



SMAIC

STATE MARINE ACCIDENT
INVESTIGATION COMMISSION

FINAL REPORT

77/18

serious marine casualty

M/V

Peak Bergen

**Grounding of the ship in the Port of Świnoujście
on 20 September 2018**

August 2019



The investigation of a serious marine casualty of the vessel **Peak Bergen** was conducted under the Act of 31 August 2012 on the State Marine Accident Investigation Commission (Dz. U. of 2019 item 1374 consolidated text) as well as norms, standards and recommended procedures agreed within the International Maritime Organisation (IMO) and binding on the Republic of Poland.

In accordance with the provisions of the above-mentioned Act, the objective of the investigation of a marine casualty or incident is to ascertain its causes and circumstances to prevent future marine casualties and incidents and improve the state of marine safety.

The State Marine Accident Investigation Commission does not determine liability nor apportion blame to persons involved in the marine casualty or incident.

The following report shall be inadmissible in any judicial or other proceedings whose purpose is to attribute blame or liability for the accident referred to in the report (Article 40(2) of the Act on the SMAIC).

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1. Facts

On 20 September 2018 at 10:12 the vessel Peak Bergen with the cargo of medium-density fibreboards unmoored from the Rozładunkowe Quay in the Port of Świnoujście. The ship without a pilot headed towards the exit from the port. At around 10:26, being off the fairway, the ship grounded at $\varphi = 53^{\circ}53,57'N$ $\lambda = 014^{\circ}15.67'E$.

The crew made the ballast tanks sounding and measured the depth of water around the ship. No water leaks into the tanks were found and an unsuccessful attempt to refloat was made. The Uran tug called for help pulled the ship off the shoal and assisted the ship back to the Rozładunkowe Quay in Świnoujście.

2. General Information



Photograph 1 Peak Bergen

2.1. Ship Particulars

Name of the ship:	Peak Bergen
Flag:	Netherlands
Shipowner:	General Partner Peak Bergen B.V
Operator:	Gronberg Ship Monagement B.V
Classification society:	Lloyd's Register



Vessel type:	cargo ship
Call sign:	PBPY
IMO number:	9544932
Gross tonnage (GT):	2978
Build:	2009
Power:	1520 kW
Length overall:	89.95 m
Width:	14.00 m
Draught:	5.25 m
Hull material:	steel
Minimum crew:	6 men
Type of VDR (S-VDR):	none

2.2. Voyage Information

Port en route:	Świnoujście, Poland
Port of destination:	Goole, United Kingdom
Type of navigation:	international
Cargo:	3028.25 tonnes of MDFs
Manning (number, nationality):	8 men (2 Netherlanders, 1 Russian, 1 Ukrainian, 4 Filipinos)

2.3. Accident Information

Kind:	serious marine casualty
Date and time of event:	20.09.2018, 10:26 a.m.
Geographical position of the accident:	$\varphi = 53^{\circ}53,57'N$ $\lambda = 014^{\circ}15,67'E$
Geographical area of the accident:	port waters of Świnoujście
Weather during the event:	wind SW 4, air temperature 22°C, good visibility
Operating state of the vessel during the accident:	loaded
Effects of the accident:	without damage

2.4. Shore Services and Rescue Action Information

The accident resulted in the need to use a tug to pull the ship off the shoal and employ divers to carry out the underwater part of the hull survey. This survey showed that the hull, rudder and propeller were not damaged.



Photograph 2 Peak Bergen aground in the Atlantic Basin in the Port of Świnoujście

3. Circumstances of the Accident

On 20 September 2018, Peak Bergen standing at the Rozładunkowe Quay in the Atlantic Basin completed preparations for departure from the port. At 10:03 the vessel reported to the VTS Świnoujście her readiness to leave the port, reporting the maximum draught of 5.25 m. 3028.25 tonnes of MDFs were loaded onto the ship with destination to the English port of Goole.

At 10:10 the VTS operator called the ship asking why they were still at the quay, and at the same time he informed the captain of the vessel about the planned departure of the Gryf ferry from the port which was moored at the ferry terminal - quay No.4 . At 10:11 the captain of Peak Bergen was instructed by the VTS operator that he must pass the Gryf ferry before 10:30. At the same time, the gangway of Peak Bergen was picked up and manoeuvres for leaving the port began. During the manoeuvres, the captain and chief officer, who operated the helm, were on

the bridge. At 10:14 Peak Bergen reported to the VTS operator that she was under way.

At 10:24 the VTS operator informed Silver Lake ship approaching the Rozładunkowe Quay about Peak Bergen whose position had not changed for some time.

At 10:34 the VTS operator called Peak Bergen asking whether the vessel has a problem. In response, he heard that the ship probably ran aground.

In this situation, the crew made the soundings of the ballast tanks and measured the depth of water around the ship. No water leaks into the tanks were found and an unsuccessful attempt to refloat was made. At 15:25 the Uran tug called for help pulled the ship off the shoal. At 15:45, the ship, assisted by the tug, moored again at the Rozładunkowe Quay in Świnoujście.

4. Analysis and Comments about Factors Causing the Accident with regard to Examination Results and Expert Opinions

The Commission found that the incorrectly prepared voyage plan had a decisive impact on the accident of grounding Peak Bergen. Both the captain of the ship and officers did not perform a detailed analysis of navigational hazards and dangers on the prepared route.

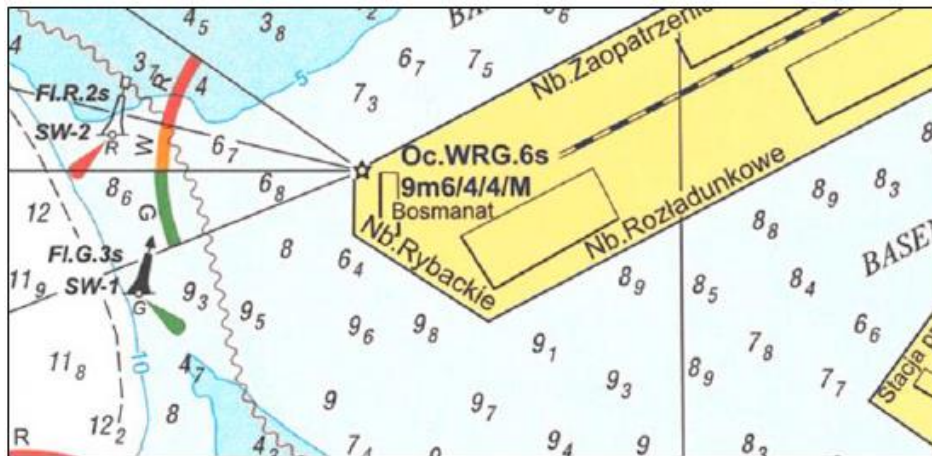


Figure 1 Fragment of map BA 2676, Plan C. Buoys SW-1, SW2.

4.1. Human Factors (errors and omissions)

The navigational officer prepares a detailed voyage plan, in accordance with the guidelines and instructions of the captain. The basic requirements for planning voyage are included in Regulation 34 of Chapter V of the SOLAS Convention. According to this Regulation:

- the ship's route should take into account any routing systems and recommended voyage routes;
- the planned route should ensure sufficient sea room for the safe passage of the ship throughout the voyage;
- the route should anticipate all known navigational hazards and adverse weather conditions;
- the voyage plan should take into account the marine environmental protection measures and plan the route, as far as possible, not to cause and avoid damage to the environment.¹

The analysis of the information obtained indicates that the voyage plan of Peak Bergen was not planned in accordance with the guidelines to the regulations of the Convention.

Referring to the first regulation, the ship's route should take into account the recommended navigation routes. SW-1 and SW-2 buoys indicate a safe approach and exit from the Rozładunkowe Quay in the Port of Świnoujście (Figure 1).



Figure 2 Screenshot of the ECDIS on Peak Bergen with the planned voyage route with an indication of the current depths of the water.

¹ 2015 SOLAS Convention, consolidated text, Chapter V *Safety of navigation*, Regulation 34 *Safe navigation and avoidance of dangerous situations*.

Analysis of the route planned by the navigation officer on the ECDIS chart (Photograph 3) showed that the ship's route was plotted outside these buoys.

According to the provisions of the second regulation, which the navigation officer also did not comply with, the planned route should ensure sufficient sea room for safe passage. While preparing the voyage plan, the navigation officer did not take into account the current draught of the ship and the depth of the water in which the manoeuvres took place. The voyage plan was prepared without taking into account the depths marked on the map (Figure 2).



Figure 3 Radar screenshot of the ECDIS on Peak Bergen

Plotting the course leading from the quay almost directly to the fairway and bypassing the recommended route exposed the ship to the danger of grounding and the possibility of damage to the ship's plating.

In the prepared voyage plan, important elements for the safe voyage of the ship, i.e. the under keel clearance (UKC) and the safety depth, were not clearly indicated (Figure 3).

Safety depth calculation	
Draft: 5.3 + maximum squat: 0.51 + UKC:	= Safety depth

Figure 3 Fragment of the voyage plan of Peak Bergen – Calculation of safety depth



4.2. Organisational Factors.

The organisational factor which undoubtedly had an impact on the occurrence of the accident was the captain's failure to verify the voyage plan.

In accordance with the above-mentioned Regulation 34 of Chapter V of the SOLAS Convention, prior departure the captain of the vessel should ensure that the ship's voyage has been planned using appropriate charts and publications regarding the port and sea waters in which the ship will be sailing, taking into account the guidelines and recommendations issued by the IMO and included in Resolution A.893(21).² This Resolution defines how the ship's route should be plotted and planned on a chart and what the voyage plan should include.

The voyage plan and route determined by the watch officer was approved by the captain without careful analysis.

5. Description of Examination Findings including the Identification of Safety Issues and Conclusions

According to the port regulations, which entered into force on 1 August 2018, ships up to 90 m in length can manoeuvre in the port of Świnoujście without a pilot.³ The captain of Peak Bergen, after consultation with the shipowner, took advantage of this exemption for the first time on 19 September 2018. This was not his first call to this port, but all the previous ones, and there were more than ten of them, were with the assistance of a pilot. On the following day, i.e. 20 September, he also conducted departure manoeuvres without the support of a pilot.

The Commission found that the reason for the grounding of Peak Bergen were the crew's mistakes in preparing the voyage plan and the captain's failure to properly verify the plan.

The ship was equipped with an appropriate set of navigational aids needed to perform the correct manoeuvre of leaving the port. She had a duplicate ECDIS, electronic editions of tide tables, a list of lights and radiosignals, and sailing directions. Despite this, the officer preparing the voyage plan did not comply with the guidelines included in the IMO Resolution A.893(21). The ship's captain also did not make a detailed verification of the plan, briefly reading the map, convinced

² IMO Resolution A.893(21) *Guidelines for Voyage Planning*.

³ Ordinance No. 5 of the Director of the Maritime Office in Szczecin of 16 July 2018 on changes to the Port Regulations. *Dziennik Urzędowy Województwa Zachodniopomorskiego* of 18 July 2018, item 3443

that the depth of the basin was sufficient for the ship. After deciding to resign from the assistance of a pilot, the captain should become familiar with the navigational and hydrometeorological conditions and port regulations which prevail and apply in a given body of water with particular care.

At the same time, the Commission found that the voyage plan was not correctly set in the ECDIS, it did not take into account, *inter alia*, the current draft of the ship.



Figure 4 Peak Bergen in the Port of Świnoujście. Own drawing based on a photo received from the iswinoujście.pl website

6. Safety Recommendations

The State Marine Accident Investigation Commission found it justified to address safety recommendations which are a proposal of actions that may contribute to preventing a similar accident in the future to the following entities.

6.1. The Shipowner

The Commission recommends the owner of Peak Bergen to send the content of this report to its fleet units as an example of non-compliance with the guidelines of the SOLAS Convention and the IMO Resolution A.893(21), which concern proper planning of a voyage. The presented report may be one of the topics to discuss at the Safety Committee Meeting.



6.2. Maritime Office in Szczecin

The Commission proposes analysis of the changes made to the Port Regulations regarding the length of ships exempted from piloting. The task of analysis would be to assess the risk of approaching and leaving quays by a ship, taking into account the manoeuvrability of ships and the nature of the port waters. There is a number of port basins along the Świna River in which manoeuvring requires practical experience and knowledge of local conditions. The changing nature of the current related to weather conditions causes significant difficulties for ships manoeuvring in the port.

The Atlantic Basin in the Port of Świnoujście is one of more difficult water area requiring experience in performing manoeuvres.

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9. Information Sources

Notification about the accident.

Peak Bergen's documents.

Documents received from the Port Authority in Świnoujście.

Photographs received from the <http://www.iswinoujscie.pl/>: photograph 2, figure 4.

Hearings of the SMAIC.



10. Composition of the Accident Investigative Team

Team Leader – Monika Hapanionek – Member of the Commission

Team Member – Marek Szymankiewicz – Secretary of the Commission