



**MINISTRY OF TRANSPORTATION OF THE REPUBLIC OF LITHUANIA
MARINE SHIP ACCIDENT AND INCIDENT INVESTIGATION MANAGER**

**MARINE SHIP ACCIDENT INVESTIGATION
FINAL REPORT
2/7/2014 No. (E)-TA-2**

The purpose of this report is accident and incident prevention. This investigation has no purpose of identifying any guilty or responsible parties, therefore the risk of misinterpretation of this report exists if the report is used for any purpose other than stated above.

Marine ship	VICTORIA SEAWAYS
Company	AB DFDS Seaways
Ship type	Passenger ferry/ro-ro ship
Registration No.	813
Incident location and date	Baltic Sea 55-02.4 N. 015-45.6 E. April 23, 2013

Incident registration numbers:
TAITS Marine Ship Accident Registry No.: 2-TAITS-2013
EMCIP database No.: 696/2013
IMO GISIS database NO. C0009108

1. DESCRIPTION OF INCIDENT

The on-board fire alarm of VICTORIA SEAWAYS ship tripped on Tuesday, April 23, 2013 at 1:53 AM ship time on voyage Kiel - Klaipėda. A starboard sensor on Deck 3, between ribs 40 and 50, detected a fire. The number of tripped fire sensors rapidly increased and there was visible smoke in the view from a video camera located on the stern of Deck 3. The ship ventilation was stopped at 1:54 AM. The seaman on duty pressed the fire button and reported open fire and the necessity to activate the drencher system. The general alarm sounded on the ship. The decision was made to activate drencher sections 7 and 8 on Deck 3. At 1:56 AM a Fight Fire alarm sounded to the crew, all crew members took their stations according to the alarm schedule. The ship speed was reduced and power supply cut off to Decks 3 and 4. The fire reconnaissance team was ready to scout Deck 5 from starboard stern through the passenger corridor while the backup and sealing teams were preparing fire fighting hoses on Deck 4. The passenger service crew started evacuation of the passengers from the cabins to the points of assembly by life-saving equipment. Section 7 and 8 of the drencher system activated on Deck 3 at 2:05 AM. The reconnaissance team was given the task to check the operation of the drencher systems. The team leader confirmed that the system was operating and there is much smoke in the premises. No smoke leaks to the external decks and living quarters were detected. At 2:10 AM the reconnaissance teams found a hot spot above the seat of fire on Deck 4 and cooling of the deck started with fire fighting hoses from the stern and the head. Radio connection was established with DANISH NAVY CONTROL coast station and the station was notified that there is a fire on-board and the crew is in control. Situational updates were continuously communicated to this station. On 2:12 AM the ship completely stopped and went adrift. On 2:25 AM, to ensure fire prevention on Deck 3, two additional fire pumps were started and connected to the drencher systems, sections 9 and 10 of the drencher system were activated on Deck 3. All passengers were wearing lifejackets and waiting in the assembly areas. Radio connection was established on Channel 16 with KAUNAS SEAWAYS and this ship was asked to stay nearby for possible evacuation. On 3:00 AM section 7 and 10 of the drencher system were deactivated while section 8 and 9 remained active. The reconnaissance team reported no temperature changes on Deck 3 and 4 stern/head between ribs 0-30 and 70-200. The deck, being cooled around the location of the seat of fire, started to cool considerably. On 3:25 AM Deck 4 had completely cooled at the seat of fire. The reconnaissance team checked Deck 3 and confirmed there were no open flames but considerable smoke. The drencher system was deactivated and reconnaissance of Deck 3 and cooling and checks of Deck 4 were performed on a regular basis. Water from Deck 3 was successfully drained through scuppers and the lurch caused by water accumulated on starboard side gradually decreased. On 3:30 AM the company dedicated person was notified about the situation on board. On 3:45 AM sections 8 and 9 of the on-board drencher systems were reactivated on Deck 3 to ensure the fire was completely extinguished. No temperature changes observed on Deck 4. On 4:00 AM the seat of fire had been extinguished. Two observers were left at the seat of the fire, the passengers were allowed to return to their cabins. There had been on panic among the passengers. On 4:25 AM the ship resumed her voyage towards Klaipėda seaport. Reconnaissance, cooling and checking of Decks 3 and 4 were continued. On 4:45 AM a permission to go full ahead was given. The Marine Rescue Coordination Centre and the Master of Klaipėda Seaport were notified about the accident after the ship had arrived to Klaipėda Seaport.

2. ACTUAL INFORMATION

2.1. VICTORIA SEAWAYS, A PASSENGER FERRY / RO-RO TYPE SHIP



Figure 1: Victoria Seaways Ferry

Name of the ship: Victoria Seaways

TJO (IMO) No.: 9350721.

Flag of the ship: LITHUANIAN

Call sign: LYTD.

Gross tonnage: 25518.

Length overall: 198.99 m

Breadth: 26.6 m

Hull height: 9.60 m

Hull material: steel

Number of crew: 37.

Minimum crew: 18.

Classification body: REGISTRO ITALIANO NAVALE

Owner of the ship: AB DFDS Seaways.

Build year and location: 2009, Italy.

Main Engine:

Type and power: 12V46 Wartsila diesel engine, 2 x 12000 kW.

Adjustable pitch screws.

2.2. LIST OF NAVIGATION EQUIPMENT ON BOARD OF VICTORIA SEAWAYS

1. Main magnetic compass
2. Gyrocompass
3. Gyrocompass heading repeater
4. Gyrocompass bearing repeater
5. Ship heading or trajectory repeating
6. Compass direction finder
7. Heading and bearing correction tools
8. Remote heading transmission unit
9. Charts
10. Navigation references
11. GPS receiver
12. 9 GHz radar station
13. 3 GHz second radar station
14. Automatic radar marking tools
15. Automatic identification system (AIS)
16. Long-range identification and tracking system (LRIT)
17. Simplified voyage data recorder (S-VDR)
18. Speed log (for measuring of speed and distance through water)
19. Echo sounder
20. Indicators: rudder position, screw speed, load direction, load of adjustable pitch screw equipped with trimmer
21. Phone communication with emergency rudder control station
22. Daylight signal lamp
23. International signals code

2.3. VOYAGE DATA

The VICTORIA SEAWAYS ferry travelled a regular international route between Kiel port (Germany) and Klaipėda port (Lithuania). Types of cargo: trailer vehicles with various cargo, second-hand cars (from Germany), tourists, and business persons. The ship had a crew of 37 at the time of the incident.

2.4. MARINE SHIP INCIDENT DETAILS

At the time of the incident the visibility was fair, it was the night-time, wind West South-West 7-10 m/s, there were no waves, the cargo was properly tied down. The ferry went from Kiel port to Klaipėda. The fire started at 1:53 AM on Tuesday, April 23, 2013 on cargo deck 3 after the ship passed Bornholm Island in Baltic Sea, at coordinates 55-02.4 N., 015-45.6 E.

This marine accident (fire) is classified as SEVERE ACCIDENT. The fire has destroyed six cars and car trailer. There were no casualties or personal injuries. The superstructure of the ship has been covered in soot.

2.5. ACTIVITIES AND RESPONSE BY THE COASTAL ADMINISTRATION

Lithuanian Marine Rescue Coordination Centre and the owner of the ferry received the incident notification on Tuesday, April 23, 2013, at 3:30 AM ship time. After the ship arrived to Klaipėda the Master of Klaipėda Seaport, the police, and the Attorney's Office were notified.

At 2:10 AM ship time, radio connection was established with DANISH NAVY CONTROL coast station and the station was notified that there is a fire on-board and the crew is in control. Updates regarding the situation and possibility of providing help to the ship and her passengers were continuously communicated to this station. KAUNAS SEAWAYS ferry was accompanying the ship to provide help should an evacuation be necessary. The crew were able to act without external help.

3. CLASSIFICATION AND CIRCUMSTANCES OF THE INCIDENT

This incident is classified as a severe accident according to Regulation on Safety Investigations of Marine Ship Accidents and Incidents approved by Section 7.2 of Order No. 3-461 of the Minister of Transportation of the Republic of Lithuania (hereinafter referred to as the Regulation).

The incident notification has been logged under the number **696/2013** in the European Marine Safety Agency (EMSA) EMCIP database.

The incident notification has been logged under the number C0009108 International Marine Organization (IMO) GISIS database.

A poor technical condition of one of the second-hand cars in the cargo has been identified as the cause of fire. A short circuit in the electrical system of the car caused sparks that fell on a dirty surface of the engine and caused the fire.

4. ANALYSIS

The analysis states that this severe accident has occurred because potential poor condition of transported second-hand cars has not been considered. Presumably the insulation of power wires of one of such was damaged and a short circuit occurred due to the impact of water and wind. This caused sparks that presumably fell on a dirty surface of the engine and caused the fire.

5. CONCLUSIONS

The investigation of this severe accident has led to a conclusion that all second-hand cars should be transported with their batteries disconnected. This procedure should be supervised by appointed members of the crew.

6. SAFETY RECOMMENDATIONS TO AB DFDS Seaways

1. We recommend to issue an order to ferry captains to appoint members of their crews responsible for checking if the batteries of all transported second-hand cars are disconnected before the ship leaves the port.

2. We recommend to install stationary carriage fire fighting guns (water or water-foam) on the company ships (ro-ro type) and connect them to the fire fighting system on cargo decks.

3. Report the state of implementation of these recommendations to the Marine Ship Accident and Investigation Manager at the Transportation Accident and Incident Investigation Department of the Ministry of Transportation within one year.

7. ATTACHMENTS

Figure 1: Incident location chart

Figure 2: The ferry after returning to Klaipėda

Figure 3: Burned down trailer

Figure 4: Burned down cars

Figure 5: Sooty deck roof

Figure 6: The car thought to have caused the fire

Chief Specialist,
Marine Ship Accident and Incident Investigation Department
Marine Ship Accident and Incident Investigation Manager

Capt. Leonardas Vilimas

Figure 1: Incident location chart



Figure 2: The ferry after returning to Klaipėda



Figure 3: Burned down trailer



Figure 4: Burned down cars



Figure 5: Sooty deck roof



Figure 6: The car thought to have caused the fire