

Transportation Safety Board
of Canada



Bureau de la sécurité des transports
du Canada

MARINE INVESTIGATION REPORT
M05L0036



ICE DAMAGE AND SUBSEQUENT SINKING

FISHING VESSEL *JUSTIN M*
OFF THE MAGDALEN ISLANDS, QUEBEC
29 MARCH 2005

Canada

The Transportation Safety Board of Canada (TSB) investigated this occurrence for the purpose of advancing transportation safety. It is not the function of the Board to assign fault or determine civil or criminal liability.

Marine Investigation Report

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Summary

On the morning of 29 March 2005, the wood-hulled fishing vessel *Justin M* became trapped in ice-packed waters south of the Magdalen Islands while on a seal-hunting expedition. It was freed early the next morning by the Canadian Coast Guard Ship *Amundsen* but sank at 0643 eastern standard time while being escorted to Cap aux Meules, Quebec. All 9 crew members were rescued, and no injuries were reported.

Ce rapport est également disponible en français.

Other Factual Information

Particulars of the Vessel

Name	<i>Justin M</i>
Official Number	372337
Port of Registry	Digby, Nova Scotia
Flag	Canada
Type	Fishing vessel
Gross Tonnage	72.15
Length ¹	18 m
Crew	9
Built	1980, wooden construction by Jesse Magarvey, Parker's Cove, Nova Scotia; covered with fibreglass in 2003
Propulsion	Cummins KTA1150M driving a fixed-pitch propeller
Owner(s)	Private

Description of the Vessel

The *Justin M* was purchased by the current owner in 2002. Initially designed for cod fishing, the vessel was rigged for shrimp in 2003. During this conversion, its wooden hull was covered with fibreglass. Moreover, to protect the hull from ice abrasion, a 5 mm-thick wood plank extending about 60 mm above the waterline was fitted on both sides, along the entire length of the vessel.

According to Transport Canada (TC) inspection records, the *Justin M* was equipped with navigation equipment consistent with the regulatory requirements. There were 9 lifejackets, 10 personal flotation devices, 9 immersion suits, and 2 six-person liferafts on board. Seal-hunting equipment included two snowmobiles, two small boats with outboard motors and two sleds.



Photo 1. The *Justin M* in 2004 (Conservation and Protection, Fisheries and Oceans Canada)

¹ Units of measurement in this report conform to International Maritime Organization standards or, where there is no such standard, are expressed in the International System of units.

History of the Voyage

On the morning of 24 March 2005, final preparations were being carried out on board the *Justin M* for the voyage from Port Saunders, Newfoundland, to the Magdalen Islands, Quebec, in the Gulf of St. Lawrence (see Appendix A) to participate in the annual seal hunt. Many other vessels from that same port began to leave late on March 24. Instead of departing on March 25 as planned, the captain of the *Justin M* followed suit and left with the group. The vessel departed around midnight on March 24 and reached the ice pack south of the Magdalen Islands at 1530 eastern standard time on March 25.² A herd of approximately 300 seals was spotted almost immediately, and the captain decided to keep his vessel in proximity of this herd while waiting for the opening of the seal hunt, which was set for sunrise on March 29. Increasing wind, however, caused ice-field pressure on the vessel, so the captain manoeuvred into open water while looking for other seals.

This type of manoeuvring continued over the next couple of days until March 29 when, at 0243 in position 47°08' N and 061°48' W,³ the ice-field pressure on the *Justin M* was such that the hull on both sides amidships was pushed inward by approximately 10 cm. Water ingress through the hull was observed in the engine room and the forward part of the vessel. A distress call was made using the very high frequency (VHF) radiotelephone on channel 16, and the crew began to unload equipment onto the surrounding ice. The distress call was received by the Marine Communications and Traffic Services (MCTS) centre at Rivière-au-Renard, Quebec, which then transmitted a Mayday Relay.

In addition to the *Justin M*, several other vessels were trapped in the ice around this time, with each suffering varying degrees of damage. At least two of these were damaged to the extent that Canadian Coast Guard (CCG) icebreaker assistance was requested to free them.

The icebreakers CCGS *Amundsen* and CCGS *Edward Cornwallis*, as well as the bulk carrier *Federal Progress*, were the first three vessels to respond to the call. The CCGS *Amundsen* was one hour's sailing time away, and the CCGS *Edward Cornwallis* was at Cap aux Meules, Quebec, approximately 1.5 hours away. The *Federal Progress*, some 23 nautical miles away, was stood down because it was too far away to be of immediate assistance. The sealing vessels *Manon Yvon* and *Grand Makasti* also acknowledged the call, but the latter could not reach the *Justin M* in time due to the ice field. Eleven other sealing vessels were reportedly within one mile of the *Justin M* but did not respond to the call.

While waiting for the icebreaker, crew members used a chainsaw to cut the ice on each side of the vessel to reduce the ice pressure on the *Justin M*'s hull. They also activated the three pumps on board.

At approximately 0340, the *Manon Yvon* arrived on scene. It was unable to relieve the ice pressure, but stood by to provide assistance as necessary. The CCGS *Amundsen* arrived later, at 0405, having been delayed by the ice field. The icebreaker then manoeuvred around the *Justin M* to reduce the ice pressure. Two of its crew members were tasked with evaluating the situation

² All times are eastern standard time (Coordinated Universal Time minus five hours).

³ See Appendix A for a chart of the exact location.

on board the *Justin M* and reporting back. With the release of the pressure, the water ingress stopped and the stricken vessel's master considered the situation under control. However, as a matter of caution, it was decided to transfer two portable pumps from the CCGS *Amundsen* onto the *Justin M*—bringing its total to five pumps—and to reload the off-loaded equipment from the fishing vessel onto the icebreaker.

The icebreaker CCGS *Edward Cornwallis* arrived on the scene at 0505—it too was delayed by the ice field—and was tasked with escorting the *Justin M* to Cap aux Meules for repairs. Shortly after getting underway, some of the *Justin M*'s crew members went to rest in the galley, while others continued monitoring the vessel's compartments.



Photo 2. The *Justin M* less than one minute after it started taking on water



Photo 3. The *Justin M* two minutes later, just before sinking

At approximately 0640, a sudden ingress of water and ice was observed entering the fish hold; the *Justin M* began to sink shortly thereafter. The crew members abandoned the vessel onto the ice and were taken on board the CCGS *Edward Cornwallis*. Three minutes later, the *Justin M* sank in approximately 20 m of water. Its position was 47°11.1' N, 061°45.7' W (see Appendix A). The crew was transported to Charlottetown, Prince Edward Island, and arrived on 31 March 2005.

Weather Information

The ice concentration for the region at the time was nine-tenths first-year ice.⁴ On March 27 the marine weather forecast predicted southerly winds of 15 to 20 knots, increasing to 20 to 25 knots in the afternoon, and reaching gale force of 35 knots near sunrise on March 28. On the afternoon of March 28, an ice-hazard bulletin was issued. It announced a rapid closing of coastal leads for the evening, with strong ice pressure developing inside the pack ice and persisting through March 29. Vessels in the area on the morning of March 29 confirmed this; hunters experienced rain and southerly winds up to 30 knots, and ice-pack pressure was strong with no significant open water or leads.

⁴ First-year ice is ice of not more than one winter's growth, ranging from 30 cm to 2 m thick (*Ice Navigation in Canadian Waters*, 1999).

Vessel Certification

Under existing Canadian regulations, a fishing vessel such as the *Justin M* requires an inspection every four years. The vessel was last inspected by TC on 26 March 2004 and issued a certificate specifying a crew of six for home-trade, Class II voyages and home-trade, Class I voyages from May to November. The voyage from Port Saunders to the Magdalen Islands was a home-trade, Class II voyage. The certificate did not impose any limitations with respect to operations in ice.

Crew Certification and Experience

The master of the *Justin M* holds a fishing master, fourth-class certificate of competency, which was issued in 2004. The master took a Marine Emergency Duties (MED) course that same year. No other crew member held a competency certificate, nor had they completed any MED training, although some had been sealing or fishing for many years.⁵ The crew of the *Justin M* had experience in the sealing industry and was well aware of the hazards associated with operating in ice: during previous sealing activities, the vessel had suffered damage requiring repairs.

Seal Hunting in Eastern Canada

Seal hunting goes back hundreds of years in eastern Canada. It is an important revenue source for some fishers and an integral part of the way of life in the area.⁶ The hunt, which has drawn sealers from around the world, was originally carried out from the shore, with hunters jumping on the ice pack and walking to the seals, or by using small craft to reach the drifting ice a few miles offshore. Larger vessels were later used to reach areas further out, and for a time, helicopters and small aeroplanes were employed.

The harp seal, concentrated in specific areas on the ice during the birthing period, is the main species hunted in today's commercial market.⁷ The main sealing regions in Canada are located in the Gulf of St. Lawrence and off the northeast coast of Newfoundland. The former is referred to as the "Gulf" while the latter is known as the "Front." Seals are also hunted along the lower north shore of Quebec, and Newfoundland's west coast (see Appendix B).

⁵ At the time of the occurrence, TC required all crew members on board small fishing vessels to complete MED training by 01 April 2007.

⁶ According to the Department of Fisheries and Oceans (DFO), commercial seal hunting in Atlantic Canada brought in over \$16.5 million in direct revenue in 2004. For 2002 and 2003, revenues were estimated at \$21 million and \$13 million, respectively.

⁷ Since 1987, the seal harvest in Canada has been exclusively beater pelts – that is, independent harp seals between 25 days and 13 months of age.

During the 1960s and 1970s, the price of a seal pelt varied, but it fell to an all-time low in the 1980s, at about \$15 per pelt. Prices remained low until the mid-1990s, when the seal quota was set at 186 000. The industry has since grown; as a result, by 2005, the quota had risen to 325 000, and pelts were fetching anywhere from \$50 to \$70 each. Appendix C indicates the growth of the industry in terms of quota, price of pelts, and number of licences issued from 1995 to 2005.

Canadian Coast Guard Support

From mid-November to the end of June, CCG icebreakers provide services to a variety of vessels in Canadian waters, including the Gulf of St. Lawrence. To reduce risks, icebreakers escort ships and organize convoys through ice-infested waters; they free trapped vessels, maintain shipping channels in shore-fast ice, and stand by in areas where requests for route assistance are likely.

In the past, icebreakers in the Gulf opened routes through the ice to help the sealers search for game.⁸ Today, this practice has been long abolished, and icebreaker service is limited to helping vessels manoeuvre out of the ice fields. However, when icebreakers are called to free trapped sealers, other vessels will sometimes use the resultant track to gain even deeper access to ice fields – and just-freed vessels have been known to return immediately into the ice field in search of seals.

The CCG receives numerous requests for assistance from vessels during the seal harvest. Emergency situations are classified as search and rescue cases, others as requests for icebreaker assistance. On 29 March 2005, two icebreakers were on site in the Gulf of St. Lawrence, providing a full-time service and ready to assist those vessels requiring aid. A third vessel was tasked with monitoring anti-seal hunt activists.

Department of Fisheries and Oceans Resource Management

The Department of Fisheries and Oceans (DFO) is mandated to manage living marine resources, including seals. Besides observer coverage and vessel monitoring using satellites, DFO does so in several ways: by regulating the number of sealer licences, by allocating quotas, by limiting the size of vessels that can participate, and by specifying the opening and closing dates of the annual seal hunt.

Sealer Licensing

To ensure the hunt is performed in a humane manner, and to avoid inexperienced persons jeopardizing good hunting practices, DFO limits hunting to those persons who hold a licence.

⁸ TSB report M97L0021, sinking of the fishing vessel *Gilbert D* off Îles de la Madeleine, Quebec, on 16 March 1997.

DFO issues four types of sealing licences: a commercial or “professional” licence, an assistant licence, a personal licence, and a licence for nuisance seals.⁹ Furthermore, in the DFO Commercial Fisheries Licensing Policy, a professional licence can only be issued to someone who has first been issued an assistant sealing licence and who has actively participated in this activity during the preceding two years under the supervision of a professional licence holder.

Of the 10 383 licences issued as of 1995, 9118 (or almost 90 per cent) were professional licences. In 2005, DFO had a total of over 15 000 licences registered. This represents an increase of almost 45 per cent over 1995.

At least one person per vessel must have a “professional licence.” On the *Justin M*, it was the master.

Quota Allocation

In 1964, DFO limited the total annual catch (TAC) to 50 000. Other regulations to control the resource followed over the years, many of them stemming from the 1986 Malouf report,¹⁰ with the result that today’s harp seal population in Atlantic Canada is now approximately 5 million – almost triple the 1970 estimate.

The TAC is shared among 11 different commercial sealing fleets. In each of those fleets, seal hunting is done on a “first come, first served” basis. There are no individual quotas for licence holders or vessels – the resource is open to all licence holders, with no limit on the quantity each can harvest – and so the money earned depends on how quickly an individual can harvest the maximum number of seals.¹¹ Each sealer competes against all others in a mass-start contest, trying to harvest as many seals as possible as quickly as possible before a given year’s global quota is met, at which point the hunt is declared over.

The 2003-2005 Atlantic Seal Management Plan allows for the harvest of 975 000 harp seals over a three-year period. For 2005, the TAC was set at 319 517 and divided between the two hunting zones, the Gulf and the Front, and the different sealing fleets.¹² The actual quantity of seals harvested for 2005 was reported as 323 826.

⁹ *Marine Mammal Regulations*, Part IV, Section 26.1 (1).

¹⁰ *Seals and Sealing in Canada*, Report of the Royal Commission, Albert Malouf, 1986, 3 volumes.

¹¹ According to DFO, some sealers have stated that sealing can represent 25 to 35 per cent of their total annual income.

¹² Approximately 75 per cent of harp seals are born in the Front; that area therefore receives a proportionate share of the annual harp seal quota. The Gulf zone is allocated roughly 25 per cent of the total quota, though this may vary slightly from year to year.

Limiting Vessel Size and Banning Other Craft

In 1965, foreign vessels were banned from hunting seals in the Gulf of St. Lawrence and, in 1968, helicopters and small aeroplanes were also banned. At that time, there were no limits on the size of sealing vessels. In 1987, as a result of the Malouf report, DFO limited the length of vessels participating in the seal hunt to less than 19.81 m (65 feet), subdividing them into two groups – small vessels less than 10.67 m (35 feet) and other vessels up to 19.81 m (65 feet).¹³

Opening and Closing Dates

DFO's first attempt to manage the seal hunt was in 1961, when it imposed a closing date for the season. Since 1987, in accordance with the Malouf report, DFO has banned the hunting of so-called "white coats" – that is, harp seal pups under two weeks of age. By controlling the season's opening date, DFO ensures that harvesting does not begin until a critical mass of these pups have reached 25 days of age, the point at which they can swim and find food. The season's closing date is more fluid; it is only announced once local quotas have been met. In 2005, for example, the hunt in the Gulf began at sunrise on March 29 and closed on April 1 for small vessels, and on April 2 for large vessels. On the Front, hunting was to begin on April 12, but strong winds and heavy ice created a safety concern that caused DFO – in consultation with TC, the National Search and Rescue Secretariat and the sealers – to postpone opening until April 15. Each commercial sealing fleet may also be subject to different season openings and closings.

Vessels Involved in the Seal Hunt

According to the *Canada Shipping Act*, vessels engaged in sealing activities are considered fishing vessels. Due to DFO management policies, vessels partaking in the annual seal hunt are, at most, 19.81 m (65 feet) in length, and the majority are constructed of wood, fibreglass, or a combination of both. Typically, their hulls, shafts, propellers, and rudders are not strengthened or reinforced for navigation in pack ice, having been built for open-water fishing and outfitted temporarily for participation in the hunt.

In 2005, there were approximately 370 sealing vessels operating in the Gulf (270 of less than 10.67 m) and 1100 on the Front (828 of less than 10.67 m in length).

Canada Shipping Act Regulations

Sealing Ships Construction Regulations

These regulations came into force in November 1954 and specifically addressed the construction and inspection of wooden and steel sealing ships, which were defined as ships "... engaged in sealing which [are] approved by the Board of Steamship Inspection as being suitable for sealing." The provisions therein specify the scantlings requirements for wooden ships, including special reinforcing of the ship's sides to resist damage from ice pressure, and the thickness of hull sheathing to be applied to resist ice-abrasion damage.

¹³ This length limit was imposed to give greater opportunity to small vessels, which had been unable to compete with the larger vessels.

The hulls of steel ships were to be built in accordance with recognized classification society rules applicable to vessels navigating in ice. Further to this, rudders and stern frames were to be strengthened for ice. Seawater inlet and overboard-discharge valves below the waterline were to be connected to boilers or air receivers such that they could be cleared of ice as necessary. Screw-shaft diameter was to be increased by 5 per cent over the otherwise-prescribed requirements. The vessels were also required to be drydocked for inspection each year.

Following a 1992 federal review of all existing regulations, TC concluded, as indicated in the *Regulatory Impact Analysis Statement*, that the *Sealing Ships Construction Regulations* were obsolete for the following reasons:

- legislation changes have made the regulations unnecessary;
- technological developments have made them obsolete; or
- the requirements were already covered by administrative policy or by other regulations.

As a result of that review, the *Sealing Ships Construction Regulations* were revoked in 1993.

Small Fishing Vessel Inspection Regulations

Fishing vessels such as the *Justin M* are subject to the requirements of the *Small Fishing Vessel Inspection Regulations* made pursuant to the *Canada Shipping Act*. These regulations contain no provisions to address the risk of ice damage posed to vessels that may operate in ice-covered waters, such as during the seal hunt.

Casualty Statistics

Between 1990 and 2005, during the months of March, April, and May – some 48 months of sealing activity – 227 occurrences involving fishing vessels operating in ice-covered water were reported through CCG radio stations. The majority of these involved hull damage, with a total of 21 vessels lost, although there was no loss of life. The investigation also revealed that many more incidents are not reported.

Analysis

Construction of Vessels for Operation in Ice

In the eastern Canadian waters south of the 60th parallel, there are no restrictions placed on navigation as a result of the annual ice pack. Vessels, many of which are constructed purely for navigation in open water, are provided guidance¹⁴ and CCG icebreaker support to assist them in navigating safely through the ice, to their destination. Where sealing vessels are concerned, however, their destination is the ice and the role of CCG icebreakers is to assist fishing vessels

¹⁴

Fisheries and Oceans Canada, Canadian Coast Guard, *Ice Navigation in Canadian Waters*, 1999.

to ice-free water and not to assist in the seal hunt. As such, the risk of being exposed to significant ice-induced loads (pressure and impact) is much greater than for other vessels, which are being navigated to avoid the ice as much as possible.

For a vessel to be considered seaworthy, it must be sufficient in its materials, construction, equipment, and crew for the trade in which it is employed.¹⁵ Where vessels are expected to operate in ice-covered waters, such as during the seal hunt, some strengthening or reinforcing of the ship is necessary, beyond that which is required for open-water operations, in order to maintain seaworthiness. This premise is supported by a review of the number of vessel damage incidents that have been reported by non-ice-strengthened fishing vessels involved in the seal hunt – 227 occurrences over 48 months of sealing activity since 1990.

At one time, TC had adopted requirements for the strengthening/adapting of vessels for operation in ice in the *Sealing Ships Construction Regulations*. However, when these regulations were revoked, the requirements were not otherwise replaced as stipulated in the *Regulatory Impact Analysis Statement* – with the result that fishing vessels are now permitted to operate in ice without specific measures to guard against the risk of damage. Recognizing the need for strengthening of vessels operating in ice-covered waters, TC has included such measures in the latest drafts of the new proposed Small Fishing Vessel Safety Regulations and Construction Standards for Commercial Fishing Vessels. However, until such time as these proposals come into force, fishing vessels will continue to operate in ice-covered waters without taking sufficient measures to mitigate the associated risks, placing fishing vessels and their crews at undue risk.

Safety Culture in the Sealing Industry

Despite warnings of the developing ice pressure, the *Justin M* remained in the pack ice in anticipation of the opening of the seal hunt. In addition to the damage sustained by the *Justin M* when it became trapped, several other vessels were also trapped and sustained damage, albeit to a lesser degree. This risk-taking is common during the seal hunt, where it is also well known that vessels will take advantage of leads created by CCG icebreakers when freeing trapped vessels to navigate into or return themselves to the ice pack.

The risk-taking propensity of those participating in the seal hunt is influenced by several factors:

- The economic benefits are considerable. In many cases, the gross income from seal hunting represents a significant percentage of annual income for an individual. Given the short length of season, the expenses associated with earning this income are also relatively low.
- The global quota system put in place by DFO to manage the fishery results in an environment of intense competition whereby the first and the fastest reap the greatest rewards.

¹⁵ René de Kerchove, *International Maritime Dictionary*, 2nd edition, New York: Van Nostrand Reinhold, 1961.

- Despite the high risk of damage or loss of their vessel, the risk to life associated with seal hunting is relatively low. Given the close proximity of other vessels and the provision of CCG icebreaker support, the chance of rescue/assistance if required is quite good. In addition, while operating in or near the ice, abandoning the vessel if necessary is a fairly straightforward process of jumping off the vessel and onto the ice.

“A safety culture consists of several elements, including compliance with standards and regulations, awareness of risks, and a fair balance between safety and commerce.”¹⁶ In the sealing industry, individuals appear to recognize and accept the risks; however, the lack of appropriate standards and regulations – in an intensely competitive environment where the benefits are high and the risks appear low – results in fostering a culture of risk rather than a culture of safety.

Finding as to Causes and Contributing Factors

1. When the *Justin M* became trapped in an ice field, the hull, which was not adequately strengthened for operations in ice, was crushed by the pressure, allowing ingress of water until it sank.

Findings as to Risk

1. In the absence of regulatory requirements to protect against damage while operating in ice-covered waters, and in an environment of intense economic pressure, fishers may be induced to take undue risks.
2. Department of Fisheries and Oceans rules for managing the sealing industry induce an intensely competitive atmosphere among those participating in the seal hunt. In an industry where the potential for economic gain is seen to far outweigh the risks to life and vessel, this atmosphere fosters a culture of risk in the sealing industry rather than a culture of safety.

Other Finding

1. At least 11 vessels were less than a mile from the *Justin M*, but only four responded to the distress call, and only three arrived to offer assistance.

¹⁶

Heiki Valkonen, *IMO News*, No. 4, 2001.

Safety Action

Action Taken

The 2005 season in particular was marked by a series of accidents and incidents in the Gulf zone. As a result, the Department of Fisheries and Oceans (DFO) changed the seal hunt's controlling conditions.

In the Gulf, there are two herds of seals that give birth in March: one south of the Magdalen Islands and a larger community further north, near the Strait of Belle Isle. To ease competition between the regions, DFO ruled that sealers from the southern part of the Gulf (the Magdalen Islands, New Brunswick, and Nova Scotia) would hunt the southern herd. Similarly, the northern Gulf herd was to be hunted by sealers from the west coast of Newfoundland and Quebec's lower north shore.

Concerning the 2006 quota, which was set at 325 000 (total for both zones), DFO decided to:

1. Share the Gulf quota – that is, 28 per cent of the year's overall total¹⁷ – among sealers from those neighbouring regions with direct access to this zone, and in the following proportion:
 - Magdalen Islands: 20%;
 - New Brunswick and Nova Scotia: 2%;
 - Quebec's lower north shore: 8%; and
 - Newfoundland's west coast: 70%.
2. Vary the start dates for sealing in the Gulf regions according to the following schedule (as influenced by expected birthing periods):¹⁸
 - Magdalen Islands, New Brunswick, and Nova Scotia: 25 March 2006;
 - Newfoundland's west coast: 05 April 2006; and
 - Quebec's lower north shore: 07 April 2006.
3. End the seal hunt in the aforementioned regions once their allotted percentage of the quota is reached, and only then grant access to sealers from other regions, according to the specified dates set by DFO.

This new method of quota allocation was expected to have two results:

- improve each sealer's income by raising the quality of pelts;¹⁹ and
- lower the number of sealers in one area, thereby diminishing competition and with it the economic pressures that lead to safety risks.

¹⁷ This works out to a quota of 92 343 seals.

¹⁸ Female seals from the more southerly herds deliver earlier in the season. Pups therefore reach the minimum 25-day threshold earlier. Consequently, sealing in these areas can begin sooner.

¹⁹ With less economic/time pressure on the vessels, sealers can, in theory, be more discriminating about the quality of the pelts they harvest.

In 2006, the number of marine accidents and incidents related to sealing vessels was significantly diminished in the Gulf zone. However, this good record also needs to be seen in light of the season's less-severe ice conditions – and not only as a result of the new rules put in place for that year's sealing.

On 06 November 2006, DFO and Transport Canada (TC) signed a Memorandum of Understanding (MOU) regarding the safety at sea of commercial fishers.²⁰ The stated objectives of this MOU are to cooperate at the national and regional levels to:

- establish principles that take into account the promotion of a safety culture among fishers;
- establish a process whereby these principles can be used when developing rules, regulations, policies, and plans;
- exchange information and consult with the objective of improving the safety of fishers at sea; and
- develop safety goals and monitor progress.

The MOU also outlines the specific processes established for cooperation with regard to fishing vessel safety, the safety implications of fisheries management plans, and the establishment of fishing safety committees.

Originally, operators of small commercial vessels were required to complete Marine Emergency Duties (MED) by 01 April 2007. While most fish harvesters have completed the training, the industry has requested an extension of the enforcement for those remaining. On 27 May 2007, TC announced a one-year grace period for fish harvesters and sealers to complete mandatory training in the principles of basic safety at sea. As a result of implementing this grace period, TC will not take enforcement action if a crew member can show proof of registration in a MED training course before 01 April 2008.

TC continues to work on finalizing the new Fishing Vessel Safety Regulations to determine which regulations most need to be modernized to best protect fishers, vessels, and the marine environment. The Fishing Vessel Safety Regulations are expected to be published in Part I of the *Canada Gazette* in the summer of 2008.

Safety Concern

Resource Management Regimes for the Sealing Industry

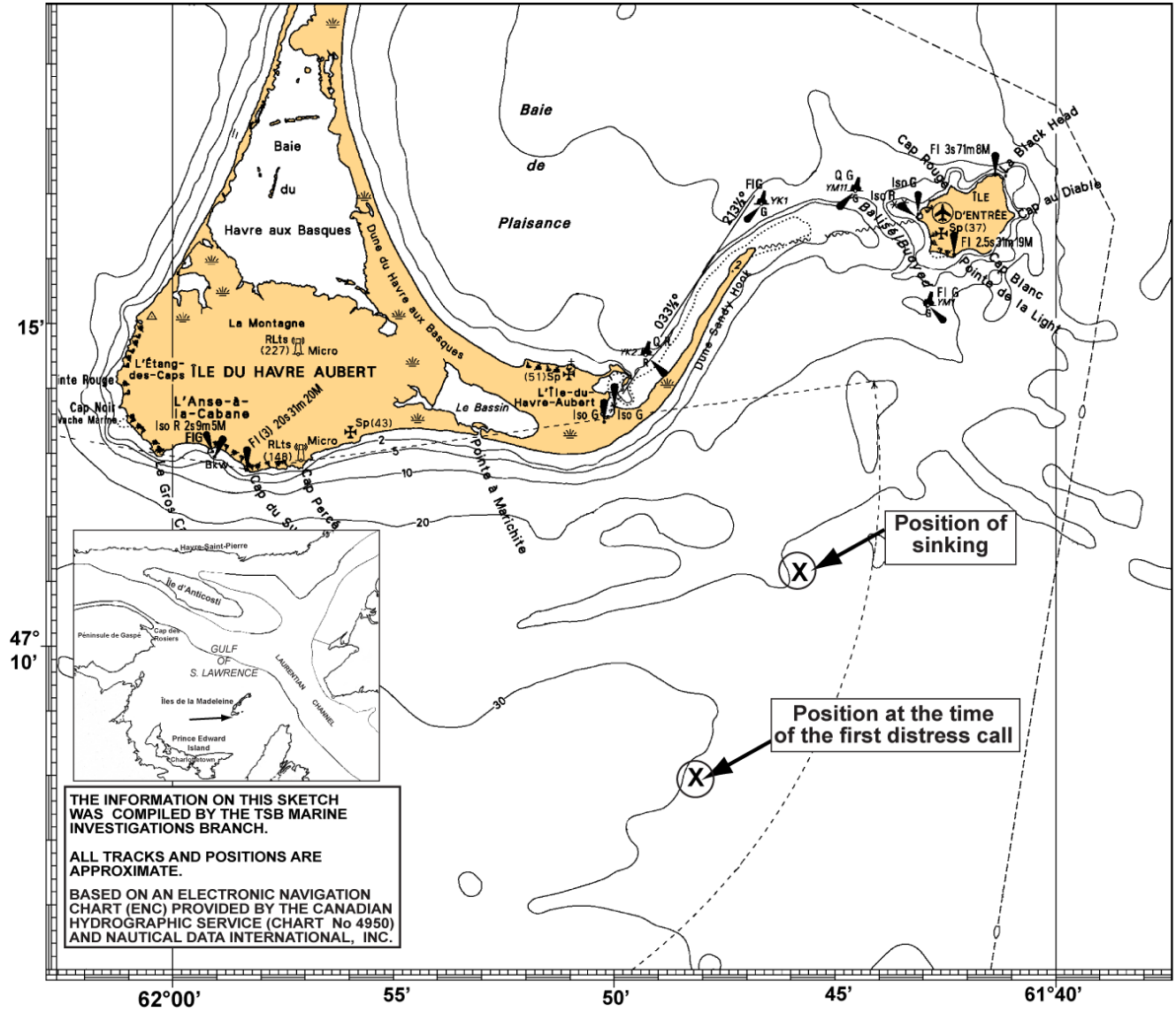
The Board recognizes that the Department of Fisheries and Oceans (DFO) modified the rules in 2006 to lower the number of sealers in one area, thereby lessening the competition among them. The Board also recognizes that DFO has signed a Memorandum of Understanding (MOU) with Transport Canada regarding the safety at sea of fishing vessels. However, the residual risks remain in that the regimes in place for the management of the sealing industry still induce an intense competitive atmosphere among those participating in the seal hunt.

The Board is concerned that, without improvements in fishery resource management practices that take full account of the risks associated with the nature of commercial sealing operations, the regime may continue to foster a culture of risk rather than a safety culture. Recognizing the impact that fishery resource management regimes can have on the safety of fishers and fishing vessels, the Board in the past had expressed similar concerns.²¹ The Board, therefore, will continue to monitor occurrences involving sealing operations with a view to assessing the need for further safety action on this issue.

This report concludes the Transportation Safety Board's investigation into this occurrence. Consequently, the Board authorized the release of this report on 27 March 2008.

Visit the Transportation Safety Board's Web site (www.tsb.gc.ca) for information about the Transportation Safety Board and its products and services. There you will also find links to other safety organizations and related sites.

Appendix A – Magdalen Islands, South Section

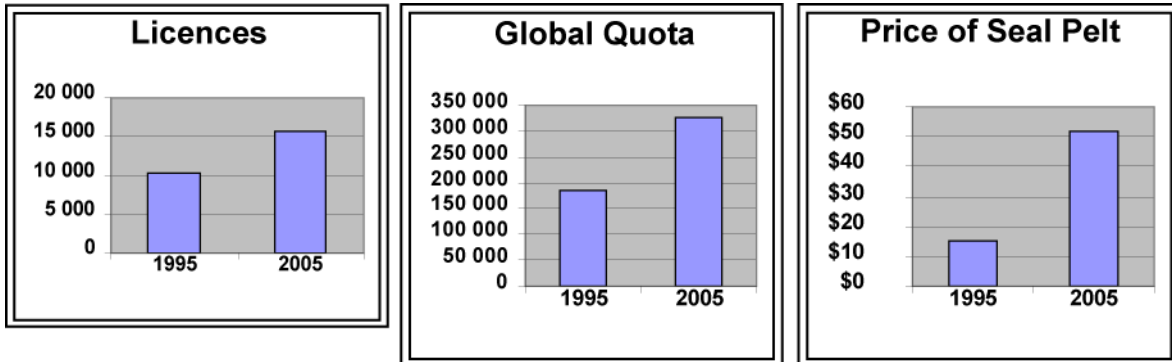


Appendix B – East Coast of Canada



Note: The main sealing regions in Canada are located in the Gulf of St. Lawrence and off the northeast coast of Newfoundland. The former is referred to as the “Gulf” while the latter is known as the “Front.” Seals are also hunted along the lower north shore of Quebec and the coast of Labrador.

Appendix C – Licence vs. Global Quota and Price of Seal Pelts



From 1995 to 2005, substantial increases in both the quota and the price of seal pelts attracted more sealers. This figure has jumped approximately 50 per cent in 10 years – from 10 383 in 1995 to 15 715 in 2005.