

Department for the Investigation of Avoidable Marine Incidents (DIAMI)

Accident report

Report into the grounding of S/Y *Hera* on the Spithead Submarine Barrier

This report is an entirely fictitious account produced for entertainment purposes. It is not based on any real investigation.



Summary

At approximately 0918 BST, the sailing yacht S/Y *Hera* sustained catastrophic structural damage following contact with the Spithead Submarine Barrier (also known as the Solent Submarine Barrier), an underwater defensive structure extending from the Southsea shoreline towards Horse Sand Fort. The accident occurred while departing London on the first leg of a passage to France. The vessel was under the command of Archie, with his father, Alastair, acting as first mate.

The yacht suffered irreparable damage to the keel and mast structure and became firmly lodged on the barrier. A MAYDAY was transmitted, and the vessel was subsequently towed clear by HM Coastguard. Alastair, who was below decks preparing tea at the time of impact, sustained significant bruising following what witnesses later described as "an unplanned inspection of every cupboard in the galley."

Narrative

The voyage commenced in favourable spirits. Weather conditions were benign, visibility was excellent, and the crew reported a high level of confidence, largely informed by the skipper's recent viewing of several online instructional videos entitled *Advanced Seamanship Made Easy*.

As *Hera* approached the eastern Solent, Archie remarked that they were "making excellent time" and observed that, at the current rate of progress, they would be alongside in France well ahead of schedule. Moments later, the yacht experienced a sudden and complete loss of forward motion, accompanied by a loud metallic grinding noise described by both crew members as "financially significant."

Below decks, Alastair was preparing refreshments. The impact caused him to be propelled through the companionway before coming to rest amongst tea bags and a packet of ginger biscuits.

"I distinctly remember wondering why the kettle had overtaken me," he later stated.

On deck, Archie conducted an immediate assessment of the situation before remarking, "Well... this isn't ideal."

The vessel had sustained severe structural damage. The keel had become firmly embedded on the barrier, while the mast had assumed an angle not generally associated with efficient sailing.

Injuries Sustained

Immediately following the impact, the first mate, Alastair, sustained extensive bruising after being thrown violently around the cabin as the yacht came to an abrupt stop. At the time of the collision he was below decks preparing refreshments and was unable to brace himself before the deceleration. He made contact with several interior fixtures and fittings, including the galley worktop, companionway and adjacent lockers, before finally coming to rest on the cabin sole.

Although the injuries were painful and visually dramatic, medical assessment confirmed that they were limited to soft tissue bruising, with no fractures or other significant injuries identified. The investigation notes that the bruising served as a vivid reminder that even relatively low-speed groundings can generate considerable forces for those below deck who are not securely braced.



Figure 1: Bruising sustained by the first mate following the collision.

Alastair later observed:

"I discovered that the galley contains considerably more hard surfaces than I'd previously appreciated."

Analysis

The vessel's electronic navigation system was recovered and examined following the incident.

Data extracted from the chart plotter indicated that the passage plan incorporated a waypoint track passing approximately 100 yards clear of the Spithead Submarine Barrier, providing an appropriate margin of safety.

Recorded track data, however, showed that Hera progressively diverged from the planned route during the final approach before making direct contact with the barrier. The investigation was unable to determine conclusively why the intended track was not followed.



Figure 2: Planned route showing passage clear of the barrier.

Several possible contributory factors were identified. These included momentary distraction while discussing the anticipated evening meal in France, overconfidence arising from favourable weather conditions, an unnoticed deviation while hand-steering, or simple confirmation bias whereby the crew became increasingly convinced they were exactly where they intended to be despite evidence to the contrary.

The investigation also considered the possibility of equipment malfunction. Post-accident examination confirmed that the chart plotter accurately displayed both the planned route and the vessel's actual position throughout the passage. The equipment therefore appears to have performed precisely as designed, albeit with only limited influence over the decisions of those observing it.

The investigation notes that the Spithead Submarine Barrier, extending between Southsea and Horse Sand Fort, has occupied substantially the same position for many decades. While it is charted and well documented, its continued inability to move out of the way of approaching yachts was considered a significant contributing factor from the skipper's perspective.

During interview, Archie stated:

"I remember looking at the screen and thinking, 'We're a little right of track.' I now realise we were considerably more right of track than I had appreciated."

Alastair was unable to comment on the vessel's navigation, explaining:

" My attention was rather occupied elsewhere. I can, however, confirm that the kettle was the only object on board that maintained its original course and speed. I regret that I was unable to do the same"

The investigation concludes that the planned passage was entirely capable of avoiding the barrier. It was the execution of that plan that proved less successful.

Emergency Communications

Following the impact, Archie transmitted a MAYDAY.

The investigation concluded that, while understandable in the circumstances, the situation would more appropriately have warranted a PAN PAN urgency call rather than a MAYDAY.

A MAYDAY is reserved for situations involving grave and imminent danger to life requiring immediate assistance. At the time of the initial transmission:

- both crew members were accounted for;
- the vessel remained afloat;
- there was no fire or flooding;
- neither crew member was in the water; and
- injuries were limited to bruising sustained by the first mate.

A PAN PAN call would therefore normally have been the appropriate classification, indicating a serious but non-life-threatening situation involving a disabled vessel requiring assistance.

The subsequent response by HM Coastguard and the tow to safety confirmed that assistance was required, although the urgency related primarily to the recovery of the vessel rather than the rescue of its crew.

Conclusions

The accident resulted from the unintended interaction between a vessel and a fixed underwater obstruction, the latter demonstrating commendable positional consistency throughout the incident.

Although *Hera* was declared beyond economic repair, both crew members escaped without serious injury. Alastair has reportedly made a full recovery, although he now instinctively adopts a braced posture whenever tea is prepared underway.

Archie concluded the investigation interview with the observation:

"I now have complete confidence in the accuracy of Admiralty charts."

The investigation makes no formal safety recommendations other than to remind mariners that the Spithead Submarine Barrier has shown little inclination to relocate since its construction, and that underwater obstructions are generally unresponsive to optimistic assumptions, enthusiastic helming, or responses to concerns beginning with, "It will be fine."