



Report of Investigation
into the fatal accident
caused by turning propeller of
a local pleasure vessel
Crescent Island
at Port Island
on 27 July 2008



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

Purpose of Investigation

This incident is investigated, and published in accordance with the IMO Code for the Investigation of Marine Casualties and Incidents promulgated under IMO Assembly Resolution A.849(20). 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.

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.

Table of Contents

	Page
1 Summary	1
2 Description of the vessel	2
3 Sources of evidence	3
4 Outline of events	4
5 Analysis of evidence	6
6 Conclusions	10
7 Recommendations	10
8 Submissions	10

1. Summary

- 1.1 At about 1500 on 27 July 2008, a diver was drawn towards and killed instantly by the turning propeller of the locally licensed pleasure vessel *Crescent Island* (hereinafter referred as the Vessel). Before the accident, the deceased was floating on the sea surface and waiting to board near the stern of the Vessel. At the time of accident, the weather was squally and the Vessel had grounded on a rocky beach at Port Island after dragging anchor.
- 1.2 The contributory cause of the accident is due to the engagement of astern engine of *Crescent Island* by the Master of the vessel with a view to clearing the vessel from grounding.



Figure 1 – Grounding position of *Crescent Island*

2. Description of the vessel

2.1 Particulars

Name	:	CRESCENT ISLAND
License No.	:	36586
Class	:	Class IV i.e. pleasure vessel
Type	:	Cruiser
Length overall	:	21 metres
Extreme Breadth	:	6.35 metres
No. of person permitted to carry	:	55
Type of engine/Propulsion Power	:	1xCummins inboard diesel engine/238.72 kW



Figure 2 – Photograph of *Crescent Island*

3. Sources of Evidence

3.1 Master and some divers of *Crescent Island*;

3.2 Marine Police, Hong Kong Police Force; and

3.3 Hong Kong Observatory.

4. Outline of Events

- 4.1 At about 0945 in the morning of 27 July 2008, *Crescent Island* departed with about 50 passengers on board from Wong Shek Pier in Sai Kung to Port Island to carry out diving activities. The Vessel arrived and dropped anchor at about 1030 at a position about 200 metres from the Port Island. The weather was fine and the sea was smooth.
- 4.2 At about 1100 a group of six divers were led and supervised by a diving instructor “A” to jump into the water from the Vessel to commence first session of diving training and after almost half an hour, the diving instructor “A” and all the divers returned to go on board the Vessel for a rest and lunch.
- 4.3 At about 1330 the above diving instructor “A” and the same group of six divers were delivered by a rubber dinghy to a position about 100 metres from *Crescent Island*. Second session of diving training was commenced at about 1400. After about 30 minutes the diving instructor and all the six divers returned to the sea surface and they found that the weather was squally with strong wind and heavy rain.
- 4.4 At about 1430 *Crescent Island* had dragged anchor under the action of strong wind and grounded on a rocky beach at Port Island. Fearing that the Vessel might capsize due to grounding, the Master engaged the astern engine for 5 minutes trying to clear the Vessel from grounding. The Master stopped the engine after failing to clear the Vessel and then used the rubber dinghy on the port side trying to push the Vessel to clear from the beach but in vain. Later he re-engaged the astern engine again trying to clear the Vessel from grounding.
- 4.5 At about 1445 an unknown speedboat nearby gave the divers and the diving instructor “A” a rope attached with a buoy to hold on and towed them towards *Crescent Island*. They were not aware that *Crescent Island* had run aground. When the speedboat was close to *Crescent Island*, they let go the rope and buoy and swam towards *Crescent Island* by themselves. However, after all the divers had boarded *Crescent Island*, they found that one of the divers was missing and informed the people on board accordingly. The Master stopped the engine when another diving instructor “B” on board the main deck of *Crescent Island* shouted to him that a diver had disappeared from the sea surface near the stern of the Vessel and assistance was required to locate the diver.
- 4.6 Two other diving instructors “C” and “D” on board the Vessel jumped into the water instantly and tried to search for the missing diver. Diving instructor “C” found a nude

dead body of a woman beneath the bottom of the Vessel. In order not to terrify the other divers on the Vessel, he pushed the dead body towards and landed on the rocky beach. The woman was later identified to be one of the divers within the above group of divers

5. Analysis of Evidence

5.1 Certification of vessel and operating personnel

5.1.1 The Vessel was first licensed by Marine Department on 15 December 2003 and its licence was valid up to 20 February 2009.

5.1.2 The Master is holding a valid Hong Kong Master Grade I Certificate of Competency for pleasure vessels of more than 20 metres in length and a valid Local Certificate of Competency to take charge of a motor up to 150 BHP (British Horse Power). Under the new pleasure vessel regulation, holder of the above local engineer qualification can take charge of a motor of any power on pleasure vessels. In this connection, the Master is found qualified to take charge of the subject vessel. He claimed that he had about 16 years of experience in operating local vessels including pleasure vessels.

5.2 Weather and sea conditions

5.2.1 The Master stated that prior to working on board the Vessel in the morning, he had already watched the weather forecast from the television and a good weather would be expected for the day. According to the statements of the Master and other witnesses i.e. divers, the weather condition was fine and the sea was smooth when the Vessel dropped anchor at about 1030. However, the weather deteriorated and became squally and there was a rough sea at the time of accident.

5.2.2 According to the weather report from the Hong Kong Observatory, the weather condition was fine and there was a light air at about 1400. At about 1500, the wind became stronger and there was a westerly moderate breeze prevailing in the area.

5.3 Diving experience of the deceased

5.3.1 One of the trainee divers who was a friend of the deceased claimed that the deceased had about one year of experience in diving.

5.4 Cause of death

5.4.1 The direct cause of death as given in the Autopsy Report was due to multiple injuries. It is believed that the multiple injuries were caused by the turning propeller of *Crescent Island*. Before boarding *Crescent Island*, some divers saw that the deceased was pushed by the waves towards the stern of the Vessel and then disappeared. Figure 3 indicates the approximate location of the deceased in the water before she was dragged towards the propeller. The rags of the diving suit of the deceased and a piece of rope were found entangled with the propeller after the vessel was docked in a small shipyard (Figure 4).

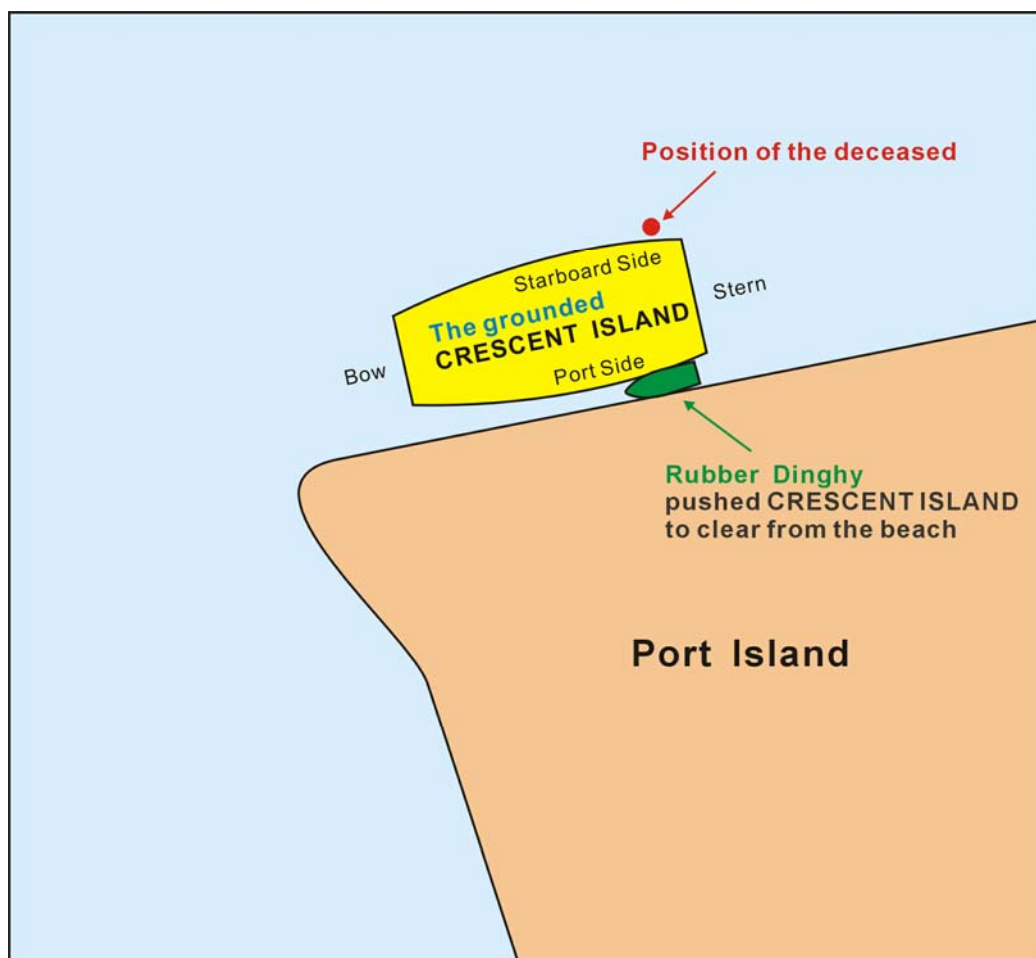


Figure 3 – Diagram showing the position of the deceased before accident



Figure 4 – Diagram showing the propeller of *Crescent Island*

5.5 Alcohol, Drug and Fatigue

5.5.1 There was no evidence that prior to reporting duty in the morning of 27 July 2008, the Master had taken any alcohol or medicines. The Master also claimed that he had sufficiently rested prior to reporting duty.

5.5.2 Most of the witnesses i.e. the diving instructor “A” and trainee divers stated that the deceased had not taken any alcohol or medicines and she was in a normal healthy condition before diving. In this connection, there was no evidence to indicate that the deceased was under the influence of alcohol or drug when the accident occurred.

5.6 Control of the vessel and the engine

5.6.1 The Master was in charge of navigation and control of the engine of the Vessel while a diving instructor i.e. diving instructor “C” assisted him in taking care of the passengers on board the Vessel. The wheelhouse is on the upper deck of the Vessel (Figure 1) and the Master claimed that before engaging astern engine for the first time for about 5 minutes, he had already checked visually and it was also confirmed by his Assistant i.e. the diving instructor “C” that there was no diver in close proximity to his vessel. He checked again visually and found no diver in close proximity to his Vessel when he engaged the astern engine for the second time for 10 minutes and the diving instructor “C” was keeping a lookout on the main deck of the Vessel.

5.6.2 The Master stated that before re-engaging the stern engine, he had checked visually that there were no divers and speedboat in close proximity to his Vessel. In this connection, it is believed that after engaging the astern engine for the second time, the divers including the diving instructor “A” were towed by a speedboat to the starboard side of the Vessel. When all the divers let go the rope and buoy and floated on the sea surface to wait for boarding the Vessel, a woman diver who was floating near the stern of the Vessel was drawn towards and seriously injured by the turning propeller. The Master claimed that before re-engaging the engine, he had neither observed the unknown speedboat nor the divers and their instructor “A”. He only saw the unknown speedboat near the stern of the Vessel after stopping the engine. Although the Assistant of the Master claimed that he was keeping a lookout on the main deck at the stern of the Vessel, he did not see that the speedboat was approaching the Vessel. In this connection, it was doubtful whether or not the Assistant was actually keeping a lookout at the stern of the Vessel.

5.7 Guidelines on safety operations for vessels

5.7.1 The company has issued guidelines to the masters of the vessels advising them how to operate the vessels safely and deal with emergencies. However, the guidelines do not stipulate that the masters must keep a sharp lookout by himself or post a lookout on deck to ensure that there are no divers in close proximity to the vessel prior to manoeuvring their vessels using the engine.

6. Conclusions

- 6.1 The accident occurred at about 1500 on 27 July 2008 on a rocky beach of Port Island.
- 6.2 At the time of the accident, the weather was squally with strong wind and heavy rain and a rough sea.
- 6.3 A diver was drawn towards and killed instantly by the turning propeller of *Crescent Island* which had grounded on a rocky beach of Port Island when the accident occurred.
- 6.4 The cause of this fatal accident was due to engagement of astern engine by the Master of *Crescent Island* who tried to clear the Vessel from grounding. However, in manoeuvring the engines, he did not realize that the deceased was in the water waiting to board the Vessel near the stern. As a result the deceased was drawn towards the propeller and killed.

7. Recommendations

- 7.1 A copy of this report is to be sent to the Master and company of *Crescent Island* drawing their attention on the findings of the investigation. The Company should issue guidelines to the masters warning them not to operate the engine unless they are absolutely sure after checking by himself or by a lookout that there are no divers in close proximity to their vessels. A good communication must be established between the Master and the lookout if posted.
- 7.2 A Marine Department Notice should be issued to advise the public of taking all necessary safety precautions when engaged in diving activities.

8. Submissions

- 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 to that person or organization for their comments.
- 8.2 The final draft of the report was sent to the Company, Master and his assistant of *Crescent Island*.

8.3 No submission was received from the Company, Master and his assistant of *Crescent Island*.