



SAFETY INVESTIGATION REPORT

201807/002

REPORT NO.: 10/2019

July 2019

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

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MY LA POLONIA **Fatal fall in the cabin,** **in the port of Imperia, Italy** **04 July 2018**

SUMMARY

MY *La Polonia* was moored at Porto Maurizio, in the province of Imperia, Italy.

On the morning of 04 July 2018, just after 0700, the chief engineer found the chief stewardess lying on the floor of her cabin, unresponsive, with her legs on the stairs. He immediately informed the master.

The autopsy and toxicological reports indicated an elevated percentage of ethanol in her blood.

The MSIU has made recommendations to the Company, designed to ensure that its alcohol policy is reviewed and implemented, and to address the latent design factors in the bunks of the vessel.

The flag State Administration is recommended to revise the issued Information Notice, relating to excessive consumption of alcohol.



FACTUAL INFORMATION

Vessel

La Polonia was a 445 gt pleasure yacht, built in the U.S.A. in 1998. She was owned by La Polonia Malta Co. Ltd., and managed by Vistra Marine and Aviation Ltd., Malta. The crewing of the yacht was managed by Dominion Marine (Malta) Ltd.

The vessel had a length overall of 46 m, a moulded breadth of 7.62 m, a moulded depth of 2.23 m, and a summer draft of 1.67 m.

Propulsive power was provided by two CAT 32 engines, manufactured by CATERPILLAR INC., U.S.A., which produced a combined power of 1613 kW. These engines drove two fixed pitch propellers, enabling *La Polonia* to reach a speed of 13 knots.

Crew

Registered as a pleasure yacht, *La Polonia* was not issued with a Minimum Safe

Manning Certificate. At the time of the accident, the vessel had on board five crew members *i.e.*, a captain, a chief officer, a chief engineer, a deckhand, and a chief stewardess. The crew were Polish, Romanian, Italian, and British citizens.

The chief stewardess was a 32-year old British national, who had joined *La Polonia* on 29 June 2018 in Porto Maurizio. This was her first contract on board the yacht. In addition to her experience, both as a stewardess and as a deckhand, she had been working in the capacity of chief stewardess on various yachts since November 2017.

Guests

At the time of the occurrence, there were no guests on board.

The cabin of the chief stewardess

The chief stewardess' cabin was located on the Lower Deck, as highlighted in Figure 1.

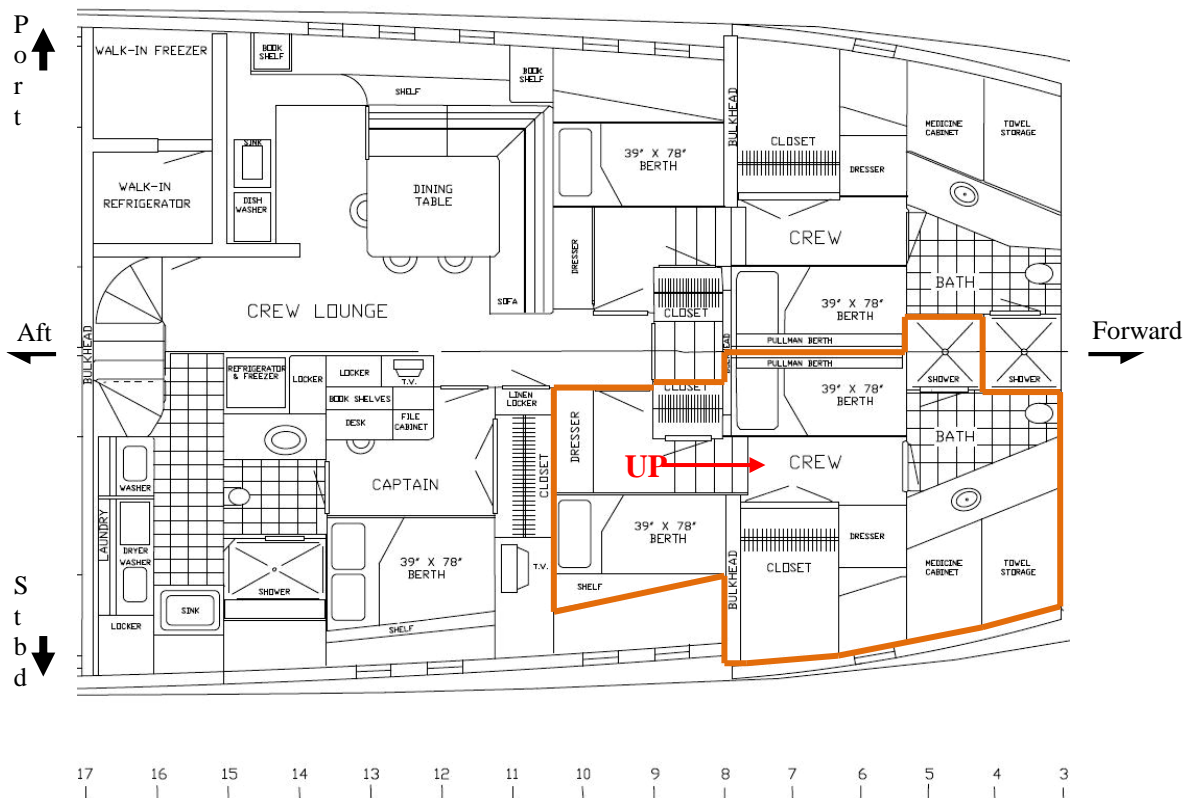


Figure 1: Extract of General Arrangement Plan (Scale 1:48)

The cabin consisted of three berths – two forward (upper), which included a Pullman Berth¹, one aft (lower), and a shared bath. The chief stewardess was occupying the first berth (the aft berth) of the cabin, and was the sole occupant of the cabin. The other three crew members were occupying the berths on the port side of the vessel. In order to access the bathroom of this cabin, one would have to pass the chief stewardess’ berth, and walk up five steps, thereafter passing by the forward berth (Figure 2).



Figure 2: Layout of the cabin occupied by the chief stewardess



Figure 3: The chief stewardess’ berth – as seen from the forward (upper) berth

¹ A Pullman Berth is a pull-down bunk, which is either hinged to the bulkhead and folded out, or

The bed which was occupied by the chief stewardess was high above the floor of the cabin, and could be estimated to be approximately one metre above the cabin floor (Figure 4).



Figure 4: Height of the bed – aft (lower) berth (Similar to the one occupied by the chief stewardess)

There were neither permanent nor temporary steps available, which could have facilitated climbing in or out of the bed; and the bed was not fitted with any guard rails.

Company’s alcohol policy

Section 9.2 of the employment contract of the chief stewardess states:

“[a]t no time whilst at sea will the seafarer consume, nor will the seafarer be under the influence of, alcohol...”

Furthermore, during the induction for joining crew members, the master informs the fresh crew members that the yacht has a ‘no drinking on board’ policy.

Deck watch, while in port

La Polonia maintained a watch system on deck, while the yacht was in port. The night watchkeeper was assigned duties, including securing of lines and fenders, locking of doors except for the crew entrance, switching off lights, *etc.* Thereafter, the watchkeeper was allowed to rest in his berth; however, he would have to remain available, as required. On the day of the accident, the night watchkeeper – the deckhand, had completed all his duties by 2200, and, thereafter, he went to rest.

Environment

On the day of the accident, the weather was clear. The yacht was within the sheltered waters of the marina and neither were any reports of adverse weather received, nor were any adverse weather conditions, affecting the area at that time, recorded.

Narrative²

La Polonia was moored with her stern to the pier at berth no. 9, Porto Maurizio, in the province of Imperia, Italy.

On the night of 03 July 2018, at around 2230, the chief officer and the chief stewardess went onto the pier drinking a glass of wine and smoking a cigarette, while they sat on a bench.

At around 2330, two crew members of another yacht, moored to the starboard side of *La Polonia*, approached the chief officer and the chief stewardess and invited them on board their yacht. The chief officer and the chief stewardess accepted the invitation. The chief stewardess went back aboard *La Polonia* for a short while and, at 0005, she was seen disembarking from *La Polonia*. Her gait, at this time, was unstable.

At 0028, on 04 July 2018, the chief stewardess was seen walking up to the gangway of *La Polonia*, assisted by one of the crew member of the other yacht. Her walk was unsteady. The chief officer of *La Polonia* returned on board at 0108 and noticed that the door of the chief stewardess' cabin was shut.

At 0700, the chief engineer, who was occupying the aft berth in the cabin on the port side, woke up to a 'wake-up' alarm. He noticed that the alarm was coming from the chief stewardess' cabin, which was directly opposite his cabin. As the alarm persisted, he tried to enter her cabin to check but felt that the door was obstructed.

When he finally managed to gain access, he found the chief stewardess lying face down on the cabin floor. Her head was turned to one side, her legs were on the stairs. Fearing the worst, he immediately called the captain. The captain checked the chief stewardess for vital signs and, on not detecting positive signs, he requested the deckhand to contact the local emergency services.

Cause of death

The autopsy revealed a fractured second cervical vertebra (neck). This would have most likely been caused due to a fall from a medium height.

The toxicological report revealed a blood alcohol content of 4.3 g^l⁻¹ (0.43 %) of ethyl alcohol, but neither medicines nor illicit drugs were detected.

² Unless specified otherwise, all times mentioned in this report are in Local Time (UTC + 2).

ANALYSIS

Aim

The purpose of a marine safety investigation is to determine the circumstances and safety factors of the accident as a basis for making recommendations, and to prevent further marine casualties or incidents from occurring in the future.

Cause of the fall

In the absence of any witness, the position and location in which the fatally injured chief stewardess was found, presented the safety investigation with three hypotheses:

- 1) the chief stewardess was on the steps, probably on the way back from the bathroom, when she fell down,
- 2) she fell while trying to climb in or out of her bed, or
- 3) she fell off the bed, at some point, while she was lying on it.

The last two hypotheses led the safety investigation to understand that a fall from the height of the bed could have contributed to the fatal injuries sustained by the chief stewardess.

Fatigue or consumption of drugs and alcohol

The safety investigation determined that the chief stewardess was neither on duty, nor assigned any work at the time of the occurrence. The duration of her last rest period was about 16 hours and therefore, fatigue was not considered to be a contributing factor to this accident.

As the toxicological analysis did not return a positive response for drugs or other substances, these were not considered to be a contributing factor to the accident.

As stated elsewhere, *La Polonia* had a 'no drinking on board' policy. Moreover, the Company's Alcohol Policy required that

seafarers neither consumed nor be under the influence of alcohol while the vessel is at sea. There is, however, no reference or guidance to the maximum allowable breath / blood alcohol content of a seafarer while ashore (*i.e.*, when the consumption of alcohol would not have happened on board).

Although it remained unknown to the safety investigation as to the kind and quantity of alcohol actually consumed by the chief stewardess, before sustaining fatal injuries, the toxicological report revealed a blood alcohol content of 4.3 gl^{-1} (0.43 %) of ethyl alcohol³. This level of concentration of alcohol in the blood was considered to be high enough to interfere with the motor skills of an individual.

Effects of alcohol

Academic research has determined that excessive alcohol consumption affects the *cerebellum*, disrupting the firing pattern of the neurons.

Alcohol can therefore lead to significant impairments, namely motor coordination and decision-making, with the potential consequence of harm. It would also appear that these effects are exacerbated with the consumption of excessive alcohol in a relatively short period of time.

As expected, the higher the Blood Alcohol Content (BAC), the higher the risk of injury. The level of BAC in this case was expected to have severely impaired coordination, balance and judgment. Studies have also established that at levels of about 0.3% BAC, a perceived beneficial effect of alcohol may give way to increased intoxication.

³ Globally, the maximum limit of Blood Alcohol Contents, prescribed for motorists, is generally 0.5 gl^{-1} . This same limit is prescribed in the STCW Convention, for seafarers performing safety, security and marine environmental duties.

CONCLUSIONS

1. The cause of death was fatal injuries to the neck, following a fall from a height.
2. The toxicological analysis revealed a high level of ethanol in the deceased crew member's blood, possibly impairing cognition, balance and judgment.

RECOMMENDATIONS⁴

La Polonia Malta Co. Ltd. is recommended to:

10/2019_R1 review the drug and alcohol policy set out in the employment contracts, which currently only addresses consumption of drugs and alcohol while the vessel is at sea;

10/2019_R2 conduct introductory and refresher training sessions on the Company's drug and alcohol policy;

10/2019_R3 carry out regular unannounced alcohol tests on board, irrespective of whether the vessel is in port or at sea;

10/2019_R4 assess the risks associated with the heights of the bunks in the cabins, and take measures to mitigate the same, if so identified;

10/2019_R5 bring this safety investigation report to the attention of all crew members serving on board the vessel.

The Flag State Administration (Merchant Shipping Directorate) is recommended to:

10/2019_R6 revise Information Notice 29, to include the potential hazards of excessive alcohol consumption on board, as well as ashore.

⁴ Safety recommendations shall not create a presumption of blame and/or liability.

SHIP PARTICULARS

Vessel Name:	<i>La Polonia</i>
Flag:	Malta
Classification Society:	N/A
IMO Number / Official Number:	1059863
Type:	Pleasure Yacht
Registered Owner:	La Polonia Malta Co. Ltd.
Managers:	Vistra Marine and Aviation Ltd., Malta
Crew Managers:	Dominion Marine (Malta) Ltd.
Construction:	Aluminium
Length Overall:	47.0 m
Registered Length:	39.35 m
Gross Tonnage:	445
Minimum Safe Manning:	N/A
Authorised Cargo:	N/A

VOYAGE PARTICULARS

Port of Departure:	Viareggio, Italy
Port of Arrival:	Imperia, Italy
Type of Voyage:	Short International
Cargo Information:	N/A
Manning:	5

MARINE OCCURRENCE INFORMATION

Date and Time:	04 July 2018 at 07:05 (LT)
Classification of Occurrence:	Very Serious Marine Casualty
Location of Occurrence:	Moored alongside berth no. 9, Porto Maurizio – Imperia, Italy
Place on Board	Crew Cabin
Injuries / Fatalities:	One fatality
Damage / Environmental Impact:	None
Ship Operation:	Moored
Voyage Segment:	Alongside/Moored
External & Internal Environment:	Weather: Clear. Visibility: 10 miles. Wind: Beaufort Force 1. Sea State: Calm. Swell: Nil.
Persons on board:	5