



## ASSESSMENT OF THE RESPONSE TO MARINE SAFETY RECOMMENDATION M00-06

### Hatch covers

#### Background

While crossing from Les Escoumins to Rimouski, Quebec, the *Brier Mist* swamped and sank some 10 miles offshore. The wreck was never found, two persons were recovered deceased and the other three crewmembers are missing.

The Board concluded its investigation and released report M98L0149 on 13 March 2001.

#### Board Recommendation M00-06 (13 March 2001)

Given the deficiencies noted over the past 10 years in the design, manufacturing, installation, maintenance and inspection of small fishing vessel hold closure systems, the Board was still very concerned about the loss of lives in this sector of the marine industry. Consequently, the Board recommended that:

The fishing industry and the Department of Transport give increased attention to small fishing vessel hatch covers to help ensure that these covers are watertight and can be effectively secured.

M00-06

The Minister agrees with the recommendation. Although the watertight integrity of hatch covers is already addressed in the *Small Fishing Vessel Inspection Regulations*, Subsection 23(2) (Chapter 1486), Transport Canada, Marine Safety is aware of problems concerning the watertight integrity of hatch covers on small fishing vessels. Small fishing vessels are subject to inspections by Transport Canada every four years. Since the *Brier Mist* accident, the department has conducted targeted inspections on certified small fishing vessels to ensure, among other things, that all openings on deck are adequately protected. These targeted inspections are conducted at randomly selected ports and complement the department's existing inspection program.

The Standing Committee on Fishing Vessel Safety will continue to review all existing regulations, standards and guidelines concerning fishing vessels with the objective of improving marine safety and will take into consideration the watertight integrity of these vessels. The Standing Committee at its inaugural meeting in May 2001, discussed the practicality of high level water alarms.

Transport Canada has also issued several Ship Safety Bulletins addressing this issue, including SSB 06/98, *Responsibilities of Shipowners and Masters Respecting Maintenance of Watertight Integrity of their Vessels*.

## **Board assessment of the response to M00-06 (10 July 2001)**

The response indicated agreement with the recommendation. It states that Transport Canada, Marine Safety is aware of problems concerning watertight integrity, and although the subject is addressed in the Small Fishing Vessel Inspection Regulations (Subsection 23) and that such vessels are inspected every four years, the Department has conducted target inspections to ensure, among other items, that deck openings are adequately protected. Furthermore, a Standing Committee on Fishing Vessel Safety, established in November, 2000, is reviewing all existing regulations, standards and guidelines concerning fishing vessels and will take watertight integrity aspects into account. In May, 1999, following the *Brier Mist* sinking, a Steering Committee was established which reported to the newly formed Standing Committee at the May, 2001 CMAC meeting. The review is expected to be completed before the November, 2001 CMAC meeting. Several previously issued Ship Safety Bulletins also refer.

On previous occasions, subsequent to the sinking of the large fishing vessels *Nadine* and *Cape Aspy* (TSB reports M90L3034 and M93M4004), the Board recommended that the Department of Transport develop and implement measures to ensure that owners, operators and masters of vessels ... have effective training and procedures for securing all exterior and interior openings sufficient to preserve watertight integrity . (M93-01 issued March 1993). The response indicated that the subject would be again brought to the attention of the industry by intensifying officer examinations and SSBs were also issued/re-issued. There is still no indication however that effective relevant training and procedures have been actioned.

It is expected that the Standing Committee review will address the abovementioned aspects and the comprehensive intent of the recommendation will be addressed as a result.

The staff therefore considers that the Department of Transport and the fishing industry has the intention to help ensure that watertight integrity of small fishing vessel hatch covers is effected and thus considers the response **Satisfactory Intent**.

## **Board reassessment of the response to M00-06 (15 September 2004)**

The watertight integrity of hatch covers is addressed in the *Small Fishing Vessel Inspection Regulations*. TC is aware of the problem concerning the watertight integrity of hatch covers on small fishing vessels. Targeted inspections are now carried out on certified vessels to ensure, among other things, that all openings on fishing vessels decks are adequately protected. TC has issued Ship Safety Bulletins addressing this issue. The SSB had minimal distribution and the action taken does not address uninspected fishing vessels.

The response is considered **Satisfactory in Part**.

## **Board reassessment of the response to M00-06 (7 December 2005)**

The watertight integrity of hatch covers is addressed in the *Small Fishing Vessel Inspection Regulations*. TC is aware of the problem concerning the watertight integrity of hatch covers on small fishing vessels. Targeted inspections are now carried out on certified vessels to ensure,

among other things, that all openings on fishing vessels decks are adequately protected. TC has issued Ship Safety Bulletins addressing this issue. Although TC considers this recommendation closed, the SSB had minimal distribution and the action taken does not address uninspected fishing vessels.

At present fishing vessels 15 gross tons and less are not subject to mandatory periodic inspections. A new compliance regime, the Small Fishing Vessel Monitoring and Inspection Program is being proposed for all small fishing vessels. The proposed program will make use of random inspections and promote self monitoring. If fully implemented, the proposed action will substantially reduce the risks associated with non-watertight hatch covers on board uninspected.

The response is considered **Satisfactory Intent**.

### **Response to M00-06 (November 2006)**

TC's update, dated November 2006, provided information to address the safety deficiency associated with recommendation M00-06.

### **Board reassessment of the response to M00-06 (November 2006)**

The Small Fishing Vessel Monitoring and Inspection Program being proposed for all small fishing vessels will make use of random inspections and promote self-monitoring. If fully implemented, the proposed action will substantially reduce the risks associated with non-watertight hatch covers.

Therefore, the assessment remains **Satisfactory Intent**.

### **Response to M00-06 (June 2008)**

TC's update, dated June 2008, indicated that work is ongoing on a revised inspection regime for small fishing vessels as part of the proposed *Fishing Vessel Safety Regulations*. (Follow-up information indicated that the regulations are expected to be pre-published in Part I of *The Canada Gazette* in the fall/winter 2009/2010.) Once the new regulations come into force, the revised inspection regime will be implemented.

SSB 12/2007 was issued regarding adequacy of single cross-bar type hatch covers.

TC is currently reviewing an industry proposal that consideration be given to authorizing qualified boat builders to inspect on behalf of TC as an alternative delivery channel for inspection services.

### **Board reassessment of the response to M00-06 (September 2008)**

It is anticipated that the revised inspection regime being proposed for all small fishing vessels will make use of random inspections and promote self-monitoring. If fully implemented, the

proposed action will substantially reduce the risks associated with unserviced life rafts on board uninspected fishing vessels.

Therefore, the assessment of the response remains **Satisfactory Intent**.

### **Response to M00-06 (March 2010)**

TC's update, dated March 2010, indicated that work is ongoing on a revised inspection regime for small fishing vessels. TC is reviewing an industry proposal that consideration be given to authorizing qualified boat builders to inspect on behalf of TC as an alternative delivery channel for inspection services.

### **Board reassessment of the response to M00-06 (March 2010)**

It is anticipated that the revised inspection regime being proposed for all small fishing vessels will make use of random inspections and promote self-monitoring. Furthermore, an industry proposal that qualified boat builders inspect on behalf of TC is being considered; however, it is not known if such inspections will be limited to first inspections (i.e., prior to the vessel coming into service).

Therefore, the assessment of the response remains **Satisfactory Intent**.

### **Response to M00-06 (December 2010)**

TC's update dated December 2010 indicated that work continues to develop tools for Canada's small fishing vessel population that consolidate regulatory requirements by vessel type and includes guidance notes and checklists for fishermen. This is intended to raise awareness of regulatory requirements among small fishing vessel owners, as well as encourage them to continuously assess and maintain their vessel's compliance. TC is also working on establishing a risk-based monitoring and inspection regime for small vessels, which allows TC to focus its inspection resources on vessels that require the most support to meet their regulatory requirements. Consultations have begun with the fishing industry to determine if this approach can be adapted to meet the needs of small fishing vessels.

TC has undertaken a pilot project, in collaboration with the Council of Marine Carriers, to test safety management system implementation in the Canadian domestic fleet. Results from this pilot project will be used to aid in the adoption of safety management throughout the Canadian domestic fleet. A three-tier approach is being proposed for safety management of domestic vessels based on their size, type and/or number of passengers. Tier 3 of this program is for fishing vessels of all sizes to have on board a guide to operational safety.

### **Board reassessment of the response to M00-06 (March 2011)**

It is anticipated that the revised inspection regime being proposed for all small fishing vessels will make use of random inspections and promote self-monitoring. Furthermore, an industry proposal that qualified boat builders inspect on behalf of TC is being considered. If fully

implemented, the proposed actions will substantially reduce or eliminate the deficiency therefore, the assessment of the response remains as **Satisfactory Intent**.

### **Response to M00-06 (December 2011)**

Transport Canada continues to work on this recommendation by increasing the attention of TC Inspectors and that of owners on small fishing vessel hatch covers. Inspectors are instructed to focus on watertight hatches during their National Training Program's for Marine Safety Inspectors. Transport Canada is developing tools for small fishing vessel owners to:

- raise awareness of regulatory requirements, including requirements for fishing vessel hatch covers; and
- encourage owners to continuously assess and maintain their vessel's compliance.

### **Board reassessment of the response to M00-06 (March 2012)**

These initiatives help to ensure that hatch covers are watertight and remain watertight. TC Inspectors and vessel owners must work together to ensure that fishing vessel hatches can be effectively secured every time a fishing vessel puts to sea. There continues to be fishing vessel capsizings, swampings and sinkings where down flooding through unsecured hatches is found to be causal.

As a result, the assessment of the response to this recommendation remains **Satisfactory Intent**.

### **Response to M00-06 (December 2012)**

Transport Canada has met this recommendation of increased attention by way of the following:

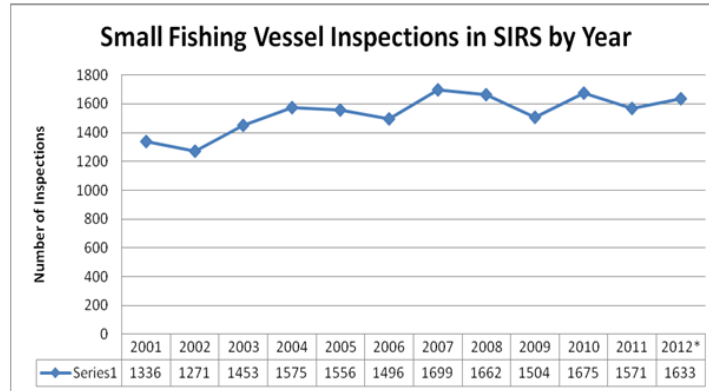
1. When conducting a monitoring inspection on a small fishing vessel, inspectors are instructed to focus on watertight hatches. This is addressed in the National Training Program's training for marine safety inspectors. Also, Ship Safety Bulletin No.12/2007, "Adequacy of Single Cross-bar Type Hatch Covers", highlights this particular issue explaining the hazards/conditions to look for and actions to be taken with regards to these hatch covers.
2. Following the general model of the Small Vessel Compliance Program, which was developed for small non-pleasure vessels, Transport Canada is developing tools for small fishing vessel owners to raise awareness of regulatory requirements, including requirements for fishing vessel hatch covers, and to encourage owners to continuously assess and maintain their vessel's compliance.

In addition, since the creation of this recommendation, *Canada Shipping Act, 2001*, Section 106 has been enacted, making the Authorized Representative responsible to ensure that the vessel and its machinery and equipment meets the requirements of the regulations.

## Supporting SIRS data

The following numbers were obtained using data on small fishing vessel inspections captured in SIRS during the twelve year period (2001 to 2012\*) directly following the *Brier Mist* sinking and the TSB report recommendation.

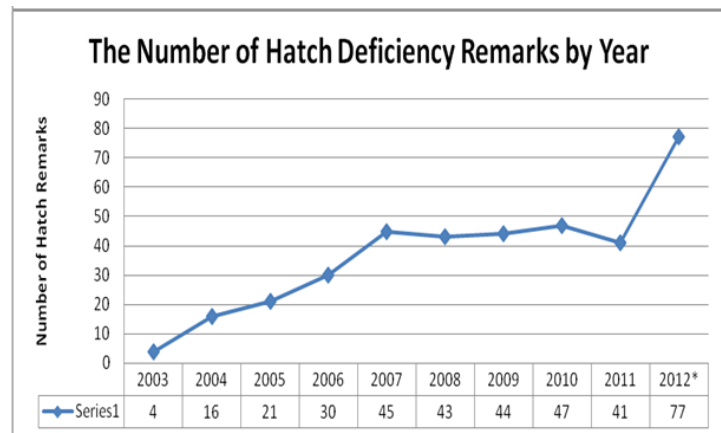
Overall, the data shows that there has been a general increasing trend in the number small fishing vessel inspections by Transport Canada Marine Safety Inspectors over the period of the data (this includes both periodic and intermediate inspections). For comparison, an annual average of 1353 inspections by Transport Canada marine safety inspectors took place in the first few years of the previous decade (2001 to 2003), while in the current decade (2010 to 2012) the annual average number of small fishing vessels inspections has risen to 1626, which is almost 300 inspections more per annum. That roughly translates into a 20% increase in the number of small fishing vessel inspections in 2012 compared with decade ago. This data therefore indicates, in quantitative terms, that Transport Canada has given increased inspection attention to small fishing vessels.



\* The total for 2012 is from January 1 to December 11.

## Small fishing vessel hatches and hatch covers

For all small fishing vessel periodic inspections, hatches and hatch covers are a specific item checked by Marine Safety Inspectors. Inspector training, a Ship Safety Bulletin (#12/2007) and the SIRS field "2J0090 - Cargo and Other Hatchways" all serve to remind or inform inspectors of the importance of inspecting small fishing vessel hatches (which includes the hatch covers). When a specific deficiency regarding hatches is found by an inspector in the course of an inspection, they enter an "Attention" remark in SIRS against field 2J0090. Future inspectors can review these comments on hatch deficiencies for the specific vessel they are going to inspect. An unrectified deficiency remark regarding hatches will show up in the SIRS pre-inspection report as an item that the inspector must check. This data is therefore used by an inspector as a reminder to ensure that the hatches are looked at during the next inspection.



\* The total for 2012 is from January 1 to December 11.

From the data found in SIRS, for the years 2003 to 2012, there has generally been a consistent annual increase in the number of remarks entered in the 2J0090 field by marine safety inspectors.

Since 2003, 390 remarks have been entered in SIRS specifically related to small fishing vessel hatches. In 2003 only 4 entries were made. In the following years the number of entries each year has grown steadily, with a significant jump in 2007 (which coincides with the release of the Ship Safety Bulletin #12/2007 referring to hatches). The years 2007 to 2011 remain relatively steady at around 44 remarks entered annually. In 2012\* a dramatic 87% increase in remarks were entered (jumping from 41 to 77). This may be attributable to the increased focus on SIRS data entry that Flag State Inspection Standards has taken over the past few years. Overall this graph shows a definite and unmistakable increasing trend in the use of the hatch deficiency field by inspectors since the *Brier Mist* sinking.

Together both graphs provide quantitative evidence that there has been an increase in Transport Canada's attention to small fishing vessel hatches, corresponding to a 20% increase in small fishing vessel inspections over the period since the TSB made this recommendation in 2000.

### **Board reassessment of the response to M00-06 (March 2013)**

TC has increased its attention to small fishing vessel hatch covers and to hatches in general to help ensure that these covers are watertight and can be effectively secured. As a result of the efforts by TC, the assessment of the response to this recommendation has been changed to **Fully Satisfactory**. As stated in the original recommendation, the fishing industry needs to give increased attention to hatch cover safety as well.

### **Next TSB action**

The deficiency file is assigned **Inactive** status.