BERMUDA

GOVERNMENT OF BERMUDA
MINISTRY OF TOURISM DEVELOPMENT AND TRANSPORT
DEPARTMENT OF MARITIME ADMINSTRATION

REPORT OF INVESTIGATION INTO THE DEATH OF A PASSENGER

ON BOARD THE SHIP "QUEEN ELIZABETH" INVOLVING

A SHIP'S TENDER

1ST APRIL 2015

CONTENTS

SUMMARY

The "Queen Elizabeth", a large cruise ship operated by Carnival UK, of Southampton, England was engaged on a cruise itinerary known as the 2015 Round the World Cruise. On the 1st April 2015 the ship anchored off the port of Sihanoukville, Cambodia the latest port of call.

As the vessel was at anchor, the passengers were transported ashore by using the ships tenders. The boarding arrangements for the tenders were facilitated via the large pontoons which are attached to the ship just above the water line, and operated by a hydraulic system. During tender operations the pontoons are manned by a team of designated crew members. The tenders are operated by the ship's crew and they come alongside the pontoon as directed by the Safety Officer who is in charge of the tender operations. When boarding the tenders, the passengers first alight on to the pontoon, and then board the tenders via the pontoon, in a controlled manner.

Mrs. Mary Atherton one of the passengers from the ship went ashore by a tender around 1227 hrs that day. After visiting the places she wanted to see, Mrs. Atherton was heading back to the Sihanoukville jetty around 1700 hrs to board the tender to return to the ship. One of the male passengers who was also from the ship, and was returning to the jetty had noticed that Mrs. Atherton was having difficulty in her mobility and assisted her on to tender No. 16 which was waiting at the Sihanoukville jetty to return to the Queen Elizabeth. There were 35 passengers and 2 crew members onboard the tender.

The tender left the jetty at approximately 1710 hrs. and at 1719 hrs. the tender was alongside the port pontoon of the vessel. Once the tender was made fast to the pontoon Mrs. Atherton was the first one to disembark from the tender, and she was assisted by the same male passenger who had assisted her at the jetty and a crew member from the tender, and one crew member who was standing on the pontoon.

As Mrs. Atherton was stepping off the tender to the pontoon step, the tender moved away from the pontoon sideways and as a result Mrs. Atherton fell into the gap between the tender and the pontoon. The crew members managed to hold on to Mrs. Atherton as she fell into the water, but almost immediately the tender moved back towards the pontoon trapping Mrs. Atherton between it and the pontoon causing severe injuries to her head. At the same time the crew members lost the grip on Mrs. Atherton and she disappeared under the pontoon.

When Mrs. Atherton reappeared abaft the pontoon, two officers, who attended the pontoon on hearing the man overboard alarm, immediately jumped into the water and proceeded to keep Mrs. Atherton afloat. A man-overboard announcement was made and the ships rescue boat was lowered to the water. Mrs. Atherton was recovered to the rescue boat and transferred via the pontoon to the ships hospital where she was pronounced to be dead.

1. Introduction

1.1 Queen Elizabeth was on day 82 of a 114 day round the world cruise and had, in the previous few days, called at Hong Kong, Na Trang, Phu My, Laem Chabang before Sihanoukville, and was next due to call at Singapore on 3rd April 2015. The Round the World Cruises are either sold as a complete cruise, or in segments, so the passengers can join and leave the ship at designated wayports during the cruise.

1.2 Sihanoukville, Cambodia is an anchorage port where transporting of passengers ashore and back to the ship are provided by ships own tenders. During the tender operations an elderly woman passenger had died on board the ship due to an accident, and the Department of Maritime Administration, Bermuda was informed of the accident and subsequent death of the passenger, by the Marine & Nautical Manager for Carnival UK who had received the notification from the vessel.

1.3 On receiving the notification of the incident, the Bermuda Department of Maritime Administration (DMA), considered to conduct an investigation in to the accident in accordance with the requirements of Section 232 of the Bermuda Merchant Shipping Act, 2002 to ascertain the circumstances leading to the death of the passenger on board the vessel.

1.4 The Bermuda Investigating Officer boarded the ship during it's scheduled port call at Singapore on 3rd April 2015.

1.5 The Head of Safety, at Carnival UK and a Senior Safety Official from Carnival UK also boarded the vessel at Singapore to conduct their own investigation into the incident on board.

1.6 Due to the limited time in port, following discussions, all interested parties agreed to conduct a combined investigation into the circumstances leading to the death of the passenger and to share the relevant information accordingly.

2 The Ship

2.1 Queen Elizabeth is a large Passenger ship with the following relevant particulars:

- Call Sign ZCEF2
- IMO Number 9477438
- Port of registry Hamilton
- Classification Society Lloyd's Register
- Gross Tonnage 90901
- Dead Weight Tonnage 7773
- Length Overall 293.84m
- Service Speed 23.70 knots
- Passenger Capacity 2092
- Ships Crew 960
- Date of Build (Keel Laid) 2nd July 2009
- Builder Fincantieri, Cantieri Navali Itialiani S.p.A

2.2 The ship is arranged with passenger cabins spread over 7 decks, capable of accommodating 2092 passengers, and crew accommodation for 960 persons spread around various decks of the vessel. The ship is powered by internal combustion engines that deliver a total power of 64000 Kw to two Azipod Thrusters aft and has a service speed of 23.7 knots. An Azipod is basically a propeller driven by an electric motor which is housed in a 'pod' that can be turned through 360 degrees.

2.3 The ship is managed by Carnival UK of Southampton, Hampshire, United Kingdom and is registered under the Bermuda flag.

3. Narrative of Events

On 1st April 2015 the Queen Elizabeth arrived at the latest port of call during it's 2015 round the world voyage, Sihanoukville, Cambodia. The vessel arrived off the port and by 0845 hrs. and was lying to 5 shackles on the Starboard anchor. The first tender carrying passengers left the vessel at 0858 hrs and open tenders announcement was made at 1145 hrs. Open Tenders is the announcement made when passengers who are not on tours are free to board a ships tender without having to queue in a ticketing system. Mrs. Atherton was still onboard the vessel when the 'open tenders' announcement was made.

It is noted from the pass records onboard that Mrs. Atherton proceeded ashore on a tender that left the vessel at 1227 hrs. Mrs. Atherton returned to the jetty later in the afternoon and it was noted she was assisted along the jetty to the tender by a younger Male Adult. At 1710 hrs Tender 16, with Mrs. Atherton onboard, departed the jetty for the return trip to the vessel, this was the 2nd to last tender to leave the jetty that day and had 35 passengers and 2 crew members onboard.

The tender arrived at the ship around 1719 hrs and it was made fast alongside the port pontoon ready for the passengers to disembark. The sea state at this time was reported to be 2 to 3 on the Beaufort Sea Scale. The Beaufort Sea Scale is a method of measuring the height of the waves and wind speed by observation of the state of the sea. Beaufort 2 is classified as sea height as 1 – 2 ft with small wavelets, crests of glassy appearance, not breaking and Beaufort 3 is classified as sea height as 2 – 3.5 ft with large wavelets, crests begin to break, scattered whitecaps. A copy of the Beaufort Wind and Sea Scale is attached at Annex 1.

As per records of the vessel's deck log book, at this time the vessels was lying head to wind, approximately 231 degrees at 1600 hrs, the wind as SW'ly (225 degrees) force 4 on the Beaufort wind scale. Beaufort Force 4 is classified as a moderate breeze with wind speeds between 11 to 16 knots (12.2 and 17.9 mph) and a wave height of 3.5 to 6.0 feet. It must be noted that waves of 3.5 to 6.0 feet could have substantial effect on the movement of a small boat such as a tender, however, this effect was somewhat reduced in the sheltered waters of the vessels anchorage. On the CCTV footage through the ship's pontoon door, it was observed that the tender was moving up and down in the range of 1 to 2 feet, as well as yawing out from the pontoon, on occasions.

Mrs. Atherton was the first person to disembark the tender and she was being assisted by the same younger male adult who was seen to be assisting her along the jetty in Sihanoukville.

As Mrs. Atherton approached the exit door of the tender she was also assisted by one crew member from the tender and 1 crew member who was stationed on the pontoon. The statements from the Crew members indicate that Mrs. Atherton appeared to be very unsteady on her feet and had some difficulty walking, only taking small steps at a time. One of the crew members assisting Mrs. Atherton advised her that due to the motion of the tender she would need to take 'one big step'. When Mrs. Atherton went to step onto the pontoon the tender yawed away from the pontoon and Mrs. Atherton fell into the water between the tender and the pontoon. The crew members who were assisting Mrs. Atherton managed to hold onto her but almost immediately the tender yawed back onto the pontoon and crushed Mrs. Atherton against the pontoon and the crew members were forced to let go of her. Mrs. Atherton disappeared from sight and re-surfaced near the aft end of the pontoon, she was unconscious and there was an amount of blood surrounding her in the water.

At 1725 hrs, on receiving notification from the pontoon of some-one falling into the water, the bridge made a Man-overboard announcement. At this time 2 crew members, who attended the pontoon after hearing the man overboard alarm, saw Mrs. Atherton appearing downstream of the pontoon and they dived into the water to try and keep her afloat. The ships Rescue boat was in the water by 1733 hrs. At 1736 hrs it was on scene and had recovered Mrs. Atherton from the water using the Jason Cradle by 1741 hrs. The rescue boat then arrived at the pontoon and Mrs. Atherton was transferred to the deck of the pontoon. Paramedics examined Mrs. Atherton and placed a neck collar to steady the neck and head, and then she was transferred to a stretcher, and carried to the ships hospital. Following further examination in the hospital she was pronounced dead by the Ships' Doctor at 1805 hrs.

4. Investigation – 3rd April 2015 – Singapore

On receiving notification from the Master of the Queen Elizabeth of the death of a passenger during tender operations, the Bermuda Maritime Administration nominated an accident investigator to undertake an investigation to ascertain the circumstances leading to the above death.

The Bermuda Investigator along with the Head of Safety at Carnival UK and a Senior Safety Official from Carnival UK interviewed the key witnesses and inspected the Tender in question, Tender 16, during the vessels call into Singapore. Due to the limited time in port, following discussions, all interested parties agreed to conduct a combined investigation into the circumstances surrounding the death.

The details of the deceased person are as follows:

Name:	Mrs. Mary Atherton
Address:	16 Ashtree Grove, Preston, Lancashire, PR1 0XX, United Kingdom.
Date of birth:	6 May 1939
Date & place joining the vessel:	18 March 2015 in Kobe, Japan
Date & place departing vessel:	3 April 2015 in Singapore.

Mrs. Atherton was 75 years old, stood at about 5 foot 6 inches, and witnesses described her as a 'large' lady. All the witnesses indicated that Mrs. Atherton walked with some difficulty even with the aid of a walking stick and she only took 'small steps'.

The tender in question, Number 16, is a model SEL-T 11.0 manufactured by Fr. Fassmer GmbH & Co of Germany. It has a carrying capacity of 150 persons as a lifeboat but also doubles up as one of the ships Tenders. In tender mode the boat is certified to carry up to a total of 102 persons. The boat has a catamaran type hull with two engines and two propellers.

On Tender 16, the top step at the entrance door on the Starboard side is 26 cm wide, whereas other tenders on the vessel have wider platform as the top step.

The photo above shows the width of the step in question on Tender 16, a pencil has been used to compare and estimate the width of the top step.

The photo above shows the step arrangement in the other tenders, it is a much wider platform.

It should be noted that all the Tenders in use onboard Queen Elizabeth are certified for use as a Passenger Tender, the current certificates were issued by the Maritime & Coastguard Agency of the UK in September 2014 and are valid until 29 September 2015.

Tender operations are carried out in ports where the ship is too large to berth safely alongside. The vessel is usually assigned a safe anchorage just off the port entrance and the ships tenders are launched from their stowed position and made ready for service. Once the tenders are launched a pontoon is extended from the ships side and prepared to accept the boats alongside. The tenders make themselves fast and the passengers, who have usually congregated in the one of the ships public rooms, are escorted down to the pontoon in order to embark the tender. Once the tender has its complement of people onboard, usually around 100 maximum, it is given permission to cast off and proceed to a safe berth in the port. This trip is no longer than 3 miles, nor is the tender ever more than 1 mile from land, this is a requirement of the Tender Certification issued by the Flag State. Once the tender reaches the port, it ties up and dis-embarks the passengers and returns to the ship. Early in the day these return trips are often made with just the operating crew onboard, however as the day progresses there may be passengers and ships crew onboard returning to the ship from ashore.

It is industry practice during tender operations that when the tender arrives at the pontoon it is secured using two ropes and the tender engines are maintained in the ahead mode to assist in keeping the tender alongside the pontoon adjacent to the steps.

It is also normal for a ship's crew member to be stationed in the doorway of the tender and for two other crew members to be stationed on the pontoon to assist passengers as they embark/dis-embark the tenders.

When Queen Elizabeth had arrived off Sihanoukville that morning the weather conditions were reported as Light Airs and a smooth sea. During the course of the day the wind had increased and by 1600 hrs the weather conditions were Wind Sw'ly Force 4, this has an associated sea state 3 to 4 and the same weather conditions had continued until 2000 hrs. However, as previously stated elsewhere the actual sea state was less than that due to the vessel being in sheltered waters. The Ships Safety Officer, who was on duty at the pontoon when the incident occurred stated that the swell had increased during the day which was causing some movement of the tender alongside the platform but he did not think it was at any time a danger to the operation of the tenders.

However, the review of the CCTV footage that had been recorded from the CCTV camera fitted at the pontoon door, shows that the tender16 was rolling, moving up and down and yawing, when it was coming alongside the pontoon, while it was tied up alongside and immediately before the incident occurred.

It is noted from the ship's log book that some, if not all, of the tenders required bunkering and this operation commenced at 1446 hrs and this operation was completed at 1649 hrs. At 1450 hrs 2 Diesel Generators along with two Azipods and 2 Thrusters were put on line in order to assist with the recovery of a tender that had been removed from service. At 1458 hrs the bridge recorded Finished with Engines and Thrusters. A copy of the Deck Log book page for the day in question and an small explanation of some of the entries is at Annex II.

Postmortem of the late Mrs. Atherton.

After the incident had happened, Queen Elizabeth left Sihanoukville carrying the body of late Mrs. Atherton on board. On arrival at the next port Singapore the body was taken ashore to the Forensic Medicine Division, Health Science Authority Singapore for a post mortem examination by the Forensic Pathologist.

On completion of the examination the Forensic Pathologist had declared the cause of death as "Extensive Fracture of Skull". A copy of the Post Mortem report is at Annex III.
It was noted that on the Return of Birth and Death (RBD1) submitted by the vessel, the ship's doctor had given the cause of death as 'Cardio-respiratory arrest following major head trauma'.

From both medical reports it has been established that the cause of the death of Mrs. Atherton was due to severe head injuries.

In research into accident reports involving small passenger vessels, it is noted that the UK – Department for Transport, Marine Accident Investigation Branch (MAIB) had carried out investigations into two fatal accidents involving small passenger vessels, namely, "Star Clipper" May 2004 and "Hurlingham" August 2008 on the River Thames in London. Both cases were concerned with the accidents that have happened during the transfer of passengers between the vessels and the jetty, the arrangements of mooring lines, and the use of vessels engines for keeping the vessels alongside. Although, circumstances are somewhat different in the case of operating ships tenders, there are certain similarities and lessons that can be learned from the above accidents.

5. Conclusions

It is concluded that:

i) During the afternoon of 1st April, the wind force had increased from Light Airs (Beaufort Scale 1) at noon, to SW - Force 4 at 1600 hrs. and continued WSW - Force 4 until 2000 hrs. The wave height for Force 4 is between 3.5 feet to 6 feet. However, given the sheltered position of the Queen Elizabeth the sea state would have been reduced, as shown by the CCTV footage which shows the tender to be moving up and down in the range of 1 to 2 feet. The Officer in charge of the tender operations did not believe the sea state to be excessive and as a result no action had been taken to provide a favourable lee for the tenders, specifically tender No.16 by using the ships thrusters;

ii) At the time of disembarkation of passengers the tender was secured alongside the pontoon with two lines, one forward and one aft, however these were insufficient to prevent it from yawing away from the pontoon;

iii) The coxswain was controlling the tender and keeping it alongside the pontoon by using engines and riding on the two mooring lines.

iv) Mrs. Atherton had difficulty in general mobility and had difficulty in boarding the tender while it was at the Jetty in Sihanoukville. She was assisted on board by a male passenger and a House Keeping Steward from the ship. The crew member acting as 'bowman' on the tender would have seen that Mrs. Atherton had difficulties while boarding the tender but they did not ask for additional assistance to ensure safe disembarkation of Mrs. Atherton when the tender arrived at the pontoon.

v) At the time when Mrs. Atherton was about to disembark, she had difficulty coping with the steps up to the entrance, a male passenger and the bowman were

assisting her on to the top step. She was unsteady and had difficulty in balancing herself on the narrow top step. The one crew member from the pontoon was also trying to assist the passenger, this operation was being watched by the safety officer who was standing on the pontoon. Taking into consideration the uncertain movements of the tender and the known mobility difficulties of the passenger, the disembarkation process should have been stopped, until appropriate safe conditions were established.

vi) It is understood that Carnival UK have a policy of not allowing passengers to use tenders if they are not able to embark or dis-embark the tenders on their own. It appears that, in the case of Mrs Atherton, it was not identified that she was such a passenger.

vii) Mrs. Atherton was unsteady on her feet and unable to take 'the one big step' which was requested of her by one of the crew members stationed on the pontoon. It appears it was at the same time that the tender moved away from the pontoon when she put her foot forward, towards the pontoon.

viii) The opinion of the officer in charge at the scene was that the movement of the tender was not a danger to the safe operation of the tenders, hence no attempt was made to create a better 'lee' for the tender by using the ships Azipods and Thrusters. However the CCTV footage showed the tender was moving up and down within a range of 1 to 2 feet, and rolling, while approaching the pontoon and while it was tied up

ix) Risk Analysis - CUK Work Place Risk Assessment which has been last approved on 24th February 2015 is concerned with the Tender Operations. It shows an Initial Risk Factor from the risk matrix as 7 (red) (Extremely Harmful, Unlikely), out of a maximum of 8. With a comprehensive list of precautions and providing a number of protective equipment for the tasks to be undertaken, the risk factor had been reduced to 3 (green) (Slightly harmful, Unlikely). Having such a high risk factor (7) and a large number of precautions to be observed and equipment to be used, it is very likely that the risk would increase rapidly if any of the mitigating factors changed. In order to ensure tender operations remain within the accepted risk factor 3 (green), the above CUK work place risk assessment procedure requires a 'Dynamic risk assessment' to be carried out. It is not clear whether a Dynamic risk assessment had been carried out in this case.

6. Recommendations

It is recommended that:

i) Whilst acknowledging that it is non-contributory to the accident the existing top step of the tender step ladder of Tender No.16 is too narrow, Carnival UK must ensure the tenders are provided with a wider passenger landing step to afford the passengers a steady and balanced footing, for safe stepping out from the tender;

ii) Carnival UK investigate the feasibility of utilizing suitable safety equipment between the tender and the pontoon. Such equipment could be a removable ramp or brow rather than steps at the pontoon, to prevent a person falling in to water from the tender of the pontoon when embarking or disembarking. A ramp/brow could be such that it would move and thus compensate for any 'yawing' of the tender such as happened in this case.

iii) Carnival UK review the mooring practice for tenders taking into consideration the safe practices recommended in the 'Code of Safe Working Practices for Merchant Seaman' (CoSWP) published by the Maritime and Coastguard Agency of the UK (MCA), and the lessons learned from similar accidents involving other tenders or small passenger vessels.

iv) Carnival UK revisit the Work Place Risk Assessment for tender operations with a view to identifying and listing the most critical 'precautions and protective equipment' requirements (mitigating factors) that will be useful to the tender crew and officers in charge of tendering operations to carry out a speedy Dynamic risk assessment, to be able to assess whether any tender operations in progress can be continued within the Company accepted risk factor of 3.

v) Carnival UK to review the training and competency requirements as required by Health and Safety Regulations, for seafarers undertaking special tasks for which the training requirements may not be covered under the provisions of the STCW regime. When allocating duties to seafarers in tenders and pontoons for the embarking and disembarking of persons and where physically challenged or elderly persons are involved, this may be considered as a special task requiring special training.

vi) The report of the internal safety investigation in to the above incident conducted by the Carnival UK, Safety Division (dated 20th April 2015) has been received at the Bermuda Department of Maritime Administration. In this report a number of reviews and studies have been initiated as 'FUTURE ACTIONS PLANNED'. It is the view of the Administration that the proposed future actions will contribute to better safety when implemented. Carnival UK shall advise the Bermuda Administration when these actions are completed, for verification.

Safety recommendations are intended for improving safety of life at sea and shall in no case create a presumption of blame or liability to any party.

The Bermuda Maritime Administration acknowledges the contribution made by the UK, DfT, Marine Accidents Investigations Branch (MAIB) to the safety of life at sea, by conducting investigations into maritime accidents and incidents, and publication of the findings and recommendations.

Prepared by C D Metson
Inspector of Ships
Bermuda Department Maritime Administration

14 August 2015

Annex 1

Beaufort Wind and Sea Scale

BEAUFORT WIND FORCE SCALE

Beaufort No.	Description	Wind Speed	Wave Height	Sea State	Sea Conditions	Land Conditions
	lm	< 1 knot < 1 mph	0 ft 0 m	0	Flat Calm (glassy)	Calm, smoke rises vertically
1	Light air	1-3 knots 1-3 mph	0-1 ft 0.1 m	1	Smooth wavelets ripples no crests	Smoke drifts in wind direction
2	Light breeze	4-6 knots 4-7 mph	1-2 ft 0.2 m	2	Small, smooth wavelets.	Leaves rustle, wind felt on skin
3	Gentle breeze	7-10 knots 8-12 mph	2-3.5 ft 0.5-1 m	3	Slight, large wavelets beginning to break	Leaves & small twigs constantly moving
4	Moderate Breeze	11-16 knots 13-17 mph	3.5-6 ft 1-2m	3 to 4	Slight-moderate with breaking crests	Dust & loose paper raised. Small branches move
5	Fresh Breeze	17-21 knots 18-24 mph	6-9 ft 2-3 m	4	Moderate waves of some length. Many white caps	Branches of moderate size move, small trees sway
6	Strong Breeze	22-27 knots 25-30 mph	9-13 ft 3-4 m	5	Rough, long waves begin to form. White crest some airborne spray	Large branches in motion. Whistling in overhead wires' Difficult to use umbrella
7	Near Gale High wind	28-33 knots 31-38 mph	13-19 ft 4-5.5 m	5 to 6	Rough – Very rough Sea heaps up, moderate amount of airborne spray	Whole tree in motion, effort needed to walk against wind
8	Gale, Fresh Gale	34-40knots 39-46 mph	18-25 ft 5.5-7.5 m	6 to 7	Very rough, high waves with breaking crests. Considerable airborne spray	Twigs broken from trees. Walking impeded
9	Strong – Severe Gale	41-47 knots 47-54 mph	23-32 ft 7-10 m	7	High waves crests roll over, large amounts of air borne spray. Reduced visibility	Some branches break of trees
10	Storm, Whole Gale	48-55 knots 55-63 mph	29-41 ft 9-12.5 m	8	Very high waves with overhanging crests	Trees broken off or uprooted
11	Violent Storm	56-63 knots 64-73 mph	37-52 ft 11.5-16 m	8	Exceptionally high waves. Severely reduced visibility	Very wide spread damage to vegetation
12	Hurricane	64+ knots 74+ mph	14+ m 50 + ft	9	Huge waves. Sea completely white with foam & spray. Greatly reduced visibility	Very widespread damage to vegetation. Windows may break

Annex II

Excerpt from the Deck Log Book of the Queen Elizabeth.

SS/MV QUEEN ELIZABETH At/From: LAEM CHABANG Towards/At: SIHANOUKVILLE

Hr	AC (1)	T (2)	G (3)	C (4)	Chart (5)	Distance True (6)	Stab. fins Port (7)	Stab. fins Stbd (8)	WTD PH/N (9)	Position Latitude/Longitude (10)	Wind F/dir	Pressure (mbs)	Dry	Wet	Sea
1		114	114	124	121	21.3	IN	IN	N	11°43.6'N 101°14.4'E					
2		118	118	124	121	21.2	IN	IN	N	11°33.7'N 101°35.4'E					
3		121	121	127	121	21.2	IN	IN	N	11°23.1'N 101°52.4'E					
4		124	124	129	121	21.3	IN	IN	N	11°12.0'N 102°11.0'E	S'ly 3	1008.7	28.0	25.0	30.0
5		128	128	134	121	21.6	IN	IN	N	11°00.6'N 102°29.6'E	SBB = 0745 Δ = 239.9NM				
6		118	118	128	121	21.9	IN	IN	N	10°49.6'N 102°48.8'E	Riv IN: 6.0NM FWE: 0935				
7	'54	098	098	103	080	21.9	IN	IN	N	10°58.4'N 103°08.1'E	Pilot: Kone [illegible]				
8		CUTMO				17.7	IN	IN	N	10°39.0'N 103°27.4'E	LIGHT AIRS	1012.4	27.0	25.5	31.0
9		STBD ⚓ SD ON DECK	A 1.72/073	B 1.23/134	C 1.61/111		HRC 137	HRC 5.1	PH	10°39.5875'N 103 29.0200'E					
10			1.73/072	1.22/133	1.58/118		131	5.0	PH	10 39.5741'N 103 29.0145'E					
11			1.73/072	1.20/133	1.57/141		356	5.0	PH	10 39.5504'N 103 29.0128'E					
12		SIHANOUKVILLE CAMBODIA	1.73/072	1.21/132	1.59/200		009	5.0	PH	10 39.5565'N 103 29.0056'E	LIGHT AIRS	1011.6	29.0	25.5	31.0
13			1.74/072	1.23/130	1.58/148		328	4.4	PH	10 39.5'N 103 29.0'E					
14			1.64/072	1.24/133	1.62/144		272	4.8	PH	10 39.5'N 103 29.0'E					
15			1.60/070	[illegible]/148	1.66/202		248	4.3	PH	10 39.5'N 103 29.1'E					
16			071° 1.60'	114° 1.16'	200 1.61'		230	4.3	PH	10°39.5'N 103°29.1'E	SW 4	1003.3	31.0	27.5	31.0
17			073° 1.61'	137° 1.15	200 1.62		230	4.3	PH	10°39.5'N 103°29.1'E	SBB 1811 / 2102 Riv OUT: 0.4				
18			072° 1.60	138 1.15	201 1.65		231	4.4	PH	10°39.5'N 103°29.1'E	FAOP 2030				
19			073° 1.60	138 1.17	200 1.61		223	4.4	PH	10°39.6'N 103°29.1'E					
20											NW 4	1009.4	29.0	26.0	31.0
21		CUTOON + MA				7.7	IN	IN	PH	10°35.3'N 103 23.1'E					
22		186	186	187	187	17.7	IN	IN	4C N	10°17.7'N 103 21.8'E					
23		172	172	173	187	18.2	IN	IN	N	09°59.6'N 103°19.3'E					
24		184	184	185	187	18.3	IN	IN	N	09°42.2'N 103°14.2'E	LT AIRS	1011.2	28.0	26.0	30.0

DATE WEDNESDAY 1st APRIL 2015

Captain's Signature

01

CLOCKS ADVANCED/RETARDED* ... MINUTES AT ... TO GMT +/- ... HRS (*Delete as appropriate)

REMARKS

0011 1st SEC CLSE ALL High risk AREAS [illegible]

CODE SEA
V/L STEADY to slight seas
7/5th Cloud cover Good visibility Dry
Lookouts/Helmsmen: CUA / CADORNA — OOW: J.C.
0500: 30 mins notice to [illegible] 0531: [illegible] all [illegible] closed [illegible] 10°54.8'N 102°40.0'E 0545: 2 mins notice to SBB 0625: 30 mins to [illegible] posn 10°45.2'N 102°57.4'E 0633: STEERING DOUBLED 0635: ALL DISCHARGES CLOSED FOR [illegible] posn 10°43.0'N 103°00.1'E 0645: 1 ME TO SBB 0650: CALL TO PILOT KAMPONG SAOM VHF CH 16 – NO RESPONSE 0711: 30 mins to [illegible] 0745: SBB, [illegible] / CAPT CHOCCEL 0761: 2 ANCHORS CLEARED AWAY 0803: 2 [illegible] + 5 [illegible] [illegible] E&C 0806: 2 [illegible] [illegible] + [illegible] 0810: [illegible] CHECKS COMPLETE + [illegible] ANCHOR TO V/L [illegible] COMPLETE 0810 SOUTH TO [illegible] + [illegible] 0816: [illegible] CHECKLIST COMPLETE 0828: TENDER 12 IN WATER 0825: SHORE [illegible] [illegible] ASHORE 0833: [illegible] 0837: SHIP IS CLEAR 0840: [illegible] + DOCK INSPECTION COMPLETE

CODE ANCHOR, V/L LYING QUIETLY TO SBB PAS [illegible]
Good vis, [illegible]
Lookouts/Helmsmen: RED / BABASA — OOW: LAP
0859 AG FIRST PAX TENDER 1145 OPEN BOATS BROADCAST

CODE ANCHOR, V/L LYING QUIETLY TO STBD ⚓ IN SMOOTH WATERS
Good vis, [illegible] showers 4/8 cloud
Lookouts/Helmsmen: ARTECHE / FLORENTINO — OOW: [illegible]
1400 [illegible] 2 [illegible] + 2 [illegible] 1446 COMMENCE [illegible] BUNKERING 1450 2 [illegible] + 2 [illegible] [illegible]
[illegible]

CODE ANCHOR
V/L lying quietly to STBD ⚓
Good vis [illegible] 3/8 cloud cover
Lookouts/Helmsmen: CUA / CADORNA — OOW: J.C.
1640: 1 ME TO SBB 1645: STEERING CHECKS COMPLETE 1648: [illegible] BUNKERING COMPLETE + [illegible] [illegible] PONTOON [illegible] 1700: 30 mins notice to SBB 1746 MOB 1722: [illegible] in water 1733: [illegible] 1736: 2 [illegible] [illegible] 1741: [illegible] out of water 1745 [illegible] 1754: [illegible] deck [illegible] [illegible] medical assistance requested [illegible] 1805 [illegible] 1848 [illegible]
1858: [illegible] delayed due to MOB indefinitely
1724 LATE ENTRY AT THIS TIME IN THE PORT OF SIHANOUKVILLE MRS MARY [illegible] SUFFERED A MAJOR INJURY TO THE [illegible] WHEN SHE FELL BETWEEN THE [illegible] AND THE TENDER. SHE WAS SUBSEQUENTLY [illegible] AT 1905

CODE ANCHOR
V/L lying quietly to STBD anchor in smooth waters
Good vis, [illegible]
Lookouts/Helmsmen: RED / BABASA — OOW: LAP
2001 2 [illegible] + 2 [illegible] 2006 [illegible] + SBB 2009 CAPT HAS CHARGE, RED HANNING 2015 CAPT [illegible] to [illegible] + CREW REGARDING MOB INCIDENT 2019 [illegible] 2023 ⚓ AWEIGH 2025 ⚓ SIGHTED + CLEAR [illegible] 2026 HSE, ⚓ HOME 2029 2 ⚓ CLEARED AWAY 2030 FAOP 2036 GREEN HANNING, 3/0 HAS CHARGE, [illegible] 2041 2 ⚓ [illegible] 2043 STEERING [illegible] 2156 V/L [illegible] 10°10.5'N 103°20.2'E [illegible]

CODE SEA
V/L STEADY TO SLIGHT SEAS, [illegible] SWELL
GOOD VIS, DRY, 4/8 CLOUD COVER
Lookouts/Helmsmen: ARTECHE / FLORENTINO — OOW: [illegible]

The following lines are those written in the Deck Log book.

1630: 1 hr to SBB (Stand By Below)

1649: Tender bunkering complete + SD A.11 C+SFS (Shell Door A.11 Closed and secured for sea)

1?50: Unknown time: Aft pontoon C+SFS (Closed and secured for sea)

1700: 30 Mins to SBB (Stand By Below)

1725: MOB (Man Overboard)

1728: FRC in water (Fast Rescue Craft in water)

Annex III

Copy of Post Mortem Report

Health Sciences Authority
11 Outram Road Singapore 169078
Tel: 65 6213 0838 Fax: 65 6213 0749
Website: www.hsa.gov.sg

HSA

Forensic Medicine Division
Applied Sciences Group
Tel: 65 6222 1712
Fax: 65 6222 3092

Date:07-April-2015

Case Number : PZ1551-02006
Ref : Request for a Post Mortem Examination

Name of Deceased ATHERTON MARY		
NRIC/Identification Document No. 106955683	**Sex** FEMALE	**Race** CAUCASIAN
Date of Birth 06 MAY 1939	**Country of Birth** UNITED KINGDOM	**Nationality** BRITISH
Home Address UNKNOWN		**Date and Hour of Death** 01 APRIL 2015 1805 HRS
Place and Address where Death Occured QUEEN ELIZABETH		

CAUSE OF DEATH

I (a) EXTENSIVE FRACTURE OF SKULL
due to (or as consequence of)

(b)
due to (or as consequence of)

(c)

II

I, the undersigned forensic pathologist, hereby certify that I conducted a post mortem examination of the body of the deceased and that to the best of my knowledge and belief the particulars of the deceased and cause of his/her death are correct.

DR WEE KENG POH
(Name)

(Signature)

SENIOR CONSULTANT FORENSIC PATHOLOGIST
(Designation)

07-April-2015
(Date)

Issued at Mortuary, Forensic Medicine Division, Health Sciences Authority
Outram Road, Singapore 169608

Forensic Medicine Division
Health Sciences Authority