

FORM FOR ANALYSIS OF CASUALTY INVESTIGATION REPORTS

Investigation report analysed: C0005748-R01 (Panama)

Analysis Details

Session of the Working Group: 15

Reporting Administration to be requested to provide more information: No

Report noted: Yes

Analysis

1. Type of Casualty:

Fire, capsize, loss of the vessel and loss of life.

2. Event and Consequences:

On board the vessel were 1321 passengers and 97 crew and the vessel was loaded with 14 trucks and seven open trailers carrying passengers' luggage.

-1651 UTC., 2nd February 2006: Vessel left Duba, Saudi Arabia bound for Safaga Egypt.

- 1909: heat detecting fire alarm activated and indicated on the bridge.

- 1910: Master arrived on bridge. Third officer confirms smoke on the car deck.

- 1910+ Chief officer investigates car deck area.

- 1912: Master ordered that the fire hose parties go to car deck and that the car deck drencher system be activated.

- 1918: Second officer confirmed that drencher system was in operation.

- 1921: Uncertainty on bridge that drencher system in operation.

- 1923 Master ordered a check that drencher system operating. Uncertainty over location of seat of fire

- 1926: 400 series cabin accommodation start to fill up with smoke.

- 1936: Fire seat located in a luggage trailer.

Three fire teams, six in each team operating: one team on car deck, the other two teams operating under the direction of the master. Drencher system and fire pump hose

water operating.

1938: Bridge informed that water was accumulating on the car deck.

Vessel listing 5° to 7° to starboard.

1940: Portable pumps used unsuccessfully to try to pump out water from the car deck.

1943: Because of possible fire damage to electrical wiring and the probable effect this would have on the navigation equipment, master was uncertain of the vessel's exact position.

2016: 3/O suggested to the Master that he asks for the assistance of vessels in the area. No request was made at this time.

2104: Vessel listing to approximately 7° starboard.

2141 to 2227: List increased to 11° starboard.

2227+: Course heading 345°.

2227+: List increased to 15° starboard.

2228+: Master requested that No 18 tank on starboard side is deballasted. C/O requested that No 25 tank port is filled.

Witness evidence indicated that the car deck scuppers were blocked because of debris from the firefighting operation.

2233: Car deck cargo had shifted.

Vessel speed 6 knots, course 90°, list 15° to starboard.

2312: Because of concern of accumulating water on the car deck, master orders that fire hose water is shut off. Heading now on 240°.

2324 to 2328: List increased from 15° to 22°.

Uncertainty on bridge about the wind direction.

Master confirmed his helm order to put the rudder over full to port.

3/O advised master to abandon ship.

List 25° starboard.

Master asked to send a May day signal.

2333 UTC Vessel sank on its crossing of the Red Sea at approximately 57 miles from Safaga, and 41 miles from Duba port.

-1031 lives were lost, and 387 persons rescued.

Weather conditions: moderate gale force 7 to 8, SE'ly wind

3. Contributing Factors:

The cause of the fire is not known. The location of the fire is uncertain but it was probably in or near to a luggage trailer parked on port side forward of the car deck.

Contributing Factors relating to the capsizing and loss of life:

- Because of blocked car deck scuppers, fire fighting water accumulated on car deck causing the vessel to become unstable.
- Debris, trash and residue, disturbed because of the fire fighting operation, may have contributed to the clogging of car deck scuppers thus preventing the free discharge of fire water overboard.
- Weather condition may have contributed to the starboard list.
- The ballasting operation may have contributed to the adverse list of 25°.
- The distraction of the fire fighting operation may have diverted attention away from proper navigation of the vessel, which, combined with the weather conditions, possibly contributed to the increase in list.
- Excessive water ingress to the vessel eventually caused the vessel to sink.
- Established emergency procedures were not implemented resulting in:

Delay in reporting the ongoing critical situation to the SAR authorities, the shipping company and to vessels nearby hindered a timely and effective search and rescue

operation and

The absence of muster and evacuation orders.

4. Issues Raised/Lessons Learned:

- The number of cars and other cargo on the car deck prevented easy access to the fire thus hindering the fire fighting operation. The distance between cars parked on the car deck needs to be specified to allow for ease of movement of crew during emergency situations.
- Passenger luggage was not subject to checks for flammable or combustible materials.
- Despite well described emergency procedures identified in SMS documentation, crews will not perform effectively in a real emergency situation unless they practice these emergency procedures regularly.
- Depending on the type of fire, smoke detectors can give earlier warning of a fire than can heat detectors. In the case of this incident, had smoke detectors been fitted the fire may have been discovered earlier.

- The discharge capacity of car deck scuppers should exceed the maximum possible discharge of water from the drencher system and fire hoses.
- Car deck scupper arrangements need to be designed so that blockage of the scupper by debris is avoided.
- To ensure that SAR operations are implemented as soon as possible, the reception of emergency signals in the appropriate SAR centre needs to be guaranteed.
- In an accident investigation involving a Ro. Ro. ferry, the recording on VDR of CCTV video images of activities on the car deck could be useful.

5. Observations on the Human Element:

The compounding effect of not knowing the location of the fire on the car deck, the dangerous build up of water on the car deck and the vessel's excessive list, probably adversely affected the master's and crew's performance to respond effectively to the emergency situation.