



INTERIM SAFETY INVESTIGATION REPORT

201809/008

REPORT NO.: 17/2019

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The Merchant Shipping (Accident and Incident Safety Investigation) Regulations, 2011 prescribe that the sole objective of marine safety investigations carried out in accordance with the regulations, including analysis, conclusions, and recommendations, which either result from them or are part of the process thereof, shall be the prevention of future marine accidents and incidents through the ascertainment of causes, contributing factors and circumstances.

Moreover, it is not the purpose of marine safety investigations carried out in accordance with these regulations to apportion blame or determine civil and criminal liabilities.

NOTE

This interim safety investigation report is not written with litigation in mind and pursuant to Regulation 13(7) of the Merchant Shipping (Accident and Incident Safety Investigation) Regulations, 2011, shall be inadmissible in any judicial proceedings whose purpose or one of whose purposes is to attribute or apportion liability or blame, unless, under prescribed conditions, a Court determines otherwise.

The interim safety investigation report may therefore be misleading if used for purposes other than the promulgation of safety lessons.

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MV ADAM ASNYK Collision with MV DK IMAN in position 38° 58.8' N 120° 46.0' E 08 September 2018

SUMMARY

On 08 September 2018, *Adam Asnyk* was proceeding to enter the Laotieshan Channel Traffic Separation Scheme (TSS) from the West, while she was en route to Taicang. There was significant traffic in the area. The second officer was on watch, along with the third officer acting as a lookout.

Following evasive actions to avoid two fishing vessels, the second officer noticed another vessel, *DK Iman*, close by on the port side. He altered course to starboard by manual steering,

while *DK Iman* altered her course to port; however, the two vessels collided and sustained damages.

The Marine Safety Investigation Unit (MSIU) and the Marine Safety Authority (MSA) of China agreed to cooperate, with Malta leading the safety investigation.

This document is an interim safety investigation report, published in terms of regulation 13(1) of S.L. 234.49.



NOTICE

The information contained in this interim safety investigation report was derived from the initial notification and subsequent investigation of the occurrence to date. Readers are cautioned that there is the possibility that new evidence, which may alter the circumstances as depicted in this interim safety investigation report, may become available during the course of the safety investigation.

FACTUAL INFORMATION

MV Adam Asnyk

Adam Asnyk was a 24,115 gt, Maltese registered general cargo vessel, built by COSCO Dalian Shipyard in China, in 2009. The vessel had a length overall of 199.8 m, a moulded breadth of 27.80 m and a moulded depth of 15.5 m. She had a summer deadweight of 30,346 tonnes, corresponding to a summer draught of 11.0 m. *Adam Asnyk* was owned by Kamil Norwid Shipping Company, managed by Chinese-Polish Joint Stock Shipping Co., and classed with the Polish Register of Shipping (PRS).

Propulsive power was provided by a 7-cylinder Wartsila 7RT-Flex 60C, 2-stroke, single-acting, direct drive marine diesel engine, producing 16,520 kW at 114 rpm. This drove a single, fixed pitch propeller to reach a service speed of about 20 knots.

The vessel was fitted with four deck cranes, to facilitate loading and unloading of cargo. The foremost and the aftermost cranes were fitted on the centreline of the vessel, while the other two were fitted on the extreme port side.

The navigational equipment available on board included a standard magnetic compass, a gyro compass with repeaters, a compass bearing device, an X-band and an S-band radar, automatic radar plotting aid (ARPA), which was incorporated into the S-band radar, two electronic chart display and information

systems (ECDIS), an AIS, a speed log, an echo sounder, and a daylight signalling lamp. The vessel was also fitted with a voyage data recorder and a bridge navigational watch alarm system. All navigational equipment was reported to have been in good order. At the time of the collision, both radar displays were connected only to the S-band antenna.

Crew

Adam Asnyk's Minimum Safe Manning Certificate stipulated a crew of 15. At the time of the collision, there were 23 Polish, Filipino, Belarusian, and Nigerian crew members on board.

The master had a total of 36 years of experience at sea, out of which 20 years were served in the rank of a master with STCW II/2 qualifications. His Certificate of Competency was issued by the Polish Maritime Authority.

The second officer had a total of 13 years of experience at sea, out of which two years were served in the rank of a second officer with STCW II/1 qualifications. His Certificate of Competency was also issued by the Polish Maritime Authority.

The third officer, who was acting as a lookout at the time of the collision, had a total of six years of experience at sea, out of which 2.5 years were served in the rank of a third officer with STCW II/1 qualifications. Her Certificate of Competency was issued by Polish Maritime Authority. Instead of a navigational watchkeeping rating, the third officer was instructed by the master to act as a lookout.

Working arrangements and hours of rest on MV *Adam Asnyk*

The working arrangements, while the vessel was out at sea, were scheduled as follows:

- chief officer – 0400-0800 and 1600-2000 navigational watches, with non-watchkeeping duties from 1300 to 1500;
- second officer – 0000-0400 and 1200-1600 navigational watches, with non-watchkeeping duties from 1700 to 1900;
- third officer – 0800-1200 and 2000-2400 navigational watches, with non-watchkeeping duties from 1300 to 1500;
- one able seaman was appointed to keep a watch with each officer; and
- the master's working arrangements were indicated as 'unlimited', so that he may be called as necessary.

The records of the hours of rest indicated that the master was working from 0800 to 1730, on the previous day, with an hour break in between *i.e.*, from 1200 to 1300. Thereafter, he was working from 1930 to 2400. He had rested for a total of nine hours on the day prior to the collision.

The second officer was on watch from 0000 to 0600, and from 1200 to 1600, on the day previous to the accident. He had rested for a total of 14 hours prior to the collision.

The third officer was on watch from 0600 to 1200, and from 2000 to 2400 on the previous day. Records of her hours of rest also indicated that she was working between 1500 and 1600 on the same day. On the day of the collision, she was acting as a lookout on the bridge from 0000 to 0200. She had rested for a total of 11 hours, prior to the collision.

MV *DK Iman*

DK Iman was a 4,562 gt general cargo, registered in the Republic of Korea. She was built in 2004 and had a length overall of 109.5 m and a moulded breadth of 17.0 m. She had a summer deadweight of 6,500 tonnes.

DK Iman was owned and managed by Intergis Co. Ltd. and classed with the Korean Register of Shipping.

Environment

At the time of the occurrence, the weather in the area was reported as fair, with a moderate breeze (Beaufort Force 4) from a North-Northeasterly direction. The visibility was reported to be eight nautical miles (nm), while the air and sea temperatures were reported as 22 °C and 18 °C respectively.

Narrative¹

Adam Asnyk had departed from the port of Bayuquan, China, on 07 September 2018. She was carrying general cargo in her cargo holds, and empty containers on deck, bound for the port of Taicang, China.

In the early hours of 08 September 2018, the vessel was proceeding towards the Laotieshan Channel TSS, on a course of 168° and a speed of 14.4 knots over the ground. The vessel was on autopilot with the second officer on watch and the third officer acting as a lookout.

At around 0140, *Adam Asnyk* altered her course by about 20° to port, in order to pass clear of two fishing vessels that were about 0.6 nm ahead of her. At around the same time, another vessel, lying about three nm off the port bow of *Adam Asnyk*, was acquired on the radar. This vessel was identified as *DK Iman*. The closest point of approach (CPA) with this vessel was 0.34 nm and the time to this CPA was about 11 minutes. At around

¹ Unless otherwise specified, all times mentioned in this report are in Local Time (UTC + 8).

0144, after the fishing vessels had passed clear of *Adam Asnyk*, the second officer started to gradually alter the course of the vessel to starboard, using the autopilot.

At 0151:26, while *Adam Asnyk* was on a course of 150°, the second officer noticed *DK Iman* lying about 0.25 nm off the port bow, heading towards *Adam Asnyk*. A few seconds later, it was noticed that *DK Iman* was altering her course to port, thereby bringing her on a collision course with *Adam Asnyk* (Figure 1).

The second officer instructed the third officer to warn *DK Iman* of the situation, by using the daylight signalling lamp. While the third officer was doing so, the second officer,

using the autopilot, altered the course of *Adam Asnyk* to starboard by about 15°.

At around 0151:44, the second officer instructed the third officer to call the master to the bridge, while he switched over to manual steering and continued altering the course of the vessel to starboard. It was noticed that the course of *DK Iman* was being continuously altered to port.

At 0152:10, as the master entered the bridge, the two vessels collided with the starboard quarter of *DK Iman* making hard contact with the port side of *Adam Asnyk*.

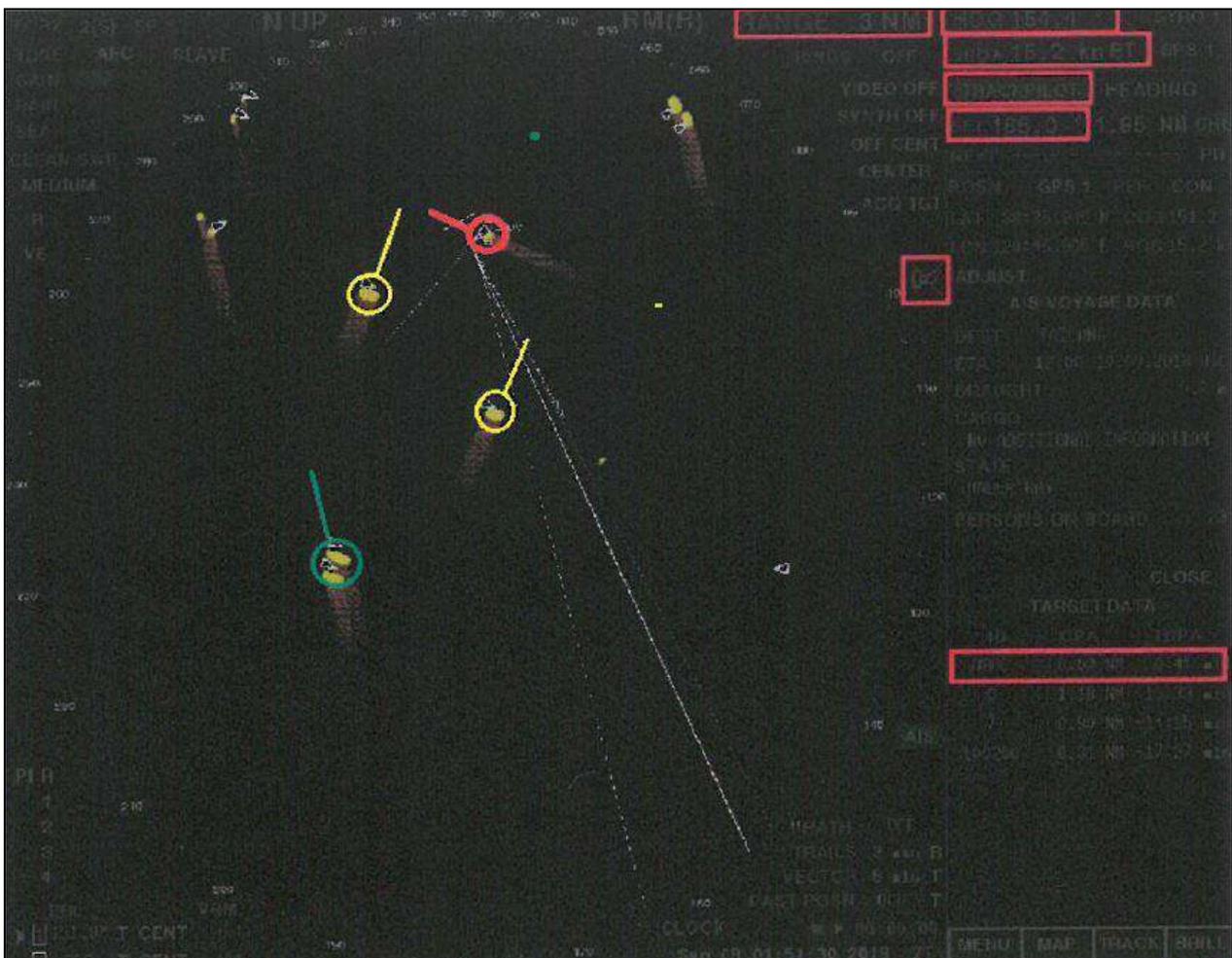


Figure 1: Radar screenshot at 0151:44

Conditions on the bridge of *Adam Asnyk* prior to the collision

Prior to the collision, *Adam Asnyk* had her engines on revolutions set above the manoeuvring range and was steering with autopilot. There was heavy traffic in the area, including some fishing vessels. Loud music was being played on the bridge.

Both radar displays were switched on, however, they were both connected to the S-band antenna. One of the displays was set on a three nm range and the other set on a six nm range. Both displays were off-centred, set on a 'North up' mode, with speed on the ARPA set to speed over the ground. The length of the trails of targets was set to three minutes, while the length of the vectors of targets was set to six minutes.

Priority for target data was set to AIS and the acoustic alarms on both radar displays were switched off.

Damages sustained by *Adam Asnyk*

Adam Asnyk sustained minor damages above the water line. The damages were located on the vessel's port side, just forward of her accommodation, as can be seen in Figure 2.

Damages were reported to a section of the bulwark, three container support pillars, three air vents and mooring bitts in the vicinity. In addition, the shore connection pipes for sewage and steam, and a cable of the emergency stop for the oily water separator were damaged.

Six empty containers, which were above the damaged pillars, had also sustained structural damages.

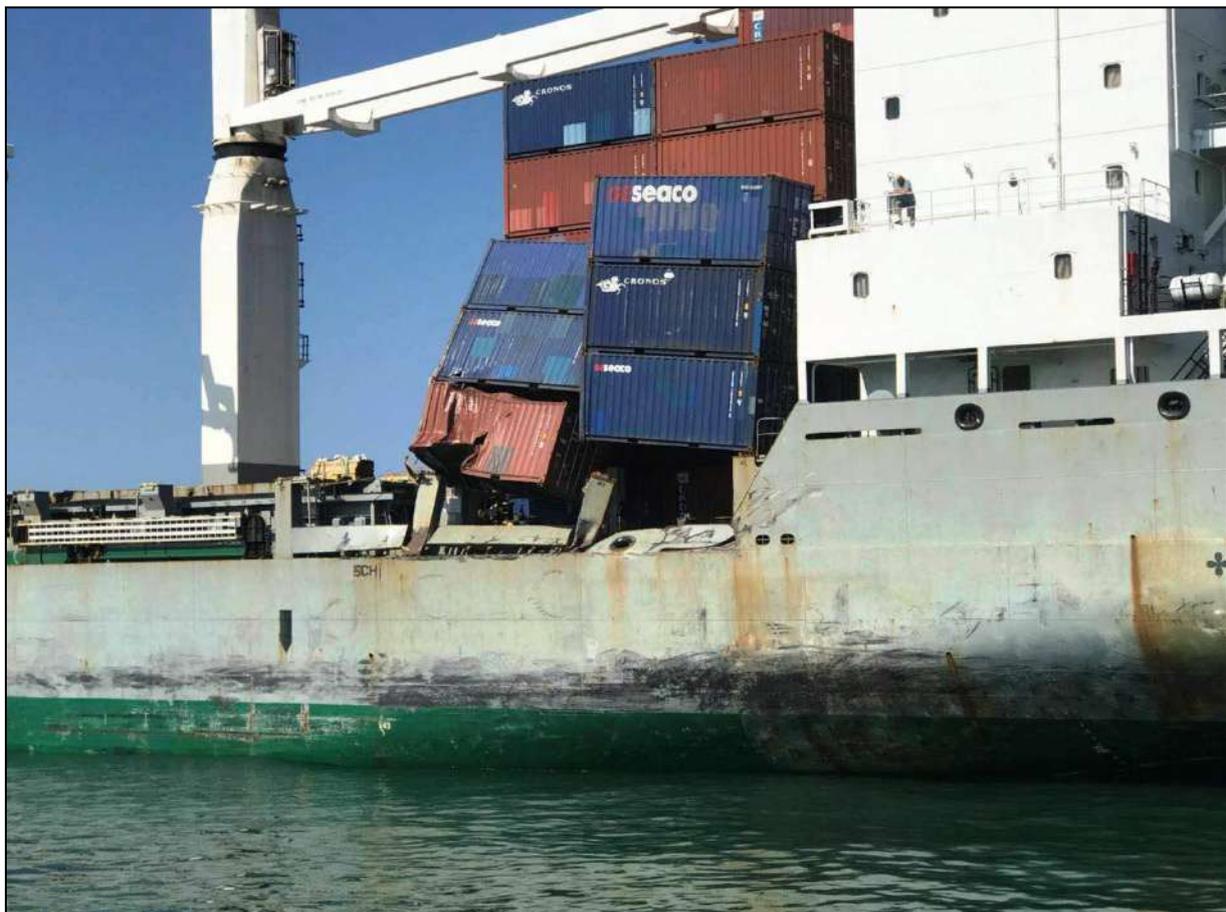


Figure 2: Damages sustained by *Adam Asnyk*

Damages sustained by *DK Iman*

As indicated in Figure 3, the vessel sustained serious structural damages to her starboard side shell plating in way of the poop deck and engine-room. There was also damage to the railing and bulwark on the aft deck. Damages were also on the mooring equipment and several air vents.

Safety investigation activities

As soon as the accident was notified to the MSIU on 10 September 2018, the MSIU made requests for the preservation and collection of information from *Adam Asnyk*.

During the preliminary assessment phase, the MSIU liaised with China MSA. China MSA investigators boarded both vessels and collected evidence. It was eventually agreed that Malta leads the safety investigation and China and the Republic of Korea will be considered as a substantially interested States.

Based on the information already available, the safety investigation will be focussing on several areas related to the navigation aspect and the dynamics of the events that led to the collision.

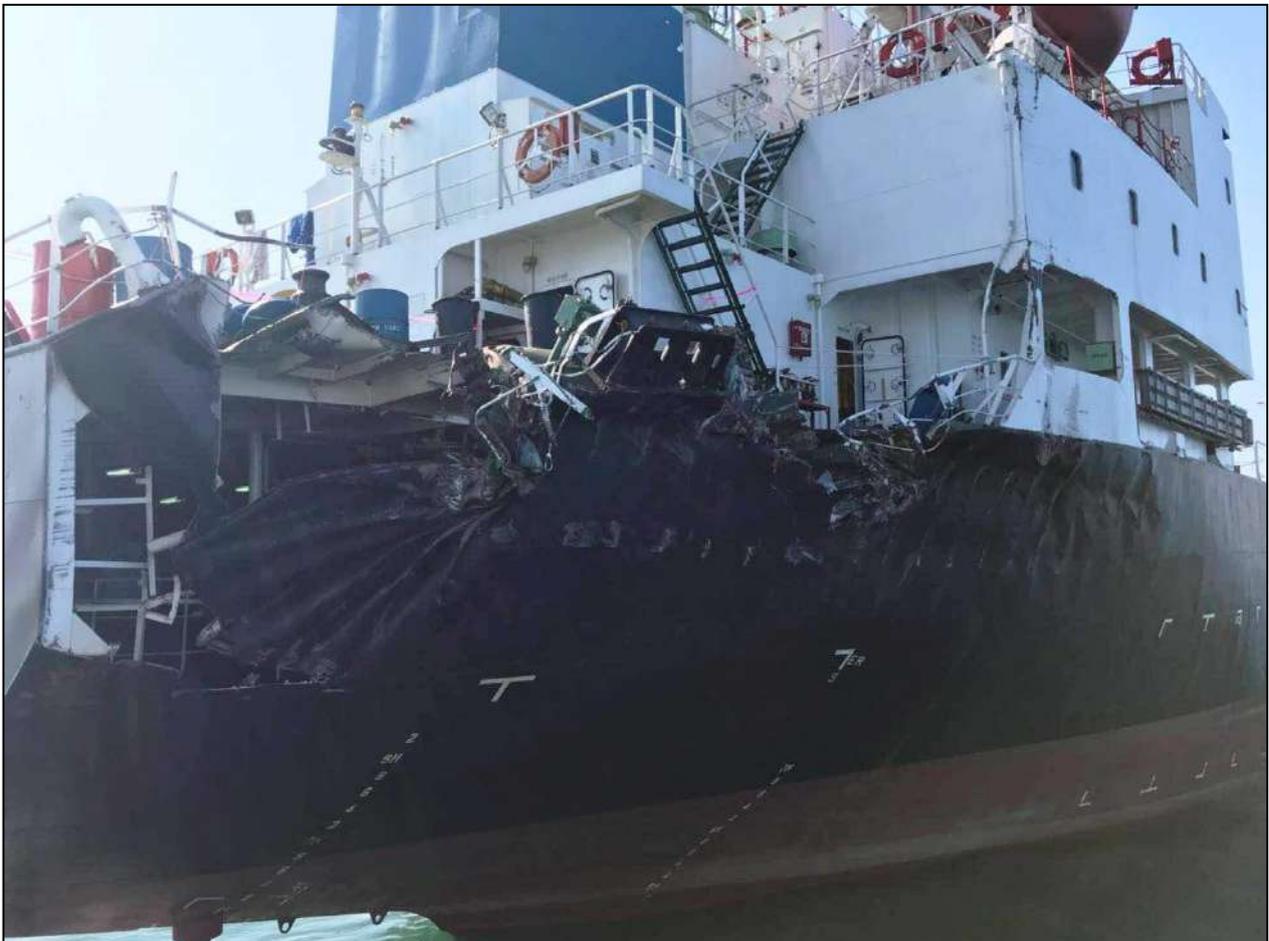


Figure 3: Damages sustained by *DK Iman*

SHIP PARTICULARS

Vessel Name:	<i>Adam Asnyk</i>	<i>DK Iman</i>
Flag:	Malta	Republic of Korea
Classification Society:	PRS	KRS
IMO Number:	9432115	9294769
Type:	General Cargo	General Cargo
Registered Owner:	Kamil Norwid Shipping Company	Intergis Co Ltd
Managers:	Chinese-Polish Joint Stock	Intergis Co Ltd
Construction:	Steel	Steel
Length Overall:	199.69 m	109.5 m
Registered Length:	190.77 m	102.0 m
Gross Tonnage:	24,115	4,562
Minimum Safe Manning:	15	<i>Not available</i>
Authorised Cargo:	General cargo	General cargo

VOYAGE PARTICULARS

Port of Departure:	Bayuquan, China	Unknown
Port of Arrival:	Taicang, China	Unknown
Type of Voyage:	Coastal Voyage	Unknown
Cargo Information:	General cargo & containers	General cargo
Manning:	23	<i>Not available</i>

MARINE OCCURRENCE INFORMATION

Date and Time:	08 September 2018 at 0153 (LT)	
Classification of Occurrence:	Serious Marine Casualty	
Location of Occurrence:	38° 35.8' N 120° 46.0' E	
Place on Board	Overside	Overside; engine-room
Injuries / Fatalities:	None	None
Damage / Environmental Impact:	None	None
Ship Operation:	In passage	In passage
Voyage Segment:	Transit	Unknown
External & Internal Environment:	Weather was clear with visibility of 8 nautical miles. Winds from a NNE'ly direction, 13 knots. Sea slight, Force 3.	
Persons on board:	23	<i>Not available</i>