



**SØFARTSSTYRELSEN**



**1/2009**

**Kvartalsvis Orientering  
Opklaringsenheden**

***Quarterly Information  
Division for Investigation of Maritime Accidents***

## Introduktion

Publikationen **Kvartalsvis Orientering** udgives hvert kvartal for at orientere om de ulykker Opklaringsenheden har afsluttet undersøgelsen af. Denne udgave indeholder også materiale på engelsk.

**Kvartalsvis Orientering** indeholder redegørelser, resuméer af søulykkesrapporter og temaundersøgelser, hvis der er udarbejdet sådanne i det pågældende kvartal.

En temaundersøgelse er en sammenfatning af en række oplysninger og fakta om en række ulykker, som Opklaringsenheden har undersøgt, inden for et bestemt område – tema. I **Kvartalsvis Orientering** kan man læse en introduktion til de/den temaundersøgelse(r), som er udsendt i det pågældende kvartal.

Endelig indeholder **Kvartalsvis Orientering** en kort beskrivelse af en række ulykker, hvor der ikke er udarbejdet søulykkesrapport eller redegørelse. Disse ulykker, der kaldes statistiksager, er alene indlagt i Opklaringsenhedens ulykkesdatabase og vil indgå som statistisk materiale i Søfartsstyrelsens årlige publikation "Ulykker til søs".

**Kvartalsvis Orientering**, søulykkesrapporter, redegørelser og temaundersøgelser findes på Søfartsstyrelsens hjemmeside [www.sofartsstyrelsen.dk](http://www.sofartsstyrelsen.dk) under *Ulykkesopklaring*.

## Introduction

**The publication Quarterly Information** is published to provide information about the investigations of accidents that the Division have completed. Some of the material is in English.

**The Quarterly Information** presents reports (minor), summaries of Marine accident reports and safety studies.

A safety study is a summing up of a number of factual information on several accidents within a specific area – a theme. In **Quarterly Information**, there is an introduction to the safety studies issued in the quarter in question.

The **Quarterly Information** also presents a short description of a number of accidents, which the Division has not made a report on. The cases are called statistical files. The information gathered in connection with these cases is used for statistical purposes only. This information is a part of the statistical material in the yearly publication "Accidents at sea" published by the Danish Maritime Authority.

Please find **Quarterly Information**, Reports and Safety Studies at the Danish Maritime Authority's homepage [www.dma.dk](http://www.dma.dk) under *Casualty Investigation*.

## Opklaringsenheden

Opklaringsenheden har ansvaret for undersøgelse af søulykker og alvorlige personulykker. Formålet med Opklaringsenhedens undersøgelser er at klarlægge, hvad der er sket og hvordan det er sket, sådan at andre kan tage de fornødne forholdsregler for at undgå, at lignende ulykker sker igen.

Desuden indsamler Enheden oplysninger til den årlige søulykkesstatistik

Formålet er ikke at placere skyld eller ansvar.

Opklaringsenheden arbejder som en selvstændig "Havarienhed". Enhedens arbejde er adskilt fra alt andet arbejde i Søfartsstyrelsen.

Det er vigtigt for undersøgelsen, at Opklaringsenheden snarest underrettes, når der er sket en søulykke eller en alvorlig personulykke.

<b>Telefon 39 17 44 00</b> <b>Telefax 39 17 44 16</b> <a href="mailto:oke@dma.dk">oke@dma.dk</a>  <b>Døgnvagt på tlf. 23 34 23 01</b>	<b>Opklaringsenheden</b> <b>Vermundsgade 38 C</b> <b>2100 København Ø</b>
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### The Division for Investigation of Maritime Accidents

The Division for Investigation of Maritime Accidents is responsible for investigating accidents and serious occupational accidents on Danish merchant- and fishing ships. The Division also investigates accidents in Danish wastes when foreign ships are involved.

The purpose of the investigations is to clarify the actual sequence of events leading to the accident. With this information in hand, others can take measures to prevent similar accidents in the future.

The aim of the investigations is not to establish legal or economic liability.

The Division's work is separated from other functions and activities of the Danish Maritime Authority.

It is important that the Division is advised immediately after the occurrence of an accident at sea.

**Phone +45 39 17 44 00**  
**Fax +45 39 17 44 16**  
[oke@dma.dk](mailto:oke@dma.dk)

**Division for Investigation of  
Maritime Accidents**  
**Vermundsgade 38 C**  
**DK 2100 Copenhagen**

**24 hours phone: +45 23 34 23 01**

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## **Resumé af søulykkesrapporter** **Summary of Marine Accident Reports**

### **HELGOLAND – Overbordfald den 16. november 2008**

#### **Resumé**

HELGOLAND afsejlede fra Thyborøn den 13. november kl. 13.30 for at drive fiskeri i den norske zone af Nordsøen. Der var en besætning på 5 mand om bord.

Den 16. november om morgenen satte man voddet ved fly-shooting metoden. Fra bakken havde to fiskere fanget bøjelinen med de tre bøjer (gajer) med et dræg, og den ene fisker havde fat i bøjelinen og var ved at hive den om bord for at den anden fisker kunne koble indhaleren til bøjelinen.

Da ca. 10 m af bøjelinen var hevet om bord, blev den fisker, som holdt fast i bøjelinen, pludselig hevet udenbords, hen over søgelænderet på bakken. Han fortsatte med at holde fast i bøjelinen, og den anden fisker greb fat i den del af linen, som lå på bakken, og holdt linen stram. Den overbordfaldne fisker slap imidlertid hurtig bøjelinien, men kom herefter ind i en redningskrans, som fra skibet var lagt i søen tæt ved ham. Efter et øjeblik gled han imidlertid igen ud af redningskransen, og det lykkedes ikke de andre fiskere at få ham om bord, før han forsvandt.

Der var NV-lig kuling og 5 – 7 m høje bølger.

Der blev slået alarm, og den norske redningstjeneste iværksatte hurtigt en eftersøgning. Den overbordfaldne fisker blev imidlertid ikke fundet, og eftersøgningen blev indstillet kl. ca. 17.00.

#### **Konklusion**

Overbordfaldet skyldes, at der opstod et uventet træk i bøjelinen, medens fiskeren holdt fast i linen. Det er ikke muligt med sikkerhed at angive årsagen til dette træk, eller hvorfor fiskeren ikke gav slip på linen, da trækket opstod. (6.1)

Trækket kan være opstået ved en uventet bevægelse af skibet i den høje sø, eller det kan have været ved en pludselig og kraftig påvirkning af bøjerne, eller ved en kombination af disse forhold. (6.1)

Risiko for overbordfald var ikke erkendt og behandlet før ulykken. (6.2)

Der blev ikke anvendt arbejdsvest under arbejdet på dækket, uanset at der var høj sø. (6.2 og 6.4)

Der var ikke egnet udstyr til at bjærge en overbordfalden fra et skib med stor dækshøjde, og besætningen var ikke gennem instruktion/drøftelser og øvelser forberedt på den mest effektive metode for bjærgningen. (6.3)

## Anbefalinger

Det anbefales HELGOLANDs ejer og reder,

- at der udarbejdes risikovurderinger for arbejdsprocesserne om bord i forbindelse med udsætning og bjærgning af grej, således at de bliver sikre under alle forhold, f.eks. ved at anvende arbejdsveste / livline under arbejde på dækket under visse vejforhold og evt. ved at forhøje søgelænderet, samt
- at der anskaffes egnet udstyr til bjærgning af en overbordfalden, og at besætningen øves i brug af dette udstyr. I denne forbindelse kan hentes inspiration i publikationen *Rapport om bjærgning af overbordfaldne fra fiskeskibe* fra Fiskeriets Arbejdsmiljøråd, se [www.f-a.dk](http://www.f-a.dk) under publikationer.

## HELGOLAND – Fall overboard on 16 November 2008

### Summary

HELGOLAND sailed from Thyborøn on 13 November at 1330 to fish in the Norwegian zone of the North Sea. There was a 5 men crew on board.

In the morning on 16 November the seine was shot using the fly-shooting method. From the forecastle two fishermen caught the buoy-line with the three buoys (gajer) using a grapnel. The one fisherman held the buoy-line and was hauling it on board in order that the other fisherman could connect the in-hauler to the buoy-line.

When approximately 10m of the buoy-line was hauled on board, the fisherman, who held the buoy-line, was suddenly pulled over board above the railing on the forecastle. He continued to hold on to the buoy-line, and the other fisherman took hold in the part of the line, which was lying on the forecastle and kept it tight. The fallen overboard fisherman, however, quickly let go the buoy-line, but there after he succeeded in entering a life buoy, which from the vessel was placed in the sea close to him. Shortly after, however, he again slipped out of the life buoy, and the other fishermen did not succeed to haul him on board before he disappeared.

There was a hard breeze from NW and 5 – 7m high waves.

Alarm was raised, and the Norwegian salvage service quickly launched a search. The fisherman fallen overboard was, however, not found, and the search was abandoned at approximately 1700.

### Conclusion

The fall overboard was caused by an unexpected drive in the buoy-line, while the fisherman held the line. It is not possible with certainty to establish the cause to this drive, or why the fisherman did not let go the line, when the drive occurred. (6.1)

The drive could occur by an unexpected movement of the vessel in the high waves or it could have been by a sudden and forceful influence of the buoys or by a combination of the two. (6.1)

Then risk of falling over board was not recognised and discussed prior to the accident. (6.2)

Lifejacket was not used during work on deck although a high sea. (6.2 and 6.4)

The vessel was not equipped to rescue a person fallen over board from a vessel with a large deck height, and the crew was not prepared through instruction/dialogue or exercises in the most effective method of the rescue.

## Recommendations

The owner of HELGOLAND is recommended,

- to work out risk assessments for the working processes concerning the shooting and the hauling of gear, so that they are always safe, e.g. by using lifejackets / lifeline during work on deck under certain weather conditions and possible by enlargement of the height of railings, and
- to procure equipment suitable for rescue of a fallen over board person, and to see to that the crew is exercised in the use of the equipment. In this respect inspiration can be found in the pamphlet "*Rapport om bjergning af overbordfaldne fra fiskeskibe*" (Report on the rescue of fallen over board persons in fishing vessels) from the Danish Fishermen's Occupational Health Council, look at [www.f-a.dk](http://www.f-a.dk), publications.

**NEW FLAME & TORM GERTRUD – Collision – 12 August 2007. The report is published by Gibraltar as lead investigating state. The investigation was conducted in cooperation with Panama and Denmark.**

## SYNOPSIS

1. At approximately 0549 (UTC + 2) on 12<sup>th</sup> August 2007, the loaded 30,058gt Danish registered oil tanker, *Torm Gertud*, was in collision with the loaded 26,824 grt Panamanian registered geared bulk carrier, *New Flame*, approximately one mile southwest of Europa Point. The Gibraltar Maritime Administration was informed and an investigation started on that day.
2. Following communications between the Gibraltar Maritime Administration, the Danish Maritime Authority and the Panama Maritime Authority, it was agreed that the accident investigation should be a joint investigation with the Gibraltar Maritime Administration as the lead investigating authority, in accordance with IMO guidelines for accident investigations.
3. The *Torm Gertrud*, carrying a cargo of 37,359 metric tonnes of unleaded gasoline, was on passage from Port Augusta, Sicily, to Port Everglades, Florida, USA, calling off Algeciras to disembark a crewmember by launch.
4. The *New Flame*, carrying a cargo of scrap metal, was on passage from Bay Ridge Flats, New York, USA to Turkey and had anchored in Gibraltar Bay on 11<sup>th</sup> August 2007 to load bunkers.
5. After completing bunkering operation, the *New Flame* weighed anchor and proceeded southward from the anchorage towards a waypoint approximately 1.2 n.miles SSW of Europa Point.
6. The *Torm Gertud* was on a westerly course, proceeding towards an RV position 2½ n.miles South West of Europa Point, intending to pass 1 n.mile south of Europa Point Light.
7. At approximately 0549 LT, the two ships were in collision approximately 1 n.mile SSW of Europa Point. The bow of the *Torm Gertrud* struck the *New Flame* on the *New Flame*'s starboard side in way of No.1 and No. 2 holds.
8. The *Torm Gertud* sustained severe damage to her forecastle, forepeak and No. 1 starboard ballast tank. There were no injuries to personnel and, due to the double hull construction, no oil escaped from the cargo tanks.
9. Following the incident, the *Torm Gertrud* was initially anchored to the south of Algeciras Port and later re-anchored in the north of the Bay of Gibraltar at the direction of the Captain of the Port of Algeciras.
11. The *New Flame* sustained extensive damage to her starboard side in way of No.1 & No.2 holds and No.1 & No.2 double bottom tanks. Due to the severity of the damage, the ballast pumps did not have sufficient capacity to deal with the in-rush of sea water and the *New Flame* began to list to starboard and sink by the head. The *New Flame* was abandoned. All the crew disembarked and were landed ashore without injury. The *New Flame* drifted towards the east, eventually running aground on a reef to the southeast of Europa Point, known locally as "Los Picos".



Subsequent salvage operations removed the *New Flame*'s fuel and lub. oils. Operations to remove the *New Flame* from Los Picos are in progress.

12 Factors contributing to the accident included:

- .1 Over reliance on electronic aids to navigation
- .2 Inadequate passage planning.
- .3 Inadequate bridge team management
- .4 The limited monitoring or control of shipping movements within the waters of Gibraltar bay.
- .5 The lack of formal procedures for the exchange of information between Algeciras Port Control and Gibraltar Port Control

13. Appropriate recommendations have been made which can be found in Section 4 of this report.

## Redegørelser – Reports

Redegørelse fra Opklaringsenheden

### **HJARNØ HAVBRUG** **Arbejdsulykke, klemning under lugedæksel** **4. december 2008**



Lugedæksel over lastrum

Foto: Opklaringsenheden

#### **Faktuel information**

HJARNØ HAVBRUG er et lastfartøj på 19,7 BT og med en længde på 16,0 meter, der anvendes til at bringe ørreder fra et havbrug i Musholm Bugt til forarbejdning i Reersø. Ørrederne lastes i en brønd, hvori der cirkuleres saltvand. Losningen foregår ved pumpning.

Besætningen er på fire mand, der alle er tidligere fiskere.

Om formiddagen den 4. december 2008 fik et besætningsmedlem hovedet i klemme mellem lugekarm og lugedæksel. Han nåede at skrigge op, hvorved kollegaen, der betjente håndtaget til lukning af lugen, blev opmærksom på situationen og standsede lugedækslets bevægelse.

## Hændelsesforløb

HJARNØ HAVBRUG sejlede den 4. december 2008, klokken ca. 02.00, fra Reersø til havbruget i Musholm Bugt og hentede dagens første ladning ørreder, ca. 35 tons. Efter udlosning hentede man yderligere en ladning af ca. tilsvarende størrelse og var tilbage i Reersø klokken ca. 09.30.

Skipperen åbnede lugen til lastrummet og gjorde i øvrigt klar med diverse slanger og rør til losningen. Efter 15 – 20 minutters losning kom et besætningsmedlem tilbage om bord med frisk kaffe til næste tur, som han netop havde lavet i land i virksomhedens frokoststue, og skipperen gik i land for at holde pause.

Derefter var der to mand om bord til at losse lasten. De stod i styrbord side og talte sammen, mens de ventede på, at fiskene skulle glide ned til sugestedet i bunden af lasten. De to skiltes. Den ene gik hen agten for lugen, og den anden tog en kost for at skubbe nogle fisk hen ad en rende inden for lugekarmen, hvorefter han gik fremefter mod styrehuset for at lukke lugen. Han havde opfattelsen, at kollegaen var gået agten om lugen og i land, idet han ikke kunne se ham.

Kollegaen var imidlertid ikke gået i land. Han forsøgte med armen at skubbe to fisk ned fra en rist lige inden for lugekarmens agterste side (se billede nedenunder). Han kunne dog ikke umiddelbart nå begge fisk og stak derfor hovedet ind under det delvist åbentstående lugedæksel for bedre at kunne nå den sidste fisk (omtrent som vist på billedet nedenfor). I det samme begyndte lugen at lukke, hvorved han mærkede, at hovedet kom i klemme, og han skreg op. Besætningsmedlemmet ved betjeningshåndtaget hørte skriget, og rent reflektorisk skubbede han håndtaget den modsat vej og standsede dermed lukningen.



Nymonteret  
sikkerhedsstang

Figurant viser den omtrentlige situation

Foto: Opklaringsenheden

Lugedækslet bevægede sig herefter lidt op og i, hvorved besætningsmedlemmet fik hovedet fri og kunne trække det til sig. Han mærkede, at han blødte fra hovedet og satte sig på dækket, mens andre straks ilede til hjælp.

Besætningsmedlemmet fik førstehjælp og blev med ambulance kørt til Slagelse sygehus, hvor man konstaterede, at han havde fået knubs og sår i panden og i nakken, men i øvrigt var uskadt.

## **Supplerende oplysninger**

Ifølge oplysning fra selskabet var der for år tilbage udarbejdet en arbejdspladsvurdering for skibet. Denne var imidlertid ikke umiddelbart tilgængelig om bord.

Ingen af de to involverede besætningsmedlemmer havde kendskab til nogen arbejdspladsvurdering.

Det var ikke aftalt mellem de to besætningsmedlemmer, at den ene skulle forsøge at få de to fisk ned fra risten.

Besætningsmedlemmet, der lukkede lugen, kunne ikke se kollegaen agten for lugen – bl.a. på grund af et stort plastkar, der på det pågældende tidspunkt stod oven på lugen.

Besætningsmedlemmet, der ville skubbe de to fisk ned fra risten, vidste ikke, at hans kollega agtede at lukke lugen på det pågældende tidspunkt. Da han tog initiativ til at skubbe til fiskene, var kollegaen ikke placeret ved betjeningshåndtagene til den hydrauliske lukning af lugen.

Den tilskadekomne er 39 år, har været fisker i ca. 10 år og har været forhyret i HJARNØ HAVBRUG i ca. to måneder, ligesom han også havde et par måneders hyre med skibet i 2007.

Besætningsmedlemmet, der lukkede lugen, er 63 år. Han har altid været fisker, og har desuden de senere år været periodisk forhyret i skibet HJARNØ HAVBRUG.

Der er ikke givet nogen konkret instruktion om det specifikke arbejde til besætningsmedlemmerne, da det anses for at være almindeligt forekommende, og det er erfarne folk, der udfører det.

## **Analyse og konklusion**

Der blev ikke brugt arbejdspladsvurdering om bord for at klarlægge mulige risikable arbejdsprocesser eller for at tilrettelægge arbejdet sikkerhedsmæssigt forsvarligt.

Der var ingen fast procedure for, hvordan man skulle forholde sig for at sikre imod tilskadekomst ved lukning af lugen under arbejde med fisken i lasten.

Det ene besætningsmedlem vidste ikke, at hans kollega gik hen for at lukke lugen.

Det andet besætningsmedlem vidste ikke, at hans kollega gik hen for at skubbe to fisk ned fra risten, og han kunne heller ikke se det.

Det er Opklaringsenhedens opfattelse, at hændelsen skete som følge af mangelfuld kommunikation mellem de to besætningsmedlemmer og manglende planlægning af og uhensigtsmæssig rutine i arbejdet.

Det er Opklaringsenhedens opfattelse, at der var dårlige oversigtsforhold fra betjeningsstedet mod det sted, hvorfra besætningsmedlemmet ville fjerne de sidste to fisk.

### **Initiativer**

Straks efter arbejdsulykken blev der som en umiddelbar og foreløbig foranstaltning monteret en stang på lugens agterkant, der mekanisk forhindrer lugens lukning, hvis stangen ikke bliver løftet manuelt på stedet.

Som en vedvarende foranstaltning til afløsning af ovennævnte stang vil der i forbindelse med skibets næste værftsophold blive monteret et dobbelt betjeningssystem, der nødvendiggør samtidig påvirkning af betjeningshåndgreb dels ved styrehuset og dels på dækket agten for lugen for at åbne og lukke lugen.

### **Anbefalinger**

Opklaringsenheden anbefaler, at der udarbejdes en arbejdspladsvurdering for skibet, og at den til enhver tid er kendt og tilgængelig for besætningsmedlemmerne.

6. januar 2009

Opklaringsenheden

Report from the Division for Investigation of Maritime Accidents

## **Container ship SORØ MÆRSK Accident to seafarer, engineer scalded by steam and hot water 4 November 2008**



### **Factual information**

#### **The ship**

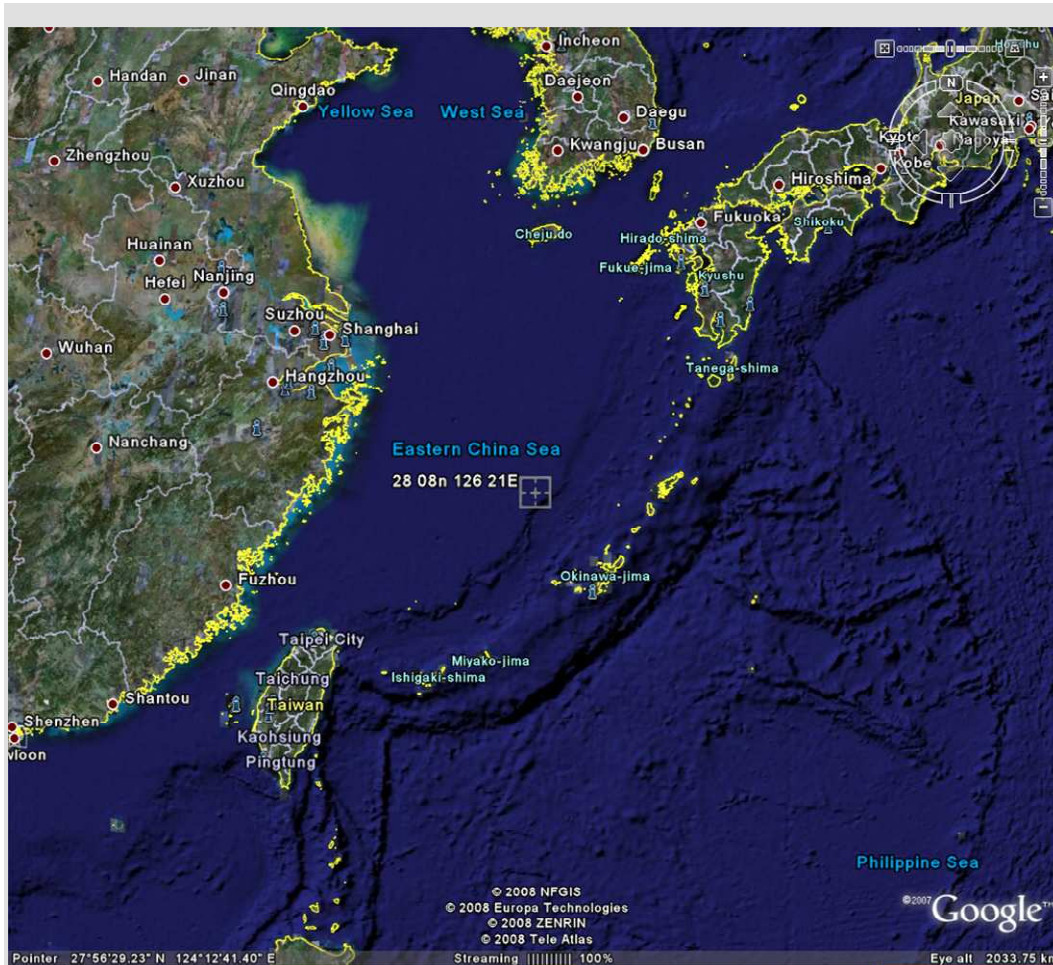
SORØ MÆRSK is a diesel propelled container ship of 91560 GT with a crew of 25.

#### **The accident**

On 4 November 2008, when the ship was on position 28°08' N – 126°21' E, navigating in the Eastern China Sea bound for Yokohama, the 4<sup>th</sup> engineer was seriously scalded when he was cleaning a drain pipe. After having received first aid on board the ship he was taken to hospital by a helicopter from Japan Coast Guard.

#### **The engineer**

4<sup>th</sup> engineer is 29 years of age. He is certified as a watch keeping engineer, holding a certificate "RC Engineer Officer" among a long range of other certificates of training and skills.



Picture: Google Earth

## Narrative

On 3 November 2008, while making his night round, the 4<sup>th</sup> engineer noticed that the dirty water drain from the fuel oil separators was obstructed.

The drain, a 2½" pipe, was supposed for draining water and oil from four fuel oil separators into a common dirty water tank ventilated to the atmosphere. The drain pipe was heated by steam tracing and furnished with a blind flange for opening and cleaning of the pipe as a part of the ship's design.

Next day, he informed 2<sup>nd</sup> engineer about the problem and they decided to proceed to clean the draining pipe, a job considered ordinary and not at all dangerous.

First, he dismantled the draining cap from separator and saw the pipe was clogged inside. He poured some diesel oil into the drain, trying to dissolve the sludge but nothing happened. After that, he tried to poke a wire rope into the pipe, but likewise with no effect.

He tracked the drain pipe and found a visiting flange (blind flange) right under the ceiling in the generator room situated under the fuel oil separator room.

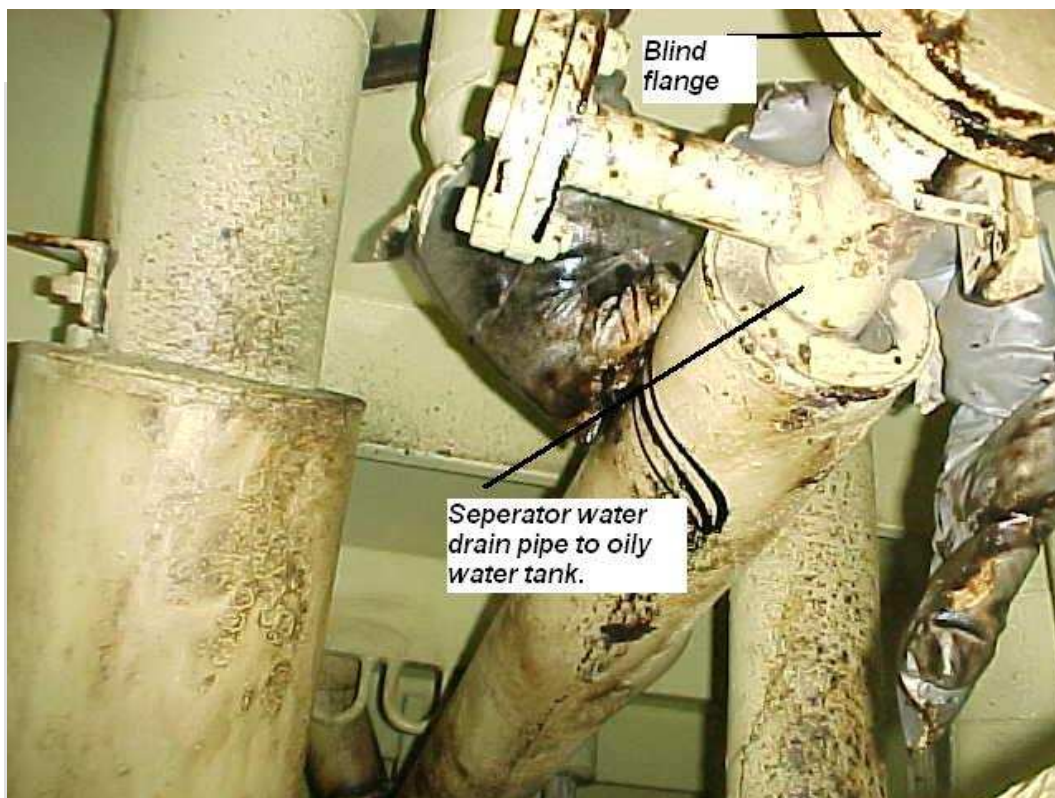


Photo: chief engineer, m/v SORØ MÆRSK



Together with the 2<sup>nd</sup> engineer, it was decided to dismantle the flange in order to obtain a better position for cleaning the pipe. The 4<sup>th</sup> engineer made a draining system from a funnel, a ¾" plastic hose and a 200 litres drum in order not to make mess and proceeded dismantling the flange.

The 4<sup>th</sup> engineer loosened the four bolts of the flange, bit by bit, until nothing came out of the pipe. That slowly draining of the pipe took about 15 minutes.

After that, he was able to dismantle completely the flange. I took a look inside the flange and saw that the pipe was almost 90 % clogged from its diameter (the pipe is horizontal in that position – generator room).

After maximum 10 seconds, the sludge inside burst out and hit the engineer all over. It was between 1300 and 1330.

The engineer was scalded in his face, on his neck, arms, and hands, thighs, forelegs, ankles and feet. He hurried to his cabin to shower and cool the burnt surfaces and clean the skin from oil with soap. At 1405 hours, he called the chief officer for help stating he was in severe pain due to the scalding/burns.

The chief officer hurried to the 4<sup>th</sup> engineer's cabin. On his way he met the master who was notified about the incident.

The 4<sup>th</sup> engineer was transferred to the ship's hospital where he was put in the bath tub and cooling with cold water was continued. The engineer received first aid and treatment for his burns and to prevent chock.

Radio Medical recommended evacuation, so the injured engineer was taken to hospital on Okinawa by helicopter from Japan Coast Guard.

At 1826, the evacuation was completed and the vessel resumed the voyage to Yokohama.

### **Others**

After the accident, 2<sup>nd</sup> engineer refitted the blind flange on the drain pipe without problems. The pipe was then without pressure.

### **Analysis and conclusions**

The 4<sup>th</sup> engineer was hit and scalded by steam, hot water and oil streaming out from the pipe after manipulating an obstruction in the pipe with a wire.

A steam pressure had obviously been building up in the pipe.

It seems like there were two obstructions in the drain pipe, and in the confined space between the obstructions water and oil was heated by the steam tracing, thus creating steam pressure.

It was not expected that steam pressure could build up inside the pipe, because it was a drain pipe leading to an open tank.

Working with the drain pipe was not considered risky at all. On board the ship there was no focus on the risk by working on a steam tracing heated pipe conveying water.

The ship has a work risk assessment (safe job analysis) on computer. However, at the time of this incident it was not covering work on steam heated pipes.

Work risk assessment was not used on board as an active tool for mapping the risk areas in the engine room.

## **Initiatives**

On 10 November 2008 an extraordinary safety committee meeting was held on board to evaluate on the accident in question:

*The accident area was investigated by the safety committee without finding any defects.*

*It was stated, that the accident was caused by a blocked drain pipe and pipe under unexpected pressure.*

*All personnel should consider what can go wrong when carrying out certain tasks and bear in mind to be cautious and seek assistance if needed.*

*A safety sign has been made and placed in the accident area.*

(Abridged by the Investigation Division)

Furthermore the shipping company has informed that the risk management procedure has been changed to incorporate working on piping with heat tracing throughout.

## **Recommendations**

1. The Investigation Division recommends that the shipping company ensures that the work risk assessments on board are used by the relevant crew to map the risk areas in the engine room.
2. The Investigation Division recommends the shipping company that the risk assessments are being updated and dealt with by the relevant crew members.

16 January 2009

The Division for Investigation of Maritime Accidents

## Report from the Division for Investigation of Maritime Accidents

# The grounding of MIRABELLE on 16 December 2008



Fig. 1. MIRABELLE on ground. Photo by the Investigation Division

### Factual information

MIRABELLE, IMO No 8500070, is a Maltese flag general cargo ship of 3,113 GT. It is Norwegian operated and trading in north European waters.

On the 16 December at 1730 local time MIRABELLE grounded at low speed in position 55°03.0 N - 010°36.7' E, shortly after departure from the port of Svendborg.

During high water and change of current the vessel re-floated on 18 December at 0225 and returned to Svendborg. There was found no damage to the vessel.

### Narrative

MIRABELLE arrived at Svendborg on 16 December at 0400 with a part load of 900 cubic metres of timber from Nakskov. There was a crew of 10 including the master, the chief officer and the 2<sup>nd</sup> officer. The three navigators run a 3 shift bridge watch when at sea. In port the chief officer and the 2<sup>nd</sup> officer runs a 2 shift watch.

The ship arrived at Svendborg via the western entrance of Svendborg Sound. Neither the master nor the chief officer had been in Svendborg Sound before. The master, however, was familiar with navigating in Danish waters and other minor harbours, and he therefore decided not to use a pilot.

Shortly after arrival the crew started loading more timber. They finished loading at 1700 and sailed at 1710 with a full load for Monsteras in Kalmar Sound, Sweden. The forward draught was 6.4m and aft draught was 6.45m.

During mooring the master was alone on the bridge. The chief officer was on the fore-castle together with two ABs, and the 2<sup>nd</sup> officer was on the deck aft together with one AB.

It was calm weather with a good visibility. The ship is equipped with electronic chart, situated close to the manoeuvring desk, and operated with the planned route inserted. Danish paper chart no. 171 with the planned voyage drawn was on the chart table. The radar was set to 3 miles range, and the echo sounder was switched on. There was no other traffic.

With an astern manoeuvre the master came free of the quay and went forward at manoeuvring speed, about four knots. He was in no doubt with regard to the navigation west in Svendborg Sound, and he was well aware of the fact that the red buoys should be kept on the starboard side. He manoeuvred the vessel into the Bratten leading lights. He was steering manual. He did not notice any effect of current.

Then he used the search light on top of the bridge roof and operated by a handle just above the manoeuvring desk. He caught the red buoy on the starboard bow in the light.

At about that time the chief officer arrived on the bridge after having finished the mooring and changed cloths. He should take over as the OOW.

Shortly after the arrival of the chief officer on the bridge, the master realized, by watching the echo sounder that "the bottom came up". He turned the helm to port, but the ship did not react. MIRABELLE was heavily loaded and at a slow speed.

Immediately after MIRABELLE grounded approx. 30m north of the red buoy.

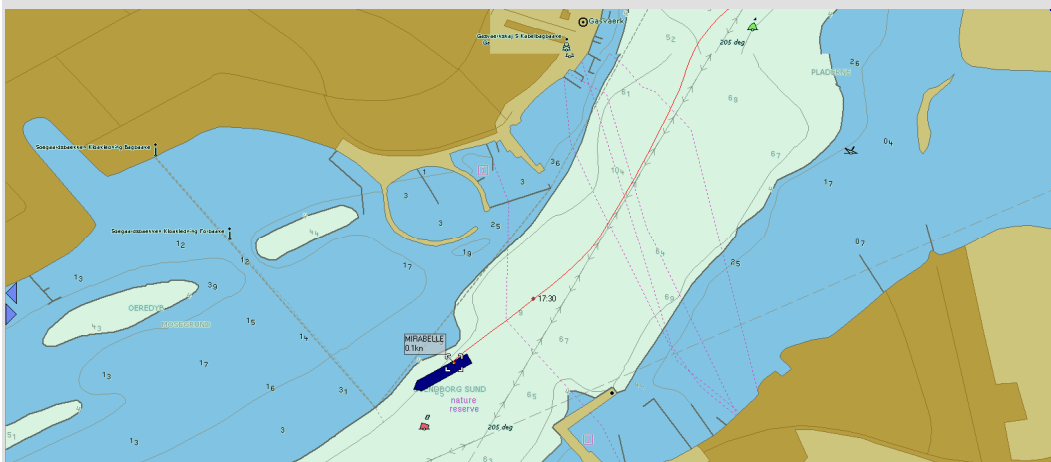


Fig. 2. Extract of AIS plot from the Danish Maritime Safety Administration

## **Analysis and conclusion**

MIRABELL grounded approximately 15 minutes after departure. The master was alone on the bridge, because the chief officer, the 2<sup>nd</sup> officer and the three ABs were on deck for the mooring operations. The chief officer came on the bridge shortly before the grounding.

The master was not familiar with the navigation in the area, it was dark and it was a narrow area with a depth of water at places, which was close to the draught of the vessel. He was manoeuvring the ship, he was helmsman, he was navigating in the leading lights and using the search light to see the dark buoys, which marked the boundaries of the fairway.

According to the AIS plot MIRABELLE started the turn to starboard approximately 300m before the planned turning position. The master can not explain why this happened. He was well rested, and he felt fully confident with the navigation. He did not notice the early turn on the chart plotter, presumably because he did not watch it.

The fact that the master was alone on the bridge and should handle the manoeuvring, the navigation, the look-out and the handling of the search light is the main cause of the grounding. He did not notice the starboard turn, before it was too late to avoid the grounding.

In the actual situation, with a full loaded ship in an area with narrow and shallow fairways with depth of water nearly the same as the draught of the vessel and in water with which the master was not familiar, it would have been an ordinary practice of seamen to make use of a local pilot.

## **Recommendations**

The master of MIRABELLE is recommended,

to update the ships SMS procedures on watch-keeping to secure that the master is assisted on the bridge during arrivals and departures,

to use a pilot in situations like the actual one, where the fully loaded ship shall navigate in a narrow area with shallow water, with which the master is not familiar.

22 January 2009

The Division for Investigation of Maritime Accidents

## Redegørelse fra Opklaringsenheden

# Kollision mellem lastskib og fiskeskib den 11. november 2008

Lastskibet SAXO af Nørresundby kolliderede med fiskeskibet ANNA PAULSEN fra Hanstholm. ANNA PAULSEN fik skader i agterskibet men kunne dog sejle i havn for egen kraft. Der skete ingen skade på SAXO.

### Faktuel information

SAXO, c/s OZPJ2, IMO nr. 8324672, er et tørlastskib på 1566 BT og en længde på 82 m. Det er bygget i Tyskland i 1984, og det opereres af rederiaktieselskabet Saxo i Nørresundby.

ANNA POULSEN, HM 136, OU 6727, er en trækutter på 6,8 BT og en længde på 8,5 m. Den er bygget i Sverige i 1979, er nu rigget til trawlfiskeri og er privat ejet.

Kollisionen skete den 11. november 2008 kl. 14.25 på positionen 57°07,3' N - 008°31,0' Ø, 2,7 sømil vest for Hanstholm.

### Hændelsesforløb

**SAXO** afsejlede fra Gent den 9. november kl. 14.00 med 1600 tons "steel coils" mod Fredrikstad. Der var en besætning på 5 mand. Skibsfører, styrmand og 3 ubefarne skibsassistenter, alle danske statsborgere. Skibsføreren og styrmanden går 6 – 6 vagt i styrehuset.

Den 11. november ved middagstid var SAXO på vej nordover langs Jyllands vestkyst på kurs 020° og fart 10 knob. Der var en sydlig vind, 3 m/sek., en nordgående strøm på ca. 1 knob og en sigtbarhed på ca. 5 sømil. Styrmanden havde vagt alene i styrehuset.

Kl. 14.15 observerede styrmanden, visuelt og på radaren, et fiskeskib ca. 15° om bagbord i en afstand af 2,4 sømil. Styrmanden skønnede ud fra slæbestregen på radaren, at fiskeskibet, som senere viste sig at være ANNA PAULSEN, ville gå klar om styrbord og passere foran SAXO i en afstand af 0,3 sømil. Styrmanden observerede ikke nogen signaler eller lys, som indikerede, at ANNA PAULSEN var i færd med at fiske. Styrmanden fortsatte derfor på uændret kurs og fart.

Kl. 14.25 ramte SAXO trawlgrejet agten for ANNA PAULSEN, hvorved fiskeskibet blev trukket ind mod SAXO styrbords bov og ramte SAXO. ANNA PAULSEN's grej brast imidlertid, og fiskeskibet gled ned langs styrbord side af SAXO, indtil de to skibe kom fri af hinanden.

SAXO vendte rundt og kom i kontakt med ANNA PAULSEN. Redningsbåden fra Hanstholm var hurtig på positionen, og der var ikke behov for yderligere assistance. Fra SAXO blev observeret, at ANNA PAULSEN for egen kraft sejlede mod Hanstholm fulgt af redningsbåden. SAXO genoptog herefter rejsen.

**ANNA PAULSEN** sejlede fra Hanstholm den 11. november kl. 06.30 for at fiske med trawl i det nærtliggende farvand. Fiskeskibet var, som normalt, alene om bord. Det var næsten stille og klart vejr med lidt vestlig dønning. ANNA PAULSEN førte trawllys og signalfigur for trawlfiskeri (2 kegler med spidsen mod hinanden), og agter var tændt en kraftig halogenlampe.

Fiskeskibet satte grejet og startede med at trawle sydover indtil ca. ud for Klitmøller. Her vendte han og trawlede tilbage mod Hanstholm. Han sad i styrehuset og koncentrerede sig om på selvstyret at styre efter en skrænt på bunden. Radaren stod på 3-sømil området. Farten var ca. 2½ knob, og redskaberne rakte ca. 170 favne (ca. 310 m) agterud.

Kl. 14.25, hvor ANNA PAULSEN slæbte på kurs 066°, blev fiskeskibet pludselig slynget rundt i styrehuset, og lidt efter klappede ANNA PAULSEN mod styrbord side af SAXO. Samtidig knækkede trawlwiren, og ANNA PAULSEN kom fri af SAXO. Ved sammenstødet knækkede daviderne, mesanmasten og trawlstativet, og der skete skader på skroget agter.

Fiskeskibet havde ikke set SAXO inden kollisionen, hverken på radaren eller visuelt.

Der lå to andre kuttere og fiskede 3 – 4 sømil sydvest for ANNA PAULSEN.

Fiskeskibet kontaktede Hanstholm havn, og en redningsbåd fra Redningsstation Hanstholm blev sendt ud og fulgte ANNA PAULSEN, som for egen kraft sejlede i havn.

Fiskeskibet havde også kontakt med SAXO, som i første omgang ville sætte MOB båden i vandet, men redningsbåden var hurtigt fremme, så det blev ikke aktuelt.

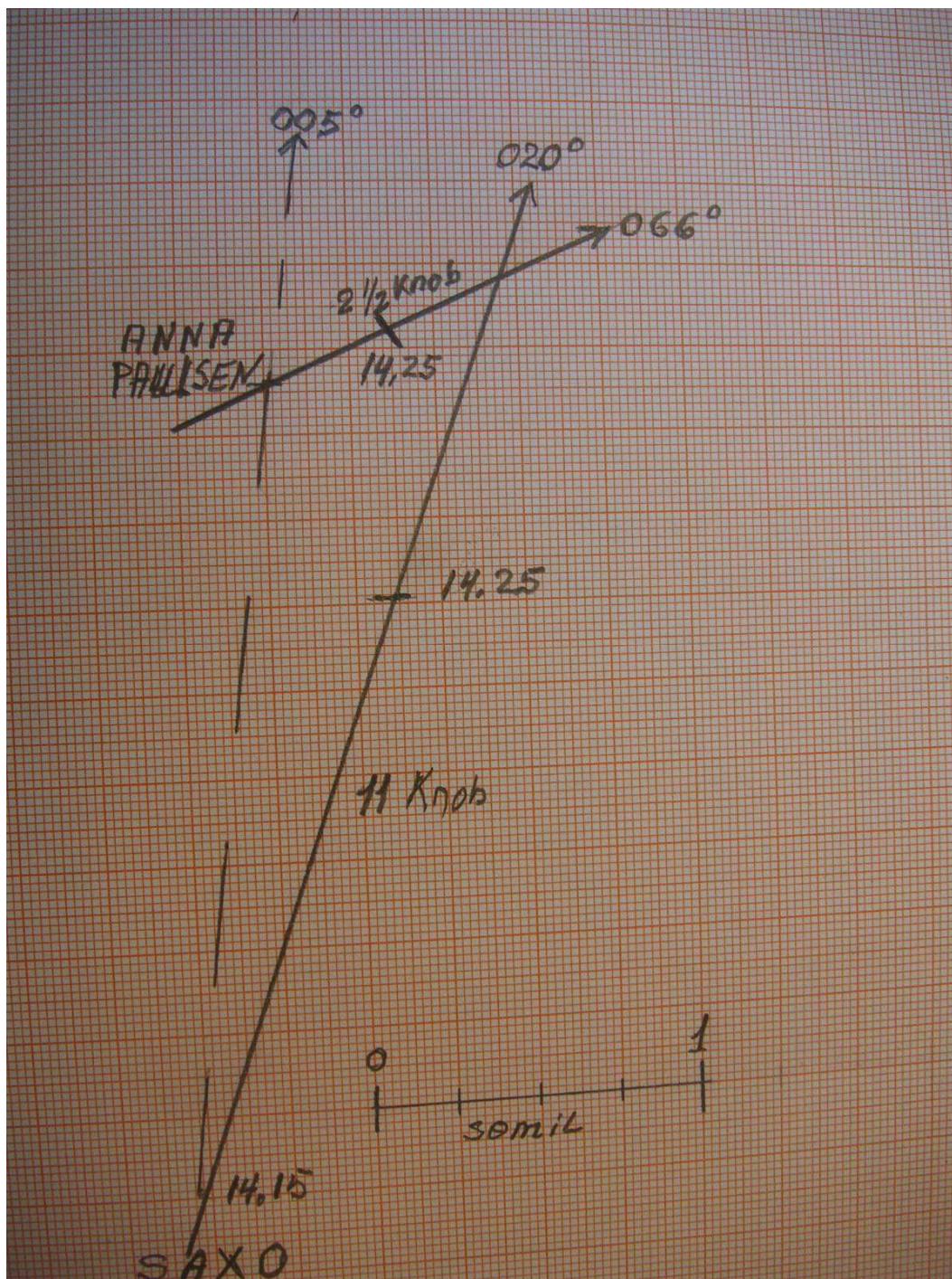
## **Analyse og konklusion**

SAXO's styrmands observation af ANNA PAULSEN er enten sket tidligere end 10 minutter før kollisionen, eller afstanden har været mindre end 2,4 sømil. Ellers kunne kollisionen ikke have fundet sted med de kurser og farter, som er oplyst, jf. Figur 1.

SAXO's styrmand observerede ingen signaler for fiskeri på ANNA PAULSEN, og han skønnede ud fra slæbestregen på radaren, at ANNA PAULSEN ville passere foran om SAXO i en afstand af ca. 0,3 sømil. Han holdt derfor kurs og fart.

SAXO's pejling til ANNA PAULSEN var ca. 15° om bagbord, det vil sige retvisende ca. 005°. ANNA PAULSEN sejlede på kurs 066°. SAXO var derfor indhentende skib i forhold til ANNA PAULSEN og havde som sådan vigepligt overfor ANNA PAULSEN i henhold til regel 13 i de internationale søvejsregler.

SAXO overholdt ikke sin vigepligt i henhold til regel 13.



Figur 1. Skitse tegnet af Opklaringsenheden

ANNA PAULSEN var i færd med at fiske, og fiskeskipperen har oplyst, at kutteren førte fiskelys og fiskesignal. Fiskesignalet var ophængt i kutterens mesanmast.





Figur 2. ANNA PAULSEN efter kollisionen. Foto taget af Skibsforsikringen i Frederikshavn.

Ovenstående billede viser, at ANNA PAULSEN førte fiskesignal for trawlfiskeri i mesanmasten.

SAXO's styrmand observerede ikke fiskesignalet, hvilket medførte, at SAXO ikke opfyldte sin vigepligt i henhold til regel 18.

Fiskeskiberen havde ikke observeret SAXO inden kollisionen. Han har derfor afskåret sig fra at kunne medvirke til at undgå kollisionen ved afgivelse af det i regel 34 omhandlede opmærksomhedssignal.

Kollisionen skyldes hovedsagelig manglende behørig udvig i begge skibe, jf. regel 5 i de internationale søvejsregler.

I SAXO medførte det en fejlagtig bedømmelse af passagesituationen samt en manglende erkendelse af, at fiskeskibet var beskæftiget med fiskeri, og at SAXO derfor havde vigepligt.

I ANNA PAULSEN medførte det en manglende observation af SAXO og kollisionen, og dermed tabet af muligheden for at bidrage til at undgå kollision.

3. februar 2009

Opklaringsenheden

## Report from the Division for Investigation of Maritime Accidents

# The collision between BLUE BIRD and HAGLAND BONA on 1st December 2008 in Randers Fjord.

### Factual information



Name	<b>BLUE BIRD</b>
Port of registry	Kingstown
Call sign	J8SK4
IMO number	8027391
Flag	St. Vincent & The Grenadines
Official Number	7282
Built	1982
Type	General cargo vessel
Gross tonnage	1115 BT
Classification society	Hellenic Register
Length overall	67.42 m
Breadth	11.26 m
Draught on day of collision	3.22m / 3.82m
Engine power	1192 kW
Number of crewmembers	8
Number of navigators	2



([www.shipspotting.com](http://www.shipspotting.com)) / © Lars Schmidt)

Name	HAGLAND BONA
Port of registry	Valletta
Call sign	9HYG8
IMO number	9132038
Register	Malta
Built	1996
Type	General cargo vessel
Gross tonnage	2456 BT
Classification society	Det Norske Veritas
Length overall	87.90 m
Breadth	12.89 m
Draught on day of collision	2.20m / 3.50m
Engine power	1501 kW
Construction	Double bottom
Number of crewmembers	8
Number of navigators	2

*In the following all times are local times (UTC +1 hour).*

At 2049 on 1 December 2008 HAGLAND BONA (outward bound) and BLUE BIRD (inward bound) collided in Randers Fjord close to a mutually agreed meeting point. Both vessels sustained damages to their port bows. In an attempt to avoid the collision, HAGLAND BONA grounded just east of the channel. BLUE BIRD was able to continue to Randers by its own power. HAGLAND BONA was taken afloat in the morning of 2 December, and subsequently anchored off Randers Fjord.

On the night of the collision the weather was good with a southerly wind 2-3 m/s, good visibility and no current.

### **Narrative**

BLUE BIRD arrived to a waiting berth in Hundested on 30 November 2008 at 2300 waiting to shift to the loading berth. There were no operations during the night. At 0900 on 1 December the vessel shifted berth, and the loading was commenced at 0950.

Loading of 716mt of iron bundles was finished at 1220 and the vessel departed without pilot on board at 1240 bound for Randers. BLUE BIRD passed the approach buoy to Randers Fjord at 1927, but did not embark a pilot. During the inbound transit in the dredged channel, the master and chief officer were on the bridge. The master was steering the vessel using manual hand steering and the chief officer was assisting.

HAGLAND BONA departed from Kragerø in Norway 30 November 2008 at 1245 and arrived to Randers 1 December at 0930. Discharging started at 0945 and was completed at 1850. The vessel departed from Randers at 1910 without pilot on board bound for Herre (Norway) to load timber / logs. From departure until the time of the collision the master was alone on the bridge.

When HAGLAND BONA departed from Randers, the master announced the departure on VHF channels 16 and 12. From a pilot on an outward bound vessel at the entrance to Randers Fjord, HAGLAND BONA was informed of the expected arrival of BLUE BIRD. HAGLAND BONA contacted BLUE BIRD on VHF channel 12, and it became clear that HAGLAND BONA could not clear the channel before BLUE BIRD had entered the channel. The master of HAGLAND BONA therefore recommended that the two vessels passed each other port to port at a position due east of Støvringgaard ISO WG.2s 4m (Approximate position of this meeting point is 56° 30'28N / 010° 13'77E – see figure 1). The master of BLUE BIRD agreed to the suggested way of passing and the passing point.

As BLUE BIRD passed Skalmstrup Vig the speed was reduced to below 6 knots as per local rules. When approaching the agreed passing point, the master of BLUE BIRD positioned the vessel as far to starboard in the channel as possible, preparing to pass the other vessel port to port. According to the master of BLUE BIRD he in fact at times was out of the channel on its starboard side. When BLUE BIRD was approximately 0.2 nm north of the passing point, the vessel was on the western edge of the dredged channel.

Approximately 15 minutes before the collision, when HAGLAND BONA approached the passing point from the south, the master of HAGLAND BONA observed that BLUE BIRD would enter the narrow stretch before HAGLAND BONA could clear this narrow part. The master therefore called BLUE BIRD on VHF requesting this vessel to reduce speed. The master of BLUE BIRD agreed, but HAGLAND BONA did not observe any reduction in BLUE BIRDs speed. HAGLAND BONA therefore increased his speed in order to clear the narrow stretch before BLUE BIRD entered. After HAGLAND BONAs increase in speed, the master of BLUE BIRD plotted HAGLAND BONAs speed to 8.9 knots.

According to a log-printer on board HAGLAND BONA showing date, time, and own vessels position, course and speed, the speed at 2036 was 4.4 knots. At 2040 and at 2045 the speed was 7.3 knots.

According to the master of BLUE BIRD, at 2037 – 12 minutes before collision –he reduced the speed to 3.2 knots / 320 rpm in order to let HAGLAND BONA clear the narrow part of the dredged channel.

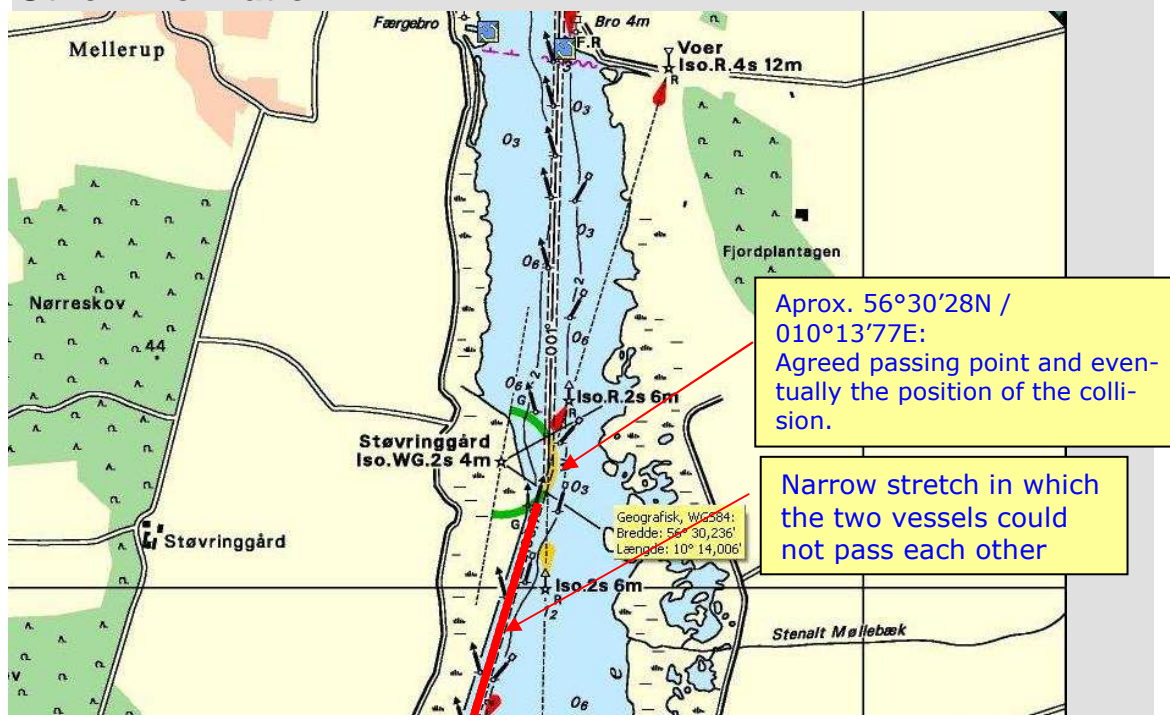
According to AIS-data from the Danish Maritime Safety Administration, at 2046 BLUE BIRDs speed was 5.3 knots.

Shortly before the end of the narrow stretch, the master of HAGLAND BONA observed that BLUE BIRD was no longer staying in the western part of the dredged channel, but was now drifting towards the eastern part. He therefore called BLUE BIRD on VHF, requesting that the vessel returned to the western side of the channel. The master of BLUE BIRD confirmed that he would return to the west-side of the channel, but from HAGLAND BONA no change of course was observed.

In order to avoid a head-on collision the master of HAGLAND BONA decided to continue on his present heading (which at that time was the heading kept to follow the channel in the narrows (017°) instead of turning to the course of the next leg of the channel (001°). At the same time he chose first 'St op' and then 'Full-Astern' on the engine, but shortly after the vessel ran aground outside the channel in approximate position 56°30'28N / 010°13'77E.

When the collision occurred, HAGLAND BONA had just started to have contact with the sea floor, and the speed was therefore very low. The two vessels hit each other on both vessels port bows, and BLUE BIRD slid down the port side of HAGLAND BONA. After the collision the two vessels confirmed that there was no danger for any crew or vessels, and BLUE BIRD therefore continued towards Randers.

### Other information



The channel where the collision took place is a dredged channel, and the assured water depth in the channel is 7.0 m. Inward bound the width of the channel from the Randers Fjord entrance to Udbyhøj is 30-50m. For the remaining parts of the channel the minimum width assured is 22m. According to local pilots the water depth in the part of Randers Fjord where the collision took place decreases rapidly to less than 1.0m outside the channel, causing the sea floor to form a steep subsea slope.

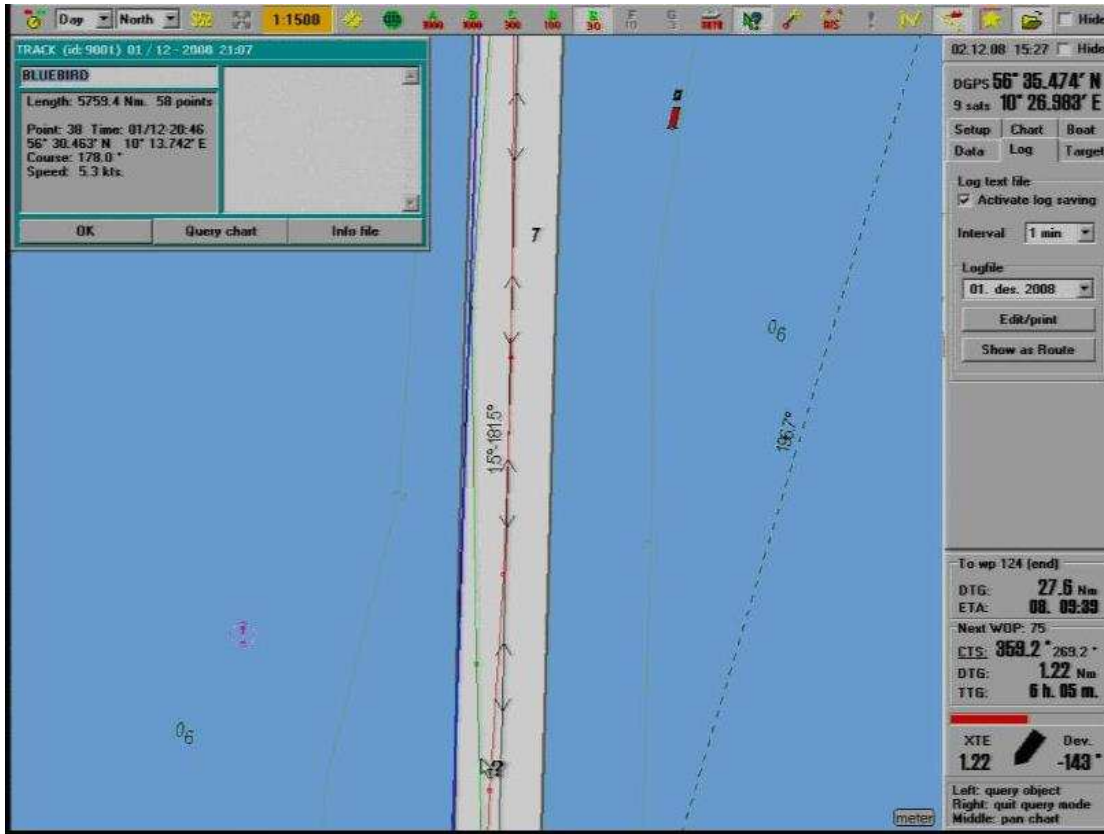


Fig. 2. – BLUE BIRD on the western edge of the dredged channel.

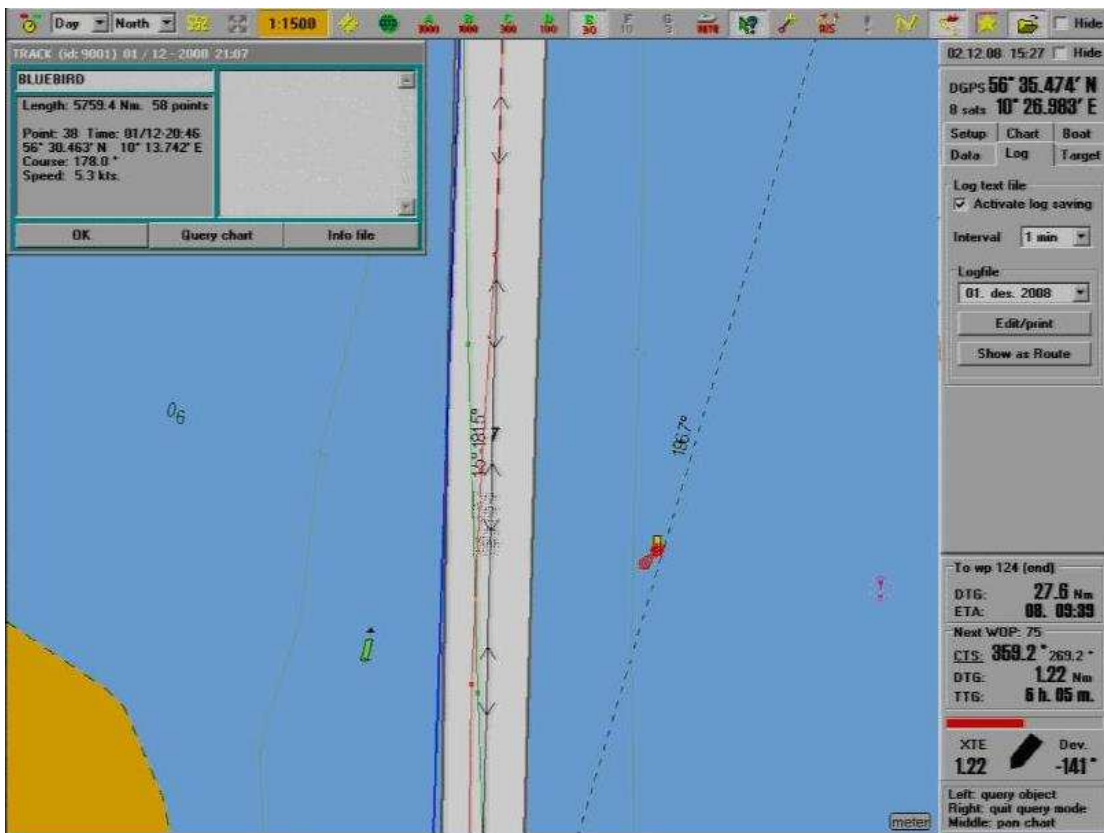


Fig. 3 – BLUE BIRD moving from the western edge towards the middle of the channel.

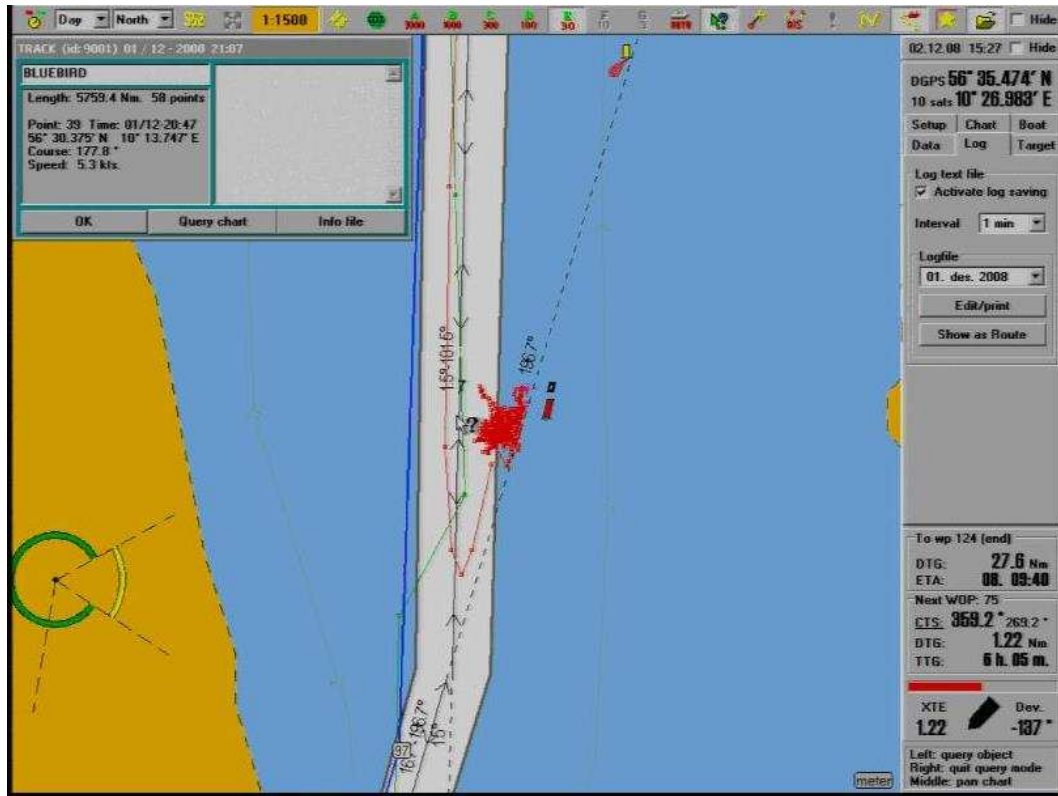


Fig. 4. – BLUE BIRD track continuing movement towards the middle. At the time of the collision, BLUE BIRD AIS-antenna seen on the eastern side of the channel.

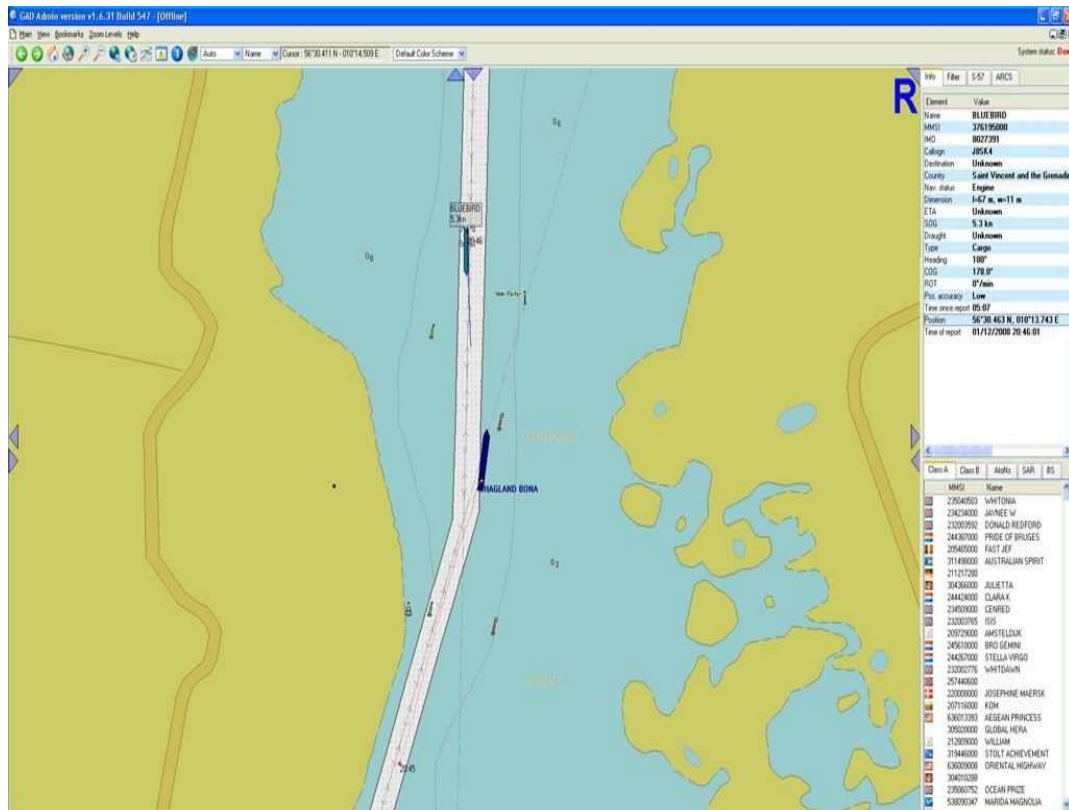


Fig. 4 – AIS-plot showing the HAGLAND BONA track prior to the collision.

AIS-data from the Danish Maritime Safety Administration (see fig.4) shows the HAGLAND BONA AIS-track in the eastern part of the channel immediately prior to and the grounded position following the collision. The shown position of BLUE BIRD in this plot is not updated, as the BLUE BIRD position in the Danish Maritime Safety Administration system was not updated since 2046. The actual time on the screen-dump on Fig.4 is 20:51:06. The BLUE BIRD position shown on this plot is 05 minutes and 07 seconds old.

The agreed passing point is not the position recommended by local pilots. Vessels with a draught less than 5.50m are recommended to pass each other off 'Voer anløbsbro', which is approximately 0.9nm north of the passing position agreed between the two vessels.

According to the master of HAGLAND BONA he has previously by a local pilot been requested to pass another vessel at this position.

## **Conclusion**

The collision between HAGBARD BONA and BLUE BIRD was caused by

- The interaction between the sea bed and BLUE BIRD forced the vessel towards the middle of the channel. Because of the interaction, it was not possible to return to the western part of the channel in order to pass HAGLAND BONA port to port in a safe distance.
- Due to the water depths outside the channel decreasing rapidly to below 1.0m in this area and the fact that the position was in immediate vicinity of a turn in the channel, the chosen position for passing each other was not the best choice.
- None of the two vessels had pilot on board. Local pilots would have been able to choose the best position for passing each other and would have been aware of the risk of interaction between sea bed and the vessels.

## **Recommendations**

Since 1998 the Danish Investigation Division has registered a total of 15 groundings in the Randers Fjord and its approaches. Three of the groundings were with pilot on board. This indicates an area which is difficult to navigate.

- Due to the difficulties when navigating Randers Fjord, the Investigation Division recommends that the Danish Pilot Authority reconsiders the regulation for the use of Pilots by vessels navigating the Randers Fjord.

8 February 2009

The Division for Investigation of Maritime Accidents



Paasiniaasartut nalunaarutaat

## **Kulilte-mik ipingajanneq Sunseeker 23 Daycruiser 14. september 2008**

### **Pisimasut**

Inuinnarnit pigineqartoq angallat motorilik ilusimigut taaguutilik "Sunseeker 23 Daycruiser" tallimanik issimasoqarluni aammalu allamik angallammik motorilimmik kalitaqarluni september 2008-mi ullusoq Nuup Kangerluatigoorluni Nuummuk sukkaatumik ingerlaarpoq.



Angallat motorilik  
Nanoq Consult

Ass: K.S. Nielsen,

Ingerlaartillutik issimasut tamarmik ajorsivimmata VHF atorlugu ikiortissarsiortoqarpoq taamalu annaassiniarneq ingerlanneqalerluni.

Angallat alla Nuup Kangerluaniittoq ikiorsiartorluni orniguppoq tassannganiillu inuk angallammuk motorilimmuk ikivoq takuaalu issimasut tamarmik ajorsilluinnarsimasut – taakkunanga pingasut ilisimajunnaareersimallutik. Suli oqalussinnaasortaasa ikiuiniartoq qinnuigaat angallat Nuummukaateqqullugu.

Nuummi politit annaassiniartartullu piareersimapput napparsimasut napparsimmavim-mukaatissallugit. Paasineqarpoq taakku tamarmik kulilte-mik najuussuisimagamik to-qunartortortinneqarlutik peqqarluinnarsimasut.

Kulilte-mik ipingajattoqarneranut pissutaavoq angallat sukkaatsumik ingerlatillugu oq-qumigaartoqarsimammat. Taamaammat angallatip motoriata benzinatortup eqqarfianiit sullulimmit gas-i umiatsiap uliata iluanut isaalerpoq issimasullu najuussuisilerlugit.

### **Kulilte**

Kulilte kemimi allanneqartarpoq CO. Aamma taaneqartarpoq carbonmonoxid, kulmon-oxid imaluunniit aamarsuit isserata pujua.

Kulilte ersinngitsuuvoq tiperarani aammalu gas-iulluni toqunarluinnartoq, silaannartut oqimaassuseqarpoq najuussuunneqarunilu toqussutaariaannaalluni.

Gas-i pinngortarpoq orsussa q ilaannakuusumik ikumagaangat – aammalu motorini benzinatortuni pinngulertornerusarluni motorini dieselitortuningarniit.

Kulilte anersaartoraangatta iiorartakkatsinnit ilt-imit (O<sub>2</sub>) 200 – 400-riaammik pilertorne-rulluni aatta aappalaartortaanut (hæmoglobin-inut) nipputtarpoq, taamalu aatta timitsin-nik ilt-ilersuinera annikillipallattarlugu. Taamaammat silaannaq iioragarput annikit-suinnarmilluunniit kulilte-qaraangat inuunermut navianaatilimmik toqunartortortinneqar-sinnaavugut.

### **Mianersoqqussut**

Una pisoq qujanartumik ajunngitsumik qaangerneqartoq aallaavigalugu Ajutoornernik Paasiniaasartut (Opklaringseheden) mianersoqqussutigerusuppaat kulilte-mik ipititsi-soqarsinnaasoq toqunartortortitsisoqarsinnaasorlu pingaartumik angallatini benzinator-tumik motorilinni motorip eqqarfianiit sullulimmit gas-i umiatsiap iluanut isaalerluni ka-tersuussinnaammat.

Angallat benzinatortumik motoreqarpat ajunnginnerpaasorinarpoq umiatsiami gas-imut sillimaniarluni kalerrisaarutiliisoqarpat, tamakkumi aamma kulilteqalernerani kalerrisaar-ismata.

24. februar 2009

Opklaringseheden - Paasiniaasartut

Redegørelse fra Opklaringsenheden

## **Kulilteforgiftning Sunseeker 23 Daycruiser 14. september 2008**

### **Hændelsesforløb**

En privatejet motorbåd af typen "Sunseeker 23 Daycruiser" med fem personer om bord og en anden motorbåd på slæb var en dag i september 2008 på vej for langsom fart i Godthåbsfjorden mod Nuuk.



Motorbåden  
Nanoq Consult

Foto: K.S. Nielsen,

Under sejladen blev alle ombordværende meget syge, og man kaldte hjælp over VHF, hvorefter en redningsoperation blev sat i gang.

En anden båd, der var i Godthåbsfjorden, sejlede til undsætning, og en person fra denne båd gik om bord i motorbåden og fandt alle meget syge – og heraf tre uden bevidsthed. De, der kunne tale, bad hjælperen om at sejle båden ind til Nuuk.

I Nuuk stod politi og redningsmandskab parat til at bringe de syge personer til sygehus. Det viste sig, at alle var blevet alvorligt forgiftet af kulilte.

Kulilteforgiftningen er opstået ved, at båden sejlede langsomt med vinden agterind. Derved er udstødsgas fra bådens benzinmotor trukket ind under kalechen, hvor de ombordværende opholdt sig.

### **Kulilte**

Kulilte har kemisk betegnelse CO. Den kaldes også carbonmonoxid, kulmonoxid eller kulos.

Kulilten er en klar, lugtløs og meget giftig gasart, der vejer det samme som luft, og som kan dræbe ved indånding.

Gassen dannes typisk ved en ufuldstændig forbrænding – og i højere grad i benzinmotorer end i dieselmotorer.

Kulilte binder sig 200 – 400 gange lettere til de røde blodlegemer (hæmoglobin) end den ilt (O<sub>2</sub>), man normalt indånder i atmosfærisk luft, og reducerer blodets evne til at transportere ilt rundt i kroppen. Dermed kan der selv ved en meget beskedent koncentration af kulilte i luften opstå en livsfarlig forgiftning.

### **Advarsel**

Denne hændelse, som endte godt, giver Opklaringsenheden anledning til at advare mod kulilteforgiftning, som kan ske, hvor udstødsgas fra især benzinmotorer kan samle sig i bådens indre.

Det er en god ide, hvis man har benzinmotor i sin båd, at installere en gasalarm, der også alarmerer for kulilte.

24. februar 2009

Opklaringsenheden

## Redegørelse fra Opklaringsenheden

# FRANKVICKI

## Kæntring og forlis

### 17. december 2008

#### Faktuel information



*FRANKVICKI på bedding i Stubbekøbing efter forliset. Foto: Opklaringsenheden*

FRANKVICKI, ND 109, er et kraelbygget fiskeskib fra 1973. Det er på 6,72 BRT, en længde på 7,71 m og har et dimensionstal på 22. Fiskeskipperen overtog fartøjet i 1979, og han har altid brugt det til bundgarnsfiskeri.

17. december kl. 13.30, i Hjelm Bugt, på vej i havn i roligt vej med få fisk i dammen og ca. 200 favne bundgarnsrad på dækket, kæntrede FRANKVICKI på positionen 54°55,3' N - 12°16,1' Ø. Fartøjet sank i løbet af ca. 15 m inutter. Fiskeskipperen, som var alene om bord, blev ca. 10 minutter efter reddet af redningsbåden fra redningsstationen Klintholm.

FRANKVICKI blev hævet et par dage efter.

## Hændelsesforløb

FRANKVICKI afsejlede fra Hårbølle den 17. december kl. ca. 08.15 for at røgte garn. Garnene lå på positionen 54°56,4' N - 12°18,1' Ø, ca. 1 time 15 min. sejlads fra Hårbølle havn. Fiskeskipperen var, som normalt, alene om bord. Det var klart og næsten stille vejr. Der var en svag dønning fra syd men ingen sø.

Da fartøjet nåede frem til garnene, begyndte fiskeskipperen at tømme ruserne. Der var kun få fisk, et par skrubber og ca. 15 ål. De kom i dammen.

Herefter tog fiskeskipperen en bundgarnsrad om bord. Den var ca. 200 favne lang og fuld af skaller. Den havde stået på positionen siden september måned. Fiskeskipperen overvejede at dele garnraden i to dele, men endte altså med at tage den hele ombord. Fiskeskipperen fordelte garnet jævnt over hele fartøjet, således at det lå på ret køl med et fribord på ca. 15 cm.

Herefter, kl. ca. 13.30, påbegyndte fiskeskipperen hjemsejladsen med tomgangsfart, ca. 2 knob, fordi han var klar over, at fartøjet var tungt lastet. Han kunne også mærke på fartøjets bevægelser, at stabiliteten var dårlig.

Kort efter fik FRANKVICKI et "skvæt vand" ind over styrbord lønning. Det medførte, at fartøjet fik lidt styrbord slagside. For at kompensere for slagsiden, flyttede fiskeskipperen garnet over i bagbord side og øste vandet ud med en pøs.

Da vandet i styrbord side var øst over bord, og med garnet flyttet over til bagbord, fik fartøjet bagbord slagside. FRANKVICKI var på dette tidspunkt på en sydvestlig kurs, langs med kysten af Møn, og havde den svage dønning ind på bagbord bov.

Efter en sejlads på ca. 2 sømil fik fartøjet sø ind over bagbord lønning, hvilket bevirkede, at det krængede yderligere til bagbord. Herved gled noget af garnet udenbords, hvilket øgede slagsiden.

Fiskeskipperen stillede skruen i neutral, og fartøjet stoppede. Han tog redningskransen fra styrehustaget og udsendte MAYDAY på VHF, kanal 16. Lyngby Radio (LYRA) svarede straks, og fiskeskipperen opgav sin omtrentlige position. LYRA meddelte, at der ville blive sendt en helikopter, som ville være fremme i løbet af 20-30 minutter. Herefter gik radioen død.

Der skyllede flere dønninger ind over fartøjets bagbords lønning, og det bevirkede, at FRANKVICKI kæntrede i løbet af 20-30 sekunder. Det lagde sig på bagbord side og begyndte at synke med agterenden. Fiskeskipperen tog redningskransen over hovedet og svømmede hen til fartøjets stævn, hvor han kravlede op og stillede sig på den spilkep, som er monteret i stævnen.

Her stod han i 10-15 minutter, medens fartøjet sank mere og mere. Da stævnen kom under vand, svømmede fiskeskipperen hen til garnet, som flød på vandet ca. 5 m fra den synkende båd. Han kravlede op på garnkuglerne og gled herved ud af redningskransen. Garnkuglerne holdt ham oppe, indtil redningsbåden fra Klintholm ca. 10 minutter senere bjærgede ham om bord.

Fra redningsbåden blev han løftet op i en helikopter og fløjet til Rigshospitalet. Han blev udskrevet samme dags aften.

En sandsuger hævdede FRANKVICKI to dage senere og bragte det til Stubbekøbing.

## Bundgarnsfartøjet FRANKVICKI



FRANKVICKI's dæk og dam

Lænsfrist til dam

Foto: Opklaringsenheden

FRANKVICKI er bygget i 1973 på Stubbekøbing Bådebyggeri. Det er et kravelbygget træfartøj på 6,72 BRT, en længe overalt på 7,71 m og med et dimensionstal (lgd. x brd.) på 22. Fartøjet er under dækket indrettet med motorrum agter. Foran for dette en dam med to adskilte rum og herefter et stuverum. I damtragten er indsat en afløbsrist fra dæk til dam i hver side. Der er ikke lænsporte i skanseklædningen. Skibet er udstyret med VHF. Der er en håndpumpe i motorrummet og en håndpumpe i stuverummet i forskibet. Der er ikke vandstandsalarm, og der er ikke selvstyrer.

Fiskeskipperen er 65 år. Han har fisket med bundgarn siden 1969 og ejet FRANKVICKI siden 1979. Han har ikke nogen teoretisk fiskeuddannelse.

Han fisker normalt alene. Normalt har fiskeskipperen en jolle på slæb, når han sejler ud for at sætte eller bjærge garn, men ikke hvis han kun skal røgte ruserne. På den omhandlede tur var slæbejollen ikke med.

### Redningsudstyr

FRANKVICKI var udstyret med en redningskrans på styrehustaget og en redningsvest, som var placeret i stuverummet i forskibet. Der var hverken redningsflåde eller redningsdragt om bord.

### Analyse og konklusion

FRANKVICKI fik et lavt fribord, da de 200 favne garn blev taget om bord. Fartøjet fik herved en dårlig stabilitet. Fiskeskipperen var klar over dette og sejlede derfor hjemad med laveste fart.

Da FRANKVICKI fik sø indenbords, og garnet skred, kæntrede fartøjet hurtigt. Bl.a. fordi vandet ikke kunne løbe af dækket, fordi der ikke var lænseporte i skanseklædningen. Herefter trængte vand efterhånden ned i fartøjet, så det sank.

FRANKVICKI havde hverken den foreskrevne redningsflåde eller den foreskrevne redningsdragt om bord.

Fiskeskipperen nåede imidlertid at slå alarm på VHF, kanal 16, og da redningsbåden fra Klintholm var tæt på, blev han reddet.

25. februar 2009

Opklaringsenheden



Report from the Division for Investigation of Maritime Accidents

## Chemical/Products tanker NORD SNOW QUEEN

### Accident to seafarer, 14 January 2009

#### Factual information

##### The ship

NORD SNOW QUEEN, IMO No. 9376828, is a chemical tanker of 24.066 GT and a length of 183.00 metres over all, built in 2008.



Sister ship of NORD SNOW QUEEN

Photo: Dampskibsselskabet NORDEN A/S

##### The accident

On 14 January 2009 whilst the ship was operating in the Mediterranean, the chief officer was on his way to the paint shop in the forecabin. When passing on a catwalk he hit his head against a stringer whereby he suffered severe bruise to his forehead. The chief officer fainted and fell on the deck which caused a broken arm and injury to his spine.

##### The chief officer

The chief officer is 45 years of age and 183 cm of height. He is holding a master's certificate and has approx. 13 years of experience in the merchant marine and before that approx. 12 years in fishing. He was newly employed by this company and had been on board for 10 days.

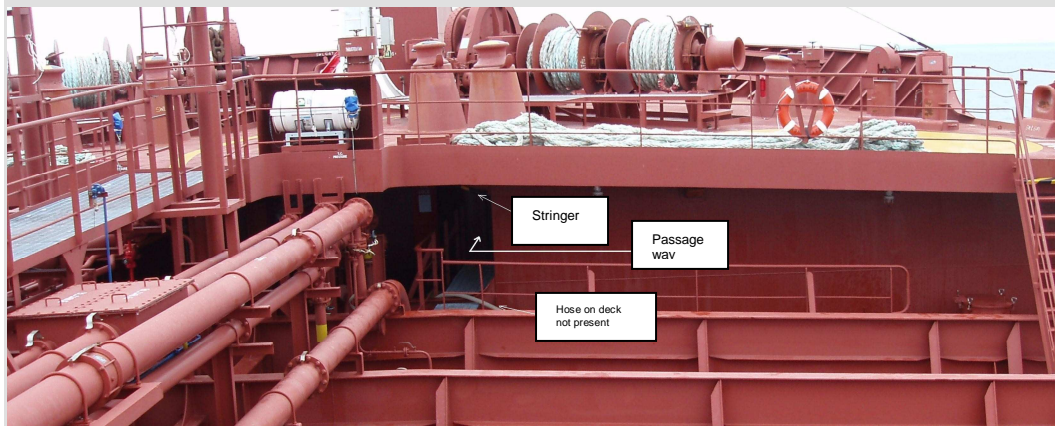
## Narrative

The following in this chapter is based on statements from the chief officer, the master and the shipping company and on minutes from the extraordinary safety committee meeting, held on board on 16 January 2009:

On 14 January 2009 before noon, while the tanker NORD SNOW QUEEN was en route from Gibraltar to Malta, an ordinary safety committee meeting was held.

At the meeting it was suggested that warning posters regarding ventilation in the paint shop was moved in order to avoid the poster not being visible when the door to the paint shop was open. It was decided that this was to be carried out immediately.

After noon, the chief officer went to the paint shop below the forecastle to see how the poster could be moved to a more visible position.



view to the forecastle and the place of the accident

Photo: D.S. Norden A/S

On his way to the paint shop, when passing on a catwalk on the starboard entry below the forecastle, he hit his head against a stringer, and due to the heavy impact he was knocked out and fell down unconscious. He was not wearing a protective helmet.

After a short while, the chief officer regained consciousness and was sitting on the catwalk for a moment before he went to the bridge, where he knew the master was. He could feel on the right side of his brow and on the left arm that that he was badly hurt.

On the bridge the chief officer was placed in the bridge couch while the master was checking his pulse and blood pressure etc. The chief officer had sustained concussion of the brain and a fracture of his left arm.

The officer was tested for alcohol, on his own initiative. The test showed no alcohol.

Radio Medical, Denmark, was consulted and advised that the chief officer was taken to hospital ashore.

The ship deviated from its original route and headed for Sicily.

During the afternoon the chief officer's breathing stopped five times, and each time it was regained by the use of a resuscitator.

JRCC Denmark contacted JRCC Roma that, in cooperation with JRCC Cagliari, arranged the evacuation and transportation by launch of the injured chief officer to a hospital south of Cagliari, Sardinia.

Subsequently, after he was hospitalized, it was ascertained that the chief officer also sustained injury to his spine/back. This was not noted on board, even though he had been moved around e.g. returning from the forecastle, during treatment where he was moved into sitting position etc., because he had severe pain from the other injuries.

#### **The catwalk and the lower stringer**

The catwalk is made of gratings approx. 25 cm above deck level. Where the catwalk, just abaft the forecastle, is turning from transverse to longitudinal there is a yellow painted lower stringer one has to step over when passing into the paint shop.

The height from the grating to the top of the lower stringer is 20 cm on one side and 23 cm on the other side.

#### **The upper stringer**

Where the catwalk is turning from transverse to longitudinal there is a stringer below the forecastle.

The height from the grating to this stringer is 165 cm at the lowest side increasing to 186 cm at the highest side.

The stringer was painted in yellow and black stripes.

#### **Weather conditions**

At the time of the accident there was north-westerly wind 10 m/sec., wave height approx. 2.5 m, air temperature approx. 12°C, good visibility and daylight.

The ship was steady in the sea, and the deck was dry with no slippery spots.

#### **Protective helmet**

It is standard company procedures and instructions that protective helmet is worn at all time during work on deck.

### **Analysis and conclusions**

The height between the catwalk grating and the upper stringer is 165 cm increasing to 186 cm.

The upper stringer was painted in yellow and black stripes, but not covered by any soft and protective material.

Where the catwalk turns from transverse to longitudinal there is a lower, yellow painted, stringer one has to step over.

The chief officer hit the upper stringer because this was situated over a catwalk in a relatively low height.

The lower stringer may have drawn the attention of the chief officer passing on the catwalk and thus prevent him from becoming aware of the upper stringer.

The chief officer did not wear a protective helmet.

This may have contributed to the severity of the incidents.

### **Initiatives and recommendations**

At an extraordinary safety committee meeting on 16 January, it was decided that a risk assessment for walking on deck was to be made.

Furthermore it was suggested to apply rubber protection pads to sharp corners on low hanging stringers and all yellow markings and yellow/black warning stripes to be renewed where necessary. This conclusion has been distributed to the fleet of sister ships as well as to the site office.

A new railing is planned to be erected on the catwalk near the stringer to slow down persons' passing to the paint shop.

The Investigation Division recommends the shipping company:

- to emphasize to all seafarers employed by the company the importance of wearing a protective helmet as stated in the company's own instructions and
- to implement considered/planned alterations of the railing arrangement at the catwalk to ensure the safe passage beneath the stringer on this ship and on sister ships as well.

4 March 2009

The Division for Investigation of Maritime Accidents

Report from the Division for Investigation of Maritime Accidents

## **Container ship OLUF MÆRSK**

**Accident to seafarer, 5 January 2009,**

### **Crew member injured while handling CO<sub>2</sub>-cylinders**

#### **Factual information**

##### **The ship**

OLUF MÆRSK is a container ship of 34,202 GT and a length over all of 247 metres and with a crew of 20.

##### **The accident**

When placing CO<sub>2</sub>-cylinders in racks on the deck, one cylinder, that had not been secured, tilted and hit a crew member who was squatting on the deck right beside the rack. The crew member sustained severe injuries to his head and was taken to hospital.

##### **The crew member**

The injured crew member is 24 years of age. He is qualified in advanced fire fighting, proficiency in survival craft, ratings performing of navigational watch and basic safety training. He signed on the ship as an Ordinary Seaman (OS) on 12 December 2008.

#### **Narrative**

*The following in this chapter is based on statements from the master, the chief officer and the able bodied seaman (AB) who was participating in the stowage of CO<sub>2</sub>-cylinders:*

OLUF MÆRSK arrived in San Antonio, Chile, on 5 January 2009 at 0650, and the ship was scheduled to depart from this port on the same day at 2100.

At every call in San Antonio empty CO<sub>2</sub> and oxygen cylinders are exchanged for recharged ones. These gases are used en route for controlling the atmosphere in reefer containers. The exchange of cylinders is normally carried out by the ship's crew, but depending of the number of cylinders, the local Maersk Reefer employees will assist.



The cylinders' placement on the main deck aft of the accommodation



Photo: The ship's master

35 cylinders are placed in transverse racks on the main deck aft of the accommodation on the starboard side as shown on the picture. The rest of the cylinders are to be stowed directly on deck and lashed to the coaming of the aftermost hold.

At this call at San Antonio, apart from the normal cargo operation, the ship was to load some 130 cylinders with pressurized CO<sub>2</sub> and oxygen, each weighing approximately 90 kg. Assistance would be given from the Maersk Reefer employees.

The instructions from the chief officer to the crew were to do this job, however to prioritize provision when arriving. He had planned the work hours for the deck crew so there were at least three persons on deck at a time, of these minimum two being experienced crew members, AB and/or bosun.

At approx. 1730, the chief officer noticed that the loading of CO<sub>2</sub> cylinders was in process, and at approx. 1840 he noticed that the bosun was resting and an AB and an OS were handling cylinders, still assisted by local Maersk Reefer employees.

The AB had joined the team on deck at 1800 as he relieved the bosun. He operated the crane and helped securing the CO<sub>2</sub> cylinders in the rack.

The cylinders were loaded by means of a cargo net from ashore and landed on deck right behind the accommodation. The cylinders were thus landed in a horizontal position, from where they were pushed along deck towards the storage rack.



A crew member in the same position as in the situation of the accident

Photo by the ship's master



The bottom of CO<sub>2</sub> cylinders, not firmly standing in the racks

Photo by the ship's master

When placing the CO<sub>2</sub> cylinders in the racks, each cylinder was lying in a horizontal position, and a piece of wood was placed at the end of each rack. Then each CO<sub>2</sub> cylinder was canted with the bottom onto the piece of wood to work them onto the level of the racks in order to shift them into the rack lane.

The AB was holding the cylinder on top while the OS was squatting on the deck holding at the bottom helping to push the cylinder to reach the rack lane. Suddenly at 1935, one cylinder already placed in the rack but not yet secured, fell over and hit the OS who was squatting on the deck. He was hit and contused at his head.

The AB raised the cylinder and secured it with a rope and ran to call the chief officer.

The chief officer arrived at the scene of the accident immediately when called. He found the OS lying on deck next to the racks.

The OS was conscious but shocked and bleeding from his head and face. Two of the local Maersk Reefer employees were with him. The chief officer asked one of them to call an ambulance whereupon he called the master himself and fetched the bandage box to give first aid to the injured OS.

At 1947, an ambulance arrived and further treatment to the injured OS was done by staff from the ambulance. At 2000 he was disembarked on a stretcher by the ship's stores crane and brought to hospital. Medical examinations revealed that he sustained contusion/heavy bruising in his right face orbit, close to the eye, but no fractures.

### **Securing of the CO<sub>2</sub> cylinders**

At the time of the accident four CO<sub>2</sub> cylinders had already been stowed in the rack but not secured. When standing in the stowage rack the CO<sub>2</sub> cylinders get very little support and can easily tilt, when the vessel is listing during cargo operation.

### **Protective helmets**

The crew members were wearing protective helmets during the work with the CO<sub>2</sub> cylinders.

### **Planning and instruction**

According to the master's report this was a standard task carried out at every call at San Antonio. Thus no specific planning of the work was made except that minimum two persons, one of which had to be AB or bosun, were needed for the job.

The ship is holding a risk assessment named "SJA" for Safe Job Analysis. At the time of the accident no SJA was laid down related to the handling of CO<sub>2</sub> and oxygen cylinders.

### **Work hours**

The OS was doing day work, and within 24 hours prior to the accident he had worked for 11 hours.

### **Safety committee meeting**

On 6 January 2009, the day after the accident, an extraordinary safety committee meeting was held on board. The agenda for this meeting was solely to discuss this



accident. Various suggestions as to how an accident like this could be prevented were given, and it was agreed that locking pins should be made to be placed on the upper part of the racks in holes already there, thus preventing CO<sub>2</sub> cylinders from capsizing during stowage. Furthermore it was agreed that it is inappropriate that the bottom support on the racks are elevated 9 cm from deck level and thereby making it necessary to lift the cylinders from deck. The work space is confined and stowage of the cylinders should be as easy and safe as possible. Further investigations will be made to as how this issue can be solved.

### **Corrective actions**

As an immediate corrective action locking pins were made to be inserted step by step when stowing cylinders in racks.

After the accident a Safe Job Analysis (SJA) for this job was laid down. The SJA contains possible hazard effects, consequences, descriptions and responsibilities.

The shipping company also conducted an internal investigation in order to find causes, establish lessons to be learned and recommendations to prevent recurrence. That report will be sent to the ships and parties of relevance.

### **Analysis and conclusions**

The rack gave no transverse support to the cylinders if not secured.

When placed in the racks and not yet secured the cylinders could easily tilt because of transverse movements of the ship during loading operations.

At the time of the accident four cylinders standing in the rack were not yet secured.

The CO<sub>2</sub> cylinder tilted because of movement of the ship and because it was not yet secured.

The cylinders needed to be lifted 9 cm from deck and guided into the rack to be stowed.

A crew member was squatting on the deck beside the rack engaged in stowing cylinders in the rack.

The crew member was hit and injured by the falling CO<sub>2</sub> cylinder.

A crew member squatting on the deck just beside the cylinder racks is in a very vulnerable situation and rather exposed to be hit by a tilting cylinder.

No Safe Job Analysis was laid down for this specific task, even though a large amount of CO<sub>2</sub> and oxygen cylinders used to be exchanged at each call of San Antonio.

No specific instructions were given to the crew members regarding this task except that at least two persons were needed one of which had to be an AB or bosun.

The work was not planned and organised to ensure safe working conditions.

The cylinders were not secured one by one because no instruction to do so was given.

### **Recommendations**

The Investigation Division recommends the shipping company to investigate how to handle and store large amounts of CO<sub>2</sub> and oxygen cylinders in a more safe and easy way.

The investigation Division recommends the shipping company to make the Safe Job Analysis that has been worked out for this ship after the accident valid for other ships handling gas cylinders in a similar way.

16 March 2009

The Division for Investigation of Maritime Accidents

## Statistiksager 1. kvartal 2009

### Statistical files 1<sup>th</sup> quarter 2009

Skibstype	Hændelse i detaljer	Kort beskrivelse af ulykken
High Speed Ro-Ro Passagerskib	Hårdtvejrsskade	En dansk hurtigfærge bliver under rejse i åbent farvand ramt af en forkert sø, hvorved skibet bremses mærkbart. Da det forsøges at åbne bovport kan denne ikke åbnes. Årsagen opgivet sin en mindre skævhed i en hydraulisk låsecylinder. Ved inspektion i havn blev opdaget indtrykninger af klædning i forskibet samt nogle bøjede 'knæ' indenbords. Skibet blev tilbageholdt indtil skader var repareret.
Fiskefartøj	Grundstødning	På forlægning fra Dragør til Rødby havn sejlede fiskeskibet på grund ved Henæs havn, hvor skipperen ville hvile natten over.
Fiskefartøj	Grundstødning	På vej ind til Hvide Sande grundstødte et 20 BT stort fiskeskib. Renden var stedvis tilsandet og sandpumperen var ikke færdig med uddybning. Fiskeskibet kom hurtig flot ved egen hjælp og fortsatte i havn. Der blev ikke konstateret skader.
Passagerskib	Andet	Kort før anløb af Ystad blev det konstateret, at en rude i bistroen var krakkeleret. Ruden blev slået ud af besætningen og det viste sig senere at vinduesrammen i aluminium var revnet. Nærmere undersøgelser viste at revnen var en udløber af en tidligere observeret revne, som var sprunget op igen.
Olietankskib	Kontaktskade	Under tillægning til oliepiere i Guldhavn med lods om bord kom manøvren ud af kontrol, hvilket bevirkede, at et 21329 BT udenlandsk tankskib i ballast ramte et hjørne af pieren med stor kraft. Skibet fik et ½ m <sup>2</sup> stort hul til en ballasttank i bagbord side ca. 2½ m over vandlinen.
Stykgodsskib	Grundstødning	Et mindre udenlandsk tørlastskib under anløb af havn mistede styringen på grund af lav fart og lægt vand ifht. Dybgang. Skibet kom derfor ud af den snævre gravede rende, og løb på grund. Skibet kunne dagen efter slæbes af grunden med kun mindre skader.
Kemikalietankskib	Grundstødning	Et udenlandsk tankskib med lods om bord gik med lav fart på grund på vej ind til Frederikshavn. Der var hård sydlig kuling og ca. ½ m lavvande. Grundstødningen skete på den nordlige kant af sejlrenden. Skibets kom flot ved egen hjælp ved stigende vande ca. 2 timer senere og fortsatte i havn. Der var ingen skader og ingen forurening.
Passagerskib	Kontaktskade	Under ankomst til Rostock svigtede kontrollen til pitch-propellerne, hvorved skibet bliver umanøvreedygtigt og efterfølgende tørner kajen. Årsagen er ikke blevet fundet.
Bugserbåd	Havari	Under bugsering af pram ud for Spaniens NV kyst i dårligt vejr sprang slæbewiren fra en bugserbåd på 282 GT. Trods bistand fra helikopter og resque båd lykkedes det ikke at genetablere slæbet, og prammen, som var lastet med bygningsmaskineri, drev på grund.
Containerskib	Arbejdsulykke	Under et dansk containerskibs passage af Biscayen i vind af orkanstyrke, faldt et besætningsmedlem på broen under en

Skibstype	Hændelse i detaljer	Kort beskrivelse af ulykken
		krængning på omkring 45 grader. Han kurede fra den ene ende af broen til den anden og fik herunder mindre skader i hovedet og på overkroppen.
Stykgodsskib	Grundstødning	Et dansk lastskib på 1449 BT grundstødte i norsk fjord i dagslys og fint vejr. Føreren var alene på broen. Han var optaget af lastepapirer og drejede for sent ved en bøje. Skibet blev trukket flot ca. 11 time senere og sejlede til kaj. Der blev ikke konstateret skader på skibet.
Kemikalietankskib	Arbejdsulykke	Under tilrigning af lodslejder for afsætning af lods i rute T ud for Skagen fra et udenlandsk tankskib på 24066 BT faldt en matros i vandet og forsvandt. Skibet satte sin MOB båd i vandet. Den kæntrede, og de tre ombordværende endte i vandet. De blev samlet op og fløjet til hospital i land. To af dem blev kort efter udskrevet.
Fritidsfartøj	Andet	En 20 årig mand afsejlede i stille vejr kl. ca. 15. Da han ikke var kommet tilbage efter mørkets frembud, tog en makker ud for at søge efter ham. Båden blev fundet tom og et par timer senere blev manden fundet drivende i vandoverfladen. Gas-håndtaget var brækket.
Uddybningsfartøj	Kontaktskade	Et uddybningsfartøj på 188 bt og 29,2 meter i længde var på vej til at anløbe Lynetten i Københavns Havn, hvor skibsføreren under manøvre forsøgte gentagne gange at slå bak på begge maskiner. Hovedmotoren ville ikke slå bak. Der blev derfor slået fuld baj på den bagbord hovedmotor for at stoppe fremdriften i skibet. Skibet tørnede kajen frontalt med ca. 1,5 knobs fart. Efter gentagne manøvrer lykkedes det at få den styrbord hovedmotor i neutral hvorefter skibet med manøvre på kun den bagbord. hovedmotor kom til kaj. Årsagen til manøvreproblemerne var for lavt hydraulisk tryk i omstyringsanlægget.
Containerskib	Kontaktskade	Under anduvning af Nuuk havn mistede skibet kontrollen med propelleromstyringen og sejlede ind i kajhammeren. Der skete ingen personskade, men skibet fik slået et større hul i stævnen ind til forepeak tanken.
Sandpumper	Havari	Under sandsugning blev flere stykker uekspoderet ammunition suget om bord i skibet. En granat eksploderede i skibets SB sandpumpe, hvilket resulterede i at pumpen flækkede og lækkede vand in pumperummet. Lækagen blev hurtigt afspærret ved hjælp af ventiler. Ingen kom til skade ved ulykken. Ingen forurening.
Stykgodsskib	Arbejdsulykke	Et mindre dansk fragtskib var på vej nordover i farvandet ud for NV Frankrig i dårligt vejr med høje bølger. Under en kraftig overhaling mistede styrmanden, som netop var kommet på broen for afløsning, balancen og rutchede fra den ene side af broen til den anden. Hans venstre for blev slemt skadet, og skibet sejlede til Brest, hvor styrmanden kom på hospital.
Sandpumper	Grundstødning	En dansk sandsuger på vej til Middelfart nord fra grundstødte nordøst for havnen, fordi strømmen overraskede den vagthavende navigatør. Skibet blev trukket flot ca. 10 timer senere. Ingen skader.
Stykgodsskib	Kontaktskade	Ved anløb til Port Moroni, ramte skibet en uafmærket under-

Skibstype	Hændelse i detaljer	Kort beskrivelse af ulykken
		vandshindring i sejlløbet ind til havnen. Det var sandsynligvis fundamentet til en søafmærkning, der ikke længere var synlig. Der var lods om bord, men denne oplyste ikke om undervandshindringen.
Lodsbåd	Grundstødning	Efter at have sat en lods af i det sydlige Lillebælt sejlede bådføreren alene tilbage mod Fredericia. Lige syd for Fænø faldt han i søvn og båden sejlede med 29 knob op på stranden.
Sandpumper eller stenfisker	Kontaktsskade	En mindre udenlandsk sandsuger/stenfisker kolliderede under sejlads i gravet snæver rende med en pram, der var opankret for uddybningsarbejder i renden. En jolle fortøjet langs den opankrede pram blev knust. Ellers kun små skader på både sandsuger og pram. Sandsugeren kunne fortsætte havneanløbet for egen maskine, og efterfølgende forsejle til værft for reparation af stålskader i skanseklædning og på bak.
Sandpumper eller stenfisker	Kontaktsskade	Et dansk entreprenørfartøj under arbejde i udenlandsk havn sejlede under havnemanøvre over sit eget anker, hvorved undervandsskroget beskadiges. Der opstod lækage, og ca. 200 liter diesel strømmer ud i havnen. Skibet gik til lokalt værft for reparationer.
Supplyskib	Kontaktsskade	Under havnemanøvre sprang flexkabel til omstyring af propeller. Skibet sejlede ind i kajen, fortsatte videre og ramte et andet skib, hvis trosser sprang. Situationen kom hurtigt under kontrol og der skete kun materiel skade.
Olietankskib	Grundstødning	Under sejlads i Nordsøen, blev der ikke ændret kurs rettidigt til sejlads gennem Slugen. Denne fejl blev erkendt 5 minutter før grundstødningen, men efterfølgende kursændring var ikke tilstrækkelig til at undgå grundstødning.
Fishing vessel	Collision	During transit to the fishing grounds, a Swedish fishing vessel collides with an UK registered wooden angling vessel, that was also in transit. The Swedish vessel was overtaking the UK vessel, but the duty officer of the fishing vessel did not observe the other vessel prior to the collision. The collision caused severe damages to the wheelhouse, the superstructure and the hull of the wooden vessel. The Swedish fishing vessel only suffered minor damages to the paintwork of the bow. The UK vessel lost steering as a result of the collision, and was towed back to harbour by the Swedish vessel.