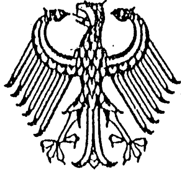

Bundesstelle für Seeunfalluntersuchung
Federal Bureau of Maritime Casualty Investigation
Federal Higher Authority subordinated to the Ministry of Transport, Building and Urban Development

Summary
Investigation Report 570/10

Marine Casualty

Personal accident on board the container vessel MSC LA SPEZIA in the port of Gioia Tauro, Italy on 21 December 2010

15 May 2012

The investigation was conducted in conformity with the law to improve safety of shipping by investigating marine casualties and other incidents (Maritime Safety Investigation Law – SUG) of 16 June 2002 in the version applicable prior to 30 November 2011.

According to said act, the sole objective of this investigation is to prevent future accidents and malfunctions. This investigation does not serve to ascertain fault, liability or claims.

This report should not be used in court proceedings or proceedings of the Maritime Board. Reference is made to the aforementioned version of art. 19 para. 4 SUG.

The German text shall prevail in the interpretation of this Investigation Report.

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1 Summary

At 1615[1] on 21 December 2010 in the port of Gioia Tauro, Italy, an 18-year-old trainee on the container vessel MSC LA SPEZIA fell from a height of 10 m onto a container in Hatch 2 while he was sweeping the coaming. There were no eyewitnesses. The casualty was treated on board by the crew and paramedics and taken to a hospital, underwent surgery and was later flown by Mediflight to Rostock for further treatment. The casualty is still suffering from pain and use of his arm and spine is restricted. Therefore, he has been forced to abandon his training and the profession can no longer be pursued.

[1] Unless otherwise stated, all times shown in this report are local = Central European Time = UTC + 1

2 SHIP PARTICULARS

2.1 Photo

Figure 1: Photo

2.2 Particulars

Name of vessel:	MSC LA SPEZIA
Type of vessel:	Container vessel
Nationality/flag:	Germany
Port of registry:	Hamburg
IMO number:	9461403
Call sign:	DIGX2
Owner:	Claus-Peter Offen GmbH & Co. KG
Year built:	2010
Shipyard/yard number:	Daewoo Shipbuilding & Marine Engineering Co. Ltd./4182
Classification society:	Germanischer Lloyd
Length overall:	365.5 m
Moulded beam:	51.2 m
Gross tonnage:	153,115
Deadweight:	165,977.9 t
Draught (max.):	16.03 m
Engine rating:	72,240 kW
Main engine:	MAN-B&W 12K98MC-C

(Service) Speed:	24.3 kts
Hull material:	Steel
Hull design:	Double hull
Minimum safe manning:	18

2.3 Voyage particulars

Port of departure:	Sines
Port of call:	Gioia Tauro
Type of voyage:	Merchant shipping, international
Cargo information:	Containers
Draught at time of accident:	Unknown
Manning:	23
Number of passengers:	None

2.4 Marine casualty or incident information

Type of marine casualty/incident:	Marine casualty – person fell into a hatch
Date, time:	21/12/2010, at about 1615
Location:	Gioia Touro, Italy
Latitude/Longitude:	φ 38°27' N λ 015°54'E
Ship operation and voyage segment:	Port
Place on board:	Hatch 2
Human factors:	Yes, human error
Consequences (for people, vessel, cargo, the environment and other):	Incapacity to work None

Excerpt from Nautical Chart 507 Plan B, BSH

Figure 2: Nautical chart

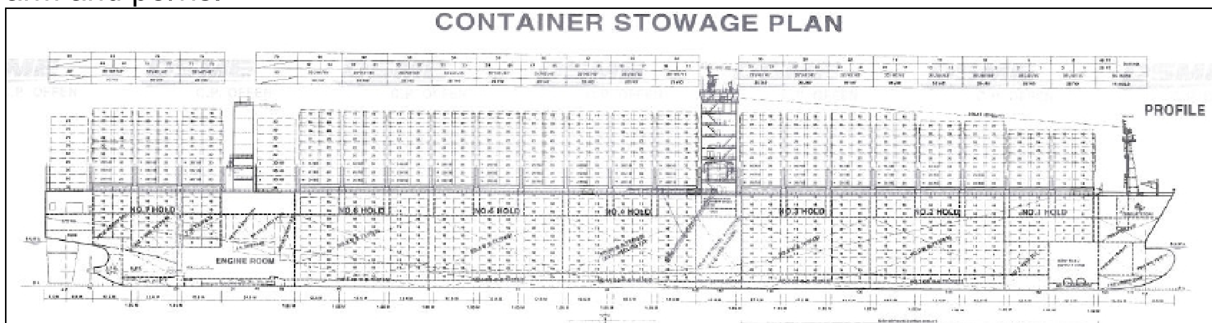
2.5 Shore authority involvement and emergency response

Agencies involved:	Ambulance, Gioia Tauro
Resources used:	Stretcher from the vessel, shore-based crane
Actions taken:	Taken to the hospital in Gioia Tauro
Results achieved:	Operation, flight to Rostock, further treatment, lasting injury to arm and spine, incapacity to work

3 COURSE OF THE ACCIDENT AND INVESTIGATION

3.1 Course of the accident

The container vessel MSC LA SPEZIA, sailing from Sines, Portugal, made fast at the container terminal in Gioia Tauro, Italy, at 1848 on 20 December 2010. Deck watches were assigned around the clock for harbour mode; each watch lasted 6 hours. On 21 December, the 12-18 watch consisted of the officer on watch, an able bodied seaman, an ordinary seaman, and a trainee. At 1628, a hatch foreman of port operations notified the deck officer of an accident involving a person in Hatch 2. The trainee fell from a height of some 10 m onto a container in the hatch. Nobody witnessed the accident. The time of the accident was narrowed down to about 1615. The casualty had been tasked with cleaning the coaming, from the catwalk the aft edge of Hatch 2, with a broom. The master and crew were alerted and took a stretcher to the scene of the accident. The emergency medical services arrived at 1640. The casualty was treated, placed on the stretcher and lifted out of the hatch with a cargo bridle. Escorted by one of the officers of the watch, he was then taken by ambulance to a hospital, where it was found, inter alia, that he had fractured his arm and pelvis.



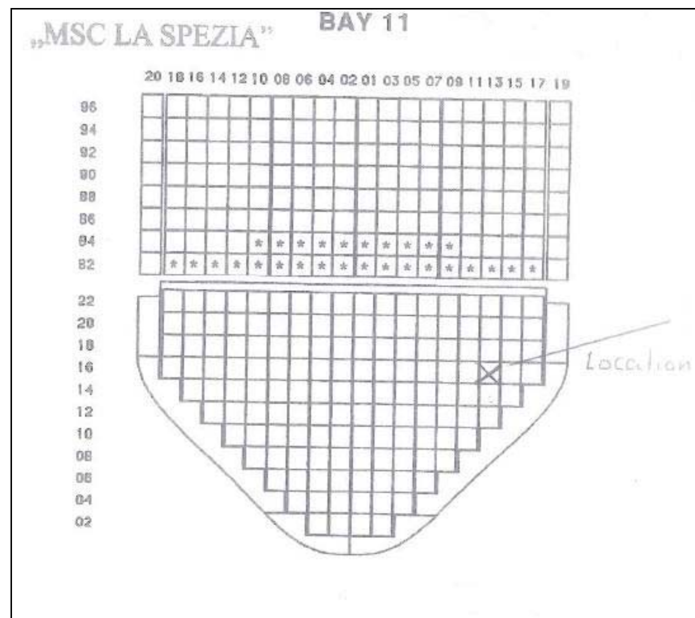


Figure 3: Scene of the accident, Hatch 2, Bay 11

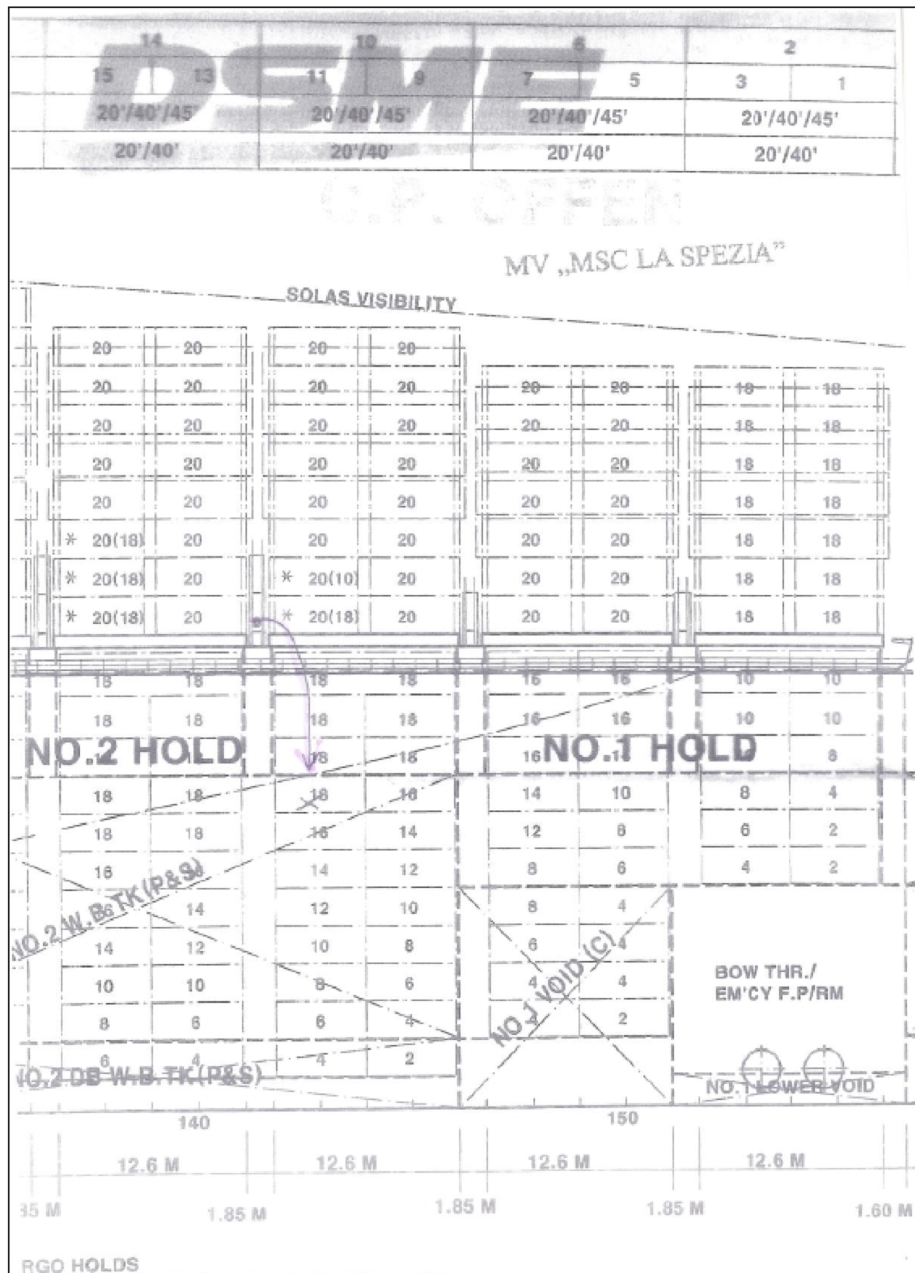


Figure 4: Height of fall = 10 m

3.2 Investigation

The casualty was found at the stowage position at Bay 11, Row 13, Tier 14 (see Fig. 3). He was wearing overalls, a helmet and safety shoes. The stowage position is located about 2.50 m laterally offset from a gate in the railing, which is secured by a hinged bar (see Fig. 5).

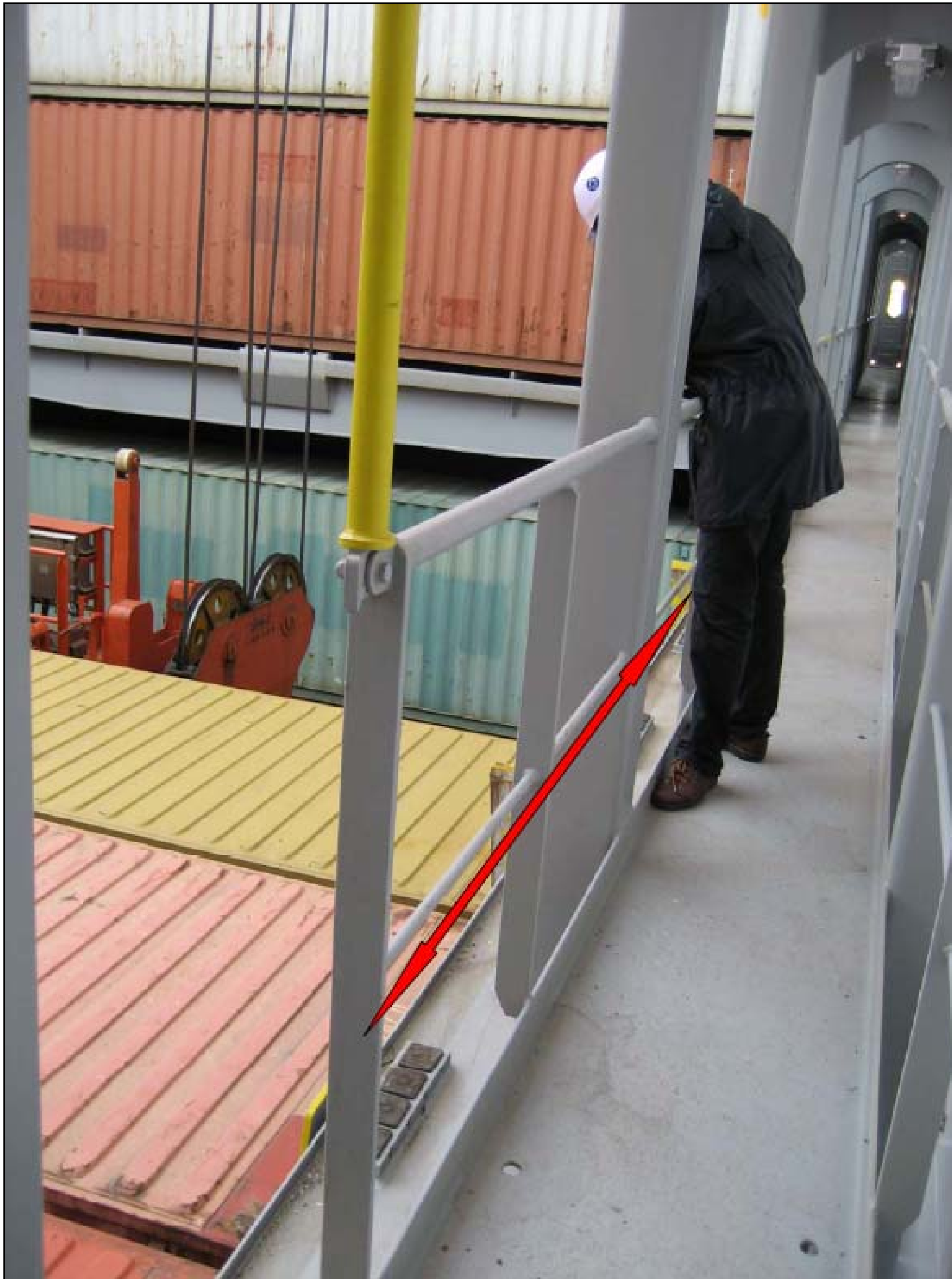


Figure 5: 2.50 m offset from the gate

While laid up in port, it is reportedly usual for members of the watch to sweep the coamings and carry out lubrication work as part of normal maintenance when the hatches are open. The broom handle has been extended to enable such work to be carried out safely from the transverse corridors (see Fig. 6).

Figure 6: Sweeping with extended handle

A standing order exists for such work. Since this concerns a simple task, a further risk assessment was not made and documented. The 1.20 m high railing is reportedly sufficient to protect against falling into an open hatch. The gate is used to access the hatch on foot when it is closed. It is secured with a hinged bar and marked yellow. Crossbars are not fitted to it. The booklet 'Notice to Crew' and the 'Standing Order for Deck Watch Officers' clearly state that work in and on the hatch is prohibited during loading operations and that open hatches must be secured by a railing. The coaming must be kept free of objects. Cleaning the coaming is a task of the deck watch in port. At the time of the accident, six corridors were in use. The officer on watch was situated at Bay 22, one member of the watch at Bay 50 and another at the gangway.

The officer on watch knew the casualty from a two-month voyage between September and November 2010 on the CMV SANTA REBECCA, where they both worked together, inter alia, on the aft manoeuvring station. His impression was that the casualty was conscientious and did not take unnecessary risks. This aspect is mentioned explicitly in the section 'Description of Routines' of the procedural instruction 'Safety at Work and Health'. The section 'Working Aloft or over the Side' also deals with risks and safety measures. Permission from the officer responsible is required for this. The officer on watch reportedly finds it difficult to understand how the accident could have happened.

According to the statements available to the BSU, the casualty had been on board for 12 days. In order for him to become familiar with the work on deck and risks, he was initially employed on the deck under the supervision of the bosun. Prior to that, officers instructed him on the safety management of the vessel, the procedures for working and the safety equipment. Over and above that, weekly occupational safety training is held for all the crew members. The last training session before the accident took place on 10/12/2010. After a week, he was assigned to a specific officer of the watch in accordance with the training schedule for a ship mechanic. This provided that he should work for four hours in the navigational watch and for four hours on deck under the supervision of the bosun when at sea. In the port of Gioia Tauro, the casualty was assigned to the 00-06 and 12-18 watches as an additional member of the watch.

On the day of the accident, the injured trainee was briefed on the cargo watch by two officers of the watch. During such work, safety shoes, protective gloves, overalls and a helmet must be worn. The work must be overseen in accordance with the stowage plan. This includes, inter alia, that safety rails are to be set and coamings kept free of objects and clean.

At the time of the accident, the trainee was operating with the required personal protective equipment, a handheld transceiver and a broom with extended handle. It was said that he did not move away from the catwalk of the coaming that needed to be cleaned and presumably lost his balance. During the work, loading and unloading operations were underway, i.e., the cargo watch was accompanied by continuous noise and vibration caused by the raising and lowering of containers.

4 ANALYSIS

The BSU believes that the casualty lost his balance and fell into the hatch while using the broom to sweep in front of the gate in the railing. It is likely that the barrier had been opened to make it easier to reach the coaming. The casualty's position was laterally offset about 2.50 m from the gate in the railing. Following the fall, the casualty must have moved.

The extended handle was more of a hindrance in front of the gate in the railing. It would have been necessary to hold it almost vertically. It may also have slid in his hands and protective gloves. The broom was not secured. Inasmuch, to clean the coaming and also make sure that the broom did not slide out, considerable care would have been needed when working. Cleaning was effected by simply sweeping the dirt over the narrow edge of the coaming, for provisions for removing it, for example, with a dustpan, had not been made.

The casualty was traumatised and therefore, unable to remember the accident in detail properly. The BSU regards it to be unlikely that a person could fall over the 1.20 m high railing. It was noisy because of the loading/unloading operation; furthermore, muffled noises and vibrations were caused by the seating and unseating of containers, which was an additional disruption. Moreover, the work height could have been unsettling.

The work times and reports gave no indication of irregularities or fatigue.

The casualty was treated on board properly and taken to the hospital in Gioia Tauro, where he underwent surgery on his arm and preparations were made for his flight to Rostock by MEDIJET. Additional surgery was necessary on his cervical vertebra, hips and pubic bone. The casualty is still suffering from pain and use of his arm and spine is restricted. Therefore, the training had to be abandoned and the profession can no longer be pursued.

5 CONCLUSIONS

The owner has a comprehensive safety management system in place, which is well documented and analyses risk. Exercises that involve the regular training of all crew members in their duties are conducted on a weekly basis. This tragic fall into a hatch from a height of 10 m, which resulted in incapacity to work and probably lasting impairment for the casualty occurred, nevertheless.

The place of work was secured by a 1.20 m high railing. In terms of personal protection, the BSU regards this safeguard to be sufficient for the task in hand. The railing was equipped with a gate that consisted of a hinged bar. It was not possible to establish conclusively precisely how the accident happened. In that respect, the BSU is unable to issue safety recommendations for this accident. Always aware of the very broad range of dangers to which seafaring is exposed when compared to other professions, in the end, it remains critical to remember personal safety prior to and during any work – supposedly routine work, in particular.

6 SOURCES

- Enquiries
  - Owner, BSU

- Written statements
  - Ship's command
  - Owner

- Witness accounts
  - None

- Reports/expert opinion
  - Documentation, crew MSC LA SPEZIA with photos and ship plans

- Nautical charts and vessel particulars, Federal Maritime and Hydrographic Agency (BSH)

- Safety management system documentation
  - Owner

- Photos
  - Owner
  - Hasenpusch (photo of the vessel)