

**FINAL REPORT ON THE INVESTIGATION OF THE
M/V HAI TONG 7
SINKING**

AUGUST 27TH, 2007

PANAMA, REPUBLIC OF PANAMA



R-012-07/DISAM

INTRODUCTION

On July 12th, 2007 the Marine Casualty Investigation Branch, Panama Maritime Authority, received a report sent by Lloyd's Marine Intelligence Unit Casualty Reporting Service, in which it informed that the M/V "HAI TONG 7" had sunk near the Island of Guam, at position Lat. 16 55.6 N, Long 139 26.1E. Same had twenty-two (22) crew members on board, all of them Chinese citizens.

The Marine Casualty Investigation Branch contacted vessel's operators, so they could inform us on this casualty, and they confirmed it, as well as the Coast Guard at Guam.

Because crew members were sent to the People's Republic of China, Mr. Li Fei was appointed, as he was the investigator closest to where the crew members were, so he proceeded interview them.

This report was made pursuant the U.N. Convention on Law of the Sea (UNCLOS), the International Maritime Conventions of which the Republic of Panama is a Signatory, the Laws of the Republic of Panama, and Resolution A.849(20), as amended, of the International Maritime Organization (IMO).

SYNOPSIS

Vessel left Port of Kimbe on July 2nd, 2007 at 1930 hours with 22 crew members, all of them being Chinese citizens. Vessel was loaded with 266 metric tons of **FO**, 67 metric tons of **MDO**, and 8,100 metric tons of tree logs in holds numbers 1 and 2, destined for the port of Zhangjiand. During the voyage, a tropical storm was formed, and with passing of time it became a typhoon when vessel was approximately 550 nautical miles there from.

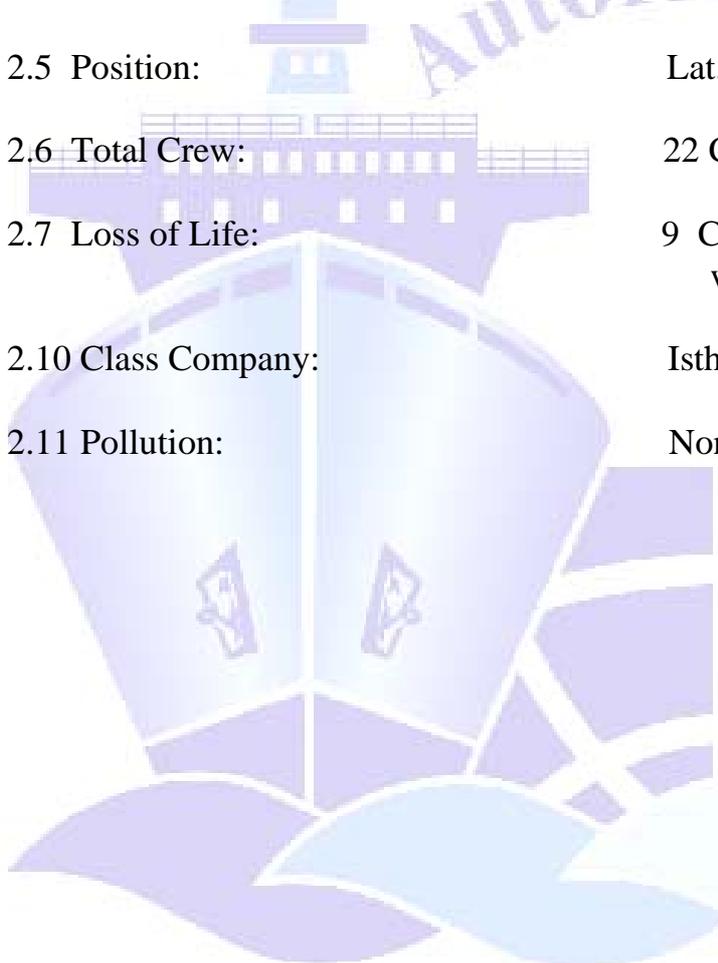
Vessel's master conducted several maneuvers in trying to avoid the typhoon, but because of strong, gusty winds which reached a speed of more than 64 knots, he was not able to avoid that vessel could be reached by it. As a result of vessel's rolling (portside to starboard) the logs which had been stored in hold N° 1, caused a fissure on vessel's hull. Those that were on deck caused damage to the cover, allowing water to ingress therein, and causing a list of 50° to portside. Master ordered that a distress signal be made through EPIRB, INMARSAT-C, VHF, and GMDSS.

On July 11th, 2007 when the vessel was at position lat 16 52N - long 13 92 5N, Master gave the order to abandon ship, and crew members threw themselves overboard with their immersion suits on, and the vessel sank. As a result of this casualty, three (3) crew members died, six (6) have disappeared, and thirteen (13) were rescued alive.

The strong, gusty winds which hit portside, caused the life boat to be carried away, as well as life rings on both sides of the vessel.

1. GENERAL DATA OF INCIDENT:

- 2.1 Name of Vessel: M/N HAI TONG 7
- 2.2 Flag: PANAMA
- 2.3 Date of Incident: July 11th, 2007
- 2.4 Time of Incident: 0415hrs.
- 2.5 Position: Lat. 16° 55.6'N, Long 139° 26E
- 2.6 Total Crew: 22 Crew Members
- 2.7 Loss of Life: 9 Crew Members (including 6 which are lost)
- 2.10 Class Company: Isthmus Bureau Shipping
- 2.11 Pollution: None



3. GENERALS OF VESSEL:

- 3.1 IMO Number: 7627297
- 3.2 Type of vessel: General Cargo
- 3.9 Gross Tonnage: 5,186
- 3.10 Net Tonnage: 4,115
- 3.11 Length: 120.92mts.
- 3.12 Breadth: 18.34mts.
- 3.13 Depth: 10.05mts.

4. HULL:

- 4.1 Builders: Hashihama Shipping Co Ltd
- 4.2 Year of Construction: 1977
- 4.3 Country of Construction: Japan
- 4.4 Hull's Material: Steel

5. MACHINERY:

5.1 Quantity:	One Machine
5.2 Brand:	Yaizu
5.3 Manufacturers:	Akasaka Diesel Ltd
5.4 Power:	4,560kw-6,200 hp
5.5 Cylinders:	6
5.6 Maximum Speed:	11 knot

7. APPROPRIATE SAFETY EQUIPMENT:

7.1 Number of life boats	2 (portside-starboard)
7.2 Life Rafts	3 (1portside 2 starboard)
7.3 Life Raft Capacity	31 personas each
7.4 Rescue Speed Boats	1
7.5 Life Rings	10
7.6 Life Vests	35
7.7 Flare Launch Rockets with parachutes	12
7.8 Line Launching Devices	1
7.9 Number of Rockets	4
7.10 9 GHz and 3GHz Radars	2
7.11 Number of VHF two-way radios	

9. GENERAL INFORMATION OF CREW:

The crew was made up of 22 members, all of whom were Chinese citizens. They spoke the same language, Mandarin. Therefore, they had good communication and understanding to carry out their chores. Officers had taken the STCW 78/95 training, certificates issued by the Republic of Panama, and AB were certified by the People's Republic of China.

Vessel had on board the following crew members:

Deck:

Master

First Officer

Second Officer

Engine:

Chief Engineer

First Engineer

Second Engineer

Third Engineer

Oilers

All crew members worked for same company which operated vessel, and had Wide knowledge of work to be performed on board. They were in compliance with Minimum Safe Manning.

10. HISTORY:

10.1 Vessel:

M/V HAI TONG 7 was constructed in 1977 at Hashihama Shipbuilding Co., Ltd, Japan. She was chartered by Hong Kong Yin Hai Shipping Co., Ltd. on October 20th, 2006. She was later purchased by the Fuzhou Haijin Shipping Co., Ltd. corporation, China, in October of last year. Same engaged in local trade and later engaged in transporting round wood logs from Papua, New Guinea, to the port located on the Zhangjiang River, China. The casualty occurred during its voyage No. 0704.

Vessel's new owners did not know its history very well, and after changing of owner ship no changes were made thereto.

10.2 Maintenance.

M/V HAI TONG 7 sank in open sea, and its salvage was not possible because it happened in deep waters. Vessel's maintenance records, as well as other documents were not saved. According to the Survey Report, salvage equipment (lifesaving boat, lifesaving rings, and rescue speed boats) and carried out by Isthmus Bureau of Shipping, all were in good conditions. Said survey was carried out on January 5th, 2007.

The Government of the People's Republic of China requires all vessels that sail in their waters, to go to dry dock once a year.

10.3 Operating company

Operating company is Fuzhou Haijin Shipping Co, and same is located in Fuzhou, China. It began to operate vessel in October of last year, and it presently has certification based on safety code rules and regulations.

11. SOURCES OF INFORMATION AND INTERVIEWS:

All information collected or obtained during this investigation, is based on interviews made to crew members and vessel's operators, who gave their full cooperation.

Master was 51 years-old, and had been on board said vessel for four years. Drills were carried out every month, in compliance with company's instructions.

12. NARRATIVE:

12.1 Voyage on date of Incident

M/V "HAI TONG 7" was engaged in transporting wood logs from Papua, New Guinea to the ports located along the Zhagnjiang River, China.

Vessel was being loaded with 8,310 cubic meters of round logs (about 1,800 cubic meters were loaded on deck), at the port of Penlolo.

Vessel sailed from the port of Penlolo at 1758 hours local time on June 30th, 2007 for its voyage number 0704, with 266 metric tons of **FO**, 67 metric tons of **MDO**, 550 metric tons of fresh water, and a draft at bow of 7.30mts. and at stern at 8.50mts., and a medium draft of 7.90mts. The larger logs were loaded on deck, approximately 3.80mts. in length. Initial stability was of approximately 0.80 (alter having a surface free of water or liquids).

At 1650 hours local time on July 2nd, 2007 the vessel arrived at the port of Kimbe, in order to exchange documents, and after deballasting approximately 270 metric tons of fresh water which had been stored in the aft ballast tank, it left said port that same day at 1930 hours local time, headed for the port along the Zhangjiagang River, China.

Everything was normal when the voyage began.

On July 7th, 2007 the weather station informed on a tropical depression at a distance of 550 nautical miles from the M/N “HAI TONG 7”, with a bearing East-West and a changing course West-Southwest, as stated in the information given in the weather report. Master did not take any type of action, because of the long distance and little intensity.

On the afternoon of July 8th, 2007 the weather station informed that the depression was increasing in intensity. At 1600 hours local time that same day, Master decided to change course from 321 (T) to 002 (T), to avoid running into it, by sailing at a speed of 10.5 knots.

On July 9th, 2007 the tropical depression increased even more, until it became a storm, and the course changed to West-Northwest. Master decided to sail with a course of East—North at a speed of 9.8 knots.

At 1600 hours on July 10th, 2007 water was found in the No. 1 cargo hold. The engine room received notice to pump water overboard. Pumping began using the bilge pump, but the suction pipe was destroyed by log wood bark falling off, and said operation could not be continued.

At 2200 hours local time on same day, tropical storm became typhoon MAN YI, and the course changed West-North, closing M/N HAI TONG 7's position at a distance of 240 nautical miles. Master decided to sail eastward, by slowing the speed to 5 knots, because of the typhoon's effect. The heavy sea was hitting the upper part of the deck, and strong rain downpour increased filtering of water into the No. 1 hold through its cover, as they were pontoon type that could not be sealed properly, so they had to be covered with canvas. The wind force lifted and removed them.

Lifting angle was of twenty-five degrees (25°); water filtration became increasingly; therefore, the water level in the No. 1 cargo hold increased.

At 0415 hours local time on July 11th, 2007 vessel was lifting until it reached fifty-five degrees (55°) to starboard.

Master ordered the crew to send distress signals and to ask for help through use of GMDSS equipment, including EPIRB, INMARSAT-C, and VHF, and to abandon ship afterwards. The No. 1 starboard life boat which was located became awashed, and the portside No. 2 life boat could not be launched because of the heavy listing angle. The life raft located on portside could not be launched, as it had suffered damages. The starboard liferaft also became awashed. All crew members had no other choice than to jump overboard into the sea, with their immersions suits on.

At 0700 hours local time on same day, a large wave dragged the above vessel from starboard to portside, causing the logs on the deck to fall into the sea, and vessel's bow began to sink. The stern was lifting and the vessel capsized on starboard. Three minutes later, the keel was looking upward.

12.2 Weather Conditions

As a result of the interviews made to Master on the day of the incident, weather conditions were as follows:

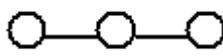
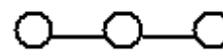
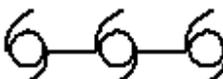
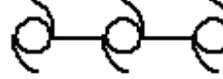
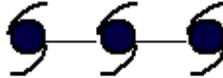
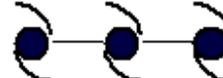
- The weather was clear.
- Visibility was clear.
- Wind direction was South-Westerly.
- No mist or storm was present. The sea was calm.
- They were fit to sail.

Past Positions

The black tropical cyclone symbols are the past positions. The symbols represent 6-hourly positions.

Northern Hemisphere

Southern Hemisphere

	Tropical Disturbance/ Tropical Depression (<= 33 knots)	
	Tropical Storm (34-63 knots)	
	Typhoon/Hurricane (>= 64 knots)	

14. RESCUE:

On July 11th, 2007 the M/V HAI TONG 7 issued a distress signal through Epirb at a frequency of 406 MHZ, same which was received by the Naval Station at the Naval Station of the Island of Guam. Same came from Northwest and was at a distance of 375 nautical miles. U.S. Coast Guard vessels USCG 1702 y USCG SEQUOIA, went to the area from where the signal was sent until July 15th, 2007 with negative results.

The Guam station contacted the KADENA Air Force Base to request support, but they said that due to bad weather conditions it was impossible for them to provide support. It did the same with the Chinese Rescue Control Center for purposes of requesting them additional information of the vessel, and they contacted vessel's owners, and they stated that they hadn't had any contact with the vessel.

Several vessels in the vicinity went to the rescue of the M/V HAI TONG 7, same which were as follows:

- 1- U.S. flagged vessel USCG 1702, which is a patrol boat from the Coast Guard at the Island of Guam.
- 2- U.S. flagged vessel USCG SEQUOIA, which is a patrol boat from the Coast Guard at the Island of Guam.
- 3- U.S. flagged vessel M/N RJ PFEIFFER, which is a general cargo vessel which was able to rescue one crew member, but unfortunately he was dead with his immersion suit on. Vessel's master requested the Guam Station to deliver the body at Shanghai.
- 4- U.S. flagged vessel M/N HORIZON FALCON, a general cargo vessel which was at position Lat. 17 05.9N Long 139 23.46E. It had seen three individuals in the sea, but knew nothing of their condition. They immediately proceeded to get the speed rescue boat, but because of bad weather conditions it hit vessel's hull, thus, causing damage to the hull and machinery. Nevertheless, crew members were safe. Search continued notwithstanding the bad weather conditions, and problems of vessel's machinery problems were also detected, as the other two continued to be at sea. Vessel returned due to damages suffered.

Guam's Naval Station EAGLE 850 plane, informed base on location of six crew members in the water at position Lat. 17 03N Long 139 21E. One was rescued by the M/V HORIZON FALCON at position 17 04.69N, Long 139 15.94E, while the other

crew member was rescued at position Lat. 17 04. 68N Long 139 15.53E. Vessel rescued a total of two (2) survivors, and both had their immersion suits on.

5- Panamanian flagged vessel M/N NEW LEADER, a bulk grain cargo vessel was able to rescue one crew member alive and two deceased, at position Lat. 17 15.6N, Long 139 05.1E. All of them were wearing their immersion suits.

6- Bahamian flagged vessel M/N CLIPPER LAGON, a bulk grain cargo vessel, was able to rescue two live crew members with their immersion suits on, at position Lat. 17 08 82N, Long 139 02 8E.

7- Hong Kong flagged vessel M/N IKAN BELIS, a bulk grain cargo vessel, was able to rescue eight (8) live crew members with their immersion suits on, at position Lat. 17 06N, Long 139 22.8E. One of them had one of his legs broken and another one had a wound on his head.

15. CONCLUSIONS:

- 15.1 Voyage was made at night with good visibility and a calm sea.
- 15.2 Vessel set sail loaded with 266 metric tons of FO, 67 metric tons of diesel fuel, 550 metric tons of fresh water, and on July 2nd, 2007 it deballasted 270 metric tons of water at the Port of Kimbe. It set sail that same day at 1930 hours towards the Port of Penlolo.
- 15.3 A tropical depression was formed 550 nautical miles from vessel's position.
- 15.4 Tropical depression gained force, and it became a tropical storm and later became a typhoon when it was at a distance of 240 nautical miles from vessel.
- 15.5 Typhoon changed course several times, since becoming such.
- 15.6 Vessel was in compliance with SOLAS Convention Rule 21, point 1.1: "A bilge system shall be installed to allow pumping and depletion in all practical situations, on any tight compartment, different than any permanent process destined to carry fresh water, ballast water, fuel, or liquid cargo, and for which another efficient means of bilging is provided. Efficient means shall be installed in order to evacuate or take out water from refrigerated holds."

16. PRINCIPAL CAUSES OF CASUALTY:

- 16.1 A typhoon reached the vessel.
- 16.2 Vessel's speed was affected by typhoon.
- 16.3 Entry of water into starboard hold N°1 was due to falling off of canvas which covered pontoon-type covers, same which were not duly sealed.
- 16.4 Partial flooding in cargo hold N°1 with water therein, produced the effects of free spaces, and that caused the angle of vessel's listing. Vessel did not comply with requirements under SOLAS Convention, Rule 23.1 point 2, as follows: "All sliding doors and hinged doors located in watertight bulkheads shall have indicators. Navigating bridge shall have the means to determine whether said doors are open or not. Also, all doors on the forum and on openings which in the Management's opinion can lead to serious flooding, so that if they are left open or unsecured, they shall have indicators of this kind.

17. RECOMMENDATIONS:

- 17.1 Master must pay a lot of attention when notified on bad weather conditions, no matter at what distance he is thereto.
- 17.2 All actions on changing course must be taken, as many times as necessary, with sufficient time in order to avoid to be reached by bad weather conditions.
- 17.3 Cargo holds must be secured and checked after loading cargo, in order to assure that same are completely closed and watertight.

