DUTCH
SAFETY BOARD

Shipping Occurrences Report 17

July - December 2023

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Investigations

Within the shipping industry, the Dutch Safety Board has the legal obligation to investigate serious and very serious occurrences involving Dutch seagoing vessels. This obligation also extends to the investigation of serious and very serious occurrences involving or on board seagoing vessels in Dutch territorial waters. The Dutch Safety Board carries out these investigations in accordance with the Kingdom Act concerning the Dutch Safety Board and the EU Directive 2009/18/EC of the European Parliament and the European Union Council of 23 April 2009, establishing the fundamental principles governing the investigation and prevention of maritime accidents. When the Dutch Safety Board decides that no structural safety shortcomings are involved with regard to a serious incident, a description of the occurrence is sufficient. The main goal of the Dutch Safety Board is to prevent accidents or their consequences by determining lessons learned and formulating recommendations. Investigating who is to blame or liable is expressly not a part of the investigation by the Dutch Safety Board.

▲ *Oceaan II on the beach. (Source: ANP)*

Foreword

'*How likely is it that...*' or *'I'm sure I can just...*' People can at times be overly optimistic when it comes to assessing risks. Even if they are aware that there are dangers.

The Dutch Safety Board frequently sees human action as a cause in an incident. Fortunately, that same human action can also prevent an incident from occurring or limit the consequences. Safety on board therefore depends to a large extent on risk awareness. That is the degree to which crew members understand and deal with the risks involved in their work.

In this 17th edition of the Shipping Occurrences Report, we take a closer look at the importance of risk awareness. Being aware of the potential dangers enables people to prepare and act. The safety on and around ships will increase if the risks on board and in the surroundings are prioritized correctly.

Chris van Dam
Chairman of the Dutch Safety Board

01

Understanding risks and acting accordingly

Accidents can occur at any time. Everyone in the shipping world can cite an example of something that went seriously wrong because something unexpected happened. In hindsight, it is often said that the unexpected event could have been foreseen, had the safety risks been understood and recognized.

During the past reporting period (July through December 2023), the Dutch Safety Board published several investigations that make it clear what can happen if there is not enough awareness of safety risks on board or if they are not recognized at a crucial moment due to circumstances. Some examples are given in the blue box below.

Collision in North Sea Traffic Separation Scheme

The trawler Z60 Blue Angel collided with the cargo ship Amadeus Aquamarijn in the traffic separation scheme above the Wadden Islands in December 2021. The mate of the trawler had not seen the general cargo ship and therefore did not divert. The cargo ship did warn the trawler, but subsequently did not check whether the trawler changed its course after being alerted. The collision severely damaged the cargo ship. The Dutch Safety Board's report points out how human actions and recognizing risks played a role in this occurrence.

Safety of historic sailing fleet

In 2022, there were two fatal occurrences on board historic sailing ships. In May 2022, a boom fell into the cockpit, seriously injuring one passenger and killing another. In August 2022, a boom on another historic sailing ship broke, killing a young passenger. The Dutch Safety Board had previously investigated safety on board the historic sailing fleet following a fatal accident on 21 August 2016. The mast of a historic sailing ship unexpectedly broke and killed three passengers on the ship.

The occurrences in 2022 prompted a follow-up investigation on the safety of the historic sailing fleet. The investigation revealed that not only the crew members, but also the inspection and classification society, lacked knowledge on the potential risks of sailing with historic ships. There is very little policy on the safety on board of this sailing fleet. The investigation also showed that knowledge about maintenance, the use of the right materials and techniques is of great importance in recognizing potential risks. New equipment was being used, for example, which entailed other risks that not everyone was aware of and for which no policy had yet been formulated by the supervisory framework. The lack of knowledge and lack of insight into possible risks made it impossible to assess the extent to which safety risks on board the historical sailing fleet were managed.

Fatal accident in cargo tank of chemical tanker

In a serious accident in the cargo tank of the chemical tanker NCC SAFA, which was anchored off the coast of IJmuiden in April 2022, crew members entered the cargo tank without a valid entry permit and gas meter. The deckhand had entered the tank on the captain's orders. They assumed that the tank was safe because colleagues had previously been in the tank. However the deckhand became unwell due to the malfunctioning of the only hard safety barrier, the shut-off valve. This malfunction caused the leak of inert gas during inerting of other tanks. The first mate tried to rescue the deckhand and also entered the tank without checks. This proved to be fatal for the mate. Incorrect assumptions and the pressure of time caused the crew to misperceive the risks. The convergence of circumstances led to the serious accident.

The Dutch Safety Board assumes that companies and organisations set up good safety management to identify and assess risks on board ships, and that measures are drawn up to manage these risks. The Dutch Safety Board has defined five focal points for an organization's safety management to improve its handling of risks on board:

1. *Understanding risks as the starting point*
   The first step is to identify the safety risks, the risk inventory. What risks do people on board face?
2. *Drawing up a safety strategy*
   The overview of the safety risks is the start of a clear prioritization and the creation of a plan of action, the risk analysis. Step 1 and step 2 together, the risk inventory and evaluation, are also known as the RI&E.
3. *Implementing a safety strategy*
   The next step is the practical implementation of the control measures that follow from the plan of action.
4. *Safety management, an ongoing process*
   The safety approach needs continuous attention. It is important to keep the risk analysis and control measures up to date, for instance when new developments occur.
5. *Safe learning environment*
   Finally, a safe learning environment is crucial for managing safety risks. This includes effective learning from incidents and unsafe situations. In this respect, it is important that people on board dare to call each other to account for unsafe behaviour and are encouraged to report incidents without fearing that their actions, omissions, mistakes or decisions will be punished (unless they are deliberate or grossly negligent out of unsafe intentions).

In this theme article, we will focus mainly on the first three areas of concern: understanding risk and the safety strategy.

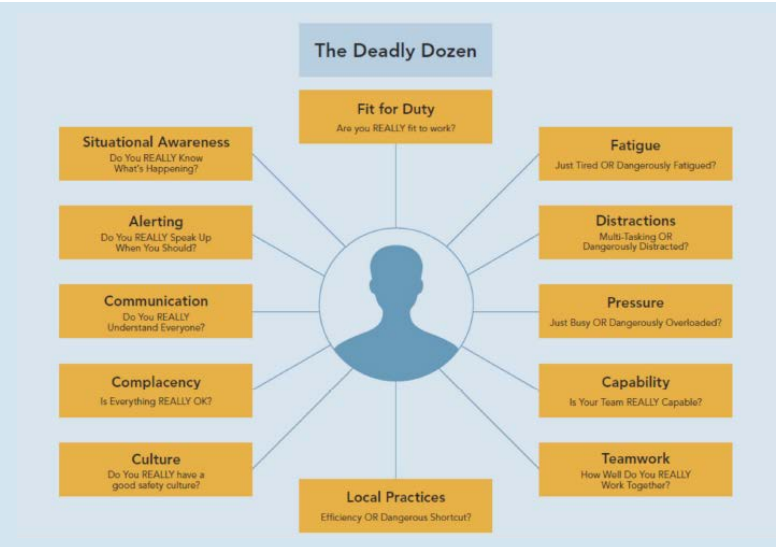
Understanding risks

The common thread connecting the three example mentioned in the blue box is the importance of understanding and recognizing risks. This involves an understanding of risks among both the ship's crew and other stakeholders. The examples show the importance of this understanding of risks and recognizing them. The common thread also raises questions. How do you ensure that you are aware of existing risks? How do you ensure that you deal appropriately with risks that could have major consequences?

If someone is risk aware, they are sufficiently aware and understand the risks in their environment. They will then be able to look objectively at potential risks and dangers, and also at possible control measures.

It is important that crew members realize at the right time what consequences their behaviour and actions can have on safety. That they see what is really happening so that they can weigh up the consequences of their actions. The term often used for this is 'situational awareness'. This means: developing and maintaining a dynamic awareness of the situation and risks present during an activity, based on gathering information from multiple sources from the environment in which the activity is being conducted, understanding what the information means and using this information to think ahead about what might happen next. This situational awareness is one of the 12 most common human-related factors that often play a role prior to accidents, also known as the deadly dozen.[1]

Despite the fact that everyone knows these factors, they are still common. Reduced situational awareness and therefore reduced understanding of the risks involved regularly appear to be contributing factors to many maritime accidents. Something that was also visible in several investigations published by the Safety Board during this ROS period.[2]



◀ *Figure 1 Deadly Dozen. (Source: MCA)*

1 In edition 6 of the shipping occurrences report, the Dutch Safety Board also called attention to the deadly dozen. Also see https://onderzoeksraad.nl/en/onderzoek/shipping-occurrences-report-may-november-2017/

2 See for the full investigations:
https://onderzoeksraad.nl/en/onderzoek/fatal-accident-in-cargo-tank-of-chemical-tanker/
https://onderzoeksraad.nl/onderzoek/aanvaring-schuitengat
https://onderzoeksraad.nl/onderzoek/veiligheid-historische-zeilvloot-een-opvolgingsonderzoek-naar/

It is important for the crew to realize that no human can be (continuously) fully situationally aware and that precisely when the impression exists that everything is under control, the danger lurks that risks are overlooked or not recognized. As a result, if the crew cannot identify the risks, evaluating the risks and taking effective action will also fail.

Risk analysis

To clarify the aforementioned 12 risk factors in their own work situation, crews can carry out what is known as a risk analysis. Such an analysis provides a good basis for understanding safety risks and drafting and implementing a safety approach. It can thus increase the risk awareness of an entire organisation. The best possible overall picture of risks is obtained by involving different layers of the organisation and drawing up the risk analysis together. By thinking and talking about risks broadly with all employees, those involved also become more aware of potential hazards.

A risk analysis is the identification of uncertainties and threats in working practice to reduce their potential impact. This involves determining the likelihood of occurrence for each risk and then assessing what the impact could be if the risk were actually to occur.

▼ *Figure 2 Example of a risk matrix.*

Risk Matrix		Severity				
		Insignificant	Minor	Moderate	Major	Severe
Likelihood	Almost Certain	Unwanted	Unwanted	Unacceptable	Unacceptable	Unacceptable
	Likely	Unwanted	Unwanted	Unwanted	Unacceptable	Unacceptable
	Possible	Acceptable	Unwanted	Unwanted	Unwanted	Unacceptable
	Unlikely	Acceptable	Acceptable	Unwanted	Unwanted	Unwanted
	Rare	Acceptable	Acceptable	Acceptable	Acceptable	Unwanted

Organizing the identified risks reveals which risks are unacceptable and which require less attention. One way to do this is to use a risk matrix. Completing a risk matrix (see Figure 2) involves estimating the magnitude of the consequences when events occur and the likelihood that an event will actually occur. Using color schemes to indicate the difference in priority creates an overview of all risks. A risk matrix is also a suitable tool for communicating with interested parties about the dangers on board and the possibilities for control measures.

After determining which risks are high on the priority list based on the risk matrix, those involved can draw up control measures. A risk analysis and associated control measures for these risks are also part of the ship's Safety Management System (SMS), an important part of the International Safety Management code (ISM code).[3]

The safety management system on board a ship is the set of procedures and agreements made on safety management. The purpose of the system is to ensure that risks for ship, crew and environmental pollution in the operation of the ship have been identified and analysed and that the ensuing control measures are safeguarded to enable safe operational performance.

Toolbox meeting

A risk matrix is often used as a tool for risk analysis when looking at the work with a little more distance. A *toolbox meeting*, on the other hand, is a risk analysis that can be directly applied to everyday work. The power of a *toolbox meeting* lies in the joint discussion of a (work) situation on site, which has a direct impact on the personal safety and health of the people on board the ship. The *toolbox meeting* is intended for and held with everyone involved in a particular situation. By engaging in the discussion, a broader understanding of the possible risks is created and risk awareness grows. The results of a *toolbox meeting* can also be input for the overall risk analysis.

In conclusion

Safety is people work. People make the difference because one of the most important factors within safety is one's own actions. Insight into the safety risks in one's (own) actions, through risk analysis for example, is the basis for taking control measures and increases risk awareness. It thus contributes to a higher standard of safety on board. Initiatives such as the started Safety Compass and the safety meeting[4] with the skippers of the historic sailing fleet from Monnickendam, where knowledge is exchanged, are concrete examples of how seafarers can get started.

3 https://www.imo.org/en/ourwork/humanelement/pages/ISMCode.aspx

4 https://veiligheidskompas.eu/training-2/67-veiligheidsmiddag-met-schippers-uit-monnickendam

Accident classification

In this Shipping Occurrences Report for the period July 2023 through December 2023, the Dutch Safety Board presents the description of occurrences on board ships sailing under the Dutch flag or occurrences that have taken place within Dutch territorial waters, as well as reports published during this period.

Each accident is classified according to seriousness. The categories are in line with EU Directive 2009/EC/18:

Very serious: accident with total loss of a vessel or where there have been fatalities or serious environmental damage.

Serious: accident involving a vessel that cannot be classified as 'very serious' and where, for example, a fire, collision, grounding, etc. has occurred preventing the vessel from continuing to sail or causing environmental damage.

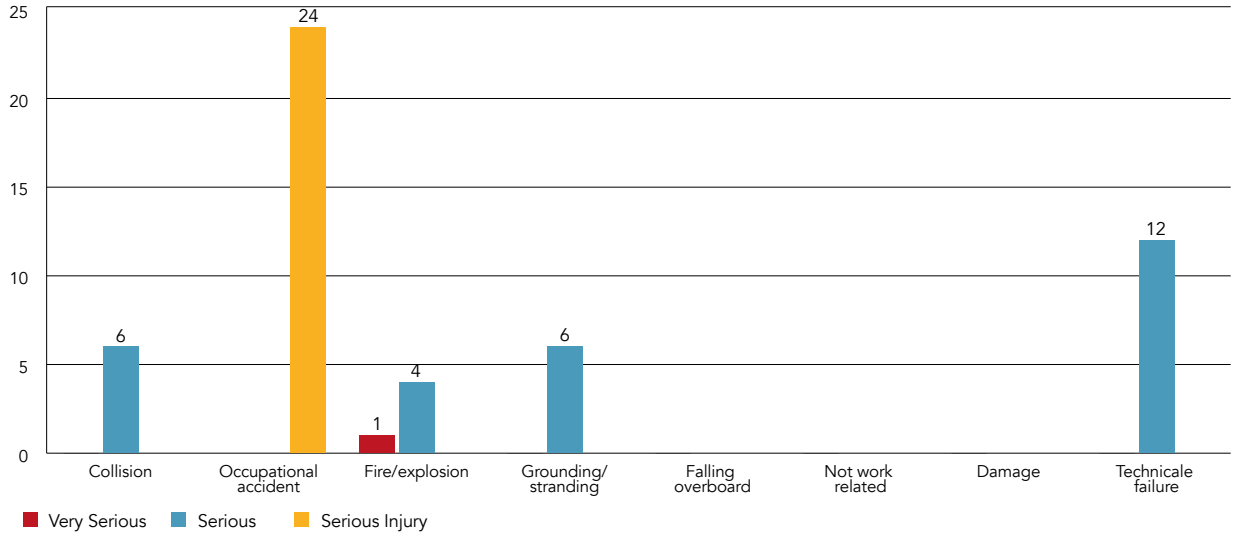
Less serious: accident that cannot be qualified as 'very serious' or 'serious'.

Marine incident: an event, or series of events, other than an accident that has taken place and is linked to shipping operations that endangered, or would endanger, the safety of the ship, a person on board or the environment if it had not been rectified.

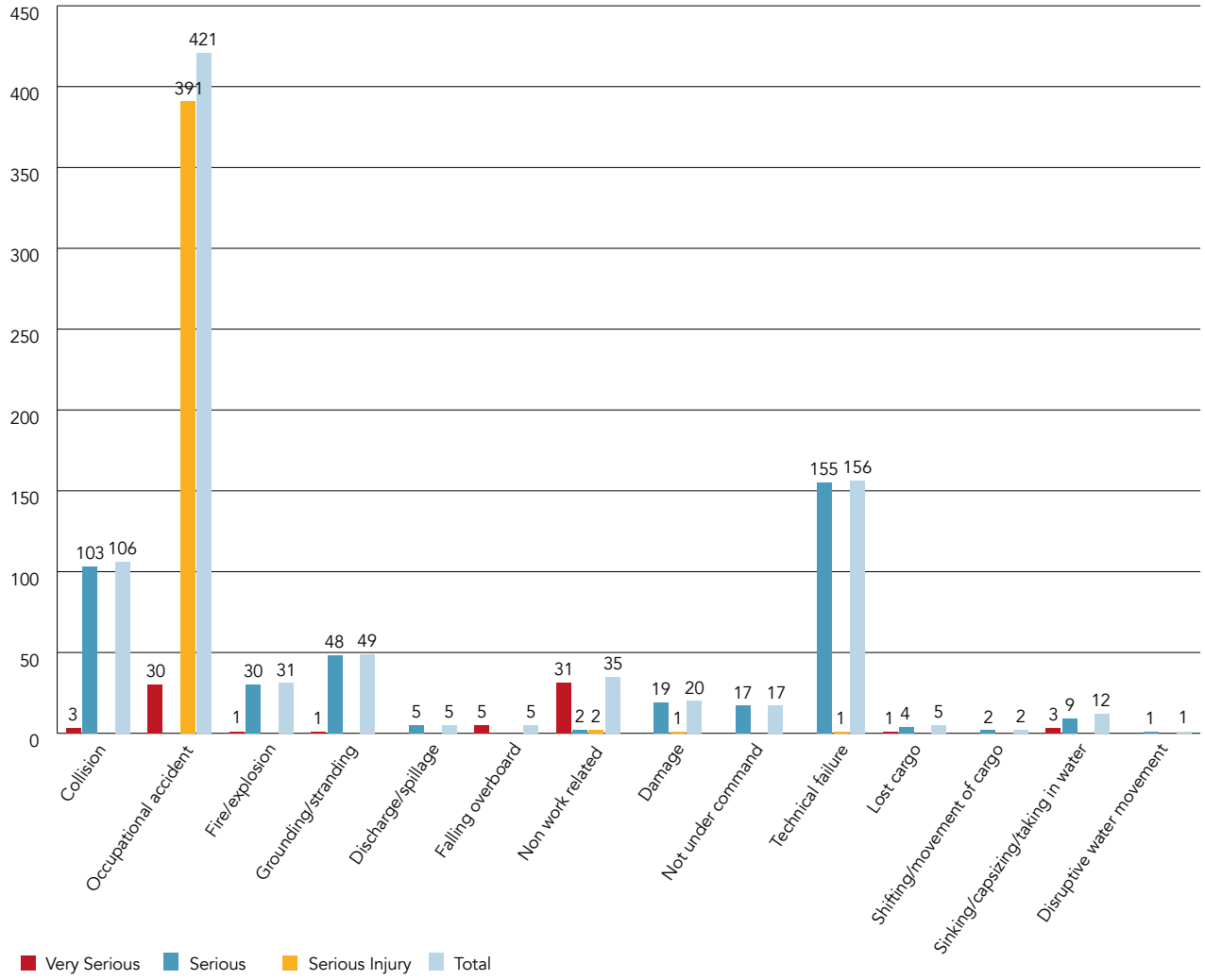
Serious injury: injury suffered by a person, which incapacitates the person for more than 72 hours, within seven days after the date on which the accident took place.

This report lists occurrences from the following categories: *very serious*, *serious* and *serious injury*. In addition to data about the reporting period, a multiyear overview is also included. This provides a greater understanding of trends.

▼ *Figure 3 Serious and very serious accidents, sea shipping, period July 2023 through December 2023.*



▼ *Figure 4 Serious and very serious accidents, sea shipping, period January 2016 through December 2023.*



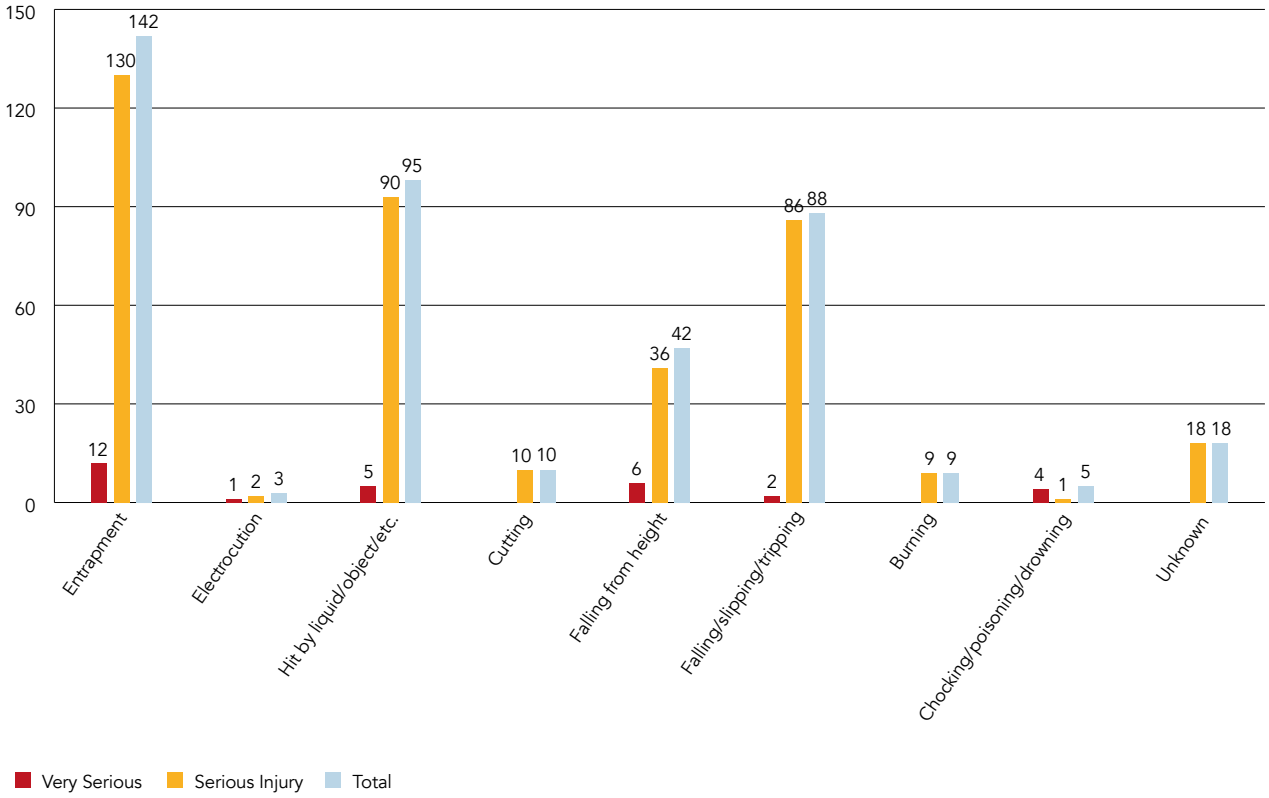
Occupational accidents take a prominent place in figures 3 and 4. The prevention of occupational accidents has also been accorded a prominent position in national and international rules. The international Maritime Labour Convention (MLC 2006), which contains these rules, is considered the fourth pillar of maritime regulation applicable on board seagoing vessels, alongside the SOLAS Convention, the Marpol Convention and the STCW Convention. MLC 2006 was drawn up under the auspices of the International Labour Organization (ILO).

In addition, in the Netherlands, the Human Environment and Transport Inspectorate (ILT) has a supervisory role in the Dutch shipping sector. This role focuses on ensuring compliance with legislation and regulations on board ships.

Greater insight into the nature of these accidents can contribute to increased safety awareness among employers, employees and other parties in the maritime sector.

For that reason, occupational accidents are displayed on the basis of causes of injury in figure 5. It is noticeable that entrapment, being hit by liquids/objects, falling/slipping/tripping/collision and falling from heights are the most common types of occupational accidents.

▼ *Figure 5 Occupational accidents linked to the cause of injury, sea shipping, period January 2016 through December 2023.*

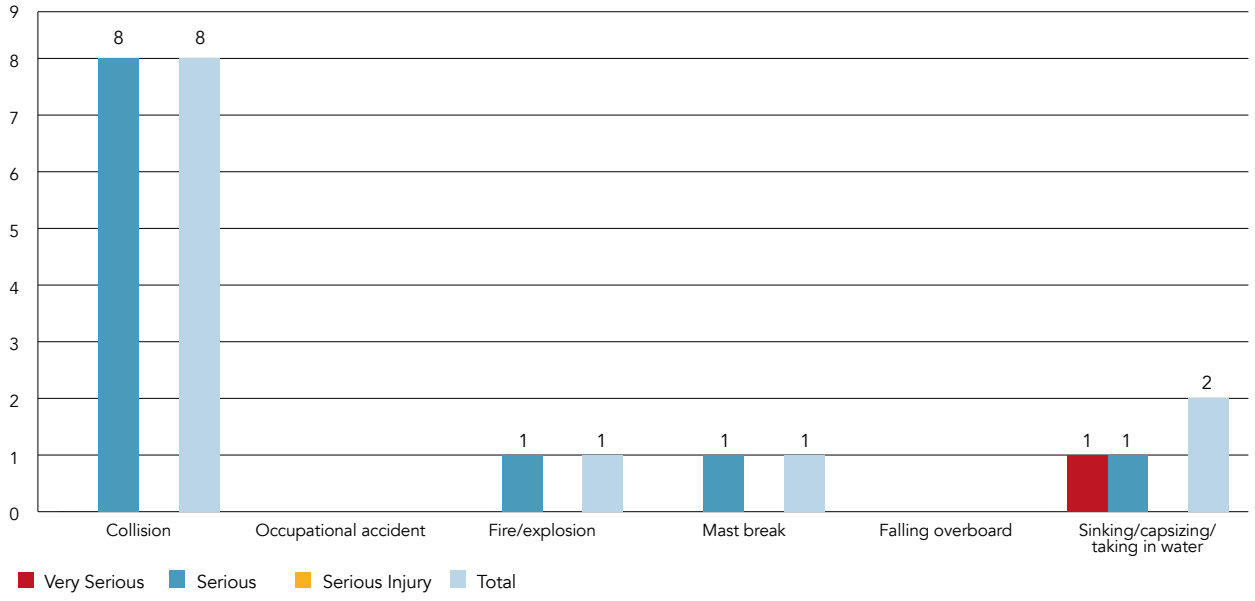


Inland shipping

Accidents on inland waterways are subject to a different classification system due to differences in international agreements, but broadly speaking are comparable with the classification mentioned above. The shipping accidents in figure 6 show the number of reports to the Dutch Safety Board of accidents on inland waterways in the period July up to December 2023. Within this classification, 'serious' and 'very serious' accidents are taken to mean: accidents whereby a vessel is no longer able or permitted to sail as a consequence of the shipping accident or if there is serious damage to the cargo, infrastructure or the environment, resulting in disruption of the navigation channel, or if there are fatalities or serious injuries.

For the sake of readability, all occurrences in this Shipping Occurrences Report, in sea shipping as well as in inland shipping, are categorized and classified in the same way.

▼ *Figure 6 Serious and very serious accidents, inland shipping, period July 2023 through December 2023.*



Published reports

Collision in North Sea traffic separation scheme North Sea, 23 December 2021

The cause of the collision between the Belgian trawler Z60 Blue Angel and the Dutch cargo ship Amadeus Aquamarijn in the traffic separation scheme above the Wadden Sea on 23 December 2021 was that the mate of the Z60 Blue Angel failed to see the Amadeus Aquamarijn and therefore did not divert.

The visibility of the Amadeus Aquamarijn was reduced by a combination of disrupted night vision, the low position of the Amadeus Aquamarijn in the water and the fact that both the trim and the masts of the Z60 Blue Angel partially obscured visibility looking forward. It is conceivable that the Amadeus Aquamarijn was visible on systems such as radar and the AIS overlay on the chart plotter during the mate's shift on the Z60 Blue Angel. It appears that fatigue and the fact that the CPA alarm was not switched on were the reasons that the mate did not see the Amadeus Aquamarijn. The mate of the Amadeus Aquamarijn alerted the Z60 Blue Angel based on his own observations, but did not receive a response. He did not subsequently check whether the Z60 Blue Angel adjusted its course.

▼ *Figure 7 Radar image port side Z60. (Source: Maritime Police)*

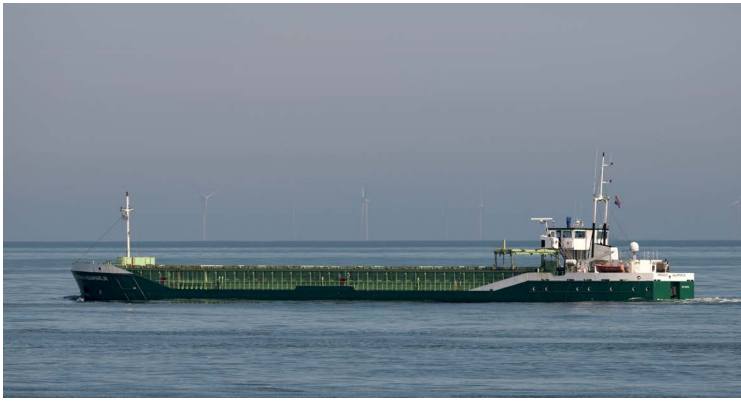
Several factors led to the collision. The Dutch Safety Board calls on ship owners and maritime training institutes to address reduced alertness due to fatigue. It is also important that the crew of fishing boats remember to switch navigation and warning equipment back on after fishing. The CPA alarm goes off repeatedly while fishing. Because this can be considered bothersome, crew members switch off the alarm while fishing. Furthermore, the shipping industry should pay more attention to practicing non-standard situations. They can do this using a simulator, for instance.

The full report is available at:

Dutch: https://www.onderzoeksraad.nl/nl/page/20235/aanvaring-in-verkeersscheidingsstelsel-noordzee

English: https://onderzoeksraad.nl/en/onderzoek/collision-in-north-sea-traffic-separation-scheme/

▼ *Figure 8a Amadeus Aquamarijn.*



▲ *Figure 8b Z60 Blue Angel. (Source: Eddy Decorte)*

Fatal accident in cargo tank of chemical tanker. Lessons learned from the occurrence on board the NCC SAFA.

North Sea, 20 April 2022

On the evening of 20 April 2022, the chemical tanker NCC SAFA, sailing under the flag of Saudi Arabia, was moored at anchorage 8 off the coast of IJmuiden, in the North Sea (within the 12-mile zone). The recently emptied ship had discharged its cargo of palm oil in Rotterdam, and was being readied to take on a new cargo of gas oil in Amsterdam. To receive the new cargo, the tanks first had to be filled with inert gas (nitrogen, N2). Before the tanks were filled with this inert gas, in accordance with the procedure, they first had to undergo a final visual inspection following washing.

At around 19.00 hours (LT), a deckhand carried out this final visual inspection in the bow tanks, before they could be filled with nitrogen. When the captain tried to contact the deckhand by walkie-talkie, there was no reply. So he sent the first mate to the bow tank to investigate the situation. When the first mate arrived, he saw the deckhand lying on a platform in the tank and sounded the alarm using the walkie-talkie. This was the only contact between the first mate and the other crew members on board the ship. When the captain arrived at the tank opening, he too saw the deckhand lying on a platform in the tank. The deckhand was retrieved from the tank by the ship's rescue team and subsequently taken to the hospital in Alkmaar by the SAR helicopter, with serious injuries. The first mate was found at the bottom of the tank. Resuscitation was attempted but was unsuccessful.

The occurrence involved an inert gas system in which just one single valve formed the hard safety barrier, a situation that is in principle unsafe and inadequate. This, in combination with the sense of time pressure that prevailed and incorrect assumptions based on a previously issued Entry Permit, which meant that procedures were not followed, made it possible for this occurrence involving both the deckhand and the first mate to take place.

The investigation revealed that a leaking valve allowed nitrogen to enter tank 1SB while the bow cargo tanks on board were being inerted. This inadvertently lowered the oxygen level in the tank. Despite being aware of the safety rules and the safety information available on board, the procedures were not adhered to. Prior to the inspection of tank 1SB by the deckhand, the risk analysis and accompanying gas measurements were not carried out and a new Entry Permit was not issued. Moreover, although both the deckhand and the first mate were wearing their helmet, overalls and safety shoes, neither was carrying a personal gas meter when they entered the tank.

Based on the investigation into the occurrence on the NCC SAFA, the Dutch Safety Board issued a recommendation to the ship manager and a number of lessons for the industry.

The full report is available at:
Dutch: https://www.onderzoeksraad.nl/nl/page/20522/dodelijk-ongeval-in-ladingtank-van-chemicali%C3%ABntanker
English: https://onderzoeksraad.nl/en/onderzoek/fatal-accident-in-cargo-tank-of-chemical-tanker/

▼ *Figure 9 NCC SAFA.*

Safety of historic sailing fleet – follow-up investigation following two occurrences in 2022

In 2022, there were two serious occurrences on board historic sailing ships, which cost the lives of two passengers. On 27 May 2022, two passengers on the historic sailing ship Wilhelmina were trapped by the boom after the topping lift came loose and the boom fell on deck. One person was killed and the other was taken to hospital with serious injuries. On 31 August 2022, a very serious accident took place on board the historic sailing ship Risico on the Wadden Sea, off Terschelling. There were two crew members and 14 passengers on the ship. The passengers consisted of 2 pupils and their two teachers who were on a school field trip. During a sailing manoeuvre, the wooden boom of the sailing ship broke, landing on a pupil. The young passenger died.

Following these two accidents in 2022, the Board deemed it necessary to further investigate the recommendations in the 2017 *Mastbreuk Harlingen* (Breakage of mast Harlingen) report and compliance with these recommendations. The conclusion of the follow-up investigation is that the historic sailing fleet has not become demonstrably safer since 2017, although progress has been made on a number of aspects. The BBZ professional charter shipping association has, for example, done much to develop industry standards and disseminate knowledge on safety to skippers/owners, but BBZ does not reach everyone.

The supervision of the historic sailing fleet is only a small part of the ILT's extensive remit and is therefore not given much priority. The ILT has tasked the inspection agencies with the checking of the ships. The Dutch Accreditation Council assesses whether the inspection agencies meet accreditation standards. However, the agencies are not fully equipped for their task. The certification system within which they operate is characterized by open and unclear inspection standards for safety critical components such as the mast and rigging, for instance. This is why the inspection agencies currently give their own interpretation to those standards. This means that skippers/owners can choose the least stringent inspection, which is also the cheapest. In this case, safety is not necessarily a decisive criterion.

The ILT opts for a role as second line supervisor, but has very little insight of the operation and effectiveness of the certification system in practice. The ILT cannot therefore currently meet its responsibility for the quality of the system in which inspection agencies issue certificates for historic sailing ships.

In recent years, the BBZ association has taken good initiatives to improve safety, together with a number of skippers, owners and other parties. But despite those efforts to improve professionalism and safety awareness, there is still a big difference in the knowledge and expertise of the various skippers and owners. This difference in professionalism results in safety risks. Skippers who are already highly committed to safety deserve recognition and support from the ILT, inspection agencies and the industry association. Initiatives such as the exchange of practical knowledge on safety by the various organizations should therefore be further fostered and supported.

Inspection agencies do not have to wait for the ILT. They can specify their own standards, partly based on what the industry itself has already developed. Investments are also necessary in the expertise of their inspectors so that they can conduct inspections that demonstrably benefit the safety of historic sailing ships.

This investigation shows that the system still has gaps, despite several occurrences in recent years and the *Mastbreuk Harlingen* report. The recommendations from the *Mastbreuk Harlingen* report therefore continue to apply in full. The focus on safety is noncommittal, which leaves room

within the entire system for individual interpretation and means that safety critical components in the historic sailing fleet are vulnerable. Furthermore, the level of knowledge and expertise of the skippers and owners of the historic sailing fleet remains varied. The ILT complies with its second line supervision role to a limited extent and there is a lack of clear coherence in the division of tasks between the ILT and the Dutch Accreditation Council.

The Dutch Safety Board made four recommendations to the Minister of Infrastructure and Water Management to improve the supervision of the historic sailing fleet together with the ILT. The Board expects other parties such as skippers, owners, BBZ association, the inspection agencies and the Dutch Accreditation Council not to wait for the Minister and the ILT to take the initiative. They must also get to work to improve the safety of historic sailing ships.

The full investigation report is available at:

https://onderzoeksraad.nl/onderzoek/veiligheid-historische-zeilvloot-een-opvolgingsonderzoek-naar

▼ *Figure 10 Historic Sailing Fleet. (Source: Hajo Olij)*

Collision in the Schuitengat

Wadden Sea, 21 October 2022

On 21 October 2022, the water taxi Stormloper and the express boat Tiger (a fast ferry) collided off the Schuitengat near Terschelling. Four people were injured, three people died and one person went missing. The Dutch Safety Board's investigation revealed that the water taxi and ferry involved were both travelling too fast, communicated unclearly with each other and did not adhere to the prevailing sailing rules. This investigation shows that the safety on the Wadden Sea can be improved, particularly in terms of sailing behaviour and legislation and regulations. Islanders and other passengers depend on the transport between the islands and the mainland and must be able to rely on the fact that this is done safely. The competent authority and the entrepreneurs have a joint responsibility to ensure this. All parties involved encounter each other in this area. The actions that have already been initiated and the recommendations of this report can facilitate increased safety and this will be strengthened if the parties give concrete form and content to this together.

The accident left a lasting impression on all parties concerned. The Dutch Safety Board therefore recommends that the existing community spirit be used and strengthened to increase the safety of shipping traffic on the Wadden Sea. The parties involved can use each other's expertise and jointly develop activities such as practicing scenarios, simulator training and training activities on the Wadden Sea. The shipping operator and water taxi company involved have since indicated that various improvement actions have been initiated. The Dutch Safety Board also recommended that the Minister of Infrastructure and Water Management set clearly defined rules with respect to commercial transport carrying 12 or fewer passengers and to adapt the legislation and regulations on enforcement.

The full investigation report is available at:
https://onderzoeksraad.nl/onderzoek/aanvaring-schuitengat/

▼ *Figure 11 The water taxi after the collision. (Source: maritime police)*

Investigations launched

Emergency response to fire on ship

North Sea, 25 July 2023

A fire broke out on board of the car carrier Fremantle Highway north of Ameland on the night of 25/26 July 2023. One crew member died and 22 others were injured as a result. The Dutch Safety Board launched an investigation into the preparations for and the communication, operational engagement, coordination and decision-making during the emergency response.
The investigation into the fire is being led by Panamanian authorities (see 'Investigations launched by foreign authority').

Classification: Very Serious

05 Investigations launched by foreign authority with the Netherlands as a State with substantial interest

Fire on car carrier, with fatality and seriously injured

North Sea, 25 July 2023

A fire broke out on board of the Panamanian car carrier Fremantle Highway on the Wadden Sea north of Ameland on the night of 25/26 July 2023. The investigation into the fire, which killed one crew member and seriously injured 22 others on board, is being led by Panamanian authorities. The Dutch Safety Board is cooperating with them in this investigation.

Classification: Very Serious

▼ *Figure 12 Fremantle Highway. (Source: ANP)*

Fall from height

VOPAK Vlaardingen, 9 August 2023

While unloading the cargo of palm oil at VOPAK Vlaardingen, a crew member of the Liberian ship Acadia Park fell from a ladder onto tank spirals (heating elements) in the cargo tank. As a result, the crew member suffered a collapsed lung and burns and was taken to hospital. The accident occurred after cleaning work. During the incident, the crew member was working in the tank with four others. According to the police, everyone was wearing PPE and gas meters and the atmosphere did not have an effect on the accident. However, the cargo residue did have an effect; he lost grip on the handrail that was greasy from the palm oil.

The safety investigation agency of Liberia launched an investigation.

Classification: Serious Injury

Fall from hatch crane

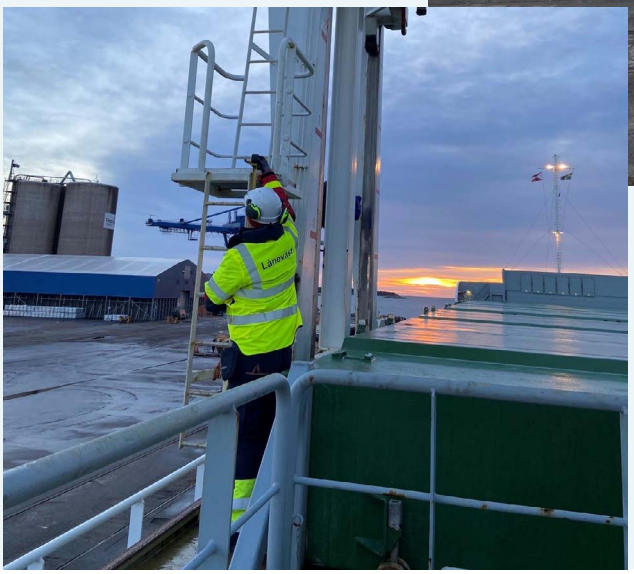
Oxelosund, 15 October 2023

In the port of Oxelosund (Sweden), the third officer fell from the hatch crane of the Dutch cargo ship Roerborg onto the quayside. After opening the hatches of the forward hold, the hatch crane was parked near the cross deck after which the third officer climbed down from the hatch crane using the ladder. The third officer made a misstep (3 to 4 steps above the cross deck) and lost his grip resulting in a fall. During the fall, his feet got caught outside the railing of the intermediate platform and he hit the railing of the lower deck before landing on the quayside. The third officer was seriously injured, but he was conscious when taken to the hospital.

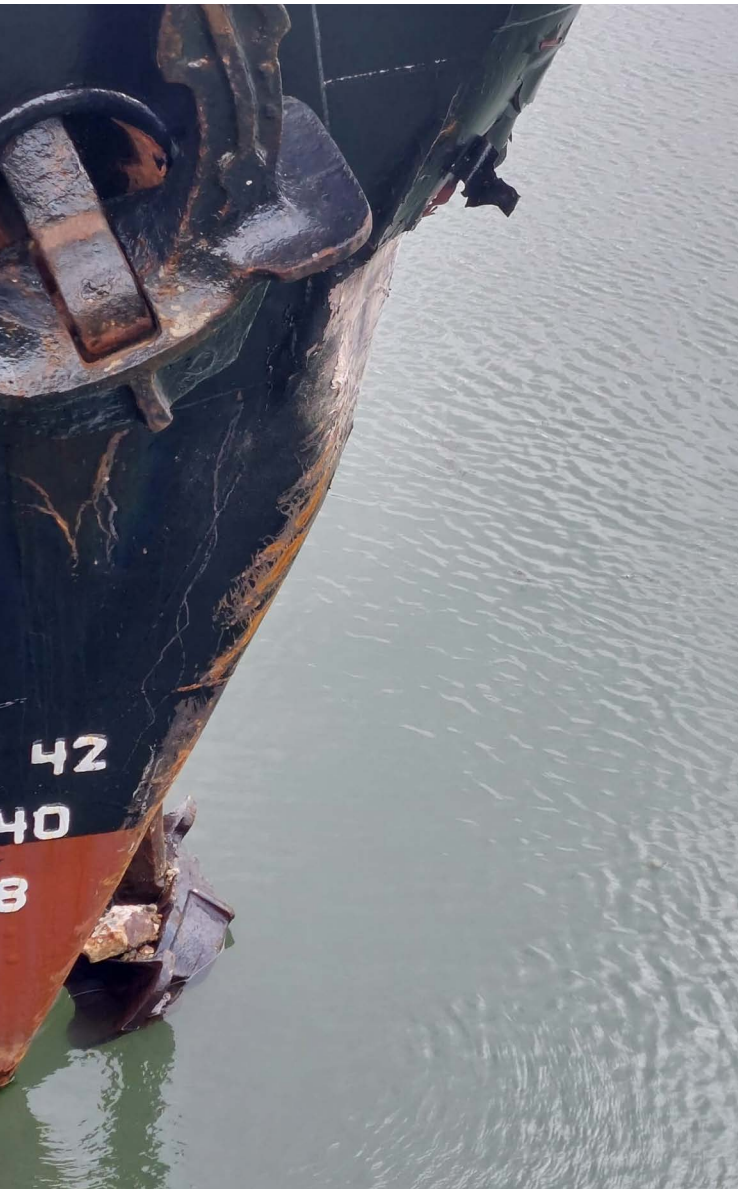
The safety investigation agency of Sweden launched an investigation.

Classification: Serious Injury

▼ *Figure 13a and 13b location of Roerborg accident. (Source: Swedish Accident Investigation Authority)*



06 Incidents that have not been extensively investigated



Collisions

Collision with jetty

West Terschelling, 1 July 2023

While mooring in West-Terschelling harbour on the short side of a jetty, the Dutch sea tugboat Holland collided with the quayside. The Holland is equipped with a reversible engine and a bow thruster and was using a tugboat while mooring. As the ship was headed toward the quayside, it was sucked towards already moored ships on its port side. In an attempt to avoid these, it hit the quayside. The ship was sailing with a group of passengers, one of whom suffered minor injuries as she fell off her chair and broke her wrist. The ship sustained damage to the prow above the waterline. There was no outflow or inflow of water. The classification society gave the Holland permission to sail back to Harlingen for repairs.

Classification: Serious

◀ *Figure 14 Damage to the prow Holland. (Source: ILT)*

Collision with piles and pilot tender

North Sea Canal, 5 July 2023

The Cypriot LNG bunkering tanker Kairos left the port of Amsterdam in the morning with a pilot on board. There were strong winds with gusts of 30 to 40 knots. On leaving, the Kairos received assistance from a tugboat and sailed to IJmuiden lock. They had requested two tugboats, but only one was available. Once in the lock, the winds picked up and it was decided to allow the pilot to disembark in the harbour instead of offshore. Despite the Kairos' azipod thrusters being at full power, the ship was caught by the wind and it was not possible to prevent the ship from running aground and hitting a number of piles that caused a tear port side above the waterline. The attempt to transfer the pilot to the pilot boat Lacerta was discontinued. There was no inflow of water. A second tugboat became available to get the Kairos safely to Aziëhaven. Also see the following incident for damage to the pilot boat.

Classification: Serious

▼ *Figure 15 Damage Kairos.*

Collision while transferring pilot

North Sea Canal, 5 July 2023

The Dutch pilot tender Lacerta was transferring a pilot sailing with the LNG bunkering tanker Kairos (see previous incident). The manoeuvre to transfer the pilot was interrupted as the Kairos lost control due to strong winds and there was a potential threat of a collision. The evasive manoeuvre was to no avail and the subsequent collision seriously damaged the Lacerta. No one was injured.

Classification: Serious

▼ *Figure 16 Damage Lacerta. (Source: Loodswezen)*

Collision during port manoeuvre

Rotterdam, 19 September 2023

While mooring the Songa Pearl at the BP Terminal in Europoort, the ship was caught by a gust of wind. The bow thruster was not strong enough to deal with the gust of wind, which is why the anchor was thrown out. This slowed down the movement, but was not enough to prevent a collision with the moored ship Willard J. Both vessels sustained damage that had to be repaired before departure.

Classification: Serious

Collision on the high seas

Denmark, 20 September 2023

The ship Eems Carrier collided with the ship Rix Explorer on the high seas. Both vessels were in Danish waters at the time. The Eems Carrier sustained a hole in the ship's skin near a full ballast tank that was full. In consultation with Danish authorities it was decided to proceed to the destination port for repairs. This was the port of Faxe (Denmark), where the ship arrived that evening.

Classification: Serious

Pleasure yacht sinks after collision with inland vessel

Dordrecht, 14 October 2023

On the Oude Maas near Dordrecht, an inland ship ran over a pleasure yacht on Saturday at about 12.45 hours. This happened near the Krabbegeul. The two people on board the yacht went under water, after which one of them was able to swim to shore. The other person was brought to shore by crew members of a passing bunker vessel. The pleasure yacht immediately sank to the bottom of the river.

Classification: Serious

Collision

Oude Maas, 26 October 2023

The Belgian-flagged tanker Antibes, loaded with fuel oil, collided with the back of the Dutch-flagged freighter Ina, loaded with rolls of steel, at about 07.00 hours. This caused the Ina to collide with a bunker station, which came loose due to the impact. There was no spillage. The Ina was trapped between piles and the shore and the sinking water level meant that there was a chance that the ship would capsize. The Ina was eventually pulled loose in a controlled way by a push boat.

Classification: Serious

Collision

Volkerak Locks, 29 November 2023

The Dutch inland ships Nova and Europa collided near Willemstad at around 9.00 hours on 29 November 2023. The wheelhouse of the smaller vessel, the Nova, was destroyed in the process. The Nova's skipper jumped into the water and later climbed back onto the Nova to activate the emergency button. The Nova could no longer sail by itself and was later towed to Schiedam to be unloaded. The Europa was able to continue sailing after a short time.

Classification: Serious

Collision with cable ferry

Lek near Culemborg, 30 December 2023

On 30 December around 08.00, the inland ship Micento sailed through the cables of the ferry near Culemborg. This caused the ferry to come loose from the cable. The collision also dislodged three cable boats. One of these was towed by the Micento to Wijk bij Duurstede. There were no people on board the ferry and no one was injured. There was material damage. The skipper indicated that he was not familiar with the location and was sailing there for the first time. He explained that the boats were poorly lit and sixty percent under the water. He further indicated that the sun was just rising, and combined with the high tide the groynes were not easily visible. The radar was on.

Classification: Serious

Collisions with engineering structures

Collision with bridge

Stroobos, 17 August 2023

On Thursday 17 August, at around 02.30 hours, MTS Marlou, loaded with rapeseed oil, collided with Stroobos bridge. The inland tanker collided with the closed swing bridge, causing the roof of the wheelhouse to be torn off and to land at the back of the deck. The dinghy landed in the water. The collision did not cause any injuries or spillage. The skipper stated that he thought he could pass under the bridge, which in retrospect was an error of judgement.

The collision meant that the swing bridge was no longer in its safety checked position. As a result, both the waterway and the road over the bridge were closed. The bridge had also been hit eight months earlier by a German inland ship.

Classification: Serious

▼ *Figure 17 Damage to wheelhouse after bridge collision. (Source: Camjomedia)*

Blockage due to collision with lock

Panheel, 9 October 2023

On 9 October, the Baracas collided with the upper door of the north chamber at Panheel lock at around 14.30 hours. There were no injuries and the vessel had no cargo on board. Because the south chamber had previously been blocked due to a technical failure, the entire complex was blocked for shipping.

Classification: Serious

Collision with lift bridge

Waddinxveen, 7 November 2023

On Tuesday morning 7 November, the inland cargo ship Sophia collided with the lift bridge over the Gouwe at Waddinxveen. The bridge was damaged and traffic over and under the bridge was blocked. Traffic over the bridge could be resumed from Wednesday. Shipping was temporarily blocked during repair work. According to the skipper, the bridge opened too slowly and he was unable to stop in time.

Classification: Serious

▼ *Figure 18 Bridge near Waddinxveen. (Source: ANP)*

▲ *Figure 19 Damage to the hull. (Source: Sima Charters)*

Collision with railway bridge

Zutphen, 9 November 2023

Op 9 november even na 22.00 uur op de IJssel voer het Nederlandse binnenvaartschip Juntos tegen de weg- en spoorbrug bij Zutphen. Door de aanvaring met het spoorgedeelte van de brug kwam de houten stuurhut van het binnenvaartschip in het water terecht. De schipper raakte hierbij gewond, maar kon nog wel zelfstandig naar een aanmeerplek varen. Hij werd daar aan een hoofdwond behandeld door een huisarts die met een bootje aan boord was gebracht. Het treinverkeer over de spoorbrug heeft tot het einde van de dienstregeling van die dag stilgelegen. Het wegverkeer ondervond geen hinder.

Classification: Serious

Collision with pipeline

Rødby Denmark, 10 November 2023

The Dutch Crew Transfer Vessel SC Falcon was performing a crew change for a client off the coast of Rødby (Denmark). On sailing out of the harbour, the captain noticed that his searchlight was no longer working. After the crew change, the SC Falcon sailed back towards the port of Rødby. In doing so, the captain took a different route than planned and the ship sailed through a closed work area. At about 18.30 hours local time, the ship hit a pipeline and got stuck on it. It was dark, rainy and the captain had not seen the pipeline on the radar. There were a number of people on deck at the time of the collision. They suffered bruises and stiff joints from the impact.

Assistance was then requested from nearby ships. A tugboat came to the rescue and pulled the SC Falcon loose. SC Falcon was then towed to the port of Rødby. There was no leakage.

Classification: Serious

Occupational accidents

Caught up in mooring line

Cuxhaven, Germany, 10 March 2023

At about 16.15 hours, the crew of the Dutch fishing vessel UK-156 Poolster had to move the ship from Cuxhaven, Germany to the inner harbour, which meant it had to pass through a lock. Two crew members were on board, the skipper and a deckhand. The skipper was in the wheelhouse and the deckhand on the aft deck. During the manoeuver through the lock, the deckhand was entrapped in a mooring line.

It is customary on the UK156 Poolster to moor to the small bollards in the lock and not to fasten the mooring lines until the vessel is stationary. Fastening the mooring lines is done from the deck. In this case, the deckhand stood on the ship's railing and threw the mooring line around a large bollard on the quayside wall. Once he had done this, he jumped from the railing back onto the deck. In doing so, his foot was caught in a loop of the mooring line. The loop pulled the deckhand's foot between the railing and the aft rigging of the boom that was tied to the railing. As a result, his right lower leg broke just above the ankle. During medical treatment, it was decided that amputation was necessary.

Classification: Serious Injury

Squashed by mooring line

Den Oever, 20 April 2023

While unmooring the Dutch fishing vessel WR 189 Grietje, a crew member lost his leg. The vessel was moored in front of the fish auction, had unloaded and the crew wanted to recover the vessel. Because of strong winds, the crew had set a spring double on a pole to turn the stern away from the side. Once the vessel had turned far enough, the skipper gave the signal to cast off and the vessel sailed astern.

The crew member called to stop the vessel after 20 metres, after which the skipper moved the vessel forward again. The mooring line was still around the bollard and tightened. The crew member was standing in a loop of the mooring line, resulting in the entrapment of his leg.

Classification: Serious Injury

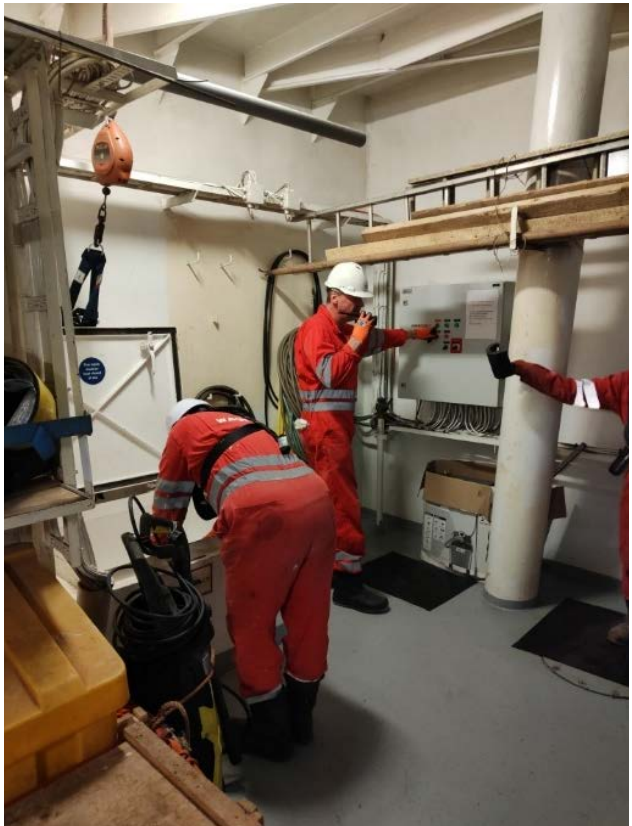
Broken arm

North Sea, 14 July 2023

At 12.30 hours local time on 14 July 2023, the high level bilge alarm sounded in the bow thruster room. In response, the crew decided to carry out an inspection. The chief engineer and the third engineer opened the hatch to the bow thruster room at 13.00 hours. The hatch was not properly secured (due to the lack of a proper locking system) and a wave caused the hatch to fall on the third engineer's arm. His arm broke as a result. He remained on board for another day until the ship reached the Kieler Channel. He disembarked here and the fracture was diagnosed, preventing him from continuing his work.

Classification: Serious Injury

▼ *Figure 20 Location of accident Geulborg. (Source: Wagenborg)*



Medical evacuation

North Sea to west of Denmark, 15 August 2023

A crew member was injured on board the Dutch flyshooter UK-38 Kleine Jan after being trapped between a tree log and the cistern. The log was in the net that tore while hauling it in. The crew member was about to reel in the hook to hoist the log out of the net when the net began to tear. Due to the weather conditions (wind force 6-7 beaufort), the vessel was swaying and a lurch caused the log to hit the crew member. The crew member was evacuated and taken to hospital. He was unable to work for three to six weeks.

Classification: Serious Injury

Leg injury

Dordrecht, 21 August 2023

A crew member was injured on board the Maltese-flagged tanker Filyoz while mooring in the port of Dordrecht. The crew member's leg got trapped when he issued the forward mooring line and the mooring boat unexpectedly pulled the forward mooring line. The crew member broke his leg in the process and was taken to hospital where he had to undergo surgery.

Classification: Serious Injury

Injury to hand

Esbjerg, Denmark, 25 August 2023

The third engineer suffered injuries to his hand while working on the air conditioning unit at around 03.00 hours local time on board the Dutch-flagged RoRo vessel Kraftca. This work had not been scheduled or assigned by the chief engineer. The third engineer had switched off the air conditioning unit's engine, but the drive belt was still turning when he started the work. As a result, his thumb got stuck between the belt and the gear. The third engineer was brought ashore by the Danish Coastguard and was treated in hospital there.

Classification: Serious Injury

Bruised hand

Rotterdam, 1 September 2023

During a test of the lifeboat crane on the container ship X Press Godavari, the third officer badly bruised his hand after it got trapped. The third officer was standing behind the lifeboat crane when he started the crane. In doing so, his hand got trapped between the crane and the boat. The third officer did not stop the crane and it therefore continued to turn. The first officer then ran up the stairs, stopped the crane and turned it in the other direction. This meant that the third officer's hand could be freed.

Classification: Serious Injury

Fall into tank

Kokkola, Finland, 4 September 2023

A deckhand fell from the vertical ladder into the tank while entering the ballast water tank to work in it. The crew member was helped out of the tank and medical care was provided. The injured deckhand was taken to hospital, where a fracture to the left hip was diagnosed for which he received treatment.

Classification: Serious Injury

Hand trapped

Rotterdam, 9 September 2023

The crew was carrying out lugging work in the hold on board of the Maltese pipe layer Lorelay. They moved a concrete block using a forklift truck. One crew member was loosening the chain that attached the concrete block to the forklift truck. When the forklift truck moved away, the crew member's finger got trapped between the chain and the concrete block. He was subsequently taken to hospital by ambulance. Half of his middle finger had to be amputated.

Classification: Serious Injury

Slipped on stairs

Hollum, 4 September 2023

A crew member of the fishing vessel LO44 Stella Maris slipped on the stairs in the galley. A closing hatch then fell on his wrist, causing a deep wound and severed thumb muscle. The crew member was unable to return to work for three to six weeks.

Classification: Serious Injury

Finger injury

North Sea, 16 October 2023

While fishing on the North Sea, a deckhand on board the Dutch fishing vessel VLI25 Cindy sustained injury to his fingers. The deckhand was evacuated by a Belgian SAR helicopter and taken to a hospital in Bruges.

Classification: Serious Injury

Finger entrapment

Farmsum, 17 October 2023

While preparing the Dutch tugboat Waterstroom in the port of Farmsum, the captain sustained an injury to his right index finger at about 10.50 hours. He got his finger stuck between the shackle and the anchor chain on the fore part. The captain was taken to hospital.

Classification: Serious Injury

Fractured knee

Sassnitz Germany, 25 October 2023

The Dutch research ship Geo Focus was docking at about 17.00 hours local time. When a crew member stepped off the ship onto the quayside to help the second mate moor the ship, he misstepped and fractured his knee.

Classification: Serious Injury

Hand entrapment

Australia, 2 November 2023

A trainee suffered injuries to his hand on board the Dutch cargo ship Heemskerkgracht. The trainee and the third officer were planning to smear a winch on the foredeck together. The trainee assisted the third officer in unhooking the eye of the mooring line from the guide wheel. In doing so, the trainee's hand got trapped between the eye of the mooring line and the guide wheel of the mooring line. The trainee was not able to work for one to two weeks because of his hand injury.

Classification: Serious Injury

Broken leg due to mooring line breakage

Helsingborg, Sweden, 9 November 2023

The Dutch cargo ship Tuna was being moved along the loading quay in the port of Helsingborg, Sweden at around 22.45 hours on 9 November 2023. A deckhand was at the front to operate the winches and a second deckhand did the same at the back. The first mate was on shore to check when the ship was in position. After the ship was in position, the mooring lines were reattached. Subsequently, the aft spring broke and hit the back of the first mate's lower leg, who had just stepped onto the gangway. It is unclear what the first mate was doing on the gangway at the time, possibly he wanted to get back on board or was working on the gangway safety net. He fell back onto the quayside and remained in that position. The local authorities were alerted and the mate was taken to hospital by ambulance at about 23.15 hours. It turned out that he had broken his calf and shin.

Classification: Serious Injury

Fall on board

Terneuzen, 12 November 2023

A crew member fell into the hold of a cutter suction dredger on Sunday morning 12 November. At the time of the accident, the vessel was moored in the Westbuitenhaven in Terneuzen. A crew member (bench worker) fell from height while assisting the crane operator on Project Nieuwe Sluis Terneuzen. The injured person was disembarked using a crane and taken to hospital. He had a broken arm and injuries to his pelvis.

Classification: Serious Injury

Trapped in wheelhouse

Parkkade Rotterdam, 16 November 2023

Inland tanker Antares came adrift off Rotterdam's Parkkade on 16 November. The vessel circled through Parkhaven several times, right in front of the Park Locks. It then collided with the quayside, and then with another inland vessel and a police boat. A police officer had to jump on board to stop the ship. The police found the skipper unconscious in the collapsed wheelhouse, trapped between the roof and the control panel. The skipper was taken ashore with a crane and taken to hospital.

Classification: Serious Injury

Collision with terminal tractor

Rotterdam, 21 November 2023

A crew member of the Maltese RoRo freighter Opaline was hit by a terminal tractor at around 13.40 hours on Tuesday 21 November 2023. The driver of the terminal tractor was driving a chassis with two containers backwards on the lower deck. A crew member of the Opaline was collecting lashing material at the time on the same deck and heard a scream. His colleague, who was supervising the loading operation on the aft of the lower deck, was lying near the rear wheels of the terminal tractor. He immediately sounded the alarm using a whistle and the walkie-talkie.

The emergency services were alerted and the victim was taken away by ambulance. The victim was conscious when he was put in the ambulance. It turned out that he suffered at least four broken fingers and injuries to his leg.

Classification: Serious Injury

Fall from stairs

North Sea, 10 December 2023

An occupational accident occurred on the way to Vlissingen on board the Dutch freighter Breadbox Xerus. The chief engineer fell down the stairs in the engine room during stormy weather. The chief engineer injured his hip and stayed in the control room until the ship arrived in Vlissingen and he was able to go to the hospital. He was unable to work for more than 72 hours.

Classification: Serious Injury

Fall from height

Zaandam, 12 December 2023

A crew member was seriously injured after a fall in the engine room of the Maltese tanker MRC Lina. The crew was using a crane to lift parts in and out of the engine room. To do this, the engine room hatch had been opened. The victim was giving directions to the crane operator when he stepped into the hole and fell 6 to 7 metres down into the engine room. He was seriously injured and was taken to hospital.

Classification: Serious Injury

Entrapment

Mexico, 18 December 2023

On board the Dutch passenger ship MS Volendam, repairs were being carried out on one of the main boilers. The ship was en route to the port of Mazatlán in Mexico. While lifting a nearly 1,300 kilo outer shell of the boiler, one of the lifting straps snapped. In the process, the outer shell of the boiler rotated, trapping a crew member. Other crew members freed him. After the ship arrived in port, he was taken to hospital by ambulance. The crew member suffered a broken bone.

Preliminary investigations by the shipping company showed that the lifting strap probably broke because it pressed against the edge of the outer shell of the boiler. The lifting strap was produced in 2023, had an inspection tag and had also been inspected and approved before the lifting operation. The shipping company has launched an internal investigation.

Classification: Serious Injury

Incident with stevedore

Italy, 23 December 2023

The Dutch cargo ship Western Rock was berthed in the port of Vibo Valentia, Italy. On the afternoon of 23 December 2023, a stevedore fell from a tweendeck into the bilge.

The tweendecks could not be closed completely from front to back. A stevedore was first seen to have been in the hold with the captain, pointing out the gaps in the tween deck. Later, when the stevedore went into the hold again, he fell from the tween deck into the bilge, about three metres below. The stevedore was taken from the hold and transported to hospital with fractures.

Classification: Serious Injury

Head injury after fall

German Bight, 22 December 2023

On 22 December the Esperance sailed into the German Bight. Walking on the bridge the captain fell due to a strong rolling motion of the ship. He fell headfirst against a bulkhead and sustained injuries. The captain was hospitalized and was expected to be unable to work for three to six weeks.

Classification: Serious Injury

Fractured leg after tripping

Wilhelmshaven, Germany, 25 December 2023

At 10.00 hours on Monday 25 December 2023, the Dutch workboat Wil S was tasked with towing the pontoon Vitruvius from the inner harbour of Wilhelmshaven in Germany to a place on the river Jade. The tow yoke of the pontoon was attached to the tow line using the Wil S's ship's crane. When the tow rope was attached, it was held in position by a deckhand using a piece of rope as a stopper. This was to allow the crane to disconnect from the yoke. Next, the deckhand could disconnect the stopper. During this process, the yoke slid into the water and the tow rope came under tension. The deckhand was standing with his back towards the towline and did not see that he was standing too close. The tensioning of the tow rope caused the wire to hit the deckhand, who consequently made a move and tripped over a wooden support block. In the process, he broke his leg.

Classification: Serious Injury

▼ *Figure 21 Location of deckhand on board the Wil S. (Source: GSS marine services)*

Fire

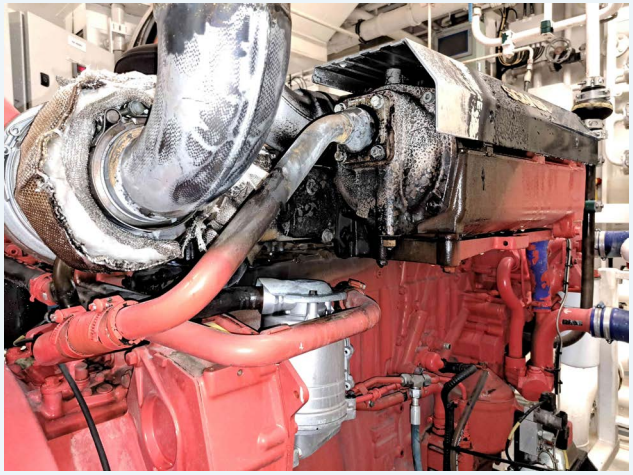
Fire

Goole, United Kingdom, 16 July 2023

A fire started in the turbo of the auxiliary engine as the ship approached the lock in Goole at around 19.30 hours local time. The fire was extinguished by the crew, with the assistance of the fire brigade. Damage was limited to the auxiliary engine. As the auxiliary engine no longer worked, the vessel's bow thruster also no longer worked and it had to be towed to the unloading quay by a tugboat. The ship was granted permission by the classification society to proceed to its next port for repairs to the auxiliary engine.

Classification: Serious

▼ *Figure 22 Fire in the auxiliary engine. (Source: Wijnne Barends)*



Fire in engine room of inland tanker

Streefkerk, 5 September 2023

Belgian inland tanker Poseidon suffered a fire in its engine room on 5 September. The tanker was sailing with a cargo of 110 tons of gasoline on the River Lek near Streefkerk. The fire did not rage in the cargo section of the vessel. The skipper had to be taken off board because of burns and smoke inhalation. The three other crew members were unharmed. Another Belgian inland tanker, the Alexia, came alongside the vessel to keep the drifting ship in place. The Rijkswaterstaat patrol boat and the Dordrecht firefighting boat also came alongside the ship to extinguish the fire. The fire brigade put out the fire. The waterway did not have to be blocked and there was no leakage.

Classification: Serious

Fire due to short circuit in switch panel

Bay of Biscay, 20 October 2023

▲ *Figure 23 Fire in Switch panel. (Source: MV Jade)*

The Dutch cargo ship Jade suffered a short circuit in the switch panel at around 04.30 hours local time on 20 October. This caused a small fire.

After a blackout occurred at around 04.30 hours, the maritime officer went to the engine room to restore power. He noticed that smoke was coming out of the switch panel, and upon opening the panel, flames were visible. The fire alarm was activated and the fire in the switch panel was extinguished with CO2. Another blackout occurred when the engine was restarted. When the busbar cover was opened it was observed that a mounting plate had been welded between two conductors, which probably caused the short circuit. Due to the system start-up problems, it was decided to stop the main engine to prevent further damage to the engine. The vessel was then towed into the port of El Ferrol in Spain.

Classification: Serious

Funnel fire

Brunsbuttel, Germany, 9 November 2023

The Dutch chemical tanker Thun Gothenborg was moored in the lock at Brunsbuttel at 19.15 hours on 9 November, with the pilot on board and engine running. The crew saw unusual smoke coming out of the funnel, after which the engineer on duty was informed. Shortly after, the chief engineer reported that insulation material wrapped around the exhaust pipe was on fire. The captain activated the fire alarm and the authorities were informed. Subsequently, the main and auxiliary engines were stopped and the emergency generator was started. The crew started extinguishing the fire. Cuxhaven Fire Department arrived at the scene quickly and took over the firefighting operation. After the fire was extinguished, the vessel was moved out of the lock by tugboats to the quayside for further investigation.

The investigation found that insulation material had been contaminated with thermal oil from a leaking exhaust boiler. Subsequently, the oil-saturated insulation material around the hot exhaust pipe ignited.

Classification: Serious

Fire in engine room

Gulf of Mexico, 17 November 2023

At 18.43 hours UTC on 17 November, the captain of the Waalborg reported a fire in the engine room. He indicated that it was not possible to extinguish the fire in the 'conventional way' and that he had released CO_2. This was done after performing a headcount, and after all ventilation in the engine room was stopped and all fire dampers were closed. Subsequently, areas adjacent to the engine room were cooled (boundary cooling). The emergency generator was started some time afterwards, but due to the fire it appeared to be no longer usable. As a result, the crew had to rely on power from emergency batteries for communication purposes.

The Waalborg was en route from Houston to Altamira and was sailing in the Gulf of Mexico; it was approximately 100 nautical miles from the nearest shore. The weather conditions were good and the vessel was drifting in a south-westerly direction. There were no navigation hazards. An ERT (Emergency Response Team) was formed within the Wagenborg organization in response to this report. The US Coast Guard was notified and the Waalborg was towed by a tugboat on 19 November. There were no personal accidents or injuries.

Classification: Serious

Groundings

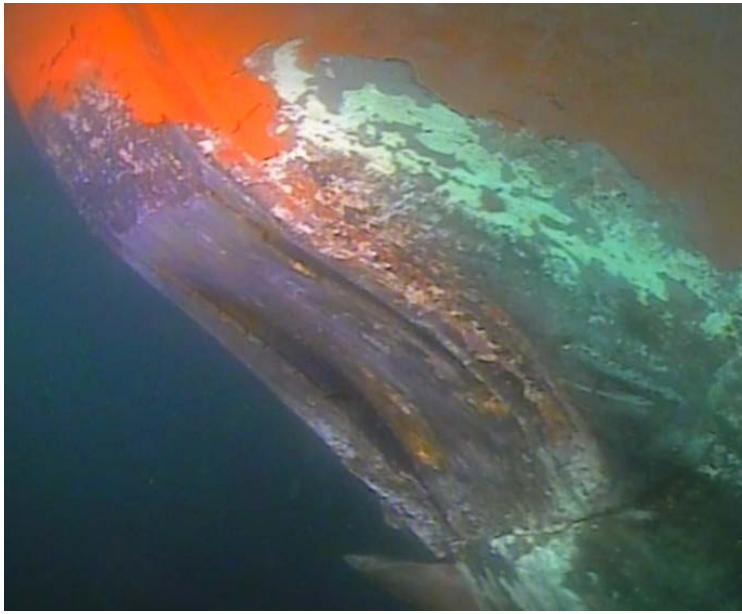
Uncharted object

Greenland, 18 August 2023

During a boat trip in Greenland waters, the sailing training ship Wylde Swan hit an uncharted object. The ship was slowed down by hitting the object, but it did not get stuck. No damage could be observed from inside the ship and there was no leakage or inflow. An underwater inspection was conducted by a diver in the port of Reykjavik. This showed that the keel and echo sounder were damaged. The damage to the keel was temporarily repaired there by the diving company so that the ship could continue its trip.

Classification: Serious

▼ *Figure 24 Damage to the keel. (Source: Swan Expeditions)*



Grounding due to technical failure

Dordtsche Kil – Oude Maas junction, 14 September 2023

The Panamanian cargo ship Navios Lyra was sailing across the junction of the Dordtsche Kil and the Oude Maas. It was assisted by two tugboats. The ship encountered technical problems, which meant that it could no longer steer properly. As a result, it hit the shore despite the tugs and caused damage to the bank. The ship itself had no leakage or inflow and was towed to the Caland Canal by tugboats.

Classification: Serious

Grounding on breakwater

Ameland, 26 September 2023

The Dutch sailing ship Najade ran aground on the breakwater Ballumerbocht near Ameland. It was dark by the time the vessel entered the Molengat channel towards Ameland. While furling the sail, the helmsman lost sight of the steering point and as a result the ship ran onto the breakwater Ballumerbocht. The ship was towed from the breakwater by a salvage company.

The ship sustained damage in the forepeak, which was provisionally sealed. The ship sailed to Lauwersoog, where it was put in a dry dock the next morning. A double plate was temporarily used to cover the damage. The damage to the area should be repaired properly during the next shipyard service visit.

Classification: Serious

Grounding

North Sea, 22 November 2023

The tugboat Oceaan II ran aground at approximately 23.30 hours on 22 November near Zandvoort beach while rescuing the already stranded fishing boat IJM 22 Black Jack. When hauling in the towing line, the line got tangled in the Oceaan II's propeller. The crew was then taken off board by the KNRM (Royal Netherlands Sea Rescue Institution) and the tugboat was then towed to the shipyard for further inspection.

Classification: Serious

Grounding

Western Scheldt, 20 December 2023

The Portuguese container ship Wec van Ruysdael was travelling with pilot on board across the Westerschelde to the port of Antwerp. Near Kruisdorp, the vessel ran aground at around 15.30 hours and was unable to dislodge on its own. With the help of tugboats, the vessel was dislodged and was able to continue its journey to Antwerp around 17.50 hours.

Classification: Serious

▼ *Figure 25 Oceaan II on the beach. (Source: ANP)*

Mast break

Mast break

IJsselmeer, 31 August 2023

On 31 August, a report came in that the mast of the historic sailing vessel Eenhoorn had broken off. At the time, the ship was sailing between Enkhuizen and Lemmer with 20 German schoolchildren on board. There were no personal accidents. Those on board were transferred to another ship and taken to Enkhuizen. A salvor sailed to the Eenhoorn to get the rigging that was hanging overboard back on deck and take the vessel to Enkhuizen.

An investigation was carried out in Enkhuizen by ILT and the police. The mast has been removed and taken to a storage facility. On the instructions of ILT, the parts of the mast will be examined by TNO.

Classification: Serious

▼ *Figure 26 Broken Mast Eenhoorn.*

Technical failures

Unmanoeuverable

North Sea, 19 July 2023

At around 11.00 hours UTC, the vessel Exeborg, loaded with timber products, became unmanoeuverable. The pistons of cylinders 3 and 4 jammed because of insufficient lubrication. Investigation by the operator revealed that incorrect piston pin bearings had been fitted during the last overhaul in Tallinn earlier in the year; the engine had only run for 300 hours when the malfunction in question occurred. These new bearings have fewer lubrication channels, which meant there was less lubrication and this ultimately led to the failure of the main engine. The vessel was towed to the port with tugboat assistance for repairs.

Classification: Serious

Anchor winch problem

North Sea, 19 September 2023

The oil tanker BW Cougar was anchored, but the anchor winches could no longer be operated. This meant that the anchor could not be pulled up. The ship requested tugboat assistance for this problem. The salvage company advised the operator to drop the anchor and pick it up later due to the bad weather.

Classification: Serious

Adrift
Western Scheldt, 22 September 2023

At around 05.00 hours, the ship Arif Amca drifted from the anchorage area at Everingen (Western Scheldt). Its dragging anchor passed over Tennet cables, which meant that divers had to go to the scene. No significant damage to the power cables on the bottom was found. To prevent the ship from drifting further, a tugboat was used to keep the vessel in place.

Classification: Serious

Steering problems
Moerdijk, 19 October 2023

En route to the port of Moerdijk, the Dutch cargo ship Onego Rio experienced steering problems. Tugboat assistance was required. The port of Moerdijk was reached with the help of two tugboats.

Classification: Serious

Engine problems
North Sea, 24 October 2023

The Dutch cargo ship Onego Rio experienced engine problems at around 06.00 hours local time when it was en route from Moerdijk to Bilbao in Spain. The crew noticed unusual vibrations and then the oil mist alarm sounded. The main engine was switched off and the anchor was dropped. There appeared to be a crack in parts of a cylinder. A tugboat then towed the ship to Rotterdam.

Classification: Serious

Blackout
North Sea Canal Amsterdam, 26 October 2023

Bulk carrier Strategic Harmony had a blackout at around 7.20 hours local time. The vessel was en route to the lock from Amsterdam and was towed back to Amsterdam by tugboats.

Classification: Serious

Engine problems
Norway, 3 November 2023

The Dutch cargo ship Medemborg experienced problems with its main engine when it sailed away from Frederikstad in Norway. The emergency stop of the main engine had to be used. The ship then suffered a blackout. The captain lowered both anchors to reduce the vessel's speed. Shortly afterwards, the ship ran aground in the muddy ground. Tugboats pulled the ship loose and towed it to the port to check for damage.

Classification: Serious

Engine problems
Rotterdam, 11 November 2023

The Cypriot vessel experienced engine problems while mooring. The main engine went into the backward position and could not be switched. The vessel entered the Princess Arianehaven backwards, after which the main engine was switched off. The vessel was then moored with the help of tugboats.

Classification: Serious

Blackout
North Sea, 25 November 2023

On Saturday 25 November, a major electrical failure occurred on the Perseus, a vessel of the Dutch Pilotage Service. The Perseus was testing how the MOB crane would operate in bad weather. The wind force was 6 to 7 at the time. At around 13.50 hours local time, the Perseus plunged into a trough and a large amount of water flooded the vessel's accommodation. All the equipment, including the engine, failed. It was not possible to restart the engine because the generator had also become faulty. At that time, the Perseus was sailing on the North Sea, off Westkapelle. The problem could not be solved on location.

A tugboat went to the scene of the problem. While attempting to establish a tow connection, a bollard was pulled off the deck of the Perseus. The tugboat was unable to make another attempt to establish a tow connection due to the water being too shallow. Because the Perseus was in shallow water, the Coastguard picked up the vessel's crew by helicopter at around 18.00 hours. The vessel was later towed to the port of Vlissingen. There were no personal accidents and no environmental damage.

Classification: Serious

Blackout
Finland, 15 December 2023

The FWN Sky was en route to Hamina (Finland). While approaching the port, the auxiliary engine and bow thruster failed. A tug then assisted the vessel with the docking and manoeuvring.

Classification: Serious

Engine trouble
North Sea, 20 December

In the North Sea, off the coast near IJmuiden, the German container ship Gotland experienced an engine failure. Thereupon, the anchor was dropped. However, this did not hold the ship, after which a tug came. With that, the vessel was towed to the Vissershaven in IJmuiden.

Classificatie: Serious

Drifting due to Engine Problems
Baltic Sea, 21 December 2023

The Dutch cargo ship Susanne was en route to the port of Amsterdam, but experienced an engine failure on the Baltic Sea off Tallinn. As the ship began to drift, a tug was ordered, after which the ship was towed to the yard in Vene-Balti port for repairs.

Classificatie: Serious

Blackout
Rotterdam, 23 December 2023

While entering the port of Rotterdam, the tanker UACC Riyadh encountered engine problems off Maassluis on 23 December 2023, causing all onboard facilities to fail and the vessel was moored as a 'dead ship'.

Classificatie: Serious

Sinking, capsizing, taking on water

Ship sunk

Upper Zeeschelde near Dendermonde, Belgium,
7 August 2023

The Dutch inland ship Jogo 2 sank in the River Schelde in Belgium off Dendermonde. The skipper went missing and was only found days later. He was the only crew member on board the ship. The ship was loaded with bricks. It is unclear why the ship sunk. Since completed investigation in Belgium has found no problems with the stability and integrity of the vessel. The ship was salvaged in late August and towed to a shipyard for further investigation by the police.

Classificatie: Very Serious

Ship takes on water

Maasbracht, 21 September 2023

Due to a leak in the engine room, the ship MVS Spica took on water. The ship was en route from Born to Maasbracht and was moored above the Oostkolk of the lock at Maasbracht to pump the water out of the ship. This caused a light oil spill and the chamber had to be closed. The ship was loaded with 650 tons of fertilizer, which had to be transferred to another ship.

Classificatie: Serious

▼ *Figure 27 Salvage of the vessel Jogo 2. (Source: ANP)*

DUTCH
SAFETY BOARD

Colofon

This is a publication of the Dutch Safety Board. This report is published in the Dutch and English languages. If there is a difference in interpretation between the Dutch and English versions, the Dutch text will prevail.

March 2024

Photos
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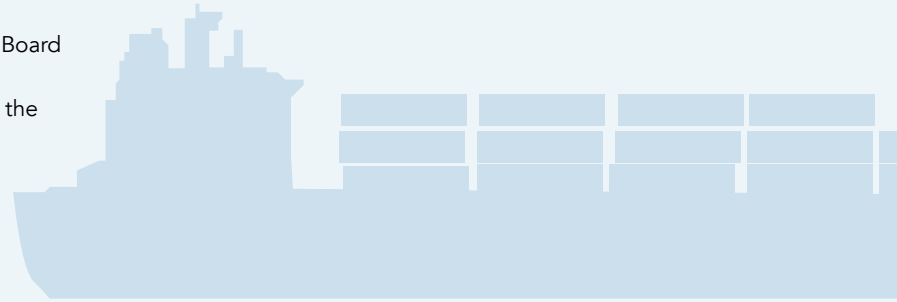
The Dutch Safety Board in three questions

1. What does the Dutch Safety Board do?
Living safely, working safely, safety. It seems obvious, but safety cannot be guaranteed. Despite allknowledge and technology, serious accidents happen and disasters sometimes occur. By carrying out investigations and drawing lessons from them, safety can be improved. In the Netherlands the Dutch Safety Board investigates incidents, safety issues and unsafe situations which develop gradually. The objective of these investigations is to improve safety, to learn and to issue recommendations to parties involved.

2. What is the Dutch Safety Board?
The Dutch Safety Board is independent of the Dutch government and other parties and decides for itself which occurences and topics will be investigated.
The Dutch Safety Board is entitled to carry out investigations in virtually all areas. In addition to incidents in aviation, on the railways, in shipping and in the (petro-)chemical industry, the Board also investigates occurences in the construction sector and healthcare, for example, as wel as military incidents involving the armed forces.

3. Who works at the Dutch Safety Board?
The Board consists of permanent board members; the Chairperson is Chris van Dam MPM. The board members are the public face of the Dutch Safety Board. They have extensive knowledge of safety issues.

They also have extensive administrative and social experience in various roles. The Safety Board's bureau has around 80 staff, twothirds of whom are investigators.



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