



## Technical report S-16/2012

# Investigation of the collision between vessel BESIKTAS PERA and vessel SUPER FAST BALEARES, at the port of Valencia on the 1<sup>st</sup> of September 2011

### NOTICE

This report has been drafted by the Standing Commission for Maritime Accident and Incident Investigations, CIAIM, regulated by the Article 265 of the Revised Text to Law of the National Ports' (Puertos del Estado) and the Merchant Navy (Marina Mercante), approved by Royal Legislative Decree 2/2011, dated 5 September, and by Royal Decree 800/2011, dated 10 June, whose functions are:

1. To carry out the investigations and technical reports of all very serious maritime accidents in order to determine the technical causes that originated them and make recommendations for the purpose of implementing the necessary measures to prevent them from occurring in the future.
2. To carry out the technical investigation of serious accidents and maritime incidents when lessons learned can be obtained for maritime safety, to prevent marine pollution from vessels, and to produce technical reports and recommendations on the same.

In accordance with Royal Decree 800/2011, the investigations will not be conducted to determine responsibilities or fault. However, CIAIM will report the causes of the maritime accident or incident even though from its results, the fault or responsibility of individuals or legal entities may be inferred. The drafting of the technical report will in no way pre-judge the decision that may fall upon the courts of law, nor will it seek the assessing of responsibilities or determination of culpabilities.

The investigation included in this report has been conducted with no other fundamental purpose than to determine the technical reasons that may have caused the maritime accidents or incidents and make recommendations for the purpose of improving maritime safety and the prevention of vessel pollution in order to prevent maritime accidents from occurring in the future.

Therefore, the use of the investigation results with any purpose other than the one described is subject in all cases to the aforesaid premises and must not, therefore, prejudice the results obtained from any other report that, in relation to the accident or incident, may be initiated in accordance with current legislation.

The use made of this report for any purpose other than for the prevention of future accidents may lead to erroneous conclusions or interpretations.



## DETAILED DESCRIPTION

The following report of the events has been drafted based on the statements provided by the crew and other documents. The times referred to in the report are local.



Figure 1. Location of the accident

### Chronology of the events

On the 1<sup>st</sup> of September 2011, at 09:51 hours, vessel BESIKTAS PERA departed from the Port of Valencia's North Pier to carry out a fuel bunkering operation for another vessel that was docked at the West Pier. This was the first time that vessel BESIKTAS PERA was to carry out a bunkering operation at the West Pier.

The Master, Pilot, First Deck Officer and two Sailors were at the wheelhouse. As was standard practice on this vessel, the Master operated the steering and propulsion system controls.

At 10:04 hours, when the vessel was navigating near the West Pier's red light, at a speed of 4 knots, her bow began to turn starboard with the consequent risk of colliding with vessel SUPER FAST BALEARES, which was docked at the East Pier.

The Master reacted by positioning the rudder full port and increasing the engines forward propulsion, but the vessel's bow continued turning starboard. Recommended by the Pilot, the Master attempted a new evasive manoeuvre by centring the rudder and setting the engine to full reverse and the bow propeller to full port.

The manoeuvre prevented a full frontal collision with vessel SUPER FAST BALEARES. However, the inertia caused her stern to swing and collide with SUPER FAST BALEARES' starboard tack at 10:06 hours.

After reporting the accident to the Port of Valencia's Emergency Coordination Centre and following the instructions provided by it, the vessel returned to the North Pier by its own means, where it docked at 11:00 hours. During the return manoeuvre no defects were noted in the steering or propulsion systems.

As a consequence of the impact vessel SUPER FAST BALEARES suffered damage to her starboard tack lining above the manoeuvre deck, while vessel BESIKTAS PERA suffered damage to the wheelhouse windows and the wheelhouse deck's starboard side aileron handrails. No contamination or personal injuries occurred.



Figure 2. Damage to BESIKTAS PERA



## OBJECTIVE DATA

### Data relative to the BESIKTAS PERA vessel and crew

The BESIKTAS PERA is a product tanker operating under the Maltese flag, which was built in 2009 and is used for transporting petroleum and chemical products. Since the 22<sup>nd</sup> of August 2001, she had been tasked with supplying fuel and lubricants to the ports of Valencia and Sagunto.

Regarding the main characteristics of the vessel, the following are noted: she has a total length of 98.71 m, a breadth of 14.1 m, a depth of 7.2 m, a maximum draught of 5.8 m, a gross tonnage (GT) of 2,974, a displacement of 5,979 t and deadweight of 4,121 t.

The propulsion system is configured for a 1,710 kW engine that drives a right handed controllable pitch propeller and another 350 kW engine that drives a transverse propeller that is located on the bow. Additionally, it has three auxiliary generators providing 365 kW each.

The vessel is classified by the Bureau Veritas, which is a society that is part of the IACS (international Association of Classification Societies), and which has been recognized by the European Union.

At the time of the accident all of the vessel's certificates were current.

The vessel is owned by KAS TANKER CO LTD; while the commercial operation as well as the obligations and responsibilities listed in the International Safety Management Code (ISM code) is carried out by company BESIKTAS LIKID TASIMACILIK.



Figure 3. Vessel BESIKTAS PERA

The vessel's crew was comprised of fourteen members of different nationalities: the Master was Spanish, the Deck and Engineering Officers were Turkish, and the junior Officers were Turkish and Romanian. The working language used on board the vessel was English.



All of the vessel's crewmembers were in possession of the special professional titles and certificates required for the performance of their duties.

The vessel had been operating at the port of Valencia since the end of August 2011. The Master had assumed command in Valencia.

#### Data relative to vessel SUPER FAST BALEARES

Vessel SUPER FAST BALEARES is a rolling stock ferry operating under Spanish flag, which was built in 2008.

Regarding the main characteristics of the vessel, the following are noted: She has total length of 209 m, a breadth of 26.5 m, a depth of 23.55 m, a maximum draught of 7.1 m, a gross tonnage (GT) of 30,998, a displacement of 22,140 t and deadweight of 10,140 t.

The vessel is owned by company NAVIERA CIBOULETTE, while the commercial operation as well as the obligations and responsibilities listed in the International Safety Management Code (ISM code) is carried out by company ACCIONA TRANSMEDITERRANEA.

At the time of the accident, the port side of the vessel was docked at the north end of the East Pier.



Figure 4. Vessel SUPER FAST BALEARES

#### Weather information

The weather and sea conditions at the time and location of the accident were winds from the W of force 2 on the Beaufort scale (4 to 6 knots), good visibility and rippled sea.

\* \* \*



## ANALYSIS AND CONCLUSIONS

In the analysis of the circumstances of the accident, the reports drafted by the Maritime Authority of Valencia and by the Pilot on board were taken into consideration.

Using the dynamic graphs of the geographic positions transmitted by BESIKTAS PERA's automatic identification system (AIS), which were recorded by Valencia's Rescue Coordination Centre, the course followed by the vessel, which is shown in Figure 5, has been reconstructed.

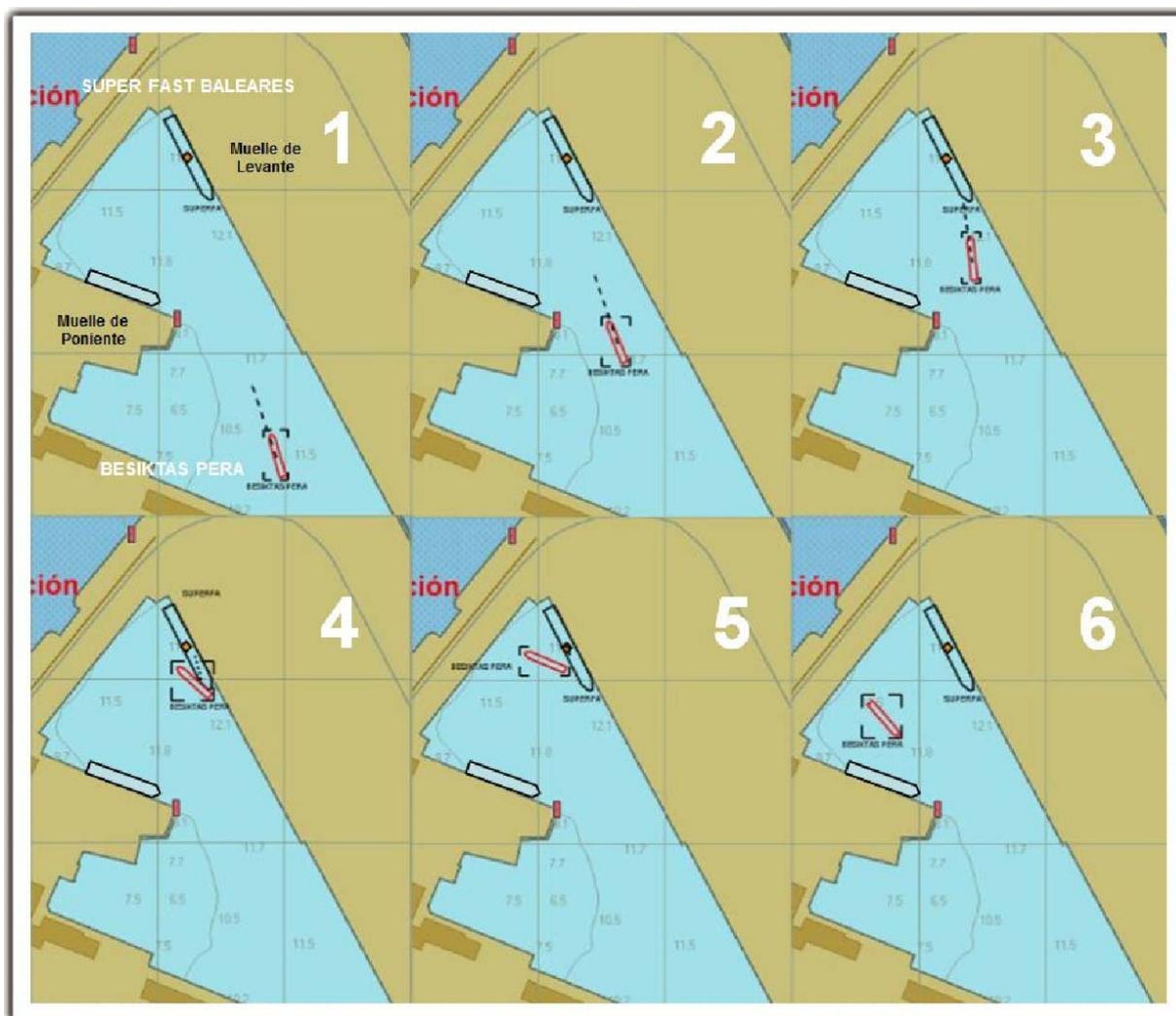


Figure 5. Reconstruction of the course followed by the vessel

Afterwards, on the same day of the accident, with the Pilot on board and assisted by a Tug and a line tied to the stern, several tests were carried out to check the vessel's steering system, which were witnessed by two career civil servants from the Maritime Authority of Valencia, a representative from the vessel's classification society and a representative from the Shipowners Protection and Indemnity (P&I) Club (STEAMSHIP). The results of the tests were satisfactory and technical failure was ruled out as a probable cause for the accident.



On the 8<sup>th</sup> of September 2011, the Master of vessel BESIKTAS PERA submitted a report to the Maritime authority of Valencia, which considered an erroneous calculation of the distance between the two vessels, the excessive start-up speed of the vessel at the start of the manoeuvre and complacency on his part and the Pilot as causal factors of the accident.

In view of the above, this commission has concluded that the accident was probably caused by planning errors on the part of the Master on board the vessel while carrying out the manoeuvre inside the port yard. An underlying factor was the erroneous estimation of the manoeuvring capacity of the vessel on the Master's part.

\* \* \*



## SAFETY RECOMMENDATIONS

This Commission, in view of the conclusions reached, provides the following recommendations in order to prevent similar accidents from occurring in the future:

To the company BESIKTAS LIKID TASIMACILIK:

1. To tailor the vessel familiarization period for Masters to assume command according to the services that the vessel is going to be providing.

\* \* \*