Report of investigation into the death of the seaman II after falling overboard from the Hong Kong registered bulk carrier "*Joyous Society*" at Panama Canal on 8 August 2013

The Hong Kong Special Administrative Region
Marine Department
Marine Accident Investigation Section

12 Dec. 2014

Purpose of Investigation

This incident is investigated in accordance with the Code of the International Standards and Recommended Practices for a Safety Investigation into a Marine Casualty or Marine Incident (the Casualty Investigation Code) adopted by IMO Resolution MSC 255(84).

The purpose of this investigation conducted by the Marine Accident Investigation and Shipping Security Policy Branch (MAISSPB) of Marine Department, in pursuant to the Merchant Shipping Ordinance Cap. 281, the Shipping and Port Control Ordinance (Cap. 313), or the Merchant Shipping (Local Vessels) Ordinance (Cap. 548), as appropriate, is to determine the circumstances and the causes of the incident with the aim of improving the safety of life at sea and avoiding similar incident in future.

The conclusions drawn in this report aim to identify the different factors contributing to the incident. They are not intended to apportion blame or liability towards any particular organization or individual except so far as necessary to achieve the said purpose.

The MAISSPB has no involvement in any prosecution or disciplinary action that may be taken by the Marine Department resulting from this incident.

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1 Summary

1.1. On 8 August 2013, the Hong Kong registered bulk carrier *Joyous Society* (*the vessel*) was transiting the Panama Canal. When *the vessel* was just clear of the Pedro Miguel locks, seven crew members were assigned to rig the accommodation ladder in combination with the pilot ladder for the disembarkation of the canal mooring crew and the pilots.

1.2. In order to fasten the removable stanchions with ropes on the accommodation ladder, one of the seaman II, stepped on the lower platform of the accommodation ladder. Unfortunately, the lower platform turned over and he fell into the water of the Panama Canal at about 0953 local time (1453 UTC).

1.3. The weather condition at that time was cloudy, the wind was westerly with the Beaufort scale force 3 and the sea condition was smooth with no swell. The visibility was about 10 nautical miles (nm).

1.4. The accident was immediately reported to the canal authority. Search and rescue (SAR) operation was carried out by the canal authority but in vain. Finally the body of the seaman II was found and verified dead at around 2300 on 10 August 2013.

1.5. The investigation into the accident revealed the following contributing factors:

a) The shipboard working procedure had not been followed. The crew members working overside of the vessel had not donned the required personal protective equipment (PPE);

b) The high risk work over the ship's side while the ship was underway was carried out by an inexperienced and unsupervised seaman II; and

c) Lack of the proper maintenance to the accommodation ladder causing the lower platform not to be locked and secured in position properly and to turn over while the seaman II was stepping on it.

2 Description of the vessel Joyous Society

Flag :	Hong Kong, China
Port of Registry :	Hong Kong
IMO No. :	9050254
Call Sign :	VRWD7
Type :	Bulk Carrier
Keel Laid Year :	1994
Gross Tonnage :	35,879
Deadweight :	69,274
Length (Overall) :	224.98 m
Main Engine :	MHI-SULZER DIESEL
Engine Output (M.C.R.) :	8,826 kw
Speed :	13.0 knots
Classification Society :	Nippon Kaiji Kyokai
Shipbuilder :	Imabari Shipbuilding Co., Ltd. Marugame, Japan
Registered Owner :	Joyous Society Shipping Co., Ltd
Management Company :	COSCO (HK) Shipping Co., Ltd
Minimum manning :	15

3 Sources of evidence

3.1 Statements from the Master and crews of *Joyous Society*;

3.2 Information furnished by the management company of *Joyous Society*.

4 Outline of events

All times are local time UTC - 5

4.1 The Hong Kong registered bulk carrier *Joyous Society* (*the vessel*) departed Donghae, South Korea in ballast condition on 14 July 2013 and bound for New Orleans, United States of America to load cargo for China.

4.2 The vessel arrived and dropped anchor at Balboa, Panama at 0036 on 8 August 2013. Then *the vessel* was informed to prepare for transiting the Panama Canal. The weather condition at that time was cloudy, the wind was westerly with the Beaufort scale force 3 and the sea condition was smooth with no swell. The visibility was about 10nm.

4.3 At 0500, it was informed that the pilot would come on board at 0530. The duty officer and engineers of the vessel tested all navigational equipment including main engine, emergency steering gear etc. and found all in good working order.

4.4 At 0536 two pilots came onboard. The main engine was standby and the vessel commenced heaving up the anchor. The anchor was aweigh at 0554 and the vessel was ready for transiting the canal.

4.5 At 0654 the canal mooring crews and another two pilots came onboard *the vessel.* At 0839 *the vessel* passed clear of the Miraflores locks.

4.6 At 0945 *the vessel* passed clear of the Pedro Miguel locks. Seven crew members were instructed to rig the accommodation ladder in combination with the pilot ladder for the disembarkation of the canal mooring crews and the pilots.

4.7 The seven crew members including: the second officer, the bosun, two seaman I, two seaman II and a deck cadet proceeded to the starboard side of *the vessel*. The starboard accommodation ladder was soon deployed at the deck level over the ship's side, one of the seaman II stepped on the accommodation ladder to fasten the removable stanchions with ropes. At 0953 when the seaman II stepped on the lower platform of the accommodation ladder, the platform turned over and he fell into the water. The second officer realized that someone had fallen into the water and rushed to get a lifebuoy. When he got the lifebuoy, he could not see the seaman II in the water but a safety helmet. The main engine of the vessel was stopped immediately and the wheel was put hard over to starboard. The incident was reported to the canal authority via the canal pilot. The crew members on deck continued to keep a sharp lookout for the seaman II, but nothing was found.

4.8 As instructed by the canal authority, the vessel continued with the transiting

passage through the canal, while the SAR operation was carried out by the canal authority. Three boats were arranged by the canal authority to conduct the SAR operation for the missing seaman II.

4.9 At 1600 on 8 August 2013 the vessel dropped anchor at Cristobal for incident investigation. At 0015 on 11 August 2013, the canal authority informed that the dead body of the seaman II was found at around 2300 on 10 August 2013.

5 Analysis

Certification and Experience

5.1 The seaman II was born in 1989 and he started his sea going career in 2009 on various vessels. He worked as a training sailor for about 6 months and as a sailor for 11 months. He obtained a certificate of competency for able-bodied seaman (AB) forming part of a navigational watch on ships of 500 GT or more from the People's Republic of China on 20 January 2010. He started the service for COSCO (HK) Shipping Co., Ltd from 2011. On the first ship he worked 4 months as seaman II and then on 14 April 2013 he joined *Joyous Society* as seaman II.

5.2 The seaman II was considered as an inexperienced seaman with little or no safety awareness for the high risk task. He had about 25 months sea going experience as sailor and training sailor.

Overside working procedure

5.3 The company procedure did specify the requirement for the overside work. It required that the proper PPE such as inflatable lifejacket and safety belt should be worn. In this incident, all of the crews working overside of *the vessel* did not don the inflatable lifejacket and the safety belt.

5.4 Failure of compliance with the company procedure was considered one of the main contributory factors to the accident.

Working site supervision

5.5 The second officer, as the supervisor at the working site, did not stop the unsafe behaviors, i.e. while working overside of *the vessel* the crews did not wear inflatable lifejacket and safety belt in accordance with the company procedure. The bosun, as the senior deck hand, did not don proper PPE when he was working overside in this accident.

5.6 The seaman II needed some guidance and supervision by senior crew or deck officer. In this accident there was no evidence that effective supervision on site was taking place, otherwise the unsafe behaviors would have been stopped.

Maintenance of the accommodation ladder

5.7 At time of the incident, the lower platform turned over when the seaman II stepped on it. The springs of the locking pins in the lower platform of the accommodation ladder had been dislocated from their original positions so the locking pins could not be plugged into the slot. As such, the lower platform had not been properly locked

and secured in position (figure 1).

5.8 The lower platform of the accommodation ladder was so designed that the platform could be adjusted at different angle and locked by two pins so as to secure the platform in position (figure 2). If the maintenance to the accommodation ladder was carried out properly, the spring loaded locking pins would have been plugged into the slots on both sides. The lower platform would not turn over when the seaman II was stepping on it and this accident might be avoided.

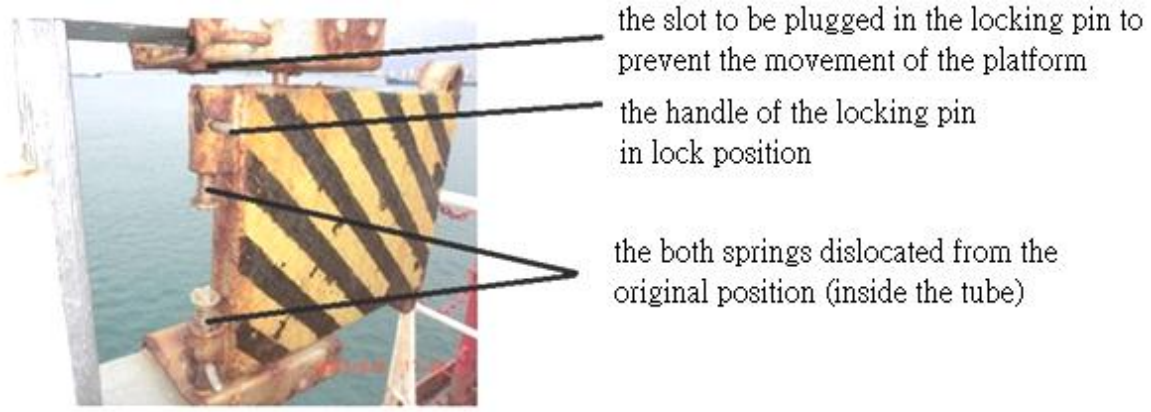

Figure 1: the lower platform was in abnormal condition at the time of accident

Figure 2: the lower platform at normal secured condition (both locking pins were plugged in)

6 Conclusions

6.1 On 8 August 2013, the Hong Kong registered bulk carrier *Joyous Society* (*the vessel*) was transiting the Panama Canal. When *the vessel* was just clear of the Pedro Miguel locks, seven crew members were assigned to rig the accommodation ladder in combination with the pilot ladder for the disembarkation of the canal mooring crew and the pilots.

6.2 In order to fasten the removable stanchions with ropes on the accommodation ladder, one of the seaman II, stepped on the lower platform of the accommodation ladder. Unfortunately, the lower platform turned over and he fell into the water of the Panama Canal at about 0953.

6.3 The weather condition at that time was cloudy, the wind was westerly with the Beaufort scale force 3 and the sea condition was smooth with no swell. The visibility was about 10 nm.

6.4 The accident was immediately reported to the canal authority. SAR operation was carried out by the canal authority but in vain. Finally the body of the seaman II was found and verified dead at around 2300 on 10 August 2013.

6.5 Investigation into the accident revealed the following contributing factors:-

a) The shipboard working procedure had not been followed. The crew members working overside the vessel had not donned the required PPE;

b) The high risk work over the ship's side while the ship was underway was carried out by an inexperienced and unsupervised seaman II; and

c) Lack of the proper maintenance to the accommodation ladder causing the lower platform not to be locked and secured in position properly and to turn over while the seaman II was stepping on it.

7. Recommendations

7.1 A copy of the report should be sent to the master and the management company of the vessel drawing their attention of the findings of this incident and lessons learnt, in particular, the management company of the vessel should ensure the shipboard working procedures are implemented and the maintenance work of the ship equipment is properly carried out.

7.2 A Merchant Shipping Information Note (MSIN) should be issued to promulgate the lessons learnt from this accident.

8. Submission

8.1 In the event that the conduct of any person or organization is commented in an accident investigation report, it is the policy of the Marine Department to send a copy of the draft report in part or in entirety to that person or organization for their comments.

8.2 The draft report has been sent to the following parties for comment:

a) The owner/management company, the master of *Joyous Society*.

b) The Shipping Division of Hong Kong Marine Department.

8.3 Submission was received from the Shipping Division of Hong Kong Marine Department and the draft investigation report had been amended as appropriate according to the submission.