



Report on the investigation of the Grounding Incident involving

MV VISNES

on

15 February 2015

This report is subject to the Gibraltar Merchant Shipping (Accident Reporting & Investigation) Regulations 2006.

Government of Gibraltar
Marine Accident Investigation Compliance Office
Suite 771
Europort
Gibraltar

Extract from
The Gibraltar Merchant Shipping
(Accident Reporting and Investigation)
Regulations 2006 – Regulation 5

“The sole objective of the investigation of an accident under these Regulations shall be the prevention of future accidents through ascertainment of its causes and circumstances. It shall not be the purpose of an investigation to determine liability nor, except so far as is necessary to achieve its objectives, to apportion blame”

NOTE

This report is not intended to be used for the purpose of litigation. It endeavours to identify and analyse the relevant safety issues pertaining to the accident, and to make recommendations aimed at preventing similar accidents in the future.



Photo Showing Major Damage

1. Synopsis

During the early evening of the 15th February 2015, the 1981 built, Gibraltar flagged, General Cargo Vessel, Visnes, IMO Number 7928251 struck an unknown, underwater object on her loaded passage from Thyborøn to Aalborg, Denmark. Bottom damage was suffered but the vessel remained in a safe, floating condition with a slight list to port that allowed her to proceed to discharge her cargo, and then make the onward short passage to the nearest shipyard at Frederikshavn.



The direct causation is that the ship's passage plan routed her over an area marked "foul" on the ECDIS display and labelled "# Uneven ground PA" on BA Chart 1422. The Master made that route in the knowledge that such markings were warnings for fishing vessels snagging their nets, not draft restrictions. The Danish authorities issued a warning notice one day later showing the draft restriction draft.

2. Time Line of Incident (Note ship's time was GMT+2 in logbooks but LT GMT +1 as converted below)

Date / Time (LT and Ship's Time GMT+1)	Description of events
15 th Feb 2015..... 17:00	Departed Thyborøn loaded, Checklist 07.02 completed. Departure draft F6.2 A6.4 (deck log book as source).
19:30	Captain on the Bridge. Position 57°02 57.55N and 8°27 56.51 E speed 10.6 knots course 37°.4 vessel believed to have hit what felt like a heavy wave but sea viewed as calm – from SVDR. Look out AB on duty but at time of incident making a round and just coming up the stairs from the galley. Steered course west away from incident.
19:34	Noticed slight list to port -SVDR
19:36	Captain believes they hit something - SVDR
19:38	Captain calls Owner who is also the back to back Captain of the vessel and they discuss the incident as the Chief Officer is called to sound the tanks and check draft - SVDR
19:44	Speed now 5.9Knots - SVDR
19:47	Start pumping out Number One Port Ballast tank - SVDR
19:53	Chief Engineer believes they hit something - SVDR
20:00	Captain calls DPA speed 4.7Knots, course 39.3, Position 57°07 59.44N and 8°30 52.76 E – SVDR. Recording finishes 4 minutes later.
20:30	Chief Officer by Interview and in deck logbook states Ballast tanks N01DB port, No1 DB Centre and N02 DB Port were full plus the nearby sludge storage tank breached.
23:00	Voyage continued to Aalborg
16 th Feb/.....	Diver's survey undertaken alongside Aalborg with report stating the port side had severe damage around the turn of the bilge to 2m into the flat bottom athwart ships. Longitudinally, the damage started 2m metres behind the bow-thruster tunnel running 18m aft. Further minor damage for another 30m aft was found. Bureau Veritas Class attended and confirmed DB tanks 1C; 1P and 2P were affected.
17 th Feb/.....	BV considering Single onward voyage application by Owners
19 th Feb	GMA approval sought and given for single voyage to repair yard then vessel departs Aalborg on 20 th February at 06:00 hours
23 rd Feb	Vessel drydocks in Frederikshavn Denmark at 14:00 Orskov Yard's dock one.

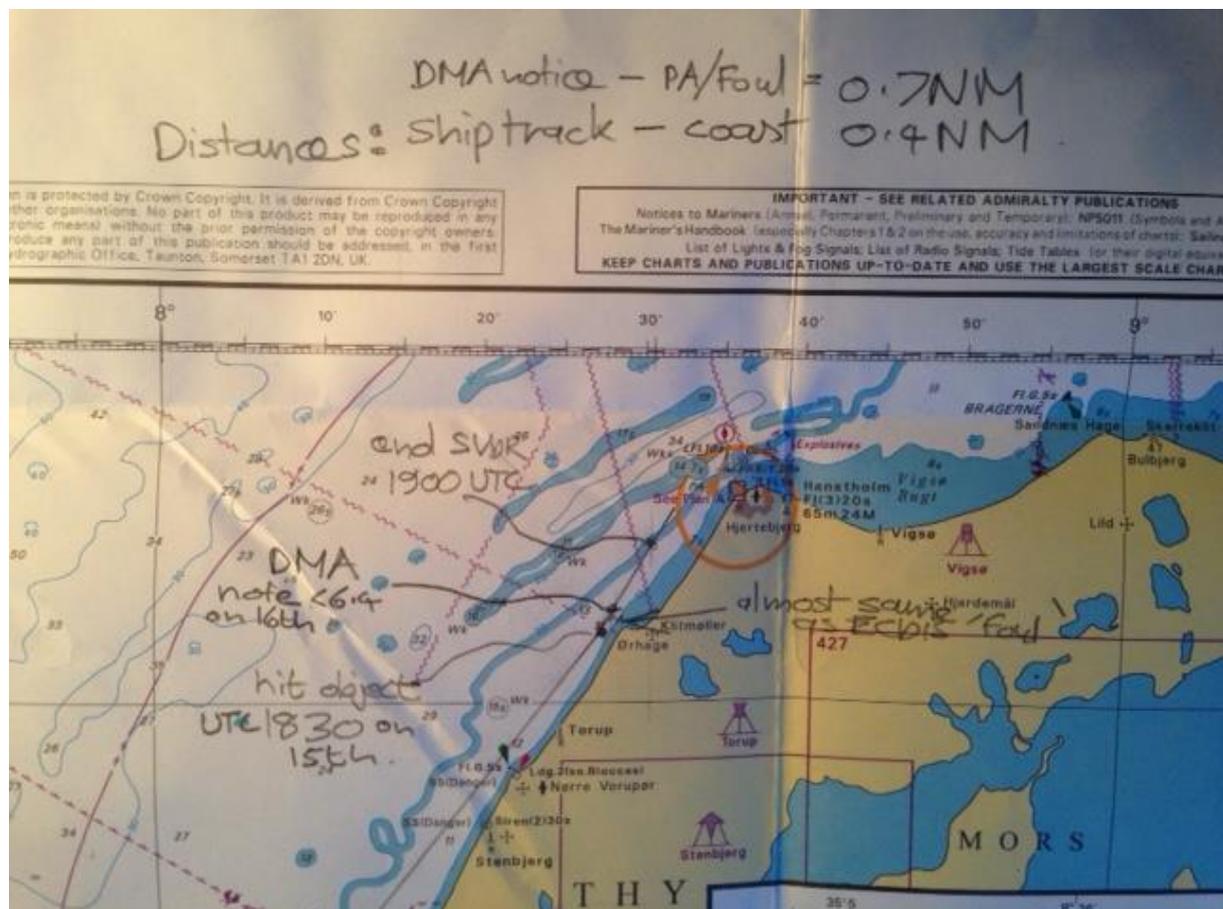
3. Evidence/Observations Made

3.1 SVDR

This hard evidence worked very well and the principal findings have been extracted and tabulated in the timeline. There is a 15 minute delayed difference in what the deck log book reports and the SVDR, which is understandable due to the incident.

The point of contact given by the SVDR is exactly the same as the "foul" symbol on the ECDIS chart and the "#uneven ground symbol" on the paper chart BA1422 as shown below. The Danish notice of restricted draft on the 16th February is shown approximately 0.7NM from the contact point.

The course was made very close to the coastline and at the point of the incident was measured at 0.4 NM.



3.2 Witness Statements

The Master – left the vessel on the 17th February 2015. There was no need to take an interview as all his actions are heard on the SVDR recording.

The Chief Officer – was off duty having completed his 12:00 -18:00 duty period. He reported that he felt a movement like hitting a big wave at 19:30 hours approximately and then the duty AB woke asked him to come to the bridge several minutes later when he then started his damage evaluation duties forward. He noticed a slight list to port.

The duty AB as lookout – was making a routine safety round of the vessel and also felt the movement but was just coming up from the galley.

The Chief Engineer had also left the vessel on the 17th February 2015.

3.3 The Damage Site on the Ships Hull

The level of damage viewed on the ship ´s hull indicates the vessel struck a hard, more than likely heavy object, which could not have been easily swept aside.

3.4 Other Evidence

The ECDIS was properly updated with on 12th February 2015.

The Paper charts were reported uncorrected as of approximately October 2014.

BA Chart 1422 of the area had the last correction applied 2014 by NTM 3882.

Klitmoeller : Water depths down to 6,4 m have been observed in pos. 57 03,1 N - 008 28,2 E. Mariners are advised to keep well clear.

Issued by the DMA one day after the evident which is not exactly at the incident but close by.

There were no D&A tests taken.

4. Breaches of Regulations and Guidelines

- 4.1 The passage plan does not comply with the IMO bridge procedures guidelines in that it is too basic with a simple cover page and a list of waypoints. Position fixing is done by radar/bearing but not recorded, as one would expect e.g. 15 minutes maximum for navigation under pilotage or close to the shore.
- 4.2 The ship has breached the requirements of the GMA in the use of ECDIS by sailing without the Chief Officer having completed Type Specific ECDIS training.
- 4.3 Other breaches of GMA guidance on ECDIS (SGN 33, 34, 49) include: completing a Risk assessment without identifying the minimum paper charts required; using ECDIS without any application to the GMA; and stopping all updates of paper charts since October 2014 that could have been required from the risk assessment.
- 4.4 The rest hours attached showed a six on six off system for bridge watch keeping up to a day before the incident. Such a system breaches the minimum rest period by handover periods and therefore the minimum 6 hours of continuous rest can never be kept. The deck log-book could not cross check the rest hours as neither the Master nor the Chief Officer ever note when they change watch.

5. Injuries, Damage, Pollution

There were no injuries to any party.

The sludge holding tank was breached but no pollution reported.

The bottom damage is as follows from BV Class: Quote

WB DB 3 SB **No damages.**

WB DB 3 PS, Bulkhead fr 58-46 (bottomplate), 300x400mm floor plate. fr. 46-47 krael.

WB DB 2 PS, fr. 73-88, bottomplate + 300x600 floorplate (bottom long. no 2 from bulkhead)
Kimiing plate, indent 72-70, 67-68

WB DB 2 SB, 87-88, bottomplate 300x400mm floorplate (just before turn of bilge) 73-65,
bottomplate, 300x400mm floorplate 2 pcs gasket piping.

WB DB 1 SB, 88-92, 300x400 bottomplate, 900mm from kimning towards center. hole in tanktop
towards wing side tank.

WB DB PS 1/Center, Cropped out 100mm long in damaged area. 1 Centr. PS, bulkhead/sludge tk,
50mm long crack long.

Unquote

6. Root Causes/Contributing Factors

There was no warning on the chart of restricted water depth other than the symbols used for foul/uneven seabed at the point of contact.

The passage plan routed the vessel over the foul/uneven seabed position. Further the plan was too close to the shore and did not consider the space required for COLREG requirements to turn to starboard in the event of a potential head on collision (only 0.4NM to land). Finally the DMA considers this area not an international shipping route, as it does not provide NAVTEX warnings for the area.

Eighteen hours after the contact, the Danish Maritime Authority (DMA) reported the Klitmoeller water depth was down to 6.4m at 13:08 hours on the 16th February. That warning is at a slightly different location from the contact made, but by only 0.7NM. Based on the draft of the vessel and the proximity, it is fair to say that it was at least a likely the source of underwater contact.

The DMA has a difficult/imperfect coastal survey task (busy shipping lanes, recent accidents, pilotage warnings in the great belt and considerable WWII wreckage). The DMA, in the case of Klitmoeller does not send such a warning by NAVTEX, instead only by MF/HF. The Captain reported that no MF/HF transmission was received on the 16th, which illustrates the danger of missing such a message when engaging on a near coast voyage (even if it had been prior to the 15th February 2015). The DMA collates all such MF/HF transmissions and publishes an NTM every Friday, in this case the 20th February 2015.

The company had breached international regulations and guidelines of the GMA with respect to the premature and unauthorised use of ECDIS, which had not been approved by the GMA. The Chief Officer was not qualified for ECDIS use on board and the risk assessment with mitigating actions to reduce risk of using ECDIS were not fully in place.

Bridge Procedure guidelines with respect to position fixing were not properly recorded considering the vessel was so close to shore.

Rest-hours, as recorded, show no fault. However with a two-officer bridge watch-keeping system of 6 hours on/ 6 hours off, each officer automatically fails the minimum STCW/MLC rest hour period of 6 hours due to the need for a handover. The deck logbook never records the change of watch making it difficult to further verify rest hours making all on board rest hour records questionable. There is no software tool to monitor rest hour non-conformities nor are any rest hour non-conformities ever raised from the vessel.

Paper Charts – These should still have formed the primary means of navigation pending approval by GMA to switch to ECDIS. The charts carried/in use were not the correct and best scale for the intended passage. This is particularly pertinent given the extremely close distance the track passes the adjacent land. The Paper Charts were not up to date with the most recent correction dated October 2014.

7. Recommendations

- 1) **The Company** is to implement a system on monitoring and checking of vessels passage plans, incorporating strict guidelines including :-
 - (i) Position fixing intervals.
 - (ii) Safe clearing distances
 - (iii) Appreciation of the effects of squat on a vessel's draught.
 - (iv) Navigational hazard high-lighting.
- 2) **The Company** is to submit the remaining requirements to GMA in order that the system of ECDIS can be approved for use as the primary means of navigation
- 3) **The Company** to arrange Bridge Team Management courses for all OOW's.
- 4) **The Company** to ensure all OOWs are fully trained and certified in the use of the ECDIS.
- 5) **The Company** to implement a system to ensure that all officers appointed to the vessel have the necessary and required training and certification.
- 6) **The Company** to implement a system of monitoring paper chart folios and chart corrections and Master to weekly carry out spot checks of chart corrections and make a record to this effect.

Alan Cubbin
MAICO
December 2015