

PART V



report of the  
royal commission  
on PILOTAGE

*Study of Canadian pilotage  
Great Lakes System*

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*PART V*

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ROYAL COMMISSION ON PILOTAGE

*To His Excellency*

THE GOVERNOR GENERAL OF CANADA

*May it Please Your Excellency*

We, the Commissioners appointed pursuant to Order in Council dated 1st November 1962, P.C. 1962-1575, to inquire into and report upon the problems of marine pilotage in Canada and to make recommendations concerning the matters more specifically set forth in the said Order in Council: Beg to submit the following Report.

*Jos. Perrin*  
CHAIRMAN

*Robert K. Smith*  
*M. J. Zarnica*

*J. W. Madigan*  
SECRETARY

August 5, 1971

# ROYAL COMMISSION ON PILOTAGE

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## INTRODUCTION

Part V concludes the Report of this Royal Commission. The framework of the full Report is outlined in the General Introduction, Part I, pp. xxv-vi. Part I is a study of the present state of pilotage legislation in Canada and contains the Commission's Recommendations of a general character. Part V, like Parts II, III and IV, is complementary to Part I and should be read in conjunction with it but, at the same time, it is also a separate report. Part I is a study of the general pilotage provisions contained in Part VI C.S.A.; Part V studies in their circumstantial context the *ad hoc* provisions for pilotage in the Great Lakes system which were introduced in 1960 as Part VIA C.S.A.

The Great Lakes system consists of the Great Lakes and their connecting channels plus the international reach of the St. Lawrence River west of St. Regis. Part V appraises the requirements for pilotage and the adequacy of the existing legislation and organization for the provision of pilotage services throughout this area.

In Parts II, III and IV, each Pilotage District or separate region was given a separate section because they are self-contained administrative and operational units. This plan could not be followed in Part V since this was not the situation when pilotage was first organized in the Great Lakes system. Instead, this Part is divided by subjects and all the Districts, and sectors and the various groups of pilots are studied and analysed under each heading. The Recommendations for the Great Lakes system form a separate chapter at the end (Chapter D).

The pilotage service in the Great Lakes system is a binational organization with U.S. and Canadian participation at all levels. The Commission has investigated in detail Canadian organization and operations but has limited its study of U.S. participation to the realm of public knowledge, i.e., legislation and published documents, and to other information volunteered by the U.S. pilots who testified at the Commission's hearings. For instance, the operations of the U.S. Pilots' Associations were not examined and the study of shipping casualties was confined to those reported to the Canadian authorities, but the differences between U.S. and Canadian concepts of pilotage and pilotage organization were stressed since these are available from official documents and form part of the basic situation that must be taken into account. While judicial notice has been taken of official reports and documents because they are in factual evidence, the Commission is aware that, at times, the information to which it had access represents only one side of the argument, but this is so only in the case of local controversies.

Observing the binational character of pilotage arrangements in the Great Lakes system, the Commission, before commencing its hearings, arranged through the Department of External Affairs to meet with the United States authorities concerned. On January 8-9, 1964, it met successively with Mr. Clarence D. Martin, the Under Secretary of Commerce (Transport) and other officials of his Department; with Capt. A. T. Meschter, Administrator, Great Lakes Pilotage, and members of his staff; and with Capt. W. C. Foster of the United States Coast Guard and various members of his staff. The aim of this official visit was to inform United States Government officials that the Commission was about to begin its investigation, to offer them the opportunity to participate in the investigation and to ask for their cooperation in order to render its study as fruitful as possible. The Commission was informed that no U.S. observer would be sent unless this became necessary, and it was agreed that the Commission's Secretary would keep the U.S. Administrator posted on the progress of the public hearings. This was done by supplying him with a copy of the transcripts of evidence as they became available. At these meetings, the Commission had informal discussions with the U.S. officials concerned and gathered valuable information which was of considerable assistance in orienting the subsequent hearings. Furthermore, the U.S. Administrator, Capt. Meschter, and his successor, Capt. G. R. Skuggen, have been most co-operative whenever the Commission sought information from them.

When this Commission was convened, the pilotage organization in the Great Lakes system was new and was regarded as most satisfactory but during the two and a half years the public hearings lasted ever increasing problems demonstrated its inherent deficiencies. Basic changes have been made since, many problems have been solved in the light of experience and the whole process of reorganization still continues. It was not considered necessary to re-open the hearings and call for new briefs since the weaknesses of the original system were clearly apparent when tested against the basic principles which should govern pilotage organization. The difficulties that arose were due to faulty legislation and procedures.

The reader's attention is drawn to the study in recent years of the application to pilots of the prevailing rate employee system. Cross references should be made between the previous parts of the Report where this subject was studied (Part 1, p. 545; Part III, pp. 210-213) and pp. 201-207 of this Part.

## ACKNOWLEDGEMENTS

The Commission's difficult task was lightened by the generous co-operation of pilots, shipowners and agents, and their respective associations or organizations. They spared neither cost nor effort to prepare thoughtful submissions and present their views publicly—in fact, many testified several times, often at great inconvenience. After the hearings, they supplied the Commission promptly with additional details needed to complete the record or bring the Report up to date.

The most complete co-operation was also given the Commission by the various Pilotage Authorities, by all Departments and agencies of the Federal Government and by librarians and archivists on whom we have been regularly calling for information and assistance. The Commission takes this opportunity to acknowledge the very special contribution made by the officials of the Department of Transport who at all times received our many inquiries with sympathetic consideration and ready response.

The Commission travelled across Canada, conducted hearings in all provinces except Saskatchewan and Alberta and visited all the principal ports and harbours. Everywhere it was met with kindness and assistance.

The detailed fact-finding investigation with which the Commission was charged in its terms of reference would have been impossible without the excellent assistance it received from all counsel. A heavy responsibility rested on them to ensure, through the examination of witnesses, that the fullest possible factual evidence concerning all pilotage problems was placed on record. They displayed outstanding industry and ability.

The Commission also wishes to acknowledge the most able contributions it was fortunate enough to obtain from law professors of various universities during the summer months. Since their names are not included in the list of Commission personnel at the front of this Report, they are recorded here with their affiliation at the time of their employment: Professors Léo Ducharme (Ottawa University), Gerard V. La Forest (University of New Brunswick), Jean Pineau (Université Laval) and Daniel C. Turack (Ottawa University).



## ADDENDUM TO PART IV

Pages 727-9 of Part IV reported the collision between M.V. *Transatlantic* and M.V. *Hermès*, the findings of the subsequent Formal Investigation and the appeal thereon.

Later, the shipowners, cargo owners and insurers involved sued for the recovery of the losses they had incurred. The Exchequer Court by judgment rendered in 1969 (Nord-Deutsche Versicherungs-Gesellschaft *et al.* v H.M. the Queen, 1969 1 Ex. C.R., pp. 117-140) awarded full liability against the Government of Canada. The Supreme Court of Canada by judgment rendered April 27, 1971, partly reversed the first judgment by also making both ships share in the liability as follows: the Government of Canada 50%, M.V. *Hermès* 30% and M.V. *Transatlantic* 20%. It was held that a major share of the blame had to be borne by the Canadian Government because there was a breach of duty on the part of servants of the Crown responsible for the care and maintenance of the range lights at Pointe du Lac and Rivière du Loup, upon which lights mariners were entitled to place reliance. The pilot of M.V. *Hermès* was held at fault "in advancing towards a position of potential danger at full speed and without having ascertained with certainty its position in the channel." A smaller share of the blame was to be borne by M.V. *Transatlantic* for two reasons: she was not as close to the north spar buoys as she should have been in the circumstances; her pilot was at fault in that he had observed at a distance of 3 miles that the *Hermès* was in difficulty but did nothing to reduce speed or otherwise prepare for the eventuality, especially since she was navigating against the current to meet another vessel in a confined area (St. Lawrence River Regulations, sec. 12).

The following excerpts from Mr. Justice Ritchie's notes are of particular interest to pilotage:

"... I think that it must be accepted that pilot..... (of M.V. *Hermès*) did not know where his ship was in the channel when he entered the cut at the east end of the anchorage, and it is also apparent that he did not know where the *Transatlantic* was in relation to the banks of the channel. Under these circumstances (M.V. *Hermès*' pilot) does not appear to have sought any means of determining the position with more accuracy but was content to rely upon the range lights without reducing speed.

As I have indicated, at the time of the accident there were spar buoys placed on the northern side of the channel and according to the evidence of the pilot ..... of the *Transatlantic*, he had inquired from the signal service and been advised that these buoys had been checked the day before. In my opinion, having regard to the provisions of section 10(4) of the Pilotage Regulations, pilot..... (of the *Hermès*) should have been in the possession of the same information. The section in question reads:

10.(4) Every pilot shall, before his departure to pilot any vessel, comply with any standing orders made by the Supervisor and shall obtain from the

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pilotage office information as to the state of the buoys, beacons and channels in the District.

Pilot.....(of the *Hermes*) did not make any inquiries but acted on the assumption that the buoys were not a reliable guide in winter time.”

And from the notes of Mr. Justice Pigeon:

“With respect to the contention that to reduce speed in order to meet an upbound ship in the anchorage area would unduly delay navigation, it must be observed that this course of action was one which Captain Irvine said should have been taken only in the particular circumstances of the case, namely in the absence of buoys on the south side of the channel and with another ship coming up to be met near the end of the narrower channel. He expressly said that he would have met the other upbound ships *in the channel*. This distinction is of crucial importance because it disposes of the objections that navigation would be unduly delayed by slowing down in order to meet in the anchorage and that the *Hermes* had met without difficulty three other Ships in the channel above Yama-chiche bend.

The reason for the distinction is the special risk of sheering due to bank suction when entering the channel at the end of the anchorage without being able to rely on anything but two range lights, some six and seven and a quarter nautical miles away respectively. With an upbound ship to be met, it was necessary for the *Hermes* to be lined up almost exactly in the center of the southern half of the channel, a 275-foot wide fairway. If the side of the ship got too close to the submerged bank, suction effects could be disastrous. Because this was not a gradual narrowing but a rather sharp corner, those effects would come quite suddenly and violently, not gradually and mildly as they would if, per chance, once in the channel, the ship happened to creep too close to the submerged bank. In my view, the evidence afforded by the example of pilot Tremblay and the opinion of Captain Irvine, not to mention that of other experts, was quite decisive as to the imprudence in attempting to meet at full speed an incoming ship in the channel, close to the end of the anchorage, without any means of ascertaining the location of the submerged bank other than distant range lights that were known to be to a certain extent inaccurate. This was a special risk that could easily be avoided and it was an imprudence not to avoid it, especially when the pilot was confronted with such a situation for the first time in his experience.”

And again:

“In my view, with respect, the trial judge has greatly overstated the effect of the Notice to Mariners of November 13, 1964 which read:

Commercial shipping using the St. Lawrence River Ship Channel between Montreal and Quebec is hereby warned that floating aids to navigation cannot be depended upon after November 30th owing to possible ice conditions.

This notice in general terms routinely issued every year at the proper time did not mean, it seems to me, that buoys were to be ignored throughout the winter season. This would have made them useless. If the Department was going to the trouble and expense of putting some winter buoys in place, this certainly implied that they were intended to be of some use. What the notice said was merely that owing to possible ice conditions “they cannot be depended upon”. However, as was his duty under the regulations, the pilot on board the *Transatlantic* inquired from the proper authority as to the condition of the buoys before leaving port. He was told that the buoys had been checked the previous day. As there was practically no floating ice he thus knew that the buoys were reliable. Under those circumstances, the general notice did not mean that he was not to rely on them but only on the range lights.”



# Part V

STUDY OF CANADIAN PILOTAGE

GREAT LAKES SYSTEM



## Chapter A

# LEGISLATION

## 1. LAW AND REGULATIONS

### PREAMBLE

For all practical purposes, Part VI of the Canada Shipping Act does not apply to pilotage in the Canadian waters of the Great Lakes system<sup>1</sup>, i.e., the St. Lawrence River west of St. Regis in the Province of Quebec and the Great Lakes and their connecting channels and tributary rivers. It was superseded in 1961 by Part VIA whose aim, as far as shipping was concerned, was to establish uniform pilotage requirements through parallel Canadian and United States legislation on both sides of the boundary in that area.

The navigable waterway west of St. Regis passes through both Canadian and United States waters and each country has retained full and complete jurisdiction on its side of the boundary. By treaty, each country has extended to the other freedom of navigation through its own waters so as to permit uninterrupted passage but has not otherwise relinquished any part of its sovereignty.

Prior to the opening of the Seaway in 1959, there was very little need for pilotage service west of Montreal because the only large vessels plying the Great Lakes were regular traders confined to the Lakes. The few small ocean-going vessels which could negotiate the series of narrow locks and canals between Montreal and Lake Ontario posed no serious hazard to navigation and any expert assistance required was readily available below Lake Ontario from Canadian licensed pilots of the St. Lawrence-Kingston-Ottawa District, and on the Great Lakes and their connecting channels from private entrepreneur pilots, locally called "Sailing Masters" (mostly retired Great Lakes Masters), who remained on board for the duration of each voyage.

The opening of the Seaway changed the traffic pattern substantially in that the small canalers were rapidly replaced by lakers built to take maximum advantage of lock dimensions, and a large number of ocean-going vessels of

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<sup>1</sup> For the purposes of this Report, the expression "Great Lakes system" has been adopted to resolve the problem arising because the Canadian and United States Acts do not refer in uniform terms to the pilotage waters (both Canadian and United States) of the St. Lawrence River west of St. Regis and the Gt. Lakes and their connecting waters and tributary rivers (vide pp. 5 and 31).

similar size entered the system. In addition to the fact that ocean-going vessels are less manoeuvrable in confined waters than lakers designed for inland navigation, their officers frequently have little local knowledge and actual experience of these waters. The problem is compounded because the Rules of the Road for the Great Lakes differ markedly from the International Rules, and upbound and downbound transiting vessels normally use separate lanes.

Under these circumstances, as the construction of the Seaway neared completion, it became apparent to both Canada and the United States that not only must an efficient pilotage service be placed at the disposal of non-regular traders but also that compulsory pilotage had to be enforced in the locks and other confined areas of the waterway. It was also realized that the legal competency of the pilots should be untrammelled by the international boundary but be determined on the basis of areas of the St. Lawrence River and Great Lakes waterway (while a solution was found on the Great Lakes, the Haro Strait problem in British Columbia remains, Part II, p. 199).

There were many ways to achieve this aim. The one adopted least affected the sovereignty of each country. Through an agreement arrived at during negotiations between Canada and the United States the following system was adopted: each country licenses its own pilots according to its own procedure and retains exclusive jurisdiction over them; the pilots' territorial competency is extended to the waters of the other country through reciprocal legislation; unification of pilotage requirements for shipping is to be achieved through parallel and reciprocal legislation; the provision of services is to be shared equitably between all pilots irrespective of their nationality, both countries are to take steps that the required organization for the provision of services is coordinated to serve all the pilots in each locality, regardless of their nationality; the necessary coordination is to be achieved at the administrative level. The agreements reached at departmental level since the enactment in 1960 of Part VI A C.S.A. and the Great Lakes Pilotage Act are contained in the "Memorandum of Arrangements" subsequently approved by each Government by an exchange of diplomatic notes. This memorandum is not legislation but merely contains the concurrence of each Government in the joint policy to be adopted in order to coordinate the implementation of their parallel statutory pilotage legislation.

For Canada, this meant the enactment of *ad hoc* statutory provisions since the contemplated situation was not permissible under Part VI C.S.A. These appeared in August 1960 as Part VI A of the Canada Shipping Act (8-9 Eliz. II c.40) and came into force and effect when proclaimed May 1, 1961. For the United States, it meant the adoption of the first federal pilotage legislation in the Canadian meaning of the term "pilotage". Although, according to the United States constitution, pilotage comes within federal jurisdiction, Congress had authorized the states to legislate in that field until federal legislation became indicated (Part I, p. 809) (vide the situation in the State

of Washington regarding pilotage in Puget Sound, Part II, pp. 31–33). The necessity for uniform pilotage requirements throughout the U.S. waters of the Great Lakes which border a number of states was considered a case warranting federal legislation. This was enacted by Congress in 1960 as “The Great Lakes Pilotage Act of 1960” (Public Law 86-555, 46 U. S. C. 216 (Ex. 1028)).

(1) CANADIAN PILOTAGE LEGISLATION APPLICABLE  
IN THE GREAT LAKES SYSTEM

This Canadian legislation is contained in:

- Part VIA of the Canada Shipping Act and the regulations made under it;
- the other provisions of the Canada Shipping Act governing pilotage and pilots which are not in conflict with Part VIA and the regulations made thereunder;
- the applicable statutes and regulations governing pilots who are prevailing rate Crown employees.

This last part of the applicable legislation will be studied in Chapter C when the status and working conditions of the various groups of Canadian pilots are considered.

(A) *Analysis of Part VIA C.S.A.*

Surprisingly, Part VIA contains, and provides for, legislation of very limited scope. As far as shipping is concerned, it is merely compulsory pilotage legislation and, for pilots, only licensing legislation. By contrast with the corresponding United States legislation, it contains no provision for establishing a system to provide and control efficient services. Except for a few reciprocal clauses, it is silent on the basic requirements for a pilotage service co-ordinated throughout the Great Lakes system by pilots of both countries.

(a) *Creation of the Great Lakes pilotage area*

Part VIA first provides that all the Canadian waters of the St. Lawrence River west of St. Regis, of the Great Lakes and their connecting channels, and of any tributary rivers flowing into these waters form a single body of pilotage waters referred to as the *Great Lakes Basin*.

A problem of semantics arises here because the same method and the same terms were not used in the Canadian and United States Acts to refer to the pilotage waters affected or referred to. The apparently general term “Great Lakes Basin” used in Part VIA C.S.A. refers misleadingly only to Canadian waters, and when it becomes necessary to refer to the whole of the pilotage waters, or only the United States part of them, it is necessary each time

to resort to a full description (e.g., subsecs. 375B(5) and (6)). By contrast, in the United States Act, "Great Lakes" is a general term which refers to the whole of the pilotage waters and, whenever it is necessary to refer to the Canadian or United States parts of them, the term is used with the necessary qualificative words, i.e., "the United States waters of the Great Lakes" or "the Canadian waters of the Great Lakes" (p. 31). However, the term "Great Lakes" is ambiguous. In its natural meaning, it excludes the St. Lawrence River west of St. Regis (and possibly the connecting waters of the Great Lakes) and is often used restrictively to mean only the open waters of the Lakes. Failure to adopt the same terms and to resort to the same method of description in the two Acts is an unnecessary cause of confusion which should be corrected. To achieve clarity, the Commission has adopted in this Report the term "Great Lakes system" to refer to the whole of the pilotage waters of both Canadian and United States waters of the Great Lakes, their connecting channels and tributary waters, and the St. Lawrence River west of St. Regis. The necessary qualifying terms are added when it is necessary to distinguish between United States and Canadian components.

(b) *Compulsory pilotage*

Pilotage is to be compulsory throughout the Canadian waters of the Great Lakes system but in different degrees (Part I, p. 532):

- (i) *compulsory piloting* (a vessel must be navigated by a pilot) in those parts of the confined waters of the transit waterway of the "Great Lakes Basin" which are to be defined by regulations made by the Governor in Council as "designated waters" (subsecs. 375A(a) and 375C(1)(a));
- (ii) *compulsory taking of a pilot* elsewhere, i.e., in the "undesignated waters", which comprise mainly the open waters of the Great Lakes but also the confined waters of the various harbours and landing places not within the confined areas of the transit waterway, e.g., the harbours of Toronto, Hamilton, Chicago, Duluth and Thunder Bay, by contrast with Windsor and Detroit.

The definition of these designated waters is contained in secondary legislation to enable any necessary amendments to be made easily. In fact, some of the limits have been modified since they were first defined in 1961.

(c) *Exemptions*

The exemptions are fully set out in the statutory provisions. They can not be withdrawn or modified, either in part or *in toto*, but may be indirectly extended through the device of granting administrative exemptions as provided in the Act.

There is a basic difference between Part VI and Part VIA of the Canada Shipping Act, in that Part VIA is essentially compulsory pilotage legislation and, hence, does not apply to vessels which, as a category, are not subject to

compulsory pilotage. An exemption not only grants dispensation from compulsory pilotage but also permits any vessel so exempt to employ an unregistered pilot at whatever fee may be agreed upon by the two parties. There is no provision in Part VIA corresponding to sec. 354 of Part VI (Part I, p. 207). Despite great similarity in wording, subsec. 375B(4) applies only to vessels that would otherwise be subject to compulsory pilotage. The penalties provided in sec. 375D for hiring an unregistered pilot refer to sec. 375B and, therefore, apply only to cases of compulsory pilotage.

The exemptions are as follows:

(i) *Exemptions to vessels*

- *Small vessels.* All vessels, irrespective of country of registry, less than 250 GRT are fully exempted (subsec. 375B(1)). This applies only to Canadian waters since there is no corresponding provision in United States legislation.
- *U.S. and Canadian inland traders' exemption.* This provision is similar to the 1960 amendment to subsec. 346(*ee*) (Part I, pp. 221–223) with the difference that in the “Great Lakes Basin” the exemption is absolute for both Canadian and U.S. regular traders. The farthest east such vessels may go to remain qualified for the exemption is St. Lawrence River ports, except for occasional voyages to Canadian ports in the “maritime provinces of Canada” (subsec. 375B(3)). This exemption, as far as Canadian lakers are concerned, applies to the whole of the Great Lakes system on account of a similar provision contained in United States legislation.
- *Administrative exemption.* By administrative decision, the Minister may exempt any vessel from compulsory pilotage “upon such terms and conditions as he deems advisable” (subsec. 375B(2)). The Act does not contain a reciprocal clause; in fact, the United States Act does not contain a comparable provision. Since this exemption is not recognized by a specific provision in United States legislation, it applies only to Canadian waters and is mainly used to rectify disparity of treatment towards certain categories of vessels as a result of different methods of classification and different wording in the respective legislations (e.g., the United States legislation does not apply to foreign vessels which are not merchant vessels).
- *De facto exemption.* A vessel is deemed to be exempt if a pilot is unavailable or an emergency involving safety arises. This provision is similar in wordings to subsecs. 354(1)(*a*) and (*b*) (Part I, pp. 207–210) and has the same effect. The non-availability of a registered pilot, whether U.S. or Canadian, is not a simple question of fact but must be a finding (referred to as a *waiver*) made by the Deputy Minister of Transport and communicated to the vessel.

Obviously, this restriction is designed to prevent vessels from proceeding without a pilot when there is a temporary shortage or if the safety of navigation might be endangered by doing so. While the United States Act provides for a similar *de facto* exemption when the United States Coast Guard informs a vessel of the non-availability of registered pilots, neither legislation contains a reciprocal provision. The consequence is that such a *de facto* exemption applies only to Canadian waters when the non-availability was confirmed by the Deputy Minister of Transport, and to U.S. waters when it was confirmed by the United States Coast Guard, and, hence, concurrent findings are required to enable a non-exempt vessel to navigate without a registered pilot a water route lying in both countries.

(ii) *Personal exemptions*

Vessels, irrespective of their country of registry (including United States registered vessels) enjoy an indirect exemption from compulsorily taking a pilot in undesignated waters (but not in designated waters) if one of their officers possesses a certificate of qualification (often referred to as a “*B*” *certificate*) issued by the Minister of Transport, or a pilot’s licence (in the meaning of the term under United States federal legislation, vide Part I, p. 810) issued by the United States Coast Guard, valid for the undesignated waters concerned.

Ships’ officers with the necessary *expertise* in the navigation of undesignated waters, or part thereof, are granted by the Minister of Transport, upon request and after satisfactory proof of their qualifications, a “certificate of qualification” which dispenses the ship in which the holder is employed, provided he is on board, from the obligation of embarking a registered pilot in the undesignated waters for which the certificate applies. This certificate corresponds to the “pilotage certificate” of Part VI C.S.A. (vide Part I, p. 232). The required standard of qualification and the appraisal procedure are left to be established by regulations.

With regard to the nature and scope of exemptions resulting from the “pilot’s licences” issued by the United States Coast Guard, vide p. 35.

Because of reciprocal clauses contained in both Canadian and United States Acts, both types of personal exemptions are valid in Canadian and U.S. waters of the Great Lakes system.

(d) *Registered pilots*

A *registered pilot* in Part VIA is the equivalent of a *licensed pilot* in Part VI. He must first meet the general definition of pilot and, in this respect, the study of the term *pilot* in Part I, p. 22, applies. There can be no argument about the status of such a pilot on board in designated waters; he is not an adviser to the Master but the navigator of the vessel (subsec. 375B(1)).



The definition of *registered pilot*, however, is awkward because it confuses official recognition of a person's qualifications to act as a pilot with the fact of being the pilot of a given vessel. Hence, if this definition were to be taken literally, whenever the term *registered pilot* is encountered in the legislation, it would refer only to the situation which exists when a person holding the proper registration is actually piloting a vessel. It would appear that the simple method used to define a *licensed pilot* (subsec. 2(44) C.S.A.) was not used here in order to avoid confusion with the "pilot's licence" issued by the United States Coast Guard to holders of a U.S. Master's Certificate of Competency. However, the resulting definition is incorrect and should be modified if Part VIA is to be retained. It is believed that the aim sought would be achieved by merely defining *registered pilot* as the person who, by the certificate of registration issued to him by the Secretary of Transportation of the United States,<sup>2</sup> or pursuant to regulations made by the Governor in Council, is entitled to act as a pilot, as defined in subsec. 2(64) C.S.A., for that part of the Great Lakes system shown on the certificate of registration. In this respect, the corresponding definitions in the United States Act are more adequate.

The definition also contains an error of correlation. It refers to "ships" while all the other provisions of Part VIA apply to "vessels". The word "vessel" is the generic term having a larger meaning than ship (subsec. 2(111) C.S.A.) (vide Part I, p. 213). If this definition were to be taken literally, it would amount to granting an automatic exemption to vessels that are not ships.

*Registered pilot*, therefore, means:

- (i) a person whose qualifications and *expertise* to navigate vessels in the Canadian waters of the Great Lakes system, or part thereof, have been appraised by the Canadian licensing authority and who has been issued by such licensing authority a licence to act as pilot in these waters or any specified part thereof; this licence is called a *Registration Certificate*;
- (ii) the holder of a similar registration certificate issued for the United States waters of the Great Lakes system by the Secretary of Transportation (formerly of Commerce) of the United States under the authority of the Great Lakes Pilotage Act of 1960.

On account of reciprocal clauses contained in both Canadian and United States Acts, such a registration certificate is valid for the waters of the other country within the same sector. A pilot's registration certificate does not *ipso facto* become subject to the pilotage legislation of the other country

<sup>2</sup> On April 1, 1967, all the functions, powers and duties of the Secretary of Commerce under the United States Great Lakes Pilotage Act were transferred to, and vested in, the Secretary of the Department of Transportation (80 Stat 939, P.L. 89-670), a fact which has not as yet been reflected in subsec. 375A(c)(i)C.S.A.

when he navigates a vessel in the waters of that country, any more than such country has any power over the Certificate of Competency of a foreign Master or officer. Such control continues to be exercised by the licensing authority which issued the registration certificates and which, in the discharge of its surveillance and reappraisal responsibilities, should have the power to withdraw them whenever it becomes apparent that the holders are professionally, physically or morally unfit to act as a pilot; the exercise of such powers is directed against the certificates and, therefore, is not impeded by any question of territoriality, any more than the Minister of Transport would be hampered in his right and duty to cancel the Certificate of Competency of a Canadian officer because the events justifying cancellation occurred outside Canadian waters.

The definition of the qualifications a Canadian registered pilot must possess and the licensing and reappraisal procedure are left to be determined by regulations to be made by the Governor in Council. The Canadian authorities have no power over the required qualifications of United States pilots and uniform standards are to be achieved through negotiations for parallel legislation.

(e) *Qualified officers and certificate of qualification*

As seen earlier, Part VIA provides that in undesignated waters, i.e., where public interest is unlikely to be directly affected by a shipping casualty, a ship's officer of any nationality possessing the necessary *expertise* in navigating the undesignated waters of the Great Lakes system, or part thereof, is authorized to replace a registered pilot on board his vessel.

The standard of qualification required, together with the appraisal and reappraisal procedure, including the appointment of a licensing authority, is to be defined in secondary legislation.

(f) *Pilotage fees and examination fees*

The term "pilotage dues" is not used in Part VIA but is replaced by "the fees to be charged in respect of services rendered by a Canadian registered pilot", simplified in the regulations by using the expression "pilotage fees". Nevertheless, they are pilotage dues since they meet the general definition of the term in subsec. 2(70) of the Act. The United States Act uses the expression "rates and charges and any other conditions and terms for pilotage service by registered pilots".

The rates which have to be modified from time to time have been made the subject-matter of regulations. The rate-fixing power of the Governor in Council is not limited by territoriality. The rates are one of the conditions of the registration certificate and should cover all services Canadian registered pilots may be required to perform which, on account of the reciprocal clauses in the parallel legislations, are not affected by territoriality.

These rates do not apply to unregistered pilots because of the specific mention that they apply only to the services rendered by registered pilots (in the case of an unregistered pilot, the charge for his services has to be established by mutual agreement), but it would appear that they would apply when a registered pilot is employed, even by a vessel which is not obliged to employ one, since the applicability of the rates was not limited to cases where compulsory pilotage applies.

The Act also authorizes fixing examination fees by regulations.

(g) *Powers delegated by statute*

Part VIA contains only two delegations of powers:

- to the Governor in Council to make the necessary regulations;
- to the Minister of Transport by administrative decision to limit the number of Canadian registered pilots.

The few subject-matters that may be dealt with through regulations made by the Governor in Council are stated and defined in sec. 375c:

- (i) defining the compulsory piloting zones within the Canadian waters of the Great Lakes system, i.e., Canadian designated waters;
- (ii) defining the qualifications for Canadian registered pilots and making the necessary regulations to provide for their registration;
- (iii) defining the required qualifications for the granting of personal exemptions;
- (iv) establishing pilotage rates and fixing fees for the examination of candidates for pilotage or personal exemptions.

The nature and the scope of each subject-matter will be studied later when the regulations made thereunder are reviewed.

Under Part VIA the number of pilots is not determined by regulations as under Part VI but by administrative decision of the Minister of Transport. By contrast with the United States Act, Part VIA does not enunciate any criterion by which the Minister should be guided. However, this does not mean that he may act arbitrarily. The granting of such discretionary power was no doubt warranted by the general context of the legislation which recognizes the legal competency of U.S. registered pilots. The governing criterion is the same here as under Part VI, i.e., the aggregate number of U.S. and Canadian pilots should be those needed to meet the demand in expected peak periods of substantial duration without overwork, and the permissible maximum should not exceed the number beyond which the pilots will individually have insufficient work to maintain and improve their *expertise*. In addition, if their remuneration depends upon their pilotage earnings, the number should be such as to afford each pilot adequate remuneration. In the Great Lakes system, all these factors will be affected by the number of U.S. pilots who share the workload.

(h) *Penal sanctions*

Part VIA does not provide any penal sanction against a registered pilot.

The sole offences under Part VIA are:

- (i) violation by an owner or Master of the compulsory pilotage requirements or of any regulation made under sec. 375c (it would appear from the limited scope of the permissible regulations that the only possible violation of a regulation would be failure to pay the prescribed pilotage fees, but it is doubtful that this was the intention);
- (ii) a person who is not a registered pilot acting as such.

The penal sanction in all cases is a fine not exceeding \$250 for each day of violation.

(B) *Great Lakes Pilotage Regulations*

The Governor in Council, pursuant to the regulation-making power conferred upon him by subsec. 375c(1) C.S.A., made regulations called the "Great Lakes Pilotage Regulations". The original regulations in P.C. 1961-623, dated April 27, 1961, which became effective May 1, 1961, the same day that Part VIA of the Act was proclaimed, are still in force but some of their provisions, mostly concerning tariff, have been amended since (Ex. 1008): July 24, 1961 (P.C. 1961-1069); October 11, 1962 (P.C. 1962-1449); July 25, 1963 (P.C. 1963-1125); June 30, 1966 (P.C. 1966-1232); October 12, 1967 (P.C. 1967-1964); April 25, 1968 (P.C. 1968-814); August 28, 1968 (P.C. 1968-1692); July 29, 1969 (P.C. 1969-1542); July 8, 1970 (P.C. 1970-1234) and August 12, 1970 (P.C. 1970-1411).

The regulations, except for Schedule A containing the definition of the designated waters and Schedule B containing the tariff, are general in scope and have no provision of a local character.

In conformity with the limited subject-matters permitted, these regulations deal with neither organization nor the provision of services; they touch upon discipline but do not create any offence. Nevertheless, as will appear later, some provisions are illegal, either because they contain an unauthorized further delegation, or because they are so vague that they amount to an absence of legislation, leaving the subject-matters to be determined administratively, which is not permissible.

(a) *Definition of designated waters*

All the confined waters of the waterway situated in the Canadian part of the Great Lakes system have been declared "designated waters" (hence, compulsory piloting). These are composed of five sectors which are grouped in the regulations into three Great Lakes Districts (no doubt to achieve uniformity with the United States classification of their designated waters).

Logically, the Welland Canal sector, which is entirely situated in Canadian waters and bounded by undesignated waters, should have been designated a separate District.

The open waters of the Lakes, together with the confined waters along their shores and their various ports with the notable exception of Kingston, are undesignated waters which do not form part of the three Great Lakes Districts.

The use in the regulations of the term *District* was unfortunate since it created confusion with the same word in Part VI of the Act which has an altogether different meaning. It is considered that the term *District* should be abandoned in the organization under Part VIA and replaced by some other appropriate term which will convey the correct meaning.

*Great Lakes District No. 1 (Sector One)*

Canadian Great Lakes District No. 1 is the first sector of designated waters and comprises Canadian navigable waters from the eastern limit of the Great Lakes system up to, but excluding, Lake Ontario. Through parallel U.S. legislation, Great Lakes District No. 1 comprises all navigable waters, whether U.S. or Canadian, between these limits.

The eastern limit of District No. 1 is defined in the regulations as "the boundary between the United States and Canada where it crosses the navigable channel of the River St. Lawrence near St. Regis in the Province of Quebec".

The description of the eastern limit is not expressed in the same wording as in the statutory description of the eastern limit of the "Great Lakes Basin" (sec. 375A(b)), i.e., "and the St. Lawrence River as far east as St. Regis in the Province of Quebec". This creates an interpretation problem: if different words are used in legislation, it is assumed that a different meaning was intended, especially when, as in this case, the two descriptions do not refer to the same places. The statutory limit of the "Basin" is somewhat east of the eastern limit of District No. 1 as defined in the regulations. Therefore, it would appear that the intention was to leave an area of undesignated waters at the eastern end of the "Great Lakes Basin". This obviously is not the case, the Governor in Council in its regulations having merely made the eastern limit of Great Lakes District No. 1 coincide with the western limit of the Cornwall District (P.C. 1960-1570, Exs. 829 and 1143), i.e., "by the boundary line between the United States and Canada where it crosses the navigable channel of the St. Lawrence River near St. Regis in the Province of Quebec . . ."

The western limit of District No. 1 is "a line drawn from Carruthers Point light in Kingston Harbour, Ontario, on a true bearing of 127° through Wolfe Island south side light and extended to the shore of the State of New York."

The Seaway ship channel at that end of the District forks into two branches: the main Seaway channel which passes south of Wolfe Island and crosses the boundary line, and the channel north of Wolfe Island which is the eastern approach to Kingston harbour. This eastern approach is not the regular route even for Kingston because it has shallow patches. The main entrance to Kingston harbour is from the west through the open waters of Lake Ontario. Except for about a quarter of a mile of beaches and shallows west of Carruthers Point light, the whole of the Kingston waterfront is included in the designated waters of District No. 1, thus depriving the harbour of the benefits enjoyed by all other Lake Ontario ports of the Canadian personal exemptions that apply only to undesignated waters. This apparent discrimination has prompted the Kingston Board of Trade to recommend that their harbour be made part of the undesignated waters.

*Great Lakes District No. 2 (Sectors Two, Three and Four)*

Between District No. 1 and District No. 2 lies a large expanse of undesignated waters, i.e., the whole of Lake Ontario except Kingston harbour and, for upbound vessels, the immediate approach to the Welland Canal off Port Weller.

The designated waters of District No. 2 comprise all the navigable waters from the downstream entrance to the Welland Canal to the entrance to Lake Huron, excluding the undesignated waters of Lake Erie. These designated waters comprise sectors two, three and four. The undesignated waters of Lake Erie lie between sectors two and three and do not form part of the so-called District.

These sectors of designated waters comprising District No. 2 are:

(i) *The Welland Canal (sector two)*

- The downstream limit of the designated waters of the Welland Canal realistically varies to conform with different pilotage requirements depending whether vessels are upbound or downbound. For those upbound, the limit is “an arc one mile to seaward of the lighthouse on the outer end of the western breakwater at Port Weller”, in other words, this one-mile arc of open waters in Lake Ontario is the pilots’ boarding area because the pilots are required to bring upbound vessels from the open waters of Lake Ontario into the Welland Canal. For downbound vessels, the limit is south of the north gate of lock no. 1, which means that the pilots disembark in the lock and not in the boarding area because there is no problem navigating out of the lock into the open waters of Lake Ontario.
- At the upstream approach, there is also a boarding area in open waters extending about one mile seaward into Lake Erie. Here it is a line rather than an arc, a manner of description made possible by the fact that the approach is

at the head of the bay and the boarding area ends in shallow water or at headlands on both ends of the line. This description dates from August 28, 1968 (P.C. 1968-1692); up to then, there was no provision for boarding areas.

Since this sector of the waterway is wholly situated in Canadian waters with no adjacent U.S. waters, there is no corresponding definition in United States legislation.

(ii) *Lake Erie western end (sector three)*

—This comprises all the confined Canadian waters at the western or upstream end of Lake Erie, i.e., “Canadian waters of Lake Erie westward of a line running approximately 206° true from Southeast Shoal light to Sandusky Pierhead light at Cedar Point in the State of Ohio” and upstream at the entrance to the connecting channels with Lake Huron. This sector extends about 40 miles between Southeast Shoal and the entrance to the Detroit River, and comprises a wide channel of deep water some three quarters of a mile wide at its narrowest at the downstream entrance of Pelee Passage and the extensive shallows at the western end of Lake Erie where approach channels to the Detroit River have been dredged to 28 feet.

(iii) *Detroit River, Lake St. Clair and St. Clair River (sector four)*

—This comprises the Canadian waters of the connecting channels between Lake Erie and the open waters of Lake Huron. The definition does not provide for a boarding area in the open waters of Lake Huron.

The third and fourth sectors of designated waters of District No. 2 are contiguous with no undesignated waters between. The division of this stretch of undesignated waters into two sectors does not appear to serve any useful purpose. The U.S. confined waters adjacent to the third and fourth sectors comprise the whole of U.S. Great Lakes No. 2 District, whose description contains no division into sectors.

*Great Lakes District No. 3 (Sector Five)*

Between District No. 2 and District No. 3 lie the undesignated waters of Lake Huron, including Georgian Bay, and of Lake Michigan.

The designated waters which form the Canadian part of District No. 3 comprise sector five, i.e., the Canadian waters of the connecting channels between Lake Huron and Lake Superior, i.e., St. Marys River from the U.S./Canada boundary line as far as longitude 84° 33' west.

No mention is made of the downstream limit because the navigable channels end in U.S. waters at Detour Passage. The northern limit is at the up-

stream end of St. Marys River at the beginning of Whitefish Bay on a line between Jackson Island and Point Iroquois. This definition now coincides with the definition contained in the United States legislation as amended in 1968.

(b) *Registered pilot's qualifications*

The regulations provide that Canadian registered pilots are to be recruited from qualified mariners or from licensed pilots of the Kingston Pilotage District.

A qualified mariner may become a registered pilot for the whole, or any part, of the Great Lakes Basin if he meets the following requirements:

- Canadian residence (the original provision which demanded Canadian citizenship was amended to residence in 1962);
- general marine competency: a Certificate of Competency not lower than Master Inland Waters, unlimited as to tonnage;
- local experience: Master of a vessel over 350 gross tons in the Great Lakes Basin "for such period as the Minister may require";
- physical fitness: good mental and physical health;
- moral fitness: good character and personal suitability;
- success in such examination as the Minister may prescribe.

In fact, the Minister has not made any regulations or rules dealing with the extent of required local experience or the content of the examination and, in practice, these questions are resolved on an individual basis (Ex. 1541 (a)).

The local experience provision is incomplete in that it fails to stress the need for *expertise* in local navigation of the waters to which the registration will apply. Experience acquired somewhere in the Canadian waters of the Great Lakes system should not be sufficient to certify that a person is expert in the navigation of a given sector, because even extensive and thorough experience in one sector can not give a person *expertise* in the navigation of another sector, e.g., the Kingston/Cornwall sector, the Welland Canal, the Detroit/St. Clair connecting channels and the St. Marys River are altogether different situations. To pretend the contrary would indicate that navigation in these sectors is comparable, or easy, in which case there would be little need for pilotage and, hence, pilotage should not be made compulsory. The redelegation of powers to the Minister of Transport was no doubt intended as a way of having this requirement completed by further detailed provisions of local character made by the Minister. However, this is not specified.

This provision is *ultra vires* because Part VIA does not give the Governor in Council power to delegate further any part of his delegated regulation-making power, or to modify the nature of the procedure set forth in the Act for establishing qualifications by making any requirement subject to administrative decision rather than regulation. All qualifications must be spelled out



fully in the legislation. The right of a qualified candidate to seek redress against discrimination would be unenforceable at law if any part of the requirements can not be ascertained objectively without necessitating an administrative decision which may be changed arbitrarily.

The requirement for professional qualifications is also deficient in that no form of theoretical and practical training is required. In the Cornwall District, where the situation is about the same, pilots are recruited from the ranks of qualified mariners. Despite the fact that the District regulations require extensive previous local knowledge and experience, it has been proved that local mariners lack the necessary *expertise* to handle ocean-going vessels which require pilotage services (Part IV, pp. 934 and ff.).

The examination requirement is illegal because it comprises an unauthorized delegation of a legislative power. A candidate should be able to find in the legislation the subjects on which he will be examined and the scope of the examination he will have to pass. The same procedure should have been followed as in subsec. 7(3) of the regulations which grants personal exemptions to ships' officers.

Because of the mutual recognition of the legal competency of the pilots in both countries, the qualifications should be defined and the appraisal procedure devised to ensure that the required local knowledge, experience and *expertise* extend to U.S. waters where a Canadian registration certificate will enable its holder to act as pilot (and vice versa), and avoid the present limitation under subsec. 5(1)(c) of the regulations to Canadian waters resulting from the use of the expression "Great Lakes Basin".

Registered pilots for the Great Lakes may also be recruited from the licensed pilots of the Kingston District, in which event the requirements above listed are waived, even the necessity of submitting to an examination. Such a provision was obviously needed as a transitory measure, but only for District No. 1. As such, this provision has now outlived its usefulness and should be deleted. However, its wording as a standing rule of general character is obviously illegal. First, it is an unauthorized delegation of regulatory power to determine which qualifications Canadian registered pilots should possess. According to Part VIA, such qualification requirements must be set out in the Great Lakes Pilotage Regulations, and not in regulations made under Part VI of the Act. This is true *a fortiori* since the regulation-making authority is not the same. Second, the purpose of the registration process is defeated if the pilot's licence which certifies its holder's *expertise* for the Kingston Pilotage District, i.e., the Canadian side only of Great Lakes District No. 1, is to be taken as proof of his qualification to act as pilot in the U.S. waters of Great Lakes District No. 1, and in other parts of the Great Lakes system.

The provision was obviously included in the regulations to avoid the necessity for double licensing when part of the Canadian waters of the Great

Lakes system is made a Pilotage District under Part VI C.S.A. However, to make such delegation of regulation-making powers to the Pilotage Authority permissible, a specific statutory provision to that effect would have been necessary, but none was enacted.

(c) *Registration*

Parliament has delegated to the Governor in Council the responsibility for making the necessary legislation to provide "for the registration of Canadian registered pilots".

Registration is merely another term for licensing. No doubt, it was used in the interest of uniformity in parallel statutory legislation. *Pilot's licence* could not be used because it already existed in U.S. legislation where it has an altogether different connotation. The term agreed upon to replace *licensed pilot* in the Canadian meaning was *registered pilot*; *licensing* became *registration* and *pilot's licence* became *registration certificate*. A registration certificate is merely the official document establishing that the holder's qualifications to act as pilot in the pilotage waters stated therein have been appraised by a duly appointed licensing authority, and vouches that he possesses the necessary qualifications and *expertise*.

(i) *Licensing authority*

For the purpose of licensing Canadian pilots, the whole of the Great Lakes system (including U.S. waters) is considered a single pilotage organization under a single licensing authority. A licensing authority is a public, quasi-judicial entity created by legislation for the purpose of appraising the qualifications of candidates for pilotage and to grant successful candidates the required official document which authorizes the holders to exercise the profession of pilotage within the waters it defines.

While the Act identifies the United States licensing authority (the Secretary of Transportation, see foot note p. 9), the Canadian licensing authority is mentioned only by reference to the regulations that must be made by the Governor in Council for the registration of pilots (subsec. 375c(1)(c)C.S.A.), and the Great Lakes Pilotage Regulations are not clear on the matter. This is a definite deficiency.

The Minister of Transport would appear to be the licensing authority but his rôle in the registration of Canadian pilots (apart from his statutory power to determine their number) is limited in the regulations to the clerical aspects of the function, as follows:

—It is his duty that a register is kept for Canadian Great Lakes pilots and that the names of those who have qualified to act as pilot for the whole or part of the "Great Lakes Basin" are entered, together with the terms and conditions imposed (sec. 4).

- It is his responsibility that each pilot whose name is entered in the register is given a registration certificate in conformity with the terms and conditions of the licensing decision.
- He may extend from year to year the validity of the registration certificate of a pilot who has reached the age of 65 if he is satisfied that the pilot is capable of performing his duties (subsec. 6(4)).

The Minister is not given any appraisal power (except in the case of registered pilots who have reached the age of 65) and the legislation is deficient in that it does not provide for the appointment of an Examiner, or for the creation of a Board of Examiners, legally entrusted with the quasi-judicial function of appraising the competency of candidates. It is true that subsec. 5(1)(g) of the regulations requires the candidate to pass “such examination as the Minister may prescribe”. However, it would be only by stretching the normal interpretation of the text and context to take this provision as the authority for the Minister to appoint an Examiner or a Board of Examiners. Apart from the question of the legality of the ensuing re-delegation of regulating powers, all this provision can be purported to mean is that it authorizes the Minister to determine the subject-matters on which the examination is to be held. This also is clearly shown by the context: this provision is included in the list of requirements a candidate must meet to obtain a registration certificate.

The power to appoint a person or create a Board with a quasi-judicial function is a matter that must be explicitly covered in legislation—it can not be deemed to exist by mere inference. Under Part VI, the authority for licensing power is found in the statutory definition of Pilotage Authority (subsec. 2(69)), the definition of licensed pilot (subsec. 2(44)) and the Pilotage Authority’s regulation-making power (subsec. 329(d)). This also has been the procedure followed in other parts of the Act whenever a person or an authority was to exercise some judicial or quasi-judicial power (vide, for example, secs. 129 and ff. C.S.A. regarding the appointment, powers and duties of Examiners for Certificate of Competency as Masters, mates and engineers). Reference is also made to the study contained in Part I, C. 9, regarding the judicial power which Pilotage Authorities are purported to possess under Part VI C.S.A.

#### COMMENTS

This deficiency in the regulations is a serious matter because it affects the validity of the registration certificates so far granted under subsec. 5(1) of the regulations.

The Minister is powerless to issue a valid registration certificate (except to a Kingston District licensed pilot) unless all the requirements set out in subsec. 5(1) are met, the last being appraisal on local knowledge and

*expertise.* This can not be done unless an appraising authority is duly appointed, but this is not the case under the present defective legislation.

(ii) *The right to be appointed registered pilot*

Part VIA C.S.A. (like Part VI) allows the licensing authority no choice or discretion in the discharge of the licensing process. Any candidate who meets the requirements prescribed in the regulations is entitled by right to a registration certificate, provided the number fixed by the Minister for the area concerned has not been reached or, if so, when a vacancy occurs.

The free exercise of the profession can not be infringed upon unless specifically provided for in statutory legislation. Secondary legislation enacted in this domain must be founded on a clear, explicit provision contained in statutory legislation and such delegation must be interpreted strictly. Apart from the question of the maximum number of registered pilots which the Act leaves to be determined administratively by the Minister (subsec. 375c(2) C.S.A.), the only permissible restrictions that may be imposed on the right to obtain a registration certificate are the qualifications candidates are to meet and the licensing procedure to which they are subject, as defined in regulations made by the Governor in Council (subsec. 375c(1)(b)). The term "qualifications" when read in the context can only mean the professional, physical and moral qualifications candidates must be found to possess through the appraisal process, and must retain thereafter. The expression "providing for the registration of Canadian registered pilots" can only refer to the appointment of a licensing authority and the establishment of the licensing procedure but can not be interpreted as granting any discretion in the process. Therefore, a candidate who meets the requirements listed in subsec. 5(1) of the regulations and is denied arbitrarily the right to have his qualifications appraised would be treated unjustly, provided there is a vacancy, and would be entitled to redress through prerogative recourse before the appropriate regular court. The same would hold if other terms and conditions are imposed (for instance, the requirement that the candidate must become a Crown employee) which are not contained in the regulations and could not be included under the governing statutory provisions.

Furthermore, it would be illegal to do indirectly what can not be done directly, such as not providing a candidate a fair and reasonable opportunity to obtain registration, or by decreasing the authorized number of pilots in the area concerned in order to bar one particular candidate. The power of the Minister to fix the number of Canadian pilots for each part of the Great Lakes system is not an arbitrary power but must be decided objectively to meet the needs of the service.

(iii) *Registration certificate—limitation as to territorial competency*

The Act provides, but only indirectly, that a person may be granted a registration certificate valid only for a given part of the Canadian waters of the

Great Lakes system, i.e., in the definition of the term “registered pilot” who is said, *inter alia*, to be a person “who is registered as a pilot . . . to navigate all or any of the waters of the Great Lakes Basin” (subsec. 375A(c)).

On the strength of this authority, the Governor in Council in subsec. 5(3) of the regulations provided that “registration of a pilot . . . may be for all the waters of the Great Lakes Basin or any portion thereof.”

It is at least surprising to find that legislation which covers such an extensive pilotage area as the Great Lakes system and which goes so far as to impose compulsory pilotage on vessels in certain areas permits the issuance of registration certificates unlimited as to territory. This means that it would still be legally possible to revert to the former Sailing Master procedure under which a pilot remains on board for the complete voyage in the Great Lakes system and pilots wherever pilotage services are required. The fact that the Act makes it possible would indicate that Parliament and Congress, acting on the advice of their experts on the subject, were of the opinion that the necessary *expertise* in navigating the Great Lakes system could be obtained in a general way and that there was no part of the confined waters which contained navigational hazards and difficulties which would require extensive local knowledge and experience.

(iv) *Registration certificate—limitation as to competency*

Neither Part VI A C.S.A. nor the regulations provide for the grading of pilots. In view of the recent Supreme Court judgment (*Baldwin v. Gamache*, Part IV, pp. 256 and ff.), to render the grade system possible it would be necessary to make a statutory provision authorizing its adoption.

(v) *Registration certificate—duration*

Part VI A does not provide for any limitation on the duration of the validity of a registration certificate, except by implication since the very nature of the certificate makes it subject to withdrawal if the pilot no longer possesses the necessary qualifications. The provisions of Part VI that apply to pilots' licences do not apply to certificates of registration. Because different terms were used, in order to make the statutory provisions of Part VI concerning pilots' licences applicable to certificates of registration, it would have been necessary to make a specific statement in Part VI A, but this was not done. The Government fully realized the position by repeating in its regulations (subsec. 6(2)(b)) the provision of sec. 338 C.S.A.

However, since the imposition of an arbitrary limitation on the duration of a registration certificate is an infringement on the free exercise of the pilots' profession, it can not be validly done unless specifically provided by, or authorized under, a statutory provision, but this is not the case. Hence, subsec. 6(2)(b) of the regulation is *ultra vires*, despite its advisability, as is the provision of subsec. 5(3) of the regulations which purports to give

power to an unnamed authority to limit the duration to a fixed term. Appropriate statutory provisions would have been necessary as was done under Part VI C.S.A. with subsecs. 329(n) and (o) and secs. 336 and 338.

(vi) *Registration procedure*

The Act made the Governor in Council responsible for making the necessary regulations to define the registration procedure (subsec. 375c(1)(b)). The regulations in this respect merely deal with the clerical functions of keeping a register and issuing registration certificates. The regulations fail to establish the procedure for appraisal, i.e., how and when applications are made, who is responsible for appointing the Examiner or the Board of Examiners, how the examination is to be carried out and who imposes the necessary terms and conditions applicable to registration certificates.

(d) *Certificates of qualification*

Non-exempt vessels, irrespective of the country of registry, may enjoy a partial exemption, i.e., valid only for the undesignated waters, if they have on board one of their regular officers with the necessary *expertise* who has been appraised and issued a "certificate of qualification". This certificate is often referred to as a "B" certificate and corresponds to the "white flag" certificate of Part VI (vide Part 1, p. 232). This personal exemption is not valid in designated waters where the vessel must be navigated by a registered pilot with territorial competency for the sector concerned.

Subsection 375c(1)(c) makes the establishment of the qualifications a subject-matter of delegated legislation of the Governor in Council. These qualifications are set out in sec. 7 of the regulations.

- (i) The applicant must belong to the regular complement of a vessel. Therefore, his certificate of qualification becomes worthless if he pilots a vessel to which he does not belong, or is not a *bona fide* member of the crew. This restriction is designed to prevent the subterfuge that may otherwise be adopted to circumvent the obligation to employ an official pilot, i.e., signing on a person solely to transit pilotage waters. The certificate of qualification is a personal right and, while the certificate still lasts, is valid for any vessel of which the holder becomes a regular member of the complement.
- (ii) Re professional competency, one of the following certificates or licences is required:
  - a certificate or licence, from any country, entitling its holder to act as Master of a steamship on foreign voyages; or
  - a Canadian Certificate of Competency as Master of an inland waters steamship or a home-trade steamship.

- (iii) Re local experience, the applicant must have made within the preceding two years at least two round voyages into the waters for which he is to be deemed qualified (the requirement for only one voyage in the case of Lake Superior was deleted in 1961).
- (iv) Since, except for ports, navigation in undesignated waters means open water navigation, the local knowledge required is realistically limited to a good working knowledge of the Rules of the Road for the Great Lakes, proficiency in the English language sufficient for the effective use of radiotelephone in navigation and a knowledge of the practice on the Great Lakes of following separate courses, having due regard to the suitability of such courses for vessels of deep draught.

The required examination is to be held by an Examiner designated by the Minister. If the candidate passes, he must be issued with a certificate of qualification which extends to his vessel a pilotage exemption while in the undesignated waters of the Great Lakes system. It is not necessary for the certificate-holder to operate the vessel: it is sufficient for him to be on board, i.e., the same requirement as would otherwise apply if a registered pilot had been employed (subsecs. 375B(1)(b)(ii) and (iii)).

#### COMMENT

The Act does not contain any provision which would authorize any limitation on duration of exemption. By contrast with the registration certificates, the Act does not provide for certificates of qualification to apply only to part of the undesignated waters. The comments made with regard to the duration of registration certificates apply *mutatis mutandis*.

#### (e) *Reappraisal powers and procedure*

Registration certificates and certificates of qualification are acquired rights which can not be withdrawn except on authority based on specific, clear statutory provisions. They are not mere privileges which could be limited, suspended or withdrawn at discretion. The comments made in Part I with regard to the surveillance and reappraisal powers of the Pilotage Authority in the case of licensed pilots (Part I, C. 9) apply here *mutatis mutandis*.

The only statutory provision contained in Part VIA on which reappraisal powers could be founded is subsec. 375C(1)(b) which authorizes the Governor in Council to make regulations "prescribing the qualifications for, and providing for the registration of, Canadian registered pilots". Only by stretching interpretation can it be maintained that the power to establish the qualifications of candidates and to create the necessary appraisal mechanism specifically granted by this provision automatically implies the power

to create a surveillance and reappraisal authority endowed with all the necessary enquiry and judicial powers. This comment applies also to certificates of qualification about which the statutory provision (subsec. 375c(1)(c)) is even less explicit.

In sec. 8 of the regulations, the Governor in Council purports in very wide terms to give the Minister such reappraisal power. This section is wrongly entitled "Disciplinary Measures" because, just as in Part VI, reappraisal powers and discipline were confused. This is obvious when the contents of the section are studied. It can not be maintained that the withdrawal of a certificate of registration is a disciplinary measure because its holder has become unfit due to illness or injury, or because for some reason or another he has failed to maintain the required standard of professional qualifications, or that his moral fitness has deteriorated to the extent that he is no longer trustworthy.

This provision is silent on the procedure to be followed. It merely states that the Minister may cancel a certificate of registration or personal exemption "on such proof as he deems reasonable". This is inconsistent with the Bill of Rights and natural justice.

(f) *Examination fees*

Pursuant to sec. 375c(1)(d), the Governor in Council has power to fix by regulations the fees to be charged for an examination. These fees were established at \$5 in all cases for a pilot and \$5 for an applicant for a personal exemption, provided the examination takes place within regular office hours; otherwise, \$25 plus reasonable expenses incurred by the Examiner.

The fee for the examination for personal exemption certificates is warranted. It would also be warranted for pilotage candidates, provided the status of the pilots does not become Crown employees or quasi-employees in a system of fully controlled pilotage (vide Part I, p. 260).

(g) *Pilotage fees*

The tariff has been repeatedly amended since it was first adopted in 1961, and the amendment of Aug. 12, 1970, modified its structure by the addition of a variable factor based on ship dimensions.

Under the 1961 system, the rates were the same for all vessels irrespective of their size. For services rendered in Districts, there were flat rates for specified pilotage trips. In undesignated waters, the rates were based on time navigating plus berthing and unberthing fees and reasonable travelling expenses. Detention *en route* for any other reason except ice, weather or traffic (except between Dec. 1 and April 8) called for a detention charge payable from the first hour. A further detention charge applied after the first hour in the case of late departure or detention for the ship's convenience at the end of an assignment. There was also a cancellation charge.



With the 1970 amendment all the foregoing structure and items were retained (but as basic rates to be varied through the new element) exactly as they were except for the basic amount which was raised and for some slight modifications, such as basing the time rate for pilotage in undesignated waters on periods of six hours rather than 24 hours as in the past, charging detention from the first hour when the pilot was retained at the end of an assignment for the ship's convenience and also the deletion of reimbursement of travelling expenses. Through a formula based on their dimensions, ships are grouped into four categories, the actual rate for each category being obtained by multiplying the applicable basic rates by the factor (called "weighting factor") for that category, these factors being 0.85, 1.00, 1.15 and 1.30 of the basic rates. Hence, smaller ships pay dues computed at 85% of the basic rates, etc.

In addition, the 1970 amendment provided for a 50% increase in the basic rates in the case of a joint assignment of two pilots, i.e., one and a half times the basic rates that would have applied if only one pilot had been assigned. By contrast with the U.S. corresponding legislation, the Canadian regulations do not specify the circumstances in which such double despatching would be permissible and by whom it should be authorized. The Canadian regulations are silent on the subject of despatching (p. 12).

*(C) Applicability of the Provisions in Part VI and of Other Pilotage Provisions in the Canada Shipping Act*

Part VIA C.S.A. is a separate piece of pilotage legislation enacted to meet an exceptional situation, i.e., pilotage requirements in the Canadian as well as the United States waters of the Great Lakes system and the necessary provisions for the extension of the legal competency of the pilots of both countries over the waters of the other country, the licensing of pilots with competence beyond the territorial waters of Canada and the fixing of rates for their services.

By contrast with the statutory legislation of the United States which it is supposed to parallel, the Canadian legislation is totally deficient in providing for the organization and control of the service, and partly deficient even as a licensing system.

It would appear that Part VIA was drafted under a misconception about the nature of a pilot's licence (whatever name it may be given) and the scope of Part VI. It is apparent that a pilot's licence was considered merely a privilege which could be granted, restricted, modified and withdrawn at any time at the discretion of the licensing authority. Therefore, there was no need for any statutory enactment to cover the organization and control of the provision of services because, if the pilots' status was to be employees of the licensing authority, i.e., civil servants, the necessary control could be

effected under the authority of the employer/employee relationship; if, on the other hand, the pilots refused to become employees, it was assumed that such control could be imposed by the device of creating a Pilotage District under Part VI C.S.A. The opinion held at that time was that subsec. 329(f) made the control, management and direction of the provision of services possible through appropriate regulations, but this is not the case (Part I, p. 39).

The fact that Part VIA C.S.A. is a separate piece of legislation is apparent from the drafting method used and is confirmed by the amendment made to Part VI by the addition of sec. 356A.

Parliament, by deliberately avoiding in Part VIA the use of all key words of Part VI, has clearly indicated that, despite the similarities that may actually exist in the subject-matters concerned, they should be considered for purposes of legislation as distinct, dissimilar matters. The licensing scheme established in Part VI C.S.A. is described with the terms "pilotage district", "pilotage authority", "licence", "licenced pilot", "pilotage dues", "compulsory payment of dues" and "ships", but these have been carefully avoided in Part VIA by using instead the terms: "Great Lakes Basin", "designated and undesignated waters", "registration certificate", "registered pilot", "Minister and Deputy Minister", "certificate of exemptions", "pilotage fees" and "vessels", and by using phrases to refer to the two aspects of compulsory pilotage. When the term "pilot's licence" is used, it is qualified to show that it has not the meaning of Part VI but the altogether different meaning in United States legislation. The only reference to Part VI is merely to ensure that none of its provisions with regard to freedom of pilotage, compulsory payment of dues and its scheme of exemptions apply, since these matters are fully dealt with for the "Great Lakes Basin" in sec. 375B.

At first sight, it may appear that this dissimilarity in terms is only apparent in that it was the indirect result of the requirement to draft parallel legislation and the desirability for uniformity's sake of employing the same terms to refer to the same matters and that, therefore, unless it is clearly indicated as in sec. 375B, the various provisions of Part VI would automatically apply despite the disparity in terms. This intention, however, is not clear in the Act and it is not permissible to assume that it is the case. For this to be so, it would have been necessary to state it explicitly, e.g., that the provisions of Part VI and other provisions of the Act concerning licensed pilots would apply to Canadian registered pilots *mutatis mutandis*.

Any doubt that may have been entertained in this regard is dispelled by sec. 356A C.S.A. The indirect result of adding this section to Part VI when Part VIA was introduced is twofold:

- It establishes that Part VIA is a separate piece of legislation and that all the provisions contained in Part VI which pertain to the

licensing scheme provided therein and its organization can not be used to supplement the provisions of Part VIA, even if they do not conflict with them.

- It confirms that when Part VIA was enacted the intention was that Pilotage Districts could still be created under Part VI in the Canadian waters of the Great Lakes system and that, therefore, when a Pilotage District is created, all the provisions contained in Part VI pertaining to Pilotage District organization could then be employed, provided they did not conflict with the overriding provisions of Part VIA.

Nevertheless, without resorting to the creation of a Pilotage District, the general provisions contained in Part VI and in the rest of the Act would appear to be applicable but when the matter is examined in detail it is seen that the very few provisions which at first sight are still applicable have remained so rather by chance than by intention.

There are very few general provisions in Part VI or in the other parts of the Act (Part I, pp. 21 and ff.) that could be deemed to apply to pilotage in the Great Lakes Basin in the absence of a Pilotage District created under Part VI; often, their context rules out their applicability.

Sections 341 to 343 C.S.A. might possibly be considered applicable in part, since they refer to pilotage dues whose statutory definition (subsec. 2(70)) would, if taken out of context, apply to the pilotage fees of Part VIA. This, however, is doubtful because these sections are contained in Part VI and in that context (as specifically stated in sec. 341) refer only to pilotage dues that are established by regulations made by the Pilotage Authority according to subsec. 329(h) C.S.A., but this does not apply. Furthermore, payment could be made only to the pilot who earned the dues through his services, since in Part VIA there is no provision by which payment could be made to someone else, even the Government.

Section 344 C.S.A., which provides for the withholding of a ship's clearance as a means of pressure to enforce payment of pilotage dues, also does not apply because the Customs Officer can only do so at the request of a Pilotage Authority.

The general provisions of sec. 359 regarding the carrying over of pilots could apply (vide Part I, pp. 189 and ff.), but sec. 360 regarding quarantine detention does not apply since its application is limited to licensed pilots.

Section 361 which defines the extent of the service that a pilot is obliged to render to a ship, i.e., when he may quit the ship, does not apply because it refers to licensed pilots and Pilotage District limits. This leaves a substantial deficiency in the legislation applicable to registered pilots since there is

nothing in Part VIA to determine the extent of their obligations and duties and this is not one of the subject-matters that could be covered by delegated legislation.

It would appear that subsec. 362(2) which limits the pecuniary liability of a pilot to \$300 would apply to Canadian registered pilots (as well as to any pilot (Part I, p. 34) including U.S. registered pilots), depending whether the pilotage contract took place in United States territory or Canadian territory and where the casualty occurred. This question would, therefore, be subject to the application of the rules of private international law regarding liability arising from contracts and torts. The exception to the limitation of liability rule contained in sec. 371 would also apply. If a pilot was employed as a result of misrepresentation which affected the safety of a ship, he would be deprived of the protection of subsec. 362(2), in addition to the offence committed.

In the offences that may be committed by pilots, the only ones that would apply (provided they are committed in Canadian waters) are those created by secs. 369 and 371. The other statutory offences, and those that may be created by regulations under subsec. 329(f), apply only to licensed pilots. Part VIA does not create any offence for pilots or authorize the making of regulations that a registered pilot could possibly violate. Here again, this deficiency in the legislation of Part VIA is the obvious result of the assumption that registered pilots would be Crown employees and that these questions of discipline could be attended to by the Minister, or his representative, as the employer through the powers derived from the contract of employment. In cases where the pilots were not Crown employees (e.g., the Kingston District), the device of a Pilotage District formed under Part VI would make these necessary provisions of control applicable.

With regard to a Preliminary Inquiry (secs. 555 and ff.), a Court of Formal Investigation (secs. 558 and ff.) and a Court of Inquiry under sec. 579 that could be created by the Minister under Part VIII of the Act, all have no power over the certificate of registration of a Great Lakes pilot because their only power over a pilot is directed against his "licence" as defined in the Act. The word "certificate" as used in Part VIII of the Act applies only to certificates held by Masters, mates or engineers.

There is no doubt that the intention was that the organizational scheme provided under Part VI would also remain permissible in the Great Lakes Basin but subject to the provisions of Part VIA. However, the creation of a Pilotage District achieves very little that could not have been obtained through regulations under Part VIA, and there is absolute incompatibility when the pilot's services are to be provided in U.S. waters as well as Canadian waters.

The only advantage in creating a Pilotage District would be to make good the shortcomings in the licensing scheme of Part VIA because the Pilot-

age Authority under Part VI possesses some reappraisal powers (although still very incomplete) and has the power by regulations to subject the pilots to a code of discipline.

However, in order to establish any semblance of compatibility, the territorial competency of registered pilots must not extend beyond District limits and, hence, such competency would have to be limited to Canadian waters. In the Great Lakes system, this situation would exist only in the Welland Canal and in Canadian ports situated in the undesignated waters of the Lakes. If the pilots' territorial competency were to extend over U.S. waters, the regulations the Pilotage Authority would have to make in order to meet the ensuing requirements of the service would be totally beyond its jurisdiction. This method was tried only in Great Lakes Pilotage District No. 1 because the pilots of the Kingston District were the only Canadian pilots in the Great Lakes Basin who refused to become Crown employees. The regulations the Pilotage Authority made show the insuperable legal obstacles encountered (pp. 152 and ff.) and, in addition, certain statutory provisions which necessarily form part of Part VI create incompatible situations under these circumstances, e.g.,

- The jurisdiction of the Pilotage Authority is limited to the territory of its District, and the limited surveillance and control powers it possesses apply only when the pilots are inside the District. An impossible situation results because many pilotage assignments have to be performed partly in U.S. waters.
- Sec. 361 C.S.A. establishes an absolute right on the part of any licensed pilot to quit a ship when the District limit is reached, but there is nothing in Part VIA which, as a condition of his registration certificate, obliges a registered pilot to remain on board a ship until the pilotage trip is completed within the territorial competency of the registration certificate, or up to the limit of such competency.
- By virtue of sec. 359 C.S.A. a pilot has a statutory right to be paid \$15 daily indemnity plus board, lodging and transportation allowance if a ship takes him outside the limits of the District.
- Part VI applies to all ships, whether or not they enjoy an exemption. Therefore, ships which do not fall under the application of Part VIA have a statutory right to employ an unregistered pilot, but, because of the existence of a Pilotage District under Part VI, would be compelled in such a case to employ a licensed pilot (secs. 354, 356 and 356A).
- To require a Canadian pilot to hold a pilot's licence as well as a registration certificate is to add a requirement which is directly in conflict with the provisions of Part VIA, since the qualifications

required to become a registered pilot must be fully determined in the regulations made by the Governor in Council pursuant to subsecs. 375A(c)(ii) and 375C(1)(b). It is illegal to impose any conditions by other means. The present provision of subsec. 5(2) of the Great Lakes Pilotage Regulations which waives all the regulation requirements for admission into the service whenever a pilot holds a licence issued by the Kingston Pilotage Authority is an unauthorized and illegal delegation of regulation-making power. To require that candidates be subjected to two licensing processes bearing on the same subject-matters could, in effect, result in the denial of the licensing authority's power under Part VIA by the imposition of unreasonable licensing requirements for the pilot's licence which may be imposed by the Pilotage Authority through its own regulations. The fact that the Minister of Transport happens to be at the same time the licensing authority under Part VIA and the Pilotage Authority of the Kingston Pilotage District is only a factual coincidence which does not affect the legal situation. In effect, the Pilotage Authority could through this device be in a position to interfere with the duties and responsibilities of the licensing authority under Part VIA and even hamper it completely by failing the candidate at the examination for a pilot's licence. In the case where a candidate succeeded in obtaining a certificate of registration but failed to obtain a pilot's licence, he would then be competent to pilot in U.S. waters in view of the reciprocity provision in United States legislation, and also to act as pilot in the Canadian waters over which registration certificates extend, provided they are *outside* the District waters but *not in* the Pilotage District—clearly an absurd situation. On the other hand, under such arrangements, a Canadian pilot holding a pilot's licence but failing his registration certificate would not even be able to pilot within the Pilotage District (except in cases where unregistered pilots are authorized to act), since a registration certificate is an absolute prerequisite in the Great Lakes system when compulsory pilotage applies.

## (2) UNITED STATES GREAT LAKES PILOTAGE LEGISLATION

United States Great Lakes pilotage legislation is fully contained in an *ad hoc* Act of Congress and in the regulations made thereunder. This became necessary because there was no federal legislation on pilotage in the Canadian meaning of the term, i.e., the navigation of vessels by qualified mariners expert in local navigation and not members of the crew.

The United States federal pilotage Act (by contrast with Part VIA C.S.A.) covers fully all aspects of pilotage services to be provided by free entrepreneur pilots; either singly or grouped in association for that purpose, under the supervision, surveillance and limited control of the Government. *Vis-à-vis* shipping, it is essentially compulsory pilotage legislation and, hence, does not apply to excluded or exempt vessels. It also provides for uniformity of pilotage requirements and harmony with Canadian legislation through parallel legislation and the necessary reciprocal legislative provisions to assure shipping similarity of treatment in both U.S. and Canadian waters. It deals with the organization of the service and defines the extent of the surveillance and control the United States Federal Government is to exercise. Again, in sharp contrast with Part VIA, co-ordination of secondary legislation and of the broad aspects of the organization of the provision of services to be shared equitably between United States and Canadian pilots is made a statutory requirement.

#### (A) *Great Lakes Pilotage Act of 1960*

The federal pilotage Act is known as the "Great Lakes Pilotage Act of 1960" (Public Law 86-555; 74 stat. 259) enacted June 30, 1960 (Ex. 1028). It has not been amended except indirectly by the Act which created the Department of Transportation (80 stat. 931; 49 U.S.C. 1965 (a)(4)), the Secretary of Transportation superseding the Secretary of Commerce in his functions and responsibilities under the Pilotage Act. Its main features are studied hereunder in the same order as analysis of Part VIA.

##### (a) *Creation of the Great Lakes system*

The pilotage waters to which the Act applies are the same as in the Canadian legislation, i.e., the Great Lakes system. However, different methods of reference and different terms have been used (pp. 5 and ff.). The term "Great Lakes" is defined for the purpose of the Act and the regulations made under it as a general term to mean all the pilotage waters, whether in Canadian or United States territory, within the area referred to in this Report as "Great Lakes system", i.e., all the navigable waters of the St. Lawrence River west of St. Regis and the Great Lakes, their connecting and tributary waters and adjacent port areas. When a distinction has to be made in the United States legislation, the necessary qualifications are used ("United States waters of the Great Lakes" (subsecs. 3(a) and (b)) or "Canadian waters of the Great Lakes" (subsecs. 3(c) and 9(c))).

The Act also contains a provision (subsec. 9(a))—which no doubt was necessary in the United States legislative context—"No State, municipal or other local authority shall have any power to require the use of pilots or to regulate any aspect of pilotage in any of the waters specified in this Act."

(b) *Compulsory pilotage*

The Great Lakes Pilotage Act contains the same conditions as Part VIA with regard to compulsory pilotage, i.e., compulsory piloting (or mandatory pilotage as it is at times called) in designated waters and compulsory taking of a pilot elsewhere. The exclusions and exemptions are in substance the same but are expressed differently to agree with the United States federal legislative context and, in general, its provisions are more complete. The designated waters in the United States part of the Great Lakes system are left to be defined by secondary legislation, in this case an order or proclamation of the President of the United States who shall be guided by "the public interest, the effective utilization of navigable waters, marine safety, and the foreign relations of the United States".

In designated waters, the vessels subjected to compulsory pilotage shall have in their service a United States or Canadian registered pilot, registered for the waters concerned, "who shall, subject to the customary authority of the master, direct the navigation of the vessel in those waters." In undesignated waters, a registered pilot must be on board, available to direct the navigation of the vessel at the discretion of and "subject to the customary authority of the master".

The substantial differences between United States and Canadian legislation in the description and scope of compulsory pilotage requirements exist because the two countries have a different basic philosophy of pilotage and compulsory pilotage and, also, an altogether dissimilar background of statutory legislation.

In the United States, *a priori*, compulsory pilotage may only be imposed on commercial vessels. United States vessels engaged in inland and coastal navigation are already governed by federal legislation which makes local *expertise* possessed by at least one of the regular complement a mandatory requirement for the navigation of any given part of United States waters. Hence, these vessels are excluded from the application of the Great Lakes Pilotage Act. By comparison, the scope of application of compulsory pilotage under Part VIA C.S.A. is more extensive. The classification of vessels in United States legislation into numbered, public, registered and enrolled vessels (Part I, p. 809) does not correspond, except in a very general way, to the Canadian system of classification. This explains the differences in the text of the two legislations when referring to categories of vessels and, also, the provision in the Canadian Act for administrative exemptions as a means of correcting any disparity of treatment. For instance, following an exchange of diplomatic notes, the Minister of Transport, September 27, 1962, issued a standing order granting such an administrative exemption concerning public



vessels owned by the Federal Government of the United States. This order reads as follows:

"Pursuant to subsection (2) of section 375B of the Canada Shipping Act, the Government of the United States, as owner of vessels, and the masters of such vessels, are exempt from the requirements of subsection 1 of the said section 375B." (Ex. 1396(1)).

According to the Great Lakes Pilotage Act, the situation with regard to compulsory pilotage is as follows:

(i) *Foreign vessels.* With regard to foreign vessels, the Act applies only to merchant vessels and an exception is made of Canadian lakers. Therefore, the Act does not apply to:

—foreign non-merchant vessels. Hence, automatically pleasure yachts, warships, hospital ships and government ships of any nation, and, possibly also, ships engaged in salvage operations, tugboats and fishing vessels, depending on the meaning given to the term "merchant vessels", are not subject to compulsory pilotage. There is no corresponding provision in Part VIA C.S.A., with the result that when such vessels are in Canadian waters they are subject to compulsory pilotage, unless they qualify for an exemption under Canadian legislation (for instance, pleasure yachts which come under the small vessels exemption), or unless the disparity of treatment is corrected by an administrative exemption granted by the Minister of Transport.

—Canadian lakers. The text of the exception in favour of Canadian lakers is the same as contained in subsec. 375B(3) C.S.A. Hence, Canadian registered vessels plying regularly on the Great Lakes or whose operations are primarily between Great Lakes ports and St. Lawrence River ports, even if they make an occasional voyage to "the maritime provinces of Canada", enjoy complete statutory exemption in both United States and Canadian designated and undesignated waters. This exception does not apply to lakers of other nationalities, such as British Commonwealth lakers.

(ii) *United States vessels.* As far as United States vessels are concerned, the Act applies only to "registered vessels", i.e., those engaged in trade with other nations. Hence, numbered vessels (mostly pleasure yachts and small craft), public vessels (United States warships, vessels belonging to, or operated by, the federal, state, or municipal governments of the United States), and enrolled vessels (commercial vessels engaged in inland and coastal voyages) are excluded from the application of the Act. This extensive exclusion is first provided indirectly by the compulsory pilotage provisions of the Act (subsecs. 3(a) and (b)) which apply only to named categories of vessels, i.e., foreign vessels as defined in the Act and United States registered

vessels. It is also provided by subsec. 99(b) which possibly may apply to some "registered" vessels if they meet the conditions:

"Nothing in this Act shall apply to any vessels of the United States, which in its navigation of waters to which this Act is applicable, is required by any other Act to have in its service and on board pilots or other navigating officers licensed by the United States for such waters."

The United States Act requires reciprocity of treatment while in Canadian waters only for U.S. enrolled vessels, Canadian lakers are excluded from the category of foreign vessels to which the United States Act applies on condition that enrolled vessels are assured similarity of treatment in Canadian legislation:

"2(c) The exceptions of section 2(f) applying to Canadian vessels shall be effective only so long as Canada permits enrolled vessels of the United States to be navigated on Canadian waters of the Great Lakes solely by qualified officers licensed by the head of the Department in which the Coast Guard is operating."

While this condition is not exactly met in Part VIA, which contains no general exemption for enrolled vessels of the United States, two provisions are applicable, although they may not fully cover the requirement. Nevertheless, any discrepancy could be corrected by an administrative exemption.

- The personal exemption resulting from the "pilot's licence" issued to a ship's officer by the United States Coast Guard is recognized whether the vessel is a United States enrolled vessel or a vessel of any other category, but it applies only to undesignated waters.
- The only provision which applies throughout the Canadian waters of the Great Lakes system is the exemption in favour of United States lakers, whether they are registered or enrolled vessels, provided they meet the conditions set therein, i.e., their voyages, except for an occasional voyage to "the maritime provinces of Canada", are on the Great Lakes only or between Great Lakes ports and St. Lawrence River ports. Hence, enrolled vessels which do not meet these conditions, although they may have on board an officer holding a Coast Guard pilot's licence for the corresponding United States waters, would be subject to compulsory pilotage in Canadian designated waters unless an administrative exemption is granted.

(iii) *General exemptions.* The Act also provides for two types:

- De facto exemption.* Vessels are exempted from compulsory pilotage requirements when an emergency affecting the safety of the vessels themselves or their cargo occurs or when a registered pilot is unavailable. In the latter case, the *de facto* exemption is not automatic and the necessary fact has to be established by the appropriate designee of the United States authority. Like the parallel Canadian provision, this exemption has no extra-territorial appli-

cation on account of the absence of the usual reciprocity clause and, hence, for a voyage involving navigation in the waters of both countries, the required authorization (i.e., a *waiver*) has to be obtained from both United States and Canadian authorities.

—*Personal exemptions.* In the undesignated waters only, foreign merchant vessels or United States registered vessels are exempted from the obligation of having on board a registered pilot if a member of its regular complement is an officer whose qualifications for navigation in the waters concerned are certified by a “pilot’s licence” issued by the United States Coast Guard or a “certificate of qualification” issued by the appropriate Canadian authority under Part VI C.S.A. Extra-territoriality is ensured by the usual clause (subsec. 3(c)) whose condition is met in Canadian legislation.

Under United States federal legislation, a pilot’s licence means that the holder possesses the necessary *expertise* to navigate a vessel in the United States waters described in the licence. It is issued to any mariner who possesses the basic Certificate of Competency, has had the required experience in navigating the waters concerned and has successfully passed the required examination on local knowledge before Coast Guard officials. A United States vessel may not navigate any United States waters unless there is on board an officer whose Certificate of Competency is endorsed for those waters. This so-called “pilot” may or may not be a member of the regular complement of the vessel (Part I, p. 810). In the case of United States vessels under registry, such “pilot” would have competency only in the undesignated waters and provided he is the Master or other member of the regular complement of the vessel concerned (subsec. 2(e) and subsecs. 3(a) and (b)).

(c) *Registered pilots*

The Act defines separately the terms “United States registered pilot” and “Canadian registered pilot”. The two definitions are the same in substance and mean a person, other than a member of the regular complement of a vessel, who holds a Master’s Certificate of Competency issued by the United States or Canadian authorities authorizing navigation in the Great Lakes system and who, in addition, has been registered as a Great Lakes pilot by the Secretary of Transportation or by the appropriate Canadian agency.

By contrast with Part VI A which leaves to be determined by secondary legislation made by the Governor in Council the qualifications to be met by registered pilots and the registration procedure, the United States Act leaves little to be covered by regulations. Taking advantage of the existing federal

shipping legislation, the licensing process has been divided into two stages, each the responsibility of a distinct licensing authority:

- (i) Appraisal of marine qualifications and *expertise* in the navigation of given U.S. waters (professional fitness) is the responsibility of the United States Coast Guard. An unlimited Master's licence authorizing navigation on the Great Lakes, which has been endorsed for pilotage on routes specified therein, issued by the Coast Guard ("pilot's licence") is one of the prerequisites to obtaining a "registration certificate". Surveillance and reappraisal powers over such professional competency and local *expertise* are in the exclusive jurisdiction of the Coast Guard, and the suspension or cancellation of a Master's certificate or the so-called "pilot's licence" obliges the Secretary of Transportation to revoke or suspend the pilot's registration certificate.
- (ii) The registration authority is the Secretary of Transportation or his designee. His licensing functions consist of verifying the other prerequisites, terms and conditions, established by him by regulations, concerning physical and moral fitness.

Availability for service when required and agreement to comply with all applicable regulations are inherent statutory conditions of the certificate.

The Act specifies that among the terms and conditions that may be imposed is the limitation of the registration certificate as to territorial competency and duration. The description of the part or parts of the Great Lakes system within which the holder is authorized to perform pilotage shall not be inconsistent with the terms of the pilotage authorization in the "pilot's licence". The question of duration is to be defined by regulations.

The registration authority is to provide fair and reasonable opportunity for registration of United States pilots subject to equitable participation of United States registered pilots with Canadian registered pilots.

The Secretary has the power and the duty to suspend or revoke the registration certificate whenever the pilot fails to meet the required standards of qualifications or contravenes the terms and conditions of his registration, other than professional competency as mariner and pilot.

The power of the Secretary and of the Coast Guard in the discharge of their respective reappraisal functions is made subject to the rules governing revocation and suspension proceedings contained in the Administrative Procedure Act (46 U.S.C. 1001-1011, Ex. 1028), a statute which is applicable to all administrative agencies of the United States Government. This Act prescribes, *inter alia*, that in adjudication proceedings every interested party "shall have the right to present his case or defense by oral or documentary evidence, to submit rebuttal evidence and to conduct such cross-examination as may be required for a full and true disclosure of the

facts." It also prescribes the rule governing the conduct of public hearings, including the procedure subsequent to these hearings, and provides for judicial review of administrative actions taken by these agencies (pp. 38 and 46).

(d) *Regulation-making authority and powers*

Except for the definition of designated waters which is a responsibility of the President, the sole regulation-making authority is the Secretary of Transportation. He is authorized by general law to re-delegate any of his regulation-making powers subject to such policies and directives as he may prescribe. The scope of such regulations is as follows:

- (i) Qualifications, terms and conditions to be met by United States registered pilots (other than professional competency as mariners and pilots). The Act specifies the criteria. The qualifications, terms and conditions are those that will ensure adequate and efficient pilotage service, and will provide equitable participation of United States pilots with Canadian registered pilots and fair and reasonable opportunity for registration. The qualifications relating to a pilot's professional competence are governed by another statute and the required regulations are issued by "the Head of the Department in which the Coast Guard is operating".
- (ii) The period of validity of registration.
- (iii) If the Secretary has authorized the formation of pools by voluntary associations of United States registered pilots, he has to establish such rules and regulations as are considered necessary for their operation.
- (iv) The fixing of rates, charges and other conditions or terms for services performed by registered pilots. The Act enunciates the criteria. These rates, charges and conditions or terms shall be fair and equitable giving due consideration to public interest and the reasonable cost and expense of providing and maintaining such facilities and arrangements as are required for the efficient performance of pilotage services. There should be uniformity of rates with those established by the Canadian authority (p. 39).

The United States Administrative Procedure Act referred to earlier requires that the public be allowed to participate in the regulation-making process, thereby enabling all those who may be concerned to express their views before the proposed regulations become effective. The text of the proposed regulations must be published in public notices in which the date and place of the required public hearing are given. This public procedure will be waived if it is deemed to be impracticable and contrary to public interest. An example of such a public notice is the one published April 6, 1966, con-

cerning amendments to the Great Lakes Pilotage Regulations and the Great Lakes Rules and Orders. These were approved effective July 1, after a public hearing April 30, as stated in the public notice (Ex. 1028). The Act also provides for judicial review of the decisions of administrative agencies. (Re regulation-making for pilotage in Canada, vide Part I, Recommendation 19, pp. 515 and ff.)

(e) *Direction and organization of the provision of services*

The only controls the United States Government may apply under the Act over the provision of services are by making regulations, approving pool working rules, exercising surveillance, prosecuting violations of the legislation and withdrawing authorization to operate a pool if the pilots' association concerned fails to meet its obligations. Neither the Government nor its agency, the Great Lakes Pilotage Administration, may become otherwise involved in the administration and direction of the provision of services.

The status of the United States registered pilots is that of private contractors in competition with other pilots. It is their individual right as private contractors to join in private partnerships, and even commercial corporations, for the purpose of exercising their profession. These are the voluntary associations of registered pilots to which reference is made in the Act. In theory, in a given area, there may be a number of such associations and also a number of pilots who operate individually.

If no pool exists there, the Government has only a very indirect and remote means of control over the profession. Associations of pilots and individual pilots not members of any association vie among themselves for clients and may give preference to one vessel over another. As far as the provision of services is concerned, their only obligation is to be constantly available.

When there is at least one pilots' association in a given pilotage area, the Secretary of Transportation or his designee may authorize it to assume responsibility for establishing and operating a pool of pilots for that area with a view to providing more efficient service. These associations are voluntary and the Government has no way of forcing pilots to form one or to oblige any existing association to accept the responsibility for establishing and operating a pool. When an association has been authorized to form a pool, the extent of the Government's control over the provision of services is through the imposition through regulations of terms and conditions, but, if the association fails to meet its obligations, the only remedial action at the disposal of the Secretary or his designee is prosecution for infractions committed and, ultimately, the abolition of the pool.

The purpose of such a pool of pilots is to group for administrative purposes all the pilots in a given area to provide in common for accessory

services, such as pilot vessels, to divide the workload equally among the available pilots through equitable despatching, to collect pilotage fees and to pool earnings.

The Act empowers the Secretary through regulations to decide where pools may be established, to define the prerequisites a pilots' association seeking the privilege to operate a pool must meet and to define the accessory services to be provided by the pool and the terms and conditions the association must meet. It is also his duty to see that United States pools of pilots are co-ordinated on a reciprocal basis with similar arrangements made by Canadian authorities. The Secretary may audit and inspect the administration and operation of the pools and prescribe a uniform accounting system.

(f) *Co-ordination of legislation applicable to regulations and of pilotage organization and administration with Canada*

The aim sought by Canada and United States regarding pilotage in the Great Lakes system was, in addition to uniformity in pilotage requirements and recognition of the legal competency of the pilots on the waters of the other country, co-ordination of organizations for the provision of services on an equal basis by pilots of both countries. The parallel statutory legislations were arrived at through negotiation and agreement. The contents of the remaining legislation and the form the joint organization should take were also left to negotiation and agreement. The difference in the two statutory legislations on this subject is that in the United States Act co-ordination and co-operation between the two countries were made a statutory requirement, while Part VI A is silent on the matter.

The United States statutory legislation makes such negotiations and agreements mandatory requirements regarding the following matters:

- equitable participation by United States registered pilots with Canadian registered pilots in the pilotage service, *inter alia*, by establishing the number of pilots who may be registered by each country;
- if pools of pilots are authorized, the Secretary may require that pooling be co-ordinated on a reciprocal basis with similar arrangements established by the Canadian authorities;
- the establishment of joint or identical rates, charges and any other conditions or terms for services by registered pilots.

(g) *Advisory Committee*

The Secretary is authorized to appoint an Advisory Committee of three public members. This Committee's responsibility is to review proposed pilotage regulations and policies and make such recommendations as are deemed appropriate. There is no corresponding provision in Part VI A C.S.A.

(h) *Penal sanctions*

The penal provisions are in substance the same as in Part VIA except that it is a civil penalty, instead of a fine, whose maximum is \$500 per day of violation:

- (i) for the owner, Master or any other person to permit navigation of a vessel in violation of the compulsory pilotage provisions;
- (ii) for an unauthorized person to navigate a vessel in violation of the compulsory pilotage provisions;
- (iii) for violation by anyone, including registered pilots, of any of the regulations made by the Secretary pursuant to the Act.

The enforcement of provisions (i) and (ii) is the responsibility of the Coast Guard; of (iii), the Secretary with additional powers to remit or mitigate a penalty.

(B) *Regulations Made by the President of the United States*

By Proclamation No. 3385 dated December 22, 1960, amended by a further Proclamation dated June 10, 1968 (Ex. 1028) the President of the United States pursuant to sec. 3(a) of the Act defined those parts of the United States waters of the Great Lakes system which thereby became "designated waters".

These designated waters are fully contained in three homogeneous sectors respectively entitled District 1, District 2 and District 3. Except for the Canadian sector of the Welland Canal, which is fully situated in Canadian waters, the limits of these designated Districts correspond to those on the Canadian side of the boundary defined in the Canadian regulations (pp. 12-16).

- District 1 comprises the United States waters of the St. Lawrence River between the international boundary at St. Regis and a line at the head of the River running approximately 127° true between Carruthers Point Light and South Side Light (Wolfe Island) and extended to the New York shore.
- District 2 comprises all United States waters of Lake Erie westward of a line running approximately 026° true from Sandusky Pierhead Light at Cedar Point to Southeast Shoal Light; all waters contained within the arc of a circle of one mile radius eastward of Sandusky Pierhead Light; the Detroit River; Lake St. Clair; the St. Clair River, and northern approaches thereto south of latitude 43°05'30" N.
- District 3 comprises all United States waters of the St. Marys River, Sault Ste. Marie locks and approaches thereto between latitude 45°57'N at the southern approach and longitude 84°33' W. at the northern approach.



(c) *Regulations Made by the Secretary*

The regulations made by the Secretary under the Great Lakes Pilotage Act of 1960 were contained in his Department Order No. 169, entitled "Great Lakes Pilotage Administration, Establishment, Functions and Responsibilities" made October 25, 1960, amended August 21, 1962, and superseded by another order bearing the same number November 13, 1962. The main features are as follows:

- (i) Its purpose is to create a constituent organization unit called "Great Lakes Pilotage Administration" headed by an Administrator and to delegate to him most of the powers conferred on the Secretary by the Act.
- (ii) The Administrator is appointed by the Secretary to perform his functions and exercise his authority, except with regard to the remission or mitigation of penalties and the appointment of members of the Advisory Committee, with power of re-delegation except concerning regulation-making and the imposition of civil penalties in cases of violation of regulations made under the Act.
- (iii) The functions of the Administrator consist of establishing and administering an effective system of regulated pilotage in cooperation with the State Department and the U.S. Coast Guard with regard to the exercise of their responsibilities under the Act, and to issue and administer the necessary regulations to ensure the adequacy and efficiency of the pilotage service. As for regulated pilotage, he has to arrange with Canada for a co-ordinated system, the determination of the number of pilots and the number and location of pilot pools, the equitable participation between Canadian and U.S. pilots in the provision of services and the establishment of rates. He is to act as the registration authority, authorize the establishment of United States pilot pools and issue the required rules and regulations for their operation, *inter alia*, a uniform system of accounting, perform audits and inspect pool operations. In addition, he is to exercise the necessary surveillance and is vested with power to impose civil penalties for violations of regulations.
- (iv) The Advisory Committee is to review proposed regulations and policies, assist and advise the Administrator in reviewing the operation of the pilotage system and provide him with any other advice he may ask for.

When the responsibility for implementing the Great Lakes Pilotage Act was transferred from the Department of Commerce to the Department of Transportation, the Secretary of Transportation issued Department of Trans-

portation Order 1100.1 dated March 31, 1967, which superseded Department of Commerce Order No. 169. By this Order the Secretary of Transportation delegated to the Commandant of the U.S. Coast Guard all the functions, powers and duties vested in him under the Act. This Order, except for the necessary modifications to reflect the changes in authority, is otherwise the same in substance as Order No. 169 which it replaced. The "Great Lakes Pilotage Administration" has become the "Great Lakes Pilotage Staff", the "Administrator" has become the "Commandant of the Coast Guard" and his *ad hoc* representative the "Director, Great Lakes Pilotage Staff" on the staff of the "Commander, 9th Coast Guard District".

(D) *Regulations Made on behalf of the Secretary*

The regulations made pursuant to the regulation-making power re-delegated in Department Order 169 were contained in three sets of regulations:

- The Great Lakes Pilotage Regulations (46 CFR 401) concerning the registration of pilots, the establishment of pools by voluntary associations of United States registered pilots, and the rates, charges and conditions for pilotage services.
- Great Lakes Pilotage Rules and Orders (46 CFR 402). These are rules and orders which the Administrator was authorized or required to make under certain provisions of the Great Lakes Pilotage Regulations.
- The Great Lakes Pilotage Uniform Accounting System Manual (46 CFR 403).

The "Pilotage Regulations" and the "Rules and Orders" are both regulations. The former contain most of the provisions of general application and those of a fairly permanent nature, e.g., the main purpose of the July 1, 1966, amendment was to transfer from the "Rules and Orders" into the "Regulations" those provisions that had been found to be of a "stable continuing nature". It is not deemed necessary for the purpose of this Report to study the "Uniform Accounting System Manual".

On October 9, 1967, the regulations were further amended by the Coast Guard Commandant to make them regulations of the Department of Transportation and on December 1, 1968, they were consolidated. Except for the amendments made to reflect the changes in authorities responsible for the implementation of the Act (e.g., replacing "Administrator" by "Director"), the new regulations are in substance the same and the analysis hereunder of the former regulations is still valid.

Effective July 7, 1970, the Great Lakes Pilotage Regulations of December 1, 1968, were amended June 24, 1970, to introduce a new rate structure taking into consideration vessels' dimensions, and to provide for the rates in case of a two-pilot assignment, modifications that had been agreed upon by Canada and the United States in a new Memorandum of Arrange-

ments, and to effect minor clarifying changes in the text of the regulations (p. 24).

(a) *Great Lakes Pilotage Regulations*

The purpose of the Great Lakes Pilotage Regulations is to carry out those provisions of the Great Lakes Pilotage Act of 1960 "relating to the registration of United States pilots, the formation of pools by voluntary associations of United States registered pilots and the establishment of rates, charges, and other conditions or terms for services performed by registered pilots to meet the provisions of the Act." The main features can be summed up as follows:

(i) *Registration of pilots*

- Requirements and qualifications for registration.* In addition to the requirements prescribed in the Act (which are repeated in the Regulations) the applicant must comply with those established in the Regulations, e.g., United States citizenship, good moral character and temperate habits; compliance with the physical standards prescribed by the Administrator.
- Training requirements.* The number of applicant pilots is determined by the Administrator and the criterion is the expected need for registered pilots. An applicant must have had satisfactory service within five years preceding the date of application varying in length depending upon the function on board and the size of the vessel, e.g., one season of eight months as Master, or four seasons as licensed Deck Officer on the Great Lakes in enrolled vessels not less than 2,500 GRT. Where a pool exists, the training of applicant pilots is made the responsibility of the pilots' association charged with the operation of the pool. Time under training with United States or Canadian registered pilots can count to meet the experience requirement. Qualification as radar observer is also required.
- Registration procedure.* The candidate must have completed the minimum number of trips prescribed in the Rules and Orders by the Administrator in the waters for which application is made (in ocean-going vessels in company with a registered pilot within one year of the date of the application), completed a course of instructions prescribed by the association, met the requirements and qualifications for registration and completed satisfactorily a written examination prescribed by the Administrator on the Great Lakes Pilotage Act and Regulations, the Memorandum of Arrangements and other related matters including the Working Rules and Operating

Procedures of his District. The pilots' association concerned is to submit its recommendation together with reasons for the registration of the applicant. The certificate of registration issued to a pilot found qualified is valid for a term of two years, or until the expiration of his unlimited Master's licence, or until he reaches the age of 65, whichever occurs first. Temporary certificates of registration may be issued by the Administrator to an applicant pilot or to a retired registered pilot in order to ensure adequate, efficient pilotage services for a period of less than one year.

—*Territorial competency.* The definition of the pilot's territorial competency on the certificate of registration must not be inconsistent with the terms of the pilotage authorization in his Coast Guard licence.

—*Renewal of certificates of registration.* The registered pilot has a right to the renewal of his registration when the two-year term has expired. If he applies for renewal, the Administrator must renew the certificate as long as the pilot still meets all the requirements and qualifications. In case the renewal is denied for cause, the applicant is given a notice in writing in which the cause is mentioned; thereupon, he may apply for a hearing.

—*Suspension and revocation of certificate of registration.* The Administrator may suspend or revoke a certificate when its holder no longer meets the requirements and qualifications or has violated a legislative provision. When public interest or safety requires, the Administrator is authorized to impose pending investigation a preventive suspension not in excess of 30 days. The regulations reiterate the right of the pilot concerned to a hearing and to be represented by counsel, and reproduces the provision of the Administrative Procedure Act relating to procedure and the questions of burden of proof, appearance, testimony and cross-examination. It also provides for review of the Examiner's decision by the Administrator.

—*Reports.* A pilot is required to report to the Administrator any shipping casualty in which he was involved, in addition to any other report he may be required to file with other authorities. Each pool is to submit a monthly report of availability of all the United States pilots and applicant pilots of that pool and of Canadian pilots who are assigned to that pool for administrative purposes.

(ii) *Establishment of pools by voluntary associations of United States registered pilots*

The prerequisite for the formation of a pool is the existence of an association of registered pilots meeting the following conditions:

- financial means and the necessary equipment;
- assurance of the accessory services indicated for the area concerned;
- willingness to accept the required duties and responsibilities;
- prior application for authorization to form and operate a pool.

The association must agree to provide the pilotage services on a “first-come, first-served” basis to vessels giving proper notice, submit working rules for the approval of the Administrator, adopt the system of accounting prescribed by him and be subject to his audit and inspection, submit annual financial statements and co-ordinate on a reciprocal basis its pool operations with similar pool arrangements established by the Canadian Government. Canadian registered pilots utilizing the facilities of the despatching services of any authorized pool are required to comply with the pool’s working rules.

It is neither automatic nor made compulsory by legislation for the pilots serving in the area where the pool is established to belong but, in practice, they have no other alternative than to join. If they fail to join the pool, they are not entitled to reciprocal despatching and related services by United States and Canadian pilotage pools as provided for by the Memorandum of Arrangements, and are considered not continuously available for service; hence, they may be subject to suspension or revocation proceedings.

Any pilot who utilizes the facilities and despatching services of a pool must comply with its working rules and other rules related to such facilities and services. The association operating the pool may require from U.S. pilots a written power of attorney for the pool to bill for services and deduct authorized expenses, as well as an engagement to comply with all its rules. A pilot who refuses to comply with this request may be denied the facilities and services of the pool with the same consequences as suffered by a pilot who fails to join the pool.

(iii) *Rates, charges and conditions for pilotage service*

These are the same as adopted by the Canadian Authority. There are additional provisions prohibiting making any charges other than those prescribed without the approval of the Administrator, and setting up a procedure for the adjudication of disputed charges.

By the June 24, 1970, amendment, the U.S. Director and Canadian Regional Superintendent were given power to authorize the assignment of two pilots to a ship when justified by circumstances (p. 25).

(iv) *Penalties for operating without a registered pilot*

This part of the Regulations provides for the procedure for obtaining from the Coast Guard certification of the non-availability of a registered pilot required to give entitlement to the *de facto* exemption. If the pilotage pool is unable to furnish a pilot within six hours of the time the pilotage services are required, a report must be made to the Administrator through the Coast Guard with all the necessary particulars that may affect safety, after ascertaining from the appropriate Canadian Supervisor of Pilots that no pilot can be obtained from that source. Every reasonable effort is to be made to prevent delay to vessels. Any vessel which proceeds without complying with this regulation is deemed to have contravened the Act.

(b) *Great Lakes Pilotage Rules and Orders*

The Regulations establish a right for the pilot concerned to a hearing and to be represented by Counsel, provide for the procedure, deal with the questions of the burden of proof, appearance, testimony and cross-examination and provide for review of the Examiner's decision by the Administrator.

The Great Lakes Pilotage Rules and Orders deal with the same topics as the Great Lakes Pilotage Regulations.

(i) *Registration of pilots*

- Requirements and qualifications for registration.* Health and eyesight standards are defined.
- Training requirements.* The minimum numbers of trips in the various channels and ports which the applicant pilots for each District are required to complete in ocean-going vessels in company with a registered pilot within one year of the date of application for registration are established, e.g., in District No. 1, five round trips between Cape Vincent and Snell lock, five trips on Lake Ontario, three round trips in Toronto harbour and one round trip in each of Ogdensburg, Oswego, Rochester and Hamilton. The Rules and Orders also establish the minimum criteria that must be met in a course of instructions prescribed by a pilots' association:
  - manoeuvring characteristics of the various types of vessels and propulsion machinery;
  - effects of ocean-going vessels in restricted waters;
  - use of tugs, berthing procedure in locks and piers, and transiting bridges;
  - search and rescue and civil defence procedures;
  - basic helm and engine telegraph orders in Greek, Spanish, German and Italian;

- communication, security and signal procedures on the Great Lakes as prescribed by the Coast Guard, St. Lawrence Seaway Development Corporation, U.S. Corps of Army Engineers and Port Authorities;
- Customs, Immigration, Quarantine, Department of Agriculture and Coast Guard Regulations applicable to United States registered and foreign vessels on the Great Lakes;
- Great Lakes Pilotage Act and Regulations, Memorandum of Arrangements;
- miscellaneous subjects including manoeuvring in recovery, collision, fire and explosion procedures and manoeuvring in ice;
- radar plotting and use of foreign-made navigational equipment.

(ii) *Establishment of pools*

The only provision is to indicate that five working rules have been submitted by the voluntary associations authorized to establish pilotage pools and have been approved, i.e.,

- working rules and despatching procedures for District No. 1, amended and adopted by the St. Lawrence Seaway Pilots Association, Cape Vincent, approved as of March 25, 1965;
- joint (interpool) working rules for United States and Canadian Districts No. 1 and No. 2, adopted by the St. Lawrence Seaway Pilots Association, Cape Vincent; Lakes Pilots Association, Inc., Port Huron; and the Supervising Pilot, Department of Transport, Port Weller, approved as of Sept. 15, 1965;
- working rules for District No. 2, adopted by the Lakes Pilots Association, Inc., Port Huron, approved as of May 15, 1967;
- joint (interpool) working rules for United States and Canadian Districts No. 2 and No. 3, adopted by the Lakes Pilots Association, Inc., Port Huron, the Supervising Pilot, Department of Transport, Port Weller, and the Lake Superior Pilots Association, Inc., Duluth, approved as of October 25, 1963.
- working rules and despatching procedures for District No. 3, adopted by the Lake Superior Pilots Association, Inc., approved as of March 22, 1965.

These working rules, together with the Kingston Pilotage District By-laws, will be discussed during the study of pilotage organization in the different sectors of the Great Lakes system.

## 2. HISTORY OF LEGISLATION

The present legislation governing Great Lakes pilotage and the organization developed from it result from a combination of established practice, former legislation and agreements between Canada and the United States to establish uniform pilotage requirements over the whole of the Great Lakes, reciprocal recognition of the competency of pilots and, where required, co-ordinated organizations to ensure orderly, equal participation in the provision of services by the pilots of both countries.

The need for pilots and, hence, for pilotage legislation arises only in relation to vessels whose Masters and officers lack the necessary *expertise* in local navigation. There was no need for organized pilotage on the Great Lakes until ocean-going vessels began trading west of Montreal after World War I, and up to the opening of the Seaway in 1959 the small vessels which could negotiate the 14-foot canals and locks between Montreal and Kingston were not serious safety hazards and encountered no special difficulties that could not be met by general experience. A qualified officer with reasonable experience of shiphandling in the canals and locks east of Kingston could readily acquire the little local knowledge he needed to navigate throughout the rest of the Great Lakes system. Under these circumstances, the requirements of the time were met adequately by employing at Montreal a Great Lakes "pilot", i.e., a Sailing Master, who remained for the whole voyage on the Lakes and until the vessel reached Montreal outbound.

Prior to the opening of the Seaway, lakers up to the present Seaway's permissible dimensions plied the whole of the Great Lakes system west of Prescott on the St. Lawrence River because the dimensions of the Welland Canal and the Sault Ste. Marie locks (except for the Poe lock which has since been increased) were the same as now, thus permitting a large interlake trade in bulk cargo, especially iron ore and grain from Lake Superior ports to transshipment facilities as far down as Prescott. The grain was transported from there in small canalers to further transshipment facilities situated on the St. Lawrence River available to ocean-going vessels, e.g., Montreal, Trois-Rivières and Quebec. The construction of the Seaway with locks and canals equalling the dimensions of the Welland Canal made these arrangements obsolete by allowing the formerly landlocked lakers to proceed directly to these transshipment terminals, while also permitting ocean-going vessels of Seaway dimensions to proceed up the Lakes for grain. With the enlargement of the Poe lock, the former situation is repeating itself but only west of the Welland Canal.

The need for public control to ensure the qualifications and availability of pilots arose when the traffic of ocean-going vessels increased. The only legal means available to establish such control under the governing Canadian legislation was by creating Pilotage Districts but this solution had only limited



application because Pilotage Districts and the jurisdiction of their Authorities could not extend beyond Canadian waters. Only one Pilotage District was created for this purpose, i.e., the St. Lawrence-Kingston-Ottawa District in 1933. Such control was most needed between Montreal and Kingston where the channel was almost exclusively in Canadian waters and all the narrow locks and canals were located. This affected the Sailing Masters because, although neither pilotage nor the payment of dues were made compulsory, they were thereby prohibited from piloting between Montreal and Kingston and, hence, their former boarding area in Montreal had to be moved to Kingston. Although pilotage is not compulsory under the legislation governing Pilotage Districts, whenever a pilot is employed he must be a licensed pilot (sec. 354 C.S.A., sec. 347, 1934 C.S.A.). Unwillingness by a number of vessels and some United States and Canadian Sailing Masters to accept this change in the system proved a major problem and resulted in the division of the District in 1960 at Cornwall so that the compulsory payment of pilotage dues could be imposed in the wholly Canadian Montreal-Cornwall sector to force vessels to employ licensed pilots.

The opening of the Seaway in 1959 greatly increased deep sea traffic on the Great Lakes because the new locks and canals between Montreal and Kingston allowed ocean-going vessels of the same dimensions as the largest lakers to reach the Great Lakes system. New navigation and safety problems were created in the confined waters of the connecting channels and the general *expertise* and knowledge of the Sailing Masters no longer sufficed. Since it was essential to acquire and maintain local knowledge and experience of each area of confined waters, groups of local pilots had to be organized. Because these confined waters are partly in the U.S.A. and partly in Canada, the two countries had to co-ordinate pilotage requirements and organization. This was achieved by the enactment in 1960 of *ad hoc* pilotage legislation for all the navigational waters west of St. Regis: Part VI A C.S.A. by the Canadian Parliament and the Great Lakes Pilotage Act of 1960 by the United States Congress.

The Canadian waters of the present Great Lakes District No. 1 formed part of the St. Lawrence-Kingston-Ottawa District until its division November 17, 1960, at Cornwall to form two separate Districts: the Cornwall District between Montreal and St. Regis, and the Kingston District from St. Regis to Kingston. Hence, the historical background of its legislation and pilotage organization up to 1960 is the same as for the Cornwall District (Part IV, pp. 876-93).

The partition of the former District meant little in practice. It merely gave formal recognition to the former *de facto* division with the difference, however, that the legal limit between the two Districts was established to correspond to the eastern limit of the "Great Lakes Basin" of Part VI A, i.e., some six miles downstream from Snell lock where the pilots had changed over

up to then and which, in fact, they continued to do with resultant problems for which adequate legal solutions have not yet been found (vide Part IV, pp. 899 and ff., Recommendation No. 3, pp. 1009-10). The payment of pilotage dues in the new Kingston District remained non-compulsory. The Kingston District General By-law, which was confirmed the same day the District was created, contained the same provisions as the General By-law of the former District. It provided for licensing requirements and procedure and for the direction of the pilotage service by the Pilotage Authority through its local representative, the Supervisor, by means of a despatching system based on a regular tour de rôle. The pilots' remuneration comprised the full amount of the dues their services had earned. There was no pension fund and no deduction of any kind was authorized. The dues for trips were based on draught and registered tonnage (\$5.00 per foot draught plus  $\frac{1}{2}$ ¢ per ton registered tonnage) with a minimum of \$87.50. In addition, for trips of unusual duration there was a charge of \$5.00 for each hour or part thereof over fourteen hours to a maximum of \$25.00 per calendar day. The dues were collected by the District Supervisor and, according to the By-law, were supposed to be remitted directly to the pilot who had earned them. In fact, these provisions were only a temporary measure pending the proclamation of Part VI A C.S.A., which had been assented to August 1, 1960. Part VI A was proclaimed May 1, 1961, and, on the same date, the territory of the Kingston Pilotage District became the Canadian part of Great Lakes District No. 1 and subject to the Great Lakes Pilotage Regulations. On the same day, the Kingston Pilotage District General By-law was substantially amended in a vain effort to reconcile the Pilotage District organization of Part VI C.S.A. with the overriding provisions of Part VI A C.S.A. and the new organizational requirements (vide pp. 156 and ff.).

Following the division of their former District, the Kingston pilots seceded from their former Corporation and formed their own with the name *Corporation of the Upper St. Lawrence Pilots* under letters patent issued August 21, 1961. The Corporation of the St. Lawrence-Kingston-Ottawa Pilots, which then comprised only the Cornwall pilots, changed its name to *Corporation of the St. Lawrence River and Seaway Pilots* (Part I, p. 87, and Part IV, p. 939).

A number of years prior to the opening of the Seaway, the main problem in the Great Lakes system west of Kingston was control of the Sailing Masters to ensure their availability. Under the free enterprise system, the regular lines accomplished this by employing some of them on a seasonal basis. However, vessels which made only an occasional voyage were liable to be delayed because Sailing Masters were not readily available at Kingston and, since this problem affected ocean-going vessels almost exclusively, the Shipping Federation (to which most of them belonged) took the initiative to arrange the necessary organization. The Department of Transport had

declined to assume this responsibility on the ground that it was not in a position to take action because under Part VI C.S.A. it was not possible to create Pilotage Districts unless they consisted entirely of Canadian waters. The Department extended its cooperation by allowing the Shipping Federation to use its despatching facilities at Kingston. When the need for Government control—over not only the availability of pilots but also their professional competency—became necessary following the opening of the Seaway, international agreements between the United States and Canada were required to achieve these controls through the device of parallel, reciprocal legislation.

In the early days, Sailing Masters were mostly retired or semi-retired former Masters of lake vessels (although, since Part VI C.S.A. did not apply, anyone, irrespective of his qualifications, could act as pilot if he could find employment. As ocean-going traffic increased on the Great Lakes, the Shipping Federation, in order to provide a sufficient number of Sailing Masters, had to enrol in its organization younger men who were trained by experienced foreign-going Masters with extensive knowledge of the Great Lakes system. In April 1956, these Sailing Masters grouped themselves into a professional organization under the name *The Great Lakes Pilots Association of Canada*. In 1957, it numbered 50 Sailing Masters, all Canadians. Their remuneration was \$25 per day plus \$2.50 for expenses.

The Shipping Federation of Canada, which was in charge of despatching Sailing Masters for vessels without contracts for such assistance, refused to accept U.S. Sailing Masters on its despatching list, despite repeated requests from the International Organization of Masters, Mates and Pilots, Inc., of the United States which represented them. Early in 1957, the international organization with which the Great Lakes Pilots Association of Canada had affiliated began negotiations with the Shipping Federation of Canada on the subject of the remuneration of Sailing Masters. However, shortly afterwards, the Great Lakes Pilots Association took charge of the negotiations.

Due to the sharp increase in ocean-going traffic, the Sailing Masters found themselves employed full time during the season of navigation. Previously, on account of the existence of the *contract pilot system*, great difficulties had been experienced by the Shipping Federation in the operation of the tour de rôle (these difficulties were of the same nature as those in the other St. Lawrence Pilotage Districts on account of the existence of the special pilot system, vide Part IV, pp. 251 and ff.). Approximately 60 per cent of the Sailing Masters were contract pilots and the remainder were on tour de rôle. The Shipping Federation considered the contract system unsatisfactory on the ground that despatching would be more efficient if all pilots were on tour de rôle and were assigned to ships rather than to com-

panies. At the negotiations, the tour de rôle system was readily favoured by the Sailing Masters' Association and the contract system was abolished. The remuneration was raised to \$40 per day plus \$2.50 per day for expenses.

In the course of negotiations, the Association had submitted that it was not satisfied with the despatching system the Federation had operated and requested that it be taken over and operated by the Department of Transport through the Kingston District Superintendent of Pilots, failing which it warned that it would take over. The ground for this move was to ensure that as far as possible all Sailing Masters had equal service. At this juncture, the Department partly reversed its non-involvement policy by agreeing to take over despatching as an unofficial service to Sailing Masters but refused to be otherwise involved in their pilotage service. A pertinent extract of the instructions issued by the Department reads as follows (Ex. 1219):

"It was decided as a matter of Departmental policy, owing to the desirability of our having an official record of the experience of sailing masters employed on ocean ships plying the Great Lakes, to have these sailing masters assigned or despatched to their ships by the Kingston office. The sailing masters themselves had from time to time requested that this be done and this request was more recently supported by the Shipping Federation. While the sailing masters are not licensed pilots, there being no pilotage district of the Great Lakes established under the Canada Shipping Act, they do fall within the definition of a pilot as given in that Act. Accordingly, it was decided, as stated above, to have them despatched through our Kingston office on the understanding that the Shipping Federation would be responsible for the compilation of the list of sailing masters and for the order in which they would be despatched. That is, the Department would take no responsibility for competency of the sailing masters or for disciplinary measures when needed."

Throughout 1957, the Shipping Federation continued control (except for despatching) of the Sailing Masters who, for all practical purposes, were treated as its employees. Applications to become Sailing Masters had to be addressed to the Federation, which made the selection. Their remuneration was fixed through negotiations between the Great Lakes Pilots Association and the Federation. In addition, the Federation looked after the clerical work and billed vessels, members or not, for the pilots' earnings, which it remitted to them when collected. It made no deduction for administrative expenses but levied on each vessel a \$5.00 administrative charge per assignment. The Sailing Masters enjoyed the benefits of unemployment insurance.

At the end of the 1957 season, the International Association of Masters, Mates and Pilots succeeded in obtaining the acceptance of four U.S. Sailing Masters for the roster.

In November 1957, the Sailing Masters refused to cross the picket lines set up by the St. Lawrence-Kingston-Ottawa pilots who were on strike at the time (Part IV, p. 886). Since Kingston was the main boarding area for Sailing Masters, the practical effect was to deprive ocean-going vessels of their services.

Negotiations had by then commenced between the United States and Canada for the solution of the expected pilotage problems in the Great Lakes system after the opening of the Seaway.

In October 1955, an informal conference was held at Cleveland on the subject of Great Lakes pilotage. It was composed of representatives of the United States Coast Guard, the various shipping firms trading on the Great Lakes and pilot organizations. They had agreed on important concepts: that safety of navigation on the Great Lakes was of the utmost importance; that legislative action should be taken at the United States federal level rather than the states level; that any proposed pilotage legislation should not apply to lake vessels; that radiotelephone equipment was essential for safe navigation on the Great Lakes.

In 1957, a bill (Bill H.R. 7515, Ex. 1220), which was intended to make the use of Sailing Masters compulsory for all ocean vessels in the United States waters of the Great Lakes system, was introduced in the United States Congress. In October 1957, the Congressional Information Bureau issued a release stating that the proposed legislation would require pilots on board ships of 300 GRT and over. It was explained that the Bill would give legislative effect to the practice followed by ocean vessels which had been in existence for many years. The Shipping Federation opposed the legislation, which was intended to perpetuate and enlarge the Sailing Master system, on the grounds that it would actually result in a shortage of Sailing Masters and that the system would no longer meet pilotage needs after the opening of the Seaway. It urged that, instead, organized pilotage be limited to the restricted areas of the connecting channels of the Great Lakes system which, in their view, were the only areas where pilotage was necessary. According to statistics prepared by the Shipping Federation of Canada for 1957, the average duration of a trip for ocean-going vessels into the Lakes was 23 days, of which 52.3 per cent were spent in port and 47.7 per cent under way. The Shipping Federation felt that it was a waste of the pilots' time to continue to despatch them on a long trip basis, to require them to remain idle in ports where ships berthed and even to be on board in the open waters of the Lakes. It felt that such wastage of the pilots' time could be avoided by modifying the organization so that organized pilotage would be limited to areas where it was necessary.

The Shipping Federation presented a brief to the Minister of Transport stating its reasons for its opposition to the United States legislation. It urged the Canadian Government to accept its views, make appropriate representations to the United States Government and show its position immediately by creating a Pilotage District under Part VI C.S.A. between Port Weller and Sarnia. The Shipping Federation also appeared in January 1958 at an official hearing held in the United States at which it established its position on the question of the proposed United States legislation on the Great Lakes.

In a letter dated March 14, 1958, from the Director of Marine Services, the Shipping Federation was informed that its request for the creation of a Port Weller-Sarnia Pilotage District was refused, but that the Government would not object if the Federation decided to establish and operate its own despatching system at Port Weller and Sarnia and institute immediately the practice of employing Sailing Masters only between those two points. The Shipping Federation was also informed that the Government intended to send an *aide-mémoire* through the Department of External Affairs to the United States Government in opposition to the proposed United States legislation. This first *aide-mémoire* pertaining to pilotage legislation on the Great Lakes was, in fact, delivered on March 20, 1958 (Ex. 1396). The Canadian Government pointed out, *inter alia*, that it was "not essential in the interest of safety that vessels carry accredited pilots during passage of the open waters of the Great Lakes". In the opinion of the Government of Canada, "interest of safety would be adequately served by requiring vessels to carry pilots in only the restricted waters" so designated by both Governments; that compulsory pilotage throughout the Great Lakes, including the open waters, was unnecessarily severe and would result in unfair economic hardship.

Bill H. R. 7515, which had passed the House of Representatives, was defeated in the United States Senate largely because of the Canadian objection.

The Shipping Federation proceeded with its proposal to limit pilotage only to the confined waters of the Great Lakes system. The Department of Transport had declined to create a Pilotage District under Part VI C.S.A. for all the waters of the Great Lakes system, or even for the section between Port Weller and Sarnia, the latter on account of the legal difficulties arising from the fact that the Detroit River and the St. Clair River are boundary waters and, therefore, an effective Pilotage District could not be created under the present Canadian legislation. However, the Department viewed the proposal favourably. The Great Lakes Pilots Association and the International Organization of Masters, Mates and Pilots, Inc., to whom the proposal was communicated during a meeting held March 31, 1958, opposed it on the basis that it would jeopardize safety of navigation on the open waters of the Great Lakes. Among the other matters under discussion was a request from the Sailing Masters for an increase in their daily rates for the 1958 season from \$42.50 to \$75.00, plus a charge of \$8.50 per foot draught in the Welland Canal, as well as other benefits.

Notwithstanding the rejection of the proposal by the Sailing Masters, the Shipping Federation went ahead with its plan and set up a pilotage area between Port Weller and Sarnia. The formal announcement of the new arrangements, which was made April 14, was met by a refusal on the part of the Sailing Masters and they went on strike.

In a telegram dated April 16, 1958, the president of the Great Lakes Association stated that any foreign vessel proceeding on the open waters of Lake Ontario without a pilot was a danger to the safety of navigation and that his Association would take any action necessary to prevent it.

On the same day, the Shipping Federation, by-passing the Associations, sent a personal telegram to all eligible Sailing Masters who had served the previous year, advising them that the former Sailing Master system had been discontinued and that it would be replaced by a system of pilotage in restricted areas. The Sailing Masters were informed that application to serve as pilot under the new arrangements would have to be made and that preference would be given to the Sailing Masters on the previous year's roster (Ex. 1045). Of the fifty Sailing Masters on the roster that year, seventeen were not invited, mostly because they were over age.

Two days later, after receiving only one application, the Shipping Federation sent another telegram to the Sailing Masters stating that the former Sailing Master system would not be resumed and that it would prefer giving priority for pilot appointments to those who had served as Sailing Masters in the past, but it could not delay implementation of the new system because the navigation season was about to open. It warned that, if applications were not filed promptly, other suitable applicants would then be hired.

About the same time, the president of the International Organization of Masters, Mates and Pilots, Inc., threatened to demand that two pilots be required at the same time on board each vessel, one U.S. pilot and one Canadian pilot, if the Shipping Federation did not revert to the Sailing Master system.

Since very few Sailing Masters applied, the Shipping Federation advertised for pilot applicants in all the principal lake ports, both United States and Canadian, and sent personal telegrams to individual Masters and mates of Canadian lake ships. The president of the U.S. Association then issued a circular letter stating that the stand taken by the Shipping Federation was a lock-out, and called for "economic action" to protect pilotage and "eliminate the dangers to the safety" of navigation. Both Sailing Master Associations responded and the economic action took the form of action resembling a strike. Most Sailing Masters refused to apply for pilotage employment and picketing action was taken against the Shipping Federation and the vessels of its members. This picketing by members of the Great Lakes Pilots Association commenced at Kingston and had the indirect result of depriving vessels downbound from Kingston of pilotage services, since the Kingston pilots respected the picket lines as a return gesture for the support they had had from the Sailing Masters during their strike the year before. Picketing by members of the International Organization of Masters, Mates and Pilots, Inc., also commenced in U.S. ports, particularly Chicago and Milwaukee.

The Shipping Federation had, by then, organized despatching in Port Weller. By the end of April, nine pilots had been hired. The despatching office as well as the pilots were subjected to constant harassment by members of the Great Lakes Pilots Association who, *inter alia*, followed the ships along the canal "screaming" through loudspeakers at vessels moving in the canal. The despatcher's house was also picketed.

According to the evidence received, all Sailing Masters did not approve of the activities along the Welland Canal, and some felt that there should have been a meeting with the shipowners.

On May 2, an interim injunction against picketing by Sailing Masters was obtained at Kingston but it was not obeyed. The Kingston pilots resumed boarding downbound vessels at Kingston after the granting on May 12 of an interlocutory injunction restraining any interference with service in the Kingston Pilotage District. In the United States, the National Labour Relations Board, on the ground of unfair labour practices, namely, a secondary boycott, obtained a restraining order against the International Organization of Masters, Mates and Pilots, Inc., and the International Brotherhood of Longshoremen from interfering with the operation of overseas vessels. Picketing by the Canadian Association, except as restrained by the injunction, continued for a while.

During April, May and June, the Shipping Federation had great difficulty supplying pilots for their ships; some pilots sailed for only two or three days and left their employment. The Shipping Federation ran into difficulty with the application of the Immigration Act when, in the absence of Canadian applicants in sufficient number, they employed several United States citizens as pilots. According to the Immigration Act, non-immigrants could not be admitted to work except in positions for which no resident of Canada was available, and the Department of Citizenship and Immigration apparently contended that this fact had not been established. The pilot vessel service established by the Federation at Sarnia ran into difficulty with the Customs authorities and a pilot vessel was seized by the R.C.M.P. on the complaint that the boatman was not clearing through Customs each time the pilot was disembarked. Eventually, this matter was settled. In May, one U.S. pilot resigned, mainly because he and his family had allegedly received threats over the telephone.

By May 15, 1958, 18 pilots had joined the roster. From then on, as additional pilots were recruited, it became easier to provide the required pilotage services and fewer ships proceeded through the area without pilots. The difficulties with the Immigration Department were finally settled, the U.S. pilots being given the usual exemptions. By the end of August 1958, there were 30 pilots, including the Port Weller despatcher, Capt. L. H. Crawford, of whom 16 were former Sailing Masters. Then other Sailing



Masters who had by then decided to join were placed on a waiting list as the number in service was sufficient to meet requirements.

The Shipping Federation employed the pilots at the rate of \$40 for each day they were available, with a guaranteed minimum of \$8,000 for the season. Sick leave was guaranteed for two weeks at full rate, and half rate thereafter for an indefinite period. Travelling expenses were reimbursed. Discipline over pilots was exercised by the Shipping Federation from its Montreal office under the authority it derived from the employment contract. It is reported that, *inter alia*, one pilot was dismissed because he was found inebriated on two occasions while on duty.

The pilots were instructed that, as soon as their vessel arrived in port, they should ascertain and report the expected length of its stay. If the vessel was to be in port for more than 24 hours, the pilot was automatically taken off and assigned elsewhere.

The pilotage fees charged by the Shipping Federation were on the basis of a flat rate for given trips, e.g., \$200 for a transit between Port Weller and Sarnia with a pilot vessel charge of \$12.50 for boarding or disembarking at Sarnia.

At the end of the 1958 season, the operations showed a surplus of about \$28,000 after paying pilots and all expenses. It was intended to place this money in a reserve fund and reduce tariffs for 1959, but this was not done because the Department of Transport finally took over the responsibility for pilotage operations.

On August 25, 1958, the Shipping Federation had asked the Department of Transport to take over the service, which by then was fully organized and working efficiently. The Department of Transport had not taken a position at that time but had undertaken a study of pilotage operations. The conclusions of the survey may be summarized:

- (i) the waters between Montreal and Kingston, the Welland Canal, Detroit River, Lake St. Clair and St. Clair River, St. Marys River and the Sault locks, and the Little Current area, were considered essentially as pilotage waters with respect to foreign-going vessels;
- (ii) pilotage was not essential in the open waters of the Lakes or in Toronto and Hamilton;
- (iii) certain points would require emphasis such as Rules of the Road for the Great Lakes, recommended courses and the use of radio-telephone;
- (iv) the equipment of all vessels entering the Seaway on their first trip should be inspected and the officers examined on local knowledge.

In the autumn of 1958, the International Organization of Masters, Mates and Pilots, Inc., endeavoured to set up its own pilotage service on the Great Lakes but was not successful. The Great Lakes Pilots Association also made a similar attempt. In early 1959, the Association sent a circular letter to various shipowners in Europe offering their services as pilots on the Great Lakes. It appears that this proposal met with very little success.

The Hamilton and Toronto Harbour Authorities were urged by the Shipping Federation to set up their own port pilotage organization. The Hamilton Harbour Commissioners immediately made the necessary arrangements and the Toronto Harbour Commissioners did likewise three years later. These port pilotage organizations were only services placed at the disposal of vessels and pilotage was not made in any way compulsory. With the enactment of Part VI A C.S.A. in 1960, these port pilotage organizations were to create problems which have not yet been solved officially.

In the meantime, discussions were being held between the Canadian and United States Governments on proposed pilotage legislation. Towards the end of the year, a policy had been drawn up by the Department of Transport with regard to the required Canadian legislation and this was detailed in Bill S-3 which was introduced in the Canadian Senate in January 1957 as amendments to the Canada Shipping Act. At that time, not only had no agreement been reached between Canada and the United States on joint policy but no progress had been made. Simultaneously Bill H. R. 57 (Ex. 1103) was introduced in the House of Representatives in the United States Congress. It was similar in terms to Bill H. R. 7515 which had been defeated earlier.

The Great Lakes pilotage provisions of Bill S-3 were aimed at establishing concurrently with similar legislation in the United States a system of compulsory pilotage as was later introduced through Part VI A C.S.A. The Bill was met by strong opposition, especially from the St. Lawrence Districts' pilots and the shipping interests. This Bill, in addition to *ad hoc* provisions concerning Great Lakes pilotage, contained provisions of a general nature in the form of amendments aimed at extending the field of legislation that could be dealt with by regulations under Part VI. The pilots of the St. Lawrence River Districts saw a threat to their pilotage organization and their so-called acquired rights in the wide powers it proposed to give the Governor in Council and the Pilotage Authority over the formation, abrogation and modification of Pilotage Districts and the extension of exemptions from compulsory pilotage (vide Part I, p. 224, and Part IV, p. 210).

The Shipping Federation of Canada held that the bill did not meet the pilotage requirements of the Great Lakes system, and that it contained only punitive measures. They urged that the only solution was complete agreement between the two Governments on setting up an efficient pilotage

service, either under an international authority or by dividing the Great Lakes into two spheres of influence (Proceedings of the Senate Committee, February 10, 1959, pp. 63 and 67).

Bill S-3 passed the Canadian Senate but, when it came before the House of Commons for second reading April 7, 1959, the Government decided to suspend debate in order to make another attempt at reaching agreement with the United States Government.

Bill H.R. 57 met the same fate before the United States Congress. The Canadian Government reiterated its opposition in the second *aide-mémoire* dated May 19, 1959 (Ex. 1396) in which, after outlining its policy with respect to pilotage on the Great Lakes (which had already been formulated in Bill S-3), said in part:

"H.R. 57 now before the United States Congress would require that a pilot equivalent to an "A" certificate pilot in Canada must be on board all vessels navigating in the United States waters of the Great Lakes. This requirement is not consistent in concept with the pilotage regime envisaged for Canadian waters. Discussions have taken place on a number of occasions aimed at reconciling the draft provisions of the Canadian and United States legislation. On March 20, 1958, a Canadian aide-mémoire was delivered to the State Department setting forth the views of the Canadian Government on the pilotage legislation then before the United States Congress (H.R. 7515). The main United States requirements for safety are believed to have been met by the "B" certificate system outlined above."

In the course of discussions in the United States Committee on Bill H.R. 57, a number of amendments were suggested aimed at establishing an international Great Lakes Pilotage Commission, but different ideas were expressed as to its functions and powers.

One of the proposed amendments—by the Shipping Federation of Canada—envisaged a supranational authority vested by both Governments with the necessary powers "to investigate, prescribe and administer" a regulated and fully coordinated system of pilotage on the Great Lakes. This was a bold departure from the methods then being considered and; while it raised a good deal of interest at the time, the proposal was not implemented. It may be surmised that the validity of the concept as well as the limited time available to work out the necessary legislative arrangements, including possible treaty negotiations and the enactment of enabling legislation, presented too great obstacles at the time (the Seaway was due to open that year). Instead, the House of Representatives Committee on Merchant Marine and Fisheries favoured other amendments which, while not altering the concept of compulsory pilotage in open waters, provided for the creation of a joint Canada-U.S.A. commission charged with studying compulsory pilotage on the Great Lakes and making recommendations to the Canadian and United States Governments.

The Canadian Government did not believe that negotiations under such auspices would be acceptable and expressed its views in a third *aide-mémoire* dated September 11, 1959 (Ex. 1396).

"While not opposing the creation of an International Pilotage Commission or authority, the Canadian Government considers that the membership of any such body should be more broadly based than that envisaged in the recent amendment to HR 57 and that in any event, if created, it should be empowered to establish and operate or control the operations of a pilotage system for the Great Lakes and its inter-connecting channels which would take into account matters affecting shipping on both sides of the border as well as those affecting the trained pilotage personnel in the two countries.

Although the exact status of the various amendments to HR 57 is not known to the Canadian Government, it appears that the most recent amendment would have the effect of predetermining a number of issues before any Joint Pilotage Commission or authority can be established. The Canadian Government would be unable to participate in a commission required to carry out its duties under such circumstances and therefore, as indicated in its earlier *aide-mémoire* of May 26, would welcome the opportunity to have further discussions on this matter with the appropriate United States authorities."

In addition to the Canadian objections, the Governments of Sweden, Ireland, Italy, the United Kingdom, Norway, Denmark, the Netherlands and West Germany expressed their opposition to the provisions which called for pilots on the open waters of the Great Lakes as being an additional expense and not necessary for purposes of safety (Proceedings on H.R. 57, p. 172; Ex. 1103).

Because of this opposition, H.R. 57 was not passed by the House of Representatives. Instead, a request was made to the State Department that consultation be held again with the responsible Canadian authorities to the end that a Bill acceptable to the Governments of both countries be developed. Thus, the United States authorities held further discussions with representatives of the Canadian Government which finally resulted in a general agreement on separate but compatible legislation as well as other requirements for pilotage on the Great Lakes.

While the question of legislation was being debated, the Department of Transport applied the Canadian Government policy of pilotage services to be provided only in the confined sectors of the Great Lakes system and not in the open waters of the Lakes. In April 1959, it was decided that the Department of Transport would take over responsibility for administering the Port Weller-Sarnia pilotage area. Advertisements for pilot candidates were published in the press. At first, only a few of the pilots who had previously served were accepted. However, all former pilots who wanted to serve under the Department of Transport were eventually engaged.

In July 1959, the Shipping Federation assisted in the formation of a third pilotage area consisting of the connecting channel between Lake Huron and Lake Superior. A number of United States pilots serving in that area were grouped under the name of the "Lake Superior Pilots Association".

At the same time, the Shipping Federation further promoted the establishment of local port pilotage in ports situated on the open waters of the Lakes, e.g., it organized local port pilotage at the twin ports of Fort William-Port Arthur (now Thunder Bay) and also prevailed upon the agent in Duluth to be responsible for pilotage there.

When the Shipping Federation was operating the Port Weller-Sarnia pilotage section, it had made arrangements to have all ocean vessels proceeding into the Lakes furnished at Montreal with the required charts, Notices to Mariners, a copy of the Rules of the Road for the Great Lakes with a poster illustrating the differences between International Rules of the Road and the Rules of the Road for the Great Lakes, as well as copies of the various circulars it had issued for the guidance of Masters proceeding up the Lakes. On passing Port Weller, a further check was made by the area despatcher, Capt. L. H. Crawford. This inspection differed from the Seaway inspection carried out at Longue-Pointe which dealt with special equipment, such as landing booms and radiotelephones. When the Department of Transport took over administration of the Port Weller-Sarnia pilotage area, it adopted the Shipping Federation's inspection procedure but had to discontinue it late in 1959, apparently on account of objections by the United States authorities, who felt that the Department of Transport was invading the field of regulating navigation in the Great Lakes system. The inspection procedure was resumed in 1960.

Following the rejection of Bill H.R. 57, a number of meetings were held between representatives of both countries. In the discussions, the officers of the Department of Transport particularly stressed that the requirement of one or more previous trips on the Lakes as a condition for granting an exemption to compulsory pilotage was neither necessary nor logical since navigation was in open waters and, in any event, the employment of pilots should be made compulsory only in the confined waters of the system. The problem of semantics arising from the different meaning given to the term "*pilot*" in the United States legislation continued to create difficulties.

Through compromises, an agreement was reached on the substance of the required parallel legislation. The results of these discussions are indicated in an exchange of *aide-mémoire*, both dated February 19, 1960, between the United States and Canadian Governments (Ex. 1396). Owing to the nature of the undertaking, both texts are reproduced hereunder.

"In discussions of Great Lakes pilotage between United States and Canadian officials following the receipt of the Canadian Aide-Mémoire of September 11, 1959, the Canadian officials were informed of the provisions of a proposed draft bill on the subject which was prepared by representatives of interested agencies of the Government of the United States. The principal purposes of the proposed bill would be to establish certain pilotage requirements for the navigation of

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United States waters of Great Lakes and St. Lawrence River by vessels operating on ocean routes to and from Great Lakes, and to provide a basis for a regulated system of pilotage to meet those requirements.

Provision is made for coordination of this pilotage system with a Canadian system on the basis of reciprocal recognition of and equitable participation by United States and Canadian pilots in the pilotage of the vessels to which the bill would be applicable. These pilots would be registered by an appropriate agency of their respective countries, and vessels to which the bill is applicable would be required to have registered pilots in their service for the navigation of designated United States waters. It is the understanding of the United States Government that Canadian waters will also be designated in which the services of registered pilots will be required.

In undesignated waters of Great Lakes, the vessels to which the proposed bill would be applicable would be required to have on board either a registered pilot or an officer of their regular complement who would be qualified for the navigation of the undesignated waters and licensed either by United States Coast Guard or the appropriate agency of Canada.

As a result of the above-mentioned discussions, the Canadian representatives indicated that their Government would be prepared to recommend to Parliament that legislation be adopted permitting coordination on the above indicated basis, if United States enacted legislation along the lines of the proposed draft bill. It is the United States Government's understanding that provision would be made to restrict the registration of Canadian pilots to persons, other than members of the regular complement of a vessel, who hold a masters certificate or equivalent license, unlimited as to tonnage, issued by the Department of Transport to authorise navigation of Great Lakes and pilotage services on routes specified therein.

The term "equivalent license" as used in the proposed United States draft bill means a license issued to a St. Lawrence River pilot to authorise the navigation of those portions of the river specified therein. In this connection Canadian officials explained that St. Lawrence River pilots are specially trained for pilotage in the districts for which they are licensed, and that they are not required to obtain a masters certificate, although some do hold such a certificate. Under the proposed coordinated arrangements, Canada would register the holder of a St. Lawrence River pilots license solely for pilotage service on that river.

The Canadian officials further indicated that the Canadian Government would include in any proposed legislation such provisions as might be considered necessary to authorise the Department of Transport to issue certificates qualifying for the navigation of the "open" (i.e., undesignated) waters of Great Lakes those officers of the regular complements of ocean vessels who meet the following requirements:

- (1) Hold an appropriate certificate of competency as master, valid for voyages in any part of the world and issued or recognized by the country in which the ship is registered.
- (2) Have the experience of at least two round trips, within the preceding 2 years, in the "open" or undesignated waters of Great Lakes where the vessel will be operating.
- (3) Possess a working knowledge of Great Lakes rules of the road as evidenced by exam.
- (4) Have proficiency in the English language, to be tested also by exam, sufficient to make effective use of the radiotelephone.
- (5) Have knowledge of the practice of following separate upbound and downbound courses on Great Lakes, giving due regard to the suitability of such courses for deep draft vessels.

The substance of the proposed draft bill which was the subject of the above-mentioned discussions is now embodied in a bill introduced in the Senate as

S 3019. The Government of the United States of America would appreciate being informed as to the accuracy and applicability of the foregoing understanding of the intentions of the Canadian Government with respect to S 3019."

### Canadian Aide-Mémoire

"An Aide-Mémoire presented to the Canadian Embassy in Washington, by the Department of State on February 19, 1960, outlines the manner in which Canadian and United States legislation aimed at establishing certain pilotage requirements for the navigation of the waters of the Great Lakes and the St. Lawrence River could be co-ordinated if the legislative proposals contained in a Bill known as S-3019 are approved by the United States Congress. In the event that that Bill does become law in the United States, it is the intention of the Canadian Government to submit to the Canadian Parliament, legislative proposals which would effect just such a co-ordinated pilotage regime in the Great Lakes in the manner indicated in the United States Aide-Mémoire."

The United States Great Lakes Pilotage Bill S.3019, which had been introduced in the Senate in February 1960, was eventually approved by Congress and signed by the President June 30, 1960, to become effective at the beginning of the 1961 season. This is the legislation now in force in the United States.

In June 1960, the Canadian Government introduced Bill C-80 in the House of Commons. The Bill amended the Canada Shipping Act by adding a new Part VIA under the heading "Great Lakes Pilotage" to implement in general terms the agreement reached. Subject to two amendments concerning exemptions and reciprocity, the Bill passed the House and the Senate and was assented to July 26, 1960. The Act, now Part VIA C.S.A. and an amendment to Part VI C.S.A. by the addition of Section 356A, came into force when proclaimed May 1, 1961.

These two United States and Canadian Acts have not been modified since, except indirectly in the case of the United States Act through the Department of Transportation Act when all the functions, powers and duties of the Secretary of Commerce under the United States Great Lakes Pilotage Act of 1960 were transferred to, and vested in, the Secretary of the Department of Transportation (vide foot note p. 9). For a comparative analysis of the United States and Canadian legislations and the regulations made thereunder, reference is made to pp. 3-47.

Following the enactment of the parallel statutory legislation, officials of the United States and Canada discussed the possibility of coordinating the two official pilotage systems and the United States authorities sought written clarification of certain points relating to Part VIA C.S.A. Accordingly, Canada in a fifth *aide-mémoire*, dated November 30, 1960 (Ex. 1396), confirmed that Canadian and United States Great Lakes vessels were exempt from pilotage requirements and that the Government also intended to exempt by administrative decision Canadian and United States public vessels. The Canadian Government indicated further that the provisions of Part VIA C.S.A. concerning the issuance of certificates of qualification

for navigation in the undesignated waters of the Great Lakes applied only to the Master or other officer of the regular complement of the vessel concerned.

The administrative exemptions to be granted by Canada for United States public vessels were further clarified through an exchange of *aide-mémoire* after the Department of Transport had reported that two United States naval vessels had navigated Canadian waters in the Great Lakes system without pilots, while another United States naval vessel had navigated such waters with a pilot who was not registered. In a note dated September 1962, the United States Government reminded the Canadian Government of its undertaking to grant administrative exemptions to United States public vessels and requested that a covering blanket exemption for public vessels of the United States be issued. This was done September 27, 1962 (vide p. 32) and the United States Government was formally informed by a memorandum dated October 12, 1962 (Ex. 1396).

On December 22, 1960, the President of the United States issued a proclamation defining the three sectors of the United States waters of the system which were to be designated waters (vide p. 40). The definition of the designated waters sectors was completed through provisions contained in the Great Lakes Pilotage Regulations issued by the Governor in Council April 27, 1961, which defined the designated sectors of Canadian waters (pp. 12-15).

In the meantime, the United States Department of Commerce, which was responsible for implementing the United States Great Lakes Pilotage Act, established the necessary organization before the Act came into force. Department Order No. 169 dated October 25, 1960, entitled "Great Lakes Pilotage Administration, Establishment, Functions and Responsibilities" established a constituent organization unit, the "Great Lakes Pilotage Administration", to be headed by an "Administrator" to whom the Secretary re-delegated most of his powers and responsibilities, including his regulation-making power as authorized under the United States statutes (pp. 37-38).

In January 1961, the Shipping Federation of Canada made representations to the United States Pilotage Administrator on the occasion of the hearings held concerning the pilotage regulations he proposed to adopt. The Shipping Federation's recommendations, which were later repeated to this Commission, were to the effect that:

- (a) pilots registered for service in restricted waters should not be allowed to pilot outside the restricted waters of their District;
- (b) when a pilot was required in undesignated waters because a vessel carried no officer holding a "B" certificate, pilotage should be performed by part-time, retired or semi-retired pilots so as not to disrupt operations in designated waters.



The United States Great Lakes Pilotage Regulations were promulgated January 27, 1961. They have since been modified and superseded by new regulations (p. 38, Ex. 1028).

Negotiations ensued between the representatives of both Governments on those matters specified in the United States Pilotage Act (pp. 37 and 39) which required coordination of regulations and organization. The results of these negotiations were confirmed in a formal document called "Memorandum of Arrangements" dated May 1, 1961, and signed by the heads of both Departments, the Minister of Transport of Canada and the Secretary of Commerce of the United States (Ex. 1400). The Memorandum was to be amended from time to time as required. The Memorandum, and later each of its amendments, was formally recognized by each Government through a formal exchange of diplomatic notes.

When the first Memorandum of Arrangements was concluded May 1, 1961, it was mutually agreed that it would be revised in the light of experience to provide more efficient and effective pilotage services and promote uniformity of administration. In fact, the original Memorandum was subsequently amended three times effective October 15, 1962, April 29, 1963, and July 29, 1963. On the basis of five years of experience, on June 29, 1966, the Secretary of Commerce of the United States and the Minister of Transport of Canada entered into a new Memorandum of Arrangements which superseded the original Memorandum of May 1, 1961. This second Memorandum, which had been amended twice, October 6, 1967, and April 25, 1968, was superseded by a third Memorandum effective August 1, 1969, and it, in turn, was replaced as of July 7, 1970, by the Memorandum now in effect, as amended effective Aug. 12, 1970.

The 1961 Memorandum dealt with the various subject-matters on which an agreement between the two countries had to be reached and where the organization for the provision of services had to be coordinated. It contained a number of transitory provisions which were later deleted when they had outlived their purpose. In *résumé*, the main features of the arrangements are:

- (a) *Participation in Pilotage Services.* There was to be full sharing of numbers by U.S. and Canadian pilots per District, parity to be achieved not later than 1965. Since Canadian pilots outnumbered U.S. pilots 72 to 34, the vacancies in each District were to be filled as they occurred by U.S. appointees, with the exception of District No. 1 where there were 24 Kingston pilots of whom only 20 were authorized to act as registered pilots, priority then being given to the four Canadian pilots in excess before parity was achieved.

- (b) *Co-ordination of Pilotage Pools.* Details of the sharing of administrative responsibility for the provision of services were established: Canadian pools were made responsible for operating the despatching facilities at Cornwall and Port Weller and United States pools for Cape Vincent, Port Huron and Sault Ste. Marie, the only despatching facility for District No. 3. These facilities were responsible for despatching pilots on all assignments originating from their locality (for the whole of District No. 3 in the case of the Sault Ste. Marie office). Pilotage requirements for an intermediate point on the open waters of Lakes Ontario, Huron or Michigan could be filled by securing a pilot from the despatching office of any contiguous Districts. Despatching was to be effected on the basis of a straight tour de rôle without regard for nationality. If a pilotage assignment was completed in another District, the despatching office of that District was to give the pilot a return assignment to his own District.
- (c) *Accounting.* Billing and collecting of fees were the responsibility of the despatching office which made the assignment. At first, billing was to be in the currency of the nationality of the pool but this was later changed to the nationality of the pilot. Each pool was to pay its operating costs out of the pilotage earnings so collected, the balance being divided between the United States pool and the Canadian pool for the District on the basis of the availability of the pilots of each pool. When a pilot of another District was despatched, the billing remained the responsibility of the despatching office, which retained 25% as part of its earnings, the remaining 75% being paid to the pool to which the pilot belonged, but this rule was deleted in 1963. There were provisions to cover accounting, payments and audits.
- (d) *Rates, Charges and Conditions.* The Memorandum sets out various pilotage charges that had been agreed upon, i.e., on the basis of flat rates for given trips, the amount being the same whether the charge is United States or Canadian currency. Provisions are made for cancellation and for detention *en route* for causes other than ice, weather or traffic delay or when the pilot remains on board for the convenience of the vessel. The rate for services rendered in undesignated waters is on the basis of a per hour rate plus berthing and unberthing charges.
- (e) *Miscellaneous.* The Secretary of Commerce of the United States and the Minister of Transport of Canada have agreed to report to one another any violation of their pilotage regulations in their waters by a pilot of the other country.

All these transitory provisions aimed at achieving parity of participation were omitted in the 1966 Memorandum of Arrangements. It was further simplified when amended in 1967 and 1968, the provisions being couched in general terms and the previous details omitted. The 1968 amendment provided, *inter alia*, for a change in the definition of the designated waters of Districts Nos. 2 and 3 (pp. 14-16). The preamble announced that the rates structure, which does not take into consideration size of vessel or, in some cases, length of voyage, was to be replaced by a new structure which more effectively measures the pilots' workload. This new structure was to be developed and made effective prior to the 1970 shipping season. The 1969 Memorandum consolidated the previous one, as amended, and provided for temporary rate increases pending the adoption of the proposed new rate structure, and for the establishment of consolidated billing, collection and accounting services. The 1970 Memorandum, which became effective July 7, 1970, is a consolidation of the previous Memorandum, as amended by the adoption of a new rate structure, the addition of an understanding regarding the joint despatching of two pilots in certain circumstances, some clarification on the question of detention and delays and other minor changes.

The main features of the 1970 Memorandum of Arrangements reflecting all the changes effected since 1966 are as follows:

- (a) *Pilotage Service.* The required co-ordinated pilotage service is to be under the "administration and control" of the Secretary and Minister who are also responsible to "establish and maintain systems for recruiting and training pilots."
- (b) *Participation in Pilotage Service.* The Memorandum no longer specifies the pilots' strength for each District but agrees on overall parity rather than parity on a District basis. The required number of pilots is to be determined by the Secretary and the Minister by joint administrative decisions.
- (c) *Despatching.* Only the principle is now mentioned without any details. The provision now reads as follows:
 

"The Secretary and the Minister will establish and maintain, or cause to be established and maintained, facilities for the despatching of pilots and for related services, including pilot boats."
- (d) *Accounting.* Billing, collecting and accounting for pilotage revenues are no longer to be the responsibility of the despatching office concerned but of offices to be established and maintained by the Secretary and the Minister. The cost of despatching and related services as determined by the Secretary and the Minister is to be paid out of pilotage revenues and divided into United States and Canadian shares, no longer on the basis of the availability of pilots but "in proportion to the revenues received for pilotage services rendered by American and Canadian registered

pilots, respectively”, with the exception of revenues collected for services rendered by “pilots registered only for service in Lake Ontario and Kingston harbour” determined on the basis of the number of days the pilots of each country were available for pilotage service. Unless otherwise jointly decided, billing is to be on the basis of the currency of the nationality of the pilot.

- (e) *Pilotage Fees.* A new rate structure, based to a certain extent on vessels' dimensions, was adopted (pp. 24–25).
- (f) *Two Pilots.* Two pilots may be jointly assigned to a ship upon the request of the ship or for safe navigation when warranted by circumstances. The ship is then charged one and a half times the normal rate.
- (g) *Miscellaneous.* The Memorandum contains the usual agreement regarding the reporting of violations and the undertaking to establish the required rules and regulations to implement the arrangements.

## Chapter B

# BRIEFS

Fourteen briefs dealing specifically with one or more aspects of pilotage on the Great Lakes were submitted to the Commission.

### *Pilots*

- (1) Federation of the St. Lawrence River Pilots, on behalf of the Corporation of the Upper St. Lawrence Pilots (B.28, Ex. 671);
- (2) Corporation of Professional Great Lakes Pilots (B.36, Ex. 1005);
- (3) American Pilots of Great Lakes District No. 2 (B.54, Ex. 1407);
- (4) Lake Superior Pilots Association, Inc. (B.49, Ex. 1376);

### *Shipping Interests*

- (5) Shipping Federation of Canada, Inc. (B.40, Ex. 1213);
- (6) Canadian Shipowners Association (B.55, Ex. 1436);

### *Others*

- (7) St. Lawrence Seaway Authority (B.60, Ex. 1292) (B.61, Ex. 1469);
- (8) Toronto Harbour Commissioners (B.37, Ex. 1113);
- (9) Hamilton Harbour Commissioners (B.38, Ex. 1105);
- (10) Kingston Industrial Commission (B.29, Ex. 1091);
- (11) International Association of Great Lakes Ports (B.43, Ex. 1350);
- (12) Civil Service Association of Canada (B.35, Ex. 1003);
- (13) Capt. Norman S. Johnston (B.34, Ex. 1004);
- (14) Great Lakes District International Organization of Masters, Mates and Pilots (B.41, Ex. 1289).

In addition to the specific recommendations on Great Lakes pilotage contained in these briefs, a number of general recommendations for basic reforms in the organization and control of pilotage in Canada, including the Great Lakes area, were submitted by the Federation of the St. Lawrence River Pilots (B. 28), Canadian Merchant Service Guild (B.53), Shipping Federation of Canada (B.27), Dominion Marine Association (B.39) and Canadian Shipowners Association (B.55), which were reported upon in Part IV of the Report (pp. 79 and ff.) and to which reference is made.

The Great Lakes pilotage recommendations which follow also show in parentheses where the question raised is dealt with in the Report.

(1) FEDERATION OF THE ST. LAWRENCE RIVER PILOTS ON BEHALF OF THE CORPORATION OF THE UPPER ST. LAWRENCE PILOTS

The Federation of the St. Lawrence River Pilots submitted its brief in the name of its five member-groups, including the Corporation of the Upper St. Lawrence Pilots representing the Canadian registered pilots in Great Lakes District No. 1. It also represented at the hearings the Corporation of Professional Great Lakes Pilots grouping most of the other Canadian Great Lakes pilots. This Corporation joined the Federation as a member-group in 1966.<sup>1</sup>

The recommendations specifically referring to the Great Lakes system and to Great Lakes District No. 1 are:

1. *Linesmen*. "That the Seaway furnish linesmen at the approach walls." (Part IV, pp. 915-16.)

2. *Wheelsmen*. "That special wheelsmen be placed on all ocean vessels having more than 3,000 net tons for their passage in the Seaway; in other cases, these wheelsmen can be utilized with the consent of the captain." (Part IV, pp. 917-19.)

3. *Apprenticeship*. "That an appropriate system of apprenticeship be adopted in the district." (Great Lakes District No. 1) (Part IV, pp. 935-38 and Part V, pp. 183-4.)

4. *Exemptions*. "That the only ships exempt from compulsory pilotage in the Kingston district (Great Lakes District No. 1) be the ships presently exempt from the compulsory payment of pilotage dues in the district of Montreal. The exemptions would be the same for American ships as Canadian ships." (Part IV, Rec. 4, pp. 1010 and ff. and Part V, pp. 136-8 and Rec. 2.)

5. *Canada-U.S. Cooperation*. "That there be an Agreement between Canada and the United States for better coordination of the current

<sup>1</sup>The objects and functions of the Federation of the St. Lawrence River Pilots are developed in Part I of the Report, p. 94 and Part IV, p. 80; re the Corporation of the Upper St. Lawrence Pilots, vide pp. 186 and ff., and the Corporation of Great Lakes Pilots, vide pp. 196-7.

administration of pilotage in the Kingston District." (Great Lakes District No. 1) (Rec. 6.)

6. *Centralization of Billing and Despatching of Pilots.* "That there should exist a single place for the billing and dispatching of pilots to the ships in the district and that this place preferably be at Cornwall." (Recs. 8 and 13.)

7. *Kingston Channel.* "That the ships can utilize the Kingston Channel without the pilots suffering penalties because of this." (pp. 220-1.)

8. *First Trip of a Vessel.* "That all vessels exempt from compulsory pilotage be required to take a pilot aboard at the time of their first few voyages in the district." (Great Lakes District No. 1) (Part IV, Rec. 4, p. 1010.)

Two additional recommendations<sup>2</sup> were made at the hearings:

9. "Two pilots be employed on tugs and tows." (p. 290.)

10. "After December 1st, there should be two pilots on board all ships as in the Quebec-Montreal and Cornwall Districts." (Part IV, Rec. 10, p. 1026, and Part V, pp. 226-7.)

## (2) CORPORATION OF PROFESSIONAL GREAT LAKES PILOTS

This Corporation represents the majority of Canadian-registered, Government-employed pilots on the Great Lakes. For the nature, purpose and activities of this Corporation, vide pp. 196-7.

In its brief, the Corporation supported the general recommendations submitted by the Federation of the St. Lawrence River Pilots listed in Part IV, pp. 80 and ff. In addition, it made the following recommendations regarding Great Lakes District No. 2:

1. *Status of the Pilots.* "The status of civil servant should disappear in pilotage and the pilots of District no. 2 should be relieved of their status of government employees." (Part I, Gen. Rec. 24, pp. 545-9 and Part V, pp. 201-8.)

2. "... Canadian and American pilots could meet jointly with the ship-owners periodically to see in what way they can improve the service in district no. 2."

3. *Administration.* "The administration of pilotage and the collecting of pilotage dues should be taken out of the hands of the Department of Transport and handed to the pilots in District no. 2." (Part I, Gen. Rec. 14, pp. 495-9.)

4. *Tariff.* "The pilots' income should be based on the pilotage tariff, as is the case for the American pilots in District no. 2 and all pilots in District no. 1." (pp. 316 and ff.)

5. "... the tariff should be based on draught and tonnage (net or gross), instead of the present flat rate." (pp. 284 and ff.)

<sup>2</sup> Transcript Vol. 89A, p. 11038.

6. "The tariff should also cover all administration cost as well as pilots' remuneration, as is currently the case in District no. 2." (pp. 281 and ff. and 302 and ff.)

7. *Earnings of Pilots.* Until the administration of the District is entrusted to the pilots' Corporation, "the pilots should be paid a salary of \$1,600.00 per month from April 1st to December 15th in order that their earnings may be closer to their American counterparts and their earnings should be spread over a twelve month period. This salary should be retroactive to August 1st, 1963." (pp. 316 and ff.)

8. *Limits of the District.* "The Department of Transport should define the limits where the compulsory pilotage for the Welland Canal starts and ends. This they have so far refused to do, adding only to confusion." (pp. 169-71.)

9. *Working Rules.* "No working rules should be set up without the participation of the Canadian and the American pilots." (p. 169.)

10. *Dispatchers.* "The dispatchers should be paid a liveable wage and concentrate more on dispatching than keeping statistics. This would help to create a better service." (pp. 170-1.)

11. *Linesmen.* "Linesmen should be placed on all approach walls in the Welland Canal by the Seaway Authority." (Part IV, pp. 915-6.)

12. *Harbour Pilots.* "The pilots should take turns to act as harbour pilots at Port Weller at all times, in order to relieve 3 or 4 pilots waiting below lock no. 1 for several hours. Or again, a special group of Harbour pilots should be licensed for Port Weller Harbour only." (pp. 170-1.)

13. *Derricks Forward.* "Forward derricks should be housed in canals and narrow channels in order not to obstruct the view of the pilot, for safety reasons." (Part IV, p. 914.)

14. *Wheelsmen.* "Special wheelsmen should be placed on all ocean vessels of more than 3,000 tons net for their passage in District no. 2; in other cases, these wheelsmen could be used with the agreement of the master." (Part IV, p. 917.)

15. *Luminous Signals.* "An automatic luminous signal must be attached to the whistle or the siren on the vessels." (Part IV, p. 176.)

16. *Wheel-house Instruments.* "The rudder angle indicator and the speed indicator (R.P.M.) from the propeller must be clearly placed, and well in view, so that no person can shield them from the pilot or helmsmen." (Part IV, pp. 176-7.)

17. *Pilots on the Lakes.* "Sufficient pilots should be licensed for the undesignated waters of the Great Lakes to accommodate those vessels without a "B" License-holder on board, if such a system is to be continued. District no. 2 pilots should never be called to go outside their district; their license should be limited to their district." (Rec. 3 and Part I, pp. 477 and 479.)



18. *Seaway Regulations*. "The St. Lawrence Seaway Authority should enforce their own regulations concerning mooring and landing equipment as per inspection at Montreal. The same applies as to rules concerning radio-operators." (Part IV, pp. 906 and ff. and Part V, pp. 107-9.)

19. *Pilot Cabin*. "A clean and sanitary cabin with a proper bunk should be placed at the disposal of the pilot, on all ships." (Part IV, p. 320.)

20. *Pilot-boat at Port Weller*. "The pilot-boat service at Port Weller should be maintained." (pp. 250-2.)

21. *Supervisor of Pilots*. "The title of Supervising pilot used in District no. 2 to designate the supervisor should be abandoned, as it is a misrepresentation." (p. 163.)

### (3) AMERICAN PILOTS OF GREAT LAKES DISTRICT NO. 2

On September 21, 1964, fourteen United States registered pilots in Great Lakes District No. 2, representing then about half of the United States pilots' strength in that District, wrote to the Commission in support of a recommendation made by their Canadian counterpart (i.e., the Canadian Government-employed pilots in the District) that the measure of income of the Canadian pilots should be their performance, thereby receiving equal pay for equal work, as is the case for the American pilots in the District. (Rec. 11.)

### (4) LAKE SUPERIOR PILOTS ASSOCIATION, INC.

The Lake Superior Pilots Association, Inc., whose head office is at Duluth, Minn., represents the United States registered pilots of Great Lakes District No. 3 (connecting waters between Lake Superior and Lake Huron). For details of the nature, purpose and activities of the Corporation, vide pp. 197-9.

In its brief to the Commission, the Association made the following recommendations:

1. (*Résumé*) That the compulsory pilotage requirements for both designated and undesignated waters be retained as a means to prevent shipping casualties. (Recs. 2, 3 and 4.)

2. "That pilotage pools and the areas of their reciprocating responsibility be continued under the present arrangements." (Recs. 5, 6, 8 and 14.)

3. "That more authority be exercised at a local level to deal with operational and administrative problems." (Rec. 13.)

4. "That within a particular pilotage pool all participants, U.S. and Canadian, stand on the same footing as free professional pilots." (Recs. 10, 11 and 12.)

5. "That pilots be permitted and encouraged to establish more direct contact among themselves and between the pilots and their associations on the one hand, and shippers and ship owners and their associations on the other." (Part I, Gen. Rec. 25.)

6. "That the role of government in the area of pilotage be reduced to participation only in those problems which must be solved at a governmental level." (Part I, Gen. Rec. 18 and Part V, Rec. 13.)

7. "That if the recommendation that all pilots within a particular pool be treated equally, regardless of nationality, be rejected, that, at minimum, there be greater contact between a pilotage pool and the government agency of opposite nationality to which such pool must report." (Recs. 6 and 10.)

8. "That the existence of port pilotage on the Great Lakes be recognized as a fact and that specific rates and terms be established for this service in the various ports." (Rec. 4.)

9. "To the extent consistent with prior commitments to overseas nations that minimum standards of vessel equipment and navigational aids be established." (Part IV, pp. 176-7.)

10. "That steps be taken to ensure adequate and sanitary facilities for the pilot who must remain aboard a vessel on lake transit." (Part IV, p. 320.)

#### (5) SHIPPING FEDERATION OF CANADA, INC.

The Shipping Federation of Canada<sup>3</sup> submitted a separate brief in connection with pilotage on the Great Lakes in which it made the following recommendations:

"1. That Pilotage on the open waters be eliminated and that until the legislation in both countries can be amended to that effect, the issuance of the "B" Certificates by the Canadian Government be liberalized by eliminating the two-trip requirement, streamlining the waiver procedure and providing for automatic renewal of the certificates to those officers who have already undergone an examination." (Rec. 3 and pp. 138 and ff.)

"2. That the Pilotage scheme for the Great Lakes be revised by dividing the Great Lakes Basin into the following spheres of control:

##### *CANADIAN*

From Eisenhower Lock to Cape Vincent (Kingston) in District No. 1;  
All ports on Lake Ontario;  
The whole of the Welland Canal;  
The twin ports of Port Arthur & Fort William in Lake Superior.

##### *AMERICAN*

From St. Regis to Eisenhower Lock in District No. 1;  
All ports in Lake Erie;  
From Southeast Shoal to Sarnia in District No. 2, that is the Detroit River, Lake St. Clair and the St. Clair River including all intermediate ports, both on the American and Canadian sides;

<sup>3</sup>The objects and functions of the Shipping Federation of Canada are developed in Part IV of the Report, p. 96.

All ports on Lake Huron including ports in Georgian Bay;  
All ports on Lake Michigan;  
From Detour to Whitefish Bay in District No. 3;  
All ports on Lake Superior except the twin Ports of Port Arthur and Fort William,

so as to avoid conflicts in the interpretation of the Regulations as have occurred in areas served by both American and Canadian Pilots, and in order also to streamline despatching and accounting services with one central despatching and accounting office at Cornwall for the Canadian sphere of operations, despatching and accounting for the American Pilots serving in the stretch between St. Regis and Eisenhower Lock to be arranged between the Cornwall Pilotage Office and the Saint Lawrence Seaway Development Corporation, and one central despatching and accounting office at Detroit or Port Huron for the American sphere of operations above the western end of the Welland Canal." (Part IV, Rec. 1; Part V, Recs. 6, 10 and 11.)

"That a system of Port Pilotage with Pilots permanently stationed at the principal ports in the undesignated waters of the Great Lakes be made available to ocean shipping on an optional basis and that this system be put into effect without further delay at the Ports of Hamilton, Toronto and the twin Ports of Port Arthur and Fort William, under the exclusive jurisdiction of the Harbour Commissions in control of these harbours." (Rec. 4.)

"3. That steps be taken immediately to reduce the high cost of administration by centralizing despatching and accounting services as indicated in Recommendation No. 2." (Rec. 6.)

"4. A) That more authority be exercised at the local level to deal with operational and administrative problems that constantly recur and have to be solved promptly on the spot." (Recs. 6, 13 and 14.)

"B) For the area within the Canadian sphere of control, that is from Eisenhower Lock to the western end of the Welland Canal, it is recommended that the local Committee be composed of the Supervisor of Pilots with head office at Cornwall with as Advisers a representative of The St. Lawrence Seaway Authority and a representative of the Saint Lawrence Seaway Development Corporation." (Rec. 8.)

"C) That in the Ports of Toronto and Hamilton, the Pilots remain under the jurisdiction of the respective local Harbour Commission." (Rec. 4.)

"D) That in the twin Ports of Port Arthur and Fort William, the Harbour Commission for the Lakehead take over control of Pilotage and jurisdiction over the Pilots operating within these Harbours." (Rec. 4.)

"5. That representatives of the shipping interests be permitted to attend meetings held between officials of the United States Great Lakes Pilotage Administration and the Canadian Government." (Part I, Gen. Recs. 16-19.)

#### (6) CANADIAN SHIPOWNERS ASSOCIATION

The Canadian Shipowners Association in its brief to the Commission, in addition to making general recommendations for basic reforms in the organization and control of pilotage in Canada (Part IV, pp. 104 and ff.), made the following specific recommendations with respect to pilotage on the Great Lakes:

1. "By negotiation with the American government endeavour to:
  - (a) (i) Divide the restricted areas of the St. Lawrence River and Great Lakes basin shared jointly by the United States

and Canada into defined unilateral spheres of control for pilotage purposes." (Rec. 6.)

"(ii) Discontinue the need for special qualifications or the use of pilots during navigation in the other waters of the Great Lakes." (Rec. 4.)

2. "Review the proposed revisions currently being considered by the United States Coast Guard in the Rules of the Road for Inland Waters to determine their acceptability and adoption in Canada." (Part IV, pp. 927-9.)

#### (7) ST. LAWRENCE SEAWAY AUTHORITY

The St. Lawrence Seaway Authority<sup>4</sup> presented on September 14, 1964, a "Brief and Answers" (Ex. 1292) in reply to a series of questions posed by the Commission concerning regulations, procedures, records and views of the Seaway Authority in connection with pilotage on the Great Lakes.

While the brief contained no direct recommendations, the Seaway Authority stated, in answer to a question asked by the Commission whether the Authority was in favour of having pilots as employees, that it would be willing to accept such a responsibility if this would contribute to the safe and expeditious transit of vessels. However, it indicated at the time that the absence of a background of experience and familiarity with the problems involved prevented it from making detailed suggestions in the matter.

Subsequently, the Authority, after having given close study to the division of responsibility between the administration of pilot services and the operation of the Seaway, came to the conclusion that canal pilotage should become an integral part of canal operations and recommended on March 15, 1966, in a supplemental brief to the Commission (Ex. 1469), that the responsibility for the employment and control of pilots in the Seaway area should be transferred to it. The Federation of the St. Lawrence River Pilots and the Dominion Marine Association expressed their opposition to such a transfer of responsibility. The matter is further reported upon in Part IV, pp. 932-3.

#### (8) TORONTO HARBOUR COMMISSIONERS

The Toronto Harbour Commissioners are constituted under a 1911 federal statute (1-2 Geo. V c. 26) to hold and administer, on behalf of the city of Toronto, certain properties and to pass by-laws, subject to the approval of the Governor in Council, to control navigation and all works and

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<sup>4</sup> A description of the functions and responsibilities of the St. Lawrence Seaway Authority is given in Part IV, pp. 905 and ff.

operations within the limits of "the port and harbour of Toronto" as defined.<sup>5</sup> The Commission consists of five Commissioners, three appointed by the city of Toronto, one by the Governor in Council and one by the Governor in Council upon recommendation of the Toronto Board of Trade.

With the introduction and expansion of direct overseas trade due to the opening of the St. Lawrence Seaway, the Toronto Harbour Commissioners instituted in 1961, with the concurrence of the Dept. of Transport, Ottawa, a voluntary port pilotage service to assist Masters not acquainted with local details and wishing such assistance (vide pp. 129 and ff.).

Accordingly, in a brief presented to the Commission on April 7, 1964, it was recommended that:

- (a) compulsory pilotage should not be required for any ship using the port of Toronto;
- (b) compulsory pilotage requirements in the Great Lakes area should be based on the necessity for service only and not related to the wage demands of Great Lakes registered pilots (Recs. 2 and 3).

#### (9) HAMILTON HARBOUR COMMISSIONERS

The Hamilton Harbour Commissioners are incorporated under a 1912 federal statute (2 Geo. V c. 98) to hold and administer certain properties on behalf of the city of Hamilton, and to pass by-laws, subject to the approval of the Governor in Council, to control navigation and all works and operations within the limits of "the harbour of Hamilton" as defined.<sup>6</sup> The Commission consists of three Commissioners, one of whom is appointed by the city of Hamilton and two by the Governor in Council.

The Hamilton Harbour Commissioners were the first Canadian Great Lakes port authorities to institute a voluntary port pilotage service. This was done in the spring of 1959 primarily for the benefit of Masters of ocean ships unfamiliar with Hamilton harbour (vide pp. 125 and ff.).

The Harbour Commissioners have recommended that Part VIA of the Canada Shipping Act "be further amended to authorize The Hamilton Harbour Commissioners to act in lieu of registered pilots within the Hamilton Harbour and approaches thereto." (Rec. 4.)

#### (10) KINGSTON INDUSTRIAL COMMISSION

The Kingston Industrial Commission is a body appointed by the city of Kingston to develop, foster and attract industry and commerce to the municipi-

<sup>5</sup> Vide p. 92 for a brief description of the harbour.

<sup>6</sup> Vide p. 92 for a brief description of the harbour.

pality. In a brief which it presented to the Commission on March 19, 1964, it contended that the port of Kingston was placed in a most unfavourable position financially as compared to the ports of Toronto and Hamilton by reason of the fact that it was the only Lake Ontario port included in the designated waters of District No. 1, and this without just cause since it presents no unusual navigational difficulties.

Therefore, the Kingston Industrial Commission sought relief by recommending that, in respect of pilotage requirements, the port of Kingston be placed on the same basis as the ports of Toronto and Hamilton through an appropriate modification of the present westerly limits of Great Lakes Pilotage District No. 1 (pp. 136-8).

#### (11) INTERNATIONAL ASSOCIATION OF GREAT LAKES PORTS

The International Association of Great Lakes Ports was formed in 1960 as a loose association of United States and Canadian Great Lakes ports for the following purposes: "to exchange information relative to port construction, maintenance, operation, organization, administration and management; to promote port development and commerce along sound economic lines; to encourage the development and use of waterborne transportation between Great Lakes and all world ports; and to coordinate as far as practical all actions and activities in furtherance of the aforesaid common interests."

When this Association was formed in 1960, it consisted of 18 member-ports, as follows:

Toronto, Ontario	Cleveland, Ohio
Hamilton, Ontario	Toledo, Ohio
Lakehead, Ontario	Detroit, Michigan
Ogdensburg, New York	Muskegon, Michigan
Oswego, New York	Chicago, Illinois
Rochester, New York	Milwaukee, Wisconsin
Buffalo, New York	Green Bay, Wisconsin
Erie, Pennsylvania	Superior, Wisconsin
Duluth, Minnesota	Kenosha, Wisconsin

The membership has since been augmented by the ports of Bay City, Mich., Lorraine and Ashtabula, Ohio.

The Association presented a brief to this Commission on Sept. 28, 1964, in which it made the following recommendations:

1. "Adopting as quickly as possible the International Rules of the Road for application within the Great Lakes." (Part IV, pp. 927-9.)

2. "A change in the present method of clearing vessels for Great Lakes operations by setting up a thorough check of the vessel and the qualifications of its personnel at the first port of call, which would be Montreal." (Part IV, pp. 904 and ff.)

3. "That pilotage in open waters be eliminated, or at least the regulation covering the issue of "B" certificates be simplified and the waiver procedure be modified to allow the master to proceed at once when he is advised by the pilot station that pilots are not immediately available." (Rec. 3.)

4. "That, as suggested by the Shipping Federation of Canada, some program should be instituted to allow closer liaison between members of the shipping interests and the United States Great Lakes Pilotage Administration and the Canadian government." (p. 65.)

#### (12) CIVIL SERVICE ASSOCIATION OF CANADA

The Civil Service Association of Canada, which no longer exists, presented a brief to the Commission dated March 9, 1964, on behalf of 12 pilots and three despatchers, then members of the Association, and representing about one third of the Canadian-registered, Government-employed pilots in Great Lakes District No. 2.

In November 1966, the Civil Service Association (30,000 members) and the Civil Service Federation (80,000 members) merged to form the Public Service Alliance of Canada, which was subsequently certificated for purposes of collective bargaining under the Public Service Staff Relations Act. None of the 12 Government pilots who had belonged to the Civil Service Association ever became members of the Public Service Alliance. By 1970, all but one of the 42 Canadian Government-employed pilots in District No. 2 had joined the local Pilots' Corporation, i.e., the Corporation of Professional Great Lakes Pilots.

It may be recorded, however, that the Civil Service Association made the following recommendations at the time it presented its brief to the Commission:

that all pilotage in Canada be part of the Public Service, and that a special agency of the Crown be established to control and administer all aspects of pilotage. (Part I, Gen. Recs. 24 and 16.)

#### (13) CAPT. NORMAN S. JOHNSTON

Capt. N. S. Johnston of St. Catharines, Ont., is a retired Great Lakes Master who held a pilot's licence in the former Pilotage District of St. Lawrence-Kingston-Ottawa. During 1959-62 he was instrumental in the formation and direction of the Sailing Masters' organization which was incor-

porated under the name of the "Great Lakes Pilots Association" (pp. 50 and ff.).

In March 1964, he submitted a brief to this Commission which was followed by a supplement in September 1964. There were numerous recommendations, all emphasizing the following basic subjects:

(a) *General Recommendations* (Part I, General Recommendations, pp. 455-581)

- (i) Pilotage in Canada should be established under the authority of a Pilotage Commission consisting of representatives from the shipping companies, pilot organizations and the Department of Transport.
- (ii) The proposed Pilotage Commission should be a regulatory body duly authorized to sit as an arbitration tribunal in unsettled disputes when all normal processes of negotiations have been exhausted.
- (iii) Pilotage should be established and controlled in Canada as a free enterprise, the licensing of pilots being regulated accordingly.

(b) *Specific Recommendations for the Great Lakes*

Pilotage on the Great Lakes, west of Cornwall/St. Regis, should be governed under joint arrangements between Canada and the United States providing, among other things, for

- (i) compulsory pilotage, but for ocean-going vessels only, in certain restricted waters designated by both Governments (Recs. 2 and 3);
- (ii) division of the Great Lakes into the following four Pilotage Districts (Rec. 6):  
District 1—Cornwall to Kingston/Cape Vincent;  
District 2—Kingston/Cape Vincent to lock 7, Welland Canal;  
District 3—Lock 7, Welland Canal to Sarnia/Port Huron;  
District 4—Sarnia/Port Huron to all ports on Lake Huron, Georgian Bay, Lake Michigan and Lake Superior;
- (iii) establishment of joint pilotage pools in these Districts, the Canadian and United States pilots enjoying the same status as free entrepreneurs (Rec. 10);
- (iv) equality of opportunity, reciprocity of treatment and similar working conditions for the pilots of both countries (Recs. 11-14);
- (v) all Great Lakes Master Mariners with at least three full successful seasons as Masters in the Great Lakes system to have the right to be registered as pilots for that system and to be employed as pilots when required (Part I, pp. 250-76 and Gen. Recs. 23 and 38).



(14) GREAT LAKES DISTRICT INTERNATIONAL ORGANIZATION OF  
MASTERS, MATES AND PILOTS

The President of the Great Lakes District International Organization of Masters, Mates and Pilots, Capt. Rolla R. Johnson, with headquarters in Cleveland, Ohio, submitted a brief to the Commission on May 11, 1964. The brief consists of a refutation of the submission made by the Shipping Federation of Canada concerning pilotage on the Great Lakes but no specific recommendations are made. Capt. Johnson declined to reveal the names of the Canadian members of the organization and the extent to which they supported his brief.



## Chapter C

# EVIDENCE

### 1. GENERAL DESCRIPTION

#### (1) GREAT LAKES SYSTEM LIMITS, PHYSICAL FEATURES AND MAIN PORTS

The Great Lakes system (for its legal description, vide p. 5 and p. 31) is the most inland portion of the 2,300-mile waterway—the world's largest—formed by the Gulf and River St. Lawrence and the Great Lakes. It begins in the east with Lake Ontario at the head of the St. Lawrence and extends over some 95,000 square miles to the western end of Lake Superior. As far as pilotage legislation and organization are concerned, the Great Lakes system also includes the international section of the St. Lawrence River as far east as the United States/Canada boundary at St. Regis, Que., 5½ miles downstream from Snell lock. The system contains more than 50 ports, the farthest west on Lake Superior being Duluth, Minn., 1260 statute miles from Snell lock, and Thunder Bay, Ont., 1,139 statute miles, and on Lake Michigan, Chicago, 1,165 statute miles (statute miles are normally used on the Great Lakes).

Over 200 million tons of cargo move in coastal, transborder and overseas trade over the Great Lakes and connecting channels; in fact, the rich industrial empire that flourishes in this region became possible largely because of the transport potential of this inland waterway.

Except for Lake Michigan (wholly in United States territory) and the Welland Canal (wholly in Canadian territory), which was built to by-pass Niagara River and Falls, all the Great Lakes and their connecting channels, including the St. Lawrence River downstream to St. Regis, are boundary waters. While the transit waterway follows the natural channel or has been dredged where most convenient, each country retains complete jurisdiction over the waters on its side of the boundary and accepts full responsibility for improving and maintaining those parts of the channels within its territory, as well as establishing, after consultation, the required floating and land-based aids to navigation. The same policy was followed with regard to the St. Lawrence Seaway and the Sault Ste. Marie locks, each country retaining full control over; and responsibility for, the facilities situated within its territory (vide Part IV, pp. 904 and ff.). The only exception to this policy of non-infringe-

ment on sovereignty concerns supervision of the outflow at the control dams, i.e., on the St. Marys River between Lake Superior and Lake Huron and on the St. Lawrence River near Cornwall, which is entrusted to a commission created by the Boundary Waters Treaty of 1909 between Canada and the United States: *The International Joint Commission*.

The surface elevation of Lake Superior is some 600 feet above mean sea level, i.e., 440 feet above the elevation at Snell lock where the Great Lakes system, as defined in this Report, begins. In addition to the gradual incline in some of the connecting channels, the main differences in level occur at the Sault Ste. Marie rapids, at Niagara Falls and at the Moses-Saunders powerhouse near Cornwall, necessitating the construction of canals and locks to permit navigation.

The water level of the Lakes fluctuates both during the year and from year to year in relation to the balance between supply and loss due either to natural causes or human interference. During the course of each year, the level is subject to a consistent seasonal rise and fall, usually lowest near the end of winter and highest during the late summer. In addition, there are sudden fluctuations due to strong winds, particularly on Lake Erie, with resultant depth problems for several Great Lakes ports. These variations, which may range from a 2-foot maximum on Lake Superior to an 8-foot maximum on Lake Erie, are particularly noticeable in bays and at the mouth of tributary rivers where water accumulates in restricted areas. This condition is very pronounced, for instance, at Green Bay Harbor on Lake Michigan and at the mouth of the Saginaw River on Lake Huron. Both the Canadian Hydrographic Service and the U.S. Army Corps of Engineers publish monthly bulletins of lake levels and also special warnings when occasion arises.

(a) *Lake Superior*

The most elevated and largest of the Lakes, it is characterized by high rocky shores and, compared with the others, has deeper, colder water, is more subject to wind influence and has a somewhat shorter navigation season. The distance from Duluth at the western tip to the head of St. Marys River at Point Iroquois is 379 statute miles.

There are no unusual navigational difficulties in its open waters or in the approaches to its two principal ports, Thunder Bay, Ont. (previously Fort William-Port Arthur, renamed Jan. 1, 1970) and Duluth, Minn.

The port of Thunder Bay, situated on the western shore of the bay of the same name, is the western terminus of Great Lakes navigation in Canada. Its facilities include some 25 grain elevators and several wharves with berthing facilities for bulk grain and iron ore carriers and ocean-going vessels. It is administered by the Lakehead Harbour Commissioners, a body corporate under the Lakehead Harbour Commissioners Act (7 Eliz. II c. 34). The port pilotage service which the Shipping Federation of Canada, and later the De-

partment of Transport, had organized was discontinued when the pilots' pool of District No. 3 was formed.

The port of Duluth, officially known as Duluth-Superior harbour, is one of the most important on the Great Lakes, both for its facilities and the extent of its trade. There are two wide, deep entrance channels, Duluth Ship Channel in the north and Superior Entry in the south. On the harbour frontage of 49 miles there are 106 wharves, including seven ore wharves, 10 coal receiving wharves with storage capacity of over six million tons, and 14 grain elevator wharves with storage capacity of 73 million bushels.

(b) *St. Marys River—Designated Pilotage Waters (District No. 3)*

The natural outlet from Lake Superior into Lake Huron is through St. Marys River, the 57-mile long boundary river from Point Iroquois light to Point Detour light. The average transit time is 8 hours. These connecting waters have been "designated" pilotage waters, and the area is known as Great Lakes District No. 3.

At Sault Ste. Marie, 15 miles below the head of the river, there are natural rapids where the river drops some 21 feet. To overcome this barrier to through navigation, five parallel locks and three parallel canals have been constructed—four locks and two canals by the United States, one lock and a canal by Canada. The largest is the U.S. Poe lock. It was recently enlarged to 1,200 feet by 105 feet by 31 feet to accommodate larger lakers primarily designed to carry ore pellets produced on the Mesabi range in Minnesota from Duluth and other U.S. ports on Lake Superior to Lake Michigan and Lake Erie steel mills. The Canadian lock, 900 feet long and 17 feet deep, comes under the jurisdiction of the St. Lawrence Seaway Authority.

Sault Ste. Marie, Ont., is the only port on the St. Marys River. Its wharves are located along the waterfront, both above and below the Canadian channel which has a swept depth of 18½ feet.

The level and outflow of Lake Superior through St. Marys River have been completely controlled since 1921 by the International Joint Commission.

The distance from Point Iroquois to the locks is 15 statute miles through a six-course dredged channel with a least width of 1,000 feet. For the first 25 of the 48 miles from the locks to Point Detour light at the downstream end of the St. Marys River into Lake Huron, there is a dredged channel with a minimum width of 600 feet in a series of straight courses. It is a two-way channel which, in Lake Nicolet, branches around Neebish Island into two one-way channels, the eastward one for upbound traffic, the other for downbound traffic. South of Neebish Island, the one-way channels merge into a 23-mile natural channel, nowhere less than a third of a mile wide and generally much wider, which is also negotiated through a series of straight courses.

Local knowledge and experience are required to navigate this connecting channel; the main hazards are short bends, cross-currents and traffic in the two-way channels. It is also difficult to find an anchorage and anchor when visibility is restricted.

There is a pilot station at each extremity of the St. Marys River, one off Gros Cap Reef light in the north and the other off Point Detour light in the south.

(c) *Lakes Michigan and Huron and the Straits of Mackinac*

Lake Huron is the second largest of the Great Lakes, slightly larger than Lake Michigan. Both are at virtually the same level and are connected by the broad, deep Straits of Mackinac.

The Straits offer no special navigational difficulties and are not included in designated waters. There are two main routes through the Straits: vessels navigating between Lake Superior and Lake Michigan ordinarily use the northern route, passing between Round Island and Mackinac Island, while those navigating between Lake Michigan and the lower Lakes use the southern route, passing to the south of Bois Blanc Island and Poe Reef. Both channels are 1,500 feet wide and 27 feet deep.

On Lake Huron, the distance from Detour to Port Huron-Sarnia is 227 statute miles. On Lake Michigan, the distance from Chicago to the Straits is 320 statute miles. There are no unusual navigational problems in the open waters of those Lakes, including Georgian Bay, with the possible exception that the many ferries which continually cross Lake Michigan at several points present the risk of collision with vessels bound for Chicago or Milwaukee which cross the car ferry routes almost at right angles.

While there are a number of ports on Lake Huron, only Port Huron is of importance for ocean-going traffic. There are some 14 ports on Lake Michigan but only two of importance, Green Bay, Wis., and Calumet (or South Chicago Harbor) Ill., both with restricted access.

Green Bay is located on the northwestern portion of the lake, in the bay of the same name. The bay, screened by several islands, extends southwest for approximately 100 miles and terminates at the mouth of the Fox River where the port lies. The approach is through three passages between the barrier islands: from the north through Rock Island Passage (about  $1\frac{1}{2}$  miles wide), through Porte des Morts at the northern end of the bay and from the south through Sturgeon Bay Canal, some 30 miles north of the port. The canal varies in width from 600 to 200 feet and is spanned by a railroad swing bridge. The United States Coast Guard controls traffic by radiotelephone and institutes one-way traffic through the bridge draws.

Calumet (or South Chicago Harbor), which handles most of the traffic, is located at the mouth of Calumet River. Inland lies Lake Calumet Harbor located on Lake Calumet, about  $6\frac{1}{2}$  miles upstream. The river is spanned

by some 14 lift or swing bridges. When in transit, vessels are not permitted to pass each other in opposite directions—one must stop or moor to allow the other to pass. Tugs are used in Calumet River and Calumet Harbor.

Most other ports, such as Chicago, Ill., Milwaukee and Kenosha, Wis., on Lake Michigan, Goderich and Bay City, Ont., on Lake Huron, and Owen Sound and Collingwood, Ont., on Georgian Bay, are easy of access and present no unusual navigational difficulties.

(d) *St. Clair River, Lake St. Clair and Detroit River—Designated Pilotage Waters (District No. 2—Western Sector)*

The natural outlet from Lakes Michigan and Huron runs about 85 statute miles from Port Huron/Sarnia, at the foot of Lake Huron, through St. Clair River, Lake St. Clair and Detroit River to Detroit River light at the head of Lake Erie. These connecting waters, plus the western end of Lake Erie up to Pelee Passage and Southeast Shoal, are “designated” pilotage waters, and form the western sector of Great Lakes District No. 2 (127½ statute miles in length).

There is a drop in water level of approximately eight feet between Lake Huron and Lake Erie but the gradient and outflow in St. Clair River and Detroit River are relatively uniform. There are no canals but a navigation channel has been dredged through the two rivers and Lake St. Clair to provide a depth of at least 27 feet for Seaway navigation.

The shorelines of this connecting channel are densely populated. The owners and operators of the many small craft in these comparatively narrow channels are prohibited from manoeuvring and anchoring in the main ship channel in order to reduce the risk to large vessels.

The head of the St. Clair River is reached from the open waters of Lake Huron by a dredged channel running five miles through extensive flats at the southern end of the lake. The pilot boarding station, which is situated at the lake entrance to this channel, is marked by a lightship.

The cities of Sarnia, Ont., and Port Huron, Mich., are situated at the head of the river near Lake Huron. Sarnia has numerous industries, particularly in the petrochemical field, and a public harbour with over two miles of wharves, mostly privately owned. A highway bridge with a clearance of 150 feet above high water spans the river between Point Edward and Port Huron. Port Huron is a port of some importance.

The upper section of the 30-mile St. Clair River consists of a winding, deep natural channel which presents no outstanding navigational difficulties but the lower part is a delta which extends from Chenal Ecarte at the northern end of Walpole Island where the river branches into several arms run-

ning between islands to the outlet into Lake St. Clair. Before reaching the lake, the main channel branches into the curving St. Clair Flats Canal, which is now rarely used, and the recently built Southeast Bend Cut-off Channel which is straight, five miles long and 700 feet wide.

While there are several good anchorage grounds along the St. Clair River, their limited width poses manoeuvring problems for large downbound vessels which must turn to stem the current before anchoring.

Lake St. Clair is an extensive shallow basin through which a dredged two-way ship channel 800 to 700 feet wide runs for 17 miles to the head of the Detroit River. It has no commercial or industrial communities and no harbours of consequence.

The Detroit River is about 32 miles long. The river divides into two quite characteristic sections at the head of Fighting Island. The upper section, roughly 15 miles long and of uniform breadth, is free of shoals and obstructions, the water is deep and runs through fairly steep banks at a velocity of approximately  $1\frac{1}{2}$  knots. The lower section features three successive channels dredged to Seaway specifications: Fighting Island Channel, Ballards Reef Channel and Amherstburg (upbound)/Livingstone (downbound) Channels which merge into one for  $2\frac{1}{2}$  miles between Bar Point light and Detroit River light. In this section of the Detroit River, the velocity of the outward flow progressively decreases from about five to two knots.

At Detroit River light, the ship channel leads into Lake Erie through either the East Outer Channel, six miles long, 1,200 feet wide, used by both downbound and upbound traffic, or the West Outer Channel,  $3\frac{1}{2}$  miles long, 800 feet wide, used only by downbound vessels.

Detroit, Mich., one of the largest ports on the Great Lakes, stretches along the western side of the upper section of the river opposite Windsor, Ont. It is 62 miles from Port Huron pilot station. The deep-water frontage extends for some 32 miles: 22 miles on the river between Windmill Point and Trenton Channel turning basin and about 10 miles on the banks of the Rouge River, a branch channel off Detroit harbour. Pilots are often required to take vessels to the various overseas terminals on the Detroit River side, and sometimes into the narrow, winding Rouge River. As a rule, tugs are not used in the harbour except on the Rouge River. Pilots also take vessels to Windsor but few ocean-going vessels call there.

The other port of importance in the area which can accommodate deep-sea vessels is the natural harbour of Toledo (Ohio) at the western end of Lake Erie, 54 miles south of Detroit and 116 miles south of Port Huron pilot station. It is reached from deep water in Lake Erie through a channel 18 miles long, 500 feet wide and dredged to 28 feet. Because there is no anchorage area in this dredged channel or in Toledo harbour, accurate information must be obtained whether a berth is available before committing a



vessel to the channel. Two bridges must be negotiated to reach the upper harbour.

The western end of Lake Erie, from Detroit River light to Southeast Shoal light, where Lake Erie undesignated waters commence, a sailing distance of 36 miles, also forms part of the designated waters of the western sector of District No. 2. Except for the shallow flats at the far western end of Lake Erie where channels had to be dredged to provide access to the ports of Toledo and Monroe and to the Detroit River, navigation of the 27-mile route between the head of the dredged channels and Pelee Passage presents no difficulties. Separate one-way shipping routes are followed through deep, unobstructed open waters. The 8.5-mile Pelee Passage is generally wide except in one place where it is restricted to two one-way channels, approximately 1,000 feet wide, separated by a shoal marked by a buoy. The main hazard is the intensity of traffic in the area because all the main courses between the eastern sector and the western sector of Lake Erie pass through Pelee Passage. The channel through Pelee Passage, which is situated between Pelee Point on the mainland and Pelee Island, affords ample width and depth for large vessels. The passage to the south of Pelee Island is interspersed with shoals and shallow patches and is used only by vessels of light draught.

The U.S. Lake Erie port of Sandusky is situated in this last named area at the very edge of the western sector of District No. 2. This port is visited by some vessels subject to the compulsory Great Lakes pilotage requirements and is thereby placed in the same position with regard to Lake Erie ports situated in the undesignated waters as is Kingston with regard to ports situated in the undesignated waters of Lake Ontario (pp. 137-8). Although it offers no greater navigational difficulties and is reached through the open waters of Lake Erie, vessels with a "B" certificate-holder on board must be moved in the harbour and brought in and out by a District No. 2 registered pilot.

The absence of a pilot boarding station in the Southeast Shoal area is a serious impediment to the efficient operation of pilotage and has precluded the creation for Lake Erie of a separate lake pilots' group, as was done for Lake Ontario and the undesignated pilotage sectors of Lakes Huron/Michigan. Since non-exempt vessels must be navigated by registered pilots in the designated waters west of Southeast Shoal, these pilots have to be carried 10 to 12 hours across the open waters of Lake Erie from or to Port Colborne where they board or disembark. This procedure involves, *inter alia*, considerable wastage of their time.

(e) *Lake Erie*

Lake Erie is the shallowest and second smallest of the Great Lakes. The run from Southeast Shoal to Port Colborne is 180 statute miles. Due

to its long axis, water levels in harbours—particularly those near each end of the Lake—fluctuate under the influence of the wind, varying with its direction, strength and persistence. For instance, a westerly wind piles up water at Port Colborne and Buffalo and differences in level as high as 11 feet have been observed at Port Colborne following a sudden change in wind force and direction. To guard against such rapid variations in water level, the harbours at Port Colborne and Buffalo are protected by extensive breakwaters. Similarly, in the Welland Canal, immediately before the canal terminates at Lake Erie, there is a guard lock (lock 8) through which vessels pass between the Lake and the regulated summit level of the canal. The variation in lift depends on the level of the Lake prevailing at the time.

The unobstructed open waters of Lake Erie present no navigational difficulties and all the lake ports which face them (except Toledo, as noted earlier) are easy of access. Toledo and Cleveland (Ohio) and Buffalo (N.Y.) are the main ports. All three are commercial and general ports of call where manufactured goods, grain, coal, iron ore and many other commodities are handled. Other ports, but of lesser importance, are Port Stanley, Port Burwell and Port Colborne (Ontario), Sandusky and Ashtabula (Ohio), Erie (Penn.) and Tonawanda (N.Y.). These ports, except Toledo, Sandusky and Port Colborne, are included in the undesignated waters of Lake Erie.

(f) *Welland Canal—Designated Pilotage Waters*  
(District No. 2—Eastern Sector)

The natural outlet from Lake Erie into Lake Ontario is through the boundary waters of the 27-mile Niagara River whose level drops 326 feet at Niagara Falls. This obstacle to navigation is overcome by the Welland Canal situated in Canadian territory which cuts across the Niagara Peninsula west of, and roughly parallel to, the Niagara River.

The first Welland Canal was started in 1824 (vide Part IV, p. 579) and has since undergone three major stages of enlargement and improvement completed in 1845, 1887 and 1932. Extensive works have been underway since June 1967 consisting of a 8.6-mile channel relocation between Port Robinson and Ramey's Bend whose scheduled completion date is 1972.

The canal is 27.6 miles long, has eight locks and is aligned almost exactly north and south. The Lake Ontario or northern entrance is at Port Weller and the Lake Erie entrance is at Port Colborne. The canal is a "designated" pilotage area for ocean vessels, forming the eastern sector of Great Lakes Pilotage District No. 2.

Lifting or lowering vessels between the levels of Lake Ontario and Lake Erie, involving some 326 feet, is accomplished by a series of seven locks concentrated in a seven-mile stretch between Port Weller and Thorold.

Locks 4, 5 and 6 at Thorold are twin locks allowing vessels to proceed in both directions simultaneously. From the head of lock 7 at Thorold across the remainder of the peninsula to Port Colborne, a distance of 20 miles, the canal is normally at the same level as Lake Erie. As noted earlier, the guard or control lock near Port Colborne (lock 8) is used only when the water level at the eastern end of Lake Erie rises under the influence of the wind.

These eight locks in the Welland Canal have the same controlling dimensions as those in the new Seaway from Montreal to Lake Ontario, i.e., 766 feet  $\times$  80 feet  $\times$  30 feet. Vessels not exceeding 730 feet overall and 75.6 feet extreme breadth may transit the canal; the maximum permissible draught is 26 feet (increased from 25'9" Nov. 9, 1970).

Spanning the canal at intervals are 18 movable bridges and one high-level, fixed-span bridge which accommodate the numerous railway and highway traffic arteries across the peninsula. Thirteen of these bridges are located in the 20-mile stretch between Port Colborne and Thorold. Apart from these bridges, which are a hindrance to navigation, there are other difficulties created by prevailing wind and weather, surging currents and type and size of vessels which may all cause delays. For instance, the outflow from the pondage pools below locks 2 and 3 causes eddies and cross-currents in the lower approaches; the tie-up wall below lock 4 is very short and medium-sized vessels have to be made fast because of the current created when the lock is emptied; below bridge 20 at Port Colborne, vessels cross the entrance to a feeder (a canal which is used to feed water into the Welland Canal) which causes a strong current that may run between 3 and 4 knots.

Vessels transiting the canal are under the control of the St. Lawrence Seaway Authority and subject to the Seaway Regulations which were reviewed earlier (vide Part IV, p. 906).

Time of transit varies with the volume of traffic, type of vessel, prevailing weather and familiarity with local conditions and procedure. Before 1964, conditions were such that close to 24 hours were required to transit the canal. However, as a result of improvements made by the St. Lawrence Seaway Authority since 1964, travel times between locks 1 and 8 in either direction now average less than 12 hours, despite increases in cargo tonnage and ships' size. To assist in implementing new traffic control procedures, modern electronic equipment, such as closed circuit television, lock telemetry and visual display boards, were introduced in the canal in 1966.

(g) *Lake Ontario*

Lake Ontario is the lowest in the Great Lakes chain. The run from Hamilton at the west end of the Lake to Kingston at the outlet at the head of the St. Lawrence River is 185 statute miles. However, Lake Ontario is much deeper (774 ft.) than Lake Erie (210 ft.) and, hence, fluctuations of water level due to wind are comparatively small.

In general, Lake Ontario is free from outlying shoals and navigation in its open waters presents no unusual difficulties. The principal harbours along the Canadian shore are Toronto, Hamilton and Oshawa, and, on the United States side, Rochester and Oswego, N.Y. These harbours face the Lake and are all easily accessible. The largest are Toronto and Hamilton.

Toronto is near the western end of the Lake, directly across from Port Weller, 26 miles away. It is a landlocked harbour with two channel entrances. The main one, called the Western Gap, has a depth of 28 feet; the other, called the Eastern Gap, has a depth of only 16–18 feet owing to continuous silting and is used by small craft. The sheltered harbour area is about 2½ miles in length and one mile wide, with facilities for a large number of vessels. The harbour has some 78 wharves and piers of various lengths and depths, the largest being 3,300 feet in length with 26 feet alongside. The harbour is under the control of Harbour Commissioners. They maintain port pilotage service, principally for ocean vessels (vide pp. 129 and ff.).

Hamilton is situated at the western end of the Lake, 30 miles west of Port Weller. It is also a landlocked harbour, triangular in shape, five miles long by up to three miles wide providing shelter for scores of vessels. There are some 26 wharves and piers of various lengths and depths, the largest being 4,000 feet in length with 26 feet alongside. The harbour is separated from the Lake by a natural sand barrier, through which the Burlington Canal (available draught 28 feet) has been cut to afford access. Two bridges span the canal: a combined highway and railway vertical bridge, with a clearance of 120 feet when open, at the eastern end, and the Burlington Skyway high-level bridge, with a vertical clearance of 120 feet, which spans the canal about 100 yards further westward. The harbour, like Toronto's, is under the control of Harbour Commissioners (vessels requiring port pilotage service employ either a registered pilot or a Toronto harbour pilot (vide p. 132). As in Toronto, pilotage is not compulsory but at the discretion of the Master. Although the service is advocated for quicker despatch, there are no unusual navigational problems. Also as in Toronto, the main hazards are variable currents across the channel entrance caused by strong winds.

(h) *St. Lawrence River, Kingston to Cornwall—Designated Pilotage Waters (District No. 1)*

The natural outlet from Lake Ontario is through the St. Lawrence River which, from its head at the eastern end of the Lake to the Gulf of St. Lawrence (some 500 miles to Father Point), drops 244 feet in elevation:

Kingston–Cornwall: drop in elevation, 92 feet;

Cornwall–Montreal: drop in elevation, 130 feet;

Montreal–Gulf : drop in elevation, 22 feet.

The waters between Cape Vincent and St. Regis in the Province of Quebec are boundary waters. They are "designated" pilotage waters and form part of the Great Lakes system as defined in Canadian and United States pilotage legislation. The area is known as Great Lakes Pilotage District No. 1. There are two pilot boarding stations, Cape Vincent at the western end and Snell lock at the eastern end.

From the point of view of navigational features, the section between Cape Vincent and Cornwall may be divided into three sectors: Cape Vincent—Brockville, Brockville—Prescott and Prescott—Snell lock. The remaining 5½-mile stretch of the Great Lakes system between Snell lock and St. Regis is treated for all practical purposes as an integral part of the Cornwall Pilotage District (Part IV, p. 900).

(i) *Cape Vincent to Brockville*

The River between Cape Vincent and Brockville, a distance of 50 statute miles, is strewn with islands, large and small, most of which are inhabited. Therefore, reduced speed is enforced throughout this area (11 miles downbound, 9 miles upbound) to protect property. However, with the exception of the Upper Narrows in the Thousand Islands Bridge area, and the Brockville Narrows just above Brockville, the Seaway channel is straight, wide (600 feet) and deep, the depth ranging from 27 feet in the improved sections to 90 feet in the natural channel. The *Upper Narrows* extend for about eight miles, four above and four below the Thousand Islands Bridge. This channel is deep (90 to 150 feet) but is no more than 250 feet wide, flanked on either side by land. The River flows through at a velocity of two–three knots. A large or medium sized vessel once committed to it lacks sufficient room to turn around, is unable to anchor in its deep waters and must keep on to the other end. Several submarine cables which cross this channel present a hazard to any ship attempting to anchor. Vessels can meet in the channel but, as a safety measure, must send out a security call by R/T before entering. Anchorage grounds are available near each end, permitting vessels to wait if adverse weather or poor visibility prevail. The Thousand Islands Bridge has a minimum clearance of 130 feet; at night, it is so well illuminated that a veil of light is created (called "curtain" by the pilots) which obscures objects immediately under or beyond the bridge, thus adding to the navigational difficulties. The *Brockville Narrows*, some 16 miles further downstream, are three miles long and, as in the Upper Narrows, any attempt to stop, turn or anchor is fraught with danger. A two–three knot current has a tendency to turn a downbound vessel to starboard and good speed is required to maintain control. Here, vessels must also send out a security call advising their intention to enter the channel.

Kingston is the only port in that section of the designated waters of District No. 1. Historically, Kingston was a transit port but this has been no longer so since the transit Seaway channel was relocated south of Wolfe Island.

Before the opening of the Seaway, the pilot boarding station was at Kingston and, hence, all vessels in transit which needed to embark or disembark a pilot had to pass by it.

Kingston is now for all practical purposes a port of Lake Ontario since its natural deep access lies on the Lake front. Only vessels drawing less than 22 feet can reach the harbour from the east, generally through the Wolfe Island Cut at the northeast end of Wolfe Island. The Cut is a channel three-quarters of a mile long, 500 feet wide and 23 feet deep which connects the Seaway, or South Channel, with the shallow Canadian Middle Channel and the eastern approach to Kingston. Upbound vessels of greater draught must, perforce, proceed past Cape Vincent around the west side of Wolfe Island and Simcoe Island in the undesignated, open waters of Lake Ontario and make their approach to Kingston from that direction. The western pilot station for District No. 1 is located at Cape Vincent on the United States side. (Vide pp. 137-8 re request to exclude the harbour from designated waters.)

The main part of the port of Kingston comprises several wharves of which the largest is situated in Cataragui Bay. It has a berthing length of 700 feet and a depth alongside of 27 feet. Tugs are available if required for berthing or unberthing but are seldom used since there are few navigational difficulties.

(j) *Brockville to Prescott*

The port of Brockville is situated a short distance from the southern entrance to Brockville Narrows. A number of industries located in the town have their own wharves in the harbour but, since Seaway depth is not available, few ocean vessels call there.

There are no unusual navigational difficulties in this 12-mile stretch of the River. The Seaway channel is straight, wide and deep. Downbound vessels may be required by the Seaway traffic controller to anchor off Prescott, the last anchorage area before Iroquois lock. This will occur when traffic conditions at the lock prevent a vessel from entering on arrival and there is no position available at the wait wall.

(k) *Prescott to Snell Lock*

The distance involved is 43 statute miles. The Lower Lakes Terminal elevator (capacity 5,500,000 bushels) operated by the National Harbours Board is located at Prescott where large grain carriers may discharge grain for transfer and domestic use. Facilities are also available for loading grain in ocean vessels. Opposite Prescott, one mile across the River on the United States side, is Ogdensburg. The Prescott—Ogdensburg bridge which spans the River nearby has a minimum vertical clearance of 120 feet with 1,150 feet between its main piers.

Just below the Prescott—Ogdensburg bridge and all the way to Snell lock is the section (International Rapids Section) where the natural features

of the River were so drastically changed as a result of the construction during 1954–1958 of the St. Lawrence Seaway and Power Project. Two canals, one with one lock (Iroquois) and the other with two locks (Eisenhower and Snell), two control dams (Iroquois and Long Sault) and a 3,300-foot long, 32-unit powerhouse (Barnhart Island–Cornwall) were constructed; several miles of new 27-foot channels were cut, islands were either removed or sliced into fragments, towns relocated, new roads laid down, bridges erected and thousands of acres of land flooded to form a 25-mile long, four-mile wide power pool above the generating plants at Barnhart Island, raising the water level there to the level of Lake Ontario.

Associated with the construction of the Barnhart Island powerhouse are the two control dams referred to earlier, one at Iroquois and the other at Long Sault in the immediate vicinity of the powerhouse, which keep the level and outflow of Lake Ontario under complete control. Thus, Lake Ontario has become since 1960 the second of the Great Lakes (the other being Lake Superior) to have its level and flow regulated under the supervision of the International Joint Commission.

Iroquois dam and lock are at the head of the power pool, named “Lake St. Lawrence”, some 10 miles below the Prescott–Ogdensburg bridge. The channel connects with the single lock canal at Iroquois, enabling ships to by-pass the control structure. The lift through the lock varies from one half to six feet. Just below the lock, the flow through the dam creates a cross-current which, on striking the shore nearby, is diverted back across the channel. The velocity of this cross-current varies depending on the number and position of the sluice gates opened in the dam. Vessels both downbound and upbound experience this variation in the current and pilots and Masters are reminded of it each spring through a general Notice to Mariners.

Twenty-two miles below Iroquois lock is the three-mile Wiley-Dondero Canal with its two locks (Eisenhower and Snell), enabling vessels to by-pass the Barnhart Island powerhouse. The combined lift through these locks is 89 feet, 42 at the upper end (Eisenhower) and 47 at the lower end (Snell).

The Iroquois, Eisenhower and Snell locks, together with the Beauharnois, Côte Ste-Catherine and St. Lambert locks between Cornwall and Montreal, were all built at the same time during the construction of the St. Lawrence Seaway to replace the old 22-lock, 14-foot canal system between Lake Ontario and Montreal. They are similar in size (766' x 80' x 30') and can accommodate vessels up to 730 feet in length, 75 feet in width, and 26 feet in draught. With the exception of Eisenhower and Snell locks, which were built in United States waters and are under U.S. control (Saint Lawrence Seaway Development Corporation), the other Seaway locks were built in Canadian waters and are administered by the St. Lawrence Seaway Authority.

However, all vessels transiting these locks, including Eisenhower and Snell, are subject to the Seaway Regulations which were reviewed earlier (Part IV, p. 906).

## (2) MARITIME AND PILOTAGE TRAFFIC

Maritime traffic in the Great Lakes system consists mainly of:

- (a) medium sized ocean-going vessels not exceeding 750 feet overall and 75 feet 6 inches extreme breadth;
- (b) lakers, i.e., vessels engaged in inland and coastal trade, not exceeding the same dimensions;
- (c) a few larger lakers in the upper part of the system;
- (d) a relatively small number of vessels not self-propelled, i.e., dredges, barges and scows with tugs.

In the lower part of the Great Lakes system east of Lake Erie, the largest vessels met are of the maximum permissible Seaway dimensions since access to this area can be gained only through the locks of the Seaway at one end and the Welland Canal at the other. Within Lake Ontario and the St. Lawrence River as far as the first lock, there is no shipping requirement that would warrant the use of larger vessels, which would be confined to these waters. However, the situation is different in the upper sector of the system where there is a requirement for large bulk carriers, especially for shipments of iron ore from the Mesabi Range mines through Lake Superior ports to United States smelting plants on the shores of Lake Michigan and Lake Erie. The factor which controls the size of these vessels is the dimensions of Poe lock, the largest lock at Sault Ste. Marie, which has been enlarged in recent years to 1,200 feet in length and 105 feet in width. These large vessels can not negotiate the Welland Canal and are restricted to the upper part of the Great Lakes system. They have only an indirect effect on pilotage since they are not required to employ a pilot and, in fact, do not do so, but their dimensions add to the navigational difficulties of ocean-going vessels meeting or overtaking them in narrow reaches and in channel bends.

Another controlling factor which particularly affects ocean-going vessels is the limited depth of the locks, canals and other dredged channels which limit the maximum permissible draught to 26 feet throughout (Part IV, p. 907). While new lakers have been designed to an optimum size within Seaway lock dimensions, ocean-going vessels must be designed primarily for ocean navigation, thus sacrificing carrying capacity, with the result that many of them which meet the permissible Seaway dimensions can not load as much cargo as lakers of comparable size and still remain within the permissible draught. The owners of ocean-going vessels planning trips through the Seaway must take into consideration three special factors: the likelihood of only a partial cargo, the delay and expense involved in topping up at Montreal or below



and the cost of compulsory pilotage. Under these circumstances it may be uneconomical to compete with lakers carrying full cargoes and free of pilotage charges, and the decision may be to proceed no farther inland than one of the several trans-shipment facilities along the St. Lawrence.

The forecast for increased future ocean-going traffic in the system is unfavourable because of the trend, greatly accelerated in recent years, to larger vessels.

Under the influence of these factors, the trade pattern of ocean-going vessels (which are the principal employers of pilots) and the operational procedures followed by owners underwent basic changes. The early rush to the Head of the Lakes slackened when the limitations of the system became apparent, while competition from lakers increased as they gradually adjusted to take optimum advantage of the Seaway. This exploratory stage was first followed by total or partial withdrawal. Some owners decided to load their ocean-going vessels, especially grain carriers, at deep water facilities served by lakers, thus allowing them to employ larger carriers. Partial withdrawal was also noticed in the general cargo field, particularly from 1967 on. Ocean-going vessels, rather than proceed west through the Seaway with small amounts of cargo, found it more economical to terminate their trips in Toronto and Hamilton and forward the small amount of cargo left by land, thus avoiding the Welland Canal with all the costs involved—Seaway tolls, pilotage fees, port dues, ship's time and general operating expenses. Also, in the general cargo field, the owners of ocean-going vessels changed their procedures in order to become more competitive: companies joined forces to pick up cargo for each other and formed consortiums. This meant fewer ships with larger cargoes and, at the same time, accessory costs (including pilotage) had to be paid only once. For the same economic reasons and in line with the general shipping trend, larger vessels gradually replaced the earlier smaller ones with a corresponding decrease in the demand for pilotage services.

Another development had its effect on pilotage, i.e., the rapid disappearance of British lakers whose place was partly filled by other foreign (not U.S.) vessels. Until the law limiting trade between Canadian coastal and inland ports to Canadian registered vessels was passed, a considerable proportion of this trade was handled by vessels registered in the Commonwealth. However, the Act could not prevent them from handling coastal and inland trade between Canadian and United States ports, and this explains why such a large number of British lakers were engaged in inland trade in the Great Lakes system after the opening of the Seaway. They felt discriminated against by the compulsory pilotage requirement since they were regular traders who did not need pilotage assistance, even in the confined waters of designated areas. These vessels took advantage of the partial relief available by having their officers pass oral examinations for undesignated waters and obtain "B" certificates. Moreover, whenever a shortage of pilots

developed, they were also obvious choices for waivers on account of their familiarity with the waters concerned and the ability of their officers to meet the radiotelephone requirement of fluency in the English language. When these vessels disappeared, they were replaced by other foreign vessels who, either because they did not trade regularly in the Great Lakes system or because their officers were not sufficiently fluent in English, did not take advantage of the "B" certificate procedure, with the result that pilotage assignments on the open waters of the Lakes increased. This strained the District pilotage service and was also wasteful of the District pilots' time. The situation was gradually corrected (although never completely) by appointing lake pilots in increasing numbers.

As early as 1963, it was noted that the traffic pattern had altered considerably, there being a marked decrease in the number of ships proceeding west of Port Huron as compared to the previous season, apparently as a result of the lessons learned during the first exploratory trips, e.g., stevedoring charges and tug charges in Chicago, plus additional pilotage and mileage to Lake Michigan ports, made most such ventures uneconomical. In 1964, the increase in the demand for lake pilots began to be felt because slightly more than fifty per cent of foreign ships lacked a "B" certificate. In 1965, the number of foreign ships engaged in Great Lakes trade increased but more noticeable was the increase in the number requiring lake pilots, especially in Lake Ontario since many did not proceed farther west. In 1966, the British seamen's strike eventually stopped all British ships for a period of time. In that year also, the number of foreign flag lakers was reduced to six from thirty-one during early 1965, resulting in a substantial decrease in waivers (468 in 1965 against 75 in 1966) and a steady increase in the number of ships requiring pilots in undesignated waters. In 1967, the trend to larger vessels and the gradual disappearance of smaller ocean vessels was particularly marked. Despite the general decline in ocean-going activities over the Great Lakes system, and, hence, in the District pilots' workload, the Lake Ontario pilotage demand was greater. However, many vessels formerly trading as far west as Detroit did not proceed beyond Lake Ontario but returned to sea from Toronto or Hamilton. In 1968, the volume of ocean traffic in District No. 2 continued to fall as far as the number of ships was concerned, but the aggregate tonnage exceeded previous years. There are various reasons for this decline, mostly falling grain exports and better organization by the shipping trade with the advent of consortiums. Pilotage traffic declined again in 1969.

No statistics have been kept in order to establish specifically the nature and relative importance of the various components of pilotage traffic in the Seaway. D.B.S. statistics divide vessels by country of registry or by origin and destination of cargo. Pilotage statistics in this connection mainly record the number of times pilots were assigned to vessels without distinction

between ocean-going vessels, Canadian and United States inland and coastal traders subject to compulsory pilotage and exempt or excluded vessels which nevertheless take advantage of the service. From the evidence received, it appears that the pilotage traffic is almost exclusively limited to ocean-going vessels with the occasional coastal and inland vessel which does not meet the exemption requirement, or which as a rule does not take a pilot but would do so in certain circumstances such as adverse weather conditions (vide pp. 103-4). By comparing Seaway statistics of maritime traffic passing through the approach to the Great Lakes system, i.e., the Montreal-Lake Ontario section of the Seaway, and Great Lakes District No. 1 pilotage trip statistics (observing that in the Snell lock-Cape Vincent section almost all traffic, except small vessels which do not take pilots, is in transit) it is possible to obtain a sufficiently accurate picture of the importance and composition of the pilotage traffic entering and leaving the Great Lakes system.

The following table shows for the years 1960-1969 inclusive the number of transits both upbound and downbound of vessels through the Montreal-Lake Ontario section of the Seaway, and from pilotage statistics the number of trip assignments performed in the international part of the same section, i.e., between Snell lock and Cape Vincent (hence excluding trips by District No. 1 pilots into the open waters of Lake Ontario). In each case the average GRT is also shown in order to indicate the trend to larger vessels and its importance.

Year	Seaway (Montreal-Lake Ontario Section)*				Pilotage (District No. 1)		
	Domestic		Overseas		Trips	Average	Tonnage
	Transits	Average Gross Tonnage	Transits	Average Gross Tonnage		Gross	Net
1960....	4,672	2,889.7	2,197	5,293.9	2,861	n/av.	n/av.
1961....	4,741	3,681.6	2,151	6,325.0	2,601	5,304	3,154
1962....	4,049	4,388.0	2,302	6,753.5	2,743	n/av.	n/av.
1963....	4,232	5,452.7	2,053	6,823.0	2,326	5,728	3,372
1964....	4,287	5,863.6	2,492	7,200.3	2,730	6,163	3,634
1965....	4,579	5,796.5	2,751	7,516.4	3,022	n/av.	n/av.
1966....	4,602	6,715.7	2,739	7,977.7	3,108	6,839	3,999
1967....	4,375	6,510.6	2,546	7,950.0	2,978	6,745	3,896
1968....	4,198	7,159.0	2,378	8,552.1	2,768	6,899	4,045
1969....	3,975	5,028.4	2,417	8,879.3	2,812	7,405	4,324

\*Upbound and downbound combined, including tug and barge combinations assessed as one unit, and naval vessels.

SOURCES: *Seaway*: Exs. 475 and 1541 (b)—*Traffic Report of the St. Lawrence Seaway*, Part II, Table 4.

*Pilotage*: Ex. 1540(b)—computer statements of the Department of Transport, except for the years 1960, 1962 and 1965 which were taken from Ex. 534(b)—annual reports of the Pilotage Authority, the information being otherwise not available.

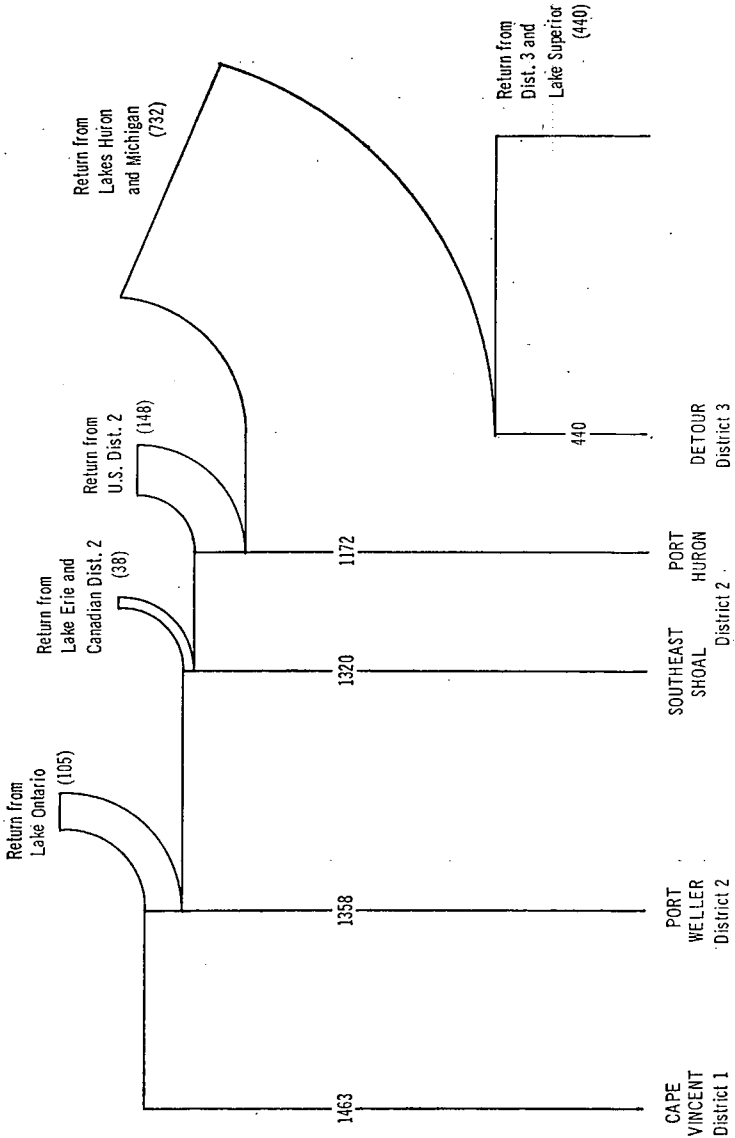
This table, *inter alia*, establishes the following facts:

- (a) The aggregate transit through the entrance sector of the system by lakers had decreased in 1969 by fifteen per cent since 1961; the average gross tonnage by lakers had increased by seventy-four per cent during the same period. This is the result of the gradual replacement of the pre-Seaway canalers by lakers designed to optimum size for the locks, and the ever-increasing aggregate cargo transported by them which has resulted in keeping their number approximately the same despite their large increase in size.
- (b) By contrast, ocean-going vessels have increased both in number (ten per cent) and in size (seventeen per cent). The increase in number, which reached a peak in 1965 and 1966, has steadily declined since then under the adverse impact of strikes that affected ocean-going traffic directly or indirectly in latter years, and also the other disadvantages ocean-going vessels experience as a result of the physical and economical limitations of the Seaway system and the cost of pilotage. Their average size, which is and always has been larger in any given year than the average size of the lakers, does not show the same steep growth, since very few ocean-going ships were small enough prior to the opening of the Seaway to proceed through the fourteen-foot locks and canals and, hence, ocean-going traffic since the opening of the Seaway has been composed of relatively large vessels.
- (c) The ratio between lakers and ocean vessels has generally averaged two to one.
- (d) The number of pilotage trips exceeds the number of transits by ocean-going vessels. The explanation is that some Canadian and U.S. vessels, whether exempt or not, employ pilots. This is further confirmed by the average GRT of vessels piloted, i.e., between the average GRT of ocean vessels and lakers.

Many ocean-going vessels will not proceed past Lake Ontario and the importance of this traffic tapers off to the west. This has become more accentuated as the operators gain experience. Additional factors are the cost for ocean-going vessels to operate through the system, and the increased competition by lakers. By contrast, laker traffic increases considerably above Lake Ontario on account of the importance of inland trade, mainly between U.S. ports on Lake Erie, the Detroit River and Lake Michigan with Lake Superior ports.

The following graph, which appeared as an appendix to the 1966 "Statistical Report Great Lakes Pilotage", shows the spread for that year of the ocean vessel trade in the Great Lakes system. It is based on the

# Number of Vessels Upbound, Passing Pilot Stations With Pilots on Board



pilotage records of upbound vessels at the control points for such traffic, i.e., the upstream pilot station for each District.

The data on the graph, when shown in per cent, indicate that in 1966 the ultimate destinations of ocean vessels on the Great Lakes were:

- (a) Lake Superior ports ..... 30.1 per cent
- (b) Lake Huron and Lake Michigan ports ..... 50.0 per cent
- (c) Ports in the western sector of Great Lakes District No. 2, i.e., situated in the western part of Lake Erie and on the Detroit and St. Clair Rivers 10.1 per cent
- (d) Lake Erie and Welland Canal ports ..... 2.6 per cent
- (e) Lake Ontario ports ..... 7.2 per cent

The "Statistical Report Great Lakes Pilotage" (Ex. 1542), referred to earlier, is an annual report published jointly since 1964 by the United States and Canadian Great Lakes Pilotage Administrations. In addition to statistical data for the year concerned, this report contains a number of cumulative tables showing comparative yearly data, in most cases as far back as 1961. The 1968 version of the report is reproduced *in extenso* as Appendix A to this Report.

A word of caution is indicated as to the informative value of certain data since a number of tables have been devised in relation to an organizational arrangement which no longer exists, e.g., these statistics make no reference to the two groups of lake pilots. According to the original plan, there were to be only three groups of pilots—one for each District—with the demands in undesignated waters being handled jointly by the pilots of the adjacent Districts in addition to their respective in-District work. This soon proved to be prejudicial to the efficiency of District operations and, as early as 1962, lake pilots were appointed and have gradually relieved Districts Nos. 1 and 2 pilots of most, if not all, of pilotage in undesignated waters. Not only is no separate mention made of the workload and pilotage revenue of lake pilots, but these data have been integrated with those of Districts Nos. 1 and 2 pilots. The result is a most misleading picture of the real situation.

In the joint annual report, the only references to the lake pilots are Tables 2, 5(a) and 5(b) of Part I dealing with "Registration of Pilots" where they are referred to under the misleading name of "applicant pilots" (p. 184).

Further difficulties arise because the terms used are not defined in the statistical report, despite the fact they are not used in their natural meaning. In addition to the term "applicant pilot", there is, for instance, the term "assignments" which not only refers to "despatches" (trips, movages and cancellations) but also to parts of single trip assignments. For example,

prior to 1969, the despatch of a District No. 2 pilot who remained with a ship for a transit between lock 7 in the Welland Canal to Detour or Chicago was counted as four assignments, i.e., each sector of designated and undesignated waters *en route* being counted as a separate trip.

Most of the missing information on pilotage data is contained in the machine data statistics kept by the Department of Transport (Ex. 1215), except for the first years, and on which the annual joint statistical report is mostly based.

The assignment figures are not really indicative of the actual pilotage workload for two reasons: substantial differences in the nature, length and duration of assignments and changes in despatching procedures. For instance, there is no comparison between a trip, a movage and, particularly, a cancellation. Fortunately, the incidence of movages and cancellations in all sectors is so small as to be negligible. The despatching procedure for District No. 1 has remained basically unchanged since 1961. Since the great majority of in-District trips assigned are full transits, the assignment statistics for this District would be sufficiently informative on the basis of in-District assignments alone. However, this is not true in the other sectors of the Great Lakes system because assignments there vary greatly both in length and duration, especially in District No. 2 where the despatching procedure has often been changed radically, e.g., the mandatory change point at lock 7 in 1963 makes a transit of the Welland Canal show as two assignments instead of the previous one. Because there are a number of important intermediate ports in the District, such as Detroit and Toledo, many trip assignments are only partial transits. For a study of the difference in length of the various trips in each sector, vide "Workload".

There is no systematic record of the use being made of the service by vessels not subject to Great Lakes pilotage legislation, or by those who enjoy an indirect exemption in undesignated waters because of the presence on board of a "B" certificate-holder. The incidence is very small as indicated by the count made by the Department of Transport at the Commission's request, resulting in the following figures as to the number of times District No. 1 pilots were employed by vessels exempt from pilotage requirements on in-District and Lake Ontario assignments (Ex. 839). The list, which is here reproduced *in extenso*, illustrates the difficulty of interpretation arising from the differences in the texts of the Canadian and United States Acts with regard to exclusions and exemptions (pp. 32 and ff.). In these statistics, the expression "exempt from pilotage requirement" was interpreted according to the United States Act since, under Part VIA C.S.A., warships and Canadian and United States Government vessels are neither excluded nor exempt, while the U.S. Act applies only to commercial vessels.

*Study of Pilotage in Great Lakes System*

	1961	1962	1963	1964
<b>CANADIAN VESSELS</b>				
Ahern Steamships Limited.....	4			
Algoma Central Railway Company.....	28	23	16	27
Bayswater Shipping.....		1		
Branch Lines, Sorel.....	16	2		18
British American Oil.....	8	5	5	5
Canada Cement Transportation Co.....	10	8	6	12
Canada Steamship Lines.....	10	1		
Canadian Oils Ltd.....		3	1	
Department of Mines (Federal).....			2	
Department of Transport (Federal).....			1	
Hall Corporation.....	3		2	
Holden Sand & Gravel Co.....	1			
Imperial Oil Limited.....	1	1	17	
J. P. Porter.....				3
K. A. Powell, Fort William.....	2			
Law Quarries Transport Co.....			1	1
N. M. Paterson & Sons.....	42	28	10	
Quebec & Ontario Transportation Co.....	9			
Royal Canadian Navy.....			10	3
Shell Oil of Canada.....			1	
Texaco Oil, of Canada.....	6	4		
Valley Camp Coal.....				2
<b>Total Canadian Vessels.....</b>	<b>140</b>	<b>76</b>	<b>72</b>	<b>71</b>
<b>UNITED STATES VESSELS</b>				
American Oil Company.....		27	15	20
Cleveland Tankers.....	2			
Gulf Oil.....		19	7	20
Marquette Enterprises.....			2	
Meritt Champman Scott.....				4
Oglebay-Norton Company.....			6	7
Socony Mobil Oil.....	2			
Standard of Indiana.....	6			
Texaco Indiana.....	1			
Texas Oil of Indiana.....			6	
United States Army.....				1
United States Navy.....			1	8
U.S. Steel.....		2		
<b>Total United States Vessels.....</b>	<b>11</b>	<b>48</b>	<b>37</b>	<b>60</b>
<b>OTHERS</b>				
French Navy.....	n/av.	n/av.	2	
German Navy.....	n/av.	n/av.		3
Norwegian Navy.....	n/av.	n/av.		2
Royal Navy.....	n/av.	n/av.	3	
<b>Total Others.....</b>			<b>5</b>	<b>5</b>
<b>Grand Total.....</b>	<b>151</b>	<b>124</b>	<b>114</b>	<b>136</b>

SOURCE: EX. 839.



### (3) AIDS TO NAVIGATION AND MAINTENANCE OF THE CHANNEL

As indicated earlier, the St. Lawrence/Great Lakes ship channel follows the natural waterway except where improvements, such as canals or locks, are required to facilitate navigation, and these aids are created as dictated by the physical features of the channel without regard for the nationality of the waters concerned. Although at first sight it would appear that the only effective way of improving and maintaining the channel, establishing and maintaining the necessary network of land-based and floating aids to navigation and obtaining the required co-ordination would have been to entrust the task to an international joint commission, the same result was attained instead by co-ordination at the administrative level, with each country assuming full responsibility for the part of the channel lying on its side of the boundary line, and by joint planning and effort. An example of such co-operation was the improvement to the channel between Lake St. Clair and the St. Clair River. The Southeast Bend Cut-off Channel was initially dredged by the United States Corps of Engineers to by-pass the curving St. Clair Flats Canal, mostly situated in United States territory; the maintenance of the new channel is now the responsibility of the Canadian Department of Public Works (Ex. 1084).

Apart from the question of the adequacy of radio communications which are studied later, no complaints were voiced by the pilots with regard to the extensive, sophisticated network of aids to navigation throughout the system.

The responsibility for navigational aids in the Canadian part of the system is shared by the St. Lawrence Seaway Authority and the Department of Transport through their Marine Agents. The Department of Public Works, through their District Engineers, is responsible for soundings and channel maintenance. As elsewhere, aids to navigation include radio shore aids, fog signal devices, lighted and unlighted floating aids, shore-based lights and, where appropriate, range lights. Every three weeks during the navigation season, the maintenance crew inspects all shore aids and vessels check floating aids. The Agents are assisted by a research team which is continually striving to improve aids to navigation. It works closely with the National Research Council and the United States Coast Guard. Shipowners are regularly consulted before any proposed change is effected.

#### *Wolfe Island Cut Dispute*

It is worth noting in the pilotage context the background of the limited improvements made to the Wolfe Island Cut. Prior to the opening of the Seaway, when Kingston harbour was part of the transit route and also the boarding area for both Kingston District pilots and Great Lakes Sailing Masters, the Cut was the normal access to the harbour from the east.

On February 20, 1957, the Corporation of the St. Lawrence-Kingston-Ottawa pilots requested that the Cut be dredged to Seaway depth. The proposal, which was approved by the Department of Public Works, called for a 5,000-foot long, 400-foot wide and 27-foot deep channel at an estimated cost of \$1,221,348.50. The project was turned down by Treasury Board as not economically justified. Later, two more submissions were put forward by the Department of Public Works; the first, dated March 6, 1961, changed the proposed channel to a length of 3,875 feet with a width of 450 feet and a depth of 20 feet. This submission was returned to the Department and was submitted again on April 17, 1961, on the basis of a shorter channel, i.e., 3,580 feet, but with the same width and depth. This item was accepted by Treasury Board and included in the estimates of the Department of Public Works in the amount of \$480,100. The works, which were completed July 16, 1962, actually produced a channel 3,970 feet long, 450 feet wide and 23 feet deep.

For maritime traffic in transit through the waterway, it was not realistic to require vessels to detour through a crooked channel and pass through Kingston harbour for the sole purpose of changing pilots when this could be more conveniently done (although on account of the narrowness of the channel, not as safely when adverse conditions prevail because vessels risk grounding if speed is reduced below steerage way) by following the main through channel between Wolfe Island and the United States mainland. In 1961, the pilot boarding station was relocated and the huge expense of dredging the Cut to Seaway depth was then no longer justifiable.

#### (4) RADIO COMMUNICATIONS

The Great Lakes system has ample shore-based medium frequency radio stations providing full coverage for ship-to-shore communications. These stations are available for both safety broadcasts and public correspondence. In addition, certain sectors of the system and some ports provide VHF coverage restricted to safety and operational traffic. Because of limited range, VHF communications do not exist and can not be established on the open waters of the Lakes for ship-to-shore traffic, except when vessels are close to shore. On account of its narrowness, Lake Erie is an exception since the regular shipping lanes are always within VHF range of the shore and contact can be maintained with the recently established network.

At the time of the Commission's hearings, the pilots made a number of complaints about areas where radio communications were poor and even non-existent. In District No. 1, they complained that there were two or three dead spots depending on weather conditions, particularly beneath the Thousand Islands Bridge and near transmission cables. In District No. 2, they reported that radio communications on Lake Michigan and Lake Huron

were bad, particularly between Mackinac Bridge and Lansing Shoal. They stated that within 30 miles of shore-based radio stations it is at times impossible to make contact by radiotelephone, probably due to atmospheric conditions. In Georgian Bay, blind spots were experienced at the entrance and ships entering could not report until they were half-way down the bay. This latter problem was solved by establishing at Wiarton a station which now covers the area adequately. Communications around Detour on the St. Marys River were not good, mostly due to technical difficulties when the station was located inside the city, but it was moved to a new location at the airport near Gros Cap and coverage has since been satisfactory. The same problem arose at Thunder Bay but conditions improved when the station was moved to the airport at the former city of Fort William. There is a sector in the centre of Lake Superior where radiotelephone contact can not be established with Canadian stations. The Telecommunications and Electronics Branch of the Department of Transport stated that they were trying to correct the situation by using more powerful sets and improving their location. There were also several blind spots in Lake Superior near Passage Island, Hare Island and close to Duluth and also in the St. Marys River between Pike Island and Lime Island, mostly due to atmospheric conditions.

There are no longer such problems in the sectors of the Great Lakes system covered by the St. Lawrence Seaway since the establishment of the Seaway Marine Traffic Control with its VHF network. Substantial improvements have also been made in medium frequency radio communications in the rest of the waterway, including the open waters of the Lakes.

(a) *Mandatory Use of Radiotelephone for Navigation Purposes*

The navigation rules and procedures in the Great Lakes system, i.e., on the St. Lawrence River west of the harbour of Montreal and on the Great Lakes, including their connecting channels, differ basically from general international practice on account of the mandatory use of radiotelephone for safety communications and navigational procedure.

Disregarding port-operated VHF stations, radiotelephone requirements in the Great Lakes system may be divided into two categories:

- general requirement applicable over the whole of the Great Lakes system, including the Cornwall Pilotage District, where medium frequency radiotelephone equipment is mandatory and is mainly used by vessels to keep abreast of safety broadcasts, to obtain safety information when needed and for ship-to-ship safety communications;
- regional VHF requirements applicable only to those parts of the Great Lakes system, including the Cornwall District, where

VHF radiotelephone is also used to obtain traffic information required for planning Seaway and pilotage operations and to transmit operational instructions to vessels in the Seaway or about to enter it.

(i) *General requirement: "Promotion of Safety on the Great Lakes by Means of Radio"—1954 treaty*

Radiotelephone equipment and its use ship-to-ship and shore-to-ship for safety communications has been mandatory for all vessels on the Great Lakes and the St. Lawrence River west of Montreal since November 13, 1954, when the agreement between the United States and Canada entitled "Promotion of Safety on the Great Lakes by Means of Radio" (Ex. 1402) became effective.

This requirement, which necessitates that radio communications be carried out in the English language, together with differences in navigational procedure resulting from special rules of the road for the Great Lakes have been the main grounds for United States insistence on the imposition of partial compulsory pilotage in the open waters of the Great Lakes.

It is on the Great Lakes that the first coordinated radiotelephone system with a common contact and safety distress channel was established. This was in 1936 following the private initiative of the Lake Carriers Association. They received the cooperation of all interested parties, including the United States Coast Guard and the Canadian Department of Transport. Almost all vessel operators recognized the advantages of an efficient communications system for safety information and participated on a voluntary basis. The experiment was successful and convincing and resulted in the 1954 treaty between Canada and the United States, followed by parallel enabling legislation enacted by each country. In Canada, this took the form of an amendment to sec. 411 C.S.A. and Part III of the "Ship Station Radio Regulations" (P.C. 1956-192, Ex. 492). Ships navigating west of Montreal are required to carry and operate while in the Great Lakes system a medium frequency radiotelephone and must have on board certified radiotelephone operators who, among other qualifications, are fluent in English. In addition, most vessels also carry VHF radiotelephone equipment which is mandatory if they are proceeding through the St. Lawrence Seaway. The radiotelephone controls must be on the bridge so that messages from shore stations or other vessels can be clearly heard by the officer or pilot in charge of the navigation of the vessel, and also so that this officer or pilot can conveniently use radiotelephone whenever necessary. While the vessel is under way, the radiotelephone is to be constantly monitored on the listening channel on which all the safety information, security calls and distress signals are made. If the ship carries a VHF set in addition, both sets are to be kept open on their own listening frequency. While ship-to-shore communications can

generally be effected only on medium frequency, in the open waters of the Lakes, VHF is preferred for ship-to-ship and close range ship-to-shore communications because its short range permits clear conversations free of interference.

The network of ship and shore stations is essentially an aid to navigation which was devised for ships' use and benefit. The United States Coast Guard and the Department of Transport use the listening frequency for their weather and safety broadcasts which are made at regular predetermined intervals and at any time an emergency arises. The listening frequency is mainly used by ships for ship-to-ship communications. Every officer or pilot in charge of navigation when entering a port or leaving a berth and/or port gives a security call announcing his expected arrival, departure or intention, and every vessel in the vicinity is then on the alert. The security call is also given before a ship enters blind turns on the St. Lawrence River or in the connecting channels and other congested waters. It is extensively used for ship-to-ship conversation to arrange for meeting or overtaking. Experience has proved that RT is a valuable adjunct to radar and assists navigating officers to plan their meeting after they have observed each other on the radar screen, particularly when visibility is reduced.

This requirement, which used to be a distinct peculiarity of navigation on the Great Lakes, has since gained acceptance as a world-wide practice, and was even sanctioned by an IMCO international convention in 1968 (Part IV, pp. 180-181).

It will soon become a general mandatory requirement for all Canadian registered vessels to carry radiotelephone equipment and use it for safety purposes, whether navigating in or outside Canadian waters, and for all foreign vessels while navigating anywhere in Canadian waters. The 1968 IMCO agreement was implemented by Canada in 1969 (17-18 Eliz. II c. 53) by an amendment to sec. 411 C.S.A. which, when it becomes effective, will prevent the navigation of a Canadian ship in any waters, and of any ship in Canadian waters, unless she is fitted with radio installations complying with regulations to be made and has on board operators in the number and with the qualifications prescribed by these regulations. Sec. 411 C.S.A. as amended is to come into force when proclaimed. This will occur as soon as the required regulations have been drafted, which will shortly be the case.

- (ii) *Regional requirements: St. Lawrence Seaway "Marine Traffic Control and Information Service" and "Marine Information Ontario"*

Since the opening of the Seaway in 1959, it has been mandatory for ships using the Seaway to carry VHF equipment and the use of VHF radiotelephone has been an integral part of Seaway operational procedures.

Radiotelephone, however, was used merely to provide a means of communication between Seaway operators and ships in the system. In 1968, in an attempt to improve the efficiency of Seaway operations, the Seaway Authority established a traffic control system modelled on the Marine Traffic Control System which the Department of Transport has established on the St. Lawrence River between Sept-Iles and Montreal. Its VHF network covers the area from Montreal, where it hooks up with the D.O.T. St. Lawrence River system, through Lake Ontario to Long Point in Lake Erie. At that end it also makes contact with *Marine Information Ontario*, a traffic information system which the Department of Transport has established on the Canadian side of Lake Erie between Long Point and Southeast Shoal. The Seaway control centres at St. Lambert and St. Catharines and the D.O.T. information centres at Montreal and Port Weller exchange all relevant information so as to provide an uninterrupted up-to-the-minute picture of maritime traffic moving in the entire area from Sept-Iles to Southeast Shoal, and to enable Seaway operators and pilotage dispatchers to plan their respective operations.

The establishment of these systems has also made it possible to improve the efficiency of pilotage despatching by providing despatchers with advance information on requirements, with complete traffic information enabling them to appraise the demand long before requests are received and with ships' ETA's at boarding stations. Pilotage radiotelephone stations could then be shut down, with ships under way being required to forward all pilotage messages through the VHF network. To promote efficiency further, all requests for pilotage service which can not be transmitted *via* the VHF system must be routed through the systems' information centres by land telephone or by coastal radio stations, thereby enabling pilotage stations to obtain from a single source all details of expected ships' movements and pilotage requests, i.e., the information they require to plan and effect the despatching of pilots.

(b) *Seaway Marine Traffic Control and Information Service*

The system (for operational details, vide Seaway Notice No. 2, 1970 (Ex. 1541(j))) operates the same way as the St. Lawrence River Marine Traffic Control System (vide Part IV, pp. 180 and ff.). In order to reduce radio traffic on the main channel and to restrict information and instructions of a local character to where they apply, the system for the radiotelephone operation is divided into seven "control sectors" (not counting the separate branch of the Seaway at Sault Ste. Marie), each with its own listening frequency; all ships while within a sector must keep their VHF radiotelephone open on the listening frequency and must switch to the listening frequency of the next centre when entering it. The Seaway's Notices to Shipping and weather information are broadcast at regular intervals and immediate warnings are given whenever an emergency situation

arises. While the immediate instructions regarding lockage operations are transmitted through a system of visual signals, a number of instructions that are necessary in the planning of these operations need to be transmitted to ships before they reach the lock; for instance, when there is no berth at the wait wall for the incoming ship she will be contacted by the Seaway operator concerned and instructed either to slow down, if the delay is expected to be of short duration, or to anchor in the last anchorage area before reaching the lock; in case of small ships, double lockage will be arranged through radiotelephone if at all possible and this may mean requiring a small ship to precede a larger ship.

All ships as they proceed through the system are requested to report as they pass the various check points by identifying themselves and stating their ETA at the next check point, their immediate destination and whether or not pilotage service is required at the next boarding area. Ships are requested to correct their ETA whenever it becomes apparent that it will be in error, plus or minus, by at least 30 minutes. They are also required to describe the weather conditions prevailing then at the check point or that they have met in the sector, together with any information that may affect the safety of navigation; in case of an emergency concerning safety, ships are required to transmit the information as soon as it comes to their knowledge. Ships departing from a berth elsewhere than in Lake Ontario or Lake Erie are required to give a minimum four-hour advance ETD, their ETA at the next check point, their pilotage requirement at the next pilot boarding station and their destination; similar reports must be given by vessels immediately after leaving a lake port. This information enables the Seaway Authority to prepare its safety and weather broadcasts and plan operations at the various locks so as to achieve maximum possible efficiency.

The information so obtained from vessels is passed to the pilotage station concerned so as to enable the despatchers to plan pilotage operations and make sure that ships will not be delayed because pilots are unavailable when they arrive at the boarding station. Here again, the procedure is the same as the one now in force on the St. Lawrence River, i.e., details of pilotage requirements have to be transmitted through the system when passing certain check points as indicated in the applicable Notice to Mariners and it is then the responsibility of the despatchers concerned to determine the time the pilot will be required at the boarding station to meet the ship. This he will do on the basis of the information transmitted to him by the information service of the system as to the progress of the ship throughout the Seaway.

The ship's VHF set is also used for ship-to-ship communications. As in the rest of the Great Lakes system, the radiotelephone is used to give security calls whenever a ship comes to a sharp turn in the channel or in places where the practice is not to meet. Security calls are also given

when fog prevails. The radiotelephone is also used by ships to arrange procedures for meeting and overtaking.

(c) *Marine Information Ontario*

With the 1969 navigation season the Department of Transport established for the Canadian waters of Lake Erie between Long Point and Southeast Shoal a marine traffic information service with the same procedure but limited to obtaining traffic information and pilotage requirements (Ex. 1541(i)).

The information centre, situated at Port Weller, is referred to as "Marine Info Ontario". The system is also based on VHF radiotelephone communication and operates on channel 12. The network is composed of a shore station located at Port Weller which controls peripheral satellite stations located on the Canadian shore of Lake Erie at Port Burwell and Leamington through which all messages pass. Upbound and downbound vessels are required to report on VHF channel 12 when passing the following calling-in points: Long Point light, a line joining Port Stanley and Ashtabula, and Southeast Shoal light buoy; upbound ships are to give their name, location and ETA next calling-in point or port of destination, whichever is the earlier. At Southeast Shoal calling-in point a ship proceeding past Detroit is required to give its ETA at the Detroit pilot change-point. Downbound vessels are required to give the same information and, in addition, to state at Southeast Shoal calling-in point, if making a Welland Canal transit, their ETA at Port Colborne and their pilot requirement there, any pilot requirement to be reconfirmed at the Long Point calling-in point. Vessels requiring a pilot at Port Colborne when downbound and unable to give 12 hours' notice of their ETA through the VHF system are required to send their pilotage requirement to Marine Info Ontario by commercial means.

There is no sanction provided at present for not complying with Marine Information Service requirements but vessels not reporting at the designated points and in the prescribed manner are warned that they may experience delays.

The purposes of the service are defined in the Notice to Mariners describing it (Notice to Mariners No. 23, '70 Annual Edition) as follows:

- to provide information for despatching pilots;
- to give the Seaway Authority as much advance notice as possible about the approach of vessels from the westward;
- to provide information to agents and the general public regarding vessels in the system.

An additional safety benefit results from the fact that ships are making their presence and intentions known and become aware of similar information from other ships navigating in the area.



Radiotelephone communications with shore stations are restricted to messages concerned exclusively with Seaway and pilotage operations and marine safety. No duplex facilities are provided and public correspondence and domestic messages are not accepted.

#### (5) ST. LAWRENCE SEAWAY REGULATIONS

The St. Lawrence Seaway Authority has made regulations setting forth, *inter alia*, the mandatory equipment and structures ships must possess to be allowed into the Seaway, lockage procedure and speed limits. For a brief review of these regulations and of the problems concerning navigation in locks and canals, reference is made to Part IV, pp. 906 and ff.

Speed limits are generally imposed for the protection of shore installations and to prevent shore erosion. Pilots and mariners in general are repeatedly warned against exceeding the prescribed speed limits. Notice to Mariners No. 31, '70 Annual Edition, under the heading "Navigation on the St. Lawrence River above Quebec and on the Great Lakes" contains the following caution:

*"Damage caused by excessive speed—Caution*

Since the opening of the St. Lawrence Seaway there has been an increase in damage ashore resulting from the passage of ships. This includes damage to beaches, wharves, boathouses, small boats and other property including land erosion. There has also been serious risk to lives of small children on or near beaches.

Masters and owners of ships may be subject to Court action for damages sustained by property owners as a result of wave disturbance caused by the passage of their ships. The size and intensity of waves at any given speed vary with the hull form and draft of individual vessels, and regulations designed to eliminate the possibility of this damage would require a speed limit sufficiently low to prevent damage by any type of ship. This can be avoided if masters, who know best the characteristics of their own ships, will moderate the speed of their ships as necessary, particularly when channels are close to the shore."

The Notice to Mariners then lists the points where special caution should be exercised and refers those concerned to publications in which specific speed limits are described.

Following complaints by shore residents about alleged damage that could have been done by the wash of speeding vessels, speed limits have been strictly enforced in District No. 1. Pilots found at fault were warned and some were even prosecuted in court. The enforcement of these speed regulations has resulted in a substantial increase in the average transit time in District No. 1 (Ex. 843).

#### (6) RULES OF THE ROAD FOR THE GREAT LAKES

This subject is studied in Part IV, pp. 927 and ff., to which reference is made.

## (7) SHIPPING LANES

The Dominion Marine Association, in co-operation with the Lake Carriers Association, has been instrumental in establishing separate shipping lanes or courses on the open waters of all the Great Lakes. These courses have now attained semi-official status; they are shown on all navigational charts as suggested courses.

This initiative has greatly enhanced the safety of navigation in the open waters of the Lakes by reducing the possibility of ships meeting at close quarters (hence, of collision) when navigating these waters.

This procedure, which used to be considered a special feature of navigation on the Great Lakes, is now being extended the world over wherever practicable and desirable. Through the Inter-governmental Maritime Consultative Organization (IMCO), international routing provisions have been introduced in many parts of the world so as to increase safety at sea and reduce the risk of large scale pollution. For details of IMCO's ships' routing provisions, vide Notice to Mariners No. 22, '70 Annual Edition.

## (8) RADAR

The pilots have stated that radar is a great safety factor, not only in the open waters of the Lakes but also in the connecting channels. Before the advent of radar, when fog prevailed in restricted areas pilots had to berth or anchor until visibility improved; they may now proceed, despite poor visibility, with the aid of radar. A further aid is the availability of radiotelephone which permits them to enter into radio contact with the target appearing on the radar screen, make known their presence and arrange for meeting.

## 2. NATURE OF PILOTAGE SERVICE

When the term "pilotage" is used with reference to the Great Lakes system it has a much wider connotation than previously in Canadian legislation before the enactment of Part VIA C.S.A. (vide meaning of the term "pilot", Part I, pp. 22-23). In particular, a distinction must be made between pilotage in designated and undesignated waters and consideration must be given to port pilotage, which is not provided for as such in Part VIA.

### (1) DESIGNATED WATERS PILOTAGE

Pilotage in designated waters, i.e., in the confined areas of the Great Lakes system, is pilotage in the Canadian meaning of the term: a service to assist Masters who lack the necessary local knowledge and experience furnished by fully qualified mariners who are expert in the navigation of local confined waters and do not become members of a vessel's complement while rendering their services.

By contrast with Part VI, Part VIA C.S.A. leaves no ambiguity about the status of such a pilot and his function on board: he is not merely an adviser on local matters but the navigator of the vessel. In designated waters, the Master commits the statutory offence of sec. 375D if he navigates his vessel himself or if he permits it to be navigated by anyone other than an official pilot registered for the waters concerned, whether or not there is a registered pilot on board. The local pilot must be the ship's navigator. The corresponding provision in the United States Act carries a qualification which does not alter the requirement, namely, the registered pilot "shall . . . direct the navigation of the vessel in those waters" and this "subject to the customary authority of the Master". This qualifying phrase does not give any authority to the Master over the professional actions of the pilot but the Master remains in charge of the vessel and the pilot becomes his servant as the ship's navigator only with reference to when and where to navigate the ship but not how this should be done. This does not prevent the Master from intervening in case of an emergency and taking over from the pilot if it is his opinion that for any reason the pilot is no longer fit to navigate the ship, e.g., physical unfitness due to sudden illness or drunkenness, or moral unfitness as demonstrated by reckless navigation and outright violation of the normal rules of prudence and seamanship or of the Rules of the Road for the Great Lakes. Such an emergency would occur when the ship's safety is endangered, thus exempting her from the compulsory pilotage requirements while the situation lasts (subsec. 375B (4)(b) C.S.A.; subsec. 8(b) United States Great Lakes Pilotage Act).

Designated waters consist essentially of the confined waters in the connecting channels between the Great Lakes, and in that portion of the St. Lawrence River between Lake Ontario and Cornwall. The confined waters of Great Lakes ports, irrespective of their navigational difficulties, have not been made designated waters as such. If some ports are included in the designated waters, it is because they happen to be situated within District boundaries or have been included within these boundaries to serve as pilotage boarding areas. Hence, designated waters pilotage, or as it is often called "in-District pilotage", is mainly river and canal pilotage and shiphandling in locks.

The required *expertise* for in-District assignments consists, first, of local knowledge and experience, then, principally of skill in navigating ocean-going vessels in the close quarters of narrow canals and channels through traffic, often under adverse weather conditions, and in piloting these vessels in and out of locks. Nowhere throughout the designated waters of the waterway is there any highly difficult situation created by physical features nor are there any strong currents and cross-currents such as those, for instance, in the Pilotage District of Montreal, especially in the harbour of Montreal. Except for weather conditions, the navigational situation does not vary to the extent that up-to-the-minute knowledge of local conditions is required, as is the case

in other pilotage areas, e.g., where tide is a factor. The local conditions that affect navigation are mostly constant in nature and are well described in the sailing directions and clearly indicated on charts. The rare changes are brought to the attention of all mariners through safety radio broadcasts and Notices to Shipping. Furthermore, the canals and channels are provided with a highly sophisticated network of aids to navigation, including radio beacons, so that the necessary local knowledge is relatively easy to acquire.

The art of navigating at close quarters and of shiphandling in the locks is not part of local knowledge but is a special skill which can neither be acquired nor maintained except through experience and continued practice.

In this situation it is a realistic feature of Canadian and United States Great Lakes legislations that the vessels which are identified as a group as regular traders in the Great Lakes system, i.e., United States and Canadian lakers, should be excluded from the application of the legislation and, hence, not affected by the pilotage requirements. After a few transits under the guidance of officers already familiar with local features and peculiarities, new officers in such lakers will soon be familiar with the few physical features likely to create difficulty *en route*. Ability to navigate his ship through narrow channels and canals and to handle her in the locks are qualifications a laker Master or officer must possess. Furthermore, since lake ships are constructed for this type of navigation, they are highly manoeuvrable in confined quarters.

Although local knowledge, especially in the St. Lawrence sector of the system, can be easily obtained, it remains a safety prerequisite. Navigational conditions were much more difficult in the Montreal/Kingston sector prior to the opening of the Seaway for there were many currents and rapids and approximately three times as many locks. The improvements resulting from the construction of the Seaway have made transits simpler and safer. However, all laker companies ensure that their vessels are navigated by officers with the necessary local *expertise* and a local pilot is employed for occasional trips through unfamiliar waters. For regular transits, however, some companies have organized their own pilotage system through what are called "relief Masters" who work under a special time agreement for seamen in the home-trade, inland or minor waters of Canada under secs. 172 and 173 C.S.A., and are employed for a named list of ships, all under the same ownership. To all intents and purposes they are company pilots. They are also used for training junior officers to acquire the necessary local *expertise*.

The safety record of these ships has proved that it is proper to exclude them from the application of compulsory pilotage. In the circumstances, compulsory pilotage would not only be unnecessary but might even be contrary to the interest of safety of navigation because the Masters and officers of lakers should normally be more competent than the pilots to navigate their own

ships in waters with which they are familiar and manœuvre them at close quarters, since long association has made them familiar with their characteristics, peculiarities and manœuvrability.

Occasional traders, especially ocean-going vessels, are in a totally different situation. In this connection, objection may be raised to the advisability of the general exclusion in the United States Act of all non-commercial vessels, thus leaving to the Masters of these ships the sole responsibility for deciding whether or not they can be safely navigated by their own officers in difficult situations. Another objection might be the lack of flexibility in the compulsory pilotage requirements as far as designated waters are concerned in that they do not provide any exemption for vessels whose officers possess the necessary qualifications to navigate their ships safely in those waters (personal exemptions, generally referred to as "B" certificates, as authorized by the Canadian and United States Acts apply only to undesignated waters). The administrative exemption the Minister of Transport is authorized to grant under Part VI A C.S.A. is not recognized in the United States legislation and, therefore, would have only limited application. In designated waters, it could apply only to ships' movements wholly in Canadian water—in practice, only Kingston, Sault Ste. Marie and the Welland Canal. In fact, this administrative power is never used for this purpose and serves merely to overcome disparity with the United States as regards categories of ships excluded from the application of the legislation (pp. 7 and 33).

This situation has resulted in the unnecessary imposition of a pilotage requirement on foreign ships which have been regularly engaged in inland trade between Canadian and U.S. lake ports, mainly British lakers which have now almost completely disappeared.

Not only do ocean-going Masters and officers in general have few opportunities to gain the necessary local knowledge on account of their infrequent trips, but most of them lack, and have no chance to acquire, the necessary skill to navigate their comparatively awkward ocean-going vessels in congested canals and narrow channels and the shiphandling skill required to proceed safely and speedily through locks. Such skill can be acquired only through long training and maintained through constant experience.

Ocean-going vessels with their high superstructure and flared bows are much more affected by winds, especially when light or partly loaded. This problem is further compounded by their inferior manœuvring ability at close quarters due, *inter alia*, to their type of engines and their smaller rudder as compared to lake vessels which are designed especially for greater manœuvrability in confined waters.

Any mishap or faulty manœuvring would not only damage the ship or ships involved but might close the Seaway for a considerable period of time. Furthermore, when the channel or canal passes through a densely populated area, e.g., the Welland Canal, the safety of the residents is also involved.

The availability of pilotage service is also an essential requirement for the efficiency of Seaway operations. In peak traffic periods, traffic congestion develops at the locks, even if operations there proceed at optimum speed; the situation would be aggravated considerably if Masters and officers unfamiliar with lockage procedures and shiphandling at close quarters were allowed to proceed through the locks on their own. Pilots bring their *expertise* to these ships and enable the Seaway to operate the locks at optimum efficiency.

## (2) UNDESIGNATED WATERS PILOTAGE

In Great Lakes pilotage legislation the term "pilotage" is used in its original meaning in connection with undesignated waters (excluding ports). It refers merely to the navigation of a vessel without connoting local knowledge or experience in a limited sector of confined waters and promises no more than general familiarity with navigation in the open waters of the Lakes.

The compulsory pilotage requirement is, therefore, basically different from the point of view of the status and function on board of the registered pilot while in undesignated waters. The pilotage service consists merely of placing on board at the disposal of a Master who has not among his crew a "B" certificate-holder a competent navigator with general experience in navigating the open waters of the Lakes. He is available if the Master wishes to consult him (in which case he is only an adviser) or to use his services (in which case he becomes the ship's pilot). If the Master does not make any use of his services, the pilot is nothing more than a passenger on board.

Navigation in the open waters of the Great Lakes is straightforward and can be performed by any qualified mariner provided, however, that he has familiarized himself with the few differences in navigational rules and customs:

- (a) the Rules of the Road for the Great Lakes which, in some respects, are at variance with the International Rules of the Road (for a study of the Rules of the Road for the Great Lakes, vide Part IV, pp. 927 and ff.);
- (b) the common practice on the Lakes of using separate courses or shipping lanes for upbound and downbound traffic as shown on charts (p. 114);
- (c) the extensive and mandatory use of ship-to-ship radiotelephone communications as a navigational aid, especially for meeting and overtaking, security calls, etc. (pp. 107-113).

That pilotage in undesignated waters is of secondary importance is apparent from Great Lakes pilotage legislation because the limit of the compulsory pilotage requirement, even for vessels whose officers are totally un-

familiar with the areas concerned, is that a registered pilot for the waters in question must be on board. He is readily available if the Master wishes to employ or consult him, but there is never any obligation to do so.

Apart from the slight differences in customs and rules already mentioned, navigation in the open waters of the Lakes does not differ from normal navigation except that ships are more frequently met. Long straight courses, clearly marked on charts, are followed and, when good weather prevails, the steering is entrusted to the automatic steering device, the "automatic pilot". The main responsibility of the officer of the watch is then to keep visual and radar lookout for possible encounters with other ships. Even this eventuality is quite remote because one-way lanes are followed. Radar is a necessary and efficient aid when visibility is poor.

Captain C. A. Bodensieck, then Assistant Operating Manager, Canada Steamship Lines, stated before the Commission that, in his opinion, average Master Mariners could sail the open Lakes without any assistance, provided they were familiar with the Rules of the Road for the Great Lakes. The same statement was made by a Canadian pilot registered for District No. 3 who pointed out, however, that Masters and officers of ocean vessels appeared to be insufficiently familiar with these Rules of the Road and claimed that they can not be learned in one or two trips. Pilot Bissonnette of District No. 2 expressed the same opinion and felt, therefore, that the "B" certificate should be retained as a way of ascertaining whether foreign officers are sufficiently versed in the Rules of the Road for the Great Lakes and local radiotelephone procedure.

### (3) PORT PILOTAGE

Port pilotage is true pilotage in the Canadian meaning of the term. Normally it consists of bringing a ship in from open waters to a berth through the congested, confined waters of a port and vice versa. It requires of pilots great skill in shiphandling and an intimate knowledge of port channels and berths, peculiarities and limitations, and up-to-the-minute knowledge of traffic and changing local conditions.

When a port is wide, deep and easy of access, pilotage is relatively unimportant and becomes merely a speedier, safer berthing service. When such conditions prevail, e.g., at Sept-Isles and Baie-Comeau on the St. Lawrence River, port pilotage may be efficiently provided by any qualified shiphandler. In most ports, however, very difficult navigational conditions exist for a number of reasons. They are generally located at the mouth of a river, with the result that navigation and berthing are affected by currents, cross-currents and eddies. Most ports have been in existence for many years and the limit of their channels and facilities has often been reached. Even such improve-

ments as are practicable can not keep pace with the increasing demands of fast changing modern ships. These difficulties are compounded when the port is very active and constant traffic prevails—Saint John (N.B.) and the upper harbour of Montreal are extreme examples. In such cases, the highest degree of shiphandling skill is required but this alone is totally insufficient: the pilots in these harbours must truly be pilots—not merely berthing Masters—and must have intimate knowledge of port features, conditions and peculiarities, traffic, currents and cross-currents and depth of water, together with constant experience in operating all types of vessels under all conditions. Such essential *expertise* can not be obtained in a general way or maintained through an occasional voyage. If this situation is not recognized, the result is inadequate, inefficient port pilotage service which will adversely effect port operations, delay ships, increase their charges and add to the risks of navigation.

Changing local conditions present few problems in Great Lakes system ports. Since there is no tide, currents are mainly uniform and in most ports there are no significant changes in water level. Any changes in level in ports situated on the shores of the Lakes (not in the connecting channels) are small, except for a few ports situated at both ends of Lake Erie (p. 84). The causes of this phenomenon are well known and information about actual water levels is readily available from data supplied by the Department of Transport and the United States Coast Guard. The main difficulties encountered in most ports are caused by narrow channels, lack of room to manœuvre and crowded traffic. However, a combination of these conditions occurs in few ports. Therefore, the need for port pilotage to enhance the safety of navigation varies greatly from place to place and, in certain cases, can be justified only for non-regular traders. Since conditions are stable, familiarity with the confined waters of a port is easily gained and maintained by regular traders. On the other hand, experience has proved that non-regular traders—even in ports easy of access, with ample room to manœuvre and little or no traffic—generally take the prudent course of employing a local pilot wherever such services are available.

Because of the compulsory pilotage requirement throughout the Great Lakes system, including open waters for all ships not qualifying as regular traders, United States and Canadian Great Lakes pilotage legislations do not specifically provide for separate port pilotage service. Non-regular traders are required to have a registered pilot on board at all times while within the system; port pilotage, including berthing and unberthing, is considered accessory to river or lake pilotage assignments. Because local *expertise* can be easily obtained and maintained, the presence of a registered pilot on board all non-regular traders in designated waters, and most of them in undesignated waters, reduces considerably the need for separate local port pilotage services.



However, Great Lakes pilotage legislation does not apply to all vessels. Moreover, in undesignated waters, personal exemptions ("B" certificates) may be obtained by ships' officers, provided they can prove their general familiarity with the navigational features and practices followed during transits of these open areas. In certain ports in undesignated waters where a demand for pilotage existed, these exclusions and exemptions, together with the added advantage of having experienced local experts, have given rise to the creation of a local port pilotage service by unlicensed, unregistered pilots, generally selected by the port authorities. In most ports, local pilotage assistance may be obtained unofficially.

Vessels subject to Great Lakes pilotage legislation face two situations as far as port pilotage is concerned, i.e., in ports within designated waters and in those situated in undesignated waters on the fringes of the open waters of the Great Lakes.

Very few ports in the first category are visited by vessels employing registered pilots. The main ones are Detroit and Toledo in the western sector of District No. 2, and, to a much lesser extent, the ports of Kingston and Sandusky, both just inside the designated waters limit. The situation here with regard to pilotage is the same as for any river pilotage such as exists in the New Westminster District and the St. Lawrence Districts of Quebec, Montreal and Cornwall. Ships arrive at those ports after a long river trip and it is part of the pilots' assignment to bring them into port and berth them if their destination is a port within the District for which they are licensed or registered. It is part of each pilot's training to be fully familiar with the local peculiarities of each of the ports within his District and such knowledge is easily maintained by the frequency of his visits during the normal course of his duties. In these circumstances, in view of the fact that a pilot is already on board incoming vessels, the creation of a separate group of harbour pilots is not economically warranted unless extreme conditions exist (for the study of the advisability of instituting separate harbour pilotage service for the harbour of Quebec, vide Part IV, pp. 322 and ff.).

In designated waters, there is very little demand for port pilotage which is not an accessory to a trip assignment, e.g., movements and services required by excluded vessels. This poses no problem if pilots are generally readily available, as is the case if the port contains a pilot station or is situated near one; or if pilots are usually in the vicinity on account of the large number of vessels calling there. Intermediate ports with little pilotage traffic pose serious problems of cost but they are cases of exception and are treated as such. Since it would be an unwarranted discrimination against these ports to charge vessels the travelling expenses of pilots from and to the nearest pilot station, they are absorbed in the operating costs of the District and are taken into account when uniform rates are established. The incidence of such local demands is very small.

However, ports situated in undesignated waters are in quite a different situation. There is greater demand for port pilotage from vessels without a pilot on board because of the fact that, in addition to the occasional excluded vessel which may make use of the local pilotage service, there are also a number of vessels which enjoy an indirect exemption because they have a "B" certificate-holder on board. These vessels, therefore, arrive off ports without a pilot on board and, although there is no obligation for them to employ a pilot to enter and be berthed, if this is desired (and this is the custom with ocean-going vessels), they may ask for an official pilot registered for the undesignated waters in which the port is situated. They also have the choice (and this at their entire discretion) of accepting the service of any other person offering his services as a pilot. By contrast with the requirement under Part VI C.S.A., exclusions and exemptions place the vessels concerned completely outside the application of Part VIA and the United States Great Lakes Pilotage Act, just as if these two Acts did not exist for them (pp. 6-7 and 32).

Therefore, parallel with the registered pilot system there are a number of non-official and voluntary pilotage services, where there are good local reasons and sufficient customers. If a local pilotage service exists, vessels with no registered pilot on board normally take advantage of it. Although none of the Great Lakes ports situated in undesignated waters present serious navigational difficulties which an occasional call would not generally suffice to solve, the knowledge required for safe navigation and efficient service can not be maintained unless the registered pilots call frequently and regularly, and their *expertise* with regard to any port will not match that of a competent local pilot who is exclusively engaged in local pilotage assignments. A large number of ports are situated in undesignated waters and, since most Lake assignments (except on Lakes Superior and Michigan) are transits, the registered pilots have little occasion to call, even at the most important Lake ports, and, in fact, there are a number of ports which some pilots do not visit at all within one or more navigation seasons. Therefore, they have little opportunity to gain and maintain the required local *expertise*. Hence, the registered pilots are unlikely to match local pilots in the provision of port pilotage services. This explains why, when the need arose for it, port authorities not only encouraged the formation of a local service but also organized such services themselves and provided them to shipping on a voluntary basis in order to enhance the safety of navigation and increase the efficiency of port operations. Toronto and Hamilton are examples. Until recently, in addition to their in-District assignments, District 2 pilots were called upon to perform port pilotage in any of the ports situated in the undesignated waters of Lakes Ontario, Erie, Huron and Michigan. The *expertise* of these pilots in these numerous and widely separated ports could only be general, with the result that they were really Sailing Masters rather than true pilots in

these situations. This has since been corrected to some extent. The policy now is to restrict District pilots to in-District assignments and leave port pilotage in ports situated in undesignated waters to registered lake pilots.

Because of the added advantages provided by a local pilot, some vessels with a registered pilot on board employ a port pilot, despite the resulting extra cost. However, since 1962, in such cases, the berthing and unberthing charges payable to the registered pilot when he performs such services have been saved.

When Capt. F.S. Slocombe of the Department of Transport testified before the Commission, he stated that they received complaints from shipping companies that District and lake U.S. registered pilots when in undesignated waters on board vessels bound to Toronto or Hamilton informed Masters that they were not familiar with these harbours and that local pilots were available. The Masters took the hint and usually ordered a port pilot who performed piloting in and out of harbour and berthing and unberthing. The Shipping Federation complained that this was an abuse since it resulted in added pilotage costs. It appears that the reason was lack of financial incentive because their remuneration remained the same whether or not they handled berthing or unberthing. To resolve this situation, a \$25.00 berthing and unberthing charge was added in 1962, provided the manoeuvre was carried out by the pilot. It is reported that the effect was a complete change of attitude; the formerly offending pilots became quite confident of their ability to pilot in Toronto and Hamilton and even expressed indignation at the employment of port pilots. The port of Hamilton authority complained in their brief to this Commission that this particular incentive was endangering the safety of the port; they pointed out that District and lake pilots had little or no experience of changing local conditions in the port but because of this additional fee they were likely to run unnecessary risks to obtain it, rather than advise Masters to take a harbour pilot.

This obviously was not the sole reason. A sizeable number of registered pilots must have found themselves too unfamiliar with these ports to undertake assignments and, despite the financial incentive, vessels with registered pilots on board continued to employ port pilots (vide breakdown of Toronto port pilotage, p. 132). The situation gradually changed as District 1 and District 2 pilots were limited to in-District assignments, and Lake Ontario assignments were concentrated among the small group of Lake Ontario pilots who thereby gained the required familiarity with these ports because of their frequent calls.

Under the governing legislation, the sole obligation for a vessel subjected to the limited compulsory requirement for undesignated waters is to have a registered pilot on board. Once this requirement is complied with, the Master is at liberty to act as if the pilotage legislation did not exist and, therefore, to employ local port pilots if he sees fit to do so. This was the

interpretation given by the Canadian authorities to the legislation but these views were not shared by the United States Administrator when he came under the Department of Commerce. The Canadian authorities have been considering Toronto and Hamilton port pilotage perfectly legal, provided it was offered on a voluntary basis and no infraction of Great Lakes pilotage legislation was committed. Hence, it was legal for an un-registered harbour pilot to pilot or handle excluded or exempt vessels in any circumstances. It was legal for him to pilot non-exempt vessels in ports situated in undesignated waters, provided the requirement of sec. 375B had been complied with, i.e., there was on board a registered pilot whose services were not used, or there was a "B" certificate-holder on board, or a waiver was issued. This view was not shared by the United States Administrator who claimed that the spirit of the Memorandum of Arrangements was being violated in that under it all pilotage services required in the Great Lakes system were to be provided by registered pilots. This view, which is not based on the clear text of both United States and Canadian statutory Great Lakes pilotage legislation, appears to have resulted from the influence of the United States system in that pilots, because they are necessarily private entrepreneurs, endeavour by all possible means to enlarge the application of legislation in order to increase their sources of revenue.

Port pilotage by registered pilots is also occasionally a serious waste of valuable time and a costly undertaking. Pilots sometimes have to be despatched many miles merely to attend to assignments for the benefit of a vessel not required to take a pilot in undesignated waters but requesting a pilot simply for port pilotage. If no pilot happens to be in the locality concerned, one then has to be provided from the nearest pilotage station by land or air transportation or has to travel with the ship as a passenger in order to be available when she reaches the approaches to the port where his services will be needed.

The provision of port pilotage services by a registered pilot is dependent upon the limited compulsory pilotage requirement for the undesignated waters of the Lakes. As stated earlier, the actual presence of a pilot on board a non-exempt vessel does not correspond to a genuine need but results from the obligation imposed by the law. If this obligation were to be abolished, the demand for port pilotage would increase greatly. It is common knowledge that, while Masters of lakers berth and unberth their vessels, even when they have a pilot on board, the reverse is true of ocean-going vessels whose Masters will, as a rule, take advantage of a local pilotage service for that purpose. This is shown again by the fact that the employers of port pilots are ocean-going vessels which have taken advantage of the "B" certificate procedure.

Such independent and voluntary port pilotage service exists in Hamilton (now serviced by Toronto pilots), Toronto, Chicago and, to a lesser extent, in other ports. It also still exists at Thunder Bay and Duluth but the former

private organizations have been taken over by District 3 registered pilots who have established pilot stations in these ports.

(a) *Port Pilotage Organization, Hamilton Harbour*

When the Shipping Federation discarded the former Sailing Master system and replaced it with pilotage service in only the confined areas of the Great Lakes waterway, i.e., in the connecting channels, and allowed ocean-going vessels to navigate freely in the open waters of the Lakes, a need for local port pilotage services developed. Then the Shipping Federation urged the port authorities of the most important ports to organize their own pilotage service. The Hamilton Harbour Commissioners proceeded with the formation of their service in 1959 because they had found that ocean-going vessels were inclined to wait outside the entrance to the harbour, particularly in bad weather, until they obtained assistance to enter. Since these vessels were in the habit of calling the Harbour Master's office for a pilot, it was decided that the Harbour Corporation should have pilots in its own employ to prevent delay.

The port authorities had tried to have their pilotage service officially recognized and to make it compulsory, but there was a great deal of opposition from the shipping lines because they felt that it should be left to individual Masters to decide whether they needed assistance or not. However, the port authorities consider that the harbour installations are adequately protected by the voluntary system they have created because no Master who is unfamiliar with the harbour would risk his vessel unnecessarily.

After the enactment of the Great Lakes pilotage legislation, the Commissioners asked the Department of Transport to have their harbour pilots given official status under the new legislation for registered pilotage in Hamilton harbour and the immediate vicinity. This request was not granted.

At one time, however, the Department of Transport suggested that one or more of the registered pilots be allocated to Hamilton but under the direction and control of the Great Lakes Pilotage Administration and not of the port authority. The Hamilton Commissioners opposed the suggestion on the ground that the integration of their various services, such as towing, pilotage and aids to navigation, is most important for the efficient operation of the port.

Hamilton harbour is administered by a Corporation created by the Hamilton Harbour Commissioners' Act in 1912 (2 George V c. 98 (Ex. 521)). The Corporation consists of three Commissioners, one of whom is appointed by the Council of the City of Hamilton, and two by the Governor in Council. The harbour, as defined in the Act, includes "all the waters of Burlington Bay and what is known as Cootes Paradise, together with all

the inlets thereof (excepting however, Burlington Channel), and also all water-front property, water lots, piers, docks, shores and beaches in and along the said bay and waters.”

The only provision in the Commissioners' By-laws concerning port pilotage refers to the charges a vessel is to pay when an employee of the Corporation is engaged as a pilot to move the vessel in and out of the harbour or within the harbour and when a pilot vessel is provided by the Corporation for that purpose (P.C. 1960-1182 dated August 24, 1960, as amended by P.C. 1962-214 dated February 15, 1962). The other provisions the Commissioners had included in their regulations for the purpose of regulating pilotage in the harbour did not receive the sanction of the Governor in Council and, therefore, were deleted.

Port pilotage was organized for two reasons: first, to meet the demand by Masters for such service and, second, for the protection of the shore installations.

The Harbour Master's office is equipped with radiotelephone and a Seaway teletype service for the purpose of allocating berths and providing port pilots and tug assistance. Tugs equipped with radiotelephone are made available on a 24-hour basis. The Corporation claims that its tug service and pilotage service are operated as a whole and can not be economically operated if one part is separated from the other. The competition to harbour pilots by registered pilots raises the question of economics. At the Commission's hearings, the harbour authority stated that, if the harbour pilots are not employed regularly, the Corporation will have to discontinue the towing service since the harbour pilots operate both pilot and towing service together on an integrated basis.

The entrance to the port is through the narrow Burlington Channel. The main navigational hazard is the cross-current that may be encountered at the entrance running possibly four to five knots depending upon the direction of the wind.

At the time of the Commission's hearings, pilotage was provided by three harbour pilots who were employees of the harbour authority and paid an annual salary to provide both tug and pilotage services.

The following table based on statistics provided by the harbour authority shows the extent of port traffic, divided into domestic and foreign, and the use made of the pilotage service.

The harbour authorities stated that they would like to have full control and supervision over pilotage within the limits of Hamilton harbour and its approaches to the fairway buoy.

The general criticism of District and lake pilots was their lack of local experience and knowledge.

Year	Domestic Vessel Arrivals	Overseas Vessel Arrivals	Overseas Vessels Employing Harbour Pilots*	Number of Ships Employing District or Lake Pilots
1959.....	n/av.	n/av.	293	n/av.
1960.....	n/av.	n/av.	525	n/av.
1961.....	1,024	383	332	n/av.
1962.....	1,071	513	492	n/av.
1963.....	1,044	500	376	201
1964.....	1,174	542	424	346
1965.....	1,151	528	412	327
1966.....	1,141	521	361	344
1967.....	960	529	366	420
1968.....	1,131	330	177	374
1969.....	1,056	306	131	310

\*Counting inward, outward and in-harbour movements separately.

SOURCE: Ex. 1541(k).

It was submitted that registered pilots are not the equals of the harbour pilots in continued experience navigating the entrance channel and in the harbour, knowledge of up-to-the-minute changes in currents, traffic and other navigational conditions and familiarity with certain berths and slips. The result is that in adverse weather registered pilots are likely to delay ships at the outer anchorage until conditions improve and, if they proceed in, their uncertainty may endanger ships' safety. To support this assertion, the case of *M.V. Patignies* was quoted as an example. In 1962, she entered on the wrong side of Burlington Channel and "rubbed the bottom" before finally getting through; once inside the harbour, a harbour pilot was employed for berthing. On November 30, 1962, *M.V. Dagan* left her terminal in dense fog with a lake pilot on board and went aground when approaching Burlington Channel (Ex. 1105).

Harbour pilots were also involved in minor casualties, e.g., *M.V. Federal Pioneer* which grounded Nov. 30, 1960; *Algernib* whose spar touched the bascule bridge on the way in June 1, 1962, and also on the way out; in 1960 or 1961, the *Crystal Gem* grounded and twisted her rudder while being towed from the Dominion Foundry berth.

There are approximately 65 open berths in Hamilton.

The only customers for port pilotage are ocean-going vessels. Over the ten-year period 1959-1968, only three domestic vessels employed a pilot to enter the harbour, in each case a harbour pilot.

There are several lines operating into Hamilton which insist on having a harbour pilot on board as a matter of policy.

When a ship arrives with a District or a lake registered pilot on board and a harbour pilot is called for in addition, the District or lake pilot remains on board but the harbour pilot takes charge of navigation from the fairway buoy, brings the ship in and berths her.

The rates for voluntary harbour pilotage service are fixed by sec. 139 of the Harbour General By-law (P.C. 1969-993). There are two scales depending upon the size of the vessel, i.e., over and under 260 feet in length. There is a rate for a round trip, i.e., pilotage inward and pilotage outward (originally, \$30 and \$50 raised to \$50 and \$60 in 1962); a rate for a one-way trip either inward or outward (originally \$20 and \$30 raised to \$30 and \$40 in 1962) and, finally, a rate for a moorage (\$15 and \$25 raised to \$25 and \$30). The pilot boat charges are of three types:

- (i) for embarking or disembarking a pilot outside the harbour entrance (\$15 raised to \$18);
- (ii) to or from the anchorage inside the harbour (\$10 raised to \$12);
- (iii) for assisting in handling a vessel's lines while mooring or moving, but not including tug service (\$10 raised to \$15).

In 1962, another item was added combining items (i) and (iii) (\$28). There is also a \$20 per hour detention charge when there is undue delay to the pilot vessel because of the failure of a Master to take service at ordered time.

In 1966, a series of disputes arose between shipowners whose vessels had "B" certificate-holders on board and the Cape Vincent pilot pool with regard to providing District or lake registered pilots for harbour pilotage in Toronto and/or Hamilton. The practice seemed to have developed that the Cape Vincent despatcher would ask vessels with "B" certificate-holders on board bound for Toronto or Hamilton whether a pilot would be needed for these harbours. Vessels which had replied in the affirmative were met at the entrance of the harbour concerned by the harbour pilot vessel with two pilots: a registered pilot and a harbour pilot. The harbour pilot was employed and the registered pilot was refused on the ground that he had not been ordered. Those vessels, however, which paid for the services of the harbour pilot were also invoiced by the Cape Vincent pool for the registered pilot on the ground that his services had been requested. The companies concerned declined the payment and, in order to put an end to this practice, the Shipping Federation issued two circular letters dated September 8 and October 17, 1966, to all its members indicating the procedure that should be followed by vessels with "B" certificate-holders on board to obtain the services of local port pilots without meeting these difficulties, i.e., never to order a harbour pilot through Cape Vincent despatching office but from the Toronto or Hamilton Harbour Master locally through the ship's agent



or directly by radiotelephone (Ex. 1541(c)). This was obviously a stratagem on the part of the Cape Vincent pilots' pool to increase its pilotage revenues. This practice has since been discontinued.

The importance of Hamilton pilotage service has been steadily decreasing with the gradual decrease in its main users—vessels with “B” certificate-holders on board (pp. 138 and ff.). At the beginning of the 1967 shipping season, the port pilotage staff was reduced to one port pilot, assisted by the Harbour Master when necessary, and the port authority has discontinued operating the pilot vessel and tug services. Under arrangements made by the port authority, these are now provided, when needed, by a private contractor. Finally, in the 1970 season, the harbour authority ceased to have harbour pilots of its own. It was realized that any Hamilton pilotage requirements not attended to by District and lake registered pilots could be satisfactorily provided by the port pilots of Toronto whose services were readily available. Therefore, the Hamilton Harbour Commissioners have arranged on a trial basis for its pilotage service for the 1970 shipping season to be supplied by the Toronto Harbour Commission (Ex. 1541(k)).

(b) *Port Pilotage Service, Toronto Harbour*

Toronto harbour is governed by the Toronto Harbour Commissioners' Act, 1911 (Ex. 516) under which the operation of the harbour is entrusted to five commissioners who constitute a corporation under the name of *The Toronto Harbour Commissioners* (1-2 Geo. V c. 26).

Toronto, like Hamilton, experienced a need for port pilotage as a result of the re-organization of the Great Lakes pilotage services by the Shipping Federation in 1958 when the former Sailing Master system was abolished and regulated pilotage services were limited as much as possible to the confined waters of the connecting channels. The immediate results were that there was no pilotage in the open waters of the Lakes, when vessels reached port they had no pilot on board and ocean-going Masters, who as a rule always employ port pilots for navigation in and out of harbour and for berthing, requested local pilots.

At first, the port authorities refused to accept responsibility for establishing their pilotage service and, under the circumstances, the shipping interests were obliged to organize one of their own. In 1959, the Department of Transport, at the request of the harbour authority, supplied Captain W. Cook, a pilot qualified for the Port Weller area and also with special qualifications for pilotage in Toronto. The Department of Transport, however, removed him after only a few days because there was allegedly no real requirement for his services there and, furthermore, his services were urgently needed in the Welland Canal. Various other qualified mariners were employed as port pilots by different companies. In 1960, the shipping interests in Toronto combined

their efforts and made arrangements with Captain D. Livingstone to be on call as a local pilot. The Toronto Harbour Commissioners contributed to this voluntary system by supplying an office and facilities free of charge. During this period they studied the advantages and feasibilities of operating their own service and began to do so in 1961, with the full knowledge and approval of the Department of Transport. They then hired Captain Livingstone as their permanent employee, with all the attendant fringe benefits, and established the charges payable to the port authority for pilotage services which, however, remained voluntary. In 1962, the number of port pilots was increased to two.

The harbour authority tried to make this service official by providing full coverage for it in the Toronto Harbour Commissioners' By-law, but the required sanction was refused except for the schedule dealing with rates. In the circumstances, the harbour authorities simply withdrew the proposed amendments and have operated the service ever since on a purely contractual basis at the request of individual Masters.

At the Commission's hearings, the Harbour Commissioners stated that there is no need for compulsory pilotage in the port but added that, if any pilotage service or any advisory assistance is to be given to Masters of ships, this can best be done under local control because those in charge know the requirements of the port both physically and economically. Port pilots have far better knowledge of day-to-day local conditions and should reasonably be expected to be better qualified than pilots who consider Toronto as simply one port in the large area where they serve. From a physical point of view, the Commissioners considered the port extremely safe but they pointed out that all ports have their own peculiarities. There are local conditions in Toronto, e.g., berthing, ferries to and from Toronto Island and regattas in the bay, which must be taken into consideration for safe navigation. The Commissioners were also of the opinion that discipline can best be handled by a local authority, and that the harbour installations are adequately safeguarded by their voluntary system of pilotage.

It is the opinion of the Harbour Master that Masters employ local pilots primarily because of their local knowledge, especially of movements within the harbour, which enables them to speed up movements and berthing.

A representative of the Shipping Federation stated that local pilots are used in Toronto to save time and money. Although a Master might be qualified to take a ship anywhere in the world, a faster operation usually results when a local pilot is employed for entering harbour. This is particularly relevant when stevedore gangs have been ordered for a specific time. It appears that the majority of agents for ocean-going vessels employ local pilots and have found them completely satisfactory.

When a harbour pilot is ordered he embarks from the local pilot tug in the harbour approaches at the fairway buoy.

In 1964, the normal work week of the Toronto pilots was 40 hours. Each eight hours of aggregate time worked on statutory holidays or in excess of 40 hours per week on regular work days entitled them to one day's vacation at the end of the season. In addition, after a year's employment, each pilot was entitled to ten working days' vacation. Sick leave credit was accumulated after one year's service on the basis of 1½ days per month's service. The pilots were also entitled to all other permanent staff benefits in accordance with the rules and regulations, i.e., pension, group life insurance, Ontario Hospital Insurance, Workmen's Compensation, Blue Cross supplementary and PSI.

The fringe benefits available to pilots in Toronto were on the basis of a full year's salary, although they worked only part of the year. It was estimated by the Toronto Commissioners that the fringe benefits were equivalent to approximately 35¢ an hour.

The Toronto Harbour Commissioners stated in a letter dated Sept. 2, 1970 (Ex. 1115) that the voluntary port pilotage service has remained essentially the same; the number of port pilots has remained at two. The rates, however, have been increased to \$80 for inward and outward pilotage and \$50 for a one-way service or a movage. There is a detention charge of \$5 after the first hour when a pilot is detained on board for the convenience of the vessel. The procedure to obtain a port pilot is to give 12 hours' advance notice of requirement and confirm it three hours ahead of time.

Toronto experienced the same difficulties as Hamilton with the Cape Vincent despatching office but these have since been resolved.

As in Hamilton, the port pilotage users are almost exclusively ocean-going vessels with "B" certificate-holders on board. Since the inception of the port pilotage service in 1961, port pilots have been employed by domestic vessels on approximately six occasions only.

The following table, computed from the Harbour Master's statistics, shows clearly the number of vessels which employ port pilots and the degree of importance of this service.

The local demand for port pilotage has decreased steadily in recent years for two main reasons:

- (i) the diminishing number of "B" certificate-holders;
- (ii) the increasing local *expertise* of the registered pilots.

The pilotage assignments in Toronto which are performed by registered pilots have been restricted to a smaller number of pilots, and now are almost exclusively performed by the Lake Ontario pilots. For a number of years, District No. 1 pilots have not performed any assignment outside their District and District No. 2 pilots are now very seldom called upon to perform any assignment in the undesignated waters of Lake Ontario. Since Toronto is

*Study of Pilotage in Great Lakes System*

Year	Number of Arrivals and Departures		Number of Times Port Pilots Employed			
	Domestic	Overseas (No. of vessels involved shown in brackets)	Total	With "B" Certificate	With Registered Pilot on Board	With Waivers
1961.....	2,742	1,628 (275)	804	Not available	Not available	Not available
1962.....	2,646	2,008 (319)	1,015	769	246	Not segregated
1963.....	2,544	1,988 (297)	805	595	210	Not segregated
1964.....	1,908	2,157 (340)	752	657	53	42
1965.....	1,686	2,276 (362)	780	623	40	117
1966.....	1,626	2,288 (353)	680	640	15	25
1967.....	1,442	2,374 (379)	632	615	4	13
1968.....	1,470	1,788 (359)	417	407	2	8
1969.....	1,522	1,862 (355)	313	305	—	8

SOURCE: Ex. 1115. Harbour Master's Office, August 4, 1970.

the busiest port where they operate, each of the 14 Lake Ontario pilots has made more frequent calls and become much more familiar with it than were the District No. 1 or No. 2 pilots.

The same factors have also caused a gradual decrease in the port pilotage demand in the neighbouring harbour of Hamilton. In 1970, the workload of the Toronto pilots permitted integration of the two services and two Toronto pilots now attend to both ports.

The following table prepared by the Toronto Harbour Master's office shows the distribution of port pilotage on a monthly basis. Except for the first and last months of the season, which are not complete months, pilotage work is spread quite evenly throughout the navigation season.

PILOTAGE SERVICES PERFORMED BY TORONTO HARBOUR  
COMMISSIONERS' PILOTS  
1961-1969

	1961	1962	1963	1964	1965	1966	1967	1968	1969
April.....	44	53	51	51	43	47	47	41	17
May.....	116	154	124	91	105	109	98	64	44
June.....	130	147	114	109	98	73	74	48	46
July.....	54	150	107	86	125	51	95	30	40
August.....	62	117	88	98	83	98	77	58	36
September.....	103	133	96	92	98	102	82	44	24
October.....	149	128	97	96	116	100	75	52	44
November.....	146	138	117	123	107	87	56	56	54
December.....	—	—	11	6	5	13	24	24	62
	804	1,015	805	752	780	680	632	417	313

SOURCE: Harbour Master's Office, August 4, 1970.

(c) *Port Pilotage Service, Other Ports*

Toronto and Hamilton are the only Canadian ports in the Great Lakes system where an organized pilotage service exists. In a number of other locations pilotage assistance was, and still may be, available on a strictly private basis.

It appears that the situation is the same in United States as in Canadian waters. Sec. 9 of the United States Great Lakes Pilotage Act of 1960 goes no further than to prohibit states, municipalities and other local authorities from making pilotage compulsory or regulating it in waters otherwise within their jurisdiction. Unless a prohibitive legislative provision can be found in some other statute, a port pilotage service may be organized and offered on a private, voluntary, contractual basis by municipalities, port authorities or private citizens or corporations. Mention was made at the Commission's hearings of port pilotage being performed at Chicago and Bay City by local men who are not registered as pilots. It appears that the Chicago pilots still continue to provide service in the Chicago area, presumably to vessels not affected by the pilotage provisions of the United States Act, or which have complied with its requirements. In 1961, a gentleman's agreement was drawn up between Districts No. 2 and No. 3 pilots and the Chicago pilots, a group which apparently had been in existence for a number of years. To enable the Lake Superior Pilots' Association (District No. 3 pilots) to play its expected rôle in the Chicago area, it made the foregoing agreement with the Chicago pilots to the effect that their pilot vessels and despatching facilities could be used whenever a ship required or requested a registered pilot.

In 1959 and 1960, the Shipping Federation of Canada had organized a private pilotage system at Duluth and the Lakehead (now Thunder Bay). These private services disappeared when the Great Lakes District 3 pilot organization stationed registered pilots in those ports for the very purpose of attending to port pilotage requirements, a system that was tried without success in Toronto and was refused by the Hamilton port authority.

Although there was a need for port pilotage, the Lakehead Harbour Commissioners declined to assume responsibility for it because of the financial implications.

When the St. Lawrence Seaway opened in 1959, very few ocean-going vessels called at the Lakehead and the limited port pilotage requirements were met by a private system organized by a local agent at the request of the Shipping Federation of Canada. The Department of Transport was well aware of these arrangements and did not consider taking over this responsibility because its policy was not to assume increased pilotage commit-

ments and, if a private concern was operating a system satisfactorily, there was no reason for the Department to interfere. Port-Cartier (Part IV, p. 542) was cited as a typical example.

Before the existing pilotage system was organized, it appears that several complaints were lodged against this private system on the ground that the shipping agent concerned was running the organization to the disadvantage of other shipping agents. At the opening of the navigation season in 1961, as an interim measure pending the organization of District 3 jointly by the United States and Canadian authorities, the Department of Transport registered two pilots who had been in the employ of the agent to perform port pilotage at the Lakehead. Early in 1962, District No. 3 was organized. Three registered pilots were stationed at the Lakehead to handle traffic and a despatcher was appointed. Since these pilots were not limited to harbour pilotage duties, they were often absent from the harbour for extended periods of time when on assignments from the Lakehead which might take them not only through Lake Superior and the designated waters of District No. 3, but also to Port Huron and even as far as Lake Michigan ports. In these circumstances, there was often a local shortage which necessitated bringing pilots either from Duluth or Sault Ste. Marie. In accordance with the tariff then in force, the considerable travelling expenses involved were charged to the vessels concerned and this caused disproportionately high pilotage fees which the Lakehead Harbour Commissioners considered detrimental to the port. Consideration was then given to establishing a true port pilotage system as in Toronto and Hamilton. In the end, the difficulties were solved to the satisfaction of the Commissioners.

At the time of the Commission's hearings, the Secretary of the Harbour Commission stated that the three registered pilots stationed at the Lakehead were sufficient to handle the foreign ships which required pilots, that the arrangements were working satisfactorily and that there had been very few complaints. At that time, the harbour had averaged about 150 foreign-going ships over the four preceding years.

With respect to the feasibility of setting up separate port pilotage for the Lakehead, the Secretary added that the economics of the system would need careful investigation. If it could be self-supporting, the Commissioners would consider it but not if a subsidy would be necessary.

*(i) Ports situated on the fringe of designated areas*

There are ports situated on the fringe of District limits which were included in designated waters either to serve as boarding areas or simply by chance.

They have direct access to the open waters of the Lakes just like ports in undesignated waters and the navigational problems they present are similar or even simpler. The fact that they have been included in a designated area

may have an adverse effect because, apart from the increased cost of comparable pilotage assignments, vessels with a "B" certificate-holder on board can not benefit from indirect exemptions since these are limited by legislation to undesignated waters. This factor may become academic as the number of "B" certificates decreases but the whole problem would revive in an acute form if the compulsory pilotage requirements in the open waters of the Lakes were abrogated.

Port Weller and Port Colborne fall in the first category, i.e., they were included mainly because they are situated at the extremities of the confined waters of the connecting channels and were obvious choices as boarding areas. Kingston and Sandusky are examples of the second category, i.e., they are in designated waters merely because they happened to be on the District side of the straight line which designates the limit.

(ii) *Port Weller and Port Colborne*

These ports serve both as the entrance to a connecting channel and a pilotage boarding area. Their chief problem is that the governing legislation does not distinguish between the two functions. While it is quite logical for vessels on inward transits to embark a pilot off the harbour where there is ample sea room, it is an unreasonable requirement that vessels destined to that port must employ a pilot simply because it happens to be within designated waters. The reverse is even more unreasonable since a departing ship is heading for open water, and a pilot is not needed unless there are unusual difficulties, which is not the case in these two ports.

After years of experience, the problem was partly solved for Port Weller. Originally, the District limits extended in all cases to the seaward approach of the port and District 2 pilots had to embark or disembark at the beginning or completion of each in-District trip. This procedure proved an unnecessary imposition on the pilots and very time consuming, and resulted in pilot shortages followed by serious traffic delays. The first tentative remedy was to appoint two harbour pilots whose sole duty was to bring ships in from the anchorage or seaward boarding area to the wait wall or into lock 1, or in the opposite direction to take vessels from lock 1 out of the harbour. It was finally realized that vessels whose officers were familiar with the open waters of Lake Ontario, as vouched for by their "B" certificate, or which embarked a District No. 1 pilot or a Lake Ontario pilot did not require a District No. 2 pilot from lock 1. In 1968, an amendment to the Canadian Great Lakes Pilotage Regulations (p. 15) relocated the downstream limit of District No. 2 for downbound vessels at lock 1, thus placing Port Weller in undesignated waters for them, but still in designated waters for upbound vessels. This was only a partial solution because no relief was

granted vessels with a "B" certificate-holder on board whose inward destination was Port Weller but no serious problem developed because very few ocean-going vessels call there.

The situation at Port Colborne is different, both with respect to the Welland Canal and the port itself. The first stopping place in the canal where incoming vessels may be required to stop and, therefore, where a pilot could embark or disembark, is lock 8, situated some 2½ miles past the canal entrance. Furthermore, since lock 8's function is merely to control changes in Lake Erie water levels, it frequently remains open and vessels "walk through", i.e., pass through without stopping, in which case the first stop is at lock 7, some 20 miles past the canal entrance. Since non-regular traders require a pilot in the canal, both inbound and outbound vessels which take advantage of the "B" certificate procedure on Lake Erie must embark or disembark a District pilot off Port Colborne. Ships in transit, whether inbound or upbound, are not inconvenienced but ships from Lake Erie whose destination is Port Colborne, and vice versa, have a problem because the "B" certificate exemption does not apply to Port Colborne, although its waters do not present any particular difficulties, and they must employ a District pilot to proceed in and out of the harbour, to berth and unberth and to perform movages. The obvious solution would be to exclude Port Colborne from designated waters for all ship movements not related to the Welland Canal.

The problem is not serious at present, first, on account of the small number of "B" certificate-holders and, second, because there is no boarding station at the western end of Lake Erie and Port Colborne serves as the boarding area for vessels bound to, or coming from, that area which is situated in designated waters. Here again, the matter would become more serious if the compulsory carrying of a pilot on the open waters of Lake Erie were abolished and if a pilot boarding station were established at the western end.

(iii) *Kingston harbour*

Kingston, the principal harbour in District No. 1, is situated at the northeastern end of Lake Ontario at the head of the St. Lawrence River. It is a public harbour under Part X of the Canada Shipping Act.

Kingston was seriously affected by the changing pattern of trade after the opening of the Seaway, and the situation was compounded because it was included in the designated waters of District No. 1.

Formerly, Kingston was a very active transit port. Its location at the head of the St. Lawrence River made it one of the most important trans-shipment terminals, especially for grain, since it was at the downstream



operating limit of lakers which were too large to proceed through the 14-foot canals and locks in the upper St. Lawrence. Grain was transported between such transshipment points and the deep-water facilities at Montreal and below in smaller vessels called canallers. This transshipment function almost disappeared with the opening of the Seaway which allowed the lakers to proceed directly to deep water as far as the Gulf of St. Lawrence, and conversely also allowed ocean-going vessels of similar dimensions to proceed upriver into the Great Lakes system.

Before Part VIA C.S.A. came into force in 1961, the fact that the harbour was part of the Kingston District carried no disadvantage in comparison with other Lake Ontario ports, since pilotage was not compulsory in the District and the harbour was automatically provided with a highly efficient port pilotage service because of its location. With the opening of the St. Lawrence Seaway, the main transit channel dredged to Seaway depth by-passed the harbour and Kingston became for all practical purposes only another port in the open waters of Lake Ontario. This factual situation was not reflected in pilotage legislation and, when it became necessary to define the designated waters of District No. 1, the western limit was made to coincide with the western limit of the Kingston District, thereby making its waters compulsory pilotage waters for all vessels except lakers and placing the harbour at a disadvantage compared to the other Lake Ontario ports.

For all practical purposes, the pilotage problem is now almost academic. Vessels to which Part VIA applies must be navigated by a District No. 1 pilot to or from the St. Lawrence River, but to or from Lake Ontario only ships carrying "B" certificate-holders are affected. Their competence does not extend to Kingston since it is in a designated area, but their number has decreased considerably since 1964/1965. Furthermore, experience in Toronto and Hamilton has proved that even those ships ask for harbour pilotage unless they are regular traders.

However, Kingston is at a definite disadvantage in respect of rates for pilotage trips that entail only entering or leaving the harbour or for movages. These rates are much higher than in Toronto and Hamilton: the basic rate for a movage in Kingston is \$120—subject to the plus or minus variation due to size—compared with \$50 in Toronto and \$25 or \$30 in Hamilton. The same discrepancy applies in the rates for an assignment limited to entering or leaving harbour, i.e., \$70 one way (\$140 both ways) subject to variation for size) as compared to \$50 one way (\$80 both ways) for Toronto, \$30 or \$40 one way (\$50 or \$60 both ways) for Hamilton (Ex. 1541(m)). The complaint about the travelling expenses a vessel had to pay when the pilot had travelled from Cape Vincent to Kingston has now been solved by deleting this charge which was not provided for in the tariff.

After receiving vigorous complaints from the city and port authorities about the resultant discrimination, the Department of Transport consulted the United States Pilotage Administration re the possibility of excluding Kingston from designated waters. The proposal met strong opposition on the grounds that, if such a change were made in favour of Kingston, there would be pressure from other United States ports such as Toledo and Sandusky for similar treatment because they had a similar problem. This appears a very weak argument since compulsory piloting should not be imposed unless it is warranted in the public interest and to promote the safety of navigation. Furthermore, if the same problem exists for Sandusky, this would not be true of Toledo whose approach is a long narrow channel which can not be compared with the open waters leading to Kingston and Sandusky.

#### (4) PERSONAL EXEMPTIONS ("B" CERTIFICATES)

Part VI A C.S.A. provides that, if a vessel carries as a regular member of the complement an officer holding a "certificate of qualification" (usually referred to as a "B" certificate) for the undesignated waters in which she is being operated, there is an indirect exemption from the requirement to have a registered pilot on board. These certificates are valid for two years and only for the waters certified therein. The renewal procedure is similar to the procedure for obtaining the original certificate, *inter alia*, the applicant must establish that in the preceding two years he has made at least two round trips in the waters for which certification is requested. These certificates are granted only by the Canadian authorities as provided for by Canadian Great Lakes Regulations. Their availability is brought to the attention of ships' officers by Notices to Mariners (vide Notice to Mariners No. 31, '70 Annual Edition).

The Canadian authorities have always opposed compulsory pilotage in any form for navigation in the open waters of the Lakes as being unwarranted with respect to the safety of navigation and undesirable from the point of view of pilotage organization (pp. 54 and 61). The limited pilotage requirement for undesignated waters and the "B" certificate system were the result of a compromise emergency solution which was reached to avoid further delay in establishing an integrated pilotage organization in the confined areas of the Great Lakes system.

The opposing concepts of pilotage requirements for the open waters of the Lakes as well as the background and intended duration of the compromise are clearly expressed in a letter addressed on May 31, 1960, by the Minister of Transport to the Shipping Federation of Canada, which is quoted in full (Ex. 1266).

"THE MINISTER OF TRANSPORT  
OTTAWA, CANADA

May 31st, 1960.

C. T. Mearns, Esq.,  
General Manager,  
The Shipping Federation of Canada,  
515 Board of Trade Building,  
Montreal 1, P.Q.

Dear Mr. Mearns:

Further to my letter of May 17th I now refer again to yours of May 13th concerning Great Lakes pilotage.

I am sure that you will appreciate that one of our most difficult problems in our discussions with United States authorities on this subject was a claim by them that their requirements in the matter of competency of navigators of ships on the Great Lakes were more stringent than ours. They pointed out to us that an American foreign-going ship proceeding into the Great Lakes was required to be navigated by licensed pilots no one of whom was allowed to be on the bridge for more than eight hours in any day, while we allowed a ship of any flag to proceed into the Great Lakes without requiring the employment of any pilot with local knowledge.

We argued that any foreign-going master or officer who was competent to navigate his ship in other narrow waters of the world was quite competent to set courses and to navigate his ship safely across the open waters of the lakes, it being already incumbent upon him to follow the rules of the road in effect locally.

Our expression of willingness to require a small amount of experience on the Great Lakes represented a compromise between these two extremely divergent points of view. Because of the attitude of a considerable body of opinion on the United States side and of certain interested parties on the Canadian side we felt that this compromise was necessary. Indeed, I am advised that had we not accepted this, it was almost inevitable that the United States would have proceeded to enact the original Bill, or something like it, including the requirement for a pilot to be on board at all times.

The proposed requirement of experience "in the open or undesignated waters where the vessel will be operating" is not intended to mean that the "qualified officer" must have been previously to every port. If he has gone into any port of a lake, this will be considered experience acceptable for all ports in that lake. This again is the practice followed by the United States Coast Guard in licensing their own men and is a requirement which already applies to American foreign-going ships entering the Great Lakes.

If in the light of experience, modifications appear to be necessary, we will endeavour to secure them but in the meantime we have to give this system a trial.

Yours sincerely,  
George Hees

(Sgd.)

George Hees"

The two-trip condition appears to be merely perfunctory. The mere fact that the applicant was on board when a ship made two round trips qualifies him, provided he meets the other requirements, and he need not have been on the bridge.

When the Canadian Great Lakes Pilotage Regulations were enacted on April 27, 1961, this requirement for Lake Superior was one round trip (subsec. 7(3)(b)(ii)). This was not in conformity with the provisions of the Memorandum of Arrangements. Since most deep-sea Masters had not made the required trips in Lake Superior and it was difficult for them to qualify, it seemed reasonable to stipulate only one trip there, observing that they had already been through several lakes where navigational conditions were comparable. However, on account of the objections raised by the United States Pilotage Administration, an amendment dated July 24, 1961, extended the two-trip requirement to Lake Superior.

In contrast to the registration certificate for pilots, there is no age limit for the "B" certificate. Since the public interest is not involved, the Canadian authorities rely on the judgment of shipowners; if they are satisfied that a Master or mate in their employ remains capable despite his advanced age, he is considered fit to hold a "B" certificate.

Examinations for "B" certificates granted by Canada are carried out by the D.O.T. Examiners of Masters and mates, usually at Montreal, but they may also be conducted at Thunder Bay, Welland, Toronto, Ottawa, Trois-Rivières, Quebec, Baie-Comeau, Port-Cartier, Halifax and St. John's, Nfld. Examinations are oral on the subject-matters specified in the Regulations (pp. 22-3) and are held at the Examiner's office, at the pilotage office and on board, whichever is more suitable in the circumstances, at any time. The fees are higher, however, if the examination takes place outside office hours or on a legal holiday (p. 24).

The following table is a summary for the years 1961-1969 of the number of examinations held for original certificates, renewals or extensions, results, reasons for failures and the undesignated waters for which the certificates are valid.

The number of certificates of qualification issued by the Canadian authorities has decreased considerably and only a few were renewed when the original certificate expired after two years. The Shipping Federation in a letter dated August 27, 1970 (Ex. 1541(n)) advanced the following as contributing factors for this decrease:

- a) "a smoothing-out" of demand after the initial three years of operation. One needs to total the last two years of operation, which in the case of 1968 and 1969 provides us with an aggregate well in excess of 382, when one combines 1970 qualifications;
- b) a large reduction in *regular* liners/traders; resulting in part in an increase in "occasional charters";

EXAMINATIONS HELD FOR CERTIFICATES OF QUALIFICATION  
FOR THE UNDESIGNATED WATERS OF THE GREAT LAKES  
FROM 1 JANUARY 1961 TO 31 DECEMBER 1969

Year	Number of Examinations**			Type of Certificate					Validity on Great Lakes					
	Total	Passed	Failed† or Not Examined	Original‡	Renewal§	Extension*	Lake Ontario	Lake Erie	Lake Huron	Lake Michigan	Lake Superior			
1961.....	522	515	7 (7‡)	500	1	14	515	507	487	351	223			
1962.....	238	238	0	210	10	18	238	226	203	159	80			
1963.....	341	341	0	170	169	2	341	333	306	255	157			
1964.....	297	288	9 (8‡ 1*)	179	94	15	288	281	239	211	137			
1965.....	375	373	2 (1‡ 1*)	194	163	16	373	351	313	289	173			
1966.....	253	251	2 (2‡)	137	97	17	250	228	213	172	86			
1967.....	283	275	8 (2‡ 6*)	114	149	12	281	263	248	225	93			
1968.....	184	175	9 (2‡ 7*)	84	83	8	183	172	159	151	49			
1969.....	212	207	5 (5‡)	97	105	5	207	185	173	159	48			

\*\*During this period, there have been no Cancellations.

†All Failures due to Rules of the Road, except one who also failed the separate courses subject.

‡Original Certificate: first issue.

§Renewal Certificate: issued in replacement of a certificate that has expired or is about to expire.

\*Extension Certificate: increased validity issued not less than three months prior to expiration date of the certificate it replaces.

SOURCE: Ex. 1401.

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- c) a general decrease in the number of ocean vessels proceeding into the Great Lakes;
- d) a decrease in *cargo* being transported by ocean vessels to and from the Great Lakes;
- e) a currently buoyant charter market favouring sea coast ports."

Under these circumstances, fewer ships' officers would be in a position to meet the two round-trip requirement. It is reported, however, that general awareness of the value of "B" certificates has been generated by recent increases in Great Lakes pilotage costs and by unrest among Great Lakes pilots.

(5) WAIVERS

Both Part VIA C.S.A. and the United States Great Lakes Pilotage Act provide for a *de facto* exemption if a pilot is not available but it is not automatic and can not take effect unless the non-availability is established as a fact by the Pilotage Administration. This doubtless explains why it is referred to as a "waiver".

When a shortage of pilots develops, the waiver procedure enables the Pilotage Administration to grant exemptions selectively to ships with the highest safety factors, and assign the available pilots to those ships which represent the greatest risk either because of their dangerous cargo, large size or lack of manoeuvrability, or their officers' lack of local knowledge or insufficient command of English to use the radiotelephone. Furthermore, pilotage priority is given to the most difficult sectors, e.g., a District pilot will not be sent on a lake assignment if he is needed for an in-District assignment. Re the statutory and regulatory provisions covering the issue of waivers, vide pp. 7-8, 34-5 and 46.

The statutory provision in Part VIA authorizing the granting of waivers (subsec. 375B (4)(a)) has been given a liberal interpretation by Canada. The requirement that the notification of non-availability of pilots (the issuance of a waiver) be given to the vessel concerned by the Deputy Minister of Transport is considered complied with if it is given by the officer-in-charge of the Canadian despatching office concerned on behalf of the Deputy Minister. Furthermore, the words "registered pilot is not available" have been taken to mean that a registered pilot is not conveniently available. Therefore, a waiver would be granted to a vessel whose Master and officers have had substantial experience in the navigation of the waters concerned if the pilots available at the time are needed for ships which lack the same *expertise* and have arrived or are expected within a reasonable period of time.

At the time of the Commission's hearings, it appeared that a more restrictive interpretation was given to the corresponding provision contained in the United States Act (subsec. 8(a)) and a more formal attitude toward waivers was taken by the U.S. Pilotage Administration. In contrast to the

Canadian legislation, the procedure for granting waivers is dealt with in the United States Great Lakes Pilotage Regulations (p. 46). A waiver is not to be issued if the delay caused by the shortage of a pilot is not expected to exceed six hours; a waiver can not be issued by the officer-in-charge but must be obtained from the Administrator through the Coast Guard which will transmit the request together with all pertinent facts, *inter alia*, particulars which may affect safety. It was reported that this procedure took up practically two hours during which the vessel concerned was delayed in order to complete the waiver procedure. This delay, however, is often reduced when the despatcher initiates the waiver procedure beforehand because he has been informed that ships subject to pilotage requirements are expected, knows that some of them are regular traders and realizes that a shortage of pilots is likely to develop.

However, vessels are never forced to accept a waiver and proceed without a pilot. A Master is entitled to decline a waiver and wait until a pilot is available, although he must take his turn with the vessels which require pilotage.

Waivers have been issued for both designated and undesignated waters but, for obvious reasons, more rarely for designated waters. The practice is to give priority to in-District assignments by reserving pilots for periods of peak traffic. The pilots have cooperated by voluntarily forgoing their leave and curtailing their rest period.

The basis for granting waivers in Lake Erie is different than in the other undesignated waters. For lack of a boarding area at the western end, ships in transit must carry their District pilot across the open waters of Lake Erie to Port Colborne. Unless it is considered that a ship would not become a safety risk if allowed to proceed without a pilot in the designated sector extending from Southeast Shoal to the Detroit change-point, she must be delayed in case of a shortage of pilots, even though her Master and officers may be qualified to navigate on the open waters of the Lake. Another reason why a lake pilot group has not been organized for Lake Erie is that it was not believed warranted to appoint lake pilots whose sole function would be to perform pilotage assignments within its undesignated waters, even if these pilots were also registered for Port Colborne and Sandusky. Therefore, waivers for Lake Erie are generally restricted to trips between Port Colborne, Sandusky and the undesignated waters of Lake Erie ports, where no unusual difficulties are encountered.

There are no comprehensive statistics on waivers. The information is available in the daily records of pilotage operations kept by the various Canadian and United States despatching offices but it was considered that the purpose and scope of this Report did not warrant such a time-consuming process. The number of waivers and the reasons for granting them are

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factors to be considered when appraising the adequacy of pilotage organization in certain sectors and deciding whether compulsory pilotage should be imposed on some vessels or groups of vessels or whether it creates an unnecessary and artificial demand for service. If a large number of ships which are subject to compulsory pilotage have been able to proceed without pilots, the obvious question arises whether these blanket requirements are realistic as far as the safety of navigation and public interest are concerned. Furthermore, unless waivers are granted only occasionally during times of unexpected peak demand, it must be concluded that there are deficiencies in the organization, poor operational procedures or an insufficient number of pilots on strength. In fact, both Canadian and U.S. Pilotage Administrations were well aware of the waiver situation from year to year although it was not reduced to actual statistics. The number of waivers has been greatly reduced partly due to the decrease in foreign vessels in the Great Lakes system. However, this factor has had an effect only on in-District assignments since the number of lake assignments has shown a substantial increase as the result of the diminishing number of "B" certificate-holders. The main factors have been improvements in pilotage operations, especially appropriate changes in pilot strength in various sectors and the creation of groups of lake pilots. The pilots now have smaller operational areas and less travel. As a result, the wastage of their time has been reduced because, with a few exceptions, they are no longer called upon to travel long distances and wait at distant outposts for a ship's return or a fresh assignment.

The following table was compiled from the Port Weller Supervisor's annual reports (Ex. 1023) which contain information on waivers for both District No.2 despatching offices, Port Weller and Port Huron. Unfortunately, they lack some very important details such as whether the figures quoted

Year	Waivers Granted		
	By the Port Weller Pilotage Station		By the Port Huron Pilotage Station
	For Lake Ontario	For the Welland Canal and/or Lake Erie	For the Western Sector of District No. 2 and Lake Huron and Lake Michigan
1963.....	8	20	3
1964.....	65	592	140(151)
1965.....	126	370	98
1966.....	34	57	18
1967.....	12(10)	11	2
1968.....	13	55	11
1969.....	8	43	13

SOURCE: Ex. 1023.



for Port Huron are limited to District trips or whether they include Lake Huron and Lake Michigan trips. The available information on waivers issued at Port Weller segregates them into those for Lake Ontario and those for the Welland Canal, but many of the latter were, as suggested by the evidence, issued to ships engaged in local trade between ports in the undesignated waters of Lake Erie and Port Colborne or Sandusky. It is a matter of regret that similar information is not available for the other despatching stations—Cornwall, Cape Vincent, Detour, Chicago, Duluth and Thunder Bay.

#### COMMENTS

The difference in attitudes on waivers between the United States and Canadian Administrations is the result of differences in concept of pilotage, organization for the provision of services and, to a certain extent, the method of remunerating the pilots. The Canadian authorities, convinced as they are that compulsory pilotage of any kind is unwarranted for the open waters of the Lakes, feel more inclined to grant waivers for lake assignments to avoid interference with in-District assignments. The most important factor is the difference in status of the officer-in-charge of the Canadian and United States despatching office. In Canada, he is a public servant and the local representative of the Federal Government with no personal interest in the provision of services; in the United States, he is not connected in any way with the United States Great Lakes Pilotage Administration but is a salaried employee of the pilots through their Association. Since the resulting conflict of interests is not conducive to the equitable implementation of the waiver provisions contained in the United States Act, such matters must be dealt with directly by the Pilotage Administration through the Coast Guard which has personnel on the spot to obtain first-hand information about prevailing conditions.

Another factor is that the Canadian Government has taken upon itself responsibility, through the Department of Transport, for administering the pilotage offices designated in the Memorandum of Arrangements as an area of Canada's participation in the organization of pilotage services. In the vital area of the Welland Canal the Canadian Administration is fully aware of its added responsibility when a shortage of pilots develops because this means disruption of canal operations and substantial delays for all maritime traffic, including exempt vessels.

There is also the financial aspect, since granting a waiver means a loss of pilotage revenue. This situation is compounded when the pilots' remuneration is directly dependent upon pilotage earnings, as is the case for United States registered pilots in all sectors. The only Canadian pilots affected are those registered for District No. 1 and Lake Ontario (the other Canadian pilots are salaried employees of the Department of Transport).