

**PACIFIC PILOTAGE AUTHORITY
Special Examination Report**

**Presented to the
Members of the Authority**

27 November 2003

**PACIFIC PILOTAGE AUTHORITY
SPECIAL EXAMINATION REPORT
TABLE OF CONTENTS**

OBJECTIVES, SCOPE AND EXAMINATION CRITERIA	1
OPINION	2
CONTEXT	
Legislative mandate	3
Objectives	3
Description of operations	3
Significant changes since the 1998 special examination	4
FINDINGS	
Introduction	5
Safe pilotage services	5
Efficient pilotage services	9
Financial self-sustainability	12
APPENDICES	
Financial and statistical highlights	A
Examination criteria	B

To the Members of the Pacific Pilotage Authority:

OBJECTIVES, SCOPE, AND EXAMINATION CRITERIA

As required by Part X of the *Financial Administration Act (FAA)*, we have carried out a special examination of the financial and management control and information systems and management practices maintained by the Pacific Pilotage Authority (the Authority). The Authority is required by paragraphs 131(1) (b) and 131(2) (a) and (c) of the *FAA* to maintain these systems and practices in such manner as will provide reasonable assurance that:

the assets of the Authority are safeguarded and controlled;

the financial, human and physical resources of the Authority are managed economically and efficiently; and

the operations of the Authority are carried out effectively.

Our responsibility is to express an opinion on whether, during the period under examination from January to October 2003, there was reasonable assurance that there were no significant deficiencies in the systems and practices examined.

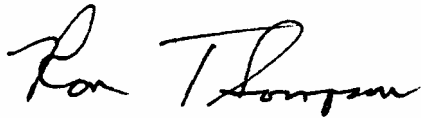
This is the fourth special examination of the Authority. A plan for the examination, based on our survey of the Authority's systems and practices, was submitted to the Members of the Authority on 27 May 2003. The plan included the criteria to be applied in the special examination. The criteria were selected specifically for this examination by our Office in consultation with the Authority. They were selected based on our knowledge and experience with value for money auditing, by reference to legislative and regulatory requirements, to standards and practices followed by the Authority and other organizations, and to professional literature. These criteria are listed in Appendix B.

The plan also identified those systems and practices that we considered essential to providing the Authority with reasonable assurance that its assets are safeguarded and controlled, its resources are managed economically and efficiently, and its operations are carried out effectively. Other systems and practices of the Authority, although covered in the survey, were excluded from detailed examination because our analysis of the significance and risks associated with them indicated that, during the period under examination, they were not critical to providing the Authority with the reasonable assurance required by paragraphs 131(2)(a) and (c) of the *FAA*.

Our examination was made in accordance with the plan as well as the standards for assurance engagements recommended by the Canadian Institute of Chartered Accountants. Accordingly, it included such tests and other procedures as we considered necessary in the circumstances. In carrying out the special examination, we did not rely on internal audits because during the period under examination the Governor in Council granted the Authority an exemption from the requirement to conduct internal audits pursuant to subsection 131 (3) of the *FAA*.

OPINION

In our opinion, with respect to the criteria established, there is reasonable assurance that there are no significant deficiencies in the systems and practices examined.

A handwritten signature in black ink that reads "Ron Thompson". The signature is written in a cursive style with a large initial "R" and "T".

Ronald C. Thompson, CA
Assistant Auditor General
for the Auditor General of Canada

Ottawa, Canada
24 October 2003

CONTEXT

Legislative mandate

The Pacific Pilotage Authority (PPA) was established in February 1972 pursuant to the *Pilotage Act*. The Authority is a Crown corporation listed in Schedule III, Part I, of the *Financial Administration Act*, and is not an agent of Her Majesty. The legislated objective of the Authority is to establish, operate, maintain and administer in the interests of safety an efficient pilotage service within the Pacific region. It reports to the Minister of Transport and is governed by a board of directors with seven members, comprised of a part-time Chair, two industry representatives, two pilots and two others that represent the general public.

The mandate of the PPA, as stated in the *Pilotage Act*, is “to establish, operate, maintain and administer in the interests of safety an efficient pilotage service within the region set out in respect of the Authority”. This region includes all Canadian waters in and around the province of British Columbia. The *Act* provides that “the tariffs of pilotage charges ...shall be fixed at a level that permits the Authority to operate on a self-sustaining financial basis and shall be fair and reasonable”. The PPA has operated on a financially self-sustaining basis since 1972 and all of its tariffs must be filed with the Canadian Transportation Agency and are subject to appeal.

The *Pilotage Act* gives the Authority the power to make regulations, subject to the approval of the Governor in Council. PPA is responsible for:

- establishing compulsory pilotage areas,
- prescribing the ships or classes of ships that are subject to compulsory pilotage,
- prescribing the circumstances under which compulsory pilotage may be waived,
- prescribing the qualifications required to obtain a license or pilotage certificate, and
- prescribing fair and reasonable tariffs that permit it to operate on a self-sustaining financial basis.

Objectives

The Authority’s corporate objectives, as stated in its 2003 corporate plan, are to:

- provide safe, reliable and efficient marine pilotage and related services in the coastal waters of British Columbia, including the Fraser River;
- provide the services within a commercially oriented framework directed toward maintaining financial self-sufficiency through tariffs that are fair and reasonable;
- promote the effective utilization of the Authority’s facilities, equipment and expertise through the productive application of these resources in the interest of safe navigation; and
- be responsive to the government’s environmental, social and economic policies.

Description of operations

PPA’s headquarters are located in Vancouver, British Columbia. When the Authority was established in 1972, the Act gave the pilots for the region or any port thereof the choice to become employees or to form their own company with the sole right to provide pilotage services in the area under contract to the Authority. The majority of pilots in the region elected to form

their own company, the British Columbia Coast Pilots Ltd. (BCCP). Through contractual arrangements with the PPA, the BCCP is the sole provider of pilots to all areas except the Fraser River; the Fraser River pilots are employees of the Authority. Vessels moving into the Fraser River are required to use both pilot groups, in accordance with the *Pilotage Act*.

Services are provided through the performance of pilotage assignments on vessels entering the region that are subject to compulsory pilotage or that request such services. In coastal waters, these assignments are mainly carried out by pilots contracted by the PPA, and on the Fraser River by employee pilots. The Authority uses either contracted boats or its own pilot boats to deliver pilots to ships, and operates a dispatch service through its main Vancouver location and its Victoria sub-office.

The B.C. pilotage environment is changing. Traffic in BC Coastal waters has declined recently due to droughts in the 2001 and 2002 crop years and as the natural resource industries in British Columbia restructure in response to tariffs and lower base metal prices. Historical sources of pilot candidates are also shifting and, as a result, there will likely be an impact on the entry requirements, the licensing process and future training needs. Vessel and navigational technology continues to evolve and the shipping industry is becoming more demanding as it faces competitive pressures. These and other changes to the PPA environment will require early consideration to ensure that its past record of success continues into the future.

Appendix A provides financial and statistical highlights of the Authority's operations for the past six years.

Significant changes since the 1998 special examination

As a result of the Government's 1995 National Marine Policy, the *Pilotage Act* was amended in 1998. These amendments:

- require that pilotage authorities be financially self-sustaining, with no further parliamentary appropriations to be made available,
- implement a more expeditious process for the revision and approval of tariffs,
- provide the option of a part-time chairman with a full-time chief executive officer, and
- directed the Minister of Transport to review and to make a report to Parliament on certain issues that affected the pilotage authorities.

After the *Act's* amendment, the Authority converted the chair position, which previously functioned as chief executive officer on a full-time basis, to two positions: a part-time chair and a full-time chief executive officer.

In November 1999, the Minister of Transport released the Ministerial Review on Outstanding Pilotage Issues which was conducted by the Canadian Transportation Agency on his behalf. While conducting the review, the Agency held extensive consultations with the pilotage authorities, pilots, users of pilotage services, and other interested parties. On 15 November 1999, the Minister wrote to PPA requesting that the recommendations that impacted the Authority be addressed and that progress be reported in its subsequent annual reports. Eight recommendations affected the Authority and progress towards their resolution has been identified in all of PPA's annual reports since 2000.

FINDINGS

Introduction

As indicated by our opinion near the beginning of this report, although certain improvements by PPA are possible, we did not find any significant deficiencies in the systems and practices examined. Our findings for each of the key areas selected for detailed examination are set out in the following sections.

Safe pilotage services

We conclude that PPA has in place systems and practices that provide reasonable assurance that the Authority operates safe pilotage services that contribute to safe navigation within the Pacific region. The following paragraphs explain our findings related to the systems and practices currently in place.

Designation of areas and vessels

With certain exceptions, the Authority has designated all foreign vessels and Canadian vessels greater than 350 gross registered tons moving within its compulsory pilotage areas as requiring the services of a licensed pilot or a pilotage certificate holder. The vessel designation has not been amended since PPA was established in 1972. The original designation of compulsory pilotage areas is based on the 1968 Report of the Royal Commission on Pilotage.

The Authority is in the business of mitigating risks to navigation to an acceptable level. It has not used a standardized methodology to set an acceptable level of risk or completed formal assessments of the level of risk within the Pacific region. As a first step in designating compulsory pilotage areas and vessels subject to pilotage, PPA must identify and evaluate the risks to safe navigation within the Pacific region. It must then identify the vessels that require the services of a licensed pilot.

In response to the 1999 Ministerial Review of Outstanding Pilotage Issues, Transport Canada, in conjunction with the four Canadian pilotage authorities, developed the Pilotage Risk Management Model (PRMM) and the PRMM manual. The PRMM was developed by adapting established and accepted risk management models to apply to the operations of pilotage authorities.

Application of the Pilotage Risk Management Model

Subsection 16(1)(b) of the *Pacific Pilotage Regulations* requires a second pilot for assignments longer than 105 miles. Subsection 16(1)(a) of the regulations requires a second pilot for assignments longer than eight hours. The 105 mile rule was established when this distance was the average a ship could travel in the regular eight-hour bridge watch of a pilot. It is questioned whether the 105 mile rule is outdated because of the speed of newer vessels. In fact, the Canadian Transportation Agency concluded in its May 2001 hearing that the rule is no longer appropriate and should be removed from the regulations. The Authority stated that it would undertake to revise the regulations and then attempt to remove the clause from its contract with the coastal pilots. This has yet to be done.

In September 2001, PPA retained the services of a consultant to apply the PRMM methodology to the 105 mile rule. A report issued in February 2002 recommended that:

- the Authority suspend the rule for a one-year trial period;
- at the end of the period, review all assignments that fell under the rule for pilot fatigue and other safety issues. Consideration would be given to extending the trial period by another year;
- PPA develop a computer program to provide information on the time to complete assignments;
- When the above matters are concluded, remove the rule from the regulations.

Transport Canada's March 2002 evaluation of the consultant's report concluded that the report's recommendation was not listed as one of the options and that in order to demonstrate that the best option was selected, the report should detail that all the options were evaluated against similar criteria. On 13 May 2002, the Authority's Board of Directors discussed the report and passed a motion that based on the data contained in the report, the 105 mile rule be retained until a proven and reliable alternative may be put in place to ensure the issue of pilot fatigue is properly addressed. Nevertheless, PPA agreed not to charge for a second pilot if voyages of greater than 105 miles were completed in less than eight hours.

In June 2003, the Authority also completed a review of the Seymour Narrows – Johnstone Strait using the PRMM. This review's purpose was not to assess the area for its compulsory pilotage designation. Rather, it was carried out to increase the level of safety in the area due to a concern about an increase in traffic that could lead to close quarter incidents as cruise ships and other vessels attempt to go through the area at the same slack water period to avoid strong tides. The review resulted in 36 recommendations to improve safety in the area.

In 1999, the Minister wrote to PPA and noted that he expected a review of the designations of compulsory pilotage areas and vessels subject to pilotage to be conducted by 2005. The Authority informs us that it intends to complete such a review, but not with the PRMM.

In May 2002, a four-member panel of industry experts was appointed by the Minister of Transport to review the *Canada Marine Act (CMA)*. While pilotage is a minor part of the Act, the *CMA Review: Report of the Review Panel*, tabled in Parliament on 4 June 2003, noted three outstanding issues from the 1999 Ministerial Review. One of these was the scope of application of the PRMM.

Management has informed us that it will conduct a review of a pilotage area when there has been a significant change in the area, such as a significant increase or decrease in traffic or a change in the nature of the traffic.

The 1999 Ministerial Pilotage Review recommended that the Authority's regulations be revised so that the designation of areas and vessels subject to compulsory pilotage be reviewed every five years based on an assessment of the navigational risks for safe movement of vessels in the British Columbia region. The regulations have yet to be amended. The Minister also expects a formal review to be completed by the end of 2005. Management has indicated that it does not plan to use a contractor for the PRMM for this review nor have extensive consultations with all stakeholders because of cost considerations.

However, the PRMM is the methodology developed to assess risks related to compulsory pilotage and should be used by PPA for this purpose. While not explicitly stated, it can be assumed that the methodology, once developed, was intended to be used in the five-year reviews and not just for changes in factors and circumstances that justify a re-examination of a compulsory pilotage designation. Until the Authority uses the PRMM to complete a review of its designations of compulsory pilotage areas or vessels subject to compulsory pilotage, the designations continue to be unsupported by a completed formal risk-based assessment. We will monitor this situation annually during our financial statement audit and may comment in a fourth paragraph of our Auditor's Report if appropriate action is not taken by 2005.

Incidents

The Authority has a strong record of safety: in 2002, 99.921 percent of total assignments were incident-free. The number of incidents has moved downwards over the past few years from a high of 32 in 1997, as shown in the following table:

Year	Number of Incidents	Incident-free Rate
1998	19	99.858%
1999	15	99.893%
2000	15	99.896%
2001	10	99.926%
2002	10	99.921%

PPA reports on its safety performance in its annual report by indicating the number of incidents and the percentage of incident-free assignments for the current year and the previous two years. This performance reporting could be enhanced by expanding the performance information to include a discussion of the nature, cause, and severity of the incidents, as well as the extent of the Authority's contribution to marine safety within the Pacific region.

However, there were no major accidents in recent years. There was also little variation in the number of incidents among individual pilots with comparable experience. Out of 105 pilots currently on strength, only two have had as many as three incidents over the last five years. These incidents are not the result of inexperience – the pilots involved have 15 and 34 years of experience, respectively.

The Authority has a number of systems and practices in place that contributed to safe navigation during the period under review.

Pilot licensing

The system of licensing pilots is comprehensive and demanding. The basic qualifications, both skills and experience, are clearly established and adhered to, as are the minimum training requirements. The General Pilotage Regulations were amended in March 2000 to require annual medical examinations, regardless of age. Previously medical examinations were required every three years to age 55 and annually thereafter. An annual doctor's notification for each pilot indicating whether the pilot is fit for pilotage duties with or without limitation, or unfit, are kept on file.

Waiver policies and practices

Waivers are provided under section 10 of the *Pacific Pilotage Regulations*. These regulations were amended on 12 June 2003 to provide reciprocal treatment of US tugs and barges as is provided to Canadian tugs and barges in US waters. Other than emergencies, waivers are provided only for US tugs and barges that have qualified and experienced persons in charge of deck watch, once they have submitted a request in writing and received approval from PPA. The current waiver policy provides for renewable waivers every six months. In general, the process works well and only one of these vessels has ever had an incident.

In 1998, we reported that PPA experienced difficulty in keeping track of and following up all waiver renewals given the number of companies involved and the frequency of the renewals. In some cases, the renewal application was late and the waiver was, technically, no longer valid. In 1999, in-house software was developed to automate this process. The Authority has also recently changed this policy so that all such waivers will be renewed annually.

Improvements in the investigation of incidents and accidents

PPA has a formal system in place for reporting all incidents. In 1998, we reported that incident investigation requirements were not clear, results were not always evident and, in some instances, there were no overall conclusions or recommendations. We found that the investigation requirements have been clarified and are divided into three classes. All incidents are subject to investigation by the Vice President and investigation reports contain overall conclusions and recommendations.

Competency of those conducting vessels

The Authority ensures that those who are responsible for the conduct of vessels are qualified and competent. Since the last special examination, PPA has initiated a number of improvements to its systems and practices in this area, including:

It has developed and implemented a structured process for pilot recruitment.

The Pilot Training and Examination Committee of the Board monitors and recommends what training should be taken for each pilot.

Previously, the BCCP contract called for \$125,000 in annual training over five years. The Authority has established a training budget for pilots of \$250,000 a year for the years 2001 to 2003. It is the goal of PPA to train 20% of its pilots each year so that all pilots will have training in a five-year period.

The 1999 Ministerial Pilotage Review recommended the development and implementation of a fair and reasonable system for assessing pilot's competence and quality of service. PPA does identify complaints and incidents involving each pilot, but most have none. The pilotage authorities, the Canadian Merchant Service Guild, and the Canadian Marine Pilots Association agreed on a national format to identify gaps in a pilot's training. This is to be reviewed annually by each authority's Pilot Training and Evaluation Committee. In addition, a complete audit of all licenced pilots was conducted in May 2002 to evaluate present pilot currency. Although

progress has been made, a system for assessing pilot's competence and quality of service is not yet in place. This was also identified by the 2003 *CMA Review* as a matter outstanding from the 1999 Ministerial Review.

The pilotage authorities have been working in consultation with the Canadian Marine Pilots' Association on a process to evaluate pilot performance. However, they have made little progress in this area.

As a first step and in conjunction with the other Canadian pilotage authorities, a Pilot's Continued Proficiency Report has been developed to document a pilot's training and experience. This form records pilots' experience in specific ports and with different types of vessels. It also provides details of training taken by the pilot since the last review and makes recommendations for future training. However, the form does not include an assessment or peer review of pilot performance in conducting pilotage assignments. Therefore, we find that it is not a tool that can be used to properly evaluate pilots' job performance. As in most organizations, we would expect that formal annual performance appraisals should become part of the process for evaluating pilots.

The use of safety suits or flotation devices by pilots still has not been made compulsory

Safety suits, or flotation devices, should be used by pilots when transferring between the pilot launch and the assigned vessel. As we noted in our previous special examination, we observed a situation during 2003 where a pilot had disembarked from a vessel without using any flotation aid. This issue was raised during our interviews and it was generally acknowledged that a small number of pilots have resisted this important safety practice. While the Authority has provided the pilots and the launch crews with flotation suits, it is not mandatory for non-employee pilots to use them. Both the PPA and the BCCP have encouraged the use of flotation aids, but they should consider making it compulsory.

Efficient pilotage services

We conclude that PPA has in place systems and practices that provide reasonable assurance that the Authority operates efficient pilotage services that meet the needs of its users. The following paragraphs explain our findings related to the systems and practices currently in place.

Corporate governance

The December 2000 Report of the Auditor General to Parliament discussed governance of Crown corporations. Corporate governance refers to the process and structure for overseeing the direction and management of a corporation so that it carries out its mandate and objectives effectively.

The Authority has an active Board of Directors and audit committee, meeting monthly. The Members of the Authority have demonstrated good governance practices including:

- assuming responsibility for setting strategic direction,
- participating in developing the corporate plan,
- following Treasury Board guidelines for conflict of interest,

providing training to board members on their responsibilities, evaluating the performance of the chief executive officer, and determining an ideal board composition profile.

We found that PPA could make further improvements in governance by establishing concrete, measurable performance targets, implementing a formalized risk-based assessment process for decision-making and expanding public reporting of non-financial performance to improve accountability.

Public reporting

As noted earlier, in its 2003–2007 Corporate Plan Summary the Authority identified four corporate objectives. However, it has not developed implementation plans to address all of the objectives. There are no clear, concrete, measurable indicators for these objectives. There is limited public reporting in PPA's annual report of the success in meeting its objectives of safety and efficiency or the results achieved.

We also found that the Authority has not established measurable performance indicators or targets for effectiveness and quality of service of its operations. The number and length of shipping delays that occur as a result of activities that are under the control of PPA is one possible measure of the quality of pilotage services. While management monitors delays and user complaints, the Authority's accountability would be enhanced by the development of additional performance measures and by public reporting of targets and results.

Meeting user needs

The Authority has no control over the need for its services. It must be prepared to meet the needs of users who expect year-round pilotage services 24 hours a day, seven days a week without delays.

The number of pilots available is based on traffic forecasts. PPA performs trend and sensitivity analyses based on past financial results, budgeted costs, and traffic forecasts for each pilotage area. This information is used to determine the number of pilots that will be required to meet users' needs and provide quality service at a reasonable cost. We reviewed the trends in the ratio of compulsory assignments to number of pilots from 1998 to 2002. We found no significant change since the last special examination (see Appendix A).

The Authority meets on a regular basis with users and user groups that represent the various pilotage areas. At these meetings, the Authority shares its information for the area including: financial results, current and planned changes to the number of pilots, any proposed tariff changes, and pilot boat requirements.

Ongoing review of operations

The 1999 Ministerial Review of Outstanding Pilotage Issues made many recommendations and most have been addressed by the Authority. Particularly, it recommended that, in partnership with pilots and interested parties, PPA examine all aspects of its operations on an ongoing basis. In response to our 1998 special examination, the Authority also closed its Prince Rupert dispatch office in 2000. Starting in 2002, PPA has also discontinued the use of a second crew in Prince Rupert during cruise ship season.

Dispatching and scheduling

Our examination concluded that the dispatch technology, which was developed by PPA, meets the needs of users effectively and efficiently. The dispatchers are generally viewed by all stakeholders as efficient and professional.

Strategic plan needed to set priorities and strategies

We noted in our 1998 special examination that the Authority lacked a strategic planning process. The Board has held annual strategic planning retreats early in the year where various issues are raised and tracked throughout the year. However, there is no formal strategic plan. The PPA currently produces a corporate plan on an annual basis. The latest plan covered the five-year period from 2003 to 2007. The corporate plan is accompanied by a current-year operating budget (2003) and a current-year capital budget (2003).

While the corporate plan makes reference to a five-year period, the focus is on the current year. There is very little information that deals with potential issues or financial impacts in the future. The plan does include financial projections for a period of five years but, for the most part, they represent the cost of maintaining the status quo in the future.

A strategic plan is important to the Authority, which has multiple stakeholders, all with somewhat different views on issues, priorities and solutions. A strategic plan could serve as a vehicle for communicating with other stakeholder groups. Finally, it helps the Board of Directors' to exercise effective governance.

Performance measurement and reporting need to be further strengthened

The lack of quantifiable performance measures was raised as a significant deficiency during the 1993 special examination. At that time, the primary performance measure was the number of pilotage assignments. Since that time, PPA has added information on its safety performance in its annual report by indicating the number of incidents and the percentage of incident-free assignments for the current year and the previous four years. This performance reporting could be expanded to include delays incurred by mutual consent to avoid callbacks, a discussion of the nature, cause, and severity of the incidents, as well as the extent of the Authority's contribution to marine safety within the Pacific region.

In addition, PPA provides information to the Board on assignments by geographic region, the number of cancellations, hours on assignment and the number of dispatches. We have also been advised that the internal systems are now capable of providing other information, if requested by the Board. In late 2001, the Authority' launched an internet site that updates traffic reports every 30 minutes as a service to customers.

Higher costs for separate dispatch operations in Vancouver and Victoria

In our 1998 special examination, we noted the need to challenge and clarify the role of regional operations. PPA has taken action to clarify its regional operations by closing the Prince Rupert dispatch office at the end of 1999.

During the Canadian Transportation Agency hearing of April 2001, the Chamber of Shipping of BC noted that it was not convinced of the need for separate dispatch offices given modern communications technology and equipment. In 2002, the Authority carried out an internal review of the amalgamation of the Victoria and Vancouver dispatch offices. While cost savings were identified as an outcome of the amalgamation of the two offices, it was recommended that no change be made. PPA plans to review the situation on an annual basis.

Financial self-sustainability

We conclude that PPA has in place systems and practices that provide reasonable assurance that the Authority operates on a self-sustaining basis while ensuring fair and reasonable tariffs for users.

In 2002, PPA's revenues increased by only \$300,000 from the previous year, but it reduced its expenses by \$883,000. As a result, the Authority was able to turn a \$561,000 deficit in 2001 into a \$622,000 surplus in 2002, increasing its retained earnings to \$3,178,000. Appendix A provides financial information for the past six years of operations and confirms that PPA is financially self-sustaining.

The following paragraphs explain our findings related to the systems and practices currently in place.

Tariffs

All tariffs must receive the approval of the Governor in Council. Any proposed tariff changes must follow a structured process, including consultation with users. Any interested party may file a notice of objection with the Canadian Transportation Agency.

In 2001, the Chamber of Shipping of British Columbia objected to the PPA's tariff application, resulting in a Canadian Transportation Agency (CTA) hearing. In May 2001, the CTA recommended that the tariff be implemented, subject to three minor changes. The tariff was implemented in two stages ending in December 2003. The 1999 Ministerial Review recommended that there be regular consultations with interested parties on financial, operational and planning issues that affect such parties. The CTA noted that there had been a lack of meaningful consultation between the Authority and all interested parties since that time. The Authority has since engaged in more consultations with users in advance of filing its 2004 tariff to help ensure that it would be acceptable. As a result, the tariff submitted on 18 October 2003 was not objected to.

In May 2001, a \$25 pilot boat replacement fee was incorporated into the tariff. Starting in October 2001, PPA's tariff includes an \$80 pilot boat replacement charge to be applied to each assignment in Victoria, Vancouver and Prince Rupert. The Authority expects this to be in place for about four years, when the acquisition and financing costs of the Pacific Pathfinder are fully recovered. PPA reports to industry quarterly on the funds collected from the charge.

Excess hours charge

In the May 2001 Canadian Transportation Agency hearing report, the issue of the excess hours charge was raised. This refers to the additional hourly fees under the *Pacific Pilotage*

Tariff Regulations when the bridge watch time of a pilot exceeds eight hours. The Agency noted that there was a difference in the definition in the start of bridge watch in the *Regulations* and the BC Coast Pilots contract. The *Regulations* state that bridge watch starts when a pilot takes conduct of the ship while the service contract states that bridge watch starts when conducting piloting duties, such as bridge resource management. The Authority indicated that it intended to amend the *Regulations* but has yet to do so.

Pilot boat replacement

Until this year, PPA had not acquired a new pilot boat in twenty years. In July 2001, a contract was entered into with a shipyard to build a pilot boat for delivery on or before 12 months from the time of receipt of the first payment, which was made on 24 August 2001. The new boat was to employ water jets for propulsion instead of traditional propellers.

The shipyard ran into financial difficulty and the *Pacific Pathfinder* was delivered seven months late on 28 February 2003. Shortly afterwards, the shipyard went bankrupt. The boat's total cost was \$3,411,000, or \$61,000 above the total budget approved by the Board in March of 2001. While the Authority has no warranty on the hull because of the shipyard's status, it does have \$100,000 in escrow to apply against any such potential items. PPA retains warranties for all components on the boat.

The launch was commissioned on 24 March 2003 and went into service at Prince Rupert during May 2003. While the new boat is faster and is more manoeuvrable, its larger engines consume considerably more fuel than the existing boats. This is expected to be offset by lower maintenance costs as there will be no propeller damage. It has also experienced a problem with the engines, although this is now being addressed by the manufacturer under warranty provisions.

PPA intends on performing an evaluation of all operational and performance aspects of the new boat after it has been in service for one year. After this evaluation is complete, plans for another boat will be formulated and discussed with industry.

While the Authority's capital plan identifies the requirement for another new pilot boat in 2004, this is not likely to occur that quickly. PPA has not prepared a long-term pilot boat replacement strategy based on a formal needs assessment, documented cost analysis, feasible solutions and timetables, taking into account its financial capability. PPA does not have a formal structured acquisition process for pilot boat replacement.

The Authority now has two spare pilot boats. While the Victoria boat has been used as a spare while one of the three main boats is being repaired, this may be an expensive practice. The need for either of these spare boats should be supported by a cost-benefit analysis.

Procedures for pilot boat maintenance to be updated

Since our last report, PPA has formalized pilot boat maintenance procedures, but they will likely have to be revised for:

The new replacement pilot boat, which is much newer and uses different technologies than the older boats

Contracting for emergency repairs as the primary shipyard it has used for such repairs is no longer in business.

Financial and statistical highlights

	2002	2001	2000	1999	1998	1997
Financial						
(\$ thousands)						
Income	40,590	40,114	41,702	39,106	37,441	39,802
Pilots' fees, salaries	26,991	27,526	29,753	27,162	26,203	27,390
Pilot boats, operating costs	4,714	4,687	4,579	4,265	4,023	4,179
Admin and other costs	8,263	8,638	7,788	7,354	6,830	6,950
Net (deficit) surplus	622	(561)	(418)	325	385	1,283
Retained earnings	3,984	3,362	3,923	4,341	3,210	2,825
Human Resources						
Employee pilots	8	8	8	7	7	7
Contract pilots	106	106	108	108	108	108
Pilot boat crew	26	29	29	29	29	29
Dispatchers	11	11	11	11	11	11
Administrative	11	11	11	11	11	11
Executive	1	1	1	1	1	1
Total	163	166	168	167	167	167
Operational Performance						
Total coastal assignments	11,194	12,037	13,256	12,279	12,232	13,278
Average number of assignments/ pilot	106	114	123	114	113	126
Total river assignments	1,461	1,398	1,329	1,003	1,035	934
Average number of assignments/ pilot	183	175	183	143	148	112
Average cost/assignment	\$3,158	\$3,095	\$2,888	\$2,920	\$2,793	\$2,710
Safety Performance						
Number of incidents	10	10	15	16	19	32
Percent of incident-free assignments	99.9%	99.9%	99.9%	99.9%	99.9%	99.8%

EXAMINATION CRITERIA

Safe Pilotage Services

1. The Authority's designation of compulsory pilotage areas and vessels subject to pilotage should be based on an assessment of the navigational risks for safe movement of vessels in the British Columbia region.
2. The Authority should ensure that pilots or certificate holders responsible for the conduct of vessels subject to compulsory pilotage are competent and in good health.

Efficient Pilotage Services

3. The Authority should establish and implement effective strategies and practices, including governance, to achieve its mandate of ensuring safe and efficient pilotage services at a reasonable cost.
4. The Authority should employ or contract pilots based on expected traffic volume and reasonable utilization standards to provide quality pilotage services at a reasonable cost.
5. The Authority should establish, measure and report on appropriate performance indicators that evaluate the effectiveness and efficiency of operations, assist in decision making, and ensure accountability.

Financial Self-Sustainability

6. The Authority should establish pilotage charges that are fair and reasonable and ensure financial self-sustainability.
7. The Authority's pilot boat acquisition, utilization, replacement planning and maintenance strategies should meet operating needs and be based on the lowest full life cycle cost.