



REASSESSMENT OF THE RESPONSE TO TSB RECOMMENDATION M96-02

Communications on board small passenger vessels

Background

On 11 August 1993, the Tan 1, a five gross-ton open fibreglass boat, with 12 passengers on board for whale watching, grounded in fog. Later, on 12 September 1993, following a mechanical failure, the Tan 1 capsized after waves broke over the stern; the passengers ended up in the water, but were all rescued.

The Board concluded its investigations and released reports M93L0003 and M93L0004 on 25 April 1996.

TSB Recommendation M96-02 (April 1996)

In view of the demonstrated communication failure due to poor reliability of non-inspected radio stations, the Board recommended that

The Department of Transport amend the regulations to require sight-seeing boats that carry fare-paying passengers to be fitted with adequate radio equipment and to report to the VTC, before departure, the number of persons on board.

TSB Recommendation M96-02

Transport Canada's response to Recommendation M96-02 (July 1996)

The Minister of Transport accepts the recommendation. It is proposed to amend Part IV of the *Small Vessel Regulations*, which addresses the requirements for passenger carrying vessels not over five tons. This amendment is scheduled for the spring of 1997. This amendment will require:

- the carriage of an appropriate VHF radiotelephone, designed and constructed to be compatible with specific marine environmental conditions;
- the fitting of an appropriate battery bank system and charger for this radio equipment; and
- appropriate measures to ensure that the radiotelephone batteries are properly charged and maintained at all times.

The mandatory carriage of this radio equipment will dictate that the ship radio station be appropriately licensed and that the owner/operators possess restricted operator's certificates.

With respect to communicating with the vessel traffic centre (VTC) or appropriate authority to file a report or sailing plan, it is worth noting that Ship Safety Bulletin 4/95, published 25 January 1995, adequately covers the subject, including the numbers of persons on board.

TSB assessment of the response to Recommendation M96-02 (September 1996)

The response indicates that proposed amendments to Part IV of the *Small Vessel Regulations*, scheduled for the spring 1997, will require vessels not over 5 gross register tonnage to carry a very high frequency (VHF) radiotelephone and battery system. Although not stated by Transport Canada (TC), the staff believes that implementation of the proposed amendments will also lead to appropriate licensing of the operators for the use of these radios. However, vessels of the size of *Tan 1* (that do not carry more than 12 passengers) will not be covered by this amended requirement.

A Ship Safety Bulletin was published, urging small vessel operators to file a report or sailing plan with the VTC or appropriate authority; (of note, compliance is not required).

While TC proposes actions to mitigate inadequate communication with sight-seeing vessels, a significant number of vessels and operators will not be affected. Therefore, the response is considered **Satisfactory in Part**.

TSB reassessment of the response to Recommendation M96-02 (September 2004)

An amendment is being proposed to the *Ship Station (Radio) Regulations, 1999*, that will require vessels of more than 8 metres in length and carrying passengers to be fitted with a VHF radio. Also, a vessel carrying passengers outside VHF coverage areas to be equipped with communicate with Marine Communication and Traffic Services (MCTS) or a person on shore.

The response is considered **Satisfactory Intent**.

TSB reassessment of the response to Recommendation M96-02 (December 2005)

An amendment to the *Ship Station (Radio) Regulations* requiring all commercial vessels carrying any number of passengers, regardless of the vessel's size or area of operation, to carry a means of two-way communications with shore, was registered in the *Canada Gazette*, Part II on 03 May 2005 and will come into force six months from that time. In most cases this would be a VHF radio; however, for passenger vessels not in a VHF area, they must be equipped with radio equipment capable of continuous two-way communication. The action will substantially reduce the risks associated with not having the means to promptly alert others for assistance.

The *Canada Shipping Act* prohibits masters from carrying passengers in excess of that allowed. Large passenger vessel operators do count and record the number of passengers and provide the count to a person ashore. Not all operators of smaller passenger vessels may be aware of the recommended practice and may not be making counts.

No substantial change to address the safety deficiency since the last reassessment.

Transport Canada's response to Recommendation M96-02 (November 2006)

TC's update, dated November 2006, indicated that CCG Marine Communications and Traffic Services have implemented a voluntary sail plan and alerting service. The sail plan includes the

number of persons onboard, as well as other pertinent information. Vessel operators have been encouraged to participate in this program.

TSB reassessment of the response to Recommendation M96-02 (November 2006)

On 03 November 2005, the *Ship Station (Radio) Regulations, 1999*, were amended to require vessels carrying passengers and engaged on a voyage any part of which is outside a VHF coverage area to be equipped with radio equipment capable of establishing continuous two-way communications with a Canadian Coast Guard Marine Communications and Traffic Services Centre or. If that is not possible, the vessel must be able to establish continuous two-way communications with another organization or person on shore that is providing communications with the ship.

However, a vessel carrying six or less passengers and engaged in a minor waters voyage during which it remains within two miles of shore is not required to be able to establish two-way communications. Without the benefit of carrying two-way radio communications crews will be unable to alert others of an emergency situation, thereby unnecessarily putting at risk the safety of passengers during an emergency. The action taken will reduce but not eliminate the deficiency.

Therefore, the assessment is now considered **Satisfactory in Part**.

Transport Canada's response to Recommendation M96-02 (June 2008)

TC's update, dated June 2008, indicated that Ship Safety Bulletin 06/2007, *Information on Persons on Board, Counting, Recording, and Special Needs*, was issued in August 2007. The bulletin advises that TC intends to adopt the IMO Regulation 27 of Chapter III of the SOLAS Convention in regard to information on passengers. TC is currently amending its *Boat and Fire Drill and Means of Exit Regulations* to include this requirement. Pre-publication in Part I of the *Canada Gazette* is anticipated in Spring 2009.

The *Ship Station (Radio) Regulations, 1999*, were amended to require all Canadian ships carrying one or more passengers, regardless of the ship's size, to fit a VHF radiotelephone when any part of its voyage is in a VHF coverage area or if more than 5 miles from shore. Given that VTS Zones are always within a VHF coverage area, this fully addresses the TSB recommendation.

Additionally, the regulations were further amended to require Canadian ships operating outside of VHF coverage to carry a means of two-way communications with MCTS or someone on shore, except for ships on minor waters within 2 miles from shore carrying less than 6 passengers.

TSB reassessment of the response to Recommendation M96-02 (September 2008)

The *Ship Station (Radio) Regulations, 1999*, were amended to require vessels carrying passengers and engaged on a voyage any part of which is outside a VHF coverage area to be equipped with radio equipment capable of establishing continuous two-way communications with a Canadian Coast Guard Marine Communications and Traffic Services Centre. If that is not possible, the vessel must be able to establish continuous two-way communications with another organization or person on shore that is providing communications with the ship. However, a vessel carrying six or less passengers and engaged in a minor waters voyage during which it remains within two miles of shore is not required to be able to establish two-way communications. Without the

benefit of carrying two-way radio communications, crews will be unable to alert others of an emergency situation, thereby unnecessarily putting at risk the safety of passengers during an emergency.

The proposed action will reduce or but not eliminate the deficiency. The assessment of the response is considered **Satisfactory in Part**.

Transport Canada's response to Recommendation M96-02 (November 2009)

TC's update, dated November 2009, indicated that the Ship Safety Bulletin 06/07 issued in August 2007 advised that TC intends to adopt the IMO Regulation 27 of Chapter III of the SOLAS Convention in regard to information on passengers.

The proposed *Fire and Boat Drills Regulations* were pre-published in Part I of the *Canada Gazette* on October 10, 2009 with a 30-day comment period. It is anticipated that the approval and publication of the regulations in the *Canada Gazette*, Part II will be in spring 2010.

TSB reassessment of the response to Recommendation M96-02 (July 2010)

The *Ship Station (Radio) Regulations*, 1999, require vessels carrying passengers and engaged on a voyage any part of which is outside a VHF coverage area to be equipped with radio equipment capable of establishing continuous two-way communications with a Canadian Coast Guard Marine Communications and Traffic Services Centre. If that is not possible, the vessel must be able to establish continuous two-way communications with another organization or person on shore that is providing communications with the ship. However, a vessel carrying six or less passengers and engaged in a minor waters voyage during which it remains within two miles of shore is not required to establish two-way communications. TC estimates there are about 93,000 non-pleasure vessels with a length of 8 metres or less (the *TAN 1* was 7.62 m). Although the number of similar-sized small passenger vessels has yet to be determined by Transport Canada, for the purposes of estimating the direct costs of new safety equipment to be realized from the new requirements of the *Small Vessel Regulations*, the department assumed that 50 per cent of these vessels were passenger vessels. Without the benefit of carrying two-way radio communications, crews will be unable to alert others of an emergency situation, thereby unnecessarily putting at risk the safety of passengers during an emergency.

The *Small Vessel Regulations* were approved and published in Part II of the *Canada Gazette* on 12 May 2010. The regulations, which apply to passenger vessels of not more than 15 gross tonnage that carry not more than 12 passengers, such as the *TAN 1*, require the operator to report the number of persons on board the vessel to a person on shore who has been designated responsible for communicating with search and rescue authorities in case of an emergency.

The new *Fire and Boat Drills Regulations* were approved and published in Part II of the *Canada Gazette* on 12 May 2010. However, the regulations apply to vessels of more than 15 gross tonnage that carry more than 12 passengers and, therefore, vessels such the *Tan 1* would not be required to have details available respecting passengers who require special assistance during an emergency.

Therefore, the assessment of the response remains **Satisfactory in Part**.

No further action is planned by TC, other than what has been already indicated, and continued reassessment will not likely yield further results.

In 2010, the TSB assigned the status of this file as **Dormant**.

In April 2017, the TSB asked TC for an update on its response to recommendation M96-02.

Transport Canada's response to Recommendation M96-02 (May 2017)

In May 2017, TC responded that, given the following actions have been taken, Transport Canada believes that it has met the spirit of recommendation M96-02.

1. The *Ship Station (Radio) Regulations, 1999*, were amended to require all Canadian ships carrying one or more passengers, regardless of the ship's size, to fit a VHF radiotelephone when any part of its voyage is in a VHF coverage area or if more than 5 miles from shore.
2. "VTC" (Vessel Traffic Center) (i.e., MCTS) is only available in areas that have VHF coverage.
3. The *Vessel Traffic Regulations* only apply to vessels that are 20 m or more in length and tow-boats, where the towed object is 20 m or more in length, or the combined length of tug and tow is 45 m in length. The Canadian Coast Guard (CCG) has stated in the past that they do not have sufficient resources to address a requirement for vessels less than 20 m to participate in the vessel traffic system (VTS) and report passenger manifests through MCTS.
4. Section 402 (1) of the *Small Vessel Regulations* require the operator to report the number of persons on board to a person on shore who is designated to communicate with search and rescue (SAR) authorities in the case of an emergency.

In addition, Transport Canada also required vessels carrying a passenger outside of a VTS zone (i.e., VHF coverage) to be fit with a means of two-way radio-communication if the vessel carries more than 6 passengers or operates more than 2 miles from shore. These include many remote lakes and rivers.

TSB reassessment of the response to Recommendation M96-02 (July 2017)

This recommendation called for 2 specific actions from TC: that sight-seeing boats be required to carry radio equipment and that these vessels be required to report the number of passengers to VTC (MCTS) before departure.

Since 2009, amendments to the *Ship Station (Radio) Regulations, 1999* have been implemented in the small passenger vessel fleet, and changes to the *Small Vessel Regulations* have come into effect (2010) in the industry.

The TSB recognizes that the *Ship Station (Radio) Regulations, 1999* call for mandatory radio carriage, but only when the vessel's expected voyage is within VHF coverage or outside 5 miles from shore. The *Small Vessel Regulations* specifically state that a passenger vessel not more than 15 gross tonnage that carries not more than 12 passengers shall:

before departure, report the number of persons on board to a person on shore who has been designated by the operator to be responsible for communicating with search and rescue authorities in case of an emergency.

TC's Vessel Registry indicates that there are 3340 passenger vessels under 15 gross register ton (GRT) (3110 of those under 5 GRT, like the occurrence vessel), and 14 ferries under 15 GRT (9 of those under 5 GRT). Since 2007, there have been 313 occurrences involving small passenger

vessels reported to the TSB, or, an average of 31 occurrences per year.¹ None of these occurrences identified that passenger accounting on small passenger vessels was a safety deficiency, and only 2 of these occurrences triggered a full investigation.²

These actions fulfill the intent of the recommendation and address the risks identified regarding passenger safety. Therefore, the Board considers the response to the recommendation M96-02 to be **Fully Satisfactory**.

Next TSB action

Because the safety deficiency associated with recommendation M96-02 is considered addressed, no further action is necessary.

The deficiency file is **Closed**.

¹ Canadian passenger vessels under 15 GRT and passenger vessels under 15 GRT in Canadian waters.

² TSB occurrences M16C0137 and M17P0098.