

MAIB

MARINE ACCIDENT INVESTIGATION BRANCH

FLYER TO THE SHIPPING INDUSTRY *STENA VOYAGER:* THE SHIFT OF AN ARTICULATED ROAD TANKER 28 JANUARY 2009



An articulated road tanker crashed through a stern door of the high speed service 1500 (HSS 1500) vessel *Stena Voyager* shortly after the ferry had commenced a scheduled crossing from Stranraer, Scotland to Belfast, Northern Ireland. The vehicle's semi-trailer came to rest on the vessel's port water jet units; its tractor unit remained on the vehicle deck. The ferry was quickly stopped and her crew were able to make the vehicle secure before returning to Stranraer.

Contrary to instructions posted on the vehicle deck, the vehicle's parking brakes had not been applied and it had been left out of gear. Although the vehicle had been lashed to the deck and its rear wheels chocked, this failed to stop it from rolling backwards as *Stena Voyager* accelerated. As neither the lashing points on the ferry's deck nor those fitted to the vehicle accorded with the applicable international and national codes of practice, the crew were unable to lash the vehicle as required by the ferry's cargo securing manual. The lashing straps were also found to be of insufficient strength and post accident tests strongly indicate that the chocks were not correctly positioned.

The HSS 1500 vessels have experienced two similar incidents of freight vehicles rolling aft and damaging or crashing through the stern doors.

Safety Issues:

- The vehicle's parking brakes had not been applied. Parking brakes, including the parking brakes fitted to semi-trailers, are the first line of defence to prevent a vehicle from moving. However, the posting of instructions and reminders on vehicle decks and on other media, such as tickets etc does not provide any certainty that this action has or will be taken. Many drivers do occasionally forget to apply parking brakes, and notwithstanding time, manning and language constraints, the most effective ways of ensuring that this important action has been taken is to either confirm its completion with each driver or to undertake physical checks.

- The road tanker had not been effectively lashed. The lack of lashing points on both the deck of the ferry and the chassis of the vehicle made it difficult for the deck crew to lash the road tanker in accordance with the vessel's cargo securing manual. This was not unusual and the resulting practices, including the incorrect positioning of chocks had become routine. The regular oversight of vehicle deck operations, along with periodic verification by both internal and external audit and inspection, would have helped to prevent this from occurring.
- The number of ferry securing rings fitted to the road tanker was insufficient to enable it to be effectively lashed to the deck. The majority of freight vehicles arriving for embarkation on ferries in UK and other European ports do not have the recommended number of ferry securing rings fitted, and a significant percentage have none at all. Although the competition on some routes makes it extremely difficult for ferry operators to unilaterally enforce such a requirement, the risks of accepting freight vehicles without adequate securing arrangements must be recognized and addressed.
- The maintenance regime for the lashings was ineffective; the residual strength of the lashings used to secure the road tanker was less than 50% of the design breaking strength. The condition and performance of web lashings can deteriorate significantly over time, and this is often difficult to detect visually. Therefore, the need for web lashings to be marked and limited to a maximum working life is compelling.

This accident was the subject of an MAIB investigation, which can be found on the MAIB's website at:

www.maib.gov.uk

A copy of the report and/or the flyer will be sent, on request, free of charge.

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