



TSB Recommendation M24-01

Passenger safety management training on all passenger vessels

The Transportation Safety Board of Canada recommends that the Department of Transport implement a requirement for crew members of all passenger vessels, including those on sheltered waters voyages, to complete appropriate training in passenger safety management.

Marine transportation safety investigation report	M22C0231
Date the recommendation was issued	19 August 2024
Date of the latest response	November 2024
Date of the latest assessment	March 2025
Rating of the latest response	Satisfactory in Part
File status	Active

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Summary of the occurrence

On 20 August 2022, at around 1700 Eastern Daylight Time, the passenger ferry *Sam McBride*, with 6 crew members and approximately 910 passengers on board, struck the dock while berthing at the Jack Layton Ferry Terminal in Toronto, Ontario. Twenty passengers were reported injured. Emergency services responded to the occurrence and 6 of the injured passengers were taken to hospital. The vessel and dock sustained damage. No pollution was reported.

The *Sam McBride* is a double-ended ferry, meaning that it has propellers at both the forward and aft ends. The TSB's analysis of security footage from the occurrence voyage determined that the vessel was travelling at 5 knots when it passed the first mooring dolphin on its way to the dock, while the speed of approach on other transits that day had been approximately 3 knots. The footage also showed that only the aft propeller was turning as the *Sam McBride* approached

the dock. The aft propeller alone was not enough to stop the *Sam McBride* from striking the dock, given the vessel's speed and distance from the dock.

Post-occurrence sea trials indicated that both the forward and aft engines and their control systems were in good working order. As well, the engine control modules for the forward and aft engines did not show any fault codes or events for the day of the occurrence. The investigation was unable to determine why the forward engine and propeller did not engage to slow the vessel on the occurrence voyage.

On the day of the occurrence, the *Sam McBride* had made 8 runs, 6 of which were at full capacity, and was behind its published schedule. When many people were waiting for the ferry and it was behind schedule, as in this case, crews on City of Toronto ferries expedited crossings to address passenger backlog by transiting faster and/or reducing the time it took to dock by approaching at higher speeds and slowing down at a faster rate. The City of Toronto did not have written procedures that defined a safe speed of approach during docking, which meant that decisions around docking speed were at the discretion of masters and might be influenced by operational pressure. The City of Toronto has since put in place documented procedures for docking.

The Board concluded its investigation and released report M22C0231 on 19 August 2024.

Rationale for the recommendation

The need for crew members to respond quickly and effectively to an emergency on a passenger vessel is the same for all vessels and voyages. When faced with an emergency, crew members need to have knowledge and skills related to crowd management and human behaviour in emergencies.

While the *Marine Personnel Regulations* require that crew members of passenger vessels greater than 500 gross tonnage (GT) on unlimited, near coastal Class 1, or near coastal Class 2 voyages have a Specialized Passenger Safety Management certificate or endorsement, there is no such requirement for crew members of vessels on sheltered waters voyages or those on vessels of 500 GT or less. The Specialized Passenger Safety Management certificate provides training on crowd management, crisis management and human behaviour in emergencies, passenger safety, and safety for personnel providing direct services to passengers. It also provides familiarization training.

While passenger vessels that are on sheltered waters voyages are closer to shore and shore-based emergency responders than vessels on other types of voyages, there are a number of types of emergencies that need an immediate response that cannot await the arrival of shore-based responders.

Currently in Canada, there are only 46 passenger vessels greater than 500 GT, while there are 5025 passenger vessels of 500 GT or less.¹ The maximum complement of a passenger vessel depends on more factors than just its gross tonnage, which means that passenger vessels of 500 GT or less may be carrying more passengers than those greater than 500 GT. Requiring training for only vessels greater than 500 GT leaves out the majority of passenger vessels.

The *Sam McBride* is less than 500 GT and was on a sheltered waters voyage. None of the crew members had received such training, nor were they required to. Following an occurrence on board the passenger vessel *Island Queen III* in 2017, the TSB issued a safety concern about the lack of a requirement for training in passenger safety management for crew members on all vessels carrying more than 12 passengers on sheltered water voyages. However, Transport Canada (TC) has yet to implement passenger management training requirements to fully address this concern. If all passenger vessel crew members are not trained in passenger safety management, there is a risk that they will not be prepared to manage passengers in emergency situations.

Therefore, the Board recommended that

the Department of Transport implement a requirement for crew members of all passenger vessels, including those on sheltered waters voyages, to complete appropriate training in passenger safety management.

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Previous responses and assessments

N/A

Latest response and assessment

November 2024: response from Transport Canada

Transport Canada (TC) agrees with Recommendation M24-01. The Department recognizes that, in the event of an emergency, it is critical that crew members be appropriately trained in passenger safety management so they are prepared to adequately maintain passenger safety as the event unfolds.

The Department is advancing regulations to replace the existing *Marine Personnel Regulations* (MPR). These new regulations will remove the current 500 gross tonnage minimum from the requirement that passenger-carrying vessels provide passenger safety training for the vessel's complement. As such, authorized representatives will be required to provide passenger safety training to crew members (e.g., the master, chief engineering officers, chief mates, second engineer officers and any person designated on the muster list as having responsibility for the

¹ The numbers for passenger vessels were obtained from a query of the Transport Canada Vessel Registry on 17 May 2024 using the vessel type "Passengers." Vessels may have safe manning documents to operate on different classes of voyage, so it is difficult to assign an accurate number of vessels to each class of voyage.

safety of passengers) on all sizes of passenger-carrying vessels, aside from those which operate exclusively in sheltered waters. These proposed amended regulations are targeted for pre-publication in the *Canada Gazette*, Part I in spring 2025.

These requirements are drawn from *The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978* (STCW Convention), which does not apply to vessels that navigate “exclusively in inland waters or in waters within, or closely adjacent to, sheltered waters or where port regulations apply.” As a result, there is no international requirement to meet these provisions for a Canadian vessel operating in either sheltered waters or on a near-coastal, Class 2 voyage.

To address these safety concerns for passenger-carrying vessels operating in sheltered waters, TC will conduct a review of the on-board vessel familiarization training for all passenger-carrying vessels that operate in sheltered waters. This review will determine whether the contents of these training materials for crew members with passenger-related safety responsibilities are current and appropriate for responding to emergency situations. Should any safety gaps be identified in this review, materials will be updated accordingly.

TC will also update its Transport Publication (TP) 4957: Marine Emergency Duties Training Courses, which outlines the training courses and safety familiarization training required by seafarers, to manage hazards associated with the marine environment, including those specific to their vessels, to a level appropriate to their function on board. Updates to this TP will make clear that the authorized representative of a passenger vessel, including those on sheltered water voyages, is required to provide training to the vessel complement on how to manage passenger safety in emergency situations.

In response to a request by the TSB for further information, TC sent additional information on 20 December 2024.

In the near-term, TC will reinforce that on-board vessel familiarization training, for passenger-carrying vessels, must include appropriate training for crew members with passenger-related safety responsibilities.

Additionally, in 2025, TC will take the following steps, which do not require a regulatory change:

- Review and publish an updated version of TP 4957: Marine Emergency Duties Training Courses. TP 4957 outlines the training courses and safety familiarization training seafarers must acquire in order to cope with the hazards associated with the marine environment and with their vessel to a level appropriate to their functions on board. Particularly, minor additions to chapter 4 covering the safety familiarization training will address passenger safety. It will make it clearer that the master and authorized representative must provide training to the vessel complement on how to manage passenger safety in emergency situations.

- Review and publish an updated version of TP 2293: The Examination and Certification of Seafarers to indicate that oral examination for Chief Mate and Master certifications knowledge and awareness of passenger safety management is clearly articulated.

March 2025: TSB assessment of the response (Satisfactory in Part)

The Board recognizes that Transport Canada (TC) will update the *Marine Personnel Regulations* to remove the 500 GT minimum threshold for passenger safety management training, currently anticipated in spring 2025. The Board notes that TC will also undertake a review of on-board familiarization and will reinforce to passenger vessel operators that such familiarization must include appropriate training for crew members with passenger-related safety responsibilities. However, the Board also notes that the justification for not requiring appropriate training in passenger safety management for all vessels on sheltered waters voyages is based on the application of the *The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978* (STCW Convention). The STCW Convention only applies to vessels on international voyages, other than the Great Lakes, and was not intended to provide requirements for sheltered waters voyages, which are under Canadian jurisdiction.

In its justification for the recommendation, the Board highlighted that the need for crew members to respond quickly and effectively to an emergency applies for all vessels and voyages. While passenger vessels that are on sheltered waters voyages are closer to shore and shore-based emergency responders than vessels on other types of voyages, there are emergencies that need an immediate response. When faced with this type of emergency, crew members need to have knowledge and skills related to crowd management and human behaviour in emergencies, whether they are in sheltered waters or further from shore.

Amending the regulations, updating the requirements for Marine Emergency Duties training, and a new verification of knowledge related to passenger safety management during examinations are good steps to ensure that crew on passenger vessels are knowledgeable about how to respond in an emergency. However, these steps will only apply to seafarers who receive their initial qualifications; there is no current or planned requirement for Canadian seafarers sailing on domestic vessels to renew their Marine Emergency Duties training or to retake their examinations; therefore, the underlying safety deficiency will take many years to resolve.

Therefore, the Board considers TC's response to Recommendation M24-01 to be **Satisfactory in Part**.

File status

This deficiency file is **Active**.