked, "Did you check that the ladder was appropriately secured?"

Communication – Pilots are strongly encouraged to forward their findings to the next port so they can be

forewarned. Repeat offenders should be reported to the Port State and Flag State.

Capability – Management must check that the crews employed have the necessary safety skills to secure a pilot ladder in accordance with the regulations. When a new crew joins your vessel, do you check to see if they can all rig and secure a pilot ladder?

Teamwork – Onboard management should encourage a teamwork culture so the crew have a shared approach to meeting safety compliance for all work. It improves the working environment and enhances wellbeing. Teamwork must also be demonstrated by senior management.

Design – the vessel is not new, but someone has signed off on this arrangement: why?

M2162

Severe Near Miss – accommodation ladder wire parts after pilot disembarks

Initial Report

The pilot reported that after disembarkation to the awaiting pilot launch, the accommodation ladder (part of a combination rig) was seen trailing in the sea when the wires for the accommodation ladder parted.

CHIRP Comment

The disembarking pilot could have been seriously injured if they had been on the accommodation ladder just a few minutes later. Why does this continue to happen?

A similar incident M1852 was published in MFB Edition 66 page 3 in which, fortunately, there was no serious injury to the pilot.

Wires need regular maintenance and regular replacement in accordance with SOLAS and company SMS maintenance procedures. The wire's function deployed on gangways is to break out/stow the gangway and position the gangway to a required angle in azimuth or elevation so personnel, including pilots, can gain access to the ship. Given that the position of most gangways is located where sea and spray impact the ladder and can accelerate corrosion, CHIRP advocates that the wires must be replaced more frequently than the current regulations stipulate. Also, lowering the ladder to approximately the same position regularly will place a more significant load and wear on that part of the wire and cause it to fail quicker despite the rest of the wire looking in good condition.

In our Annual Digest (2022-23), we advocate for a replacement period of 12-month intervals due to the high number of wire failures. CHIRP has received several reports where the wire has parted while in use and wants to collate these reports to provide objective evidence that the regulations must change to a 12-monthly frequency for renewal.

CHIRP encourages manufacturers to reconsider gangway design so crew members can easily inspect and maintain the wires.

Reference: Pilot ladder Safety - Do it right the first time

Factors related to this report

Design – You need to be able to see the wire to inspect it. A lot of the wire is hidden, especially at the terminations. Manufacturers must look at the design with a focus on maintenance by the crew. Does your ship have a spare gangway wire on board?

Capability – Improvements in inspections require the crew to be trained in what to look for. Have you ever been given any formal equipment maintenance training? Or have you just picked it up from the other crew members?

Situational Awareness – Think of the vulnerability of the gangway and apply more stringent measures concerning maintenance. Please think of the people who must use the gangway as part of their job, e.g., pilots, and increase safety factors for the moving parts. Consider halving the periods for maintenance and replacements.

Alerting – If you inspect your gangway and find the wire condition in a poor state, will you notify the rest of the fleet?

M2121

Passenger ship evacuation procedures

Initial Report

This report was submitted by a passenger on a cruise ship and concerns passenger evacuation procedures and access to lifesaving equipment.

The reporter stated that they were frequent travellers on passenger ships and had concerns about varying safety standards between cruise liner companies. Of particular concern on one cruise were the following issues:

The mandatory passenger emergency muster drill before departure needed to be better organised. Signage must be clarified, and the presence of crewmembers to guide passengers to their muster stations must be included in some sectors of the evacuation route. The captain's safety speech could have been clearer on where to go and what to do in an emergency. Life jacket signs were posted in the stateroom, but there were no life jackets, raising concerns about passenger familiarisation and safety in an emergency.

The reporter felt that more crew training was required on emergency procedures, including passenger evacuation, but noted that due to the high turnover of crew due to the pandemic, some experience was lacking.

Also, fatigue could be a problem for some crew members with many tasks. The reporter stated that regular drills should be conducted in both crew spaces and passenger areas to ensure preparedness.

CHIRP Comment

CHIRP thanks the reporter for highlighting what they perceived as the inadequacies of the passenger muster drill before departure.

The muster drill is a fundamental safety procedure that should familiarise all passengers and crew with emergency evacuation protocols. It serves to instil confidence and provide reassurance, especially for individuals who are new to cruising.

The amended regulation III/19 in the International Convention for the Safety of Life at Sea (SOLAS) mandates that all passengers must participate in safety drills, including mustering at lifeboat stations, before or immediately upon departure. Cruise companies are responsible for conducting these drills efficiently and effectively to ensure everyone knows their emergency muster and evacuation locations.

The muster drill should be allocated adequate time to ensure passengers and crew fully understand the procedures. Crewmembers must be trained to guide passengers to their designated muster stations confidently. They should be able to respond to queries raised by passengers.

Clear and visible signage and instructions throughout the ship are crucial to assist passengers during emergencies. These should help passengers to locate their muster stations and understand evacuation routes quickly.

Recognising the demanding and stressful nature of work on a ship, it is essential to manage crew workload and consider the experience level of crewmembers. Fatigue, stress, and a high workload can impede the crew's ability to focus on safety protocols.

CHIRP encourages passengers to seek guidance from the crew if they require additional clarification about the evacuation procedure. Crewmembers are there to assist and ensure passenger safety.

CHIRP encourages cruise companies to allocate more attention and time to enhancing their emergency drills and evacuation procedures. Actively seeking feedback from passengers on what worked well and what could be improved is vital for ongoing safety enhancements.

CHIRP contacted the DPA for the cruise liner company and received an excellent response. They immediately took action to investigate the passenger's concerns based on CHIRP›s information and provided their feedback. They made some changes to their training and familiarisation procedures. This action is highly commendable, highlighting a good safety culture at all levels in their organisation.

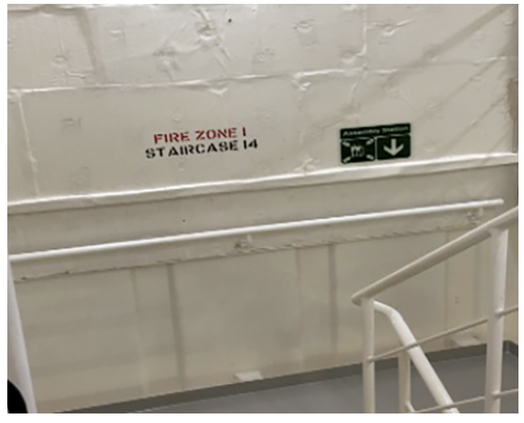
Below is an account of the actions undertaken by the DPA.

The DPA joined the ship for a brief sea trip to investigate reporter comments. During the trip, an emergency evacuation drill was conducted, and attendance for the passengers was electronically verified. The vessel consistently maintains a 94% attendance rate, with non-attendees receiving letters for personal review. Cabin TVs show a safety video before other channels can be accessed, with no override.

The DPA reported that crew training has been increased as needed. It was noted that stairway guides and muster station teams were effective. Concern about the loss of experience due to the pandemic has been addressed with increased training for the crew. This was verified during an inspection by the Class during a simulation drill for passenger evacuation and was approved without any comments.

Increased focus on the passenger familiarisation meeting by the cabin attendants, including locations of life-saving items, was noted during the DPA's tour, and cabin attendants greeted passengers and explained lifejacket locations on embarkation day. Signage was also improved and addressed across the fleet. Compliance was monitored by housekeeping management and confirmed during the Passenger Ship Safety Certificate (PSSC) audit by the Class.

This demonstrates how open communication and a willingness to report can yield positive outcomes in the maritime industry.



Factors related to this report

Local Practices – Beware of inadequate procedures that cannot be correctly implemented. Report them to bring about a change if they cannot be met due to working conditions/workload.

Communications – The visual presence of the crew, properly attired at a passenger muster drill, is a high-level form of visual communication. It reassures passengers that there is guided safe access during evacuation. This will be the first time the passengers get to see the crew, and whilst many passengers are regulars, there will be many first-time cruise passengers.

Alerting – If something is not right, report it. Management will thank you for finding something that they have not noticed.

Culture – A strong safety culture is a commercial selling point that will bring passengers back to the ship for other cruises.

Pressure – There may be time/commitment pressure on the crew, which means shortcuts could be taken. Carry out an audit/review to determine if this does exist. Listen to the crew.

WE ARE GRATEFUL TO CHIRP MARITIME'S SPONSOR AND SUPPORTERS. THEY ARE:

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