



DUTCH
SAFETY BOARD

Investigations

The Dutch Safety Board has the legal obligation of investigating serious to very serious incidents involving Dutch vessels within the shipping industry. In addition, the obligation applies of investigating serious and very serious incidents that have involved sea 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 EU Directive 2009/18/EC of the European Parliament and European Union Council of 23 April 2009 establishing the fundamental principles governing the investigation of accidents in the maritime transport sector. When the Dutch Safety Board decides that no structural safety shortcomings are involved with regard to serious incidents by performing extensive investigation, a description of the occurrence is sufficient. The main goal of the Dutch Safety Board is to prevent accidents or the consequences thereof by determining lessons learned and formulating recommendations. Investigating who is to blame or liable is expressly not a part of the investigation of the Dutch Safety Board.

Shipping Occurrences Report

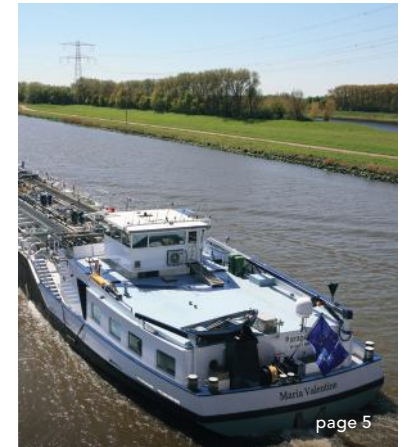
November 2017 - April 2018



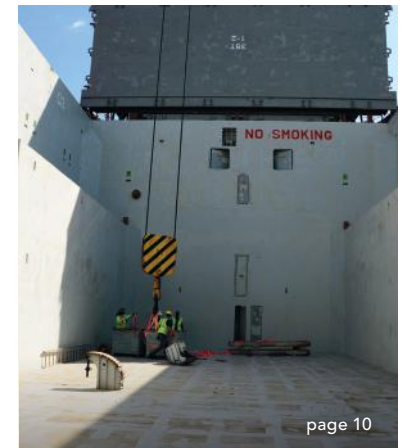
A ship is a potentially hazardous environment. Having the necessary practical experience is a key factor in dealing with those hazards. The Dutch Safety Board regularly investigates (fatal) accidents involving (the least experienced) crew members. This report therefore focuses clear attention on the importance of acquiring practical experience under supervision, in a high-risk environment.

In addition to lack of experience, another common cause of accidents in a high-risk environment is overconfidence in a person's capabilities. Modern technical systems offer huge capabilities and often determine the conditions in which vessels are able to operate. However, the fact that a ship is permitted to sail in all conditions does not necessarily mean that it should do so. At the end of the day, the knowledge and experience of the crew are decisive in how a potentially hazardous situation turns out, in a particular case.

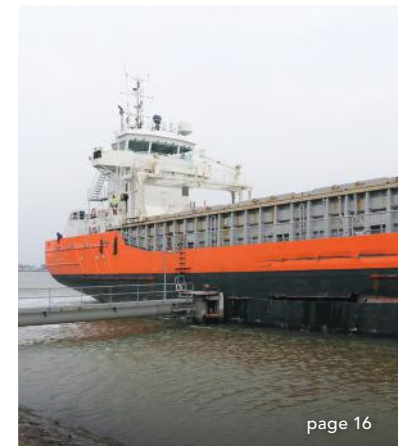
Tjibbe Joustra,
chairman of the Dutch Safety Board



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Acquiring practical experience in a high-risk environment

The Dutch Safety Board regularly investigates (fatal) accidents involving (the least experienced) crew members.

Take for example a crew member involved in a cleaning operation. He knew perfectly well what had to be done, but turned out to be insufficiently aware of the dangers of the environment in which he was working. He was informed of the dangers of the crane, during a safety briefing but was not supervised when working in the vicinity of the crane. The outcome was a fatal collision.

Another example is a crew member who became trapped beneath a container, during unloading. The investigation revealed that this was made possible by the fact that everyone had their own view of the work, without a common safety perspective being laid out in advance.

Or what about the example of the crew member who was standing in line with the hatch cover when the cover slipped and he became trapped between the hatch cover and the accommodation. That investigation showed that there was insufficient understanding of the potential risks and how to take up a safe position in respect of those risks. It was assumed that the crew member would understand what was and what was not allowed, and so training was provided, without supervision. In all three accidents, the crew member in question eventually died.

The Dutch Safety Board has concluded that a number of shipping accidents are caused by a lack of supervision and the fact that inexperienced crew members are required to work independently, too soon. Knowledge and experience determine how you deal with a potentially hazardous situation, and how that situation turns out.

When a crew member starts work on board a ship for the first time, he has no conception of the risks to which he will be exposed. This article therefore focuses on an important lesson: crew members must be better supervised on board, and not set to work independently, too soon.

Overconfidence

On board a ship there are constantly potential hazards and knowledge and experience determine how those hazards are dealt with, and how the situation ends up. If someone has never done something before, and sees someone else carrying out a task that appears simple, the idea can soon take root that the task is indeed simple. This in turn can lead to overconfidence in a person's ability; that person may assume he has certain skills, which he does not in fact have, at all. Overconfidence on board a ship can quickly lead to accidents, sometimes with a fatal outcome.

Acquiring practical experience

Naturally, a new crew member never comes on board entirely without preparation. Every crew member must satisfy the provisions in the *International Convention on Standards of Training, Certification and Watchkeeping for Seafarers* (STCW) and have undergone a medical examination. Training within the STCW is focused on acquiring knowledge of the tasks and equipment on board a vessel. The training can best be compared with obtaining a driving licence. When you pass your driving test your skills may be at the required level, but you only learn to drive a car really proficiently by acquiring considerable practical experience. A person is competent once he has both knowledge and experience. The same applies to working on board ships. Merely obtaining the necessary certificates is not enough to ensure safe working on board. To become a truly competent seafarer, you must acquire practical experience, on board.

Make mistakes while supervised, in a safe environment

Acquiring practical experience in a high-risk environment is never without danger. And if watching someone else leaves the impression that a task is apparently easy, then a new trainee is unlikely to ask too many questions. Only when they are told that they are not doing something right do they discover that there is something they are not capable of doing, and then it is possible to identify the **learning needs**. Wherever new skills are learned, mistakes are made. It is therefore essential that mistakes that are made in order to learn be taught in a safe working environment.

Teaching a skill is not the same as teaching a trick

In addition to a safe learning environment, a new crew member not only needs a supervisor who teaches him the tricks of the trade, but who also points out potential risks. Not everyone is suitable for passing on knowledge or for **teaching** skills. Someone may be an expert in their own profession, but their skills may be so ingrained that they are no longer able to precisely explain what has to be done. A supervisor must be capable of pointing out potential hazards and together with the newcomer, identifying the learning needs. That calls for a supervisor who is aware of his own knowledge and skills, and is capable of passing them on. It also calls for a supervisor who is capable of allowing a new crew member to learn in a safe environment, to make mistakes and to learn how to **apply** new skills. Only in this way is it possible to work towards a situation in which the newcomer is better able to assess the hazards on board, and fall back on skills previously acquired.

Who takes the initiative?

Requesting supervision and offering supervision are essential, but not easy. Against that background, the **operator** must:

- take the initiative in proactively offering supervision to newcomers, for a longer period;
- identify experienced seafarers who are capable of providing supervision.

It is literally of lifesaving importance that new seafarers be given an opportunity to acquire new skills in a safe environment, under close supervision.

Learning needs

You don't know what you do not know. If someone has never done something before, watching somebody else do something that looks apparently simple, may leave the feeling that the task in question is in fact simple. This can lead to overconfidence; you assume you have certain skills that you do not yet have.

Only when someone points out to you that you are not doing something right, or if carrying out a task proves more difficult than you expected, do you become aware of your learning needs and can you truly start to learn.

Learning skills

In this phase, you are aware that you are not able to do something, and only then you can start learning. You discover exactly what is required and how much practice it takes to carry out an apparently simple task. In the beginning the task will demand considerable attention, but by acquiring experience (repeating the task), your skills will increase.

Application

After plenty of practice, you are increasingly capable of completing the task. The task may entail a variation of which you are not yet aware, and again a new learning need is identified. Eventually, the task requires less effort, time and attention. Gradually you learn to master the task in all its aspects and it becomes easier.

Accident classification

In this Shipping Accident Report the Dutch Safety Board presents the description of incidents on-board ships sailing under the Dutch flag or incidents that have occurred within Dutch territorial waters and published reports during the period between 1 May 2017 and 1 November 2017.

Every accident has been classified based on seriousness. The categories match EU Directive 2009/EC/18:

Very serious: accident where the ship is a total-loss or there have been fatal victims or serious environmental damage.

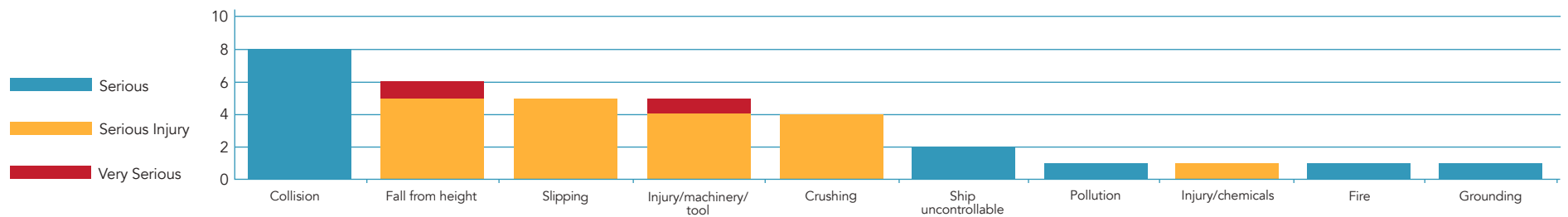
Serious: accident involving a ship that cannot be classified as 'very serious' and where, for example, a collision, grounding, etc. has occurred that has meant that the ship cannot continue to sail or causes environmental damage.

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 put at risk the safety of the ship, a person on-board or the environment or would have put any of these at risk if it had not been rectified.

Serious injury: injuries suffered by a person that has meant that the person has been incapacitated for work for more than 72 hours within seven days after the date on which the accident took place.

This report lists incidents from the following categories: very serious, serious and serious injury.



Accidents with the classification: Very Serious, Serious and Serious Injury between 1 November 2017 and 1 May 2018 classified per type.

Published reports

Collision with the weir near Grave by a benzene tanker, 29 December 2016

On 29 December 2016, the inland vessel *Maria Valentine*, loaded with 2000 tonnes of benzene was travelling on the Meuse river towards Rotterdam. Due to dense fog, the captain was navigating mainly by radar which requires specific training and experience, and is particularly strenuous. After thirteen hours' sailing, the vessel approached the weir at Grave. However, the vessel passed the opening to the weir, headed directly toward the weir, and then subsequently sailed right through. The water began to flow strongly through the opening created in the weir, and the vessel was carried through the opening, ending up three metres lower on the other side of the weir, before coming to a stop 600 metres further downstream. The captain survived the accident.

The inland shipping sector imposes practically no specific rules for sailing in dense fog. It is incomprehensible to the Dutch Safety Board that a vessel loaded with 2,000 tonnes of benzene is permitted to travel for up to fourteen hours at a time, without relieving the captain. The Board would point out that the responsibility in this respect not only lies with the captain, but also the chemical companies who contract the transport.

On average, Dutch inland waterways experience dense fog on 15 days a year. This not only makes sailing more hazardous, but also hinders the provision of assistance following an accident. The Dutch Safety Board therefore recommends that the parties reach binding agreements on the transport of hazardous substances in (dense) fog. Transport companies and chemical companies bear primary responsibility for risk management in the transport of hazardous substances. The Board also recommends that Rijkswaterstaat be provided with the legal authority to halt shipping traffic in extreme weather conditions.

The collision with the weir on 29 December 2016 was a double accident: it was an incident with a vessel loaded with hazardous substances in addition to which the damage to the weir had major consequences for water levels in the Meuse. Although in dealing with the incident and crisis management in Grave the fog represented a complicating factor, the incident response was seriously hindered more particularly by the large number of parties involved and the lack of a combined incident management plan. The Dutch Safety Board therefore recommends that a coordinating safety region be set up and that a joint incident response plan be established, with specific attention for incidents on the water, and at the boundary between safety regions. The Minister of Infrastructure and Water Management is recommended to make a collision analysis for bridges, locks and weirs in the Netherlands, where necessary including measures to minimize the potential consequences. In addition, the obsolete information and monitoring system for shipping should be replaced with an alert feature in the event of incidents involving vessels carrying hazardous materials.

The full report is available at:
<https://www.safetyboard.nl/nl/onderzoek/2302/stuwaanvaring-door-benzeentanker-bij-grave?s=D25BC0406BFEDC54A9E87BF9247150852945ADE4>



Maria Valentine. (Photo: Aris van Dijk)



The weir at Grave.

Yacht capsizes in bad weather, Dunlin, Eierlandse Gronden, Wadden Sea, 23 April 2017

On 23 April 2017, the Polish yacht Dunlin was sailing close to the passage between the Dutch Wadden Islands of Texel and Vlieland (Eierlandse Gronden). There was only one person on board, the owner of the yacht. Weather conditions were poor. At a given moment, the yacht became caught in a strong current which overturned the yacht, and completely crushed the hull. Without calling the Coastguard for assistance, the captain attempted to evacuate by launching a life raft. The Coastguard was informed by a person on shore who had observed the yacht sailing on a dangerous course. The Dutch lifeboat service KNRM immediately started a search and rescue operation. An hour after the rescue operation was started, an SAR helicopter discovered the body of the captain in the sea, close to the life raft. The KNRM towed the damaged yacht to the beach at Vlieland.

In accordance with national regulations, the Polish maritime investigation organization SMAIC launched an investigation into the loss of the Dunlin and the death of the captain. The most important finding of the investigation was that the captain had acquired ownership of the vessel a short time earlier, from the previous owner in England. He had planned to sail the yacht singlehanded from Scarborough (UK) to Poland. The captain had very little experience with the ship and furthermore selected a

course well-known as being hazardous, along the Wadden Islands, in poor weather conditions. The combination of these factors proved fatal for the captain and the yacht.

Classification: Very Serious

The full report (only in English) is available at: http://pkbwm.gov.pl/images/Reports/Final_report_WIM_21_17_sailing_yacht_Dunlin.pdf

Collision involving crane on board Lady Christina, Rauma (Finland), 15 November 2017

On Wednesday 15 November 2017, the Dutch freighter Lady Christina was moored in the port of Rauma (Finland) where it had unloaded a cargo of china clay. After unloading, the ship was cleaned by the crew. During the cleaning work, the ship's crane moved over the hatch combing, which was cleaned from the crane. At around 9.30 hours local time, a Philippine crew member was found dead, on the port gangway. The crew member was found with a very serious injury to the neck. It was immediately clear that the victim was dead. It is highly probable that the crew member became trapped between the crane moving over the hatch combing and a horizontal structural element in the gangway.

The local investigation, including interviews with the crew, revealed that no one on board the ship had seen the accident happen. It was determined that the victim was killed on board the Lady Christina as a result of a collision with the crane.

Accidents involving mobile cranes and hatch cranes

The crane on board the Lady Christina is in fact not a hatch crane. The movement of the crane on the Lady Christina is however comparable to the movement of hatch cranes, and the accident is comparable to accidents involving hatch cranes. A great deal has already been said and written about the use of hatch cranes and accidents. Nonetheless, the Dutch Safety Board would once again like to draw attention to the lessons learned from previous investigations into accidents involving hatch cranes.

The full report, including references to previous reports on similar accidents, is available at: <https://www.safetyboard.nl/nl/onderzoek/2383/aanrijding-door-kraan-aan-boord-lady-christina-15-november-2017?s=00D2D4D9E745FEA5634C317A5B81A5512E5DC2F0>



Crane on board the Lady Christina.



Location where the crew member must have become trapped. (Photo: Wijnne Barends)

Sailing yacht capsizes due to breaking off of keel, Capella, Belgian coast, 1 July 2017

On Saturday 1 July 2017, at around 8.15 hours local time, the Dutch sailing yacht Capella capsized off the Belgian coast during the Light Vessel Race. It was not until 14.38 hours that the Capella was observed floating upside down by a passing tanker. Three of the six crew members died in the incident. Two were immediately located close to the yacht, the third was not discovered until two weeks later. The Belgian Federal Bureau for the Investigation of Maritime Accidents (FIBIMA) conducted an investigation into this accident, and published its report on 4 April 2018.

The Capella capsized when the keel bolts with which the keel was attached to the yacht broke off during sailing, as a result of fatigue. The Capella was fitted with a new keel in 2000. The FIBIMA was able to determine why the keel bolts broke off due to fatigue, on the basis of forensic analysis. It was also determined that the method by which the keel bolts were fitted rendered interim inspection of these keel bolts impossible.

The capsizing of the Capella was only discovered by accident, by a passing tanker. The race was not actively monitored by the race organizers. The participants were required to pass on their positions at set times, but no action was taken if a vessel failed to report. The capsizing took place so quickly that the crew were unable to transmit any distress signal. The search for crew members was also made more difficult by the fact that it did not become clear until much later precisely how many crew members were on board at the time of the accident.

As a result of this accident, the FIBIMA issued recommendations to the Maritime Rescue and Coordination Centre in Oostende, the Belgian Federal Public Service Mobility and Transport and the Royal Belgian Sailing Club.

Classification: Very Serious

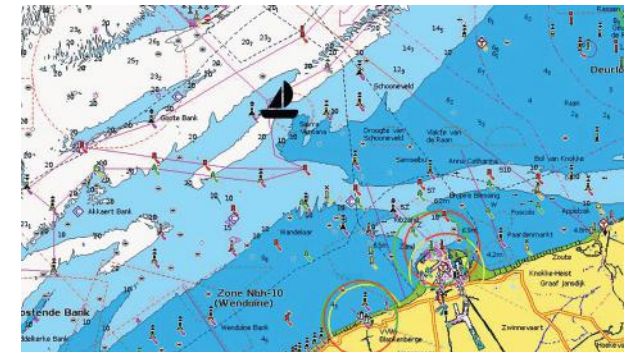
The full report (only in English) is available at: https://mobilit.belgium.be/nl/resource/report_sailing_vessel_capella



Broken-off keel bolts Capella. (Photo: Federal Bureau for the Investigation of Maritime Accidents)



Hull of the Capella. (Photo: Federal Bureau for the Investigation of Maritime Accidents)



Location where the Capella capsized. (Photo: Federal Bureau for the Investigation of Maritime Accidents)

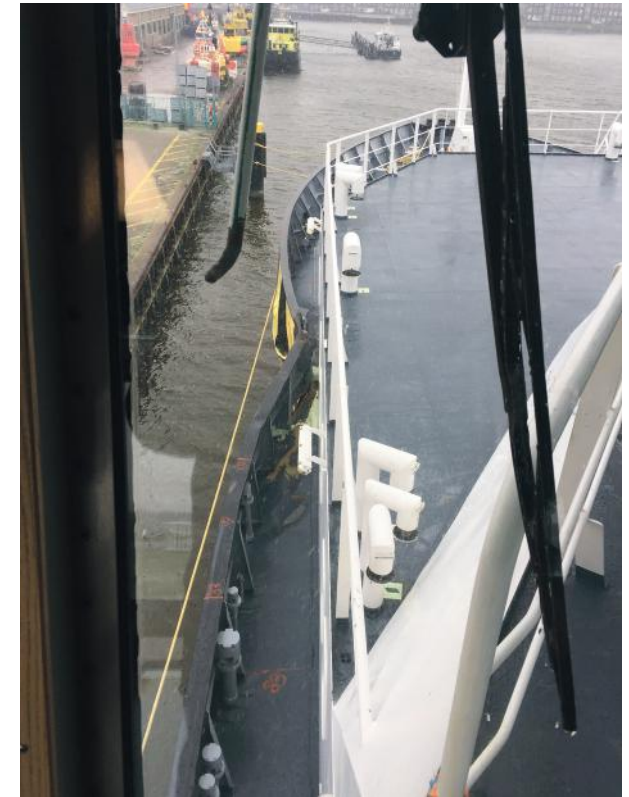
Started investigations

Collision near pilot station Steenbank, North Sea, 21 January 2018

In the morning of 21 January 2018, a Dutch pilot cutter and a bulk carrier sailing under Panamanian colours collided with each other close to the Steenbank. The collision took place shortly after the pilot had been taken off the bulk carrier by another pilot vessel (the SWATH). The pilot cutter suffered severe damage on the portside near the bridge, but took on no water. Two crew members of the pilot cutter suffered minor injuries and were taken to hospital by way of precaution. They were discharged from hospital shortly afterwards. The bulk carrier made anchor in the Schouwenbank anchorage while the pilot cutter and the other pilot vessel sailed to Flushing.

The Dutch Safety Board has started an investigation into this accident.

Classification: *Serious*



Damage to the pilot cutter.

Fatal accident during maintenance on hatch wheel, Venice, Italy, 9 February 2018

On 9 February 2019, the chief engineer was killed on board a freighter sailing under the Dutch flag. The accident took place during maintenance on a hatch wheel that was in danger of running off its axle. When the hatch was opened, the crew member saw that one wheel was not running in the normal manner. He observed that the wheel in question was not travelling entirely correctly over the coaming and was protruding by several centimetres. The captain and chief engineer were called on deck by the first mate, to examine the situation. The chief engineer intended to hammer the wheel back into the correct position. While carrying out this action, the wheel broke free entirely, and the chief engineer was hit by the wheel. The first mate immediately called the emergency services, but their efforts were to no avail. The chief engineer died from his injuries, on the scene.

The Dutch Safety Board has started an investigation into this accident.

Classification: *Very Serious*



Axle of the broken-off hatch wheel. (Photo: Maritime Police)



The broken-off hatch wheel in the gangway. (Photo: Maritime Police)

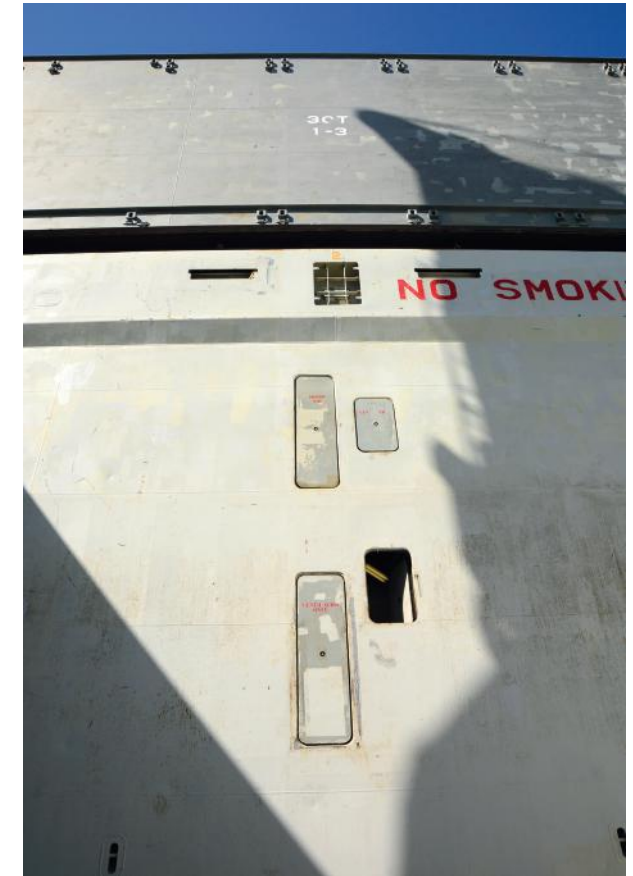
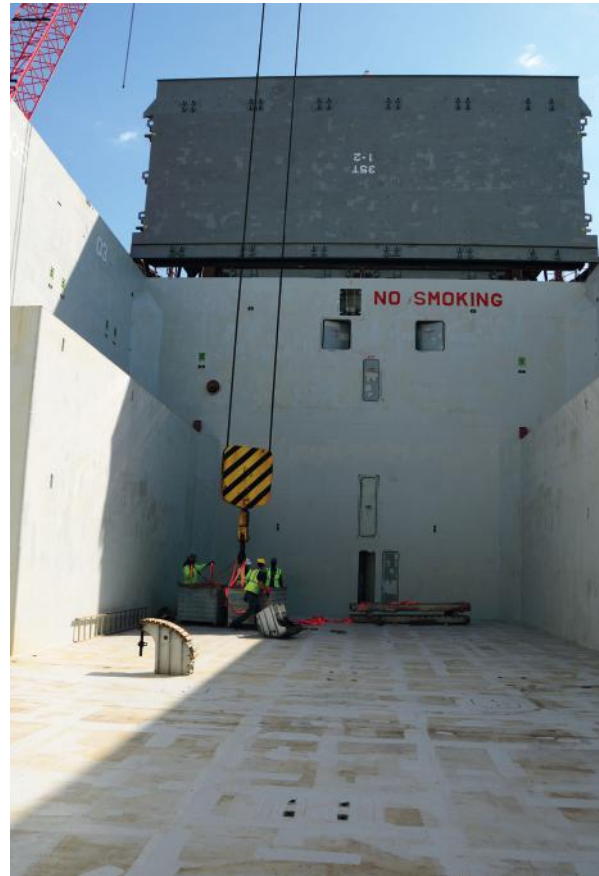
Started investigations

Crew member falls into hold and subsequently dies, off the coast of Venezuela, 16 February 2018

On 16 February 2018, a Dutch dry bulk vessel was anchored close to the Venezuelan port of Puerto Sucre. The vessel was waiting for permission to enter the port to take on cargo. Preparation work was being carried out at the anchorage, in good weather conditions. This included the removal of barges from the holds, using the ship's own cranes. During this work, one crew member decided to collect a number of stacking cones from elsewhere on the vessel that would later be needed for fixing the containers. During his search for these stacking cones, the crew member in question fell into the hold, from height. He suffered severe injuries as a result of the fall. The captain initiated an evacuation. The crew member was carried by ship to a hospital on shore, where he died later that day.

The Dutch Safety Board has started an investigation into this accident.

Classification: Very Serious



Left and right: Hold into which the victim fell.

Investigation started by foreign authority with the Netherlands as the State with substantial interest.

Crew member falls overboard in port, and drowns, Amsterdam, 2 December 2017

On the evening of Saturday 2 December 2017, a Filipino crew member of a Liberian tanker observed a cardboard box containing goods fall into the water, while loading the vessel in one of the docks in Amsterdam. The box remained afloat. The crew member decided to go ashore where he took off some of his clothes. He then descended into the water via a ladder, with no lifejacket, with the intention of retrieving the box. After having swum several metres, the crew member sank below the surface, and never resurfaced. At the time, the outdoor temperature was around freezing point. Fire brigade divers subsequently found and retrieved the lifeless body of the man, from the bottom of the dock.

The Liberian Registry's Marine Investigations Department (LISCR) has announced its intention to start an investigation.

Classification: *Very Serious*

Fishing vessel runs aground in Slijkgat, Stellendam, 23 April 2018

On the morning of 23 April 2018, a demersal trawler sailing under Belgian flag ran aground in the Slijkgat, close to the SG6 buoy. The Dutch Coastguard was informed, and the lifeboat of the Royal Dutch Lifeboat Association (KNRM) Stellendam station eventually succeeded in refloating the trawler. The trawler was then able to continue its journey to Stellendam.

The Slijkgat is the sea passage that links the North Sea with the Haringvliet. The passage is marked with buoys and runs from the Goeree Lock in Stellendam to the North Sea. The demersal trawler ran aground in the passage. Groundings are regularly reported in the Slijkgat.

The Belgian Federal Bureau for the Investigation of Maritime Accidents (FEBIMA) is investigating the incident.

Classification: *Serious*



Chart of the Slijkgat.

Incidents that have not been extensively investigated

Crew member falls and suffers dislocated shoulder, Anna, Sardinia (Italy), 26 October 2017

A crew member of the freighter Anna, sailing under the Dutch flag, suffered a fall on board on the afternoon of 12 February 2017. The ship was moored in Sardinia, Italy. The crew of the vessel was busy loading a clay substance which can lead to slipping hazard. The victim was on deck during this loading operation, when he slipped. As a result of the fall, his shoulder was dislocated.

Classification: *Serious Injury*

Crew member falls and suffers head injury, Lady Ariane, North Sea, 26 October 2017

On 26 October 2017, at around 1.30 p.m., a crew member of the Dutch freighter Lady Ariane suffered a fall. At that time, the vessel was sailing on the North Sea. The victim was at work painting the cargo hold, with a number of colleagues. He was standing at the time on part of the cargo. While painting, he failed to notice that he had reached the end of the cargo, whereupon he fell to the floor of the hold. The fall height was approximately two metres. He suffered a head injury. Besides the head injury, no other injury was observed, and the crew member was able to return home from hospital, the next day.

Classification: *Serious Injury*

Collision with moored ship, Solitaire I and Asian Hercules III, Waalhaven, 6 December 2017

On 6 December 2017, the ship Asian Hercules III sailing under the flag of Singapore was moored in the Waalhaven, when the Panamanian freighter Solitaire I collided with the Asian Hercules III at around 21.30 hours. The Asian Hercules III only suffered paint damage but the Solitaire I suffered a tear to the hull, five metres above the waterline, measuring 1.5 metres by 15 centimetres, from which ballast water subsequently leaked. The Solitaire I was not permitted to continue sailing, before repairs were carried out.

Classification: *Serious*

Collision between chemical tanker and unmanned production platform, North Sea southwest of Den Helder, 31 December 2017

On Sunday 31 December 2017 at around 18.20 hours, the Portuguese chemical tanker Elsa Essberger was sailing on the North Sea 14 NM southwest of Den Helder, when it collided with the unmanned production platform Q1 Halfweg. The collision took place in international waters. The weather conditions were poor at the time of the incident. The ship was carrying hazardous materials (UN 1814; UN 3267). The production platform was inactive and unmanned. There were no injuries and no escape of substances. There was however serious damage to both ship (front mast broken, hole in the foreship approx. 5 metres above the waterline; hole in the ballast tank; three bridge windows damaged) and the production platform. The Elsa Essberger was travelling from Antwerp (Belgium) to Malmö (Sweden). Following the collision, the vessel was unable to continue its journey, and sailed on New Year's Day to the anchorage at IJmuiden for further inspection by Port State Control. The next day, the ship set sail for Rotterdam for repairs at a shipyard.

Investigations have revealed that despite the very poor weather conditions, at the time of the collision, the only crew member present on the bridge was a ship's mate.

This incident has been reported by the Dutch Safety Board to the Portuguese maritime investigation board because the collision took place outside Dutch territorial waters. The Portuguese maritime investigation board has decided to commission no further investigation.

Classification: *Serious*

Crew member traps arm, Eemsdijk, Mostanagem (Algeria), 1 January 2018

On Monday 1 January 2018, the Dutch freighter Eemsdijk was moored in the port of Mostanagem (Algeria). At midday, during loading and unloading operations, the second mate was at work positioning a flat rack. The flat rack was laden with trays containing lifting gear. The rack was being moved by the ship's own crane. During this operation, the second mate became trapped between the flat rack and a container support, suffering bone fractures in his arm. The circumstances of the accident were discussed with the other crew members during a safety meeting, immediately following the accident.

Classification: Serious Injury



Container with lifting gear Eemsdijk. (Photo: SCG)

Fishing gear causes head injury, Maria (GO 20), North Sea, 3 January 2018

At around 15.30 hours on Wednesday 3 January 2018, a crew member of the Dutch fishing vessel GO 20 Maria was evacuated by helicopter. At the time, the vessel was in the Rotterdam anchorage. The crew member had suffered a head injury caused by fishing gear which had come into contact with his head due to strong wind.

Classification: Serious Injury

Crew member cuts arm, Zealand Almere, Atjeh (Indonesia), 4 January 2018

On Thursday 4 January 2018, a crew member of the Dutch bulk carrier Zealand Almere suffered an injury on board, during work. He suffered a deep cut to the forearm. At the time of the accident, the vessel was located north of Atjeh, Indonesia en route from Singapore to Saudi Arabia. Following consultation with the coastguard medical service, the victim was evacuated for hospital treatment.

Classification: Serious Injury

Fall while stepping over hatch cover, Piz Navigator, port of Willemstad (Curaçao), 7 January 2018

While working on board, a crew member of the Dutch freighter Paz Navigator suffered bruised ribs. The incident took place during the evening of 7 January 2018, in the port of Willemstad, Curacao. The victim had just completed preparations for sailing, with a number of colleagues, on deck, at which point they together crossed a hatch cover. When stepping over the cover, the victim stepped onto a railing, lost his balance and fell onto the railing, hitting his chest.

The crew member was taken from the ship and transported to hospital by ambulance, where it was determined he had suffered bruised ribs.

Classification: Serious Injury

Collision near Skagen, Zillertal and EDMY, Skagen (Denmark), 10 January 2018

On 10 January 2018, a collision took place between the Dutch freighter Zillertal, en route from St. Petersburg to Rotterdam, and the freighter EDMY, sailing under the flag of the Cook Islands, travelling from Odense to Dirdal. The collision took place close to Skagen, Denmark. The Zillertal and EDMY collided on the portside (accommodation) and starboard (bow) respectively. On board the Zillertal, two cabins suffered severe damage, but the vessel was able to continue her journey to Rotterdam. The EDMY was forced to put into a shipyard, for repairs. An investigation by the operator of the Zillertal revealed that insufficient attention was being paid on either vessel, and that neither vessel took any action to avoid the collision.

Classification: Serious

Incidents that have not been extensively investigated

Broken ankle, Morgenster, (UK 147), North Sea, 11 January 2018

A crew member of the Dutch-flagged fishing vessel UK 147 Morgenster, broke his ankle. The crew member was subsequently taken to the port of Scheveningen by the coastguard vessel Barend Biesheuvel and then transported to hospital.

Classification: Serious Injury

Fractured fibula, Vertrouwen (TX 68), North Sea, 15 January 2018

On board the Dutch fishing vessel Vertrouwen (TX 68), a crew member suffered a fractured fibula after slipping on deck. The crew member had just finished processing the catch. The weather conditions were poor. There was heavy swell, it was raining and it was evening, so artificial lighting had been lit. While walking to the accommodation section, the crew member slipped and fell on deck. The crew member was put ashore for examination at hospital. Examination revealed that the crew member had broken his fibula.

Classification: Serious Injury

Damage to rudder caused by fishing nets, Morgenstond II, Rongcheng Bay (China), 23 January 2018

On 23 January 2018, the Dutch freighter Morgenstond II was sailing in ballast condition from Onahama (Japan) to Weihai (China). Because the anchorage at Weihai was unprotected during the prevailing weather conditions (8 Bft), the vessel was advised by the ship's agent to set anchor at the Rongcheng Wan anchorage, under guidance of the Chengshan Jiao VTS. The anchorage was marked on the ECDIS, and a course was plotted well clear of the fish farm marked on the chart. At around 22.04 hours, both captain and first mate were present on the bridge. Visibility outside was poor due to heavy snow showers. A course was set to sail to the south of the designated fish farm. At that time, no signals were visible on the radar of objects close to the vessel. The crew members on the foredeck standing by for anchoring saw nothing floating around them in the water.

At 22.15 hours, the captain and first mate felt the vessel unintentionally lose speed. In the engine room, the chief engineer saw no immediate unusual indications in the performance of the main engine and the echo sounder indicated that the vessel had not run aground. The captain decided to turn the vessel around, and return along the same route. The chief engineer indicated that values in the engine room were slightly higher than normal, but still within permissible margins. At that moment, the ship received a call from Chengshan Jiao VTS notifying them that the vessel was sailing in a fish farm. In response, the captain shut down the main engine and set anchor. Following an inspection, it became clear that the propeller had become entangled with fishing nets, and at day break, it emerged that other fishing nets were floating around the vessel. The vessel was then towed to Longyan Port. The fish farm was not marked on the chart.

Classification: Serious



Image from the ECDIS on board the Morgenstond II. (Photo: Crew Morgenstond II)



Fishing nets around the propeller. (Photo: Morgenstond II crew)

Collision with bollard, Christine, Coenhaven Amsterdam, 4 February 2018

When mooring in the Harbour Basin A, Coenhaven, the Christine collided with a bollard. The vessel was not able to continue before the damage was repaired. The vessel's railing and skin were damaged while mooring against the bollards at the ICL Terminal. The report was not received from the vessel itself, but from the repair team that requested permission to carry out hot work. The ship was towed to the Eggerding Terminal, where the damage was repaired.

Classification: Serious



Damage to bollard and ship. (Photos: Human Environment and Transport Inspectorate)



Stack fire, close to Sri Lanka (Indian Ocean), 7 February 2018

On 7 February 2018, a stack fire took place on board the Dutch freighter Arneborg. The crew put out the fire, and located the seat of the fire and the place where the fire started. No crew members suffered any injury.

The stack fire was extinguished with five fire hoses. Four hoses on the housing for the external duct for boundary cooling, and one hose in the inner duct that was extinguished by fire fighters in full gear, from deck three. The front section of the stack was not damaged by the fire, nor was the starboard section of the stack.

The cause was a discharge gas leak from the main engine exhaust. As a result of the fire, all cables in the inner duct were burned out. The insulation of the ME exhaust pipe was partially damaged, and all paint was burned off. The boiler and thermoil system were also damaged. The vessel was able to restart its engine, and was able to reach Colombo under its own power, at 50%.

Classification: Serious

Incidents that have not been extensively investigated

Failure of main engine, Bergfjord, North Sea in the vicinity of Floro, Norway, 9 February 2018

The Dutch-flagged freighter Bergfjord suffered main engine failure on 9 February 2018. At that time, the vessel was sailing near Floro, Norway. The failure of the main engine left the vessel without propulsion and without steering. As a result, the vessel collided with a rock, which caused a hole in the fore peak tank.

Classification: *Serious*

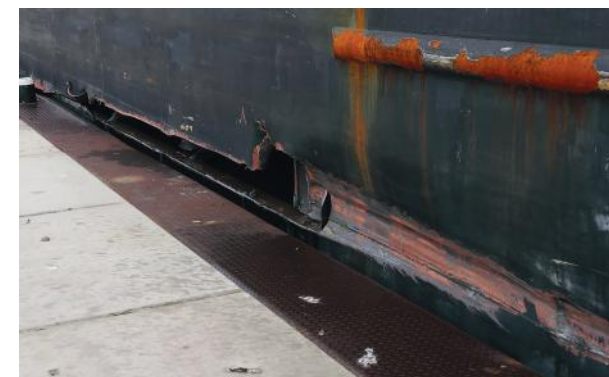
Engineer suffers burns to right arm, 100 NM from Lombok (Indonesia), Tiberborg, 28 February 2018

On 28 February 2018 at around 17.00 hours, a chief engineer on board the Dutch freighter Tiberborg was injured, while working. Because the electricity to the galley had failed, the chief engineer started fault tracing, and discovered that the problem was in a switch in the main circuit board. The chief engineer decided to replace the switch on the main circuit board. This was not fully insulated and his right upper arm probably acted as a conductor when it came into contact. As a result, the chief engineer suffered second and third-degree burns due to the arc flame.

Classification: *Serious Injury*

Ship collides with quayside, Avalon, Terneuzen, 1 March 2018

Despite strong easterly winds, force 7 to 8, on 1 March 2018, the Dutch freighter Avalon set sail in ballast conditions, only suitable for good weather. On this occasion, the strong easterly wind was blowing perpendicular to the quayside. The vessel attempted to sail clear of the quayside on two occasions. Following the first failed attempt, the crew did not realize that the weather conditions were too poor to sail in this ballast condition. The idea of taking on more ballast (in the double bottom tanks) was not considered. During the second attempt, the vessel once again failed to anticipate the wind correctly, by taking more space to manoeuvre the vessel. There was also another inland ship behind the Avalon and the propeller effect of that vessel caused further problems. As a result, it was once again not possible to make the turn, and the Avalon was forced to switch hard in reverse. The vessel then collided against a steel bollard, with its starboard stern section. Following the collision with the steel bollard, the vessel was torn open along its starboard side.



Damage to Avalon. (Photo: HVZeeland.nl)

Classification: *Serious*

Collision, Primula Seaways and MSC Madrid, Western Scheldt near Flushing, 3 March 2018

On 3 March 2018, the Danish ro-ro vessel Primula Seaways and the container vessel MSC Madrid sailing under Liberian flag collided with one another, close to Flushing. The collision took place following the pilot change on the MSC Madrid, which was heading for Antwerp. The Primula Seaways was outward bound and was sailing in line with the Outer harbour at Flushing. Both vessels had a Flemish pilot on board. The Dutch tanker Bit Oktania was also sailing nearby, at the time.

Initially, the MSC Madrid and Bit Oktania were on collision course. The MSC Madrid steered hard to port to pass behind the Bit Oktania, and to avoid a buoy. The rudder was then turned hard starboard, and engines were switched to half speed ahead. The MSC Madrid was then asked about her intentions, by the Primula Seaways. The MSC Madrid reported its intention to steer to starboard. However, the MSC Madrid failed to turn to starboard fast enough. As a consequence, the MSC Madrid collided with the Primula Seaways.

Although both vessels suffered damage, the Primula Seaways was able to return to Ghent. The MSC Madrid sailed to the Wielingen Noord anchorage.

Classification: *Serious*

Shoulder injury due to fall, Volendam, South China Sea, 6 March 2018

At around 8 p.m. on 6 March 2018, a crew member of the Dutch passenger ship Volendam was heading for the ship's hospital before the start of her shift, when she suddenly slipped on a just mopped floor on deck 1. The crew member intended to reach deck 1 via the stairway, but saw that the fire door, that gave access to the deck, was closed. After she had opened the door, she saw that someone was mopping the floor. The crew member decided at that moment to step onto the deck, and attempt to reach the hospital, cautiously. However, she slipped and landed on her right-hand side. She fell on her right shoulder, suffering concussion and a fracture to the right arm. Her right shoulder was also dislocated.

Classification: *Serious Injury*

Crew member breaks back following fall from stairs, Veendam, Atlantic Ocean, 9 March 2018

On 9 March 2018, a crew member on board the passenger vessel Veendam fell from stairs in the passenger access area of the ship. At the time of the accident, the sea was calm. The crew member was not at work at the time. As a result of the fall, he broke his back. In St.Thomas (USVI), he was taken ashore and transferred to hospital.

Classification: *Serious Injury*

Slipped on wet floor, Zuiderdam, Oranjestad (Aruba), 23 March 2018

At around 9 p.m. on the evening of Friday 23 March 2018, a crew member was at work removing a warning cone for a slippery floor. Because the cone was positioned in the middle of the wet floor area, the crew member first had to cross the slippery floor to reach the cone. While crossing the floor, the crew member slipped, landed on his right shoulder, and broke his collarbone. At the time of the injury, the vessel was moored in the port of Oranjestad, Aruba.

Classification: *Serious Injury*

Incidents that have not been extensively investigated

Collision while sailing in convoy, Thamesborg, Gulf of Bothnia, 16 March 2018

On the afternoon of Friday 16 March 2018, the freighter Thamesborg sailing under Dutch flag entered the Gulf of Bothnia. Here, the Thamesborg collided with the motor freighter Mario L. Both vessels were part of an ice convoy accompanied by the ice breaker Ymer. At around 15.00 hours, the crew of the ice breaker informed the Thamesborg of the presence of thick ice and that the Mario L was at risk of becoming stuck in the ice. The crew of the Thamesborg then reduced speed. The distance between the two vessels was approximately 750 metres. After a few minutes, the crew of the Thamesborg noticed that the Mario L's speed had fallen. The Mario L appeared to be stuck in the ice. The crew of the Thamesborg switched the main engine to full reverse, to stop the vessel. Despite this attempt, the Thamesborg collided with its starboard side against the stern section of the Mario L. The frame for the freefall rescue boat was completely twisted and the freefall rescue boat itself suffered serious damage. There were no personal injuries during the incident.

Classification: Serious



Damage Mario L.



Damage Thamesborg.

Fall from bunkbed, Oosterdam, Freeport (Bahamas), 28 March 2018

On 28 March 2018, a crew member of the Dutch-flagged passenger ship Oosterdam fell out of bed, breaking her collarbone. The ship was moored in Freeport, the Bahamas. From her top bunk, she was attempting to open the door to her cabin for her fellow crew member who had forgotten her key. She lost balance and fell out of bed. She was subsequently hospitalized.

Classification: *Serious Injury*

Running aground, SBI Jaguar, Western Scheldt, in line with Perkpolder, 29 March 2018

In the night of Wednesday 29 March 2018, the vessel SBI Jaguar, sailing under the flag of the Marshall Islands, was heading out of the Western Scheldt, when a cylinder of the steering gear sheared off. As a result, the vessel became not under command. The SBI Jaguar then ran aground on a sandbar in line with Perkpolder. Shortly after 1 p.m., with the tide rising, the SBI Jaguar was refloated by seven tugs, and subsequently towed to the anchorage at Everingen, for an underwater inspection.

Classification: *Serious*

Hand caught between gearwheel and conveyor belt, Annelies Ilena, English Channel, 5 April 2018

On board the Dutch fishing vessel Annelies Ilena, a crew member suffered severe injuries to his arm. At the time of the accident on 5 April 2018, the vessel was sailing towards the Netherlands, through the English Channel. The Annelies Ilena has a factory on board, for immediate further processing of the fish catch. During cleaning work in the factory, a crew member's hand became trapped in the gearwheel of one of the conveyor belts. The crew member's finger first became trapped, until eventually his whole hand was drawn between the gearwheel and the conveyor belt. Shortly afterwards, the conveyor belt emergency stop button was pressed by another crew member. After disconnecting the conveyor belt and the gearwheel, the crew member could be freed, and taken to the hospital on board the ship. He was then evacuated to hospital by a French navy helicopter.

Classification: *Serious Injury*



Gearwheel on board the Annelies Ilena. (Photo: Parlevliet and van de Plas)

Incidents that have not been extensively investigated

Crew member trapped between pallet and railing, Frank, Amsterdam, 9 April 2018

On Monday 9 April 2018, the Gibraltar-flagged tanker Frank was being resupplied in the Westhaven in Amsterdam. Pallets from a lighter were being brought on board and one pallet became caught against a railing. The probable cause was the poor visibility of the crane driver in respect of the height of the pallet. One crew member immediately took action to release the pallet. In the process, a piece of wood broke off the pallet, which then was released from the railing. As a result, the crew member was pushed against the other side of the railing, and became trapped, himself. He was knocked unconscious. The crew member received first aid and oxygen. The crew member was then transferred to hospital by ambulance. Examination revealed he had broken several ribs.

Classification: *Serious Injury*

Injury due to chemicals in face, Veendam, Caribbean, 16 April 2018

On 16 April 2018, a crew member of the passenger ship Veendam suffered eye injuries. When reaching for a bottle of chemicals, the bottle collided with the shelf in the cupboard, causing the lid to fly off and the chemical to spray into his eyes. The crew member had not realized that the bottle cap was not tightened. He was not wearing safety glasses so the chemical was able to come into contact with his eyes. Immediately following the incident, he rinsed his eyes with water from (4) eye rinse bottles, and was transferred to the sick bay. The crew member will be unable to work for between 3 and 6 weeks.

Classification: *Serious Injury*

Intern breaks hand, Nassauborg, Egypt, 19 April 2018

An intern suffered a broken hand while on board the Dutch flagged freighter Nassauborg. The incident took place in the afternoon of 19 April 2018 in Egyptian waters. At that time he was carrying out loading and unloading work on deck. The hand of the intern, a trainee maritime officer, became trapped while working, between a lifting hook on the deck crane and a pile of wood.

Classification: *Serious Injury*

Environmental contamination from pumping ballast water overboard, Iver Exporter, New Orleans (United States), 22 April 2018

At around 23.20 hours on Sunday 22 April, the watch officer of the Dutch tanker Iver Exporter discovered that while pumping ballast water overboard in the port of New Orleans, the ballast water was of a darker colour than normal. All operations were halted immediately. The officer of the watch then reported this situation to the first mate, and together they inspected the area where the ballast water had been pumped overboard. Because night had already fallen, after halting the pumping operation there was not much more to be seen. After opening the ballast tank, they discovered a layer of heavy oil floating on the surface of the ballast water. All authorities and relevant bodies were immediately notified.

At around 02.30 hours, the first mate entered the ballast tank with full breathing apparatus and discovered that heavy oil was leaking into the ballast tank from the adjacent heavy oil tank. The decision was taken to pump the heavy oil into another tank, so that the tank could be inspected. The inspection revealed a crack in the bulkhead between the ballast tank and the heavy oil tank. The crack was temporarily sealed under the supervision of the classification office, using an epoxy coating, until the crack could be definitively repaired. The operator decided to temporarily decommission both the ballast tank and the heavy oil tank.

Classification: *Serious*



Crack in the bulkhead between the heavy oil tank and the ballast tank. (Photo: Iver Ships)



Repair with epoxy resin. (Photo: Iver Ships)

Incidents that have not been extensively investigated

Broken ankle in frozen hold, Carolien, Western coast of Scotland, 23 April 2018

On Monday 23 April 2018, a crew member suffered an injury to his leg on board the Dutch fishing vessel Carolien, while repacking fish. At around 16.30 hours, the crew member had stepped with his right leg into a gap between packs of frozen fish, whereby he twisted his leg. The crew member was in the process of stacking boxes of frozen fish from the ship, onto pallets in the frozen hold. Once a first layer of full pallets is completed, it is practice to walk over this layer, to build up a second layer of pallets of frozen fish, on top. Due to the movement of the ship, gaps eventually occur between the frozen fish on the applets. The crew member stepped into one these gaps and fell over. His lower leg remained trapped in the gap, resulting in a broken ankle. Medical aid was provided immediately on board, and contact was sought with the Radio Medical Service. The victim was eventually evacuated by helicopter from the ship, and transported to a hospital on the Isle of Lewis.



Gap between packs of frozen fish. (Photo: Carolien crew)

Classification: Serious Injury



The frozen hold of the Carolien. (Photo: Carolien crew)

Captain breaks leg, Yerseke, Eemshorn, 30 April 2018

During crew embarkation on Monday 30 April 2018, at around 02:00 hours local time, the captain suffered an unfortunate fall when passing through the starboard accommodation entrance. The fall resulted in a fractured left leg. During the accident, the weather conditions were poor, with heavy rain and hard wind. Due to the placing on board of supplies, stores and personal property, a situation was created in which the passage was narrowed, and it was no longer possible to make the transfer from outside to inside, via a normal entrance/step. The captain placed his foot incorrectly, and on the partially wet surface was unable to step normally, at which point he slipped. The captain was transported by ambulance to the Admiraal de Ruyter hospital in Goes, for treatment. It should be noted that procedures, knowledge and experience acquired by the crew members involved correctly were applied and that the accident was handled in a calm, controlled manner.

Classification: *Serious Injury*



Threshold on board the Eemshorn. (Photo: Eemshorn crew)

The Dutch Safety Board in four questions

1

What does the Dutch Safety Board do?

When accidents or disasters happen, the Dutch Safety Board investigates how it was possible for them to occur, with the aim of learning lessons for the future and, ultimately, improving safety in the Netherlands. The Safety Board is independent and is free to decide which incidents to investigate. In particular, it focuses on situations in which people's personal safety is dependent on third parties, such as the government or companies. In certain cases the Board is under an obligation to carry out an investigation. Its investigations do not address issues of blame or liability.

Recently the Dutch Safety Board reported about the environmental safety of cannabis grow rooms, collision with the weir near Grave by a benzene tanker and the safety at the Chemelot industrial complex.

2

What is the Dutch Safety Board?

The Safety Board is an 'independent administrative body' and is authorised by law to investigate incidents in all areas imaginable. In practice the Safety Board currently works in the following areas: aviation, shipping, railways, roads, defence, human and animal health, industry, pipes, cables and networks, construction and services, water and crisis management & emergency services.

3

Who works at the Dutch Safety Board?

The Safety Board consists of three permanent board members. The chairman is Tjibbe Joustra. The board members are the face of the Safety Board with respect to society. They have extensive knowledge of safety issues. They also have wide-ranging managerial and social experience in various roles. The Safety Board's office has around 70 staff, of whom around two-thirds are investigators.

4

How do I contact the Dutch Safety Board?

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July 2018

Photos

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Source photo frontpage:

Photo 1: Aris van Dijk

Photo 3: HVZeeland.nl