

REPORT ON BERTHING ALLISION BETWEEN HSC GRANVILLE AND SAILING YACHT SHAMU



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GLOSSARY

HSC	High Speed Craft as defined by the HSC Code 2000 as amended 2008
PEC	Pilotage Exemption Certificate.
PTOHSC	Permit to Operate – High Speed Craft
VTMS	Vessel Traffic Monitoring System
VDR	Voyage Data Recorder

1.0 SYNOPSIS

1.1 On Sunday 13 May 2018 the high-speed passenger ferry **GRANVILLE** was making its approach to its berth in St Helier Harbour at No.3 berth, when it failed to stop and made contact with the sailing yacht **SHAMU**, which was moored on the south end of Albert Pontoons. There were no reported injuries and neither vessel suffered significant damage. The pontoon adjacent suffered some damage to the outboard side.

2.0 NARRATIVE

2.1 At approximately 1636 local time the high-speed passenger **GRANVILLE** was granted traffic clearance to enter the harbour and berth at No.3 north, being its usual berth. At 1645 the vessel entered the main harbour and turned north to shape up for its berth, electing to berth port side too with its bow facing north. At 1646 the vessel appeared to make contact with a sailing yacht moored on the Albert Pontoon immediately north of its intended berth. The incident was reported by both the yacht skipper and the Master of **GRANVILLE** by VHF at 1702.

2.2 **GRANVILLE** is a 41m French registered mono hull high speed craft (HSC) licenced to carry 245 passengers. It is powered by three engines driving three independent propellers and the vessel is fitted with a bow thruster. The normal procedure for berthing is to stop the centre engine and to execute the berthing manoeuvre on the two outer engines. During the final stages of approach the Master will transfer to the appropriate wing console to berth the vessel. On this occasion, the master transferred control to the port bridge wing as normal, when abeam of the moored harbour tug, and went out to the port bridge wing with the "Staff Captain" remaining in the port seat at the centre console. As the vessel approached the position where the master would normally take way off the vessel by operating astern propulsion he noticed no lights indicating that control had not been successfully transferred to the wing console. He shouted to the Staff Captain, who remained at the centre console, to operate astern propulsion which he duly did. Unfortunately, this action was too late to take all way off the vessel and **GRANVILLE** subsequently allided with the yacht **SHAMU** moored on the south end of the Albert Pontoon.

2.3 The Master is a 58-year old French national who has been employed by the same company on a variety of its high speed vessels since 2003. He has also held a Pilotage Exemption Certificate (PEC) since that date for both St Helier and Gorey. He has not experienced any berthing issues in the fifteen years of operations in Jersey.

2.4 The vessel's bow made contact with the yacht pontoon and the inboard port side of the moored yacht. The pontoon suffered a small slicing of the wooden decking where the bow of **GRANVILLE** made contact. The yacht **SHAMU** suffered some gel coat and hull damage in way of the toe rail. The **SHAMU** also suffered impact damage to the wind generator mast, cracks to the deck edge and some handrail stanchion damage. The boarding ladder on the transom also sustained damage.

2.5 There were no reported injuries to persons either on the yacht or ferry;

2.6 There was no visible damage to the bow of **GRANVILLE**.

3.0 PHOTOGRAPHIC IMAGES



Fig 1 Stern of SHAMU showing damage to wind generator mast.



Fig 2 showing stern of SHAMU and decking damage to Albert Pontoon. Note overhang of stern which reduces the length of No.3 berth due to the change in angle

4.0 MASTER'S STATEMENT

4.1 The Master advised that he went to the port bridge wing to take control of the vessel from the outside console as usual. When he decided to apply astern power to stop the ship he noticed that he had no command of the controls, as indicated by the lack of lights on the console. He immediately called out to the Staff Captain (Chief Mate) who immediately took control and put the engines astern. Way came off the vessel quickly but not sufficiently so to prevent the bow making contact with the Albert pontoon and the stern of the yacht **SHAMU**. The Master noted that there was no apparent damage to the structure of either vessel but noted the damage to the wind generator mast.

4.2 In a later interview (15 May) the Master stated the he believed the controls had been selected to the port bridge wing. He only became aware of the lack of control when he moved the levers astern and noted the absence of the red lights indicating he had control on that wing.

5.0 YACHT OWNER'S STATEMENT

5.1 The skipper of SHAMU was not on deck at the time of the allision. He heard people shouting "astern astern" and others shouting in panic. He felt something on top of the stern of **SHAMU** and looked out the port forward bow window to see the anchor of the ferry. He immediately went out on deck as he felt the weight of the ferry roll off the stern. The pontoon was wet where the ferry had impacted and there was a wedge of wood missing. He noted his wind turbine mast was bent, the hull showed signs of impact with the gel coating coming off. He was concerned about damage to his rudder and tiller arrangement. He spoke to the Master of **GRANVILLE** who came to the bow to enquire if there were any injuries. He agreed to report damage.

6.0 FINDINGS

6.1 The vessel suffered control failure at the port bridge wing and could not be stopped in time before it made contact with the pontoon. After the incident the bridge wing controls were tested and found to be in good order.

6.2 The vessel made a standard approach to the port and into the main harbour. There was sufficient room for the vessel to berth safely astern of the yacht pontoon. The port controls failed because of either of the following reasons:

- a) The wing controls failed to accept or the Master failed to press the accept button hard enough for control to transfer;
- b) Control may not have transferred due to lack of alignment of the pitch levers. On this vessel both sets of levers must be aligned or set to zero to effect transfer of control;
- c) There had been a signal failure in the control system.

6.3 It was noted that control was transferred to the wing after the vessel had passed the moored harbour tug. At this time the vessel would have less than 100m to run to its berth position, giving very little time to check astern propulsion or react to a control failure;

6.4 The vessel had a departure check list but had no pre-arrival check list;

6.5 A subsequent check of the control system showed no failures in transferring between manoeuvring positions. The operator has booked an external technician to undertake checks of the

system on 24 May 2018. The vessel is also due an in-service Permit to Operate High Speed Craft (PTOHSC) annual inspection on 29 May of this year.

The port's Vessel Traffic Monitoring System (VTMS) has been interrogated, to determine the speed of the vessel approaching the berth. The system displayed AIS data alone due to the location of the radar scanner once the vessel passed inwards of the pier heads.

6.6 Information from operational Masters advised that **GRANVILLE** operates at a minimum speed of 7 knots with both engines just clutched in. The vessel was observed to pass the tanker berth at 7 knots. Speed had reduced to 6.3 knots passing the pier heads and to 5.9 knots when turn completed passing the moored tug Duke of Normandy;

6.7 On completion of the turn towards the berth the speed on AIS increased to 6.4 knots and remained unchanged until just before contact. From the AIS output the speed at impact was anywhere between 6.4 knots and 3 knots;

6.8 Considering initial speed to be 6.4 knots as control from the port wing was unsuccessful and the subsequent order to the Chief Mate at the centre console to put both engines astern, way would have come off very quickly and speed of impact likely be 3 knots or less. In the absence of data from the vessel's Voyage Data Recorder (VDR), this is the best estimate of speed at the point of impact;

6.9 Subsequent investigations into the control failure were carried out by a technical expert engaged by the operator. The Harbour Authority was advised that the failure to take control on the port bridge wing was caused by a failure of a computer processing unit. This unit has now been replaced;

6.10 Subsequent to this incident another control failure occurred while the vessel was in Sark, resulting in the vessel being taken out of service until repaired;

6.11 Within the port limits as defined in GD 1, the maximum speed limit is five knots. The Port Authority accepts that some larger vessels need to keep a reasonable speed to maintain directional stability in strong wind conditions. These conditions, however, do not significantly influence such stability inside the main harbour. From operational characteristics supplied by the Masters of **GRANVILLE**, the minimum speed with both wing engines engaged is 7 knots, which is 40% higher than the imposed speed limit.

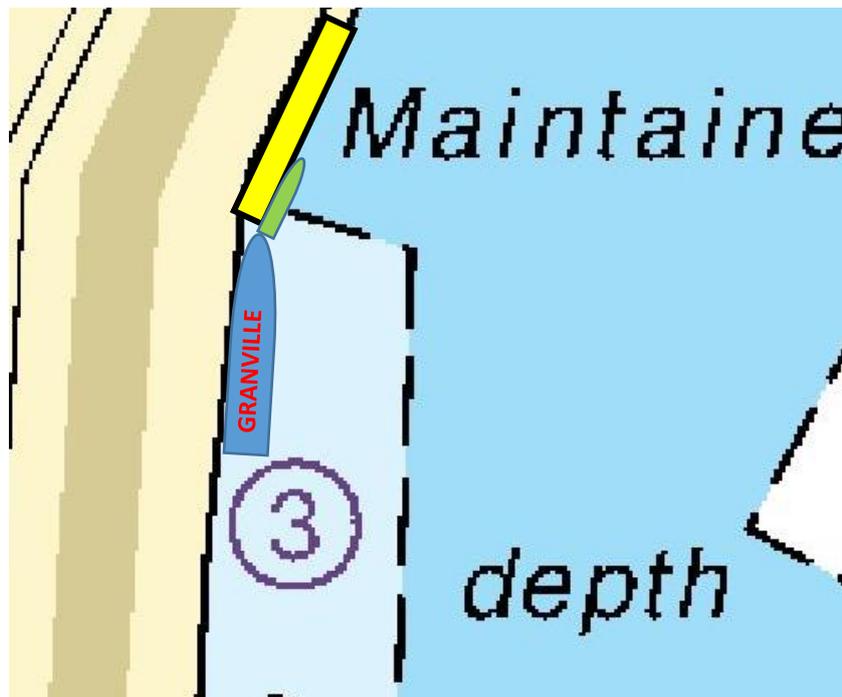


Figure 3

This diagram (**Fig 3**) illustrates the effect of a small overhang of yachts together with the impact of rafting on the pontoon, to the area of space available for the passenger ferries to manoeuvre. The passenger ferry positions are quite critical to allow both to place gangways over the stern onto the half tide landings at No.3.

7.0 CONCLUSION

7.1 7 knots is 40% in excess of the published speed limit and speed was certainly a contributing factor in the inability to stop the vessel in time;

7.2 There was no pre-arrival manoeuvring check list in place as required by Section 1.4.2 of the ISM Code;

7.3 Change over to wing controls was effected too late to accommodate any failure;

7.4 It was not normal practice to test astern propulsion once control was transferred to the wing;

7.5 The Albert Pontoon extends very close to the axis of No. 3 berth north limiting the amount of manoeuvring space available. This should be factored into any approaching manoeuvre;

7.6 The yacht SHAMU was overhanging the end of the pontoon.

8.0 RECOMMENDATIONS

8.1 The Company should ensure there is a pre-arrival check list in place as soon as practical;

8.2 The change over to the appropriate wing control should be undertaken in sufficient time to allow any control failures being identified and appropriate action taken;

8.3 Once control has been accepted on the wing, the vessels astern propulsion should be tested before attempting to berth;

8.4 Consideration should be given to how the vessel should be manoeuvred in order to remain within the published speed limit. This could include use of only one wing engine at a time alternately;

8.5 Yacht mooring on south end of Albert Pontoon should be monitored and consideration given to the desirability to restrictions in both number or position.