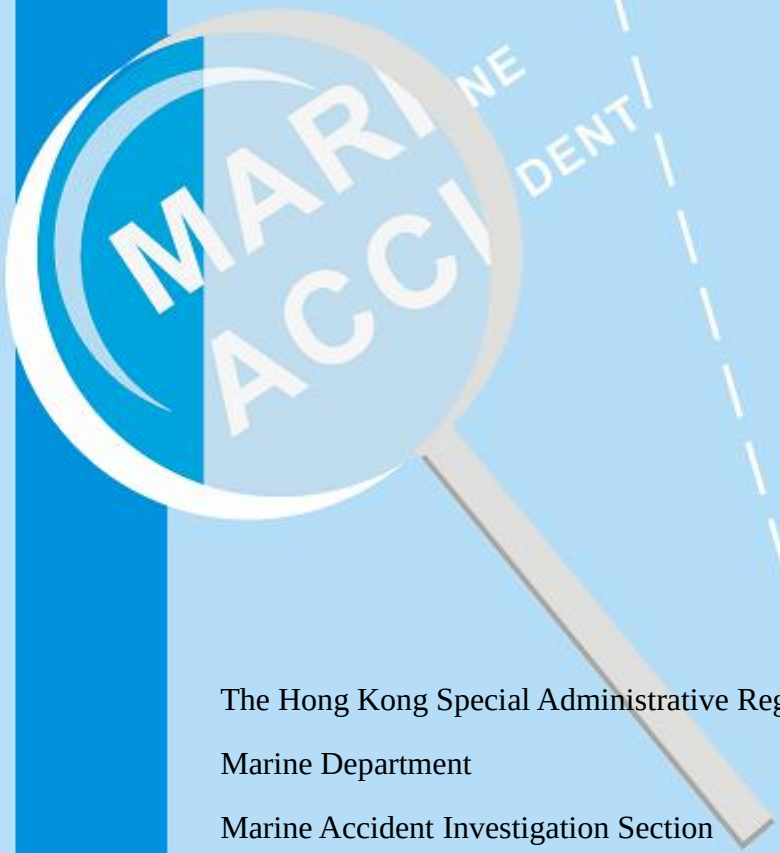
Report of Investigation into the fatal accident of two stevedores on board a bulk carrier "*PEKIN*" at Humen, China on 31 May 2016



The Hong Kong Special Administrative Region

Marine Department

Marine Accident Investigation Section

12 December 2018

Purpose of Investigation

The purpose of this investigation conducted by the Marine Accident Investigation and Shipping Security Policy Branch (MAISSPB) of Marine Department 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.

It is 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.

Table of Contents Page

1. Summary

1.1 On 31 May 2016, a fatal accident happened on board the Hong Kong registered bulk carrier *PEKIN* (*the vessel*) at the port of Humen, Guangdong in China.

1.2 At about 0012 hours on 31 May 2016, the night shift stevedore (Stevedore A) lost the contact with the day shift stevedore (Stevedore B) who was supposed to be on his way to *the vessel* for checking and repairing a broken excavator on board. As instructed by the supervisor (Supervisor A) of stevedores and the machine foreman (Foreman A), Stevedore A conducted a search around *the vessel* and found Stevedore B lying near the upper platform of the spiral ladder of the aft access trunk of No.2 cargo hold. Stevedore A at once informed Supervisor A and Foreman A for assistance.

1.3 At about 0050 hours, Supervisor A arrived at the entrance of No. 2 cargo hold aft access. Using clothes muffling his nose and mouth, Supervisor A entered into the aft access trunk trying to rescue Stevedore B. Stevedore A wearing a mouth mask also followed Supervisor A into the aft access trunk As Stevedore A himself smelt a strong unpleasant odour which made him difficult to breathe, he returned to the deck immediately. After that, Foreman A wearing 5 pieces of mouth masks entered the aft access trunk but he also returned to the deck immediately due to strong unpleasant odour. Foreman A then sought the berth security for assistance.

1.4 Meanwhile, the duty second officer of *the vessel* (Second Officer) was informed by the stevedores about the accident. He reported to the master of the *vessel* (Master) accordingly. At 0105 hours, the Master raised an alarm for mustering crew and took charge of a rescue operation.

1.5 At about 0121 hours and 0126 hours, Stevedore B and Supervisor A were rescued to the deck respectively by *the vessel*'s rescue team. They were treated at once by the shore medical team that attended *the vessel* after receiving an emergency call.

1.6 The shore medical team attempted resuscitation in vain to revive the two causalities. Stevedore B and Supervisor A were declared dead on the spot by the shore medical team doctor at 0145 hours.

1.7 At the time of the accident, the weather was fine and the wind was light air with

Force 1 on Beaufort Wind Scale. The illumination for the deck, the access trunk and the berth was normal.

1.8 The investigation identified the following contributory factors in this accident and the lessons learnt to avoid recurrence of similar accidents:

(a) the stevedores were not familiar with the working environment on board the *vessel*. Stevedore B made a mistaken entry into the aft access trunk of No.2 cargo hold which contained high contents of toxic gases and was in oxygen depletion. He collapsed inside the aft access trunk and lost his life due to suffocation and gas toxication.

(b) the shore side workers were lack of safety awareness of confined space entry. Stevedore B entered an access trunk which was a confined space of unknown oxygen content. Even recognizing Stevedore B had collapsed inside the access trunk of No. 2 cargo hold, Stevedore A, Supervisor A and Foreman A still entered the unventilated cargo hold by simply using clothes and / or masks to cover their noses and mouths.

(c) ship's crew failed to follow the shipboard Safety Management System to lock all accesses to cargo holds which had not been sufficiently ventilated for safe entry. Warning placards for arousing the safety awareness of enclosed space hazards were not posted at every entry of the cargo holds.

1.9 The Investigation also identified the following safety issue:

(a) ship-shore safety checklist was discussed between the chief officer of *the vessel* (Chief Officer) and the cargo foreman but the checklist was not signed by the cargo foreman. As such, it could not be ascertained that the cargo foreman had indeed understood the hazards involved during the unloading operation of logs on board.

2. Description of the vessel

Ship Name	:	*PEKIN*
Flag	:	Hong Kong, China
Port of registry	:	Hong Kong
IMO No.	:	9721566
Type	:	Bulk Carrier
Year built, shipyard	:	2016, Zhejiang Ouhua Shipbuilding, China
Gross tonnage	:	24,785
Net tonnage	:	13,026
Summer deadweight	:	39,777 tonnes
Length overall	:	176.65 metres
Breadth	:	30.00 metres
Engine power, type	:	6,050 kW, WARTSILA 5RT-FLEX50B
Classification society	:	Lloyd's Register (LR)
Registered owner	:	The China Navigation Co. Pte. Ltd.
Management company	:	The China Navigation Co. Pte. Ltd.

Figure 1 ***The vessel***

3. Sources of evidence

3.1 The Master, the Chief Officer and the second Officer of *the vessel*.

3.2 The management company of *the vessel*.

3.3 The foreman and the stevedore on night shift.

3.4 The death medical proof inference.

4. Outline of events

(All times are local time, UTC + 8 hours.)

4.1 On 9 May 2016, the Hong Kong registered bulk carrier *PEKIN* (*the vessel*) carrying full load logs cargo departed from the port of Tauranga, New Zealand to China. Logs were stowed inside the five cargo holds of *the vessel* and on deck (**Figure 2**). In accordance with the cargo plan, the logs stowed in No. 1 cargo hold and part of the logs in No. 3 and No. 4 cargo holds were to be discharged in Humen, Guangdong in China. The remaining logs would be discharged at the next port Qinzhou, Guangxi in China.

Figure 2 Logs on Deck

Cargo treatment for the voyage

4.2 In accordance with the cargo carriage requirements, logs were fumigated on board *the vessel* and the logs stowed inside cargo holds were further fumigated on 9 May 2016 before departure from the port of Tauranga. Furthermore, fumigation was also applied on 15 May 2016 during the sea voyage and to this effect, *the vessel* carried a fumigation officer arranged by a pest control company as required by the management company to perform the role of fumigator-in-charge of logs and responsible for issuing gas free certificates.

4.3 During the voyage at sea, a daily monitoring of dangerous gas was carried out by the Chief Officer and the fumigation officer.

4.4 In addition, there were three thorough checks of dangerous gas on board *the vessel*, including the engine room, all living and internal work areas. The first check and the second check were done on 15 May 2016 and 24 May 2016 respectively,

with no dangerous levels of toxic phosphine gas being detected in the mentioned areas.

4.5 The third check was done by the fumigation officer on 27 May 2016 with traces of phosphine gas detected. Some cargo holds and areas that had not been ventilated to below TVL[1] of 0.3 ppm of phosphine gas were indicated by the fumigation officer on a "Gas Free Not Certificate Vessel Map" (**Figure 3**) with remarks "the concentrations (phosphine gas) will drop below the TVL once all holds are opened." and recommendation "allow half an hour with holds open before anyone can enter the holds".

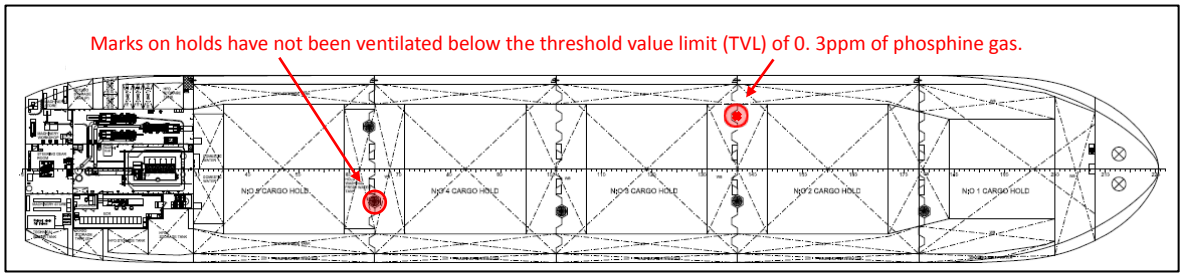


Figure 3 Gas Free Not Certificate Vessel Map

Unloading the cargo on arrival at the first discharge port Humen

4.6 At 1400 hours on 28 May 2016, *the vessel* arrived at the port of Humen, Guangdong in China and started unloading logs from No. 1, No. 3 and No.4 cargo holds at 1640 hours. Before the commencement of cargo unloading, the Chief Officer held a meeting with the cargo foreman of the shore stevedore company and provided the latter a ship-shore checklist, stowage plan and discharge sequence plan. The Chief Officer briefed the foreman that the cargo holds No.2 and No.5 were not allowed for entry as the logs inside these two cargo holds together with the logs stacked on their deck areas and hatch covers would be discharged at her next port in Guangxi. The items of the checklist were checked by the foreman one by one, but the foreman refused to sign the checklist.

4.7 For cargo unloading, there were about 4 to 5 stevedores on board *the vessel* to work in rotation. Furthermore, 2 shipboard crew members were also on duty to monitor the cargo operation together with another 2 crew members on standby round the clock.

---

[1] TVL namely Threshold Value Limit - the equivalent of Threshold Limit Value (TLV) in common use for a substance in the air which has been defined as the time-weighted average (TWA) concentration for normal eight-hour working day, and the 15-minute short-term exposure limit (STEL) concentration.

4.8 In the morning on 29 May 2016, the fumigation officer left *the vessel* and the cargo unloading continued.

4.9 At 2000 hours on 30 May 2016, Stevedore A came on board *the vessel* to operate an excavator in order to unload the logs in No. 3 cargo hold. At around 2303 hours, the excavator broke down and Stevedore A sent a photo of the broken excavator via his smart phone to Stevedore B who was responsible for the maintenance of excavators on board *the vessel*.

4.10 At 2306 hours, Stevedore B called back and advised Stevedore A that he would come on board soon. Stevedore A then informed Supervisor A and Foreman A about the situation.

4.11 At about 2350 hours, the broken excavator was shifted to the quayside awaiting for repair. At about 2356 hours, Stevedore B called to inform Stevedore A that he had arrived at the gate of the terminal.

4.12 At about 0010 hours on 31 May 2016, Supervisor A noticed that Stevedore B had not yet arrived. He phoned Stevedore B at about 0012 hours but the call was not answered. Supervisor A then asked Stevedore A to look for Stevedore B around *the vessel*.

4.13 Searching along the portside of *the vessel*, Stevedore A could not find Stevedore B and reported to Supervisor A. As instructed by Supervisor A, Stevedore A carried another search along the starboard side of *the vessel*. During the second search, Stevedore A saw a safety helmet inside the aft access trunk of No. 2 Cargo hold (*the trunk*), and that Stevedore B was lying near the upper platform of spiral ladder. Illumination lights for No. 2 cargo hold were switched on. Stevedore A shouted for help and then phoned Supervisor A and Foreman A to report his finding.

4.14 Supervisor A and Foreman A reached the entrance of *the trunk*. Emergency calls were instantly made by Foreman A via walkie-talkie to the security guard and terminal operator of the port.

4.15 At about 0050 hours, Supervisor A took off his clothes to cover up his nose and mouth and then entered into *the trunk* trying to rescue Stevedore B. Stevedore A also put on a face mask and followed Supervisor A to go into *the trunk*. When Stevedore A arrived at the upper platform, he found that Supervisor A had

collapsed on the lower platform. Stevedore A could not stay long in *the trunk* because a strong unpleasant odour had caused him difficult to breathe. He came out of *the trunk* and then reported to Foreman A.

4.16 Foreman A wore 5 pieces of face masks and went into *the trunk*, but he felt chest tightness, eyes irritation, dizziness and difficulty in breathing. He quickly returned to the deck and yelled for help from the crew of *the vessel*. Meanwhile, terminal operators arrived at the scene with 2 mask respirators for toxic gas. After discussion, it was decided that it was unsafe to enter *the trunk* with only mask respirators for toxic gas.

4.17 Meanwhile, the Second Officer patrolling on deck was informed by the stevedores about the accident. The Second Officer immediately reported to the Master. At about 0105 hours, the Master raised an emergency alarm for mustering the crew and took charge of search and rescue operation.

4.18 At about 0110 hours, the crew assembled on deck. At about 0115 hours, the first team consisted of the Chief Officer and an able-bodied seaman entered into *the trunk*. At about 0121 hours, they managed to retrieve Stevedore B to the main deck. The shore medical team comprising doctors and nurses who had arrived at scene at about 0118 hours applied first-aid treatment immediately. At about 0126 hours, the second team consisted of three ratings entered into *the trunk* and retrieved Supervisor A from the lower platform of the spiral ladder.

4.19 The shore medical team applied first-aid treatment to revive the two casualties with resuscitation but in vain. At about 0145 hours, Stevedore B and Supervisor A were declared dead by the shore medical team doctors on the spot.

4.20 At about 0830 hours, a surveyor on behalf of the ship owner's P&I Club boarded *the vessel*. The surveyor together with the Chief Officer measured the air inside *the trunk*. The oxygen concentration was very low and the results of measurements were tabulated below.

Air measurement of aft access trunk of No.2 cargo hold	Oxygen	Carbon Monoxide	Hydrogen Sulfide	Phosphine gas
	5.6%	307 ppm	67 ppm	Not measured
Composition of normal air	20.95%	0.25 ppm	Nil	Nil
TVL (TWA/STEL)	N.A.	35 / 200 ppm	1 / 5 ppm	0.3 /1.0 ppm

5. Analysis

Certification, training and experience

5.1 *The vessel* was a bulk carrier delivered in January 2016 with the capability of carrying logs. The statutory trading certificates of *the vessel* were valid and in order.

5.2 The Master held a valid Class 1 Licence of the Deck Officer issued by the Hong Kong Marine Department (HKMD) of China. He was in charge of *the vessel* for about 5 months after the new delivery of *the vessel* from shipyard in January. He had no experience of carrying logs before joining *the vessel*.

5.3 The Chief Officer held a valid Class 2 Licence of the Deck Officer issued by HKMD. He joined *the vessel* in February 2016 and had no experience of carrying logs before he joined *the vessel*. The Second Officer held a valid Class 3 Licence of the Deck Officer issued by HKMD. He was in the capacity of the Second Officer for more than 3 months before the accident. He was on cargo watch at the time of the accident.

5.4 Stevedore B was employed by a stevedoring company with the business scope of general cargo handling, machinery leasing and repairing. He held a licence issued on 7 April 2010 and valid until 7 April 2016 for the operation of machinery, including fork lift, excavator and wheel loader. During that period, his licence was reviewed twice on April 2012 and April 2014 respectively. He completed a subsidiary training in operation of excavator at secondary level and possessed a relevant skill certificate for the construction industry. In addition, he had been trained and passed an engineering machinery programme provided by the company during the period from 18 December 2012 to 18 March 2013 at Xuzhou, China. However, it was not known if he had been provided with training of enclosed space entry or training of cargo handling on board.

5.5 Supervisor A, employed by the same company of Stevedore B, was in a supervisory capacity of general affairs in safety production. However, it was not known if he had been provided with training of enclosed space entry or training of cargo handling on board.

Working hours and fatigue

5.6 The stevedore company arranged a day shift from 0800 hours to 2000 hours and a night shift from 2000 hours to 0800 hours the next day. Although no detailed information was provided to show the rest hours taken by Stevedore B, a duty list of the stevedores showed that he was on the day shift. Stevedore B was called at about 2300 hours for repairing the broken excavator and the accident happened at midnight. Stevedore B worked beyond the hours of his normal shift, but it was hard to determine if fatigue was a contributing factor of the accident.

Weather condition

5.7 The weather was fine and was not considered as the contributing factor to the accident.

Access trunk arrangements of No.2 cargo hold

5.8 There were two entries for No. 2 cargo hold: one at the portside for front access and the other one was at the starboard side for aft access. The front access of No. 3 cargo hold and the aft access of No. 2 cargo hold (the aft access) were located on the same cross deck passage (**Figure 4**).

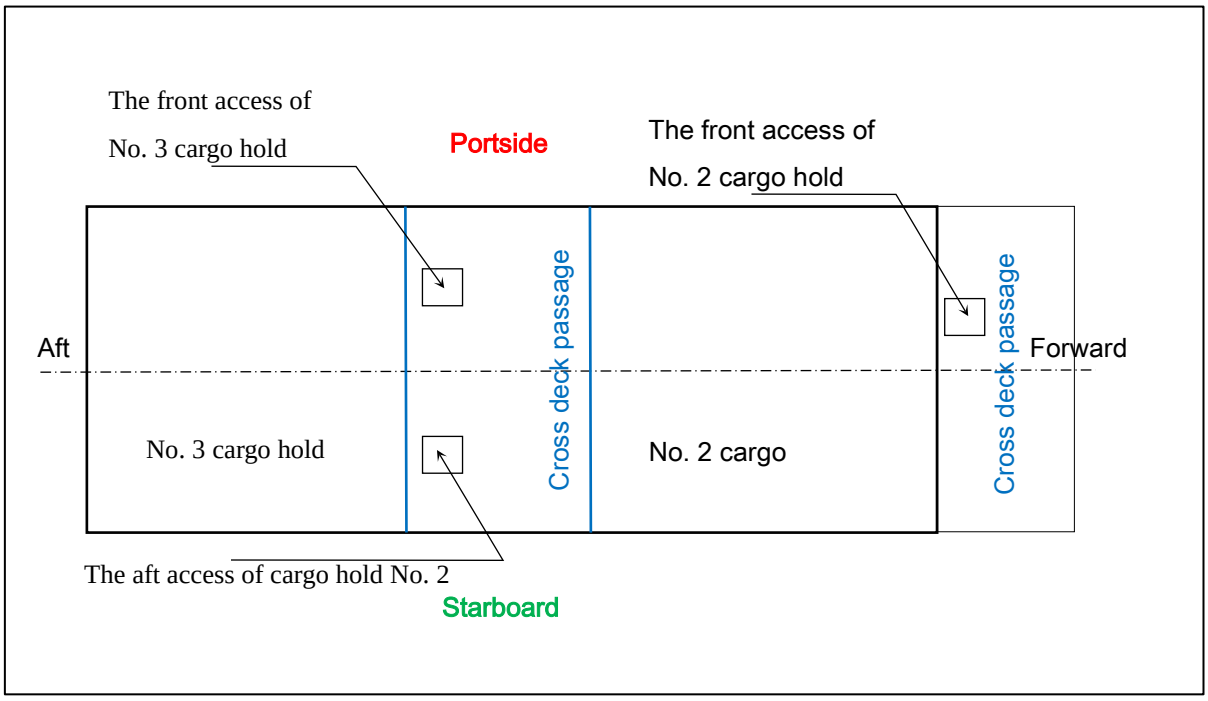


Figure 4 Access trunk arrangements for No. 2 cargo hold

5.9 The entry of the aft access was located in a recess of the corrugated bulkhead (the recess) on the cross deck passage (**Figure 5**). The entry into the No. 2 cargo hold

was via a hatch cover and below the hatch cover was *the trunk*. The access of *the trunk* comprised two lengths of vertical ladders followed by a spiral ladder (**Figure 6**). There were two platforms, the upper platform and the lower platform, on the spiral ladder. There were openings with wooden covers inside *the trunk*. The wooden covers were not gas tight and therefore the air quality inside *the trunk* and the cargo hold was more or less the same.

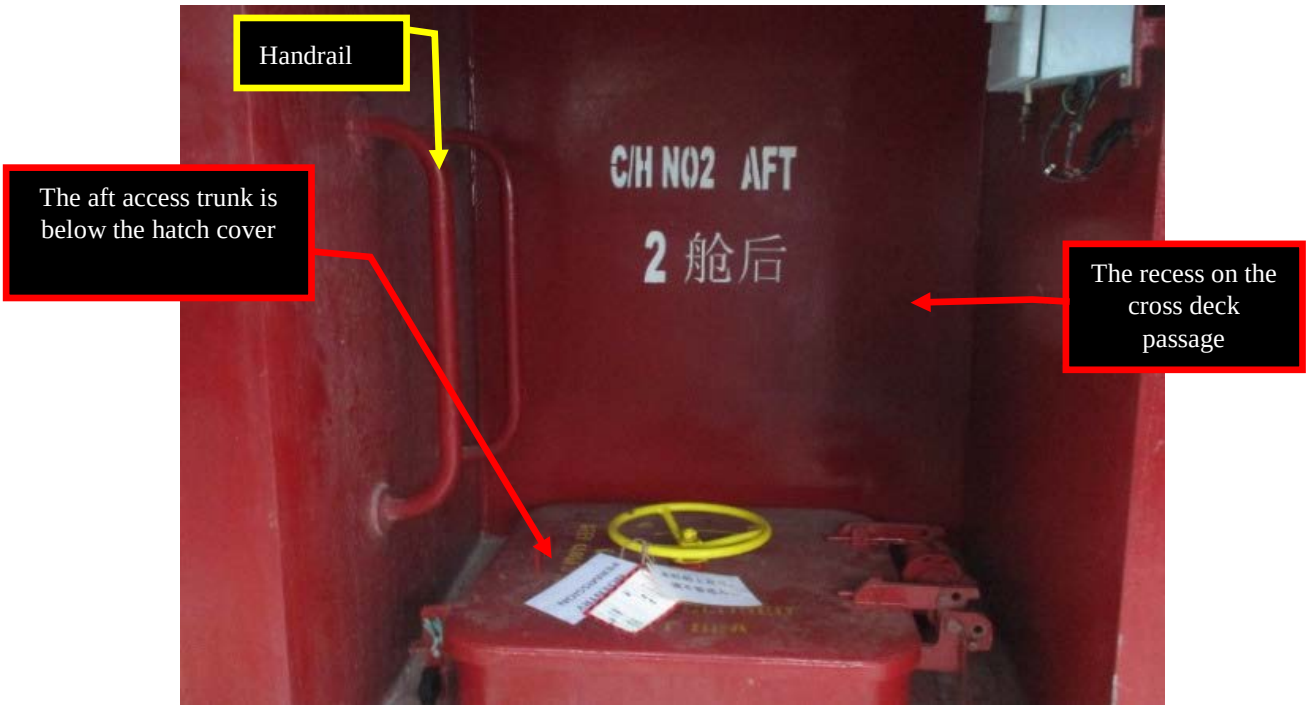


Figure 5 The aft access of No. 2 cargo hold

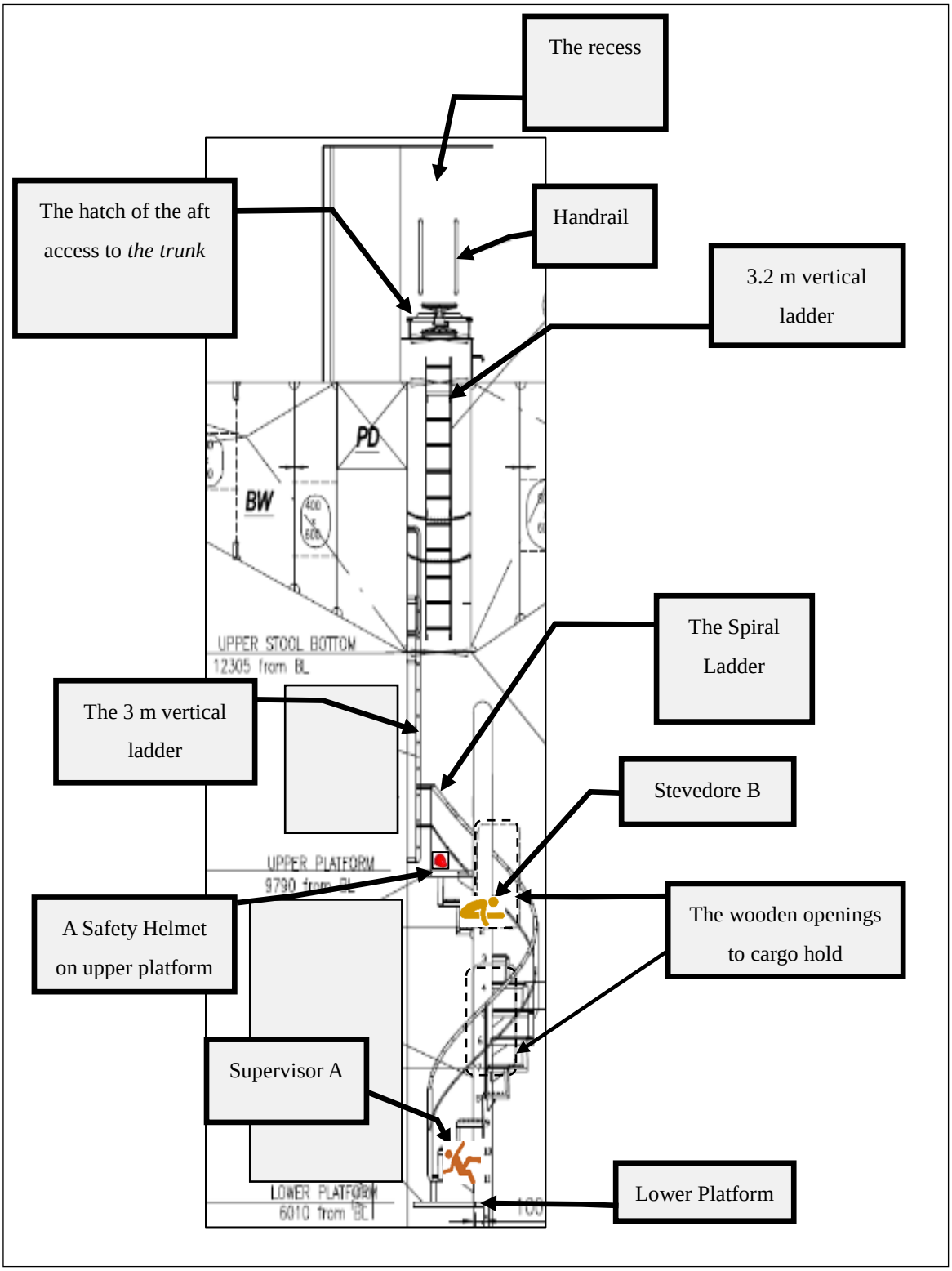


Figure 6 Casualties locations and *the access trunk* of No. 2 Cargo Hold

The use of phosphine gas for the fumigation of logs

5.10 Phosphine gas is colourless and highly toxic with unpleasant odour. The TVL of phosphine gas is 0.3 ppm. It causes bleeding and liquid formation in lung that leads to increasing levels of respiratory discomfort as exposure increases.

5.11 Phosphine gas is used worldwide as a fumigant by interfering the biological process of living organisms, including the fumigation of raw material such as the logs as carried on board cargo ships.

5.12 Phosphine gas was used to fumigate the logs in cargo holds of *the vessel* before departure from the port of Tauranga. A fumigation officer was arranged by a pest control company as required by the management company to perform the role of fumigator-in-charge of logs during the sea voyage and responsible for issuing gas free certificates.

5.13 The Chief Officer had told the cargo foreman that cargo of all No.1, No.3 and No.4 cargo holds were to be discharged at the port of Humen, and that all hatches for No.2 and No.5 cargo holds were closed. The Chief Officer also provided operation checklists for the cargo foreman but the latter did not append his signature on the checklist. The Chief Officer also took no further action to alert the stevedore company of not to enter into No.2 and No. 5 cargo holds.

Inadvertent entry into No.2 cargo hold

5.14 The last contact with Stevedore B was at about 2356 hours on 30 May 2016 and his contact was lost at 0012 hours on 31 May 2016. It was believed that Stevedore B had mistakenly entered the aft access of No. 2 cargo hold instead of No. 3 cargo hold at about midnight.

5.15 It was observed that the aft access to No. 2 cargo hold was neither locked nor posted with any entry warnings (e.g. warning placard or stencils of warning signs) at the time of the accident. As a result, Stevedore B went into No. 2 cargo hold easily, perhaps inadvertently. It was hard to determine if the factor of working for 12 hours day shift work with only about three hours' rest before being called to attend a repair could induce fatigue and thus cause his misjudgment of entering into wrong cargo hold.

Locations of the casualties inside the trunk of No.2 cargo hold

5.16 Stevedore B's safety helmet was found on the upper platform and he was lying on the spiral ladder a few steps down from the upper platform. Supervisor A was found on the lower platform **(Figure 6)**.

Cause of death

5.17 The death medical proof inference indicated that the cause of their death was due to unidentified gas toxication.

5.18 The "Gas Free Not Certificate Vessel Map" indicated No.2 and No.5 cargo holds had not been gas freed. No.2 cargo hold and its access hatch were neither opened nor ventilated at the port of Humen. In this regard, No.2 cargo hold was an enclosed space with hazards of oxygen depletion and existence of toxic gas. The measurement of air composition (with results shown in the table of paragraph 4.20) in *the trunk* as conducted by the P&I Club surveyor together with the Chief Officer on 31 May 2016 revealed its fatal air quality. It could be deduced from the death medical proof inference and the air measurement result that oxygen depletion compounded with toxic gas had caused the death of Stevedore B and Supervisor A.

Safety awareness of the stevedores

5.19 Due to the nature of the logs for oxygen absorption and the fumigation done in all the cargo holds of *the vessel*, the cargo holds and their access spaces were expected to be depletion in oxygen and contained toxic gases. Precautionary measures and extra care should be taken before entering into these areas.

5.20 Before the cargo handling operation, the Chief Officer briefed the cargo foreman that the No. 2 and No. 5 cargo holds were not allowed for entry but the cargo foreman declined to sign the ship-shore safety checklist. It indicated that the stevedores might not really understand the briefed working environment including different access trunks for different cargo holds and precautionary measures of entering into these areas.

5.21 The actions of Stevedore A, Supervisor A and Foreman A trying to rescue Stevedore B evidently showed that they were not fully aware the severe consequence of unsafe entry into enclosed space. Their acts of direct entry with

face masks and clothes only to cover their noses and mouths had endangered their own lives and caused Supervisor A consequently collapsed and lost his life.

5.22 According to the above findings, though the stevedores received some related trainings and possessed relevant certificate or licence for the operation of machinery, their education and training for shipboard operations were apparently insufficient. They were also lack of safety awareness and training of enclosed space entry.

Shipboard procedure and guidance of the safety management system (SMS)

5.23 There were cargo hold entry procedures and guidance for entry into enclosed space for shipboard operations issued by the management company of *the vessel*. Those procedures and guidance highlighted general precautions and testing of atmosphere prior to entering a cargo hold and for controlling the entry of personnel into an enclosed space, including but not limited to gaining approval from the Chief Officer prior to making an entry.

5.24 In fact, the "Gas Free Not Certificate" certified that an internal check to all cargo holds for traces of phosphine gas was completed on 27 May 2017. Although there were holds not ventilated below the TVL of 0.3 ppm of phosphine gas, the concentration would drop once the hatches were opened. It should also be noted that the fumigation officer had recommended to allow half an hour with holds open before anyone entering the holds.

5.25 The guidance and procedure in health safety environment safety (HSES) issued by the management company gives *the vessel* explicit instructions on where and how to take care of confined spaces. However, the following requirements stated in the HSES were not complied with by *the vessel*:

The cargo holds and communicating spaces in bulk carriers are examples of confined spaces where such toxic atmospheres may develop.

(a) ***All access ways and access hatches …… must be locked with a different type of padlock …… and the keys kept under the control of the Master and the Chief Officer.***

(b) ***…… hold entry placard must be placed at the entrance to every access way and properly secured ……***

5.26 Moreover, the HSES contains extensive safety precautions for fumigation in port and continued at sea. A gas free certification system is also incorporated into the enclosed space checklist and set up the role of the fumigator-in-charge, specifying his duty and responsibility for the safety precautions based on MSC.1/Circ.1264[2].

5.27 The fumigation officer had joined *the vessel* from 9 May 2016 to 29 May 2016 and discharged the role of the fumigator-in-charge as required by the HSES. After he left *the vessel*, however no crew had taken over his role to look after those high risk areas mentioned on the "Gas Free Not Certificate", thus appropriate control was not put in place.

[2] Recommendations on the Safe Use of Pesticides in Ships Applicable to the Fumigation of Cargo Holds, MSC.1/Circ.1264, 27 May 2008

6. Conclusions

6.1 On 31 May 2016 between around 0012 hours to 0050 hours, a fatal accident involving two deceased stevedores happened on board the Hong Kong registered bulk carrier *PEKIN* at the port of Humen, Guangdong, China.

6.2 In the early morning on 31 May 2016, while Stevedore B was found lying unconsciously near the upper platform of the spiral ladder inside *the trunk*, Supervisor A and Stevedore A entered *the trunk* trying to rescue Stevedore B. Supervisor A collapsed and lost his consciousness in *the trunk* and Stevedore A managed to exit from *the trunk*.

6.3 Although the rescue operation by ship's crew was effective to retrieve the two casualties from *the trunk* eventually, and first-aid treatment for the casualties by the shore medical team were applied immediately at the spot, the resuscitation was in vain. The two casualties were declared dead at the spot by the doctors of shore medical team at 0145 hours. The death medical report stated that the cause of their death was due to unidentified gas toxication.

6.4 The investigation had identified the following contributory factors in this accident and lessons learnt to avoid recurrence of similar accidents:

(a) the stevedores were not familiar with the working environment onboard *the vessel*. Stevedore B made a mistaken entry into *the trunk* which contained high contents of toxic gases and was in oxygen depletion. He collapsed inside *the trunk* and lost his life due to suffocation and gas toxication.

(b) The shore side workers were lack of safety awareness of confined space entry. Stevedore B entered an access trunk which was a confined space of unknown oxygen content. Even recognizing Stevedore B had collapsed inside the access the trunk of No. 2 cargo hold, Stevedore A, Supervisor A and Foreman A still entered the unventilated cargo hold by simply using clothes and / or masks to cover their noses and months.

(c) ship's crew failed to follow the shipboard Safety Management System to lock all accesses to cargo holds which had not been sufficiently ventilated for safety entry. Warning placards for arousing the safety awareness of enclosed space hazards were not posted at every entry of the cargo holds.

6.5 The Investigation also identified the following safety issue:

(a) ship-shore safety checklist was discussed between the Chief Officer and the cargo foreman but the checklist was not signed by the cargo foreman. As such, it could not be ascertained that the cargo foreman had indeed understood the hazards involved during the unloading operation of logs on board.

7. Recommendations

7.1 The owner/management company of *the vessel* is recommended to:

(a) issue notice/circular to draw the attention of their masters, officers and crew to the findings of the investigation, and consider to take internal audit to ensure that the company's procedures and instructions for handling of fumigated logs on board ships (i.e. "when carrying logs inside cargo holds") and "entry into enclosed space" to be strictly followed by the crew on board their fleet.

7.2 A copy of the investigation report should be sent to the stevedore company, advising them the findings of this incident. Their attention is also drawn to the lessons learnt from the investigation. The stevedore company should provide effective supervision and adequate training to their stevedores, in particular:

(a) vessels' confined space entry; and

(b) communication with vessels' crew on cargo handling procedures and precautions including risks of particular cargos and cargo holds, and the dangers involving the cargo operation and environment on board.

7.3 A copy of the investigation report should be provided to the International Safety Management Section of the Shipping Division of Hong Kong Marine Department for information and attention on the findings of the report.

7.4 A Hong Kong Merchant Shipping Information Note should be issued to promulgate the lessons learnt from the accident.

8. Submission

8.1 The draft investigation reports, in its entirety, had been sent to the management company, the Master of *the vessel*, the stevedore company and the Guangdong Maritime Safety Administration of the People's Republic of China for their comments.

8.2 During the consultation period, comment from the management of *the vessel* was received and properly considered and the report has been amended. The Master of *the vessel* could not be contacted. No comment was received from the rest of the recipients.