

# Review of Pilotage Issues

Report to the Minister of Transport



Canadian Transportation Agency  
August 31, 1999





August 30, 1999

The Honourable David M. Collenette, P.C., M.P.  
Minister of Transport  
Transport Canada Building  
Place de Ville  
330 Sparks Street  
Ottawa, Ontario  
K1A 0N5

Dear Minister,

In accordance with your request of August 12, 1998 that the Canadian Transportation Agency undertake the review of pilotage services specified in the *Canada Marine Act* and your Terms of Reference for the review, the Pilotage Review Panel is pleased to present to you the Final Report of the Review of Pilotage Issues. The report contains the outcome of the consultations with interested parties and the recommendations of the Pilotage Review Panel in respect of each of the issues that were examined.

Yours sincerely,

Marian L. Robson

Jean Patenaude

Keith Penner

Richard Cashin



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# Acknowledgements

The Pilotage Review Panel would like to express its appreciation to all who participated in the Review of Pilotage Issues. During the review, hundreds of people representing a wide range of interests have spent countless hours researching, preparing briefs and attending meetings across the country. Their contribution to the work of the Panel has been invaluable.

The participants in the pilotage system have a great deal at stake in the outcome of the review, and they have put forward their positions vigorously and effectively. The topics under review have been controversial and, while

there was extensive debate at the table, the parties treated each other with respect for their differing views.

During the review period it became evident to all that there were already positive signs of change in the pilotage system across the country. It is a credit to the Authorities, the pilots and the users that, despite some differences, they can work together to improve the system. It is in that spirit of cooperation that the Panel trusts that this report will contribute to improvements in the pilotage system across Canada.





# Abbreviations *and* Terminology

## AGENCY

Canadian Transportation Agency

## APA

Atlantic Pilotage Authority

## BERNIER REPORT

Study of Canadian Pilotage Regulation and General Recommendations, by Yves Bernier (1968)

## BCCP

British Columbia Coast Pilots

## BLOUIN REPORT

Study of Operations with a View to Increasing Productivity while maintaining a Safe and Efficient Pilotage Service, by Pierre Blouin (1987)

## BRM

Bridge Resource Management

## CSA

Canadian Shipowners Association

## CSBC

Chamber of Shipping of British Columbia

## CTC

Canadian Transport Commission

## DANCOSSE REPORT

Examination of Compulsory Double Pilotage in the Laurentian Pilotage Authority Area, by Guy P. Dancosse (November 1992)

## DWT

Dead Weight Tonnage

## FRPA

Fraser River Pilot Association

## GAUTHIER REPORT

Investigation of proposed amendments to the Great Lakes Pilotage Regulations as published in the Canada Gazette, May 14, 1988 by Johanne Gauthier (February 1990)

## GLPA

Great Lakes Pilotage Authority

## GRT

Gross Registered Tons

## KPMG REPORT

Examination of the Laurentian Pilotage Authority Certification Process, by KPMG (1997)

## LPA

Laurentian Pilotage Authority

## NRT

Net Registered Tons

## PANEL

Pilotage Review Panel

## PPA

Pacific Pilotage Authority

## SLSA

St. Lawrence Shipoperators Association

## TSB

Transportation Safety Board of Canada



# Introduction

## Background

The passage of the *Canada Marine Act* in June 1998 resulted in amendments to the *Pilotage Act*. One of these amendments required the Minister of Transport to review specific issues related to marine pilotage services and to submit a report to Parliament on the findings of the review. Specifically, the following section was added to the *Pilotage Act*.

*53. (1) The Minister shall, in consultation with each authority, its users, and other persons affected, at the latest one year after the coming into force of this section, review the pilot certification process for masters and officers, training and licensing requirements for pilots, compulsory pilotage area designations, dispute resolution mechanisms, and the measures taken in respect to financial self-sufficiency and cost reduction, and prepare a report on the findings.*

*(2) The Minister shall have a copy of each report laid before each House of Parliament on any of the first thirty days on which that House is sitting after the Minister prepares it.*

In August 1998, the Minister appointed the Canadian Transportation Agency (the Agency) to undertake the review described above. In his letter of August 12, 1998 to the Agency, the Minister asked the Agency to undertake the review in accordance with the Terms of

Reference<sup>1</sup> and to submit the results of the review to him no later than September 1, 1999.

The Terms of Reference contained the following directions regarding the review's objective, scope and recommendations:

- the review will be forward looking, to meet ongoing and long-term user expectations;
- the review will examine five subject areas, as described in the new section 53;
- the review will include research, consultation and recommendations;
- the consultations will include two national meetings;
- the review will assess the impact of the recommendations; and
- where there is no consensus on solutions, the report will include alternative recommendations of interested parties.

## Conduct of the Review

Upon receiving the ministerial mandate to review marine pilotage issues, the Agency established a Pilotage Review Panel (the Panel) consisting of the following individuals:

Marian Robson, Chairman  
Jean Patenaude, Vice-Chairman  
Keith Penner, Member  
Richard Cashin, Member

<sup>1</sup> The Minister's letter and Terms of Reference are reproduced in this report as Appendix I.

By letter dated August 28, 1998, the Panel notified interested parties across Canada<sup>2</sup> that the Minister of Transport had given the Agency the mandate to conduct the review of marine pilotage issues. At that time, the Panel advised parties that, in addition to the two national meetings specified in the Terms of Reference, the Panel intended to hold a series of regional consultations. In addition, as part of the consultation process, the Panel invited interested parties to submit their written comments on the pilotage issues under review and indicated that such comments would form part of the public record of the review.<sup>3</sup> The Panel advised parties that the first round of regional consultations would be informal, consisting of separate discussions with various groups.

The Panel held the first round of regional consultations with interested parties in October 1998.<sup>4</sup> Although the Terms of Reference established five specific pilotage issues to be examined, the Panel asked interested parties during this first round of consultations to comment on all aspects of pilotage services, to give the Panel a better overall understanding of Canadian pilotage services and related issues. This approach brought out a number of concerns, some of which went beyond the scope of the review as outlined in the Terms of Reference. During these discussions, a number of parties expressed

the view that all aspects of pilotage services should be examined, including the structure for providing services. Some parties advocated commercializing or privatizing pilotage services.

Before the first national meeting, which was held on January 18 and 19, 1999, the Panel distributed a discussion paper to interested parties. In this discussion paper, the Panel commented on the scope of the review as follows.

In this regard, the Panel wishes to emphasize that it is conducting the review in the context of the current structure of pilotage services; i.e., the services are provided by four pilotage authorities, each of which is a Crown Corporation. The structure of pilotage services was the subject of debate prior to the passage of the *Canada Marine Act*; however, there were no amendments to the structure of pilotage services contained in this legislation when it was passed by Parliament. The mandate of the Panel does not extend to revisions to existing legislation as the government made a conscious decision on the structure of pilotage services with the passage of the *Canada Marine Act*. The current structure is therefore the framework within which the Panel is carrying out the review.

At the first national meeting, the Panel clarified this idea further, saying that while the review did not extend to revising legislation to change the structure of pilotage services,

<sup>2</sup> See Appendix II for a list of the interested parties who participated in the review.

<sup>3</sup> See Appendix III for a list of all written submissions the Panel received.

<sup>4</sup> See Appendix IV for a list of regional and national meetings and Appendix V for a list of participants at regional and national meetings.

the Panel could consider other legislative changes where appropriate to solve issues it was examining.

In the discussion paper, the Panel indicated that the discussions at the first national meeting would focus mainly on national issues and would allow the Panel and the parties to explore ways of making progress on or resolving controversial issues. This meeting would also set the stage for talks on more regional matters at the next round of regional meetings.

At the beginning of the first national meeting, the Panel informed parties that the number of issues under review had been reduced to four from five. The Panel indicated that it was no longer necessary to examine dispute resolution mechanisms during the review since the *Canada Marine Act* had been amended to prohibit pilots from refusing to provide services while a contract with an authority is in effect or is being negotiated. In addition, the Panel learned during the October 1998 consultations that most employee pilots had voluntarily agreed not to withdraw their services.

During the first national meeting, and in comments submitted by interested parties, the Panel sensed a certain level of frustration about the fact that some long-standing issues had not been resolved. The Panel noted, however, that the participants were willing to move ahead and to discuss these issues further. In this regard, several parties indicated that they wished to discuss details of certain issues during regional consultations, rather than at a national forum. This desire reflects the regional differences

between pilotage services and authorities that characterize Canadian marine pilotage.

At the close of the first national meeting, the Panel advised parties that it would give them an outline of topics and associated questions to provide a framework for the following round of regional discussions. This approach allowed the Panel to focus on the most contentious issues and to identify issues where the interested parties appeared willing to work towards achieving resolution during the February/March 1999 public and individual meetings.

The Panel was encouraged by the parties' progress and by their willingness to find common ground for acceptable solutions to problems during the February/March 1999 consultations. Consequently, the Panel decided that a third round of regional meetings would be beneficial.

During the April/May meetings, the Panel observed that the pilotage authorities, the pilots and the industry in certain pilotage regions were making substantial progress in resolving local issues. In other regions, however, there still appeared to be some gaps between the positions of the interested parties, although the Panel noted that discussions between parties continued. In some instances, the Panel specifically asked parties to discuss particular aspects of an issue where the parties did not appear to have a good understanding of each other's concerns.

As a prelude to the second national meeting, held on June 9 and 10, 1999, the Panel distributed a discussion paper of preliminary

conclusions and recommendations. The paper highlighted various aspects of the issues under review that the Panel believed to be of the greatest importance in each pilotage region. The Panel chose an abbreviated form of discussion paper due to the short period between the end of the final round of regional consultations and the national meeting.

The Panel believes the second national meeting was successful because the parties were able to arrive at a consensus on several aspects of the issues being examined. This reflected the parties' attitude that their solutions were preferable to solutions imposed by government — a view the Panel shared. Differences of opinion remained, however, on some aspects of issues.

The Panel recognized that pilotage is regional by nature and that, therefore, the solutions are also regional. The discussions in each region emphasized these facts. As a result, when preparing this report, the Panel decided to identify achievable solutions to problems in each pilotage region, rather than try to identify all-encompassing solutions that would apply to all pilotage regions.

## Report Outline

Levels of concern about some topics and issues differed in each pilotage region. The report treats each authority separately in such instances. Where concerns applied more or less equally to

all authorities, the report examines all authorities together.

The report is divided into four sections, one for each of the issues examined in the review. Each section follows a similar format with a summary of legislative provisions; background information; issues; analysis; and the Panel's recommendations.

Some of the Panel's recommendations in this report give authorities specific deadlines for completing the recommended actions. Others have no deadline and the Panel leaves it to each authority's discretion to set priorities and establish deadlines for these recommendations, based on the urgency of the issue and the availability of resources. Nevertheless, the Panel believes that authorities should try to implement these recommendations as soon as is reasonably possible. In that regard, following the fourth section, the report contains a provision for the implementation of those Panel's recommendations without specific time frames.

While there was a high degree of consensus on many of the Panel's recommendations, certain participants disagreed with the Panel and have submitted their own recommendations with respect to the topics under review.

Appendix VI contains the Panel's recommendations, alternative recommendations from participants and a brief discussion of the potential impacts of the Panel's recommendations.



## Section 1

# Compulsory Pilotage

## Area Designations

### Introduction

Each pilotage authority exercises jurisdiction over the waters within the geographical boundaries specified in the *Pilotage Act* for each pilotage region. Each region is described below.<sup>5</sup>

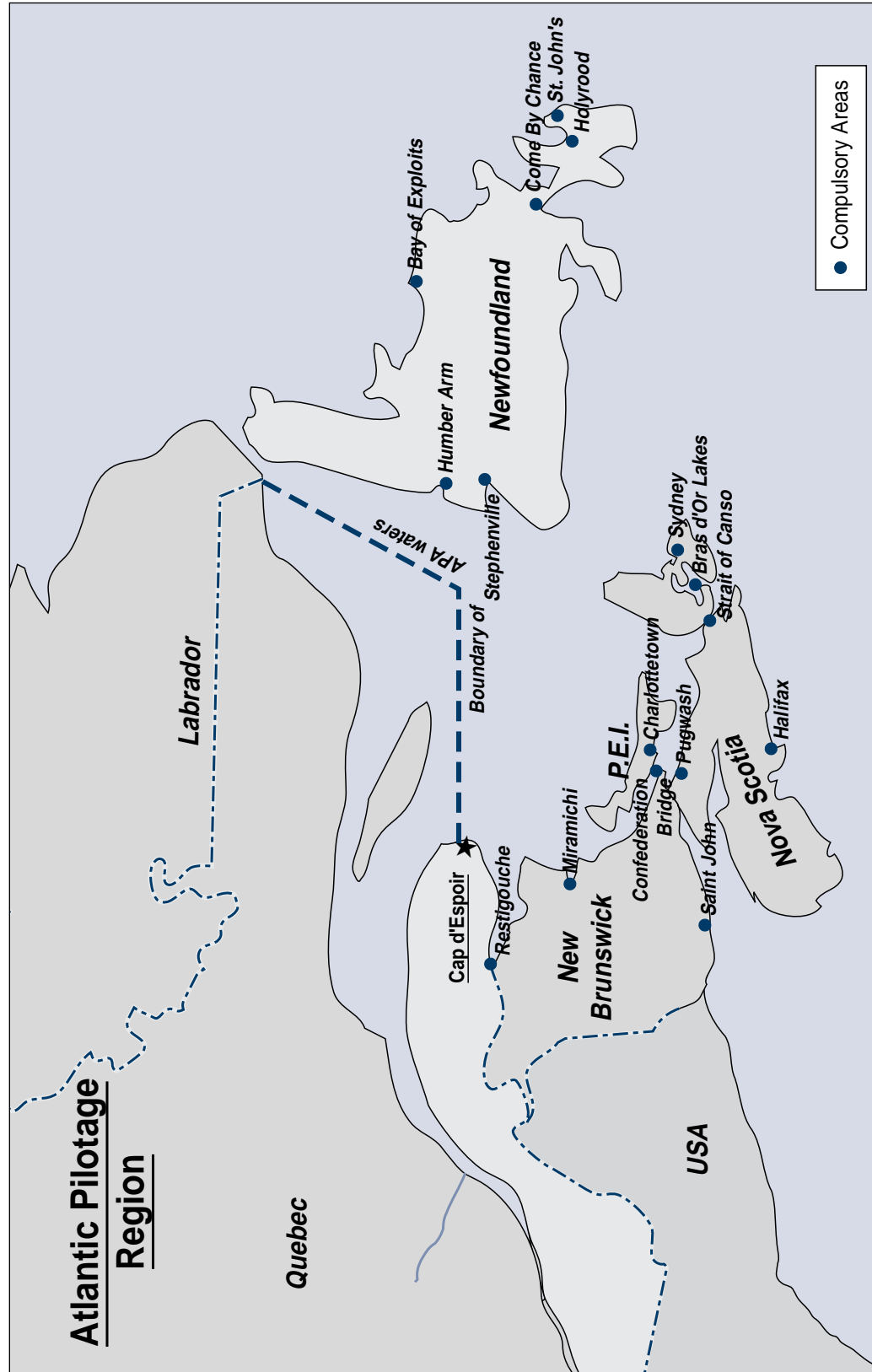
- Atlantic Pilotage Authority (APA): all Canadian waters in and around the four Atlantic provinces, including the waters of Chaleur Bay in the province of Quebec south of Cap d'Espoir.
- Laurentian Pilotage Authority (LPA): all Canadian waters in and around the province of Quebec, north of the northern entrance to St-Lambert Lock, except the waters of Chaleur Bay.
- Great Lakes Pilotage Authority (GLPA): all Canadian waters in the province of Quebec south of the northern entrance to St-Lambert Lock and all Canadian waters in and around the provinces of Ontario and Manitoba.
- Pacific Pilotage Authority (PPA): all Canadian waters in and around the province of British Columbia.

The *Pilotage Act* also empowers each pilotage authority to make regulations establishing compulsory areas within the Authority's geographical boundaries. A brief description of the compulsory areas is given below.

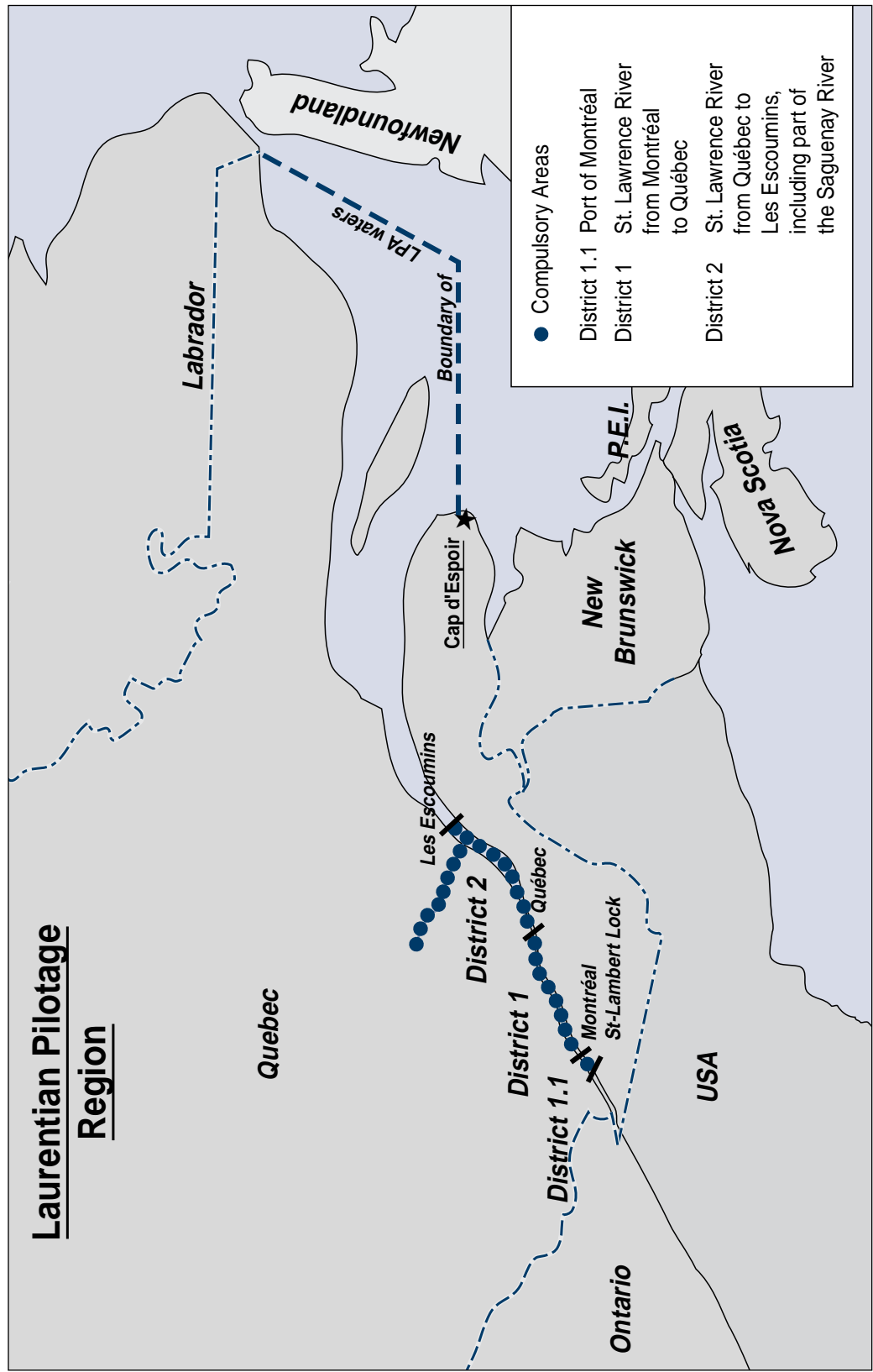
- APA: 15 major ports, in addition to the waters under the Confederation Bridge linking New Brunswick and Prince Edward Island.
- LPA: the St. Lawrence River from the St-Lambert Lock (west of Montréal) to Les Escoumins, and part of the Saguenay River.
- GLPA: the Canadian waters of the St. Lawrence River west of the St-Lambert Lock to Lake Ontario, the Canadian waters of Lake Ontario, the Welland Canal, and the Canadian waters of lakes Erie, Huron and Superior, as well as the connecting rivers and channels between them and the Port of Churchill, Manitoba.

<sup>5</sup> The pilotage regions and the compulsory areas are illustrated in the maps on pages 6 to 9.

Atlantic Pilotage Authority (APA)

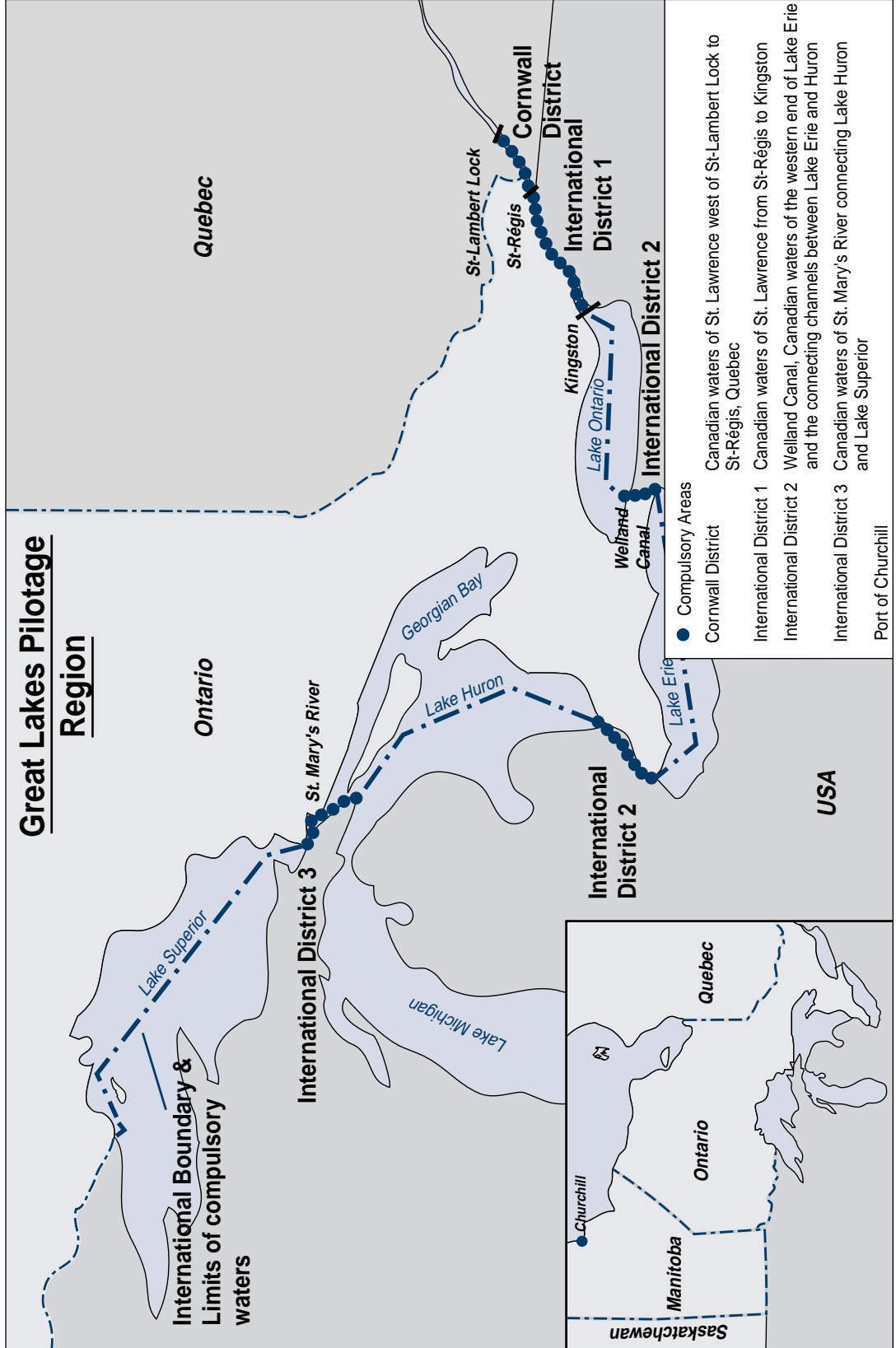


Laurentian Pilotage Authority (LPA)





## Great Lakes Pilotage Authority (GLPA)



## Pacific Pilotage Authority (PPA)



- PPA: all the coastal waters of British Columbia, including the coastal areas of Vancouver Island and the Queen Charlotte Islands, and the Fraser River.

During the initial consultations on compulsory designation, the Panel became aware of a number of topics related to compulsory designation that required review. Based on the written submissions and the comments from parties, the Panel identified the following topics for review in this chapter:

- the criteria used to designate compulsory pilotage areas;
- the determination of sizes and types of Canadian vessels subject to compulsory pilotage;
- the granting of waivers;
- the basis for the compulsory use of two pilots (LPA region only);
- the basis for the compulsory use of docking pilots (LPA District 2 only); and
- two-pilot assignments (PPA region only).

## Criteria Used to Designate Compulsory Areas

### Background

The imposition of compulsory pilotage was one of many topics discussed in the report of the Bernier Royal Commission on Pilotage. Bernier gave two primary reasons for imposing compulsory pilotage:

- a) a maritime casualty would seriously disrupt navigation to the marked

disadvantage of the national economy; or

- b) safe, speedy transits and movements which must be effected in the national interest can not be achieved unless vessels are navigated by mariners with adequate local knowledge and skill.

Bernier went on to say the following:

Since compulsory pilotage interferes with basic freedoms, it should not be imposed indiscriminately but only when necessary and to the extent warranted as the result of positive, deliberate judgement.

Under the *Pilotage Act*, each pilotage authority has designated specific areas of the waters under its jurisdiction as compulsory pilotage areas. With the exception of the APA, all designations made when the *Pilotage Act* came into force in 1972 have remained unchanged. In the intervening period, however, some authorities have reviewed their designations and some have proposed changes to their designated areas. A review of the original designations and subsequent developments follows.

### ATLANTIC PILOTAGE AUTHORITY

The APA is the only region where the designation of compulsory areas has changed since the *Pilotage Act* came into force. A number of areas that were initially compulsory were changed to non-compulsory. In recent years, the Confederation Bridge which links New Brunswick to Prince Edward Island, was added as a compulsory area, while Clarenville in Newfoundland was changed

from compulsory to non-compulsory. The APA proposed to make Belledune, New Brunswick a compulsory area but, following an examination by an investigator appointed by the Minister of Transport, Belledune remains a non-compulsory port. While the APA does not have published criteria for compulsory designation, the investigations of the proposed designations of Belledune and the Confederation Bridge incorporated the general guidelines the APA has developed. During the consultations, the APA indicated its intention to use the Q850 Risk Management analysis<sup>6</sup> for future compulsory designations.

#### LAURENTIAN PILOTAGE AUTHORITY

The designated compulsory areas in the LPA region have not changed since the *Pilotage Act* came into force, but the designation of parts of the region has been examined.

In September 1985, the Blouin Committee,<sup>7</sup> which the LPA established, was asked to examine compulsory pilotage zones. In its final report of May 1987, the Committee recommended that the LPA compulsory zones remain unchanged.

In January 1989, the LPA proposed regulatory amendments to remove the area between Cap aux Oies and l'Île Blanche from compulsory designation in District 2. This is a 38-mile stretch of river about halfway between Québec

and Les Escoumins. This proposal was followed by a number of other examinations of pilotage on the St. Lawrence River, including the Brander-Smith examination of oil tanker safety and reports by the House of Commons Standing Committee on Transport. While the LPA region was subjected to a series of assessments, the regulations regarding designated compulsory areas remained unchanged.

#### GREAT LAKES PILOTAGE AUTHORITY

The designated compulsory areas of the GLPA have not changed since the *Pilotage Act* came into force. Since much of the Seaway and the Great Lakes are under shared jurisdiction with the United States, vessels that travel through the region cross the international boundary several times. As such, the GLPA cannot act unilaterally to designate compulsory areas in shared waters. Should the GLPA propose changes in designation, these would have to be negotiated between Canada and the United States.

#### PACIFIC PILOTAGE AUTHORITY

The designation of the entire coast of British Columbia and the Fraser River as compulsory pilotage areas has not changed since the *Pilotage Act* came into force.

In response to a ministerial directive of June 1995 to examine the validity of compulsory pilotage areas, the PPA established the

6 Q850 Risk Management is a model developed by the Canadian Standards Association in 1996. It is based on a six-step approach to assessing risk to ensure that affected parties are involved and that their concerns are taken into consideration.

7 The Committee comprised Pierre Blouin, legal counsel and a member of the LPA Board of Directors, assisted by pilot advisors.

Compulsory Areas Working Group with representatives of the PPA, both pilot groups and shipping companies. The PPA reported to the Minister in December 1995 that all participants in the Compulsory Areas Working Group believed that the compulsory pilotage areas remained valid and should be maintained. This working group reviewed all of the compulsory areas, taking into consideration safety, environmental protection, modern navigation practices, monitoring and communications systems, ship standards and traffic patterns.

## Issues

The four pilotage authorities note that there is no record of the original factors or criteria used to designate compulsory pilotage areas. The authorities believe that prior designations were merely continued when the *Pilotage Act* came into force. Some parties are concerned about this absence of analysis or rationale to support the designated compulsory areas.

Canadian shipowners operating in the APA, LPA and GLPA regions find it difficult to accept some of the compulsory designations in the absence of clear justification. They believe that, when designating compulsory pilotage areas, authorities should consider the fact that the shipowners are leaders in using modern vessel technology and in training their masters and officers. Canadian shipowners question why a master who has been navigating a ship into and out of a port or area can suddenly be considered incompetent to do so as a result of a designation. They point to the designation of the

Confederation Bridge as a case where compulsory pilotage appears unjustified, noting that the investigator recommended exempting Canadian vessels from compulsory pilotage at the Confederation Bridge.

Canadian shipowners also question whether compulsory designation improves the safety profile of a port or area. Their fundamental position is that Canadian vessels should be recognized as distinct from foreign flag vessels with respect to compulsory pilotage designation. Nonetheless, Canadian shipowners support the development of criteria for, and the use of, a risk-based assessment for compulsory designation.

Pilots note that, while there may have been no documented criteria or rationale for the initial compulsory designation when the *Pilotage Act* came into force, the designations were nonetheless based on “common sense” factors. Pilots believe that in-depth analyses would probably show that these factors were indeed sound judgements that continue to be valid today; they support, however, the development of a risk-based assessment and methodology for designation.

Foreign shipowners in the APA, LPA and GLPA regions support the development of specific criteria for compulsory designation, as well as the application of a risk-based methodology for designations. In the PPA region, shipping interests agree with the current designations but believe that the conditions for designation should be periodically assessed, using a risk-based methodology.

Several parties commented on the need for a regular review of compulsory areas to ensure that the designation continued to be valid in light of changing technologies and ship design, as well as new bridge and safety management practices. Some parties observed that past reviews of compulsory areas had been conducted only as a result of a ministerial directive or a request from the Auditor General's office. The consensus was that a periodic review every five years was appropriate.

## Analysis

In discussing the manner in which authorities designate or review compulsory pilotage areas, the Panel found that they usually considered a series of factors, including the following:

- degree of difficulty and hazard in the approaches and within the port itself;
- incidence of weather, such as fog, ice, strong winds, tides and currents;
- available depth of water;
- amount of traffic;
- size and manoeuvrability of vessels;
- design of wharves and adjacent equipment, such as cranes; and
- nature of the cargo carried on board, such as oil, gas or explosives.

There was, however, no indication that the authorities had used a risk-based process when reviewing designations.

As Bernier discussed, compulsory pilotage cannot be imposed indiscriminately. Rather, it must be the result of positive and deliberate judgement. The Panel believes that, in today's

environment, if authorities expect users to accept a designation, they must exercise such judgement after making a proper risk-based assessment. The Q850 Risk Management analysis and the International Maritime Organization Formal Safety Assessment analysis were suggested as possible methodologies to apply to compulsory designation. The Panel does not believe it should stipulate a specific methodology. A review of such methodologies has however convinced the Panel that a methodology must have certain basic elements to ensure the validity and acceptance of its results. In the Panel's opinion, a risk-based methodology must require authorities to:

- identify the problem and associated risk factors, and develop an information base related to the risk factors;
- form a risk management team to carry out the risk assessment;
- identify and consult with all interested parties and determine their risk concerns;
- analyse risk scenarios and their frequency, consequences and cost implications, as well as interested parties' acceptance of risk;
- identify risk control options and their effectiveness and cost implications;
- assess interested parties' acceptance of proposed actions and residual risks; and
- establish a process to monitor the chosen action.

At the June 1999 national meeting, it was suggested that the Joint Operations Committee of the four pilotage authorities discuss the

selection of a risk-based methodology and the development of appropriate criteria related to compulsory designation.

During the discussion of the need to apply a risk-based methodology, the Panel heard differing viewpoints. Some parties advocated re-examining currently designated areas, while others argued that only new areas being considered for designation should be subject to a risk-based assessment.

The Panel considers that all new areas being considered for designation should automatically be subjected to a risk-based assessment. For currently designated areas, the Panel considers that the factors and circumstances related to compulsory designation should be reviewed periodically to see whether any changes have occurred that would warrant a risk-based assessment of the designation. Such a review would be directed by an authority and would involve consultations with interested parties.

The Panel believes that such a periodic review is needed to show users that changes in management practices and in the nature of shipping are receiving ongoing consideration. The requirement for periodic review should be included in regulations to ensure that the reviews take place.

## Panel Recommendation No. 1

*The Panel recommends that each authority be required to identify, in consultation with interested parties, any compulsory areas where a change in factors and circumstances related to designation justifies*

*a detailed re-examination of the designation, and to develop a plan and a time frame for doing so.*

*The Panel recommends that each authority be required to report on this plan and time frame to the Minister in its next annual report.*

*The Panel recommends that each authority be required to publish a regulation stipulating that reviews of the factors and circumstances related to compulsory designations will take place every five years.*

*The Panel recommends that each authority be required to conduct a risk-based assessment of proposed new compulsory areas and of those areas where changed factors and circumstances justify a detailed re-examination of the designation.*

*The Panel recommends that before conducting such a risk-based assessment, the authority be required to adopt a risk-based methodology that requires the authority to, among others*

- *identify the problem and associated risk factors, and develop an information base related to the risk factors;*
- *form a risk management team to carry out the risk assessment;*
- *identify and consult with all interested parties and determine their risk concerns;*
- *analyze risk scenarios and their frequency, consequences and cost implications, as well as interested parties' acceptance of risk;*
- *identify risk control options and their effectiveness and cost implications;*
- *assess interested parties' acceptance of proposed actions and residual risks; and*
- *establish a process to monitor the chosen action.*



# Determination of Sizes and Types of Canadian Vessels Subject to Compulsory Pilotage

## Background

Each pilotage authority has established regulations prescribing the sizes and types of vessels subject to compulsory pilotage within compulsory pilotage areas. These sizes vary substantially among regions and, in some instances, among districts.

In the PPA region, all ships of more than 350 GRT are subject to compulsory pilotage, except Canadian ships under 10,000 GRT. In addition, US ships under the command of US masters or officers who have made a specified number of trips in the compulsory areas are not required to take pilots.

In the GLPA region, all ships of more than 300 GRT are subject to compulsory pilotage, except ships under the command of Canadian masters or officers who have specific experience in the compulsory areas.

In districts 1.1 and 1 of the LPA region, Canadian ships over 225 feet in length and over 1,500 NRT are subject to compulsory pilotage. In District 2, Canadian ships over 260 feet in length and over 2,000 NRT are subject to compulsory pilotage. All foreign ships over 100 feet in length are subject to compulsory pilotage.

In the APA region, Canadian ships over 1,500 GRT are subject to compulsory pilotage, as are foreign ships over 200 GRT.

Ships owned by the Canadian government, including military vessels, as well as passenger ferries (whether provincially or federally owned) and Canadian fishing vessels, are exempt from compulsory pilotage in all pilotage regions.

Vessel size limits related to compulsory pilotage were not an issue in either the GLPA or PPA regions, so the following discussion relates to the APA and LPA regions.

## Issues

As was the case for the designation of compulsory areas, the authorities have no record of the criteria or rationale used to establish the size limits for vessels subject to compulsory pilotage when the *Pilotage Act* came into force.

Canadian shipowners believe that the competency of the master and officers on board a vessel, rather than the vessel's size, should be the principal factor determining the need for a pilot on a ship. They argue that, when applying compulsory pilotage, authorities do not recognize shipowners' investments in modernizing their fleets and training their crews. Some shipowners suggest that revenue considerations, rather than safety concerns, drive the selection of the sizes and types of ships.

Foreign shipowners believe that uniform criteria for the size of vessels subject to compulsory pilotage are not appropriate and that regional characteristics that affect pilotage must be taken into account. Pilots take a similar view and contend that local conditions of navigation justify the variations in vessel size in the four pilotage regions.



The authorities do not believe that applying uniform size limits in all regions would be reasonable, although there may be potential for changes in the vessel size limits in certain compulsory areas. In this regard, the APA is changing its regulations to allow highly manoeuvrable supply vessels up to 5,000 GRT to move within St. John's harbour without pilots.

## Analysis

The situation with respect to vessel size limits is similar to the one for compulsory designation: there is no indication that any data, analyses or analytical frameworks support the existing size limits for vessels subject to compulsory pilotage. As stated before, to encourage users to accept the validity of existing vessel size limits in some regions, authorities should be able to provide a sound rationale for such limits. In the Panel's view, they can do so only by doing a risk-based assessment of current size limits.

The Panel is not suggesting that this assessment should result in uniform vessel size limits in each pilotage region. Local conditions should dictate size limits. Sound justification for the size limits established in each region is, however, necessary.

## Panel Recommendation No. 2

*The Panel recommends that the Atlantic Pilotage Authority and the Laurentian Pilotage Authority be required to carry out, in consultation with interested parties, a risk-based assessment of vessel size limits and types of vessels subject to compulsory pilotage; be required to complete the risk-based assessment by*

*the end of 2001; be required to report the results of the risk-based assessment to the Minister; and be required to change regulations when the results of the risk-based assessment differ from the current regulations.*

# Granting of Waivers

## Background

Under the *Pilotage Act*, each authority can make regulations regarding the granting of waivers to compulsory pilotage. Accordingly, each authority has established specific circumstances under which it may grant a ship a waiver.

Generally, the authorities grant waivers under the following circumstances:

- a ship is engaged in rescue operations;
- a ship enters a compulsory area for refuge;
- a pilot is unable to board the ship because of weather conditions; and
- a pilot is not available and the vessel would be subject to an undue delay.

As well, when requests are made for waivers, the authorities generally require the following information:

- the size and type of ship;
- the destination of the ship;
- the type of cargo carried;
- the master's degree of familiarity with the area and with marine traffic regulations; and
- whether the vessel owners or underwriters are prepared to have the vessel proceed without a pilot.

The above list is not exhaustive but it describes the type of information that an authority reviews when considering granting a waiver.

In the discussion of waivers during the consultations, the Panel was made aware that the APA grants waivers after a case-by-case assessment of the circumstances. The APA is very reluctant to grant waivers but has occasionally done so. Neither the LPA nor the GLPA grants waivers. The GLPA requires the agreement of the US to grant a waiver, due to shared jurisdiction, and has not granted any waivers since the US passed the *Oil Pollution Act* in 1990. The PPA grants waivers only under exceptional circumstances.

## Issues

Canadian shipowners are concerned about the lack of well-defined criteria for granting waivers and the lack of an explanation when an authority denies a request for a waiver. Regarding the LPA region, Canadian shipowners noted that at times — during the winter, when double pilotage applies — they had requested waivers when a second pilot was not available. The shipowners said the LPA generally denied such requests without explanation but occasionally told shipowners the vessel could proceed if the shipowners paid charges for two pilots, even though only one pilot was on board.<sup>8</sup>

Some foreign shipowners on the West Coast believe that a vessel that trades regularly

into and out of a port should be eligible for a waiver. These shipowners contend that the fact that the master and vessel are not Canadian should not exclude them from eligibility for waivers.

During the consultations in the PPA region, the PPA told the Panel that it had reviewed waivers and the conditions under which they could be granted. Consultations with parties have been proceeding and the PPA indicated that the results of the waiver review should be available by the end of September 1999.

Based on the consultations in each pilotage region, the authorities support the present waiver system, which allows a case-by-case review of waiver applications. Pilots think that waivers should be granted only under exceptional circumstances and on a case-by-case basis.

## Analysis

The Panel sees the waiver provision in the *Pilotage Act* as intended only to give authorities some degree of flexibility in exceptional circumstances. The Panel believes waivers were not intended to be used regularly or as a way to circumvent compulsory pilotage. Consequently, authorities should grant waivers on a case-by-case basis only.

The whole purpose of compulsory pilotage is to ensure safety of navigation. To argue that waivers should be available regularly or when desired to vessels that are regular callers to

<sup>8</sup> The use of two pilots during the winter is discussed in a later section in this chapter.

reduce pilotage costs negates the fundamental principle of compulsory pilotage. Therefore, a waiver can be justified only under exceptional circumstances outside the norm of navigation in compulsory areas.

The Panel is convinced that the authorities are taking an appropriately prudent approach to granting waivers that accords with their mandate to ensure safety of navigation. In the interest of openness and transparency, the Panel however believes the authority should give reasons when it denies a request for a waiver.

### Panel Recommendation No. 3

*The Panel recommends that each pilotage authority maintain the current practice of assessing requests for waivers to compulsory pilotage on a case-by-case basis, in the interest of safety of navigation.*

*The Panel recommends that, in the interest of greater transparency of the waiver process, each authority provide reasons when denying a request for a waiver.*

## Double Pilotage

This discussion of double pilotage refers to those circumstances in the LPA region when vessels are required to have two pilots on board to perform pilotage duties. It does not include those situations where the length of the voyage exceeds the duty time of a pilot and a second pilot must be on board to relieve the first pilot

once he or she has reached the maximum duty time.

Under the *Pilotage Act*, an authority can make regulations regarding the circumstances under which a vessel must take on more than one pilot. There are provisions in the service contracts between the pilot corporations and the authorities relating to the circumstances where double pilotage is required.

## Background

Under the LPA's regulations, all ships subject to compulsory pilotage must take on two pilots during the winter. In addition, large vessels of more than 63,999 DWT in District 1 and of more than 74,999 DWT in District 2 must have two pilots on board year-round. Similarly, passenger vessels of more than 100 metres in length and tankers of more than 40,000 DWT must have two pilots on board year-round.

The requirement for double pilotage during the winter has been in place since 1960. The requirements for double pilotage for large ships in districts 1 and 2 were established in 1977 and 1978, while the same requirement for passenger ships and tankers was added in August 1993.<sup>9</sup>

In December 1991, the LPA published its proposal to impose double pilotage on passenger ships and tankers over 40,000 DWT. Objections to the proposal by Canadian

<sup>9</sup> The Blouin Committee examined winter double pilotage in the LPA region, among other pilotage topics. In the final report of May 1987, Blouin commented that the difficult conditions of winter navigation, together with the lack of navigational aids in the river, made two pilots a necessity. Blouin recommended that winter double pilotage be continued. Blouin also recommended that the vessel size limit for District 1 be increased to the size limit for District 2.

shipowners led to the September 1992 memorandum of understanding between the LPA and the Canadian Shipowners Association (CSA). One of the elements of the memorandum of understanding was an agreement for an examination of compulsory double pilotage. In November 1992, the Minister of Transport appointed Guy P. Dancosse, QC to examine the question of double pilotage.

In his examination, Dancosse looked at the mix of foreign and Canadian traffic in the LPA region and noted that the double pilotage regulations affected mainly foreign vessels outside the winter period. Dancosse felt that Canadian shipowners were only marginally affected by double pilotage requirements in the winter because Canadian ships make few trips during that period.

Dancosse recommended that double pilotage be continued during the winter and that the requirement for double pilotage for tankers over 40,000 DWT and passenger ships over 100 metres in length be adopted. Dancosse recommended that the definition of the winter season be revised to make it more flexible. Previously, the definition was based on calendar dates.

The LPA adopted a new method for determining the start and end of the winter season, based on water temperature. This method, developed by the Ice Office of the Canadian Coast Guard, establishes that ice will form within 48 hours when the water temperature drops to 2.5 degrees Celsius.

## Issues

Canadian shipowners, including both the CSA and the St. Lawrence Shipoperators Association (SLSA), question the need for two pilots during the winter. They argue that they have not heard any justification for double pilotage and claim that the role of the second pilot on the ship is not defined. CSA members say that instances where a second pilot was not available and the vessel was allowed to proceed after paying charges for two pilots show that double pilotage is really a revenue-generating requirement. The SLSA is of the opinion that the requirement for double pilotage during the winter does not take into account the evolution of information available to shipping lines, such as data provided by the Ice Office of the Canadian Coast Guard.

Canadian shipowners are convinced that, with modern navigational aids and advances in vessel design, two pilots are no longer required during the winter. They believe that including provisions relating to double pilotage in the service contracts with the pilot corporations limits the LPA's discretion and is an inappropriate exercise of the LPA's mandate.

Foreign shipowners question the need for two pilots on cruise ships when the practice elsewhere in the world is to have a single pilot. These shipowners argue that there is a need to determine what extra safety factor a second pilot adds to a trip and to reassess the need for double pilotage.

The LPA indicated that since it was negotiating with District 1 pilots and that there were two outstanding arbitration cases related to double pilotage, it could not comment.

The pilots contend that the conclusions of the Dancosse report are still valid and that the advances in technology since 1993 do not justify a reduction in safety measures. They say that modern electronic navigational aids have not been proven reliable, so such aids cannot be used as a substitute for an experienced pilot. Finally, the pilots argue that the conditions regarding the need for two pilots on ships are part of their contractual agreements with the LPA.

## Analysis

The Panel notes that while both Blouin and Dancosse considered a series of factors when they examined double pilotage, there is no indication that they performed a risk-based analysis to substantiate their conclusions.

As stated earlier, the Panel agrees with Bernier's statement that compulsory pilotage interferes with basic freedoms and should only be imposed when necessary and to the extent warranted. This applies equally to double pilotage. It must be shown that two pilots are warranted. If the LPA expects users to accept the costs of double pilotage, it must be able to point to an appropriate analysis of the risks and to the adequacy of the means proposed to address those risks. While, intuitively, one would believe that two pairs of eyes are better than

one, this is not an adequate demonstration of the need for double pilotage.

Accordingly, the Panel concludes that the requirement for double pilotage during the winter, and on tankers over 40,000 DWT and passenger vessels over 100 metres in length, must be re-examined using such a risk-based methodology as described previously.

Regarding provisions in a service contract with a pilot corporation, the Panel believes that no provision in a service contract should restrict in any way the manner in which an authority exercises its mandate and discretion.

## Panel Recommendation No. 4

*The Panel recommends that the Laurentian Pilotage Authority be required to carry out a risk-based assessment by mid-year 2001 to determine whether and when requirements for double pilotage are valid, including the current requirement for double pilotage on all vessels during the winter, the requirement for double pilotage on tankers over 40,000 tonnes and the requirement for double pilotage on passenger vessels over 100 metres in length.*

*The Panel recommends that the Laurentian Pilotage Authority be required to report the results of the risk-based assessment to the Minister of Transport and be required to implement the results of the assessment by amending its regulations where necessary.*

## Docking Pilots at Québec and Secondary Ports in District 2

### Background

Under the LPA tariff regulation, a vessel master, owner or agent may request the services of a pilot with specialized skills (known as a docking pilot) to perform docking or undocking manoeuvres. The tariff specifies a separate charge for this service. This charge is in addition to the regular charge for a trip, which includes the berthing and unberthing of the ship. According to the tariff, this provision is voluntary. As a matter of practice, however, the services of docking pilots have been imposed for a number of years at Québec and, more recently, at other ports in District 2.

The use of docking pilots began in the early 1970s when Ultramar began to use large tankers to bring oil products to its Québec terminal. The company asked for pilots with particular skills in docking large ships as manoeuvring the large tankers was difficult in the confines of the harbour.

For ships travelling from Les Escoumins to Québec, a docking pilot boards the vessel to perform the berthing. When ships leave Québec and are destined for points beyond Les Escoumins, a docking pilot performs the unberthing and a regular pilot navigates the ship as far as Les Escoumins. Docking charges in District 2 are also levied on ships calling at Cacouna, Pointe-au-Pic, La-Baie (formerly

Port-Alfred) and Grande-Anse. For these four ports, no extra docking pilot boards the ship; the pilot on board is declared a docking pilot and the docking charge is then imposed. For ships coming from or through District 1 and destined for Québec, the District 1 pilot performs the berthing in Québec. Similarly, for those ships leaving Québec to travel into or through District 1, the District 1 pilot performs the unberthing of the ship, even though pilots in District 1 are not designated as docking pilots.

At the port of Québec, six pilots are designated as docking pilots. These pilots are on a rotational duty schedule, with two of them on duty for two weeks in the port while the other four perform regular assignments in District 2. During the two-week duty time in the port, the two pilots perform docking and undocking exclusively. For the other four ports in District 2, there are 20 pilots designated as docking pilots.

In 1974 and again in 1976, the Canadian Transport Commission (CTC) examined docking pilotage at Québec as part of tariff investigations. In 1974, the CTC rejected a proposed docking/undocking charge on all oil tankers over 5,000 tons on the basis that the charge would be discriminatory. In 1976, the CTC approved a docking charge on the basis that the charge was voluntary and would only apply when the owner, master or agent of a ship requested a docking pilot. The tariff provision has been in effect since 1976, with periodic changes to the amount of the charge.

## Issues

The CSA and the SLSA believe that there is no justification for docking charges at Québec or other ports. They further believe docking charges are applied inconsistently and arbitrarily. Foreign shipowners think such services should be available as an option for a vessel master but should not be imposed.

The pilots argue that docking pilots are justified from a safety point of view and that their skills ensure that docking manoeuvres are carried out with precision. The pilots note that, since there are about 100 pilots in District 2, the duty roster does not allow each pilot to stay current enough in all ports to carry out dockings everywhere with a high degree of safety.

The pilots contend that the use of docking pilots ensures that vessels are handled in the most efficient manner possible, without any delays. Pilots note that the use of docking pilots often makes it unnecessary to use tugs in berthing, which saves the shipowner money. As well, pilots point out that larger vessels can now serve those ports where docking pilots provide services. Pilots contend that docking pilots are necessary and such services must continue. They propose a risk-based assessment of the requirement for docking pilots.

## Analysis

The Panel believes that docking and undocking are part of a ship's voyage and, as such, form part of the regular duties of a pilot. Bernier considered this matter specifically.

The principle that berthing and unberthing a vessel is part of a pilotage trip should not be departed from except as a matter of safety, or to improve the pilots' working conditions, provided neither shipping nor the public is unduly inconvenienced thereby. Insistence on the employment of a berthing pilot requires basic organizational modifications which entail serious disadvantages. These are acceptable only if they are offset by substantial advantages which, under the present circumstances, do not exist in the harbour of Québec.

The Panel believes that the issue of docking pilots in District 2 is essentially a question of the currency of the pilots in the district. The pilots say that docking pilots are necessary because not all pilots have the same degree of familiarity or experience in all ports in the district. The Panel considers that, if this is the case, the LPA is responsible for finding a means to keep pilots current.

In his analysis of the question of docking pilots, Bernier commented that an authority is responsible for ensuring that pilots were fully qualified to perform their duties, which included docking and undocking. Bernier stated that if a pilot did not want to dock and undock ships, this raised the question of the pilot's competency and skill.

The Panel has been advised by the LPA that all District 2 pilots are trained in docking and undocking procedures during their apprentice program and that pilot licensing exams include questions on these procedures, as well as on knowledge of ports. In the LPA's view, all District 2 pilots are capable of docking and



undocking ships as part of their regular pilotage duties, as is the case with all District 1 pilots.

Since the June 1999 national meeting, the Panel has received a number of written submissions supporting docking pilotage at Québec. These submissions argue that docking pilotage ensures safety of navigation in the port and that discontinuing docking pilotage should not be contemplated until the matter has been examined thoroughly.

The Panel is aware that there may be a need to provide optional docking pilotage for users who value it. The Panel would like to make it clear that it is not advocating the discontinuance of docking pilotage; rather, it advocates discontinuing the practice of imposing docking pilotage when neither the shipowner, the agent nor the master has requested this service. For this reason, there is no need to perform a risk-based assessment of docking and undocking pilotage in District 2 as suggested by the pilots.

## Panel Recommendation No. 5

*The Panel recommends that the Laurentian Pilotage Authority be required to immediately cease the practice of mandatory use of docking pilot services, be required to immediately cease imposing docking/undocking charges on vessels that have not requested the services of a docking pilot, and be directed to apply the tariff provision for docking pilotage.*

## Two-Pilot Assignments in the Pacific Pilotage Authority Region

### Background

The PPA's regulations stipulate that two pilots are required on vessels under the following circumstances:

- for any trip during which the ship would require the services of a pilot on bridge watch for a period exceeding eight consecutive hours; and
- for any trip during which the ship would require the services of a pilot on bridge watch for a distance exceeding 105 consecutive nautical miles.

The eight-hour, 105-mile rule was established when the average speed of ships was 12 to 14 knots and a 105-mile distance generally represented a regular eight-hour duty time.

### Issues

In recent years, shipowners have questioned the eight-hour, 105-mile rule, since modern vessels are able to travel more than 105 miles in an eight-hour period but still require a second pilot on board due to the regulation. The shipping industry argues that the current rule does not give them operational flexibility and imposes unnecessary costs.

During the consultations with parties in the PPA region, the Panel was advised that the PPA, pilots and shipowners were examining



the eight-hour, 105-mile rule with a view to changing it. The pilots indicate that many such trips take place at night and they are concerned about the effects of fatigue. Pilots note that the part of the trip that requires the most concentration occurs with the docking of the vessel, at the end of the pilot's eight-hour duty time. Pilots want to see night duty time reduced to seven hours for safety reasons and are willing to expand the day duty time to nine hours.

The Panel recognizes that parties in the PPA region are actively examining the eight-hour, 105-mile rule with a view to

making changes that will satisfy the concerns of the shipping industry as well as pilots.

The Panel believes that this constructive cooperation between parties will result in a solution acceptable to everyone.

### **Panel Recommendation No. 6**

*The Panel recommends that the Pacific Pilotage Authority be required to report on the agreed-upon changes to the eight-hour, 105-mile regulation in its next annual report to the Minister.*



## Section 2

# Training *and* Licensing Requirements *for* Pilots

## Introduction

During the initial round of consultations, participants identified a number of issues concerning the training and licensing of pilots. Some of these issues related to specific pilotage regions, while others applied more generally, although they varied in nature and importance with each pilotage region under consideration. As the consultations progressed, issues such as Bridge Resource Management (BRM) and pilots' knowledge of new vessels and equipment were resolved or were not pursued by the parties. Consequently, they were not included in the discussion paper for the second national meeting.

For the purpose of this report, and using the information gathered during the consultations, the Panel identified four issues that remain concerns of certain parties in various pilotage regions. These are as follows:

- the lack of national standards for training and licensing pilots;
- the adequacy of the pool of pilot candidates;
- the establishment of a pilot quality assurance program; and
- the continued adequacy of coast-wide licensing and dispatching in the Pacific Pilotage Region.

## National Standards

### Background

The *Pilotage Act* sets out the Canadian citizenship requirements for pilots and gives pilotage authorities the authority to regulate the pilot licensing process through such means as prescribing classes of licences and setting requirements for local knowledge, skill, experience and language proficiency. Further, the pilotage authorities are empowered to regulate the examination process for pilot licensing and further training for licensed pilots.

The General Pilotage Regulations, which apply to all pilotage regions, set out entry-level qualification requirements for pilots with regard to age and health; navigational qualifications as a mariner (certificate of competency); and experience at sea (minimum 12 months as master or 24 months as deck watch officer). These regulations are amended from time to time to reflect developments in pilotage services across the country. For example, Transport Canada is currently preparing a proposed amendment to the regulations that will introduce BRM as a new national requirement for pilot training. This regulatory action follows the 1995 safety study by the Transportation Safety Board of Canada (TSB) on the Operational Relationship between Shipmasters, Watch Keeping Officers and Marine Pilots. In that study, the TSB recommended that all pilots be required to demonstrate their skills in BRM when obtaining or renewing a licence.

The Atlantic Pilotage Regulations, the Great Lakes Pilotage Regulations, the Laurentian Pilotage Regulations and the Pacific Pilotage Regulations set their own region-specific requirements. These stipulate, in greater detail than the *Pilotage Act* and the General Pilotage Regulations, and in accordance with the regional structure of pilotage services, requirements concerning applicants' entry-level qualifications, apprenticeship and training; the licensing examination process; and continuing training for pilots.

For purposes of comparison, the subsections below summarize some of the specific

requirements — such as entry-level conditions, duration of apprenticeship and licensing process — for each pilotage region.

On the issue of training, the programs for pilot candidates and active pilots in the four pilotage authorities have several similarities. Pilot training in each region includes instruction related to BRM, electronic navigation systems, effects of sleep deprivation and other safety-related subjects, and training on manned models and computer ship-handling simulators at marine centres in Canada, England, France, the Netherlands and the United States.

#### **ATLANTIC PILOTAGE AUTHORITY**

The APA recruits pilot candidates mainly from the Canadian shipping industry, the Canadian Coast Guard and deep-seagoing vessels. Most pilots are employees of the APA, while entrepreneur pilots provide services in some compulsory areas. Entry-level candidates must satisfy the requirements stipulated in the General Pilotage Regulations and the Atlantic Pilotage Regulations, which include a minimum of 100 trips as a master or deck watch officer. A successful applicant receives an apprentice permit, which enables him or her to undertake pilotage training in a specific compulsory area under the supervision of a licensed pilot.

The APA's licensing process comprises three types of pilot licences — A, B and C — which dictate the different sizes of vessel a licensed pilot is qualified to handle. After completing his or her apprenticeship, a new pilot needs approximately two years to progress

from a class C licence to a class A licence.

Although each pilot is trained and licensed to perform duties in a specific compulsory port, the APA recently introduced a cross-licensing system whereby pilots may be licensed for more than one compulsory area or district. This system, which currently applies to compulsory areas within Newfoundland, and between the Cape Breton District and Halifax, allows more flexibility to deal with peak periods in specific areas without having to increase pilot strength. For the purpose of ongoing training, the APA and its pilots have developed a computer program that simulates ship handling in various compulsory ports.

#### **LAURENTIAN PILOTAGE AUTHORITY**

The LPA recruits pilot candidates mainly from the Canadian shipping industry and the Canadian Coast Guard. It contracts with two pilot corporations for pilotage services in compulsory District 1 (St-Lambert-Québec) and District 2 (Québec-Les Escoumins), while pilotage services in District 1.1 (Port of Montréal) are provided by employee pilots. District 3 (east of Les Escoumins) is a non-compulsory area and is not subject to the licensing process.

In addition to the requirements stipulated in the General Pilotage Regulations, the Laurentian Pilotage Regulations set out, for each district, several criteria for entry-level candidates relating to navigational qualifications and experience at sea. Applicants must be able to communicate in both French and English when performing their duties and must have

successfully completed formal training in marine navigational sciences at a marine institute. They acquire local knowledge during their apprenticeship. A candidate receives a class D apprenticeship licence and must perform more than 100 trips during a two-year period under the supervision of a senior licensed pilot.

The LPA issues class A, B and C pilot licences, according to district and ship dimension. New pilots need approximately six years of practice and training to progress to a class A licence, which enables them to pilot all ships in a specific compulsory district. Under the LPA's regulations, pilots are required to stay current by performing at least 10 one-way trips per year after receiving their licence, and to take continuing training to maintain their qualifications and update their skills with respect to new technology and equipment.

#### **GREAT LAKES PILOTAGE AUTHORITY**

Pilot candidates are recruited mainly from the Canadian shipping industry and the Canadian Coast Guard. All GLPA pilots are employees of the GLPA. In addition to the basic requirements set out in the General Pilotage Regulations, pilot candidates must meet the requirements of the Great Lakes Pilotage Regulations, which include a minimum of 15 trips as a mariner in the three years preceding the application. Pilot candidates in the Cornwall District must have a working knowledge of both official languages, while only English is required in the other districts. Qualified candidates receive on-ship training while performing at least 50 trips under the supervision of a senior licensed pilot

in the district for which the pilot candidate applied.

A GLPA pilot licence is valid for all vessels in the district for which the licence is issued. As part of a memorandum of understanding between Canada and the United States, both countries reciprocally recognize pilot licences for pilotage in contiguous compulsory waters. Under the GLPA's regulations, a licensed pilot must satisfy various currency requirements, which include completing at least five one-way trips per year.

#### **PACIFIC PILOTAGE AUTHORITY**

Pilot candidates are recruited mainly from the BC coast tug and barge industry and the Canadian Coast Guard. The PPA contracts pilotage services in coastal areas from the BC Coast Pilot Corporation, while employee pilots provide services in the Fraser River. Qualifying exams establish an eligibility list of potential pilot candidates, which the PPA uses for recruitment. The PPA also offers a familiarization program that allows potential applicants to acquire a better knowledge of the pilotage areas and pilot duties before commencing the entry-level examination process. Following the examination process, which varies between the coastal regions and the Fraser River, candidates who meet the requirements of the General Pilotage Regulations and the Pacific Pilotage Regulations are placed on an eligibility list until a position becomes available. A new pilot undergoes an apprenticeship program under the supervision of a licensed pilot, which consists of 50 assignments over a period of three months in the Fraser

River and 80 assignments over a period of six months in coastal areas.

After apprenticeship, a pilot receives a Class II licence for one year. If the new pilot's performance and skills are satisfactory, he or she receives a Class I licence the second year. A licensed pilot needs approximately five years to perform duties on all sizes and types of ships trading in the PPA compulsory waters.

#### **Issues**

The Canadian Shipowners Association (CSA) is concerned about the lack of national standards. In addition to the requirements currently imposed by the General Pilotage Regulations, it says additional national standards should be considered in areas such as specific entry-level requirements, apprenticeship, licensing and continuing training. The CSA points out the lack of uniformity among regions regarding the minimum number of trips that pilot candidates are required to make at the entry level and during apprenticeship, as well as the differences among regions with respect to the length of the apprenticeship and initial training periods. It believes that such elements of the training and licensing process should be standardized at the national level by means of regulatory changes.

#### **Analysis**

The Panel notes that the *Pilotage Act* and the General Pilotage Regulations already contain national standards in that they set out entry-level requirements related to the competency, age, medical fitness, citizenship, navigational qualifications and experience at sea of pilot

candidates, as well as requirements for the licensing process. They do not, however, take into account the conditions of local navigation particular to each pilotage region, such as navigational requirements, the nature of waterways and ports, geography, the types and sizes of ships trading in various areas, and other local factors.

Under the current legislation, each authority is responsible for the safety and efficiency of pilotage services in its pilotage region. While the *Pilotage Act* and the General Pilotage Regulations set out general requirements, the pilotage authorities' regulations contain specific criteria that reflect local conditions and emphasize the importance of local knowledge at all stages of the selection, apprenticeship, training and licensing process.

While it creates differences, this regional approach is consistent with the report of the Bernier Royal Commission on Pilotage, which recommended that the specific requirements relating to the training and licensing of pilots be left to each pilotage authority.

With respect to the entry-level process, the Panel noted that, while local knowledge is a prerequisite in certain pilotage regions, in other jurisdictions, pilot candidates acquire local knowledge during their apprenticeship. It appears logical that the length of the apprenticeship period in each region reflects this regional approach. The entry-level criteria for working language requirements also vary in each pilotage region. While in certain regions, only English is mandatory, other pilotage authorities require applicants to have working

knowledge of both French and English. The Panel believes that these working language requirements are consistent with the needs of each region.

Similarly, the nature of the compulsory waters in each region — that is, ports, waterways or coastal waters — dictates the approach each pilotage authority takes with regard to the licensing process and the continuing training required for pilots. With some exceptions, pilots in the four regions undergo similar training on ship handling, BRM, simulators, and other subjects related to navigation and marine safety. The Panel is satisfied that, where requirements for initial or continuing training are identified, there are means to ensure that pilots remain current with the changing environment.

With respect to national training, the Panel notes that Transport Canada has taken regulatory action to make BRM training for all pilots mandatory. Further, the Panel understands that the International Maritime Organization is currently reviewing the modernization of standards for pilot training and that Transport Canada is participating in this process.

The Panel believes that the different approaches adopted by the pilotage authorities under their respective pilotage regulations reflect local realities while meeting the requirements of the *Pilotage Act* and the General Pilotage Regulations. The Panel further believes that the goal of these approaches — the undisputed competence of pilots — is paramount, and that the pilot training programs achieve this goal. The current system is an

effective blend of national and regional regulations tailored to the needs of each pilotage region.

## Panel Recommendation No. 7

*The Panel recommends that the current regional system for training and licensing pilots be maintained as a responsibility of each pilotage authority.*

## Pool of Pilot Candidates

### Background

In some regions, there are concerns about the long-term decline of the pool of qualified pilot candidates. Changes in trading patterns, the restructuring of the shipping industry, salary competitiveness and a decline in entry-level qualifications are factors contributing to this decline.

Canadian shipowners report that the availability of qualified mariners is a world-wide problem and that Canada is not immune to the shortages. They share the concern raised by certain pilotage authorities, since many pilot candidates are drawn from the ranks of their masters and officers.

### Issues

#### ATLANTIC PILOTAGE AUTHORITY

The APA is concerned about its ability to attract qualified candidates due to the structure of pilotage in its jurisdiction and the competing salary pressures from the marine industry. It says there is no homogenous pool of candidates in the Atlantic region because the sources of

potential candidates and the compulsory ports are scattered throughout the four Atlantic provinces. This situation limits the number of potential candidates with adequate local knowledge and practical experience in compulsory areas. The APA pilots are also concerned about the level of qualifications demonstrated by new pilot trainees.

The APA is reviewing its apprenticeship program for pilot candidates to determine whether a revised and expanded program would enable the APA to amend entry-level requirements by accepting candidates with the requisite mariner qualifications but less local practical experience. The APA is however concerned that expanding apprenticeship and related training would impose a financial burden on the APA that it would ultimately have to pass on to the industry through tariff action and increased costs of pilotage services.

#### LAURENTIAN PILOTAGE AUTHORITY

No concerns were raised in the LPA region with regard to present and future pools of pilot candidates.

#### GREAT LAKES PILOTAGE AUTHORITY

The GLPA pilots are concerned that changes in the structure of the Canadian shipping industry in the Great Lakes region are resulting in a shortage of mariners who have the qualifications and practical experience to apply as pilot candidates. They observed that mariners who do apply are less experienced and qualified than their predecessors and believe that the GLPA apprenticeship and training program should be

reviewed to address the lack of entry-level experience and skills. The pilots point out that the Gauthier report recognized the ever-diminishing pool of experienced ship officers in the Great Lakes. The report noted that, as a result of the shrinking pool, pilots will have to be recruited among mariners who do not have significant experience in the Great Lakes region.

The CSA does not agree with the pilots and says that most pilot candidates are masters or officers of its members' fleets who, for the most part, have been trained as mariners at Canadian marine training centres and have subsequently acquired extensive practical experience. While the CSA does not perceive a shortage of eligible pilot candidates in the GLPA region, Canadian shipowners are concerned about losing their trained and experienced masters and officers to the pilot groups because of better salaries and working conditions.

Although the GLPA recognizes the potential long-term shortage of eligible candidates, it believes that the current pool is adequate to meet the short-term demand. While it is monitoring the situation, the GLPA is concerned that expanding the apprenticeship program to increase the pool of pilot candidates would impose a logistic and financial burden on the GLPA. The GLPA points out that a recent review by the Auditor General did not reveal any shortcomings in its recruiting and training process.

## PACIFIC PILOTAGE AUTHORITY

The CSBC is concerned about the shrinking pool of qualified pilot candidates and about the impact the situation may ultimately have on the safety of pilotage services in the PPA region. It says that, due to the restructuring of the shipping industry on the West Coast, pilot trainees are less experienced and do not have the qualifications and skills required under the current recruiting and licensing system. Fewer candidates have the necessary coast-wide knowledge; due to the changing nature of coastal shipping patterns, candidates' knowledge is increasingly localized. The CSBC believes, however, that options exist to resolve the problem, such as the review of the recruitment and apprenticeship process.

Based on their knowledge of the west coast marine community, the coastal pilots are confident that there is a sufficient number of qualified and experienced mariners to ensure an adequate pool of pilots in the foreseeable future. They are participating, however, with the PPA and the CSBC in the review of the matter.

Through a special committee comprising pilots and CSBC representatives, the PPA is assessing long-term needs and the availability of qualified pilot candidates. The PPA says the results of the study, which includes a survey of Canadian masters and officers on the West Coast, will be available soon. With respect to apprenticeship, the PPA says that a familiarization period and a longer apprenticeship program customized to the needs of candidates



will allow for a larger pool. Further, if required, the PPA will adapt the entry-level examination process to allow pilot candidates with less coast-wide experience to apply. The PPA also says that, while the study addresses long-term needs, short-term requirements can be met from the eligibility list.

## Analysis

Pilotage being a compulsory requirement, shipowners must be assured that pilotage services will not be disrupted as a result of a shortage of pilot candidates. Since pilotage authorities are responsible for ensuring the safety and efficiency of pilotage services in their compulsory waters, and since they are the only providers of pilotage services, they should be required to give users this assurance by monitoring the short- and long-term pools of qualified candidates.

The Panel notes that the pilotage authorities are conscious of the situation in their regions and that some are undertaking special measures to address the pool of qualified candidates.

## Panel Recommendation No. 8

*The Panel recommends that the pilotage authorities be required to report on the pool of qualified pilot candidates in their annual reports. In doing so, each pilotage authority should outline any problems it has identified in its region, the results of any review or study, and the corrective measures taken or contemplated.*

# Pilot Quality Assurance

## Background

Under the *Canada Shipping Act*, ship masters and officers are subjected to a mariner competency certification process administered by Transport Canada, designed to assess their competency every five years. While pilotage authorities have various means to monitor the overall performance of pilots, such as incidents statistics, there is currently no formal process for regularly assessing pilot competence. Further, the pilotage authorities do not have a system that allows them to assess the quality of the pilotage services that pilots provide to users.

## Issues

Certain shipowners are concerned about the lack of structured and regular assessment of licensed pilots' skills and currency. While they recognize the competence of pilots, they believe that such a periodic assessment should be mandatory as an essential element of safe pilotage services. They believe that pilots, like their masters and officers, should undergo regular competency assessments to maintain the validity of their licence. In addition to Transport Canada's five-year competency certification process, some CSA members regularly assess the competence of their masters and officers. The annual assessment of masters is an on-shore process performed by the shipowner's management, while the seasonal assessment of deck officers is conducted by ship masters. The CSA says that pilots should be assessed every

two or three years, and that shipowners should help develop any formal competence and quality assurance assessment process.

The CSA says a formal assessment process for pilots should be implemented through legislation or national regulations. It is concerned that a voluntary approach by the pilotage authorities might result in inconsistency between regions and a discretionary application of the process. The CSBC believes the pilotage authorities should develop a mandatory assessment process, in conjunction with existing pilot skills upgrading programs and in accordance with international standards. It was pointed out that licensed pilots are not presently subject to the IMO International Safety Management's requirement that all masters and officers regularly demonstrate and document that they have appropriate qualifications and updated skills.

The pilots endorse the concept of assessment on a regional basis and are prepared to help develop fair and reasonable methods. They also support the IMO's modernization of its guidelines for the regular assessment of pilots' skills. The pilots recognize that a structured and regular assessment of pilots' competence and quality of service, in combination with ongoing training, will enhance the safety and efficiency of pilotage services. If such an assessment however takes place, they believe that the pilotage skills of masters and officers who hold a pilotage certificate should also be assessed. The pilots submit that the competence of masters and mariners as pilotage certificate holders is not part of Transport Canada's five-

year competency certification process, and that those holding a pilotage certificate should undergo a separate pilotage skills assessment by the pilotage authorities.

The pilotage authorities all agree that a structured process for regularly assessing pilots' competence and quality of services will help enhance the safety and efficiency of pilotage services. While it is discussing the issue with the other pilotage authorities, the PPA is currently addressing the matter of pilots' periodic assessment in the context of its ongoing review of coast-wide pilot currency. The PPA, the CSBC and the pilots are discussing an approach to ensuring pilots' documented currency. They are also developing the Pacific Pilot Validation Endorsement Program, which would periodically assess pilot competence and quality assurance. In the Atlantic pilotage region, the APA is reviewing the assessment of pilots and examining an annual system used in Australia for port pilots. It expects to implement a similar system by the end of 2000. The LPA has recommended that Transport Canada publish general pilotage regulations that would impose an assessment program for licensed pilots comparable to the current requirement for masters and officers. The GLPA agrees there is a need for a regular pilot assessment process.

## Analysis

Since pilotage authorities and pilots provide a service to users, pilotage should be subjected to the elements traditionally attached to a service industry, such as quality assurance. While

competency must be continuously assessed and enhanced in the interest of safety, the Panel believes that quality assurance is also important, particularly in a regulated monopoly, and should be regularly assessed.

The Panel notes that pilotage authorities and pilots agree on the importance of a fair and reasonable competence and quality assurance process that will benefit all parties. Further, the Panel notes that the report of the Bernier Commission contemplated a form of pilot assessment. More recently, the IMO has taken action to modernize Resolution 485(XII), which will provide guidelines for regularly evaluating pilots' competence and performance.

On the issue of frequency of pilot assessment, the Panel believes this matter should be left to the pilotage authorities. The Panel, however, believes that assessments should be done regularly and not less than every five years. The Panel also believes that authorities should establish such a quality assurance system after consulting with interested parties.

With respect to the pilots' submission that masters and officers holding a pilotage certificate should be assessed, the Panel notes that the situations are not identical; quality assurance for masters and officers is not required because they do not provide pilotage services to third parties. Pilotage authorities may consider introducing such a system for masters and officers holding a pilotage certificate, where deemed appropriate or necessary, once a system to assess quality assurance for pilots is in place.

## Panel Recommendation No. 9

*The Panel recommends that the pilotage authorities be required to develop and implement a fair and reasonable system for assessing pilots' competence and quality of service, after consultation with interested parties. This assessment process should take place regularly and not less than every five years.*

## Pacific Pilotage Authority Coast-wide Licensing and Dispatching

There are two areas of concern in the PPA region with respect to this matter: the overall coast-wide licensing and dispatching of pilots, and the establishment of a separate northern pilotage area at Prince Rupert.

### Background

Earlier in the review, the shipping industry raised concerns that the size and complexity of the coastal compulsory pilotage area and the changing shipping patterns on the West Coast may affect pilots' currency under the current licensing and dispatching system, and that this may, in turn, affect the safety of pilotage services.

The examination of coast-wide licensing conducted by the 1995 Pacific Pilotage Task Force (1995 Task Force) concluded that the PPA system was the most efficient and cost-effective means of providing pilotage services in the coastal region.

The Auditor General's recent overall examination of the PPA's pilotage services found the current coast-wide licensing system to be safe and cost efficient.

More recently, following consultations, the PPA, the pilots and the CSBC agreed that the current coast-wide licensing system will be maintained, subject to the establishment of a structured pilots' currency evaluation system.

## Issues

While the shipping industry does not question the professionalism of the pilots, it believes there is a need to examine the manner in which the service is provided. It says the status quo should not be the preferred option. It is concerned about the ability of pilots to maintain coast-wide experience with fewer trips to smaller outports and believes that this situation compromises the safety of pilotage services in these less-frequented areas.

Following a series of marine incidents that occurred in coastal waters between 1996 and 1998, the CSBC submitted its concerns to the PPA, stating it doubts that pilots could maintain coast-wide experience with fewer trips to smaller outports and that the coast-wide licensing and dispatching system practised by the BC Coast Pilots could continue to deliver safe pilotage. The industry requested that the PPA consider two options to address its concerns:

- expanding training for new and licensed pilots through extended apprenticeship, simulation and familiarization periods, to help pilots achieve and maintain currency; and

- exploring area-specific licensing and partial dismantling of the coast-wide dispatching system.

Although it initially favoured a full examination of a regional licensing and dispatching system, the industry is now working with the PPA and the coastal pilots to develop a coast-wide assessment system to ensure pilots' currency in all coastal pilotage areas. This approach is consistent with the first option proposed by the industry.

The coastal pilots are convinced that the current coast-wide licensing system is safe and efficient. They say the current dispatch system ensures that pilots are assigned to all areas on a rotational basis and, with the exception of four low-traffic ports on the west coast of Vancouver Island, pilots visit all ports with adequate frequency. Further, the pilots monitor their own coast-wide exposure and request dispatching to less-frequented areas, if they have doubts about their local knowledge. The pilots submit that all past studies of pilotage on the West Coast, including those in which the industry participated, have demonstrated that the coast-wide licensing and dispatching system is the most efficient means of delivering the service.

With regard to the concerns raised by the shipping industry following marine incidents in coastal areas, the pilots say there was no discernable pattern to these incidents and that it was clearly established that pilot currency was not a factor in three of four instances. Nevertheless, pilots support constructive changes to the

current structure and will contribute to any undertaking designed to ensure the safety of pilotage services in all coastal areas. They have proposed the Pilot Currency Examination Board, consisting of PPA, pilot and industry representatives, which would regularly assess the currency of coastal pilots in coastal compulsory waters, including low-traffic ports. Appropriate training and assignment measures would be taken to address currency deficiencies.

The PPA believes that, to serve its customers efficiently, it needs a sufficient number of pilots with experience in the less-frequented ports primarily on the west coast of Vancouver Island. The PPA submits that changes in trading patterns, particularly in the forestry industry, have resulted in fewer vessels calling at outports along the coast, and that this trend is likely to continue. In view of this situation and in response to the shipping industry's concerns about pilots' coast-wide currency, the PPA has proposed the Pacific Pilot Validation Endorsement process to assess pilots' currency. The PPA's Pilot Training and Examination Committee would administer this process, and pilots would be required to participate in it to maintain their licences. The validation endorsement process would classify less-frequented ports and establish criteria for pilots' currency at these ports, based on the frequency of pilot assignments.

The PPA, the pilots and the industry are currently discussing the proposal. The parties have agreed to maintain the existing coast-wide licensing and dispatching system, and agree that ongoing pilot training is needed to help pilots

become and stay current, with the understanding that a sufficient number of qualified pilots will be available at all times to meet the dispatching demand at coastal outports. They have not determined the expected increase in training costs and the source of funding. The PPA, the pilots and the industry joint committee are currently reviewing apprenticeship training, sourcing of pilots, fatigue and quality assurance, among other related issues.

## Analysis

In considering the matter, the Panel noted the conclusion of the 1995 Task Force that the current coast-wide system is cost efficient and provides the most effective licensing and dispatching system. Based on its review of the information submitted during the consultations, the Panel believes this conclusion remains valid today.

With respect to the issue of pilots' currency, the Panel notes that, through training, familiarization and rotational dispatch, pilots can maintain local experience in all compulsory waters, including in less-frequented ports. While it agrees that these measures help improve pilots' currency, the Panel believes there is a need for a pilots' currency assessment system to complement rotational dispatch. The Panel believes such a system would enhance users' confidence in the safety and efficiency of pilotage services and would show that their concerns are being addressed.

On this matter, the Panel observes that the PPA, the pilots and the industry agree that the

present coast-wide licensing and dispatching system should be maintained. They also agree that a structured process should be established to ensure the currency of pilots in all compulsory waters in coastal areas. In this regard, the Panel notes that the PPA has proposed the PPVE process, under which a committee on pilot training and examination would regularly assess pilots' currency. These discussions show the parties are committed to ensuring the safety and efficiency of pilotage services in the region and to resolving the issue of pilots' currency in low-traffic compulsory areas. The Panel believes, however, that, in addition to those participating in the current discussion on the matter, other interested parties, such as port authorities, should be kept informed during the development of the proposed system.

### Panel Recommendation No. 10

*The Panel recommends that the PPA coast-wide system for pilot licensing and dispatching be maintained.*

## Pilotage Services at Prince Rupert

### Background

Normally, the pilot rotation system at Prince Rupert provides for two coastal pilots on duty at all times. One of these pilots is entirely dedicated to Prince Rupert and cannot be asked to perform duties in other compulsory areas while on assignment at Prince Rupert. The rotation enables all coastal pilots to serve this port regularly and acquire local experience. On demand,

the two Prince Rupert pilots may be supplemented by pilots dispatched from other compulsory areas.

The Prince Rupert Port Authority has historically advocated the permanent assignment of pilots at that port. It maintains that the level of traffic in this compulsory area justifies such a departure from the current rotational assignment system and that permanent assignment would allow pilots to improve local knowledge and would reduce pilotage costs, thereby enhancing safety and efficiency.

The 1995 Task Force concluded that the current pilot assignment system at Prince Rupert provides for safe and efficient pilotage services, and that a system based on a permanent pilot base would not be beneficial under the current PPA licensing and dispatching regime.

### Issues

The Prince Rupert Port Authority submits that, although the Panel may recommend that the current system is the best approach, the Authority's position should be examined further. In asking for an impartial examination, it submits that the review of pilotage issues offers an opportunity to explore options for a new licensing system on the West Coast and that the status quo is not the only option. The Port Authority is of the opinion the PPA and the pilots are unwilling to discuss the issue, and that the 1995 Task Force did not consider Prince Rupert's interests. The Port Authority says that, based on its own examination of the pilotage

assignment system, a pilot base at Prince Rupert would be cost effective and would enhance the competitiveness of the northern transportation system.

Shippers offer mixed views on the issues. Some say that both coast-wide and regional systems have merit but they are not convinced that a change from a coast-wide to a regional system would improve efficiency and reduce costs. Others promote the establishment of a northern pilotage area and say pilots should be permanently assigned to certain ports to enhance dispatch efficiency and reduce operating costs.

The CSBC is of the opinion that the present pilotage system at Prince Rupert works and that there is no evidence that the permanent assignment of pilots would reduce costs to users or improve safety. The industry participated in the work of the 1995 Task Force and agreed with its conclusions.

The pilots say that the permanent assignment of pilots at Prince Rupert has been studied extensively and that there is general agreement that such a system would not enhance safety and efficiency. With respect to safety, the pilots are convinced that their extensive training and familiarization program, in combination with the current rotational dispatch system, ensures their currency at Prince Rupert. They are however prepared

to work with the Prince Rupert Port Authority and the PPA to enhance pilotage services at this port.

The PPA believes the present system works well and sees no reason to change it. Nevertheless, like the pilots, the PPA is willing to consult with the interested parties to identify any opportunities that would enhance safety and maximize efficiency.

## Analysis

The Panel supports the conclusion of the 1995 Task Force that the current system is safe and efficient. As the Task Force's report stated, pilots permanently based at Prince Rupert would be subject to fluctuations in levels of traffic and would be underutilized for periods of time, resulting in high costs and overall inefficiencies. As well, these pilots would lose their coast-wide currency.

The Panel also notes that the shipping industry serving Prince Rupert supports the coast-wide system and believes that the current rotational assignment of pilots at this port is safe and efficient.

## Panel Recommendation No. 11

*The Panel recommends that the PPA, under its current coast-wide licensing and dispatching regime, continue to provide pilotage services at Prince Rupert on a rotational pilot assignment basis.*





## Section 3

# Pilot Certification Process

## *for Masters and Officers*

### Introduction

The pilot certification process allows Canadian masters and officers who meet certain qualifications and who have successfully completed examinations to obtain a pilotage certificate. This certificate allows them to navigate their own ships in compulsory areas without a licensed pilot on board. This provision in the *Pilotage Act* recognizes that qualified mariners, as well as licensed pilots, are able to navigate ships safely in compulsory areas.

In 1968, the Bernier Royal Commission on Pilotage reported that none of the pilotage authorities had provisions for issuing pilotage certificates, even though the power to make such regulations existed in the 1934 *Canada Shipping Act*. Bernier noted that the pilotage authorities could use certification to exclude ships or classes of ships from compulsory pilotage. Bernier commented as follows:

Direct exemptions can be granted to vessels whose navigation is not considered to imply any safety risk in local circumstances, and indirect exemptions to a class of vessels by issuing pilotage certificates to those masters and mates the Pilotage Authority is satisfied possess the degree of local knowledge and experience which has been established in the regulations as necessary for safe navigation.

Because the basic aim of pilotage legislation is to promote safety of navigation, it should never be distorted by being used as a means of either justifying an unnecessary number of pilots or exacting from shipping payment for services that are not required.

The Act should stipulate that it is an absolute statutory right for any person who possesses the required competency and meets the prescribed conditions to obtain a personal pilotage exemption certificate.



Section 22 of the *Pilotage Act* continued the provision in the 1934 *Canada Shipping Act* for issuing pilotage certificates in addition to pilot licences. This provision empowers an authority to issue a certificate to applicants with the requisite skills and knowledge of the compulsory area equivalent to that of an applicant for a licence. The *Pilotage Act* also stipulates that all licence and certificate holders must be Canadian citizens or landed immigrants.

The General Pilotage Regulations require licence or certificate holders to have specific certificates of competency, navigational qualifications and experience at sea.

Section 20 of the *Pilotage Act* also empowers each authority to make regulations prescribing:

- the classes of licences or pilotage certificates;
- the qualifications that a holder of a pilotage certificate must have in terms of local knowledge, skill, experience and language proficiency; and
- the manner of determining whether a person has the necessary qualifications.

Each pilotage authority has established its own qualifications for certificate holders and has established an examination board to determine whether candidates have the required qualifications.

In general, the following regulatory requirements must be met by candidates seeking certificates:

- be medically fit;
- hold specific marine certificates;
- have taken specific marine courses;

- have a working knowledge of the required official language(s);
- have logged a specific number of trips in the compulsory area; and
- be a regular member of the crew of the ship for which they will perform pilot duties.

The approach to pilotage certification for ship masters and officers is quite different in each of the four authorities. In the PPA, pilotage certification is unnecessary due to the tonnage limitation for Canadian vessels. In the GLPA, an exemption process for Canadian ships has gradually evolved, so certification has not been applied. In the APA, the certification process has been used since the Authority was established. In the LPA, the certification process has only been used since 1987, and only in District 2.

Because each pilotage authority treats certification very differently, this report discusses each authority separately.

Throughout the regional and national meetings, members of the CSA described problems they had encountered with existing certification processes over the years and proposed an altogether different approach designed to avoid certification and its attendant difficulties. These shipowners advocate a national exemption system based on national standards that would permit Canadian masters and officers to pilot vessels in compulsory pilotage areas in Canada. They base this proposal on their conviction that Canadian masters and officers are highly trained and also have continuous access to advanced navigational technology. Such an exemption

system would expand the system of exemptions presently in effect in the GLPA, a system that the shipowners believe addresses their concerns about economics, safety and the environment.

The CSA's proposed approach would be a self-administered program for determining the competency of masters and officers to pilot their own ships. This proposal is reviewed in detail in the GLPA section of this discussion.

The CSA argues that the same standards for pilotage must be applied across the country. They do not want to just "fine tune" the existing certification process, which they say is unacceptable, especially in the LPA region.

The Panel does not believe that a national exemption scheme, such as that proposed by CSA, is appropriate for the pilotage system in Canada. Each pilotage region is different and, generally, one solution does not fit all. The Panel has therefore identified specific problems in each region and has sought regional solutions for each.

## Atlantic Pilotage Authority

### Background

As has been noted, the APA has used the certification process since 1972. Between 1972 and 1999, it granted 88 certificates. At present, 19 certificates are in effect for 15 mariners.

The examination board for candidates seeking certificates consists of a representative of the APA, two licensed pilots who are knowledgeable about the pilotage areas and may include an industry observer. The APA's regulations

specify that the examination may include questions related to local knowledge of the compulsory area; radar interpretation; relevant harbour, marine and pilotage regulations; ship handling; and the use of modern navigational aids.

The examination for certification has two parts, each of which lasts approximately two hours: a written exam followed by an oral exam. The written exam focuses on local knowledge, while the oral exam focuses on a series of specific scenarios where the candidate is expected to explain the procedures for safe navigation and to exercise judgement.

### Issues

In the APA region, two main topics related to certification were identified:

- lack of a detailed syllabus for certification candidates; and
- certification of a mooring master at the Canaport monobuoy.

### Analysis

#### SYLLABUS FOR CERTIFICATION CANDIDATES

Canadian shipowners say their masters believe that there is neither clear indication in the APA regulations of the knowledge needed for certification nor of the way a candidate is expected to conduct himself/herself in front of the examination board.

The APA, pilots and foreign shipowners think that the certification process works reasonably well, as shown by the number of certificates issued since the *Pilotage Act* came into

force. Foreign shipowners emphasize that they have to be confident that qualified people are in command of all ships in compulsory waters and that certification is the only way to ensure this.

The Authority notes that the Atlantic Pilotage Regulations outline the subject matter needed by candidates seeking certification. It also notes that all of the questions in any examination are based on information readily available to candidates from public sources. The APA says that, during the oral exam, the examination board questions candidates mainly on local knowledge. There have been no complaints about the certification process. The APA often sends applications for certification to shipowners but gets no response.

The APA is willing, however, to review its material to see whether it could describe requirements in more detail, but it would like the CSA to clarify its position in this regard. During the concluding round of regional consultations in the APA region, the Panel asked Canadian shipowners to consult with the APA to discuss the kind of expanded detail that masters and officers want regarding certification. At the time of the last national meeting, the parties had not consulted with each other.

The Panel notes that the certification process has been used extensively from the beginning in this pilotage region. Based on the number of applications and certificates issued, the system appears to be working well. Indeed, Canadian shipowners have not identified major concerns with the APA in the intervening period.

The Panel also notes that shipowners have never raised their concerns about the syllabus directly with the APA. This is not meant to diminish the validity of the concern but rather to put it in perspective when looking at the overall APA certification process. As any process is open for improvement, the Panel believes the APA should try to develop a more detailed outline of the material required for certification and to describe the examination process.

## **Panel Recommendation No. 12**

*The Panel recommends that the Atlantic Pilotage Authority, together with pilots and Canadian shipowners, be required to develop a more detailed outline of material that is relevant for purposes of certification, as well as a description of what is expected in the certification exams.*

## **Certification of the Canaport Mooring Master**

As has been noted, a candidate must be a regular member of a ship's crew to be eligible for certification. Canaport Ltd. has asked to have this regulation changed to allow the certification of mooring masters responsible for berthing and unberthing large tankers at the Canaport monobuoy, which is offshore from Saint John and located within the Saint John compulsory pilotage area. Canaport Ltd. notes that, in an era of ever-increasing government charges, the company must look for ways to economize. Canaport Ltd. argues that the certification of mooring masters would enhance the safety of operations at the monobuoy and

would allow the company to save money on pilotage costs.

Canadian shipowners support the Canaport Ltd. proposal, but the APA, pilots and foreign shipowners oppose it. The pilots are concerned about the close proximity of the monobuoy to the shoreline and cite an environmental study that said a mishap with a large crude carrier would have a devastating ecological impact on the whole Bay of Fundy area. The pilots say they are independent professionals whose purpose is to ensure the safety of navigation. The APA is of the opinion that certifying a mooring master would result in parallel pilotage<sup>10</sup> and would also set a precedent that could prompt other private companies to make similar requests. The APA says pilots make decisions on the basis of safety and are not subject to commercial pressures about the unloading of a product.

The Panel notes that certifying mooring masters would be equivalent to permitting private pilotage, as the mooring master would be an employee of Canaport Ltd. and would be piloting many different foreign-flagged ships at the monobuoy, none of which are owned by Canaport Ltd.

Certifying mooring masters for the Canaport monobuoy would, in the Panel's opinion, constitute the privatization of pilotage services for one segment of the industry. At the

outset of this review, the Panel indicated that commercialization or privatization of pilotage services was not under consideration, as this was not part of the Terms of Reference. The federal government, in enacting the *Canada Marine Act*, rejected the commercialization or privatization of pilotage services when it decided to retain the pilotage authorities established under the *Pilotage Act*.

Even if Canaport's proposal were within the Terms of Reference, the Panel is not convinced that it would enhance safety. Currently, one pilot and one mooring master attend at the mooring of the Canaport monobuoy. There is no basis to conclude that safety would be improved by removing a pilot and replacing him or her with a mooring master who reports to Canaport. In addition, the Panel shares the pilots' concern about possible mishaps involving large crude tankers and their ecological impact on the Bay of Fundy area.

### Panel Recommendation No. 13

*The Panel recommends that section 13 of the Atlantic Pilotage Regulations, which stipulates that a certificate holder must be a regular member of the complement of a ship, not be modified to allow other individuals who are not regular members of the complement of a ship, such as a Canaport mooring master, to be eligible for certification.*

10 The term "parallel pilotage" refers to a situation where a person who has not been licensed as a pilot by an authority carries out pilotage duties for all types of ships. Certified masters or officers are able to perform pilotage duties on their own ships but cannot pilot any other ships. Therefore, certifying a person to pilot all types of ships would duplicate the role of a licensed pilot under the jurisdiction of an authority.

# Laurentian Pilotage Authority

## Background

The current LPA certification examination board consists of one representative from the LPA, three licensed pilots who are knowledgeable about the pilotage areas, and a Coast Guard examiner of masters and mates; the CSA is also entitled to appoint an observer to attend oral exams. The LPA's regulations specify that the examination may include questions related to local knowledge of the compulsory area; radar interpretation; relevant harbour, marine and pilotage regulations; ship handling; and other subjects the examination board considers relevant to pilotage duties. No Canadian masters or officers applied for certificates between 1972 and 1987. Since that time, 30 candidates have applied and 11 certificates have been granted. Nine certificates are in effect at present.

The LPA certification examinations consist of three written exams followed by an oral exam. The written exams focus on general knowledge, collision regulations and local knowledge, while the oral exam focuses on local knowledge, ship handling and regulations. Two of the written exams are three hours long, while the other is two hours long. The oral exam has no specified time period.

## Issues

The certification process has been the source of much controversy among pilots, the LPA and Canadian shipowners, as shown by the fact that

the LPA received no certification applications for the first 15 years, and since then has issued only 11 certificates out of 30 applications.

Canadian shipowners believe that the current certification process is biased and lacks transparency. They argue that the subject matter of the certification exams is not sufficiently defined in the syllabus. They also point to the fact that pilots stand to lose when certificates are granted to masters, and yet they prepare the exam and control the examination board through their majority.

The CSA sees this as a fundamental flaw that affects the credibility of the process and that is substantiated by the low number of successful applicants.

Over the years, the CSA has made a number of proposals to correct this perceived bias. Aside from its proposal to establish a national exemption program, the CSA has proposed a more detailed syllabus that would allow certification applicants to better prepare for the exam. It has also proposed using simulators in the examination process and changing the composition of the examination board to bring more objectivity to the examination process.

Pilots argue that the low number of applications for certificates by Canadian masters shows that few masters are interested in becoming certified due to the difficulty of navigation in LPA compulsory areas, the need for language proficiency, and their current workload and resulting fatigue. Pilots maintain that the certification process is fair and objective, and point to the fact that only one candidate has ever

challenged the outcome of the exam. While the exams may be difficult, pilots argue that they reflect the difficulty of navigation in these compulsory waters and the need to ensure navigational and public safety and to protect the environment. Pilots point to the numerous changes to the certification and examination process as a demonstration of their good faith and their openness to changes that do not affect the safety of navigation.

Foreign shipowners argue that any certification process must maintain the industry's confidence in the ability of an officer in charge of a domestic ship, so that a pilot on a foreign ship would not take evasive action, such as slowing or anchoring when meeting domestic vessels. They stressed the need for continuous and uninterrupted service that allows shipowners to meet established schedules.

The LPA is of the opinion that the current certification process is credible and objective, but needs to be modernized.

## Historical Background

The issues raised by the CSA during the consultations with respect to the certification and examination process are not recent concerns. The transparency of the process, the training of candidates, the composition of the examination board and the use of simulators have all been the subjects of previous studies or reviews. Since the situation has evolved over the years, a brief overview of these studies and an analysis of recent developments is necessary to better understand the current situation.

## THE BLOUIN COMMITTEE

The CSA raised the issue of pilotage certificates in the context of an investigation by the Canadian Transport Commission (CTC) in 1985 into an LPA tariff proposal. At that time, Canadian shipowners indicated that no masters had ever applied for certification, as they felt the process was so difficult that it was virtually impossible to succeed. As well, masters said it was unfair to have to face an examination board dominated by pilots. In addition, masters did not want to subject themselves to exams on material they had already covered when obtaining their certificates of competency from Transport Canada.

In September 1985, during the course of the CTC investigation, the LPA established the Blouin Committee to examine a number of issues, including the issuance of pilotage certificates. In its final report of May 1987, the Blouin Committee concluded that the pilot corporations felt that candidates for a pilotage certificate must have exactly the same level of knowledge and skill as that of a pilot.

The Blouin Committee concluded that pilots needed to realize that there is a considerable difference between a pilot and a certificate holder who navigates his own ship, and made the following recommendations regarding the certification process in the LPA.

- The knowledge required to navigate safely must be well defined for candidates and the material must be described for ease of understanding.

- A training program for certification candidates should be set up, under the responsibility of the LPA, with the involvement of the Québec Marine Institute at Rimouski, pilots and the industry.
- The LPA should establish examination procedures.
- The examination committee should have five members and pilots should not comprise the majority.

### THE 1992 MEMORANDUM OF UNDERSTANDING

There is no indication that the LPA took any immediate action on the Blouin recommendations. The situation remained unresolved and in March 1992, Canadian shipowners took the unprecedented step of refusing to pay pilotage charges to the Authority; all charges were paid into a trust fund. The objective of this endeavour was to get the federal government to act on pilotage issues.

In September 1992, the LPA and the CSA signed a memorandum of understanding, which brought about the following changes to the certification process.

- One of the LPA representatives on the examination board to be replaced by a Coast Guard Examiner of Masters and Mates.
- A CSA-nominated observer to be allowed to attend oral exams.
- The oral exams to be recorded.
- Part of the oral exam to be converted into a written exam.
- Some of the material candidates had already been tested on when obtaining their Transport Canada certificate of competency to be removed from the exams.
- Candidates to be required to draw charts of selected parts of the compulsory area during the written exams.

After signing the memorandum of understanding, Canadian shipowners transferred all monies in the trust fund to the LPA. Subsequently, Canadian shipowners said the LPA was not respecting the agreed changes, because much of the material covered by Transport Canada requirements remained in the syllabus and the accuracy requirements for chart drawings were too stringent.

### THE GAUTHIER REPORT

In January 1996, Johanne Gauthier<sup>11</sup> reported to Transport Canada on an examination of the LPA certification process following consultations with the LPA, pilots, and Canadian and foreign shipowners. The Minister appointed Gauthier to discuss with the parties their concerns about exemptions, waivers and pilotage certificates in the LPA region. Gauthier noted that Canadian shipowners initially advocated total exemption of their vessels from compulsory pilotage. They later proposed, however, an alternative exemption scheme for mariners who had made a specified number of trips in the compulsory area, who had taken simulator training with BRM, and whose proficiency, local knowledge and language skills had been

<sup>11</sup> Johanne Gauthier is a legal counsel with marine-related experience with the Montréal firm of Ogilvy Renault, Barristers and Solicitors.



validated by an LPA representative and a certified master. Gauthier reported that pilots were reluctant to discuss the proposal because they felt it would result in parallel pilotage. The pilots believed that certification, rather than exemption, was the proper approach under the *Pilotage Act*.

Gauthier examined the matter of a syllabus for certification candidates and noted that pilots felt the syllabus as modified in 1992 was clear and complete but shipowners believed it needed further revision. Gauthier tried to get the parties to agree to clarify the syllabus but did not succeed. She reported that the newly appointed chairman of the LPA intended to discuss the syllabus with pilots and shipowners with a view to making further changes, such as eliminating the requirement to draw charts, introduced in 1992, and reducing the extent of written exams. Gauthier concluded that the consultation process was not complete and that consensus on an approach was not likely before the end of 1996.

## THE KPMG REPORT

In early 1997, Transport Canada and the CSA asked KPMG Consulting to examine the LPA certification process and to propose ways of using new technologies and techniques to modernize the certification process.

In its report of January 1998, KPMG concluded that the LPA certification process should be modernized and that greater recognition should be given to candidates' work experience and to recent technological developments.

KPMG recommended that the LPA create a common body of knowledge setting out what candidates were expected to know; create a structured process for candidates to follow when preparing for examinations; change the oral examination from one based on open-ended questions to one based on standards and objectives; and use simulators when training and evaluating candidates.

## Analysis

To function properly, the certification process must be accepted by those who are subject to it. In turn, participants will accept the process only if they perceive it to be fair, transparent and impartial. From the review of the various studies and analyses performed over the years, it is fair to say that Canadian shipowners who are subject to the current process do not accept it. Unless this problem is resolved, one can expect further studies and periodic reviews. Demonstrating fairness, transparency and impartiality is much more difficult when the certification candidates are convinced that the process is controlled by a group with a vested interest in granting as few certificates as possible.

The CSA's preferred approach to addressing this matter was a national exemption program. While this approach was rejected, as described earlier in this chapter, the Panel believes that the current certification process needs to be modernized to respond to the challenges it faces.

Aside from its national exemption program, the CSA has also proposed adjustments to the current certification process to respond to



perceived bias and lack of transparency. These include

- a more detailed syllabus to help candidates better prepare for the examination;
- the use of simulators in the examination process to bring more objectivity to the examination process; and
- a change in the composition of the examination board to remove any perception that the board is controlled by a group with a vested interest in controlling entry to the profession.

While these adjustments may be valid, the Panel believes they may address symptoms only, not the root causes of the problems the CSA perceives in the existing system. The Panel is convinced that a more fundamental review is required. As an example, a more detailed syllabus alone falls short of the candidate training program recommended by the Blouin Committee, a recommendation with which the Panel agrees. Similarly, using simulators in the examination process does not address the need for examination procedures and a proper evaluation guide.

For these reasons, the Panel believes that the proper approach is the one which the LPA has initiated with the interested parties at the beginning of this review process.

The LPA set up a Certification Steering Committee in the fall of 1998 to modernize the certification process,<sup>12</sup> as recommended by KPMG. The Steering Committee comprises

representatives of the LPA, the CSA, Transport Canada, the St. Lawrence Shipowners Association (SLSA) and the Québec Marine Institute at Rimouski. The Steering Committee decided to develop a competency-based program for certification, and retained the Marine Institute to develop a methodology for modernizing the certification process. The Institute proposed a six-stage process to achieve this objective.

- Phase 1: Analyze the work situation; describe the profession and its tasks, and the required skills and behaviour; make suggestions for training.
- Phase 2: Design a training proposal.
- Phase 3: Validate the training proposal.
- Phase 4: Draft the training program; determine what candidates must know, and the associated objectives and standards.
- Phase 5: Draft a teaching guide for candidates that describes the objectives and standards of the teaching program and the weight given to each competency element; develop learning approaches and strategies, and a descriptive bibliography to be used as a reference.
- Phase 6: Recommend an evaluation guide that describes evaluation items, the weight of each item and the recommended method of evaluation for each competency.

The first three phases of the process were completed in February and March 1999. In May 1999, the draft training program (Phase 4)

<sup>12</sup> At present, the examination of the certification process is focused on District 2, the only district where Canadian masters and officers have applied for and obtained pilotage certificates.

was completed and submitted to the Steering Committee. The training program was developed by a working subcommittee comprising representatives of the LPA, pilots, certified masters, Canadian masters and the Marine Institute, and an adult education specialist. The draft training program was distributed to all parties for comment. In June 1999, the Steering Committee officially accepted the training program and decided to proceed with the last two phases of the process: developing the teaching guide and the evaluation guide. At the last national meeting, the Panel learned that the input of various parties would be sought in the development of both of these guides. The documents are expected to be completed by the middle of November 1999. After the Certification Steering Committee and the LPA Board of Directors approve these guides, the modified certification process is expected to be implemented in early 2000.

While the most critical parts of this six-phase approach are the two remaining phases, the Panel is encouraged by the consensus that has developed on the first four phases and the agreement of all parties to proceed with the last two phases. Consensus on the building blocks is essential to achieve a fair and transparent certification process.

While the CSA has reservations about a modified certification process being adopted and implemented, the SLSA fully supports the six-phase program leading to a more structured

certification process. Pilots are committed to continuing to help develop a modernized certification process.

### DETAILED SYLLABUS

With respect to the CSA's request for a more detailed syllabus, the training program that the parties are currently reviewing consists of a detailed description of what candidates need to know to plan a trip through the district, to navigate their ship in the confined waters of the district and to carry out emergency manoeuvres. This detailed program totals 270 hours of study and training to prepare candidates for the certification exams. Additional time would be required should a candidate wish to be certified for navigation in ice, for docking procedures at certain ports and for bridge resource management — 30 hours for each element. As previously discussed, all participants support this training program and the Certification Steering Committee has accepted it.

The teaching guide for the revised certification process will include a bibliography related to each of the elements of required knowledge in the training program. This bibliography will enable candidates to locate and obtain relevant material.

The Panel believes that the teaching guide for certification candidates should address the CSA's concerns about the syllabus and the definition of source material.

## **USE OF SIMULATORS IN THE EXAMINATION PROCESS**

The CSA believes that using simulators would reduce reliance on oral exams to establish a candidate's competence and would make the evaluation process more objective. Following the June 1999 national meeting, pilots said they had no objection to using simulators or onboard ship handling as part of the examination process, as long as these were not considered substitutes for the examination board's assessment of a candidate's local knowledge. The LPA notes that the oral exam tests candidates' local knowledge rather than their ship handling skills, so a simulator could not be used as a substitute for the oral exam.

With respect to the use of simulators, the Marine Institute of Memorial University says simulators are ideal for testing behavioural characteristics and skills. The Institute points out that simulators can be used to examine candidates in a variety of pilotage situations without putting personnel, vessels or cargo at risk.

In the discussions with the representative of the Québec Marine Institute at Rimouski, the Panel was informed that when competency is being assessed, not only knowledge but ability, aptitude and perception must also be evaluated. Knowledge may be evaluated by a written or oral exam, but to test a candidate's skills, he/she must demonstrate what they are capable of doing either on board a ship or on a simulator. This method will allow the examination board to assess the candidate's behaviour, perceptions as well as his interaction with the bridge crew, a requirement of BRM.

As discussed earlier, the LPA Certification Steering Committee is completing the last two phases of its program, namely the teaching guide for candidates and the candidate evaluation guide. The latter guide will describe the evaluation items, the weight of each item and recommended methods of evaluation. While the Panel does not want to prejudge the work of the Committee, it agrees with the Québec Marine Institute that the method of evaluation must be consistent with the factor being evaluated. The pilots' position concerning the use of simulators in the examination process is encouraging and suggests that consensus on this matter is possible. The Panel believes there is merit in using simulators as part of the training and the evaluation of candidates seeking certification.

## **COMPOSITION OF THE EXAMINATION BOARD**

Canadian shipowners point to the number of pilots and to their dominant role on the examination board to support their perception of inherent bias in the process, which decreases a candidate's chance of success. During the consultations, participants suggested that a national certification board be established to conduct all certification examinations in all pilotage regions, or that Transport Canada take over responsibility for conducting such exams. Alternatively, some participants said, one or more certified masters could replace one or more certified pilots on the examination board, and an independent observer could be present during all oral exams.

Foreign shipping interests do not support the idea of a national examination board. They believe that pilotage is regional in nature and therefore examinations should be conducted in a regional context. They do not object, however, to having a certified master on the examination board to give a candidate an additional level of comfort.

Pilots object to any change in the make up of the examination board, stating that experts have to assess the competence of candidates and that pilots are the experts.

The Panel notes that anyone evaluating candidates must be seen to be impartial. As already discussed, this presents a challenge when candidates believe that the person conducting the evaluation has an inherent interest in limiting the number of successful applicants. The Certification Steering Committee is considering this issue as it develops the candidate evaluation guide and the methods of evaluation. The Panel is convinced that a well-structured exam with specific objectives known to the candidate in advance will alleviate some of the concerns.

In addition, if the Steering Committee maintains the examination board, the Panel agrees with the Blouin Committee recommendation that pilots should not constitute the majority on the Board. The Panel agrees with the pilots that they have in-depth knowledge of the compulsory area and are best able to assess candidates in this regard. A certificated master is also, however, a professional with local knowledge and the skills necessary to pilot his vessel in the pilotage area under consideration. The

Panel believes that a certificated master should replace one of the three pilots currently on the examination board.

The LPA must continue to administer and supervise the evaluation of candidates, since it is responsible for safety of navigation. Under a revised certification process, where candidates are assessed in accordance with an evaluation guide, a representative of the LPA must continue to chair the examination board. The Panel believes the chairman of the examination board must be responsible for ensuring that the evaluation guide is properly followed and that the recommended methods of evaluation are implemented. As such, this individual will require a clear understanding of the different forms of evaluation and the purpose of each one. In the Panel's view, the chairman will need specialized training in the methods and purposes of evaluation.

## Panel Recommendation No. 14

*The Panel recommends that the Laurentian Pilotage Authority be required to implement a modernized certification process for LPA District 2, based on a training and evaluation program adopted by the LPA Certification Steering Committee. A modernized certification process will include the following elements:*

- *a competency-based training program that includes details on the required abilities, the context of their application and the level of performance required to achieve certification;*
- *a teaching guide that includes, for each of the required abilities, teaching and*

*learning methods and bibliographical references to help candidates prepare for certification examinations;*

- *an evaluation guide to be used by the examination board, together with recommended methods of evaluation for each part of the examination, including, where appropriate, the use of simulators or onboard ship handling;*
- *an examination board made up of one LPA representative as the presiding member, two pilots, one certified master, and one Transport Canada representative; and*
- *the training of the chairman of the examination board in the methods and purposes of evaluation.*

*The Panel recommends that the Laurentian Pilotage Authority be required to extend to District 1 the modernized certification process developed for District 2.*

## Great Lakes Pilotage Authority

### Background

While the GLPA's regulations contain provisions for granting certificates to Canadian masters and officers, the regulations also exempt from compulsory pilotage Canadian ships under the command of Canadian officers who are regular members of the complement of the ship and who have made a minimum of 10 trips in the compulsory area in the previous three years. As a result, the GLPA does not use the certification provisions.

The exemption for Canadian vessels, introduced when the *Pilotage Act* came into force, was intended to be a temporary measure to

cover Canadian masters and officers until they could become certified to pilot their own ships. Canadian masters did not apply, however, for certificates and, after a time, the exemption for Canadian ships became an established practice and was embodied in the GLPA's regulations.

In May 1988, the GLPA proposed regulatory amendments to strengthen the requirements that Canadian masters and officers must meet if the vessels under their command are to be exempted from compulsory pilotage in GLPA designated areas. The GLPA proposed to

- define "regular member of the complement of a ship";
- require officers to have performed 15 one-way trips in the compulsory area in the past three years, with five of these trips in the 12 months preceding the request for exemption; and
- require a ship in a compulsory area to have two qualified officers — that is, officers who have met the minimum trip requirements — one of whom is master on board.

Various parties filed objections and the Minister appointed Johanne Gauthier to investigate the proposed amendments. In her report of February 1990, Gauthier made a number of recommendations that were more stringent than those proposed by the GLPA. She recommended that

- the qualified officer on board the vessel with the master in compulsory areas have a first mate rating;

- the masters and qualified officers provide proof that they were on the bridge of the ship for each of the qualifying 15 trips in compulsory areas; and
- ships that constitute a risk to safety of navigation be subject to having pilots on board, and that vessels carrying dangerous or hazardous goods be ineligible for exemption.

## Issues

Pilots submit that the current exemption scheme is an aberration that should be eliminated. They advocate some form of certification system to ensure the safety of navigation in the GLPA region. In their view, completing 10 trips in the last two years should not automatically qualify someone to pilot a vessel in the compulsory area. In support of their position, they point to the fact that pilot candidates from the ranks of Canadian shipowners are less experienced than they used to be, but that these same people are now exempted from compulsory pilotage after 10 trips. Pilots recognize that some masters and officers currently exempted under the regulations would be treated differently should a certification process be introduced in the GLPA region, but they argue that such special treatment should not be extended to all currently exempted masters and officers.

The CSA considers the current exemption process in the GLPA to be satisfactory and points to its safety record as evidence. Member companies of the CSA have internal training processes for all masters and officers who navigate vessels in GLPA compulsory areas. The

shipping lines call this self-certification. It consists of time on the bridge with qualified masters, a specified number of trips in each compulsory area, simulator training and bridge resource management training.

Canadian shipowners argue that they have the most at stake with vessels, cargo and personnel, so they are best able to manage essential safety practices. The CSA companies also point to the fact that they are world leaders in adopting and implementing modern safety and management practices to ensure that their vessels operate safely at all times. Canadian shipowners do not support any type of certification process in the GLPA region.

Canadian shippers do not believe a certification process is necessary and support the views of Canadian shipowners in this matter.

The Ontario government believes that safety of a transportation system can and should be measured so that the system is not burdened with extra costs unless it is clear that the related changes will improve safety.

Foreign shipowners do not agree with an exemption scheme and support a certification process to ensure safety of navigation in the GLPA region.

The GLPA is of the opinion that the current requirements for exemption for Canadian masters and officers are not stringent enough and would like to see them strengthened. It says the exemption system does not ensure that Canadian masters and officers are qualified to pilot their ships safely under all circumstances. The GLPA is of the opinion that a certification

process would ensure safe navigation in the long term. Nevertheless, it supports strengthened requirements for Canadian masters and officers wishing to obtain an exemption.

## Analysis

The Panel notes the internal standards of CSA member companies with respect to the training and experience masters and officers get before navigating their vessels in GLPA compulsory areas. These requirements clearly go beyond the regulatory requirement to complete 10 trips in the particular area. The Panel also notes the statement made by CSA representatives during the consultations that they would not allow their masters and officers to navigate a vessel in the GLPA compulsory areas if they only met the 10-trip requirement. The Panel agrees with the prudent approach of the CSA members and does not consider the current exemption process to be adequate.

As discussed in the introduction to this chapter, the CSA is proposing an exemption scheme that would be based on specific criteria for masters and officers, as well as specific requirements for vessels, as follows:

The master or deck officer would:

- have completed the required number of passages in the compulsory area;
- be a regular member of the complement of the ship;
- be certified by Transport Canada;
- have successfully completed acceptable formal pilotage training in an accredited marine training institution;

- have successfully completed a Transport Canada bridge resource management course;
- be trained in electronic chart display and digital global positioning systems; and
- be proficient in the required languages.

The vessels would:

- be certified by Transport Canada;
- be equipped with “state of the art” navigation technology;
- have an official passage plan before commencing each passage; and
- be certified to the International Safety Management Code or an equivalent safety management standard.

Canadian shipowners say this would be a self-administered program for determining the competency of masters and officers to pilot their own ships but that a third party could audit it to ensure that shipowners, masters, officers and vessels meet the requirements. Canadian shipowners advocate amending the *Pilotage Act* to incorporate the proposed exemption scheme to permanently solve the issue of certification. CSA member companies currently apply most of these requirements in the GLPA region.

While, as discussed earlier, the Panel does not agree that such a scheme should be extended to all pilotage regions, it could certainly be a valid basis for improvement in the GLPA region. The Panel believes that a combination of some elements of the CSA proposal and of the Gauthier recommendations discussed below



would significantly improve the situation in the GLPA region.

With respect to the Gauthier recommendations for increasing the number and currency of trips a master has taken in the compulsory area, the Panel notes that CSA companies' in-house training programs already require masters and officers to exceed the 10 trips specified in the GLPA's regulations.

The Panel, however, cannot agree with the Gauthier recommendation regarding vessels carrying dangerous or hazardous goods. The Panel believes that the safety of a vessel is primarily a function of the competency of the master and officers who have command of the vessel. If masters and officers have been certified or have been granted an exemption on the basis of certain requirements, then they are considered competent to navigate in compulsory areas and the type of ship they navigate is not material. The Panel agrees with Bernier's statement that the ship must be under the conduct of a fully qualified person but this person does not have to be a pilot simply because the vessel carries dangerous or hazardous goods.

In the CSA's proposal for a national exemption scheme, the Panel notes that one of the suggested requirements is the successful completion of training at a marine institute. The Panel believes this is a positive step toward demonstrating the competency of ship officers that should also be incorporated in the enhanced requirements for exemption.

The CSA supports the concept of enhanced requirements for exemption. It wants

to see amendments to the *Pilotage Act* to ensure that anyone meeting the requirements is eligible for an exemption. In this regard, the Panel notes that the current exemption process has functioned as a regulatory provision for many years and that there is no reason to believe a modified regulatory provision would not function satisfactorily in the future. The Panel does not believe that a legislative provision is necessary to solve a regional issue.

In summary, the Panel believes that the exemption requirements for Canadian vessels in GLPA designated areas should be strengthened to enhance safety of navigation by adding additional requirements that would

- ensure that there are two qualified officers on board the vessel in compulsory areas — the master and a second officer with a first mate qualification;
- increase the minimum number of required trips in the compulsory area to 15 over a three-year period, with five of these in the 12 months before an exemption is requested;
- ensure that the master and officer have been on the bridge of the ships for each of the 15 trips and can provide documented proof; and
- ensure that the master and officer requesting exemptions have received appropriate training in a marine institute acceptable to the GLPA.

The Panel also believes that the GLPA should have the right to revoke an exemption in any circumstances where it considers that the conduct of a vessel constitutes a risk to the



safety of navigation. In such cases, the Authority must provide the reasons for the revocation.

## Panel Recommendation No. 15

*The Panel recommends that the Great Lakes Pilotage Regulations be amended to enhance requirements for exempting vessels from compulsory pilotage in the Great Lakes pilotage region by:*

- *adding a requirement ensuring that there are two qualified officers on board the vessel in compulsory areas, one being the master and the second being a deck watch officer holding a first mate qualification;*
- *increasing the minimum number of trips required from both the master and the deck watch officer in the compulsory area to 15 in a three-year period with five of the trips completed in the 12-month period preceding the request for exemption;*
- *adding a requirement ensuring that both the master and deck watch officer requesting the exemption have been on the bridge of the ship for each of the required 15 trips and can provide documented proof at the request of the Authority; and*
- *a requirement ensuring that both the master and the deck watch officer requesting the exemption have received marine training acceptable to the Authority.*

*The Great Lakes Pilotage Regulations be further amended to add a provision that would enable the Authority to revoke an exemption from compulsory pilotage, if the Authority determines that the conduct or the navigation of the vessel constitutes a risk to safety of navigation. This provision should require the Authority to provide reasons for the revocation.*

## Pacific Pilotage Authority

The PPA's regulations contain a provision for granting certificates to Canadian masters or officers; however, since compulsory pilotage applies only to vessels above 10,000 gross tons and since virtually all of the Canadian fleet falls under this tonnage limit, there have never been any applications for certificates and none have ever been issued. Larger Canadian vessels, such as passenger ferries, are also exempt from compulsory pilotage, so those masters do not need to be certified.

## Pilotage Act Provision for Certification of Masters and Officers

### Background

As noted earlier, each authority may grant pilotage certificates to masters and officers who meet certain qualifications. According to section 22 of the *Pilotage Act*, such a certificate can be granted only if the master or officer has a degree of skill and local knowledge “equivalent” to that required of a pilot. The wording of this provision and the use of the term “equivalent” have historically been controversial.

### Issues

Canadian shipowners contend that the term “equivalent” has been interpreted to mean identical and for this reason candidates have been required to demonstrate knowledge beyond what is necessary to navigate their own ships safely. They add that while the pilots’

position may have changed recently, nothing prevents them from reverting to their previous literal interpretation if section 22 is not amended.

Authorities and pilots say the term “equivalent” does not imply identical when comparisons are made to pilot knowledge and skill. Authorities point to the fact that they have different exams for pilots and for candidates seeking certification and do not require the same level of in-depth knowledge from a candidate as is expected of a pilot. This shows they do not interpret the word “equivalent” as meaning identical. Pilots state that applicants are tested only for the vessel of which they are a crew member and for the transits that the vessel will make. The pilots suggest that one way to ensure a reasonable interpretation of section 22 of the *Pilotage Act* is to refer to the French text, where the word “comparable” is used; they believe this is a more flexible word.

## Analysis

The definition of the word “equivalent” in section 22 of the *Pilotage Act* has certainly been an issue in the past, as the Blouin Committee discovered in 1987. The Committee found that pilot corporations felt that candidates seeking a pilotage certificate should have exactly the same level of knowledge and skill that a pilot has. The situation has, however, changed since that time.

The Panel accepts the position of the authorities and the pilots that the exams for masters and officers differ from those for pilots and that such exams take into account the fact that a master or officer will be piloting only the vessel of which they are a regular crew member. In addition, the authorities and pilots clearly and publicly confirmed during the consultations and the national meetings that certification candidates are not expected to have skills and knowledge identical to those of pilots. While there is nothing preventing either the authorities or the pilots from reverting to a previous interpretation of the word “equivalent,” it would be difficult to do so with any credibility, given the public statements referred to above. Consequently, there is no apparent need to open the *Pilotage Act* solely to modify the term “equivalent” in section 22. The Panel also notes that the changes to the certification process in the LPA region should alleviate concerns over the application and interpretation of section 22.

Nevertheless, if the *Pilotage Act* is amended in the future for other reasons, the Panel suggests that consideration be given to amending section 22 along the following lines:

... but no pilotage certificate shall be issued to an applicant therefor unless the candidate has demonstrated, through the successful completion of prescribed examinations, the degree of skill and local knowledge of the waters of the compulsory pilotage area that is necessary for safe navigation.



## Section 4

# Financial Self-Sufficiency *and* Cost Reduction

## Introduction

Throughout the consultations, a number of issues were raised for discussion and review that did not relate specifically to any of the topics referred to in the Terms of Reference. Since financial self-sufficiency and cost reduction relate to the overall efficiency of pilotage operations, the Panel chose to deal with those topics in this section of the report.

As a result, the Panel identified the following key issues for review within this section of the report:

- financial self-sufficiency and cost reduction;
- the structure of the Board of Directors;
- improved communication and consultation on operational, financial and planning issues; and
- improved accountability.

## Financial Self-Sufficiency and Cost Reduction

### Background

Since their creation in 1972, the pilotage authorities have been eligible for appropriations from the federal government to cover any year-end losses, even though the legislation requires the authorities to operate on a self-sustaining basis. In 1995, the National Marine Policy was developed, which recommended that appropriations should no longer be available to the authorities. The *Canada Marine Act*, promulgated in June 1998, amended the *Pilotage Act* to implement the National Marine Policy and prohibit parliamentary appropriations for pilotage authorities.

The PPA, the GLPA and the APA were self-sufficient when the *Pilotage Act* was amended; the LPA achieved that objective at the end of 1998. Since all four pilotage authorities were self-sufficient by the time of the review, the main focus of discussion was

not on self-sufficiency but rather on cost reduction.

It is important to clarify at the outset that, in reviewing potential cost reduction measures, the Panel did not conduct in-depth reviews and micro-analyse the financial or operational aspects of each authority. This level of financial scrutiny is part of the Agency's responsibility in the context of an investigation of a tariff proposal. Rather, the Panel considered cost savings in a broader context and reviewed proposals made by interested parties for further cost reduction.<sup>13</sup>

## Issues

As a means of exploring all possible avenues for reducing costs, the Panel raised the possibility of merging the LPA and GLPA. None of the parties supported this idea; parties argued that the two regions are very distinct with different working rules and different language requirements, and that one works closely with its US counterpart; merger or amalgamation would create, in their opinion, numerous difficulties and only minor benefits. The Panel did not pursue this issue.

Shippers and shipowners recognize the authorities' past efforts to reduce costs; however, they are not convinced that the pilotage authorities have pursued all possible means of reducing costs and would, therefore, like authorities to explore all potential avenues.

Shippers note that, with increasing pressures from competition and volatile international markets, businesses must continually reduce costs to remain viable. They contend that profit margins are so narrow that every cost element is important and that, therefore, transportation costs — specifically pilotage costs — deserve attention.

Small cost increments are significant in a competitive environment where sales are made on the basis of pennies per ton. Reducing costs is imperative, as cost control keeps companies in business. Shippers believe that on the Seaway and in the Great Lakes, competition has caused grain shipments to shift either to the West Coast or to the United States via the subsidized Mississippi River. Furthermore, they point out that Seaway/Great Lakes shippers are facing increased marine system fees as well as threats from other modes of transportation, as competition from railway and trucking companies intensifies.

Authorities, on the other hand, note that they will continue to identify areas where they can reduce costs. With respect to general administrative costs, the authorities believe that they have brought these under control in recent years and that further cost reduction in this area is not practical.

Pilots support the efforts of each authority to achieve financial self-sufficiency and note that they have always co-operated with them

<sup>13</sup> The cost-saving measures reviewed in this section are in addition to those that would likely result from the implementation of many of the recommendations contained in other sections of this report.

to determine areas where costs may be reduced. They believe that they have contributed considerably to controlling pilotage costs. They also believe that pilotage costs represent only a small proportion of the total costs of marine transportation and that, therefore, the degree to which they can contribute to the overall financial efficiency of the marine transportation system is limited. Pilots contend that pilotage costs are an essential expense to protect ships, personnel and the environment.

Industry members recognize the authorities' efforts to reduce costs but identify several areas where they believe that the authorities could save more money.

In the LPA region, the industry is concerned about the productivity payments the LPA makes to District 1 pilots' corporation.<sup>14</sup> Under existing contract or collective agreement provisions, pilots in both districts 1 and 1.1 receive extra payments for assignments they complete in excess of their normal workload. The extra payments for these assignments are a percentage of the regular payment. For pilots in District 1.1, the productivity clause results in payments to the pilots of 30 percent of the regular payment made by the Authority to the pilots. The District 1 pilots' corporation receives 50 percent of the regular payment.<sup>15</sup> An example of such a productivity payment in District 1 is as follows: the LPA collects \$5,000

per assignment from the industry; the LPA's regular payment to the pilots' corporation is \$4,000; the productivity payment is \$2,000; thus the total payment to the pilots' corporation is \$6,000.

Some parties are convinced that productivity payments are counterproductive, result in unreasonable pilotage payments to the corporation and do not help the LPA achieve financial self-sufficiency. Pilots, however, believe that the payments are reasonable and comparable to practices in other parts of the marine sector. For example, the Canadian shipping industry pays masters extra money for duty time that exceeds 200 days per year.

The shipping industry notes two other areas of cost concern: the docking pilots in District 2 of the LPA, and double pilotage.<sup>16</sup> In respect of double pilotage for tugs and barges specifically, Canadian shipowners note the LPA pays the pilot corporations for two pilots but receives payment from users for only one pilot.

In the PPA region, the shipping industry is concerned about the high cost of pilotage in the Fraser River. While most parties recognize that the Fraser River requires specialized river pilotage expertise, they have, for many years, called for reductions in the high costs of pilotage services.

Several factors contribute to the additional costs of river pilotage. The largest cost relates to the fact that two pilot groups provide services,

14 Other authorities also have provisions for similar payments to pilots in contracts and collective agreements with pilots but the issue was only raised in respect of the LPA District 1.

15 These percentages are those that were in effect during the period of the Review.

16 These matters have already been addressed in Chapter 1, which deals with designation of compulsory pilotage areas.

so two unit charges are applied to each vessel, one for each pilot group. Another significant cost relates to the pilot boat, which is required to serve both pilot groups. A minor cost relates to the additional charges for approximately three hours while the BC Coast pilot remains on board with the river pilot between New Westminster and the coast.

From the PPA's perspective, fluctuations in river traffic complicate the delivery of river pilotage services. With the cost of the service fixed, since the pilots are employees, the volume of business directly affects the PPA's bottom line. In recent years, the volume of business has fluctuated from less than break even, in 1995, to a dramatic increase in 1998–99.

Fraser River pilotage has been the subject of several studies in the past, with a variety of solutions proposed. Agreement as to the best solution, however, has never been reached.

In 1999, a committee of the Audit Committee of the Board was struck to study the Fraser River options. This committee has held numerous meetings, considered all the data available, completed a thorough study and investigated the positions of all interested parties. In reviewing the various options, committee members agreed that a fundamental principle must be respected — that is, that any changes must not adversely affect the current high standards of safe pilotage services in the Fraser River. The following four options have been discussed with interested parties.

- Option 1: Status quo — toward increased efficiency.

- Option 2: Fraser River pilots would be responsible for the corridor.
- Option 3: Fraser River pilots and BC Coast pilots would be on board all vessels moving to and from the Fraser River.
- Option 4: The BC Coast and Fraser River pilot groups would merge.

The PPA recently met with the Chamber of Shipping of BC and representatives of the BC Coast pilots and the Fraser River pilots to discuss these options. These groups will have further discussions with their members before responding. Since the parties are still in discussion, an alternative option may emerge.

## Analysis

The Panel has not identified any general administrative costs that authorities could reduce further at this time.

With specific reference to productivity payments in the LPA's districts 1.1 and 1, it is important to note the difference between payments for a call-back assignment and productivity payments. Off-duty pilots perform call-back assignments, and payments for such call-backs compensate pilots for working during an off-duty period. Such payments are generally viewed as similar to overtime payments. In such circumstances, an authority must determine whether it is more efficient and productive to train new pilots or to continue paying for call-backs.

In the case of productivity payments, pilots receive these for assignments that fall within their normal working schedule but exceed the

number of assignments that has been established as the norm for each pilot each year. Consequently, increases in traffic volumes directly affect the payments the LPA makes to pilots in districts 1.1 and 1 and can have an impact on the LPA's financial position. In such a situation, it is not obvious how these productivity payments benefit users of the service. The Panel asserts that this is a matter for negotiations and must not be ignored.<sup>17</sup>

With respect to the Fraser River cost issue, the Panel notes that all affected parties are currently considering this matter. The Panel expects that the PPA will resolve the issue in a timely manner, with the co-operation of the parties.

## Panel Recommendation No. 16

*The Panel recommends that the authorities, in partnership with pilots and all interested parties with a legitimate interest in pilotage, regularly examine all aspects of their operations and that the authorities report to the Minister of Transport, in their annual reports, specific steps they have taken to improve efficiencies and further reduce costs.*

*The Panel recommends that the PPA be required to report to the Minister on the outcome of its review of pilotage options for the Fraser River with a schedule for implementing the selected option.*

## Structure of the Board of Directors

### Background

The *Pilotage Act* allows the Governor in Council to appoint a chairman and allows the Minister to appoint six other members of each authority's Board of Directors. While the chairman is appointed at pleasure, the members are appointed for a term not exceeding three years.

There are no other provisions, either in the legislation or in the regulations, concerning the composition of an authority's Board of Directors.

It has been common practice for the Minister of Transport to ask shipping companies and pilots to propose candidates from their ranks for appointment to a Board of Directors. The Minister traditionally appoints two members from pilot groups, two from shipping companies and two representing the public interest.

### Issues

The CSA and some shipper groups are concerned about the structure of these boards of directors. They believe that the current board structure is ineffective and delays decision making. They contend that some members may be compelled to act as representatives of the interests from which they were chosen rather than in the interests of the authority. The CSA recognizes that some boards are more effective

<sup>17</sup> The Panel was advised that productivity payments are currently the subject of negotiations between the LPA and Districts 1 and 1.1 pilots.



than others and points to the LPA as the most problematic authority. It is also concerned that certain members of the LPA board may resist any changes recommended by the Panel and adopted by the Minister. As a result, changes may be delayed or, worse, may not materialize at all under the current structure.

The CSA is calling for national standards and suggests that authorities' boards be modified to reflect a structure similar to that of the boards of port authorities provided for in the *Canada Marine Act*. In the case of port authorities, specific interest groups appoint directors, but an individual may not be a director, officer or employee of that interest group. According to the CSA, this provides for more "arms length" and professional boards, resulting in more transparent and objective decision making. The Canadian Chamber of Maritime Commerce and the Fraser River Port Authority support the CSA recommendation.

Foreign shipowners, pilots and most authorities are convinced that the current structure functions well and should not be modified. These parties believe there is the need for "hands-on" boards that have members with direct pilotage and shipping expertise and members who represent the public interest. They argue that such expertise is crucial to the decision-making process.

## Analysis

The Panel recognizes that the current board structure may adversely affect the decision-making process and that the potential for

conflict of interest exists. At the same time, however, the Panel recognizes that the current structure of authorities' boards of directors functions effectively in most regions. In addition, the Panel notes that the authorities' board members are subject to the federal government's conflict of interest guidelines.

The Panel notes that neither the *Pilotage Act* nor the General Pilotage Regulations specify the composition of boards of directors, so the Minister has complete latitude to select candidates. This means that it is not necessary to have two members from pilot groups, two shipowners' representatives and two public interest representatives if that make-up does not function well in a specific region. Consequently, the panel finds no reason to recommend an amendment to an Act that already permits such flexibility in the appointment process.

## Panel Recommendation No. 17

*The Panel recommends that no changes be made to the Pilotage Act in respect of the composition of the boards of directors.*

## Consultation

### Issue

Throughout the review, participants observed that pilotage authorities do not consult frequently enough and do not communicate the outcome of consultations consistently. Canadian and foreign shipowners say certain authorities seem to make an effort to create and maintain some level of discussion with users; however,



these discussions usually centre on tariff matters. Users believe that consultation is necessary to ensure that authorities fully understand users' positions on issues and their potential impact when making decisions.

Shipper groups regret that they are not consulted and believe their views and concerns should be considered since shippers ultimately pay for services.

Authorities agree that communication with users is important and are committed to broadening the scope of their consultations to include all users of their services. Most interested parties acknowledge that consultation had improved during the review process and are encouraged by this development. They raised doubts, however, about the extent of future consultations after the completion of the review.

## Analysis

Most authorities have recognized the value of consultation in recent years and have improved the process. Authorities usually consult extensively on tariff-related matters, since they want to gain acceptance of their proposed tariff to avoid objections leading to an investigation of the tariff proposal by the Agency.

The Panel considers consultation by authorities an obligation that flows from the fact that pilotage service is provided through a regulated monopoly. Therefore, authorities should extend consultation to matters beyond tariff action, such as financial, operational and planning matters that will affect interested parties. The Panel also believes a more systematic

approach to consultation is needed and that the authorities should be accountable for ensuring more regular dialogue.

## Panel Recommendation No. 18

*The Panel recommends that pilotage authorities be required to hold regular consultations with interested parties on financial, operational and planning issues that affect such parties.*

*The Panel recommends that pilotage authorities be required to report on their plans for consultations and the implementation of those plans in their annual report to Parliament.*

## Accountability

The Panel identified two separate matters as concerns under the general subject of accountability. These were:

- the reporting of incidents with ships under the control of a pilot; and
- the lack of a structured approach for handling complaints.

## Reporting of Incidents

### Issue

In the PPA region, some shipping companies are dissatisfied that the PPA and pilots do not always respond to requests for information on minor incidents in a timely fashion. They argue that information on minor incidents would help prevent other incidents. They note that while the Transportation Safety Board investigates major incidents and distributes the reports to the parties involved, minor incidents are

investigated internally and the PPA or the pilots hold the information. The shipping companies claim that pilots are reluctant to provide their information or to comment due to liability and legal considerations. They are also concerned about the extent of remedial action taken by the PPA and believe that prescribed sanctions against pilots under the *Pilotage Act* are, at times, insufficient.

Pilots note that while the Transportation Safety Board is investigating an incident, they are unable to respond to industry requests for information related to that incident for legal reasons. With respect to prescribed sanctions, pilots explain that, while the *Pilotage Act* limits their liability to \$1,000, the *Canada Shipping Act* permits penalties ranging from \$50,000 to \$200,000, depending on the offence, and certain offences can result in five years' imprisonment.

Pilots favour an increased exchange of information to enhance safety and reduce the possibility of similar incidents. B.C. Coast pilots have created an internal information bulletin on incidents that is currently distributed to all pilots. The bulletin is designed to keep pilots informed so that they can benefit from the experience and take whatever action is required to avoid a similar incident. The pilots also expect to release this bulletin to the PPA and are considering wider dissemination.

## Analysis

The Panel recognizes that liability issues arising from accidents and incidents tend to constrain pilots and authorities from more open exchanges

of information. The Panel, however, believes sharing information is necessary to reduce the risk of recurrence of similar incidents. The IMO Code specifically recognizes the value of sharing information; it states that the objective of any marine casualty investigation is to prevent similar casualties in the future. It explains that by introducing a common approach to marine casualty investigations and reporting, the international maritime community may become better informed about the factors that cause, or contribute to, marine casualties. Participants discussed the issue at length during the consultations and agreed that a more open exchange of information on incidents would benefit everyone.

## Panel Recommendation No. 19

*The Panel recommends that authorities, pilots and the shipping industry establish a system for the early release of practical information about minor incidents.*

## Complaints

### Issue

The shipping industry in all regions is concerned about the lack of a structured approach for handling complaints about pilotage services that are not related to tariff increases or regulatory changes, such as complaints about operational matters or pilot performance. The consensus is that the authorities do not always provide information about the way they respond to a complaint.

Canadian shipowners are calling for the formalization of the complaint process, including the creation of national standards.

The authorities believe that, although they use an informal process, they generally handle complaints as quickly as possible and to the satisfaction of most parties.

## Analysis

It is unclear from the consultations whether this problem is frequent or widespread; however, to the extent that this problem is present, the Panel fails to understand why any complaint filed

with an authority would not be resolved. As a monopoly service provider, authorities have a responsibility to users to ensure that parties have some degree of certainty that authorities will examine an issue and make the outcome known.

## Panel Recommendation No. 20

*The Panel recommends that the pilotage authorities establish a structured methodology for handling complaints that ensures that the complainant receives timely feedback about the outcome or the action taken.*



# Implementing *the* Recommendations

The Panel has included specific time frames for implementing those recommendations where timing appeared critical. The absence of specific time frames for other recommendations should not be taken as an indication that the recommendation is less important. Rather, this recognizes that, while parties should make every effort to implement these recommendations quickly, the priorities may vary from authority to authority. It also recognizes that the responsibility for allocating resources rests with the authorities and that they are in a better position to determine their priorities.

While recognizing the pilotage authorities' responsibility, the Panel is of the view that the interested parties have a role to play in the implementation process, in that they will be directly affected by the measures undertaken

by the pilotage authorities pursuant to the recommendations.

Consequently, the Panel believes that each authority should, after consultation with the interested parties, produce a plan that sets out its priorities and time frame for implementing these recommendations.

## Panel Recommendation No. 21

*The Panel recommends that each authority be required to submit, within six months of the tabling of the report, and following consultations with the interested parties, a plan to the Minister of Transport setting out, in order of priority, the proposed implementation and anticipated completion date of all the recommendations contained in this report that do not have a specific time frame.*



# Postscript

During recent decades, pilotage services in Canada have been the subject of many exhaustive reports and reviews. At the national meeting in June 1999, a consensus emerged that the time for change had arrived. Parties generally agreed that changes along the lines suggested by the Panel seemed appropriate. However, parties questioned how these recommendations would be implemented and monitored.

Participants recognized that action on the Panel's recommendations would come about through ministerial directives or legislative and regulatory change. However, they remained

concerned about who would monitor the implementation process to ensure full compliance, and how.

The Panel leaves the matter of future monitoring unresolved, but it does wish to inform the Minister of the parties' belief that some means are needed to follow up on all recommendations that are formally adopted. At the moment, the parties exhibit an encouraging spirit of cooperation and willingness to change, as demanded by the current situation. The Panel believes that active monitoring could maintain this momentum.

## Appendix I

Ms. Marian L. Robson  
Chairman  
Canadian Transportation Agency  
Ottawa, Ontario  
K1A 0N9

Dear Ms. Robson,

Now that the *Canada Marine Act (CMA)* has received Royal Assent, we have commenced the challenging process of implementing the provisions of this law which we hope will ensure the continued competitiveness of Canada's marine sector.

One area which has received considerable attention is the pilotage sector. Canada's pilotage regime was widely debated in the various fora leading up to the introduction of the Act resulting in numerous changes to the *Pilotage Act* being included in Part 7 of the legislation. While the changes to the law have introduced many progressive changes, the government acknowledged that there were still some outstanding issues which merited further study. Consequently, Section 157 of the *CMA* contains a provision which amends the *Pilotage Act* as follows:

53. (1) The Minister shall, in consultation with each Authority, its users and other persons affected, at the latest one year after the coming into force of this section, review the pilot certification process for masters and officers, training and licensing requirements for pilots, compulsory pilotage area designations, dispute resolution mechanisms and the measures taken in respect of financial self-sufficiency and cost reduction, and prepare a report of the findings.

(2) The Minister shall have a copy of each report laid before each House of Parliament on any of the first thirty days on which that House is sitting after the Minister prepares it.

I would like to request that the Agency undertake this Pilotage Review on my behalf in accordance with the attached Terms of Reference. I feel that the Agency's independence from the Department, the fact that you have an administration in place which is familiar with pilotage issues and your experience in conducting public hearings and consultations, make the Agency a logical choice to provide an impartial, unbiased assessment of the issues at hand.

It is our intention to bring into force Part 7 and consequential amendments of the *CMA* on October 1, 1998. In order to allow enough time for me to prepare a report of your findings for Parliament, I would ask that the results of the Review be submitted to me no later than September 1, 1999.

While the Agency will be free to undertake the Review as it deems appropriate, I would appreciate if an administrative liaison could be established with my Department to provide ongoing updates with respect to the progress and conduct of the Review. Our Director of Certification and Pilotage, Mr. Gerard McDonald, will be the contact in this regard.

I thank you for taking on this challenge and look forward to hearing of your deliberations on these important issues.

Yours sincerely,

Hon. David M. Collenette, P.C., M.P.

Attachments

# Ministerial Review of Outstanding Pilotage Issues

## Terms of Reference

### 1. Background

Marine pilotage in Canada has been a matter of vigorous debate at various times over the past eighty years. These debates have sparked many inquiries, including six Royal Commissions, the most recent of which (the “Bernier” Commission) lasted nine years and led to the adoption in 1972 of the present *Pilotage Act*.

In May 1995, the House of Commons Standing Committee on Transport (SCOT) released a report on the marine sector, in which it expressed concern that organized pilotage was taking too big a share of marine sector resources and proposed a new pilotage regime.

The Standing Committee proposals were debated in a number of fora over the following months. These discussions revealed that a majority in the marine community felt that sufficient improvements could be achieved within the existing pilotage structure.

Taking these views into consideration, four key issues still had to be addressed:

- The extent of waters now included as compulsory pilotage areas, and the designation mechanism;
- The qualifications for a pilot licence or certificate, and the basis for granting exemptions and waivers;

- Improvements to the mechanism for setting pilotage rates; and
- The users’ requirement to reduce pilotage costs.

Four regional working groups and a National Task Force on Marine Pilotage Policy were put in place, representing a wide cross-section of the shipping industry and shippers.

The Task Force endorsed the view that pilotage services should continue to be organized as four regional Pilotage Authorities. The Task Force also proposed several changes to the *Pilotage Act* which aimed to improve the efficiency and financial stability of the four Authorities. In addition, all Authorities committed to follow up on outstanding issues such as:

- further cost-reduction measures;
- the examination of specific local issues in such operations as those at the Port of Prince Rupert and on the Fraser River; and
- the signing of agreements with their pilot groups on an appropriate dispute resolution clause.

In order to ensure that outstanding issues were resolved, the government further proposed to reassess the pilotage regime by December 31, 1998.



The *Canada Marine Act (CMA)* was originally tabled in the House of Commons on June 10, 1996 and was subsequently referred to SCOT for review. The Standing Committee, in its report to Parliament, felt there was a need to address the pilotage issues in a more expeditious manner and suggested moving the Review forward by one year. Bill C-44 had not yet passed in the Senate before Parliament was dissolved on April 27, 1997.

The *CMA* was re-introduced as Bill C-9 on October 2, 1997. Because time had overtaken the revised deadlines for the Review, SCOT, in its re-examination of the Bill, suggested that the Review be completed within one year of the coming into force of the pilotage section (Part 7) of the Act.

Consequently, Section 157 of the *CMA* contains a provision to amend the *Pilotage Act* by adding a requirement for the Minister to further review the pilotage system which reads as follows:

53. (1) The Minister shall, in consultation with each Authority, its users and other persons affected, at the latest one year after the coming into force of this section, review the pilot certification process for masters and officers, training and licensing requirements for pilots, compulsory pilotage area designations, dispute resolution mechanisms and the measures taken in respect of financial self-sufficiency and cost reduction, and prepare a report of the findings.

(2) The Minister shall have a copy of each report laid before each House of Parliament on any of the first thirty

days on which that House is sitting after the Minister prepares it.

## 2. Review Objective

To conduct a forward-looking review of the marine pilotage system and to develop recommendations to ensure Canada has an efficient, viable, and safe pilotage system to meet the ongoing and long-term expectations and demands of all users.

The recommendations will reflect, as much as possible, a high degree of consensus amongst system stakeholders.

## 3. Scope

The parameters set forth in the legislation are fairly precise as to what issues are to be reviewed. Specifically, there are five distinct subject areas which must be covered:

- pilot certification process for masters and officers;
- training and licensing requirements for pilots;
- compulsory pilotage area designations;
- dispute resolution mechanisms; and
- measures taken in respect of financial self-sufficiency and cost reduction.

The Review itself will encompass three broad elements: research, consultation and formulation of recommendations. In respect of item 4, the Review by the Agency would only relate to mechanisms for resolving disputes about contracts for pilotage services.

The research phase of the Review will be broken down into four component studies

which mirror the issues noted above (items 1 and 2, because of their similar subject areas will be dealt with as one comprehensive study). These studies will describe the current situation, identify deficiencies, as highlighted by appropriate stakeholders, and formulate possible solutions or recommendations for consideration by both government and industry.

Consultation will be done on an ongoing basis with appropriate stakeholders, however, two national meetings of interested parties will be convened. The first will be held at the commencement of the Review with the goal being to solicit stakeholder views on the conduct and emphasis of the Review. The second national meeting will be held once the component studies have been completed to debate overall study recommendations and conclusions.

In developing recommendations, a full assessment of the impact of such recommendations on all components of the pilotage system, including system stakeholders, will be made.

#### 4. Recommendations and Timing

A final report will be prepared and submitted to the Minister which will report in the following manner:

- i) recommendations on issues or subject matter where there is a high degree of consensus on solutions;
- ii) issues or subject matter where a high degree of consensus was not achieved;
- iii) stakeholder recommendations on issues or subject matter in ii) above;
- iv) author recommendations on issues or subject matter in ii) above.

A final report will be submitted to the Minister of Transport within eleven months of the coming into force of Part 7 of the *Canada Marine Act*.

## Appendix II

### Interested Parties

Individuals and organizations who demonstrated an interest in the Review.

Mr. André Roberge Agences Océaniques du Bas Saint-Laurent ltée	Mr. Rio St. Amand Atlantic Towing Limited
Mr. Brian Saunderson Agricore Cooperative Ltd.	Captain D. Blanchor Avenor Maritime Inc.
Ms. Rita Ellis Alberta Pool	Mr. Michel Broad B & K Shipping Ltd.
Mr. Gary Rosko Alberta Transportation and Utilities	Mr. Michel Guimond, M.P., Beauport– Montmorency–Côte-de-Beaupré–Île d'Orléans Bloc Québécois Transport Critic
Mr. Rod Thompson Alberta Transportation and Utilities	Mr. Paul Devries British Columbia Coast Pilots Ltd.
Captain James Pound Algoma Central Corporation	Captain Gerry Farley British Columbia Coast Pilots Ltd.
Captain Harry S. Waugh Algoma Tankers Ltd.	Captain Finn Hoyrup British Columbia Coast Pilots Ltd.
Mr. Paul Nykanen Alliance of Manufacturers and Exporters Canada	Captain Jim McPherson British Columbia Coast Pilots Ltd.
Ms. Anne Castonguay-Soucie Atlantic Pilotage Authority	Captain Bob Kitching British Columbia Institute of Technology
Captain Don MacAlpine Atlantic Pilotage Authority	Mr. R.V. Wilds British Columbia Maritime Employers Association
Mr. Peter MacArthur Atlantic Pilotage Authority	Mr. Gary Farrell Canada Maritime Agencies Ltd.
Captain R. Anthony McGuinness Atlantic Pilotage Authority	Ms. Norma Rose Canada Maritime Agencies Ltd.
Ms. Elizabeth Beale Atlantic Provinces Economic Council	Mr. David Scratch Canada–Nova Scotia Offshore Petroleum Board
Ms. Mona Savoie Atlantic Provinces Transportation Commission	Captain Gordon (Kip) Hacquoil Canada Steamship Lines
Mr. Peter Vuillemot Atlantic Provinces Transportation Commission	Mr. Raymond Johnston Canada Steamship Lines
Mr. Ron Clark Atlantic Towing Limited	

Mr. Kirk Jones Canada Steamship Lines	Mr. Guy Genois Canadian Salt Limited
Mr. Wayne Morrison Canada Steamship Lines	Captain Réjean Lanteigne Canadian Shipowners Association
Captain John Pace Canada Steamship Lines	Mr. Donald Morrison Canadian Shipowners Association
Mr. Pierre Alvarez Canadian Association of Petroleum Producers	Mr. Blaine Higgs Canaport Limited
Mr. David Goffin Canadian Chemical Producers' Association	Mr. Brian Knight Canfor Wood Products Marketing
Mr. Neil Stephens Canadian Coast Guard, Fisheries and Oceans	Mr. Rod MacDonald Cape Breton Development Corporation
Mr. Roger Larson Canadian Fertilizer Institute	Captain Terry R. Pittman Cape Breton Pilot Group
Ms. Lisa MacGillivray Canadian Industrial Transportation Association	Captain John Stewart Cast North America Inc.
Mr. Richard Vézina Canadian Marine Officers' Union	Mr. Jim Campbell Chamber of Maritime Commerce
Captain Serge Arcand Canadian Marine Pilots' Association	Mr. Douglas Smith Chamber of Maritime Commerce
Captain Gérard Belley Canadian Marine Pilots' Association	Mr. Ron Cartwright Chamber of Shipping of British Columbia
Captain Alex MacIntyre Canadian Marine Pilots' Association	Mr. Brock Chrystal Chamber of Shipping of British Columbia
Captain Michel Pouliot Canadian Marine Pilots' Association	M. Ton Plateel Chamber of Shipping of British Columbia
Captain Wayne Whyte Canadian Marine Pilots' Association	Mr. Anthony G. Roper Chamber of Shipping of British Columbia
Mr. Lawrence Dempsey Canadian Merchant Service Guild	Mr. J. Brian Zak Coast Forest & Lumber Association
Captain Maury Sjoquist Canadian Merchant Service Guild	Mr. Guy Dufresne Compagnie Minière Québec Cartier
Mr. Robert J. Broeska Canadian Oilseed Processors Association	Captain David Carter Company of Master Mariners of Canada (The)
Mr. Pierre Caron Canadian Pulp and Paper Association	Captain John Daniels Company of Master Mariners of Canada (The)
Mr. David Church Canadian Pulp and Paper Association	Captain Alan Knight Company of Master Mariners of Canada (The)

Captain Wilson Stuart  
Company of Master Mariners of Canada (The)

Mr. Don Fitzpatrick  
Comtug Limited

Mr. David Thompson  
Conservation Council of New Brunswick

Mr. Jean Lapointe  
Corporation des pilotes du Bas Saint-Laurent

Captain Guy Marmen  
Corporation des pilotes du Bas Saint-Laurent

Captain Louis Rhéaume  
Corporation des pilotes du Bas Saint-Laurent

Captain Gilles Harvey  
Corporation des pilotes du port de Montréal

Captain Raymond Jourdain  
Corporation des pilotes du port de Montréal

Captain Fidèle Tremblay  
Corporation des pilotes du port de Montréal

Captain Guy Daoust  
Corporation des pilotes du Saint-Laurent Central

Captain Jacquelin Hardy  
Corporation des pilotes du Saint-Laurent Central

Captain Pierre Boucher  
Corporation of Professional Great Lakes Pilots

Captain Michael Pratt  
Corporation of Professional Great Lakes Pilots

Captain Charles W. Tully  
Corporation of Professional Great Lakes Pilots

Mr. Ron MacDonald  
Council of Forest Industries

Mr. Kim Graybiel  
Department of Highways and Transportation  
Saskatchewan

Ms. Nancy Belding  
Department of Transportation  
New Brunswick

Mr. Gord Tufts  
Department of Transportation and  
Public Works  
Prince Edward Island

Ms. Sherry Appleby  
Department of Works, Services and  
Transportation  
Newfoundland and Labrador

Mr. Doug Shea  
Department of Works, Services and  
Transportation  
Newfoundland and Labrador

Mr. Ernest Beaupertuis  
Enerchem Transport Inc.

Mr. Eric Hodgson  
Esso Petroleum Canada (East) (Imperial Oil)

Mr. Gordon Smith  
F.K. Warren Limited

Mr. Paul Gourdeau  
Fednav International Ltd.

Mr. David Grieve  
Fednav International Ltd.

Mr. Peter Matthews  
Fisheries Council of British Columbia

Captain Ted King  
Fraser River Pilots' Association

Captain Allen Domaas  
Fraser River Port Authority

Mr. Barry Heselgrave  
Fraser Surrey Docks Ltd.

Mr. Gregory Thompson  
Fundy North Fishermen's Association

Ms. Nicole Boudrau  
Fundy Shipping Inc.

Mr. Kim Laing  
Furncan Marine Limited

Captain Stephen Brown  
Gearbulk Shipping Canada Ltd.

Captain Robert Leanord Goodfellow  
Goodfellow Shipping Agency Limited

Mr. Dick Armstrong  
Great Lakes Pilotage Authority Ltd.

Mr. Brian Ducharme  
Great Lakes Pilotage Authority Ltd.

Mr. Robert Lemire  
Great Lakes Pilotage Authority Ltd.

Mr. Louis-Marie Beaulieu  
Groupe Desgagnés Inc.

Captain Rosaire Desgagnés  
Groupe Desgagnés Inc.

Mr. Jacques Tanguay  
Le Groupe Océan Inc.

Mr. Wade Elliott  
Halifax-Dartmouth Port Development  
Commission

Mr. Donald Jeans  
Halifax-Dartmouth Port Development  
Commission

Captain Allan Stockdale  
Halifax Pilot Group

Ms. Cheryl Bidgood  
Halifax Port Authority

Captain Randall Sherman  
Halifax Port Authority

Mr. Robert Hennessy  
Hamilton Harbour Commissioners

Mr. Nath Cooper  
Harvey CSM Offshore Services Ltd.

Mr. Len Cughlan  
Hibernia Management & Development Co.  
Ltd.

Mr. Ross Matthews  
Imperial Oil Limited

Mr. Raymond Giguère  
Institut maritime du Québec

Mr. Robert B. Pelletier  
Institut maritime du Québec

Mr. Robert Youden  
Irving Transportation Services

Mr. Gerry N. Skura  
James Richardson International

Captain Richard Goddard  
Kent Line Limited

Captain Clément Deschênes  
Laurentian Pilotage Authority

Mr. Guy Major  
Laurentian Pilotage Authority

Mr. Yvon Martel  
Laurentian Pilotage Authority

Mr. Jean-Claude Michaud  
Laurentian Pilotage Authority

Mr. Denis Pouliot  
Laurentian Pilotage Authority

Mr. A. Taschereau  
Laurentian Pilotage Authority

Mrs. Suzanne Paquin  
Logistec Navigation Inc.

Mr. Tom Stevens  
MacMillan Bloedel Limited

Mr. Jim H. Peachey  
Marine Safety Agency

Ms. Jane Madsen  
Maritime Canada Shipping Services Ltd.

Mr. Garth McKeil  
McKeil Marine Limited

Mr. John Connors  
Memorial University of Newfoundland  
Fisheries and Marine Institute

Dr. Jacek Pawlowski  
Memorial University of Newfoundland  
Fisheries and Marine Institute

Mr. Gilles Desgagnés  
Ministère des Transports du Québec

Mr. Michel Dignard  
Ministère des Transports du Québec

The Honourable Dave Keenan, MLA  
Ministry of Community and Transportation  
Services  
Yukon

The Honourable Glen Findlay, MLA  
Ministry of Highways and Transportation  
Manitoba

Mr. Doug Howard  
Ministry of Transportation  
Northwest Territories

The Honourable Vince Steen, MLA  
Ministry of Transportation  
Northwest Territories

The Honourable Tony Clement, MPP  
Ministry of Transportation  
Ontario

Mr. Peter Dudka  
Ministry of Transportation  
Ontario

Mr. Rod Taylor  
Ministry of Transportation  
Ontario

The Honourable Harry S. Lali, MLA  
Ministry of Transportation and Highways  
British Columbia

Mr. Nicholas Vincent  
Ministry of Transportation and Highways  
British Columbia

Mr. C.B. Huskison  
Ministry of Transportation and Public Works  
Nova Scotia

Mr. Charlie Mackenzie  
Ministry of Transportation and Public Works  
Nova Scotia

Mr. Don Stonehouse  
Ministry of Transportation and Public Works  
Nova Scotia

Mr. Daryl Black  
Miramichi Regional Development Corporation

Captain Jean-Luc Bédard  
Montréal Port Authority

Mr. Kirk Tyler  
Montship Inc.

Mr. Robert J. Paterson  
N.M. Paterson and Sons Ltd.

Mr. Bill Mills  
Nanaimo Port Authority

Mr. Kevin Obermeyer  
Nanaimo Port Authority

Mr. Toni Nardi  
Neptune Bulk Terminals (Canada) Ltd.

Mr. John Wilcox  
Neptune Bulk Terminals (Canada) Ltd.

Mrs. Ruth Graham  
Newfoundland Ocean Industries Association

Captain Sidney J. Hynes  
Newfoundland Transshipment Limited

Mr. Harvey J. Mott  
Newfoundland Transshipment Limited

Mr. Graham Allen  
Noranda Inc.

Mr. Jerry Stacey  
North Atlantic Refinery Limited

Mr. George W. Colquhan  
North Fraser Port Authority

Mr. John Cox  
North West CruiseShip Association

Mr. Cees Deelstra  
North West CruiseShip Association

Mr. John Hansen  
North West CruiseShip Association

Mr. Lars Ljoen  
North West CruiseShip Association

Mr. Derrick Briggs  
Northern Transportation Company Ltd.

Mr. C. W. Clement Northern Transportation Company Ltd.	Mr. J. Pearson Prairie Pools Inc.
Mr. Terry J. A. Park Nova Chemicals Ltd.	Mr. Ivan Noonan Prince Edward Island Potato Board
Mr. Erle G. Barrett Océanex (1997) Inc.	Mr. Jeff Burghardt Prince Rupert Grain Ltd.
Mr. Gilles Champagne Océanex (1997) Inc.	Mr. Don Krusel Prince Rupert Port Authority
Mr. Yvon Dufour Océanex (1997) Inc.	Ms. Rhoda Witherly Prince Rupert Port Authority
Captain Michel Duplin Océanex (1997) Inc.	Mr. Dave Woodman Prince Rupert Port Authority
Mr. Michel Parent Océanex (1997) Inc.	Mr. George De Santi QIT-Fer et Titane
Ms. Johanne Gauthier Ogilvy Renault	Mr. W. Stanley Webber Quay Cruise Agencies
Mr. Robert Bremner OOCL Canada inc.	Mr. Alexis Ségal Québec Port Authority
Mr. Bruce Chadwick Pacific Pilotage Authority	Mr. Lee Morrison, M.P. Cypress Hills–Grasslands Reform Party Transport Critic
Mr. Maurice Fellis Pacific Pilotage Authority	Mr. Brian Ritchie Rigel Shipping Canada Inc.
Captain Robin Heath Pacific Pilotage Authority	Captain Pierre LeClaire River and Seaway Pilots Corporation
Mr. Dennis McLennan Pacific Pilotage Authority	Mr. Peter Fagan Riverside Forest Products Limited
Captain Glenn Lawrence Pilot's Corporation Lake Ontario and Harbours	Mr. Wayne Cammell Rivtow Marine Ltd.
Captain Richard Winnel Pilot's Corporation Lake Ontario and Harbours	Mr. Michael Milner Robert Reford Inc.
Mr. David Hart Point Tupper Marine Services Ltd.	Mr. Steven Cutler Saga Forest Carriers International Ltd.
Mr. Dennis White Port Alberni Port Authority	Mrs. G. Collard Saguenay Port Authority
Mr. Guy Desgagnés Port of Belledune	Captain R.A. Pennington Saint John Pilot Group
Captain Wynford Goodman Port of Belledune	



Captain Peter Turner  
Saint John Port Authority

Captain Nelson Pittman  
St. John's Pilot Group

Captain Henry Flight  
St. John's Port Authority

Ms. Nicole Trépanier  
St. Lawrence Shipoperators Association

Mr. Leroy Larsen  
Saskatchewan Wheat Pool

Captain Torben Hestbaek  
Seabase Limited

Mr. Paul Locke  
Seabase Limited

Captain William F. Morgan  
Seabase Limited

Mr. Roman Gralewicz  
Seafarers' International Union of Canada

Mr. John Barker  
Seaspan International Limited

Mr. Brian McAdam  
Seaway Bulk Carriers

Mr. Wayne A. Smith  
Seaway Self Unloaders

Mr. Chris Hall  
Secunda Marine Services Limited

Captain John Hughes  
Secunda Marine Services Limited

Mr. Fred Smithers  
Secunda Marine Services Limited

Mr. Valmont Bourgeois  
Sept-Îles Port Authority

Captain Maarten Buth  
Shell Canada Products Ltd.

Mr. Al Hamilton  
Sifto Salt

Mr. Jim Powell  
Skeena Cellulose Inc.

Mr. Claude Mailloux  
SODES

Mr. Peter Baumgartl  
Stelco Inc.

Mr. Bill MacInnis  
Stora Port Hawkesbury

Mr. John Francis  
Strait Crossing Bridge Ltd.

Mr. Ross Gilmour  
Strait Crossing Bridge Ltd.

Mr. John Myers  
Sultran Ltd.

Mr. Yorke Barrington  
Sydney Steel Corporation

Mr. M. Fournier  
The St. Lawrence Seaway Authority

Mr. Pierre Cécile  
The St. Lawrence Seaway Management Corporation

Mr. André Landry  
The St. Lawrence Seaway Management Corporation

Captain Ivan Lantz  
The Shipping Federation of Canada

Captain Frank Nicol  
The Shipping Federation of Canada

Ms. Sonia Simard  
The Shipping Federation of Canada

Ms. Rebecca Johnson  
Thunder Bay Chamber of Commerce

Mr. Dennis E. Johnson  
Thunder Bay Port Authority

Mr. Paul Kennedy  
Thunder Bay Port Authority

Mr. Michael Doran  
Toronto Port Authority

Mr. Gerard McDonald  
Transport Canada

Captain Harvey Wade  
Transport Canada

Mr. Robert Masson  
Trois-Rivières Port Authority

Captain Ross Armstrong  
ULS Corporation

Captain Walter Davis  
ULS Corporation

Mr. Louis Forget  
Ultramar

Mr. John Radosevic  
United Fishermen and Allied Workers' Union

Mr. Trevor Heaver  
University of British Columbia

Mr. Louis Drolet  
Upper Lakes Group Inc.

Captain John Greenway  
Upper Lakes Group Inc.

Mr. Chris Badger  
Vancouver Port Authority

Mr. Michael Cormier  
Vancouver Port Authority

Captain Norman C. Stark  
Vancouver Port Authority

Mr. Tom E. Culham  
Weldwood of Canada Limited

Mr. Keith Manifold  
West Fraser Timber Ltd.

Mr. Dave Morris  
Westward Shipping Ltd.

Mr. K.H. Bjorndal  
Weyerhaeuser Canada Ltd.

Mr. David Cree  
Windsor Port Authority

## Consultants

Captain Claude L. Ball

Captain David Batchelor

Mr. Pierre Blouin

Mr. Pelino Colaiacovo

Mr. Jim Everson

Mr. Robert G. Friend

Mr. David K. Gardiner

Mr. Philippe I. Georges

Mr. T. Norman Hall

Captain Guy LaHaye

Captain A.D. Latter

Mr. Yvon Matte

Captain Angus McDonald

Mr. Neil McNeil

Mr. Dusty Miller

Captain Robert C. Milne

Mr. Bruce Murdock

Mr. Jim Roche

Mr. Mario St-Pierre

Mr. Tom Sellers

Mr. Johnathan Seymour

Mr. Louis A. Toupin

Mr. J.P. Turcotte

## Appendix III

### Written Submissions

Agences Océaniques du Bas Saint-Laurent Itée, June 23, 1999	Canadian Shipowners Association, June 3, 1999
Agricore National Affairs, January 27, 1999	Canadian Shipowners Association, June 4, 1999
Alberta Minister of Infrastructure, August 5, 1999	Canadian Shipowners Association, June 30, 1999
Atlantic Pilotage Authority, May 17, 1999	Canaport Limited, September 29, 1998
Batchelor Marine Consulting Services Inc., September 30, 1998	Canaport Limited, May 19, 1999
Bloc Québécois, July 9, 1999	Chamber of Maritime Commerce, December 22, 1998
British Columbia Coast Pilots Ltd., October 28, 1998	Chamber of Maritime Commerce, January 4, 1999
British Columbia Coast Pilots Ltd., June 2, 1999	Chamber of Maritime Commerce, June 11, 1999
British Columbia Maritime Employers Association, October 27, 1998	Chamber of Shipping of British Columbia, July 9, 1998
Canadian Marine Pilots' Association, September 25, 1998	Chamber of Shipping of British Columbia, February 15, 1999
Canadian Marine Pilots' Association, February 12, 1999	Chamber of Shipping of British Columbia, February 23, 1999
Canadian Marine Pilots' Association, February 24, 1999	Chamber of Shipping of British Columbia, May 13, 1999
Canadian Marine Pilots' Association, May 3, 1999	Chamber of Shipping of British Columbia, June 16, 1999
Canadian Marine Pilots' Association, May 27, 1999	Chamber of Shipping of British Columbia, June 30, 1999
Canadian Marine Pilots' Association, June 30, 1999	Chamber of Shipping of British Columbia, September 16, 1999
Canadian Petroleum Products Institute, June 8, 1999	Company of Master Mariners of Canada (The), September 25, 1998
Canadian Pulp and Paper Association, September 23, 1998	Conservation Council of New Brunswick, April 15, 1999
Canadian Shipowners Association, September 28, 1998	Corporation des pilotes du Bas Saint-Laurent, March 12, 1999
Canadian Shipowners Association, December 2, 1998	Department of Works, Services and Transportation, Newfoundland and Labrador, February 1, 1999
Canadian Shipowners Association, April 12, 1999	Fednav International Ltd., July 7, 1999
Canadian Shipowners Association, May 7, 1999	Fraser River Port Authority, January 7, 1999

Fraser River Port Authority, April 28, 1999	Northwest Corridor Development Corporation, March 11, 1999
Fraser River Port Authority, June 18, 1999	
Fraser Surrey Docks Ltd., November 19, 1998	Pacific Pilotage Authority, April 27, 1999
Fundy North Fishermens' Association, April 29, 1999	Pacific Pilotage Authority, June 29, 1999
	Pacific Pilotage Authority, July 21, 1999
Gallant, C.G., April 20, 1999	Prairie Pools Inc., September 15, 1998
Gearbulk Shipping Canada Ltd., June 30, 1999	Prince Rupert Grain Ltd., February 16, 1999
Great Lakes Pilotage Authority Ltd., June 16, 1999	Prince Rupert Port Authority, January 15, 1999
Halifax Pilot Group, May 14, 1999	Québec Port Authority, June 28, 1999
Irving Oil Limited, May 19, 1999	Saint John Port Authority, May 12, 1999
Irving Oil Limited, June 16, 1999	St. Lawrence Shipoperators Association Inc., June 21, 1999
	Sheehan, Clark J., May 21, 1999
Kent Line Limited, June 8, 1999	Strait Crossing Bridge Ltd., January 21, 1999
Laurentian Pilotage Authority, October 5, 1998	The St. Lawrence Seaway Authority, September 23, 1998
Laurentian Pilotage Authority, November 2, 1998	The St. Lawrence Seaway Management Corporation, October 6, 1998
Laurentian Pilotage Authority, January 18, 1999	The St. Lawrence Seaway Management Corporation, June 30, 1999
Laurentian Pilotage Authority, May 5, 1999	The Shipping Federation of Canada, September 25, 1998
	The Shipping Federation of Canada, October 2, 1998
Matte, Yvon, September 25, 1998	The Shipping Federation of Canada, December 23, 1998
McCartney, Bill, March 22, 1999	The Shipping Federation of Canada, February 23, 1999
McIntosh, Andrew, April 15, 1999	The Shipping Federation of Canada, June 21, 1999
McKeil Marine Limited, September 9, 1998	The Shipping Federation of Canada, July 16, 1999
McKeil Marine Limited, February 23, 1999	T. Norman Hall Group Inc., January 30, 1999
Memorial University of Newfoundland, Fisheries and Marine Institute, September 25, 1998	
Ministry of Transportation and Highways, British Columbia, October 1, 1998	Ultramar, June 28, 1999
Ministry of Transportation, Ontario, October 7, 1998	United Fishermen and Allied Workers' Union, December 2, 1998
Neptune Bulk Terminals (Canada) Ltd., November 17, 1998	
New Brunswick Museum, May 31, 1999	
Newfoundland Transshipment Limited, October 7, 1998	Vancouver Port Authority, November 9, 1998

## Appendix IV

### List of Meetings

#### REGIONAL MEETINGS

##### Laurentian Region

October 5, 1998	Individual meetings in Montréal, Québec with: • Laurentian Pilotage Authority • The Shipping Federation of Canada
October 6, 1998	Public meeting in Montréal, Québec
October 30, 1998	Individual meetings in Hull, Québec with: • Mr. Michel Guimond, MP, Beauport–Montmorency–Côte-de-Beaupré–Île d'Orléans and Bloc Québécois, Transport Critic • Corporation des pilotes du Bas Saint-Laurent, Corporation des pilotes du Saint-Laurent Central and LPA Employee Pilots of the Port of Montréal
February 2, 1999	Individual meetings in Montréal, Québec with: • Canadian Pulp and Paper Association • Canadian Ships Masters and Officers • Canadian Shipowners Association • The Shipping Federation of Canada • Chamber of Maritime Commerce • Laurentian Pilotage Authority • Corporation des pilotes du Bas Saint-Laurent, Corporation des pilotes du Saint-Laurent Central and LPA Employee Pilots of the Port of Montréal
February 3, 1999	Public meeting in Montréal, Québec
May 3, 1999	Individual meetings in Montréal, Québec with: • Institut maritime du Québec • Laurentian Pilotage Authority • Corporation des pilotes du Bas Saint-Laurent, Corporation des pilotes du Saint-Laurent Central and LPA Employee Pilots of the Port of Montréal • Canadian Shipowners Association
May 12, 1999	Individual meeting in Hull, Québec with: • Institut maritime du Québec
May 21, 1999	Individual meeting in Montréal, Québec with: • St. Lawrence Shipoperators Association Inc.

## Great Lakes Region

October 7, 1998	Individual meetings in Hull, Québec with: <ul style="list-style-type: none"> <li>• Great Lakes Pilotage Authority Ltd.</li> <li>• Government of Ontario</li> <li>• Canadian Shipowners Association</li> </ul>
October 8, 1998	Public meeting in Hull, Québec
October 29, 1998	Individual meeting in Hull, Québec with: <ul style="list-style-type: none"> <li>• GLPA Employee Pilots</li> </ul>
February 24, 1999	Individual meetings in Hull, Québec with: <ul style="list-style-type: none"> <li>• Canadian Shipowners Association</li> <li>• GLPA Employee Pilots</li> <li>• Chamber of Maritime Commerce</li> <li>• The Shipping Federation of Canada</li> <li>• Great Lakes Pilotage Authority Ltd.</li> </ul>
February 25, 1999	Public meeting in Hull, Québec
May 7, 1999	Individual meetings in Hull, Québec with: <ul style="list-style-type: none"> <li>• Great Lakes Pilotage Authority Ltd.</li> <li>• GLPA Employee Pilots</li> <li>• Canadian Shipowners Association</li> <li>• The Shipping Federation of Canada</li> </ul>

## Atlantic Region

October 20, 1998	Individual meetings in Halifax, Nova Scotia with: <ul style="list-style-type: none"> <li>• Atlantic Pilotage Authority</li> <li>• APA Employee Pilots</li> <li>• New Brunswick, Newfoundland and Labrador, Nova Scotia and Prince Edward Island provincial governments</li> </ul>
October 21, 1998	Public meeting in Halifax, Nova Scotia
March 2, 1999	Individual meetings in Halifax, Nova Scotia with: <ul style="list-style-type: none"> <li>• Halifax-Dartmouth Port Development Commission</li> <li>• APA Employee Pilots</li> <li>• Atlantic Pilotage Authority</li> <li>• Canaport Ltd.</li> <li>• Canadian Shipowners Association</li> <li>• The Shipping Federation of Canada</li> </ul>
March 3, 1999	Public meeting in Halifax, Nova Scotia
May 6, 1999	Individual meetings in Halifax, Nova Scotia with: <ul style="list-style-type: none"> <li>• Atlantic Pilotage Authority</li> <li>• APA Employee Pilots</li> <li>• Canadian Shipowners Association</li> </ul>

## Pacific Region

October 26, 1998	Individual meetings in Vancouver, British Columbia with: <ul style="list-style-type: none"> <li>• Pacific Pilotage Authority</li> <li>• Fraser River Pilots' Association</li> <li>• Chamber of Shipping of British Columbia</li> </ul>
October 27, 1998	Individual meetings in Vancouver, British Columbia with: <ul style="list-style-type: none"> <li>• Saskatchewan, Alberta and British Columbia provincial governments</li> </ul>
October 27, 1998	Public meeting in Vancouver, British Columbia
October 28, 1998	Individual meeting in Vancouver, British Columbia with: <ul style="list-style-type: none"> <li>• British Columbia Coast Pilots Corporation Ltd.</li> </ul>
February 16, 1999	Individual meetings in Vancouver, British Columbia with: <ul style="list-style-type: none"> <li>• Skeena Cellulose Inc.</li> <li>• Chamber of Shipping of British Columbia</li> <li>• British Columbia Coast Pilots Corporation Ltd.</li> <li>• Prince Rupert Grain Ltd.</li> <li>• Pacific Pilotage Authority</li> <li>• Prince Rupert Port Authority</li> <li>• Fraser River Pilots' Association</li> <li>• David Batchelor</li> </ul>
February 17, 1999	Public meeting in Vancouver, British Columbia
April 28, 1999	Individual meeting in Vancouver, British Columbia with: <ul style="list-style-type: none"> <li>• Pacific Pilotage Authority</li> </ul>
April 28, 1999	Public meeting in Vancouver, British Columbia

## GENERAL MEETINGS

October 21, 1998	Meeting in Halifax, Nova Scotia with: <ul style="list-style-type: none"> <li>• Memorial University of Newfoundland, Fisheries and Marine Institute</li> </ul>
January 18/19, 1999	First National Meeting in Ottawa, Ontario
April 20, 1999	Meeting in St. John's, Newfoundland <ul style="list-style-type: none"> <li>• Memorial University of Newfoundland, Fisheries and Marine Institute</li> </ul>
June 9/10, 1999	Second National Meeting in Ottawa, Ontario

## Appendix V

### Participants at Meetings

Individuals and organizations who attended the regional and national meetings of the Review.

Graham Allen, Noranda Inc.	Pierre Caron, Canadian Pulp and Paper Association
Sherry Appleby, Department of Works, Services and Transportation, Newfoundland and Labrador	Frank Carosella, Fraser River Pilots' Association
Serge Arcand, Canadian Marine Pilots' Association	David R. Carter, Company of Master Mariners of Canada (The)
Dick Armstrong, Great Lakes Pilotage Authority Ltd.	Ron Cartwright, Chamber of Shipping of British Columbia
Ross Armstrong, ULS Corporation	Anne Castonguay-Soucie, Atlantic Pilotage Authority
Chris Badger, Vancouver Port Authority	Pierre Cécile, The St. Lawrence Seaway Management Corporation
Serge Ball, Consultant	Bruce Chadwick, Pacific Pilotage Authority
Erle G. Barrett, Océanex (1997) Inc.	Gilles Champagne, Océanex (1997) Inc.
David Batchelor, Consultant	Brock Chrystal, Chamber of Shipping of British Columbia
Peter Baumgartl, Stelco	David Church, Canadian Pulp and Paper Association
Nancy Belding, Department of Transportation, New Brunswick	Pelino Colaiacovo, Consultant
Erin Bell, Canadian Industrial Transportation Association	John Connors, Memorial University of Newfoundland, Fisheries and Marine Institute
Gérard Belley, Canadian Marine Pilots' Association	Michael Cormier, Vancouver Port Authority
Rob Bergevin, Ministry of Transportation, Ontario	John Cox, North West CruiseShip Association
Cheryl Bidgood, Halifax Port Authority	Steven Cutler, Saga Forest Carriers International Ltd.
Tor Bordevik, Star Shipping Limited	
Pierre Boucher, Corporation of Professional Great Lakes Pilots	John Daniels, Company of Master Mariners of Canada (The)
Valmont Bourgeois, Sept-Îles Port Authority	Guy Daoust, Corporation des pilotes du Saint-Laurent Central
Robert Bremner, Montréal Port Authority	Cees Deelstra, North West CruiseShip Association
Michael Broad, B & K Shipping Ltd.	George De Santi, QIT-Fer et Titane
Stephen Brown, Chamber of Shipping of British Columbia	Clément Deschênes, Laurentian Pilotage Authority
Jeff Burghardt, Prince Rupert Grain Ltd.	Jacques Desgagnés, Transport Desgagnés Inc.
Bill Burnett, Fraser River Pilots' Association	Rosaire Desgagnés, Groupe Desgagnés Inc.
Grahame Burton, Chamber of Shipping of British Columbia	Paul Devries, British Columbia Coast Pilots Ltd.
Jim Campbell, Chamber of Maritime Commerce	Michel Dignard, Ministère des transports du Québec



Teny Dikranian, Transport Canada  
 Allen Domaas, Fraser River Port Authority  
 Louis Drolet, Upper Lakes Group Inc.  
 Brian Ducharme, Great Lakes Pilotage  
 Authority Ltd.  
 Peter Dudka, Ministry of Transportation,  
 Ontario  
 Guy Dufresne, Compagnie Minière Québec  
 Cartier  
 Mike Duncan, Halifax Shipyard Limited  
 Michel Duplin, Océanex (1997) Inc.

Wade Elliott, Halifax-Dartmouth Port  
 Development Commission

Gerry Farley, British Columbia Coast Pilots Ltd.  
 Gary Farrell, Canada Maritime Agencies Ltd.  
 Maurice Fellis, Pacific Pilotage Authority  
 Don Fitzpatrick, Comtug Limited  
 Henry Flight, St. John's Port Authority  
 Louis Forget, Ultramar Petroleum  
 John Francis, Strait Crossing Bridge Ltd.  
 Joseph-Marie Fraser, Algoma Central Marine  
 Robert G. Friend, Consultant

Patrick Gates, Kent Line Limited  
 Guy Genois, Canadian Salt Limited  
 Raymond Giguère, Institut maritime du  
 Québec  
 Ross Gilmour, Strait Crossing Bridge Ltd.  
 Richard Goddard, Kent Line Limited  
 David Goffin, Canadian Chemical Producers'  
 Association  
 Ray Goode, British Columbia Coast Pilots Ltd.  
 Wynford Goodman, Port of Belledune  
 Paul Gourdeau, Fednav International Ltd.  
 Kim Graybiel, Department of Highways and  
 Transportation, Saskatchewan  
 John Greenway, Upper Lakes Group Inc.  
 David Grieve, Fednav International Ltd.  
 Michel Guimond, M.P., Beauport–  
 Montmorency–Côte-de-Beaupré–  
 Île d'Orléans and Bloc Québécois Transport  
 Critic

Gordon (Kip) Hacquoil, Canada Steamship Lines  
 Chris Hall, Secunda Marine Services Limited  
 Norman Hall, T. Norman Hall Group  
 Al Hamilton, Sifto Salt  
 John Hansen, Chamber of Shipping of  
 British Columbia  
 Jacquelin Hardy, Corporation des pilotes du  
 Saint-Laurent Central  
 David Hart, Point Tupper Marine Services Ltd.  
 Gilles Harvey, Corporation des pilotes du  
 port de Montréal  
 Richard G. Harvey, Océanex (1997) Inc.  
 Robin Heath, Pacific Pilotage Authority  
 Torben Hestbaek, Maersk Technical  
 Organization  
 Blaine Higgs, Canaport Ltd.  
 Eric Hodgson, Esso Petroleum Canada (East)  
 (Imperial Oil)  
 Finn Hoyrup, British Columbia Coast Pilots Ltd.  
 John Hughes, Secunda Marine Services Limited  
 Gordon Huston, Vancouver Port Authority

David Jackson, Canadian Coast Guard, Fisheries  
 and Oceans  
 Donald Jeans, Halifax-Dartmouth Port  
 Development Commission  
 Raymond Johnston, Canada Steamship Lines  
 Kirk Jones, Canada Steamship Lines  
 Raymond Jourdain, Corporation des pilotes du  
 port de Montréal

Paul Kennedy, Thunder Bay Port Authority  
 Dennis Kooka, P & H Shipping  
 Alan Knight, Company of Master Mariners  
 of Canada (The)  
 Don Krusel, Prince Rupert Port Authority

Guy LaHaye, Consultant  
 André Landry, The St. Lawrence Seaway  
 Management Corporation  
 Réjean Lanteigne, Canadian Shipowners  
 Association  
 Ivan Lantz, The Shipping Federation of Canada  
 Jean Lapointe, Corporation des pilotes du  
 Bas Saint-Laurent

Roger Larson, Canadian Fertilizer Institute	Harvey Mott, Newfoundland Transshipment Limited
A.D. Latter, Consultant	Bruce Murdock, Consultant
Glenn Lawrence, Corporation of Professional Great Lakes Pilots	Peter Murray, Fraser River Pilots' Association
Pierre LeClaire, Corporation of Professional Great Lakes Pilots	John Myers, Sultran Ltd.
Robert Lemire, Great Lakes Pilotage Authority Ltd.	Toni Nardi, Neptune Bulk Terminals (Canada) Ltd.
Lars Ljoen, North West CruiseShip Association	Frank Nicol, The Shipping Federation of Canada
Don MacAlpine, Atlantic Pilotage Authority	Kevin Obermeyer, Nanaimo Port Authority
Peter MacArthur, Atlantic Pilotage Authority	Christian Ouellet, Les Silos Port Cartier
Lisa MacGillivray, Canadian Industrial Transportation Association	Leslie O'Reilly, Memorial University of Newfoundland, Fisheries and Marine Institute
Bill MacInnis, Stora Port Hawkesbury	John Pace, Canada Steamship Lines
Alex MacIntyre, Canadian Marine Pilots' Association	Michel Parent, Océanex (1997) Inc.
Charlie MacKenzie, Ministry of Transportation and Public Works, Nova Scotia	Robert Paterson, N.M. Paterson and Sons Inc.
Claude Mailloux, SODES	Jacek Pawlowski, Memorial University of Newfoundland, Fisheries and Marine Institute
Guy Major, Laurentian Pilotage Authority	Robert B. Pelletier, Institut maritime du Québec
Keith Manifold, West Fraser Timber Ltd.	R.A. Pennington, St. John's Pilot Group
Guy Marmen, Corporation des pilotes du Bas Saint-Laurent	George Philippe, Consultant
Yvon Martel, Laurentian Pilotage Authority	Nelson Pittman, St. John's Pilot Group
William McClean, Corporation of Professional Great Lakes Pilots	Terry R. Pittman, Cape Breton Pilot Group
Angus McDonald, Consultant	Michel Pouliot, Canadian Marine Pilots' Association
Gerard McDonald, Transport Canada	James Pound, Algoma Central Corporation
R. Anthony McGuinness, Atlantic Pilotage Authority	Jim Powell, Skeena Cellulose Inc.
John McIntyre, Rigel Shipping Canada Inc.	Michael Pratt, Corporation of Professional Great Lakes Pilots
Garth McKeil, McKeil Marine Limited	Louis Rhéaume, Corporation des pilotes du Bas Saint-Laurent
Dennis McLennan, Pacific Pilotage Authority	Brian Ritchie, Rigel Shipping Canada Inc.
Neil McNeil, Consultant	Jim Roche, Consultant
Jim McPherson, British Columbia Coast Pilots Ltd.	Anthony G. Roper, Chamber of Shipping of British Columbia
Jean-Claude Michaud, Laurentian Pilotage Authority	Gary Rosko, Alberta Transportation and Utilities
Michael Milner, Robert Reford Inc.	Patrice Ryan, GPC Canada
William F. Morgan, Seabase Limited	Rio St. Amand, Atlantic Towing Limited
Dave Morris, Westward Shipping Ltd.	Brian Saunderson, Agricore Cooperative Ltd.
Donald Morrison, Canadian Shipowners Association	Mona Savoie, Atlantic Provinces Transportation Commission
Wayne Morrison, Canada Steamship Lines	

Alexis Ségal, Québec Port Authority  
 Tom Sellers, Consultant  
 Johnathan Seymour, Consultant  
 Doug Shea, Department of Works, Services and  
 Transportation, Newfoundland and Labrador  
 Randall Sherman, Halifax Port Authority  
 Sonia Simard, The Shipping Federation of  
 Canada  
 Maury Sjoquist, Canadian Merchant Service  
 Guild  
 Douglas Smith, Chamber of Maritime  
 Commerce  
 Gordon Smith, F.K. Warren Limited  
 Wayne A. Smith, Seaway Self Unloaders  
 Jerry Stacey, North Atlantic Refinery Limited  
 John Stewart, Cast North America Inc.  
 Allan Stockdale, Halifax Pilot Group  
 Jim Stoneham, ATSHIP Shipping Agency  
 Don Stonehouse, Ministry of Transportation  
 and Public Works, Nova Scotia  
 Wilson Stuart, Company of Master Mariners  
 of Canada (The)

Rod Taylor, Ministry of Transportation, Ontario  
 Louis Toupin, Consultant  
 Fred Towers, British Columbia Coast Pilots Ltd.  
 Fidèle Tremblay, Corporation des pilotes du  
 port de Montréal

Ms. Nicole Trépanier, St. Lawrence  
 Shipoperators Association Inc.  
 Gord Tufts, Department of Transportation and  
 Public Works, Prince Edward Island  
 Charles W. Tully, Corporation of Professional  
 Great Lakes Pilots  
 Peter Turner, Saint John Port Authority

Philippe Vachon, McMaster Gervais  
 Mike van der Gracht, Fraser River Pilots'  
 Association  
 Richard Vézina, Canadian Marine Officers'  
 Union  
 Nicholas Vincent, Ministry of Transportation  
 and Highways, British Columbia

Harvey Wade, Transport Canada  
 Harry S. Waugh, Algoma Tankers Ltd.  
 Wayne Whyte, Canadian Marine Pilots'  
 Association  
 Jim Wilhelm, Algoma Central Corporation  
 Richard Winnel, Corporation of Professional  
 Great Lakes Pilots  
 Rhoda Witherly, Prince Rupert Port Authority  
 Dave Woodman, Prince Rupert Port Authority

## Appendix VI

### Recommendations and Potential Impact

This Appendix includes: the Panel's recommendations; alternative recommendations proposed by some parties on those issues where they disagree with the Panel's recommendations; and a discussion on the potential impact of the Panel's recommendations.

#### 1. Compulsory Pilotage Area Designations

##### Risk-based Methodology

##### Panel Recommendation No. 1

The Panel recommends that each authority be required to identify, in consultation with interested parties, any compulsory areas where a change in factors and circumstances related to designation justifies a detailed re-examination of the designation, and to develop a plan and a time frame for doing so.

The Panel recommends that each authority be required to report on this plan and time frame to the Minister in its next annual report.

The Panel recommends that each authority be required to publish a regulation stipulating that reviews of the factors and circumstances related to compulsory designations will take place every five years.

The Panel recommends that each authority be required to conduct a risk-based assessment of proposed new compulsory areas and of those areas where changed factors and circumstances justify a detailed re-examination of the designation.

The Panel recommends that before conducting such a risk-based assessment, the

authority be required to adopt a risk-based methodology that requires the authority to, among others

- identify the problem and associated risk factors, and develop an information base related to the risk factors;
- form a risk management team to carry out the risk assessment;
- identify and consult with all interested parties and determine their risk concerns;
- analyze risk scenarios and their frequency, consequences and cost implications, as well as interested parties' acceptance of risk;
- identify risk control options and their effectiveness and cost implications;
- assess interested parties' acceptance of proposed actions and residual risks; and
- establish a process to monitor the chosen action.

##### CSAs Recommendation

The CSA recommends that the *Pilotage Act* be amended to include guidelines for the development of local criteria by the pilotage authorities. Legislation should ensure that review takes place before areas are designated.

### **Governments of Alberta, Manitoba and Saskatchewan Recommendation**

The Governments of the Prairie Provinces recommend that a Review be conducted by an independent party. Transport Canada should be responsible for cost and management for developing a risk-based methodology. They further recommend a risk-based approach to making pilotage decisions, including a review of the cost and benefits of keeping the existing the current regime and structure. They also recommend that the commercialization of pilotage services be placed on the agenda of the 2000 review of the *Canada Transportation Act*.

### **Size of Canadian Vessels subject to Compulsory Pilotage**

#### **Panel Recommendation No. 2**

The Panel recommends that the Atlantic Pilotage Authority and the Laurentian Pilotage Authority be required to carry out, in consultation with interested parties, a risk-based assessment of vessel size limits and types of vessels subject to compulsory pilotage; be required to complete the risk-based assessment by the end of 2001; be required to report the results of the risk-based assessment to the Minister; and be required to change regulations when the results of the risk-based assessment differ from the current regulations.

### **Governments of Alberta, Manitoba and Saskatchewan Recommendation**

The Governments of the Prairie Provinces recommend that independent parties from the

shipping community to be included to ensure a fair and objective process.

### **Granting of Waivers**

#### **Panel Recommendation No. 3**

The Panel recommends that each pilotage authority maintain the current practice of assessing requests for waivers to compulsory pilotage on a case-by-case basis, in the interest of safety of navigation.

The Panel recommends that, in the interest of greater transparency of the waiver process, each authority provide reasons when denying a request for a waiver.

### **CSA Recommendation**

The CSA recommends that a standard be developed and published by each pilotage authority with respect to the information that must be submitted by vessel Master, shipowner or agent in support of a request for waiver, i.e., passage plan, experience of bridge crew, status of bridge equipment and engineering, and presence of specialized navigational technologies. Further, an appeal mechanism for waivers be developed by each authority.

### **Governments of Alberta, Manitoba and Saskatchewan Recommendation**

The Governments of the Prairie Provinces recommend that a risk-based assessment be used for the granting of waivers, and that criteria be established to promote commercial flexibility and timeliness.

## Double Pilotage

### Panel Recommendation No. 4

The Panel recommends that the Laurentian Pilotage Authority be required to carry out a risk-based assessment by mid-year 2001 to determine whether and when requirements for double pilotage are valid, including the current requirement for double pilotage on all vessels during the winter, the requirement for double pilotage on tankers over 40,000 tonnes and the requirement for double pilotage on passenger vessels over 100 metres in length.

The Panel recommends that the Laurentian Pilotage Authority be required to report the results of the risk-based assessment to the Minister of Transport and be required to implement the results of the assessment by amending its regulations where necessary.

## Docking at District 2 Ports

### Panel Recommendation No. 5

The Panel recommends that the Laurentian Pilotage Authority be required to immediately cease the practice of mandatory use of docking pilot services, be required to immediately cease imposing docking/undocking charges on vessels that have not requested the services of a docking pilot, and be directed to apply the tariff provision for docking pilotage.

### Canadian Marine Pilots' Association Recommendation

The CMPA recommends that a risk-based assessment be carried out for each port where docking pilotage is currently required in order to determine its validity.

## Two-pilot Assignments in the Pacific Pilotage Authority Region

### Panel Recommendation No. 6

The Panel recommends that the Pacific Pilotage Authority be required to report on the agreed-upon changes to the eight-hour, 105-mile regulation in its next annual report to the Minister.

## 2. Training and Licensing Requirements for Pilots

### National Standards

#### Panel Recommendation No. 7

The Panel recommends that the current regional system for training and licensing pilots be maintained as a responsibility of each pilotage authority.

### CSA Recommendation

The CSA recommends that discernible national standards be developed for the hiring, training and licensing of pilots rather than leaving each pilotage authority with the jurisdiction to establish its own criteria.

### Pool of Pilot Candidates

#### Panel Recommendation No. 8

The Panel recommends that the pilotage authorities be required to report on the pool of qualified pilot candidates in their annual reports. In doing so, each pilotage authority should outline any problems it has identified in its region, the results of any review or study, and the corrective measures taken or contemplated.

## **Pilot Quality Assurance**

### **Panel Recommendation No. 9**

The Panel recommends that the pilotage authorities be required to develop and implement a fair and reasonable system for assessing pilots' competence and quality of service, after consultation with interested parties. This assessment process should take place regularly and not less than every five years.

### **Governments of Alberta, Manitoba and Saskatchewan Recommendation**

The Governments of the Prairie Provinces recommend that any additional costs associated with the development of a pilot assessment system to be borne by the pilots. Assessment to take place on an annual basis.

## **Pacific Pilotage Authority Coast-wide Licensing and Dispatching**

### **Panel Recommendation No. 10**

The Panel recommends that the PPA coast-wide system for pilot licensing and dispatching be maintained.

## **Pilotage Services at Prince Rupert, BC**

### **Panel Recommendation No. 11**

The Panel recommends that the PPA, under its current coast-wide licensing and dispatching regime, continue to provide pilotage services at Prince Rupert on a rotational pilot assignment basis.

### **Prince Rupert Port Authority Recommendation**

The Prince Rupert Port Authority recommends that the issue of pilot assignment at

Prince Rupert be examined by an impartial third party to determine whether the current rotational system should be maintained or replaced by a permanent assignment system.

### **Governments of Alberta, Manitoba and Saskatchewan Recommendation**

The Governments of the Prairie Provinces recommend that an independent cost benefit assessment be undertaken.

## **3. Pilot Certification Process for Masters and Officers**

### **Atlantic Pilotage Authority**

#### **SYLLABUS FOR CERTIFICATION CANDIDATES**

### **Panel Recommendation No. 12**

The Panel recommends that the Atlantic Pilotage Authority, together with pilots and Canadian shipowners, be required to develop a more detailed outline of material that is relevant for purposes of certification, as well as a description of what is expected in the certification exams.

### **CERTIFICATION OF MOORING MASTER AT CANAPORT MONOBUOY**

### **Panel Recommendation No. 13**

The Panel recommends that section 13 of the Atlantic Pilotage Regulations, which stipulates that a certificate holder must be a regular member of the complement of a ship, not be modified to allow other individuals who are not regular members of the complement of a ship, such as a Canaport mooring master, to be eligible for certification.



### **Canaport Ltd. Recommendation**

Canaport recommends that Section 13 of the Atlantic Pilotage Regulations be amended to allow Canaport's personnel to apply for certification in order to perform pilotage duties at Canaport's Monobuoy.

### **LPA Certification Process**

#### **Panel Recommendation No. 14**

The Panel recommends that the Laurentian Pilotage Authority be required to implement a modernized certification process for LPA District 2, based on a training and evaluation program adopted by the LPA Certification Steering Committee. A modernized certification process will include the following elements:

- a competency-based training program that includes details on the required abilities, the context of their application and the level of performance required to achieve certification;
- a teaching guide that includes, for each of the required abilities, teaching and learning methods and bibliographical references to help candidates prepare for certification examinations;
- an evaluation guide to be used by the examination board, together with recommended methods of evaluation for each part of the examination, including, where appropriate, the use of simulators or onboard ship handling;
- an examination board made up of one LPA representative as the presiding member,

two pilots, one certified master, and one Transport Canada representative; and

- the training of the chairman of the examination board in the methods and purposes of evaluation.

The Panel recommends that the Laurentian Pilotage Authority be required to extend to District 1 the modernized certification process developed for District 2.

### **CSA Recommendation**

The CSA recommends that a National Pilotage Exemption Program for Canadian-flagged vessels, as developed by the CSA and based on vessel equipment, training standards and Masters and Officers experience and proficiency, be implemented as an alternative to the current compulsory pilotage certification process. Further, the Pilotage Act be amended to allow the implementation of the National Pilotage Exemption Program.

### **Governments of Alberta, Manitoba and Saskatchewan Recommendation**

The Governments of the Prairie Provinces recommend that an exemption program for masters and officers be instituted to reduce costs for lake carriers transporting western grain.

### **GLPA Exemption Process**

#### **Panel Recommendation No. 15**

The Panel recommends that the Great Lakes Pilotage Regulations be amended to enhance requirements for exempting vessels from



compulsory pilotage in the Great Lakes pilotage region by:

- adding a requirement ensuring that there are two qualified officers on board the vessel in compulsory areas, one being the master and the second being a deck watch officer holding a first mate qualification;
- increasing the minimum number of trips required from both the master and the deck watch officer in the compulsory area to 15 in a three-year period with five of the trips completed in the 12-month period preceding the request for exemption;
- adding a requirement ensuring that both the master and deck watch officer requesting the exemption have been on the bridge of the ship for each of the required 15 trips and can provide documented proof at the request of the Authority; and
- a requirement ensuring that both the master and the deck watch officer requesting the exemption have received marine training acceptable to the Authority.

The Great Lakes Pilotage Regulations be further amended to add a provision that would enable the Authority to revoke an exemption from compulsory pilotage, if the Authority determines that the conduct or the navigation of the vessel constitutes a risk to safety of navigation. This provision should require the Authority to provide reasons for the revocation.

#### **Canadian Marine Pilots' Association Recommendation**

The CMPA recommends that the GLPA be required to institute a certification process for Canadian Masters and Officers, following an agreed transition period.

#### **Governments of Alberta, Manitoba and Saskatchewan Recommendation**

The Governments of the Prairie Provinces recommend that the GLPA be required to institute a certification process.

### **4. Financial Self-Sufficiency and Cost Reduction**

#### **Self-Sufficiency/Cost Reduction**

##### **Panel Recommendation No. 16**

The Panel recommends that the authorities, in partnership with pilots and all interested parties with a legitimate interest in pilotage, regularly examine all aspects of their operations and that the authorities report to the Minister of Transport, in their annual reports, specific steps they have taken to improve efficiencies and further reduce costs.

The Panel recommends that the PPA be required to report to the Minister on the outcome of its review of pilotage options for the Fraser River with a schedule for implementing the selected option.

#### **Governments of Alberta, Manitoba and Saskatchewan Recommendation**

The Governments of the Prairie Provinces recommend that specific measures be taken to promote competition within pilotage services. Pilotage authorities to commit themselves to

specific cost reduction performance. They further recommend that the commercialization of pilotage services be placed on the agenda of the 2000 review of the *Canada Transportation Act*.

## Structure of Board of Directors

### Panel Recommendation No. 17

The Panel recommends that no changes be made to the *Pilotage Act* in respect of the composition of the boards of directors.

### CSAs Recommendation

The CSA recommends that the legislation be amended to establish national standards with respect to the Authorities' Boards of Directors.

## Governments of Alberta, Manitoba and Saskatchewan Recommendation

The Governments of the Prairie Provinces recommend that the corporate governance structure of commercialized pilotage include industry representatives from the Prairie Provinces on the board of directors.

## Consultation

### Panel Recommendation No. 18

The Panel recommends that pilotage authorities be required to hold regular consultations with interested parties on financial, operational and planning issues that affect such parties.

The Panel recommends that pilotage authorities be required to report on their plans for consultations and the implementation of those plans in their annual report to Parliament.

## Governments of Alberta, Manitoba and Saskatchewan Recommendation

The Governments of the Prairie Provinces recommend that the issue of consultation be linked to a broader review of an appropriate corporate governance structure for a commercialized pilotage service in the context of the 2000 review of the *Canada Transportation Act*.

## Accountability

### Reporting of Incidents

### Panel Recommendation No. 19

The Panel recommends that authorities, pilots and the shipping industry establish a system for the early release of practical information about minor incidents.

## Governments of Alberta, Manitoba and Saskatchewan Recommendation

The Governments of the Prairie Provinces recommend that the Authorities be required to release information about incidents. Further, the Authorities be required to release financial information and publish benchmarks and results of their performance.

## Complaints

### Panel Recommendation No. 20

The Panel recommends that the pilotage authorities establish a structured methodology for handling complaints that ensures that the complainant receives timely feedback about the outcome or the action taken.

## **Implementation of Recommendations**

### **Panel Recommendation No. 21**

The Panel recommends that each authority be required to submit, within six months of the tabling of the report, and following consultations with the interested parties, a plan to the Minister of Transport setting out, in order of priority, the proposed implementation and anticipated completion date of all the recommendations contained in this report that do not have a specific time frame.

### **Discussion on the Potential Impact of the Panel's Recommendations**

Although implementation of some of the recommendations is likely to result in initial costs for the pilotage authorities and the industry, others will potentially generate savings. It is also believed that the additional costs incurred by the parties will be offset by long-term benefits and will result in the enhanced safety and efficiency of pilotage services.

### **Recommendations with minimal or no impact**

The Panel's recommendations that suggest the continuation of the current systems are expected to have minimal or no impact on the interested parties. These are the recommendations made with respect to the granting of waivers (No. 3) and national standards on training and licensing of pilots (No. 7). The recommendations addressing mainly administrative matters, such as self-sufficiency (No. 16), the structure of the board of directors of the authorities (No. 17), accountability (Nos. 19

and 20) and implementation of recommendations (No. 21), will also have minimal or no impact since they can be integrated into the authorities' administrative procedures and can likely be actioned without additional resources.

### **Recommendations on issues affecting all pilotage areas**

The Panel's recommendation with regard to the assessment of the pool of pilot candidates (No. 8) may result in additional costs, especially if outside consulting is required by the authorities. The financial impact will increase in those regions where, due to the small pool of available pilot candidates, there is a need for an enhanced apprenticeship program. Such costs, however, do not result from the recommendation itself but rather from the situation identified as a result of the recommendation.

With respect to the recommendation on pilot quality assurance (No. 9), it is expected that the authorities and the pilot groups will incur some costs related to the development and the implementation of an assessment system. While the authorities' existing resources may be sufficient to administer this system, the potential impact appears to be mainly on the pilots' time that will be required for evaluation and training.

The recommendation that potentially has the most impact on interested parties is the one made with respect to the development and application of risk-based assessment process relating to the designation of compulsory areas (No. 1). Where the review of factors and circumstances identify the need for a

detailed examination of the designation, there will be additional costs for the pilotage authorities related to the development of a risk-based methodology and the conduct of the assessment. Whether the assessment process reaffirms the validity of the current compulsory designation or reduces the number of compulsory designations, the users will be assured that the resulting designation of compulsory areas will be based on sound analysis.

The recommendation regarding consultations (No. 18) is expected to have an impact on the interested parties in that the process, including those consultations recommended by the Panel in regard to the issues addressed in various sections of the report, will necessitate additional costs such as administrative, meeting and travelling expenses. The consultations will however improve communications between the parties and will potentially result in long term savings by enhancing the efficiency of pilotage services.

#### **Recommendations on issues affecting some pilotage areas only**

The Panel's recommendation concerning docking pilotage at LPA's District 2 ports (No. 5) will have financial impacts by reducing pilotage costs for shipowners and reducing the Authority's pilotage revenues. Any reduction in the Authority's pilotage revenue should be offset by an equivalent reduction in payment to the pilot corporation as a result of workload reduction. The Authority and the District 2 pilots may have to adjust docking pilot strength to reflect new workloads.

With respect to the LPA certification process (No. 14), the Authority has already undertaken measures to modernize the program. Therefore, it is not expected that there will be substantial costs resulting solely from the Panel's recommendation. It is not clear whether the new training program being developed by the Québec Marine Institute will increase the current training costs for the Canadian shipowners. In the long term, the modernization of the LPA's certification process should allow Canadian shipowners to qualify more of their masters and officers and thereby reduce their pilotage costs. While this may result in a loss of pilotage revenue for the Authority in District 2, it should be offset by gradual reduction in pilot strength resulting from lower workloads.

The recommendations concerning the size of vessels subject to compulsory pilotage (No. 2) and double pilotage (No. 4) in the LPA will result in additional costs for the authority in the conduct of a risk-based assessment, and will likely need outside consultant assistance. Whether the current requirements are confirmed or reduced, the users will be assured that the resulting requirements are based on sound analysis.

In the APA region, the Panel's recommendation on the syllabus for certification candidates (No. 12) will have little or no financial impact on the authority. In regard to the recommendation concerning the size of vessels subject to compulsory pilotage (No. 2), the APA, like the LPA, will likely require the

assistance of an outside consultant to conduct the risk-based assessment.

With respect to the certification of Canaport's mooring master (No. 13), the Panel's recommendation is not expected to result in an impact in that it recommends the continuation of the current pilotage system at the Monobuoy. Canaport Ltd. will not realize anticipated savings representing the difference between the cost of pilot and the cost of a second mooring master.

The recommendation regarding the enhancement of the GLPA exemption process (No. 15) will likely have no impact on the Authority since there is already an exemption system in place. Some Canadian shipowners in the GLPA region may incur training costs to ensure that their masters and officers meet the requirements of the recommended enhanced process.

With respect to the PPA region, the recommendation concerning two-pilot assignments (No. 6) will likely not affect the Authority, but should reduce the costs to the industry. On the issue of coast-wide licensing and dispatching (No. 10), the recommendation to maintain the present system is not expected to result in additional costs, with the exception of those related to the maintenance of pilot currency in less-frequented ports. It is however believed that these costs will be minimal. It is noted that the PPA has already addressed the issue of pilot currency. The recommendation with respect to pilotage services at Prince Rupert (No. 11) will have no impact on the pilotage authority. The present system is safe and efficient, and its continuity is not expected to have an impact on the Port Authority.