



MARINE ACCIDENT REPORT DIVISION FOR INVESTIGATION OF MARITIME ACCIDENTS

# Divsion for Investigation of Maritime Accidents. Danish Maritime Authority, Vermundsgade 38 C, DK 2100 Copenhagen

Phone: +45 39 17 44 00, Fax: +45 39 17 44 16 CVR-nr.: 29 83 16 10

## The marine accident report has been issued on 16 November 2007

Case: 200711082

The marine accident report is available on our homepage: www.dma.dk.

#### 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 vessels. The Division also investigates accidents at sea on foreign ships in Danish waters.

#### **Purpose**

The purpose of the investigation 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.

#### Reporting obligation

When a Danish merchant or fishing vessel has been involved in a serious accident at sea, the Division for Investigation of Maritime Accidents must be informed immediately.

Phone: 39 17 44 00 Fax: 39 17 44 16 E-mail: oke@dma.dk

Cell-phone: +45 2334 2301 (24 hours a day).
Accidents is: 23 34 23 01

# **Contents**

1	Introduction4
2	Summary4
3	Conclusion4
4	The investigation5
5	Factual information5
	5.1 Data5
	5.2 Navigation data6
	5.3 Ship data6
	5.4 Weather data6
	5.5 Crew data6
	5.6 Shipping company data7
	5.7 The course of events7
	5.8 The shipping company's knowledge of the hijacking12
	5.9 The ship's navigation planning and the actual navigation13
	5.10 The watch
	5.11 Ship Security Alert System (SSAS)16
	5.12 Precautions against pirate attack
	5.13 Working hours/resting time
	5.14 Consequences
6	Analysis
	6.1 Decision regarding the journey20
	6.2 Navigation planning
	6.3 The watch20
	6.4 Precautions against pirate attacks21
	6.5 The pirate attack
	6.6 Ship Security Alert System (SSAS)22
7	Recommendations
	7.1 Procedure regarding piracy23
	7.2 The SSAS23
8	Measures23

## 1 Introduction

For many years, pirate attacks on ships have been a problem and internationally, with strong Danish support, a number measures have been initiated in order to fight piracy.

The Division for Investigation of Maritime Accidents has looked into the events that led to the attack on DANICA WHITE in order to produce material, which establishes a foundation for implementing further measures to reduce the risk of similar accidents.

This Report only includes the events leading up to the pirate attack and the hijacking and the background material for this course.

## 2 Summary

DANICA WHITE was proceeding from Sharjah in the United Arab Emirates to Mombasa in Kenya with a crew consisting of 5 men and with a cargo of drill pipes and drill cement when the ship was attacked on 1 June 2007 at app. 1015 by Somali pirates who took control of the ship.

The attack took place in position  $01^{\circ}50 \text{ N} - 50^{\circ}06' \text{ E}$ , 205 miles off the coast of Somalia.

The pirates demanded that the ship be sailed to the coast of Somalia and DANICA WHITE anchored off the coast of Somalia at the territorial waters on 2 June at midnight.

The ship was released on 22 August and sailed to Djibouti. From here the crew was flown home. There was no major damage to the ship. The 5 crewmembers did not suffer any physical harm. They are, however, examined for psychological problems.

#### 3 Conclusion

It was the decision of the charterer to take the cargo to Mombasa, which initiated the voyage.

It was the information from the charterer's agent in Bahrain, which led to the fact that DANISH WHITE changed the route further to the sea; app. 48 hours after the voyage was started.

The master had not received any clear instructions from the shipping company or the charter regarding the route at the passage off the coast of Somalia. (6.2)

Under these circumstances, navigating in waters where there is a risk of encountering pirates, the watch in DANICA WHITE was insufficient. (6.3)

DANICA WHITE's ISM contains a procedure on piracy. (6.4)

Neither the shipping company nor the charterer had provided the master with clear instructions regarding this navigation or about the precautions against piracy in connection with the navigation. (6.4)

The master did not take any additional precautions – such as increased lookout. (6.4)

No one on board saw the pirates, until they were on board. (6.4)

The pirate attack took place 205 miles off the coast of Somalia. (6.5)

If there had been proper lookout from DANICA WHITE, the pirate boats could have been spotted app. 30 minutes before they reached DANICA WHITE. However, due to the slow speed of the ship, DANICA WHITE could not have sailed away from the pirates, but the crew would have been able to raise the alarm in time and shown the pirates that they had been spotted. (6.5)

The master acted correctly by following the orders of the pirates. In doing so, he ensured the crew's safety in the best possible way. (6.5)

Neither SOK nor the shipping company received the SSAS alarm from the ship on 1 June. (6.6)

The master's statement concerning the SSAS alarm indicates a lack of knowledge about the functioning of the alarm. Therefore, the possibility that the master may have raised the alarm incorrectly cannot be excluded. (6.6)

Apart from the lack of reception of the alarm on 1 June, there are no indications of technical defects in the SSAS. (6.6)

## 4 The investigation

The Division for Investigation of Maritime Accidents has interviewed the 5 crewmembers and the master.

The Division for Investigation of Maritime Accidents has gone through DANICA WHITE's ISM and ISPS systems.

The Division for Investigation of Maritime Accidents has gone through the material on information and guidance on piracy.

All indications of time are local.

## **5** Factual information

# 5.1 Data

Type of accident	Pirate attack and hijacking
Date and time	1 June 2007 at 1015
Position	01°50' N - 50°06' E
Area of waters	The Indian Ocean
Injured persons	5 are examined for any psychological ill-effects

5.2 Navigation data

Stage of navigation	Navigation in open waters
Port of departure	Sharjah (at Dubai)
Date and time of departure	21 May at 1845

5.3 Ship data

5.5 Ship adia			
DANICA WHITE			
Nakskov			
OXMG2			
8401157			
D 2995			
DIS			
Denmark			
1985			
Bulk carrier			
997			
Bureau Veritas			
61.55			
588 KW			
World Wide			
Messages from the Danish Maritime Authority			
В			

# 5.4 Weather data

Wind – direction and speed in m/sec	SSW – 4
Height of wave	App. 1 meters
Current	Going N
Visibility	Good
Light/dark	Light

# 5.5 Crew data

Number of crewmembers	5	
Number of crew members certified to act as	2	
bridge watch		
Type of watch	2-shift	
Minimum safe manning	4	
Job on board	Age, certificates of Competency, other	
	certificates, education, training and sailing time	
Master	55-years-old	
	Master restricted, general radio certificate	
	Sailed as master since 1988, in the shipping	
	company H. Folmer & Co. as master since	
	1994. Signed on in Zeebrugge on 4 February.	
Mate	63-years-old	
	Master restricted, general radio certificate	

Marine accident report

	Sailed since 1965, varying between master and
	mate, second sign on in the shipping company
	H. Folmer & Co.
	Signed on in Izmir on 19 April.
Cook	48-years-old
	Sailed since 1979, as a cook in the shipping
	company H. Folmer & Co. since 2004.
	Signed on in Izmir on 19 April.
Ordinary seaman (OS) 1	26-years-old
	Ships assistant training (basic).
	App. 8 months of sailing on the DANICA
	BROWN in the beginning of 2000.
	Signed on in Izmir on 19 April.
Ordinary seaman (OS) 2	18-years-old
	Sea training school in the fall of 2006.
	1 month's sailing in January/February 2007.
	Signed on in Izmir on 19 April.

# 5.6 Shipping company data

Shipping company: H. Folmer & Co., Copenhagen

Operator: H. Folmer & Co., Copenhagen

The shipping company's Document Of Compliance (DOC) was withdrawn by the Danish Maritime Authority in May 2007 and the management was passed on to Erria A/S, who would have the responsibility of the individual ship in the shipping company as the ships underwent an ISM-audit one by one, to introduce the safety management system to Erria A/S in the next safe port.

The agreement was that DANICA WHITE would be inspected in Suez after the ship's voyage in the Persian Gulf. Due to the changed plans for DANICA WHITE, the inspection was changed to Mombasa. The inspection and the subsequent transfer of the management of DANICA WHITE took place in Djibouti after the ship had been released.

The shipping company has informed that Bureau Veritas has on 19 March 2007 renewed DANICA WHITE's SMC for a new 5-year period and had an intermediate inspection on the ISPS certificate. There were 2 Non Conformaties on the ISM and 3 on the ISPS, which were corrected immediately.

<u>The charterer:</u> Nico Shipping, USA

## 5.7 The Narratives

The following description of the course of events is based upon the Division for Investigation of Maritime Accidents' interviews of the 5 crewmembers, the master, the mate, OS 1, OS 2 and the cook, interview of the Owner and notes from the ship's logbook.



## Prior to the pirate attack

The Master came on board DANICA WHITE in Zeebrugge on 4 February 2007. From Zeebrugge, DANICA WHITE sailed to Venezuela and from Venezuela to Wilmington in North Carolina, where ammunition from the military weapons depot at Sonny Point was loaded. In Wilmington, the ship came under the American shipping company Nico Shipping's time charter (T/C).

DANICA WHITE left Wilmington on 22 March and arrived at Izmir in Turkey on 19 April. Here, the mate, the two OS and the cook were replaced. The Master and a third ordinary seaman (OS 3) remained on board. When the ship left Izmir, the crew consisted of a master, a mate, three ordinary seamen and one cook. This is the normal crew composition.

From Izmir, DANICA WHITE sailed through the Suez Canal to Al Hydaydah in Yemen, where some of the cargo was unloaded on 29 April. The ship continued from Al Hydaydah the same day at 2220.

From Yemen, DANICA WHITE sailed to Muscat in Oman where the ship remained from 7 May at 1310 to 8 May 2230, while a part load was unloaded. From Muscat to Abu Dhabi in the Emirates where the ship remained from 10 May at 1620 to 2230, a part load was also unloaded. The ship then stayed in Bahrain from 12 May 0610 to 1640 and then stayed in Kuwait from 13 May 2345 to 14 May 1150. The final port was Umm Qasr in Iraq where the ship arrived on 15 May at 1145 and the last part of the cargo was unloaded the same day.

OS 3 was replaced by OS 4 in Abu Dhabi on 10 May.

After the unloading in Umm Qasr, the lower hold needed to be cleaned and some lashing gear had to be moved. In connection with this work, which was done by the ordinary seamen. A hatch on the tweendeck was removed in order to pull up the gear from the lower hold. During this work, OS 4 accidentally stepped into the hole. He fell down to the lower hold and injured his right foot. He was brought to the doctor, who did not find anything broken and he gave him an analgesic. To begin with, he remained on board the ship.

DANICA WHITE sailed from Umm Qasr in ballast on 16 May at 1240, and the plan was that the ship would continue to Suez where it was to be handed over by the charterer. Here, another inspection would take place in preparation for handing over the management to Erria A/S.

On 16 May, one of the staff of the shipping company's found an offered cargo of drill pipes etc. from Sharjah at Dubai in the Emirates, to Mombasa in Kenya. The staff notified Nico Shipping of this. It was now up to Nico Shipping whether or not they wanted to accept the cargo or not. Nico Shipping chose to accept the cargo, which took place on 17 May. Nico Shipping rerouted DANICA WHITE to Sharjah by notifying the ship directly as well as informing the shipping company.

DANICA WHITE arrived in Sharjah on 18 May and during the next couple of days, drill pipes, drill cement and a container on the deck containing computer- and laboratory equipments (a operating/laboratory module) weighting a total of app. 1000 tons, were loaded.

OS 4 who had injured his foot in Umm Qasr, was brought to the doctor in Sharjah and his foot was put in plaster. After this, he was signed off due to illness and sent home from Dubai. Therefore, only two ordinary seamen were on board.

Before Sharjah, the two OSs participated in the sea watch as lookouts or helmsmen according to fixed schedule where the OS 1 had the watch from 00-06 and from 12-18 with the mate and OS 2 from 06-12 and from 18-24 with the master. OS 3 was the day man. They took turns every month. At one point, the day man replaced OS 2 (OS 4), because the master did not get along with OS 2.

The OS on duty, worked with the day man within normal working hours (08-17). Therefore, it was only outside normal working hours that the ordinary seamen ran the bridge watch. The ordinary seamen received a contractual wage increase for the time spent on watch.

After leaving Sharjah, the master cancelled the OSs' sea watch, because they did not wish to run the sea watch and do work on deck and because the Master did not want any more arguments with them. Also the mate did not think there was a need for an OS on the lookout.

DANICA WHITE left Sharjah on 21 May in the evening. On departure, the draught was 4.1 meters, which gave a freeboard of app. 1.5 meters.

Before departure, a voyage plan had been drawn up. The master had drawn up the voyage plan on his computer and selected WayPoints, courses etc. He had printed it and given it to the mate. The mate had filled out the voyage plan chart in the ship's SMS file (Safety Management System) and inserted the courses in the charts.

At first, the Master had drawn up the voyage plan with a passage distance of app. 140 miles off the coast of Somalia however, according to the master, they were told by the shipping company to stay at least 200 miles clear of Somalia, and thus the master had changed his plan accordingly.

According to the two OSs, the route was changed after DANICA WHITE had left Sharjah on the charterer's say so.

They received a local Mombasa chart on board in Sharjah.

According to the master, he had received various papers on piracy in Sharjah from the agent, which the agent had downloaded from the Internet and among these were the latest bulletins from MARLO (Maritime Liason Officer) in Bahrain and from the Piracy Reporting Centre in Kuala Lumpur.

DANICA WHITE has normal sea speed of 9-9.5 knots, and the expected arrival to Mombasa was app. 31 May. The weather was good when en route towards south. However, there were southern winds and a northward current and therefore the speed was reduced to 5-6 knots.

On 26 May at midnight, DANICA WHITE passed 330 miles east of the island of Suqutra and from here it continued at a south-western course along the coast of Somalia at a distance of 300 - 205 miles. There was not much traffic. The master and the mate were sharing the bridge watch according to their normal 6 - 6 working hours. Both radars were working and were indicating an area of 12 miles. One of the ship's 3 GPS' was on and the AIS was also on.

Every day, the master sent a report to the charterer and to the shipping company including the ship's position, ETA (Estimated Time of Arrival), course and speed etc.

On 31 May at app. 1800, DANICA WHITE passed a ship sailing in the opposite direction at a distance of app. 2 miles. On DANICA WHITE's AIS, the ship was stated as being 220 meters long, as being a Pilot ship with a fishing licence. The ship was named NAUTICA + another name. The Master thought it looked odd. He was able to see the ship visually and the length was less than 100 meters. They spoke of this on board.

In the morning, on 1 June before they were attacked, the container ship CMA CGM SIMBA, which was en route southwest, passed them. It passed at a distance of app. 5 miles.

#### The pirate attack

#### The master's statement

The attack took place on 1 June at 1015 on app. 2° northern latitude. The master was running the bridge watch alone where he was preparing some papers in connection with a new master who was taking over the ship in Mombasa. Furthermore, he was also noting the position, ETA, weather etc. for the shipping company. Both radars were on.

Suddenly, the master heard screams coming from the outside. First he thought that it was the ordinary seamen who were joking around. Then he heard a few crashes and realized that somebody was pulling the door to the wheelhouse.

The master did not see the pirates come on board the ship, and according to him none of the other crewmembers saw them either. Suddenly, there were 10 - 15 men with weapon in the wheelhouse. The Master put his hands up in the air and said that they could take whatever they wanted and that the crew would do as they said.

Before this, the master had managed to raise the SSAS alarm. The button lit up confirming transmission.

The Master set off the ship's general alarm to get the rest of the crew members to come to the bridge. The pirates did not believe that there were only 5 men on board.

The pirates had boarded the ship from 3 fibre-glass boats, one large boat with an inboard motor and 2 smaller boats with outboard motors. The boats were towed behind DANICA WHITE.

#### The mate's statement

The mate was off duty and was in his cabin. At app. 0930 he went to the toilet. When he came back to his cabin, he happened to look outside the window and saw the stern of a of a fibre-glass boat. The time was 0945. Then he went up to the bridge and informed the master that they were being attacked. The master was working at his computer. He had not seen anything.

The master told the mate that he had raised the alarm.

Immediately after this, the pirates entered the wheelhouse and pointed machine guns at them.

## The cook's statement

On 1 June, the weather was cloudy. At one point, he was heading towards the mess to get a cup of coffee. He heard a few crashes and at first, thought that it was the OSs who had launched some light flares, and therefore he continued towards his cabin with the coffee. Then he heard the ship's alarm, and realized that something as wrong.

Therefore, the cook went up to the bridge accompanied by the mate. The Master was alone on the bridge. When the pirates had entered into the wheelhouse, the mate had gone down to find the OSs, but he did not find them.

Afterwards, the pirates told the cook to find the rest of the crew and had a machine gun pointed at the back of his head. He went down and called the OSs, who had locked themselves inside, and told them to come up to the bridge. They opened the door and went up to the bridge.

## Statement by OS 1

On 1 June at 1000, he and OS 2 had finished the Friday cleaning below. They had had a break of 10 minutes and at 1015 were to continue the work, and they each sat in their cabins collecting themselves. Suddenly, the OS 2 came running in and shouted that pirates were attacking them.

OS 1 first saw the pirates when they were coming up to the deck. They had easy access to the ship. The freeboard was only app. 1 meter and they used a regular ladder with hooks, which they fixed to the deck.

They both panicked a little. He tried to call the bridge. Then he heard some shots, and realized that the pirates were already on board the bridge. They did not know what to do, but believed that the best thing would be to find a safe place.

They ran from the cabin down to the engine room and locked the door behind them. They sat there for app. 15 - 20 minutes ("to catch their breath"). They then agreed that it would be best to go up to the bridge, so that they did not put the others in danger as the pirates would realize that some of crew members were missing.

The OS 1 was aware of where the alarm button was. However, in that situation they did not think of raising the alarm.

On the way up to the bridge, - in their hallway – everything was calm. They could see some boats. They went into the cabin of OS 1 and locked the door. Shortly after, the cook knocked on the door and then the general alarm was raised. It was only on for a short while.

When they arrived on the bridge, they were all told to go down to the mess, with the exception of the Master, who stayed on the bridge.

The pirates had arrived in 3 fibre-glass boats. One of the boats was bigger than the other two and the biggest one was filled with oil drums.

## Statement by OS 2

He and the OS 1 had been cleaning the accommodation since 0800. At 1000, they took a break and at 1015 they were sitting in their own cabins and "were chilling". He heard a few crashes and he thought it was the cook. When the crashes continued, he looked out of the porthole and spotted the pirates on their way up the ladder to the bridge.

He panicked and shouted to the OS 1 that pirates were attacking them. They ran down to the engine room, locked the door and hid behind an auxiliary engine. They sat there for app. 15 minutes, after which they agreed that it would be best to go up so that they would not put the other three in danger, when the pirates realized that some of crewmembers were missing.

They went up to the cabin of the OS 1 and locked the door. Shortly after, the cook knocked on the door and told them to come up to the bridge. When they arrived on the bridge, they were told to go down to the mess. The master stayed on the bridge where he was looking at a chart together with a pirate. Shortly after, the course was changed headed towards land.

The OSs did not think of raising the SSAS alarm. Besides, the OS 2 did not know where it was. He was told about this later.

The pirates had easy access to the ship. Astern there was a freeboard of app. only ½ meter and thus they had access to the ship almost directly from the boats.

# 5.8 The shipping company's knowledge of the hijacking

On Saturday 2 June at app. 1300, an employee from the shipping company's office in Copenhagen received a call from an American warship informing that they had just observed DANICA WHITE headed towards Mogadishu with 3 boats in tow. They wanted to know if this was correct.

The employee from the shipping company immediately called the Owner. The Owner was on board DANICA RAINBOW in Gdynia. Shortly after, the Owner replied to the warship that they would investigate the situation and call back.

After this, he set up an emergency staff on DANICA RAINBOW's bridge, consisting of himself, the master of DANICA RAINBOW, the mate and 3 of the shipping company's regular machine fitters.

The master sent out a "captain's message" containing private letter to DANICA WHITE. There was no response to the message.

The office in Copenhagen investigated whether the destination of the ship had been changed (by the charterer). This was not the case.

SOK was asked if any SSAS alarm had been received. This was not the case.

After this, the American warship was notified that DANICA WHITE was not supposed to head towards Mogadishu, and that it seemed not to be under the shipping company's control.

The Owner spoke with SOK several times during the afternoon.

The warship informed that it had sailed closer to DANICA WHITE and that they had observed a disturbance with many people on the ship's bridge.

After receiving this message, an employee was sent to the shipping company's office, and the Owner started contacting the crewmembers' relatives.

## 5.9 The ship's voyage planning and the actual navigation

According to the ship's Safety Management System (SMS), after the ISM code, a passage plan has to be drawn up for the voyage prior to leaving a port, and this voyage plan is entered into "Passage Plan Checklist".

The master has explained that during the stay in Sharjah, he had registered the travel plan to Mombasa on his computer. The route was scheduled at app. 140 miles off the coast of Somalia. During a conversation with the Owner, he was told to reschedule the route to at least 200 miles off the coast of Somalia, and thus he corrected the voyage plan accordingly. He printed out the plan and handed it to the mate, who then entered it into the standard schedule for the voyage planning from DANICA WHITE's SMS and inserted it into the charts; BA charts no. 4703 and 2969.

The master had not previously heard of the general recommendations on keeping a clear distance of at least 200 miles off the coast of Somalia.

The mate has explained that he had drawn up a voyage plan for the passage from Sharjah to Mombasa at a standard schedule on board and that he inserted the route into the charts.

According to the mate, the charterer had communicated to the ship that they should keep a clear distance of at least 200 miles off the coast of Somalia and the travel plan was corrected accordingly.

The ordinary seamen have explained that the route was changed after leaving Sharjah on the charterer's say so.

According to the shipping company's mail correspondence, Nico Shipping received the MARLO Advisory Bulletin of 20 May 2007 regarding "Somali Coast" from their agent in Bahrain. Nico Shipping forwarded this bulletin to the shipping company, which then forwarded it to DANICA WHITE on 23 May at 1050. In the same mail, the employee in the shipping company adds the following:

"XX has said the following to the shipper of the present cargo.

Due to the high risk of pirates along the coast of Somalia, the Master has decided to go about 250 miles off Socotera and keep a distance off the coast of Somalia of 150 nm. At 2 S he will alter the course straight for Mombasa. We may have to ask him to keep another 50 miles off Somali, this has been recommended by Marlo.

The above taken into effect, the Master gives ETA Mombasa for June 3rd morning, and he will keep us updated daily."

On 24 May at 0928, DANICA WHITE's master sent out a position report to Nico Shipping including the information to the shipping company and Erria A/S. The position report which gives ETA Mombasa on 4 June at 0600 ends with the following note:

"We have readjusted our route according to your mail/recommendation, which means that the route has been prolonged with 90 nm."

Below are some of the positions entered into DANICA WHITE's logbook:

26/5 at 2350: 12°38,7' N - 59°59,7' E. Which is 330 miles east of the island Sugutra.

27/5 at 2350: 12°00,0' N - 60°00,0' E. Course 224°. The average speed for the last 24 hours is 7.5 knots.

28/5 at 2350: 08°11,2' N - 56°15,5' E. Course 224°. The average speed for the last 24 hours is 7.5 knots. Distance to the coast is 303 miles.

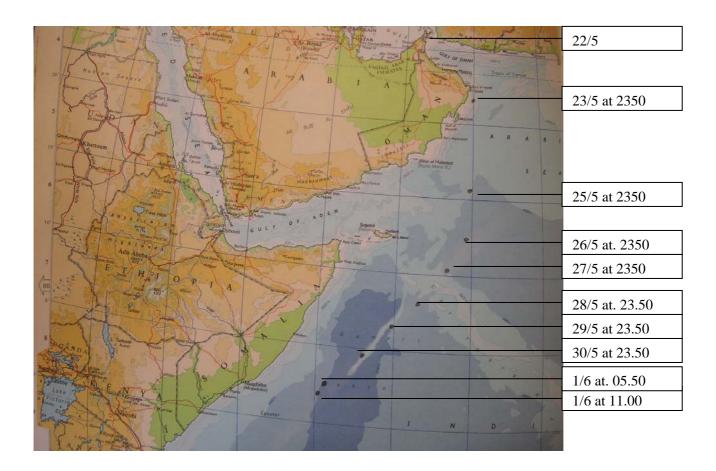
29/5 at 2350: 06°36,6' N - 54°44,3' E. Course 224°. The average speed for the last 24 hours is 5.2 knots. Distance to the coast is 285 miles.

30/5 at 2350: 04°39,7' N - 52°51,8' E. Course 224°. The average speed for the last 24 hours is 6.7 knots. Distance to the coast is 245 miles.

31/5 at 2350: 02°30,7' N - 50°47,8' E. Course 224°. The average speed for the last 24 hours is 7.5 knots. Distance to the coast is 206 miles.

1/6 at 0550: 02°07,5' N - 50°25,3' E. Course 224°. The average speed since 31/5 at 2350 is 5.5 knots. Distance to coast is 205 miles.

1/6 at 1100: 01°50,3' N - 50°06,1' E. Distance to the coast is 205 miles.



## 5.10 The watch

According to DANICA WHITE's SMS, the mate has to draw up the watch plan schedule for the crew. The mate also has to register the crewmembers' records of resting hours. The mate hands in the records to the master at the end of the month, and the records of resting hours are sent back to the shipping company along with the monthly accounts.

Normally, DANICA WHITE had a crew of 6 men, the master, the mate, three OSs and one cook.

The sea watch on board was arranged in such a way that the master and the mate had a 6-6 hours schedule as the navigators on duty. Two out of the three OSs also had similar 6-6 hours schedule as lookout man/helmsman. OS 3 was a day man and did not take the sea watch. The OS on duty worked with the day man within normal working hours (08-17).

In port, the OSs kept an entrance log at the gangway.

On 12/5 at 1810, the following has been entered into DANICA WHITE's logbook: "OS XXX leaves the watch – does not wish to keep a lookout – believes that he is entitled to sit down." On 13/5 at 1000, the following has been entered: "no lookout".

On 21/5, shortly after DANICA WHITE left Sharjah, one of the OSs was signed off due to illness. After this, only two OSs were left on board.

Subsequently, the master decided to stop the OSs' sea watch. According to him, this decision was taken on basis of the fact that he did not want further discussions with the two OSs, who did not want to carry out the sea watch in addition to the cleaning and keeping up the maintenance of the deck.

Therefore, during the period from 21/5 at 1845 (departure from Sharjah) to 1/6 at 1015 (the pirate attack), only the navigator on duty was present on the bridge.

No steps concerning the watch were taken in connection with the passage of waters outside Somalia.

The pirates were not observed from DANICA WHITE until they were on board.

## 5.11 Ship Security Alert System (SSAS)

The SSAS is an "attack alarm", which is activated on board in case the ship is threatened by a pirate or terror attack. The security alarm is activated at a pre-appointed authority in land and it cannot be heard on board or by any other ships. By activating the alarm, the ship's data, position etc. are automatically sent to the appointed authority. In the case of Danish ships, the alarm is activated at Admiral Danish Fleet (SOK) and to the ship's shipping company.

The security alarm must be able to be activated from the bridge and at least from one other place on the ship. It is compulsory for all Danish ships, including DANICA WHITE, which are under the ISPS code. All crewmembers must be informed of the position of the alarm, in case they have to activate it themselves and to avoid activating the alarm by accident.

In DANICA WHITE, the security alarm is a TT-3000SSA, which transmits on Inmarsat-C. The alarm can be activated from the bridge and from another part of the ship. The control panel consists of a green and a red button. The green button is a test button and the red button is the alarm button. There is a hinged plastic cover over both buttons to prevent that a blow activates the alarm by accident.

The green button gives out a constant light, which indicates that the system is active.

The alarm is activated when the red button is pressed in and it stays in.

The alarm signal starts transmitting after 30 - 33 seconds. If the red button is pressed again before the 30 - 33 seconds, the alarm is disconnected before the signal has been transmitted and the green button will flash slowly. You cannot see when the alarm is activated.

The SSAS can be tested locally without transmitting a signal, by using the green test button together with the red alarm button. By using the two buttons, the SSAS also transmits a test message to the shipping company. The message will show that this is a test. Finally, a "real" test can also be performed where the alarm is activated as it would be in a situation where the ship is under threat. Before activating a "real" test, SOK has to approve this.

According to the ISPS code, there has to be procedures for testing of the SSAS.

According to DANICA WHITE's Ship Security Plan (the SSP), a test of the SSAS has to take place every third month.

At the time of the hijacking, the Danish Maritime Authority's guidance did not require periodic testing of the SSAS. In connection with the updating of the regulations for the SSAS, it has been suggested that there should be a requirement of having the system "real" tested when the system is installed and also in connection with the annual radio inspection.

Up until now, the normal procedure has been to test the SSAS at the ISPS audits.

The master has explained that he pressed the SSAS alarm, and the button gave out a light signalling that it was transmitting.

Furthermore, the master has explained that the firm SEACOM in Ærøskøbing tested the alarm system when the ship was in Wilmington. The alarm was tested twice when the radio engineer transmitted the alarm over his own computer. The shipping company received the alarm and returned the text, which they had received.

Seacom's operator has confirmed that he tested the system in Wilmington and that he checked the software, frequency etc. It functioned correctly and was approved by the classification society.

SOK has informed that on 15 March (Wilmington) they received a call from the shipping company, where they were told that on that particular day the alarm would be tested, and that the alarm was not supposed to be transmitted to SOK. However, if the alarm was transmitted to SOK anyway, the shipping company could be contacted on a specified number.

The master has explained that he had instructed the new crewmembers in the use of the alarm, and made them aware of not pressing the alarm button. He showed them where both the alarms were placed.

Lastly, the master has explained that on board, they did not test the alarm themselves and he did not seem to have seen a test button on the system.

In connection with the class survey after DANICA WHITE arrived to Djibouti on 28 August, the alarm was tested and it worked as it was supposed to.

SOK has informed that they did not receive the alarm on 1 June.

On 2 September, SOK has registered a normal live test for DANICA WHITE.

# 5.12 Precautions against pirate attacks

For many years, pirate attacks on ships have been a problem and internationally, with strong Danish support, a number of measures have been initiated in order to fight piracy, especially UN's International Maritime Organisation (IMO). IMO and a number of international, vocational organisations have sent out guidelines for shipping companies/operators, masters and crews concerning precautions against pirate attacks.

IMO's Guidance on Piracy And Armed Robbery Against Ships can be found in the newsprint MSC/Circ.623, which dates back to the end of the nineties. The circular contains a number of recommendations to both the crew and the Owner on how to prepare navigation in waters where there is a risk of encountering pirates, and how to react if the ship is under attack or if an attack is attempted.

One recommendation is to intensify the surveillance by increasing the lookout, both visually and by radar. In this connection, it is stated that an early recognition of a pirate attack will provide more time to activate the alarm and the opportunity to show the pirates, by manoeuvring and such, that they have been spotted and this can result in them abandoning the attack.

The circular was last revised in 2002 and today it can be found in the newsprint MSC/Circ.623/Rev 3 of 29 May 2002. The Danish Maritime Authority sent the newsprint to the shipowner's associations and to the seafarer's organisations on 10 July 2002.

The International Shipping Federation (ISF), International Chamber of Shipping (ICS) and BIMCO are some of the organisations that have published the Master's Guide on Piracy and Armed Robbers.

The International Maritime Bureau has set up an IMB Piracy Reporting Centre in Kuala Lumpur. The Centre publishes weekly reports on pirate attacks on the Internet website <a href="www.icc-ccs-org">www.icc-ccs-org</a>. The reports are based on statements concerning the events from the shipping companies/operators and ships.

The Maritime Liaison Office (MARLO) Bahrain is the link that connects USA's naval forces and the civilian shipping in the Red Sea, the Indian Ocean and the Persian Gulf. It provides with information on maritime events, including pirate attacks, on the Internet website <a href="https://www.marlobahrain.org">www.marlobahrain.org</a>.

The Danish Maritime Authority has through a number of articles in trade journals, meetings with the maritime organisations and at lectures supplied with information about piracy, including which areas that are mostly exposed to pirate attacks, about which precautions that have been taken internationally in order to fight piracy and about what the shipping companies and ships can do to fight threats from the pirates.

In the fall of 2005, MARLO Bahrain recommended that ships should stay at least 200 miles off of the coast of Somalia.

MARLO Bahrain repeated its recommendation in MARLO Advisory Bulletin 20 May 2007 due to a number of pirate attacks outside of Somalia in 2007, of which several took place a fair distance from the coast.

The Danish Shipowners' Association repeated this in 2005 in a recommendation that suggested staying 200 miles off the coast of Somalia. This recommendation was sent out through the shipping association letter no. 24/2007 of 22 May 2007. The Shipowners' Association of 1895 also sent out the shipping association letter. DANICA WHITE's shipping company is member of this association.

The Owner states that he knows of the MSC Circ. 623 and that it is probably present on board the ships. Every shipping association letter that the Owner receives is forwarded to the ships.

The Owner believes that the circular was included in the ISPS code.

In the Safety Management System (SMS) on the shipping company's ships there is a page on piracy and the purpose of this page is "to provide with information about the procedure for piracy". One thing that is mentioned here is that it normally takes place in territorial waters and that the captain, the mate and rest of the crew must be on guard of this risk, especially in areas where the attacks are frequent.

It is also stated that the pirates often board the ship from small vessels, including everything from canoes to speedboats. It is also recommended that there should be kept watch.

The Master of DANICA WHITE did not know of MSC Circ. 623. He had not taken any specific precautions when sailing along the coast of Somalia. According to the Master and the other crewmembers, they had not imagined that this could take place when they were so far off the coast.

## 5.13 Working hours/resting hours

The mate registers the resting hours records on board. The records are then sent back to the shipping company together with the monthly accounts.

On 11/10, the latest records of resting hours for April for DANICA WHITE were sent back.

Thus, the Division for Investigation of Maritime Accidents has not seen records for May.

According to the records for April, together with the notes in the ship's logbook, there have been no problems in observing the regulations for the resting hours.

During the period from 7 May to 15 May, DANICA WHITE had a number of short port calls. As mentioned, the Division for Investigation of Maritime Accidents has not gone through the records for May and therefore cannot say whether the port calls have caused any problems in connection with observing the regulations for the resting records.

According to the ship's logbook, no activity had taken place on board, from the time of the sailing from Sharjah on 21 May until the attack on 1 June, which could provide problems in observing the regulations for resting hours.

## 5.14 Consequences

Besides a large clean-up job, the damage to the ship was limited.

The crew did not suffer any physical harm, but after arriving home they were all examined for any psychological problems.

# 6 Analysis

## 6.1 Decision regarding the voyage

DANICA WHITE was scheduled to sail in ballast to Suez after being unloaded in Iraq.

The day after it left Iraq, the charterer decided that the ship should take on cargo from Sharjah, at Dubai in the Emirates, to Mombasa in Kenya. It was the shipping company's staff that made the charterer aware of this cargo.

It was thus the decision of the charterer to take the cargo to Mombasa, which initiated this voyage.

# 6.2 Navigation planning

According to the statement of the master, he had minor knowledge regarding pirate activities off Somalia. He did, however, not think that they would operate so far out at sea.

The master did not know of the general recommendation advising to stay at least 200 miles off the coast. Nor did the master know of the information given by MARLO on the hijackings taking place at more than 200 miles off the coast.

The master's first voyage plan was therefore 140 miles from the coast.

According to the mail correspondence from the shipping company, it was the information from the charterer's agent in Bahrain, which led to the fact that DANICA WHITE's Master changed the route further to the sea 48 hours after the voyage, had been initiated.

The master's final choice of route and acting upon the general recommendation to stay at least 200 miles off the coast of Somalia seems to be due to the fact that the charterer's agent received information, which he then forwarded to the charterer.

The master had not received any clear instruction from the shipping company or the charterer about the route at the passage off the coast of Somalia.

## 6.3 The Watch

According to DANICA WHITE's Minimum Safe Manning, the crew must consist of at least one Master, one chief officer and two ordinary seamen.

Furthermore, the ship normally has one OS and one cook on board.

With three ordinary seamen on board, it is possible, in relation to the resting hours regulations, to let two of the ordinary seamen be on a 6-6 hour sea watch as navigators, and let the third OS operate as day man for the cleaning and run-down work on deck.

During the actual sailing, there were only two OSs on board because the third had been signed off due to illness shortly before departure.

With two ordinary seamen on board, it was still possible, in relation to the resting hours regulations, to let one OS take the lookout watch in the dark hours and also to clean the ship.

During DANICA WHITE's passage off the coast of Somalia, a sail of 8-9 days and nights should have established an increased lookout, as recommended in MSC/Circ.623, and as stated in the ship's procedure for piracy under the wording "Stay alert". This could have been done with two OSs on board, however the time to do any other work would have been very limited, if the resting time regulations were to be observed.

During this sailing, only the navigator on duty was on the bridge because the Master had decided that the OSs were not to take the sea watch. The navigator on duty was therefore the only one on the lookout, also in the dark and no increased lookout had been established, even though the sailing took place in an area where there is a risk of pirate attack. Lastly, the Master was alone on the bridge during the pirate attack, occupied with other things than the sailing of the ship and the lookout.

Under these circumstances, the watch on DANICA WHITE was insufficient.

# 6.4 Precautions against pirate attacks

According to the given statements, neither the Master nor the rest of the crew members had imagined that pirate attacks could take place so far out at sea.

The master had apparently not noticed the information in the mail, which he received from the shipping company on 23 May in which is repeated the MARLO's information on hijacking of merchant ships far off the coast of Somalia.

The master was not aware of the circular with IMO's guidance on precautions against piracy. The Danish Maritime Authority has sent out the circular to the shipping associations and to the seafarer's organisations. The Owner knows of this and according to him it should be on board the ships.

During the recent years, the Danish Maritime Authority has provided much information on piracy and the precautions against pirate attacks.

DANICA WHITE's SMS contains a procedure on piracy.

Neither the shipping company nor the charterer had provided the master with clear instructions regarding this navigation or about the precautions against piracy in connection with the navigation.

The master did not take any additional precautions – such as increased lookout.

No one on board saw the pirates until they were on board.

## 6.5 The pirate attack

The pirate attack took place at 205 miles off the coast of Somalia.

There was light and the weather was clear. The master was alone on the bridge. The four other crewmembers were below.

The pirates came, fully armed, in 3 fibre-glass dinghies. They climbed on board the astern with the help of ladders.

If there had been proper lookout in DANICA WHITE, the boats of the pirates could have been spotted app. 30 minutes before they reached DANICA WHITE. The crew would thus have had the opportunity to raise the alarm in time and to prepare for the attack. Through manoeuvring and such, the crew could have shown the pirates that they had been spotted and that the crew was prepared for their attack.

Due to wind and current, DANICA WHITE was at a slow speed, app. 5 knots, and the ship had no chance of sailing away from the pirates even if they had spotted them sailing towards DANICA WHITE.

The master acted correctly by following the orders of the pirates. In doing so, he ensured the crew's safety in the best possible way.

## 6.6 Ship Security Alert System (SSAS)

According to the Master, he had raised the SSAS alarm, the alarm had indicated that it had been activated, there were no test button on the alarm and the crew itself does not perform tests of the alarm system.

Neither SOK nor the shipping company received the alarm on 1 June.

On 15 March, the SSAS alarm had worked and it was also working when it was tested after the ship had been released.

The master's statement indicates that there is a lack of knowledge about the functioning of the alarm. Therefore, the possibility that the master may have raised the alarm incorrectly cannot be excluded.

Apart from the lack of reception of the alarm on 1 June, there are no indications of technical defects in the SSAS.

## 7 Recommendations

# 7.1 Procedure regarding piracy

#### To the shipping company/the operator

The shipping company/the operator is recommended to lay down a written shipping company procedure. This procedure should state that the shipping company/the operator must provide the ships with information on areas that are potentially threatened by pirates when they pass through or call at a port in such areas. Furthermore, before the voyage the shipping company/the operator must contact the master to agree on the precautions, making the passing/the call as safe as possible.

## To the shipping company

The shipping company is recommended to revise the procedure for piracy, which can be found in the ships' SMS. The procedure should include detailed descriptions on how the crew can prepare for navigation in areas that are threatened by pirates and take measures in case of pirate attacks or pirate threats.

In this connection, it is recommended to find inspiration in MSC Circ.623/Rev of 29 May 2002.

## To all Danish shipping companies

All Danish shipping companies are recommended to check whether all their ships are familiar with the IMO Circ.623/Rev of 29 May 2002 and that the circular's guidance is properly implemented in the ships' SMS.

The Danish Shipowner's associations are requested to pass on this recommendation to their members.

7.2 SSAS

## To the shipping company

The shipping company is recommended to take measures to ensure that the masters/SSO are fully familiar with the function of the SSAS, including the written test procedure for the system.

#### 8 Initiatives

The Division for Investigation of Maritime Accidents has been informed by the Danish Maritime Authority that the following initiatives have been taken as a result of the hijacking of DANICA WHITE.

The Danish Government has through the Danish Ministry of Foreign Affairs set up a cross-ministry working group, with the job to provide with suggestions on which international initiatives DANICA WHITE-case can give rise to. The Danish Maritime Authority, the Danish Ministry of Justice and the Danish Ministry of Defence are also represented in this working group.

The Danish Maritime Authority will take the initiative for IMO to elaborate on the guidelines for preventing piracy and armed robbery against ships and also to increase the existing resolution regarding Somalia.

On the Danish Maritime Authority's homepage, links to IMO and IMB (International Maritime Bureau) will provide information on attacks on ships. This way, both the Danish shipping companies and the maritime organisations will have easy access to the developments in areas where they are sailing.

At the moment, the Danish Maritime Authority is considering whether or not this case shall give rise to an amendment of the Danish regulations.