

## FORM FOR ANALYSIS OF CASUALTY INVESTIGATION REPORTS

Investigation report analysed: C0005748-R02 (Egypt)

### 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, capsized, total loss of the ship and loss of lives

#### 2. Event and Consequences:

The ro ro passenger vessel was en route from Doha Port, Saudi Arabia to Safage Egypt with 1310 passengers and 96 crew. Private cars, trailers, and open trucks loaded with passenger luggage were stored on the main car deck.

At 1910 fire alarm sounded. The car deck watchman reported to bridge that the car deck was full of smoke and spreading to other parts of the vessel .

1914 - Car drencher system operated and water discharged onto car deck.

Boundary cooling of fire division bulkheads around car deck.

1959 - Car deck scuppers reported blocked: orders to unblock them.

2008 - Source of fire reported to be in luggage stored on one of open trailers.

2014 - Pressure on drencher system increased.

2039 - Accommodation deck plating starting to buckle, carpets started to burn.

2104 - Vessel listing to 7 degrees starboard.

2106 - Plumber ordered to unblock scuppers.

2115 - Reported that 4 scuppers on starboard side of car deck cleared.

2124 - Order given to stop drencher water discharge.

2147 - List increased to 10 degrees.

Master told that ships are present within 12 miles radius on starboard side.

Decided not to contact these vessels.

2150 - Concern about possible ignition of lub. oil drums on car deck and drencher system water discharge re-started.

2158 - List increased to 12 degrees.

2207 - Orders to change helm to 12 degrees then hard to starboard.

2216 - List decreased to 9 degrees starboard.

Wind on port side: force 4 -7 Beaufort wave height 4-8 feet.

2250 - List increased to 13 degrees.

Filling a port ballast tank.

2308 - List increased to 15 degrees starboard.

Concern expressed that filling this tank was not enough to bring the vessel upright.

2313 - Master ordered that drencher water and accommodation fire water discharges are stopped.

2330 - List increased to 25 degrees and master gave order to send out mayday.

2333 - Vessel capsized onto its starboard side.

### 3. Contributing Factors:

The factors below led to the vessel loss of stability and its capsize at 2333.

- Fire outbreak on car deck and delay in reporting the fire.
- Accumulation of large quantities of drencher system water discharged on the car deck.
- Inability of the car deck scuppers to keep car deck clear of water due to:
- Blocking of scuppers possibly due to debris on car deck.
- Possible design of scupper valve arrangement not matching the rate of discharge of drencher water onto car deck.
- Position of scuppers preventing discharge of water on the car deck at a list of 6½° and above.

### 4. Issues Raised/Lessons Learned:

- Distribution of trailers, truck car on car deck restricted fire fighting crews ease of access and movement in an emergency situation.
- Emergency procedures were not followed in accordance with those stated in the SMS manual.
- The crew failed to extinguish the fire.

- No order was given to abandon ship, the opportunity was not taken to seek help from ships within 12 miles of the vessel, and a mayday was sent out three minutes before

the vessel sank.

- The vessel had two passenger safety certificates: one for 1100 passengers and 86 crew for international voyages, and a second for 2790 persons on board and without a specified area of operation.

- Possible conflict of interest because the same person acted, as flag State surveyor and also as training consultant for the vessel's managing company.

- The second mate activated the EPIRB before the vessel sank and abandoned ship into a liferaft taking the portable GMDS with him. At 06.55 the second mate informed a

sister vessel of the AL SALAM BOCCACIO 98 of his position and that the vessel had sunk. Although within sailing distance of his position the vessel continued on its planned

route.

- The managing company did not implement contingency plans in spite of having notice of the vessel's loss and the position of sinking.

- The stability booklet was approved but not in accordance with the SOLAS Convention. The booklet did not account for effect of side wind, movement of crowds to one side

of the vessel, the turning of the vessel and damage stability.

- The vessel had not been issued with a damage stability booklet.

- Discharge overboard of water through the car deck scuppers was not possible once the vessel reached a 6½° list.

- The investigators considered that the system of SAR in the Red Sea failed to provide a timely and efficient response to the casualty.

#### 5. Observations on the Human Element:

Systemic failure to execute an effective search and rescue.

The decision not to send out a mayday or to abandon ship.

The decision of the sister vessel not to assist the casualty.