

Report on the grounding of  
m/v FAST JEF on November 11, 2019



Picture: [Balticshipping.com](http://Balticshipping.com)



## **Extract from European Directive 2009/18**

(26) Since the aim of the technical safety investigation is the prevention of marine casualties and incidents, the conclusions and the safety recommendations should in no circumstances determine liability or apportion blame.

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## Glossary of abbreviations and acronyms

°	Degrees
Bft.	Beaufort
BSH	Bundesamts für Seeschifffahrt und Hydrographie
cm	Centimetres
CRS	Course
E	East
ETC.	Et Cetera
HDG	Heading
IMO	International Maritime Organization
kW	Kilo Watt
Lbpp	Length between Perpendiculars
LOA	Length Over All
LT	Local Time
m	Metres
M/v	Motor Vessel
N	North
N°	Number
NE	North East
NL	The Netherlands
PS	Port Side
SB	Starboard
SE	South East
SOG	Speed Over Ground
UTC	Universal Time Co-ordinated

# 1 Marine Casualty Information

## 1.1 Classification of Accident

According to Resolution A.849(20) of the IMO Assembly of 27 November 1997, Code for the investigation of Marine Casualties and Incidents, a *serious marine casualty* means a marine casualty involving a fire, explosion, grounding, contact, heavy weather damage, ice damage, hull cracking suspected hull defect, etc., resulting in:

- structural damage rendering the ship unseaworthy, such as penetration of the hull underwater, immobilization of main engines, extensive accommodation damage etc.;
- or pollution (regardless of quantity);
- and/or a breakdown necessitating towage or shore assistance.

*Less serious accidents* are accidents that are not defined as *serious accidents* or *very serious accidents*.

According to this definition, the accident was classified as

### **LESS SERIOUS**

## 1.2 Accident Details

Time and Date	11 November 2019, 1525 LT
Location	Berndshof, Industriehafen Ueckermünde, Germany
Deceased	0
Type of accident	Grounding

## 1.3 Resume

Vessel grounded when leaving the port during maneuvering outside the fairway.

No structural damage nor any pollution was caused.



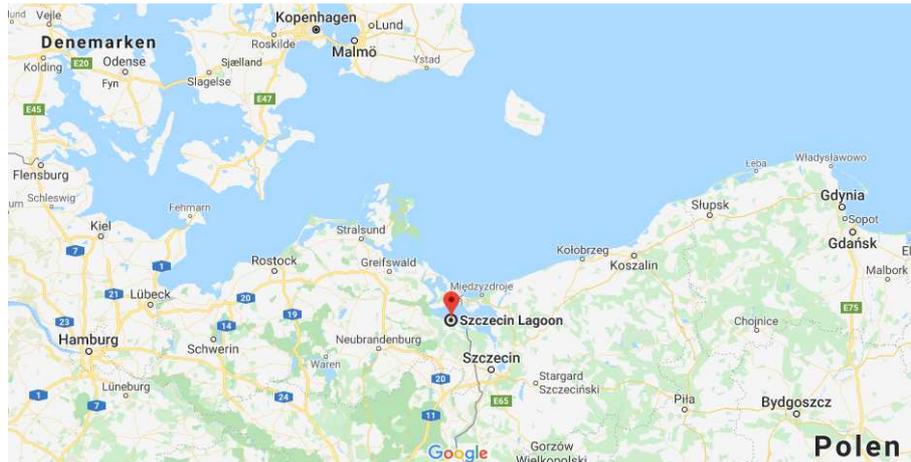
## 2 Synopsys

### 2.1 Narrative (UTC+1, unless specified)

On November, 11<sup>th</sup>, 2019, at 1515, m/v FAST JEF left the port of Berndshof.

The port is located at Stettiner Haff (Szczecin Lagoon) in the Baltic Sea, see

Figure 1.



*Figure 1 - Ueckermünde, Stettin Bay*

All navigation equipment on board was in good working order. Six crewmembers were on board, all holder of the applicable certificates and all were found medically fit for duty.

It was daylight, it was not raining and visibility was good. A 3 to 4 bft SE wind was blowing, causing small waves of 0.3m.

The observed water level in the port was 514 cm, 14cm above chart datum. According to the sailing directions, the tidal range within Stettiner Haff is limited to 0.4m, depending upon the wind direction.

The vessel was moored PS alongside and the draughts fore and aft were respectively 1,50 m and 2,80 m. The vessel was in minimal ballast condition as the vessel was to sail through a fairway with restricted waterdepth (destination Szczecin, Poland).

Turning inside the port was not possible. A turning area, marked by two cardinal buoys was made available in NE direction just outside the port. The vessel had to maneuver astern into the turning circle where she could put her engine ahead and turn towards buoys B9 and B10 to proceed the voyage within the fairway, see

Figure 2.



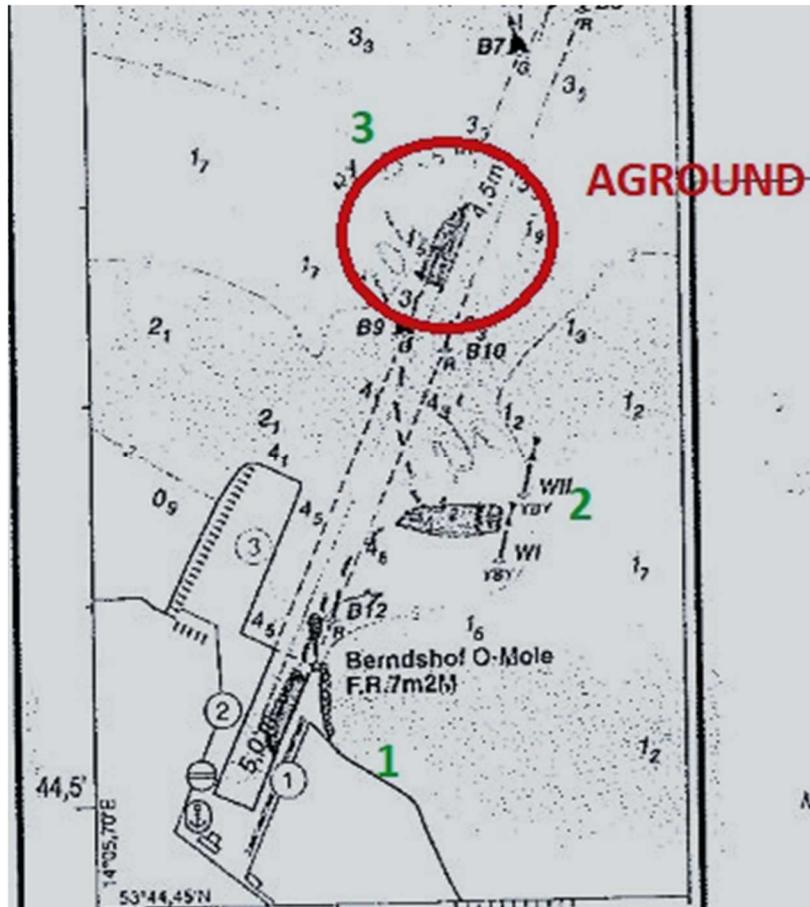


Figure 2 - schematic drawing of turning manoeuvre

The port, fairway and turning circle were charted on local chart *BSH 1513 -Peenestrom, südlicher Teil und Kleines Haff*, see

Figure 3.

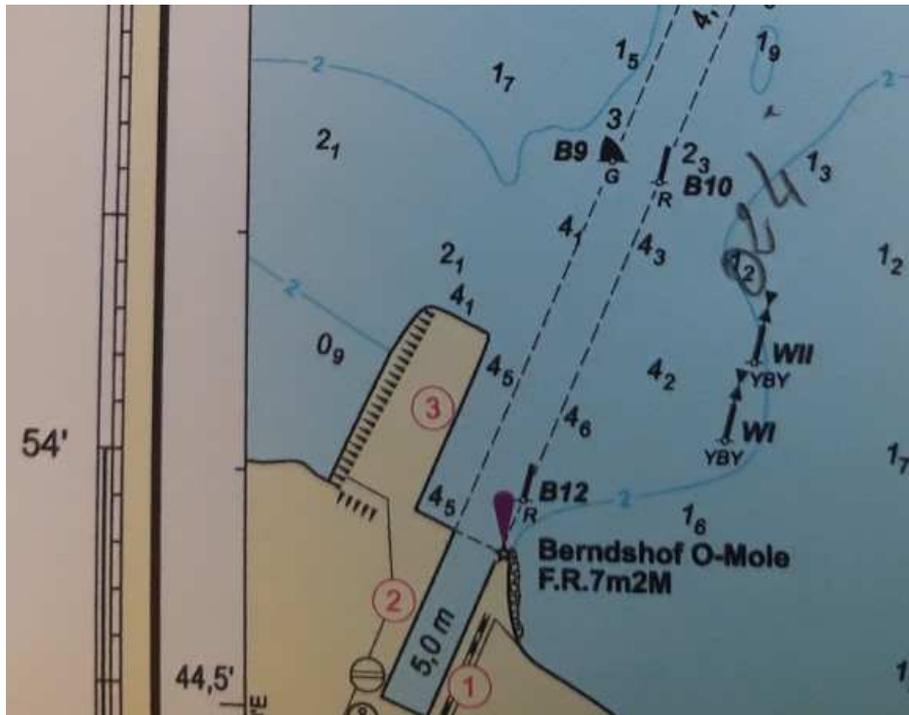


Figure 3 - BSH 1513 – Port of Ueckermünde

There was no pilot on board. The vessel was not assisted by tugs. The master was alone at the bridge to manoeuvre the vessel out of the port. He was assisted by a look-out on the forecastle.

The master had sailed on board m/v FAST JEF since 2006. The last time he called upon the port was already a few years past. Reportedly nothing had changed to the port and buoyage since.

The master was one month on board when the grounding happened. The periods of working and rest hours had been respected and the master did not consider himself as being tired. The vessel had stayed in Ueckermünde for seven hours. The previous port of call was Dordrecht. The voyage from Dordrecht to Ueckermünde had taken two days.

After unmooring, the vessel maneuvered astern towards the turning basin, course 024°.

The vessel passed buoy B12 and turned her stern towards the cardinal buoys. The engines were put ahead and the vessel turned towards the fairway to reach a heading of 024° inside the fairway.

The vessel entered the fairway between buoys B9 and B10, still turning towards her final heading.

The vessel passed buoys B9 and B10 and crossed the western boundary of the fairway where she grounded at 1525 in position N 53° 44,7' E 014° 05,9'.

The speed at that moment (SOG) was 4.2 knots.



*Figure 4 – Grounding position*

The vessel could not come afloat immediately and had a list of 4 degrees over SB. All ballast tanks and bilges were sounded, no water ingress was noted. Soundings around the vessel showed that she was stuck at height of hatchcovers 4 and 5. The ballast tanks in that position, ballast tanks N°2, were empty. At 1540 ballast tanks N°3 on PS and SB were emptied. The vessel came afloat by own means at 1650.

The vessel did not receive permission to return to the port of Ueckermünde, as port entry was allowed by daylight only.

On November 11, sun set was predicted at 1612, so the vessel had to wait at the anchorage. At 1740 the vessel was at anchor.

The next day, m/v FAST JEF heaved up the anchor at 0702, to head towards the port of Ueckermünde where she arrived at 0745.

During inspection, slight intends to ballast water tank number 2 had been noticed.

### 3 Factual information

#### 3.1 Vessel's details



Figure 5 – M/v FAST JEF

Picture: [Balticshipping.com](http://Balticshipping.com)

Type: General cargo

Flag: Belgium

Port of registry: Antwerpen

IMO N°: 9136101

Call Sign : ONEE

Shipyard Barkmeijer Stroobos, NL

Year of built : 1996

Current owner: Fastlines Belgium Antwerp

LOA: 87.99m

Lbpp: 83.78m

Beam: 12.5m

Depth (moulded): 6.0m

Gross tonnage: 2066

Net tonnage: 1043

Engine power: 1000 kW

Engine type: MAK8M20

Hull: Steel

Rudder: Flap type ( Hinze)

Bowthruster: Veth type VT150 -220 kW

Draught in full ballast: Fwd 2.73m – Aft  
3.36m

Draught fully laden: 4.65m (summer –  
4.55m ( winter)

Airdraught in ballast: 11.2m

## 4 Analyses

### 4.1 Voyage planning

A voyage plan was made for the voyage from Ueckermünde to Szczecin. The voyage plan comprised the voyage from berth to berth.

Paper chart *BSH 1513 - Peenestrom, südlicher Teil und Kleines Haff* had to be used to leave the port of Ueckermünde.

The chart used on board was outdated. Edition 2009 of the chart was in use, but the latest version was published in 2016.

The undepth where the vessel grounded, was also visible on the chart edition 2009.

### 4.2 Manoeuvre

The vessel was moored PS at Ueckermünde, heading 204°.

She had to sail a course of 024° inside the navigation channel in front of the port.

Turning 180° inside the port of Ueckermünde was not possible, so the vessel had to sail astern passing buoy B12 to turn inside the turning circle towards cardinal buoys WI and WII, see Figure 6.

A SE 3-4bft wind was blowing the vessel towards the green side of the fairway.

The following figures show a heading (HDG) and a course (CRS). The heading is the direction in which the vessel is pointing. The course shows the direction in which the vessel is moving, as measured over the ground.

When sailing astern without any influence by wind or current, the difference between heading and course is 180°.



ID...	3869A	CAL	ONEE
NAME	FAST JEF		
LAT	53:44.620 N	LON	014:05.902 E
CRS	29.4	Grd	SPD 2.3 Kn
DGT	3.8	m	SRC GPS
HDG	208.0	Grd	ROT >>> Grd/min
TYPE	Normal	STAT	Unterwegs
PILOT	Nein	MMSI	205465000
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> CPA/ETA <input type="checkbox"/> AIS			

Figure 6 - M/v FAST JEF leaving port

Once turned against the wind and towards the buoys, the vessel had to sail ahead (wind in the back), turning inside the fairway towards a course of 024°.



ID...	3869A	CAL	ONEE
NAME	FAST JEF		
LAT	53.44.667 N	LON	014.05.977 E
CRS	108.1	Grd	SPD 0.5 Kn
DGT	3.8	m	SRC GPS
HDG	295.0	Grd	ROT >>> Grd/min
TYPE	Normal		STAT Unterwegs
PILOT	Nein		MMSI 205465000
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> CPA/ETA <input type="checkbox"/> AIS			
REPLAY ACTIVE: 11.11.2019 15:22:11 (R)			

Figure 7 - M/v FAST JEF turning circle

The vessel had to reach a course of 024° when passing red buoy B10 and green buoy B9, both marking the channel.

M/v FAST JEF entered the fairway just in front of buoy B10, having a speed of 2.9 knots and a course of 7°, see Figure 8.



ID...	3869A	CAL	ONEE
NAME	FAST JEF		
LAT	53:44.704 N	LON	014:05.989 E
CRS	7.0	Grd	SPD 2.9 Kn
DGT	3.8	m	SRC GPS
HDG	357.0	Grd	ROT 0 Grd/min
TYPE	Normal		STAT Unterwegs
PILOT	Nein		MMSI 205465000
Standard CPA/ETA AIS			
REPLAY ACTIVE: 11.11.2019 15:23:58 (R)			

Figure 8 - M/v FAST JEF entering the fairway

When entering the fairway, m/v FAST JEF had altered the course more to PS. Wind was coming in on SB aft quarter (SE 3-4bft.).

M/v FAST JEF ended up on the other side of the channel where the depth was indicated to be 1.5m (chart datum) only.

Her speed at that moment was 4.2 knots (SOG), her course 353°, see Figure 9.



ID...	3869A	CAL	ONEE
NAME	FAST JEF		
LAT	53:44.769 N	LON	014:05.984 E
CRS	352.8	Grd	SPD 4.2 Kn
DGT	3.8	m	SRC GPS
HDG	0.0	Grd	ROT >>> Grd/min
TYPE	Normal		STAT Unterwegs
PILOT	Nein		MMSI 205465000
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> CPA/ETA <input type="checkbox"/> AIS			
REPLAY ACTIVE: 11.11.2019 15:24:58 (R)			

Figure 9 - M/v FAST JEF grounding

## 5 Cause of the accident

The vessel was in minimal ballast condition and so more vulnerable to the wind blowing the vessel towards the green side of the fairway.

The appreciation of the effect of the wind on the vessel in ballast condition in combination with the available navigational information caused the grounding of the vessel.

## 6 Conclusion

### 6.1 Safety Issues

Navigation chart *BSH 1513 - Peenestrom, südlicher Teil und Kleines Haff* was outdated.

When PSC boarded the vessel after the grounding a remark had been raised regarding the use of this outdated chart.

No other actions were taken and no recommendations are issued regarding this accident.







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