



REASSESSMENT OF THE RESPONSE TO TSB RECOMMENDATION M16-05

Wearing of suitable PFDs at all times while on the deck of a fishing vessel

Background

On 5 September 2015, the fishing vessel *Caledonian* capsized 20 nautical miles west of Nootka Sound, British Columbia. At the time, the vessel was trawling for hake with 4 crew members on board. Following the capsizing, the master and mate climbed onto the overturned hull and remained there for several hours. When the vessel eventually sank, the master and mate abandoned it, and the mate swam toward and boarded the life raft. The Canadian Coast Guard subsequently rescued the mate and recovered the bodies of the master and the 2 other crew members.

The Board concluded its investigation and released report M15P0286 on 14 December 2016.

TSB Recommendation M16-05 (December 2016)

Fishermen often operate in harsh physical and environmental conditions. They harvest, load, transfer, and store their catch while the vessel is in various sea conditions, and the risk of going overboard is high. If a fisherman ends up in the water, the consequences can be fatal. The Safety Issues Investigation identified falling overboard as the second highest cause of death in the fishing industry. In British Columbia, since 2006, the TSB has determined that approximately 70% of all fishing-related fatalities result from not using a personal flotation device (PFD).

TSB investigations have shown that wearing a PFD increases the chance of surviving a man overboard situation, and this occurrence is yet another example, where the mate, who was the only one wearing a PFD, survived.

In February 2012, the Commission de la santé et de la sécurité du travail (CSST) made it compulsory for lobster fishermen to wear PFDs at all times. Recently, the CSST has sent letters to all masters on lobster fishing vessels explaining the regulation as it pertains to the mandatory use of lifejackets or PFDs on board fishing vessels and the CSST has conducted 150 vessel visits to ensure compliance.

Apart from the CSST, neither TC nor any other provincial workplace safety regulator has requirements to ensure that fishermen wear PFDs at all times. Those requirements that do exist place the onus on fishing vessel masters to determine whether or not a risk is present and to decide if PFDs should be worn. Not only is this assessment of risk subjective, but it also assumes that crew members are in a position to recognize when risk is present and have the time available to don a PFD or other flotation device.

Despite risk-based regulations and industry initiatives to change behaviours and create awareness about the importance of wearing PFDs, as well as design improvements by PFD manufacturers to address fishermen's concerns about comfort and constant wear, there has not been a significant change in the behaviour of fishermen and many continue to work on deck without wearing a PFD.

The TSB believes that the implementation of explicit requirements for fishermen to wear PFDs, along with appropriate education and enforcement measures, will significantly reduce the loss of life associated with going overboard. The Board therefore recommended that

The Department of Transport require persons to wear suitable personal flotation devices at all times when on the deck of a commercial fishing vessel or when on board a commercial fishing vessel without a deck or deck structure and that the Department of Transport ensure programs are developed to confirm compliance.

TSB Recommendation M16-05

Transport Canada's response to Recommendation M16-05 (March 2017)

Transport Canada (TC) disagrees with the recommendation to have prescriptive regulatory requirements for persons to wear personal flotation devices, and disagrees with the recommendation to have programs developed to ensure compliance.

TC promotes and encourages the wearing of personal flotation devices (PFDs) or lifejackets through educational initiatives to increase awareness of their importance in reducing loss of life, and through continuing to work with stakeholders and industry on new standards for more wearable flotation devices. Such initiatives include:

- Promoting and supporting innovative performance based standards for more wearable lifejackets. This initiative began with the development of the Canadian Lifejacket Standard, CGSB 65.7-2007, and continues with TC's support of the new bi-national North American lifejacket standard, UL-12402, which will include increased design options for manufacturers to provide more comfortable and wearable devices.
- Ship Safety Bulletin 06/2012, *Wearing and Using Flotation Devices, Small Non-Pleasure Craft & Small Commercial Fishing Vessels* which allows, in certain situations, the use of more wearable flotation devices in lieu of traditional lifejackets designed for ship abandonment. The Ship Safety Bulletin requires that where this option is used, personal flotation devices must be worn by crew on deck at all times.

TC has consulted extensively with the fishing industry and has determined that education and awareness on the wearing of PFD or lifejackets is the most effective approach and will result in a reduction of fatalities.

The TC compliance and inspection regime is established to verify regulatory compliance while vessels are in port. Only seafarers themselves can ensure compliance while vessels are at sea. It is the Authorized Representative's (AR) responsibility to develop safe operating procedures and confirm compliance on board the vessel. The new *Fishing Vessel Safety Regulations* require that no person shall operate, or permit another person to operate, a fishing vessel in environmental conditions or circumstances that could jeopardize the safety of persons onboard unless a lifejacket or PFD is worn by all persons onboard, in the case of fishing vessel that has

no deck or deck structure, or by all persons on the deck or in the cockpit, in the case of a fishing vessel that has a deck or deck structure.

TSB assessment of Transport Canada's response to Recommendation M16-05 (July 2017)

Transport Canada does not agree with this recommendation, suggesting that a requirement to wear a PFD at all times could not be enforced by TC and that only seafarers themselves can ensure compliance. Further, TC's response focuses on actions already taken to promote and encourage educational initiatives to increase awareness of the importance of wearing a PFD and on its continued work with stakeholders and industry regarding new standards for more wearable flotation devices.

Since 2007 there have been 99 fishing-related fatalities; approximately 80% of those fatalities resulted from fishermen ending up in the water for a number of reasons including falling overboard and stability issues. The TSB has not seen an improvement in fishing-related fatalities when comparing the two five-year periods, from 2007 to 2011 and 2012 to 2016. Therefore, despite TC's risk-based requirement to wear a PFD for operations on a fishing vessel, initiatives to change behaviour, and recent PFD design improvements, the TSB is concerned that there has not been a significant change in the behaviour of fishermen and many continue to work on deck without wearing a PFD.

The TSB is aware that TC's compliance and inspection regime was established to verify regulatory compliance while vessels are in port, however there may be other means to ensure or verify compliance. This may include TC's engagement with other federal or provincial agencies that conduct at sea inspections, such as WorkSafeBC.

Therefore, the response to the recommendation is considered to be **Unsatisfactory**.

Transport Canada's response to Recommendation M16-05 (March 2018)

Transport Canada (TC) agrees in principle with the recommendation.

The new *Fishing Vessel Safety Regulations* require that no person shall operate, or permit another person to operate, a fishing vessel in environmental conditions or circumstances that could jeopardize the safety of persons onboard unless a lifejacket or PFD is worn by all persons onboard, in the case of a fishing vessel that has no deck or deck structure, or by all persons on the deck or in the cockpit, in the case of a fishing vessel that has a deck or deck structure.

The current TC compliance and inspection regime is limited to verifying regulatory compliance while vessels are in port. Authorized Representatives (AR) also have a responsibility to develop safe operating procedures and to confirm compliance onboard the vessel. Therefore, TC will consider the feasibility of alternative options for compliance such as delegating to other departments / agencies who interact with vessels on the water; creating a requirement for operators to do spot checks and/or audits to demonstrate compliance. The review will be completed by March 2020.

In the meantime, TC will continue educational and awareness efforts to encourage compliance. TC promotes and encourages the wearing of personal flotation devices (PFDs) or lifejackets through educational initiatives to increase awareness of their importance in reducing loss of life,

and through continuing to work with stakeholders and industry on new standards for more wearable flotation devices. Such initiatives include:

- Promoting and supporting innovative performance based standards for more wearable lifejackets. This initiative began with the development of the Canadian Lifejacket Standard, CGSB 65.7-2007, and continues with TC's support of the new bi-national North American lifejacket standard, UL-12402, which will include increased design options for manufacturers to provide more comfortable and wearable devices.
- Ship Safety Bulletin 06/20 12, Wearing and Using Flotation Devices, Small Non-Pleasure Craft & Small Commercial Fishing Vessels which allows, in certain situations, the use of more wearable flotation devices in lieu of traditional lifejackets designed for ship abandonment. The Ship Safety Bulletin requires that, where this option is used, personal flotation devices must be worn by crew on deck at all times.

TSB reassessment of Transport Canada's response to Recommendation M16-05 (March 2018)

Transport Canada agrees in principle with this recommendation. The TSB is encouraged by TC's commitment to undertake a review of alternative options for verifying compliance with PFD usage, the continued focus on educational initiatives, and its continued work with stakeholders and industry regarding new standards for more wearable flotation devices.

However, TC's feasibility review of alternative options for verifying compliance is not due for completion until March 2020. Until this review is completed and a plan is put in place to ensure compliance, it is too early to determine to what extent the proposed actions will address the risk. Therefore, the response to the recommendation is rated as **Satisfactory Intent**.

Transport Canada's response to Recommendation M16-05 (January 2019)

Transport Canada (TC) agrees in principle with the recommendation. TC is continuing educational and awareness efforts to encourage compliance with the new *Fishing Vessel Safety Regulations* (FVSR).

TC promotes and encourages the wearing of personal flotation devices (PFDs) or lifejackets through educational initiatives to increase awareness of their importance in reducing loss of life, and through continuing to work with stakeholders and industry on new standards for more wearable flotation devices. Such initiatives include promoting and supporting innovative performance-based standards for more wearable lifejackets. This initiative began with the development of the Canadian Lifejacket Standard, CGSB 65.7-2007 and continues with TC's acceptance of certain devices manufactured in accordance with the new bi-national North American lifejacket standard, UL-12402, which includes increased design options for manufacturers to provide more comfortable and wearable devices.

To support the use of modern and wearable PFDs and help increase their availability on the market, TC has signed a Memorandum of Understanding (MOU) with the United States Coast Guard (USCG) for mutual acceptance of PFDs under the new bi-national standards (http://www.tc.gc.ca/eng/marinesafety/Memorandum_of_understanding_approval_personal_lifesaving_appliances.html).

TSB reassessment of Transport Canada's response to Recommendation M16-05 (March 2019)

The Board appreciates that TC is promoting the wearing of personal flotation devices (PFDs) through educational initiatives and is continuing to work with stakeholders and industry on new standards for more wearable lifejackets.

However, the Board notes the lack of a regulatory requirement for persons to wear a suitable PFD at all times when on the deck of a commercial fishing vessel, and the lack of an update to the review of alternative options for verifying compliance that TC referenced in its 2018 response.

In BC, in response to a similar TSB recommendation addressed to WorkSafeBC (M16-04), the Board at WorkSafeBC recently approved a regulatory amendment that will require fishermen in BC to wear a PFD while working on a fishing vessel. WorkSafeBC has also planned an enforcement strategy to ensure compliance with the new regulatory requirements. The progress made by WorkSafeBC is encouraging, but only applies within the province.

Until a regulatory requirement is in place to ensure that persons wear a suitable PFD at all times when on the deck of a commercial fishing vessel, and that programs are developed to confirm compliance, the risk of loss of life associated with going overboard will remain.

The Board considers the response to the recommendation to be **Satisfactory in Part**.

Transport Canada's response to Recommendation M16-05 (January 2020)

Transport Canada (TC) agrees with the recommendation.

TC is continuing educational and awareness efforts to encourage compliance with the new *Fishing Vessel Safety Regulations* (FVSR) and will continue to assess the effectiveness of the FVSR performance requirement to wear a lifejacket or a PFD in situations that could jeopardize the safety of persons.

TC also supports education and awareness campaigns by provincial and industry initiatives, such as Worksafe BC, FishSafe in BC, WCB Nova Scotia, CNESSST in Quebec and the Quebec Standing Committee on Fishing Vessel Safety.

TSB reassessment of Transport Canada's response to Recommendation M16-05 (March 2020)

Transport Canada (TC) is continuing educational and awareness efforts to encourage compliance with the *Fishing Vessel Safety Regulations*. However, the Board notes the lack of a regulatory requirement for persons to wear a suitable PFD at all times when on the deck of a commercial fishing vessel, and the lack of an update to the review of alternative options for verifying compliance that TC referenced in its 2018 response.

Until a regulatory requirement is in place to ensure that persons wear a suitable PFD at all times when on the deck of a commercial fishing vessel, and that programs are developed to confirm compliance, the risk of loss of life associated with going overboard will remain.

The Board considers the response to the recommendation to be **Satisfactory in Part**.

Next TSB action

The TSB will continue to monitor TC's progress to ensure the safety deficiency identified in this recommendation is mitigated.

This deficiency file is **Active**.