



## INFORMATIONAL BULLETIN

5 November 2021, No (L-21/18) 1A-308

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Severity of occurrence	Marine incident			
Date of occurrence	29 May, 2021			
Local time of occurrence	12:00			
Place of occurrence	Central Klaipėda Terminal, Klaipėda State Seaport			
Name of the ship	Grumant	Finlandia Seaways		
IMO No	7427659	9198721		
Ship flag	Lithuanian	Danish		
Ship type	Tanker	Ro-Ro Cargo		
Length of the ship, m	83,01	162,58		
Tonnage (GT)	2021	11530		
Date of built	1977	2000		
Voyage data	Grumant supplied bunkers to Finlandia Seaways			
Persons on board	Crew – 9	Other – 1	Crew – 16	Other – 0
Injuries to persons	Crew – 0	Other – 0	Crew – 0	Other – 0
Damage to ship	None		None	
Other damage	Some heavy fuel oil was spilled to port area			

### Synopsis

Grumant provided bunkering services in Klaipėda State Seaport. At 9:20 (local time is used here and hereinafter) of May 29, 2021, Grumant moored at the portside of Finlandia Seaways in Klaipėda Central Terminal for bunkering operation. It was planned to supply Finlandia Seaways with 300 tons of heavy fuel oil (HFO) and 30 tons of marine gas oil (MGO).

At 10:00, on completion of ship-to-ship pre-transfer checks and preparations, transfer of HFO and MGO was commenced.

At 10:45 MGO transfer was completed. Grumant's crew closed relevant MGO supply valve. HFO transfer was still in progress.

At 11:55 when the HFO tank of Finlandia Seaways was topped up to about 96% of its volume, the pumping of HFO was completed and the crew of Grumant closed the HFO supply valve. Two able seamen of Grumant via open port in Russian and in gestures discussed with the motorman of Finlandia Seaways the planned blowing of fuel hoses with compressed air. At the same time, the motorman of Finlandia Seaways communicated by VHF (Very high frequency radio communications) with Finlandia Seaways engineer in charge of the bunkering operation. The communication lasted until 11:56.

At 11:57 one of the two able seamen of Grumant, who communicated with the motorman of Finlandia Seaways, informed the master of Grumant, that Finlandia Seaways gave permission to commence the fuel hose blowing procedure. Soon after that the crew of Grumant has started the fuel hose blowing procedure with compressed air. At that time, Finlandia Seaways engineer in charge of the bunkering operation was engaged in soundings of HFO and MGO tanks and calculations of received amount of bunkers.

At 12:02 the crew of Grumant completed the procedure of fuel hoses' blowing with compressed air. Immediately afterwards, the crew of Grumant noticed a flow of HFO on portside of Finlandia Seaways. The HFO flowed through the portside plates and scupper drain hole (Fig. 1).

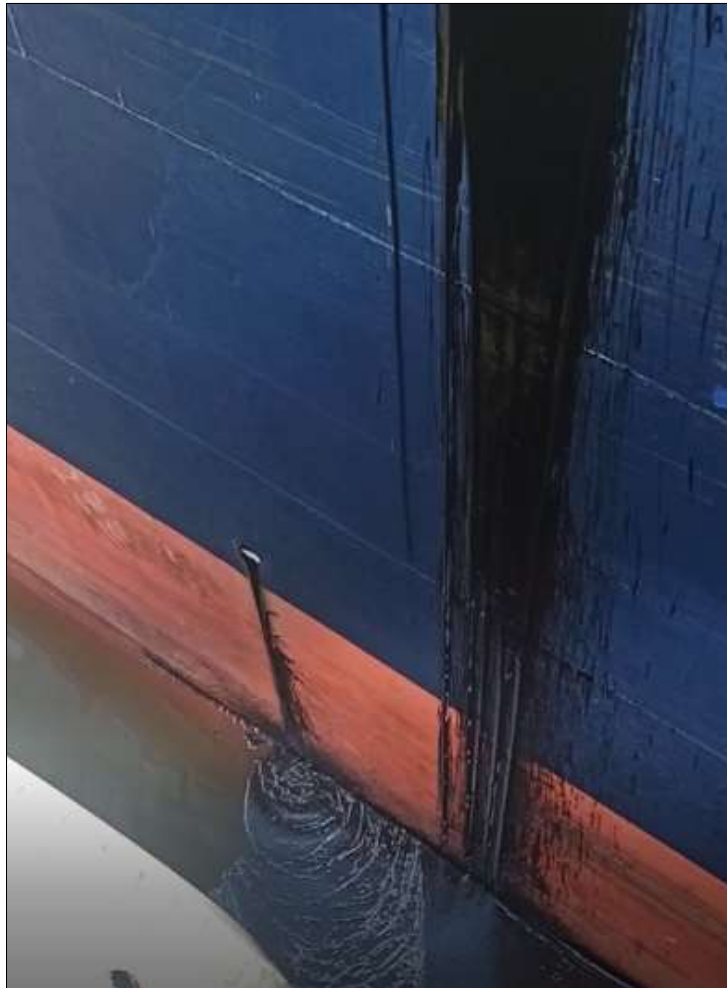


Fig. 1 Trace of heavy fuel oil. Por side of Finlandia Seaways.  
(Screenshot from video, provided by Grumant crew)

### **Procedure of fuel hoses' blowing with compressed air**

Upon completion of bunkering, fuel residues must be removed before disconnecting the fuel supply hoses. This is usually arranged by fuel-supplying ship, using compressed air to blow the fuel supply hoses. During this procedure, it is very important to maintain constant communication between the fuel-supplying ship and the fuel-receiving ship, with the crew of the fuel-receiving ship keeping a close watch of ventilation pipes of the fuel tanks. Neither international nor industry standards governing bunkering operations provide specific instructions or recommendations for procedure of fuel hoses' blowing with compressed air.

After the incident, the crew of Finlandia Seaways indicated that it was acceptable for it to start fuel hoses' blowing with compressed air when the fuel supply valve on the fuel-receiving ship is closed. Then, in constant communication with the fuel-supplying ship, the fuel supply valve on the fuel-receiving ship shall be gradually opened and closed several times by observing the ventilation pipes of the fuel tanks of the fuel-receiving ship.

Following the incident, the operator of Grumant indicated that it was normal practice for Grumant to start blowing the fuel hoses with compressed air when the fuel supply valve on the fuel-receiving ship is open. While blowing, the crew of fuel-supplying ship gradually opens and closes the compressed air valve several times. This removes fuel residues from the hoses.

The crews of both ships did not agree on which of the above methods would be used to blow the fuel supply hoses after bunkering. Neither Grumant nor Finlandia Seaways safety management system procedures specified a detailed sequence of steps for blowing the fuel hoses with compressed air after bunkering. There are no requirements to do so in international or industry standards.

### **Readiness to start the fuel hoses' blowing operation**

The statements of Grumant and Finlandia Seaways crews about the readiness of Finlandia Seaways crew to start fuel hoses' blowing with compressed air, differs. The crew of Grumant stated, that it had started to blow fuel hoses with compressed air after receiving verbal permission from Finlandia Seaways crew. Meanwhile, the crew of Finlandia Seaways stated, that it was not ready for the fuel hose blowing operation, and the crew of Grumant commenced blowing of fuel hoses with compressed air without the verbal permission of Finlandia Seaways' crew.

### **Communication**

It was stated in the bunkering agreement between Grumant and Finlandia Seaways, that the means of communication between responsible officers of these vessels were VHF radio or oral communication via open port.

The working language on board Grumant was Russian and on board Finlandia Seaways - English.

Prior to commencing the fuel hoses' blowing, Grumant's and Finlandia Seaways' officers in charge for bunkering, communicated with each other through Grumant's able seamen and Finlandia Seaways' motorman. Grumant's able seamen communicated with Finlandia Seaways' motorman in Russian. Communication took place via open port. Finlandia Seaways' motorman translated the information received from Russian into English and passed it by VHF to Finlandia Seaways' engineer in charge of the bunkering operation. The latter indicated after the incident that he was not prepared to begin fuel hoses' blowing at that time. Grumant's crew stated, that it was not informed of this unpreparedness.

### **Course of the incident**

HFO was spilled on Finlandia Seaways' deck through the fuel storage tank's ventilation pipe after the transfer of HFO was completed, while Grumant's crew was carrying out fuel hoses' blowing with compressed air. HFO from Finlandia Seaways' deck flowed through the portside plates and scupper drain hole (fig. 1). This indicates that the scupper drain plugs on the deck of Finlandia Seaways were not properly secured during bunkering.

The statements of Grumant and Finlandia Seaways crews about the readiness of Finlandia Seaways crew to start a fuel hoses' blowing with compressed air, differs. It is unlikely, that Finlandia Seaways' engineer in charge of the bunkering operation, with the HFO tank full to about 96% of its capacity, intended to allow Grumant crew to start blowing the fuel hoses while he did not establish close monitoring of fuel tank vent pipes and while he did not take all necessary precaution measures. It is most likely that the fact of unreadiness of Finlandia Seaways' crew to start a fuel hoses' blowing operation was not properly communicated by Finlandia Seaways crew, or was not properly understood by the responsible crewmembers of Grumant.

### **Actions taken**

After the incident, SE Klaipėda State Seaport Authority made arrangements to guard polluted port area by bonnet barriers. All pollutants were collected from the port area.

To reduce the risk of similar incidents in the future:

- the operator of Grumant carried out an internal investigation into the incident, issued the investigation report in which provided instructions for risk mitigation actions and circulated the report to the crews of its fleet;

- the operator of Finlandia Seaways disseminated information about the incident to the crews of its fleet and instructed crews to review the bunkering procedures, including communication.

### **Safety lessons**

1. The course and stages of fuel hoses' blowing operation should be discussed by the responsible crew members of supplying and receiving ships before commencing bunkering.

2. Efficient and reliable communication between fuel-supplying and receiving ships is important not only during bunkering, but also upon completion of bunkering, when in order to remove residues of fuel from the hoses, fuel hoses' blowing with compressed air operation is carried out.

3. In order to ensure efficient and reliable communication between responsible persons of fuel supplying and receiving ships, long communication chains, where information reaches the addressee through several intermediaries, should be avoided. Whenever possible, communication schemes where crew members are required to translate the information transmitted into another language, also should be avoided.

4. When the fuel tanks of the receiving ship are topped up to 90% or more of their capacity, the blowing of the fuel hoses with compressed air should be carried out with particular care, ensuring continuous monitoring of the fuel tank ventilation pipes and constant and reliable communication between responsible persons of fuel supplying and fuel receiving ships.

5. The risk assessment for bunkering operations should address the risks associated with the compressed air blowing operation, paying particular attention to cases where the fuel tanks are topped up to 90% or more.