

3. ORGANIZATION

PREAMBLE

The present scheme of organization is a tentative solution to the problem which arises because Canada and the United States both have territorial rights in the Great Lakes system. It was adopted because time was lacking to devise a more sophisticated and more adequate procedure. Although studies and negotiations between the Canadian and United States Governments and other interested parties commenced a number of years before the opening of the Seaway (pp. 53 and ff.), no agreement had been reached in 1959 on the organization to be set up, and the necessary legislation could not be drafted until this was done. In these circumstances, a compromise was adopted followed by a temporary solution which remains basically unchanged some ten years later.

The main problem to be resolved was the nature and extent of Canadian and United States participation in the organization of the required pilotage service. Neither country alone could enact adequate, comprehensive pilotage legislation, since each was without jurisdiction over the waters of the system beyond its boundaries. A clear example of the situation is found in the unilateral pilotage organization which Canada had set up in 1933 between Montreal and Kingston, i.e., the St. Lawrence-Kingston-Ottawa Pilotage District. All this organization could and did provide was the availability to shipping of qualified pilots. Payment of dues could not be made compulsory since Canada's jurisdiction was limited to Canadian waters. In 1960, it was necessary to detach from the District the international section of the channel (it became the Kingston District) so that the payment of dues could be made compulsory in the wholly Canadian sector which became the Cornwall District (p. 49). Furthermore, the Pilotage Authority was legally powerless to force its licensed pilots to effect transits because this involved navigation into United States waters which were beyond District limits and, hence, outside Canada's legislative jurisdiction. This is also why the Port Weller/Sarnia pilotage service that had been organized by the Shipping Federation of Canada never became a Pilotage District under Part VI C.S.A., although its operation was informally taken over by the Department of Transport (pp. 54-5).

The situation precluded either country from passing separate pilotage legislation without recognizing that the physical circumstances imposed mutual interdependence in this field.

There were a number of possible solutions, all with advantages and disadvantages. Each solution necessarily implied some abandonment of, or encroachment on, sovereignty.

One solution was to give one country the whole responsibility for pilotage (with the possible exception of service in ports). That country would

then sign a treaty agreeing to provide an adequate, efficient system where required and the other country would merely recognize the organization by giving it legal effect in its own waters through the enactment of the necessary legislation. A variant of this solution (as advocated by the Shipping Federation of Canada (pp. 74-5)), would have been to divide the Great Lakes system on a sector basis and enact appropriate legislation to give each country full jurisdiction over, and responsibility for, pilotage in the sectors allocated to it. This has been partly achieved at the administrative level through recent modifications to the organizational scheme.

Another method would have been to create a joint international commission charged with the whole responsibility for organizing pilotage under general policies jointly established by agreements drawn up by both countries. This would have required a detailed agreement, i.e., a treaty defining the nature, function, powers and organization of such a commission and the mechanism for the establishment of joint policy and control, followed by the appointment of the commission and the enactment by each country of a law ratifying the treaty. This procedure was envisaged (p. 60) but, although considered probably the most adequate solution, it was set aside (at least temporarily) because pilotage legislation was urgently needed and time was not available for a lengthy process of studies, negotiations and agreement preceding enactment.

The solution adopted in the circumstances least infringed on the sovereignty of each country. Parallel legislation enacted similar pilotage requirements for shipping, the extension of the legal competency of the pilots of one country in the waters of the other and, by joint Governmental arrangements, equal participation by Canada and the United States at all stages of organization. The result of this compromise solution was an involved, awkward system controlled directly by a dual authority consisting of two distinct and independent Canadian and United States Pilotage Administrations with diverging concepts of pilotage and governed by different and often conflicting principles. The organization of pilotage on the Great Lakes is characterized by disparity of procedure at all levels between Canada and the United States, resulting in constant problems and conflicts for which there appears to be no adequate solution except a fundamental re-organization based on different principles.

The latest amendments to the Memorandum of Arrangements recognized this need and anticipated certain basic changes. The preamble to the 1967 amendment stated:

"In the past six years, with the introduction of newer and larger ships with more sophisticated navigational equipment and altered traffic patterns, pilotage requirements in those waters governed by the agreement have changed considerably. As a result, the present pilotage system and its rate structure, designed to meet the requirements of 1961, do not meet the requirements of today.

Accordingly, the United States and Canada have initiated an overall review of the present pilotage system and its rate structure on the basis of which a new system and structure can be established before the navigational season of 1968."

The target date could not be met and the preamble to the 1968 amendment reported as follows:

"In that amendment, the two governments agreed to initiate an overall review of the pilotage system and its rate structure. While much of this review has been accomplished, a number of areas remain in which further study and coordination with the interested parties is required. These areas include the subjects of "home porting", "open water" pilotage, modification of the "tour de role", assignment of pilots, and the modification of the rate structure to reflect more accurately the relative difficulty of different pilotage assignments. Accordingly, the review is continuing and changes to the system and its rate structure in these areas will be made as soon as they have been determined to be desirable and practicable."

The 1969 Memorandum required the Secretary and Minister to establish consolidated and more efficient billing, collecting and accounting services instead of having these functions exercised separately by each of the various despatching offices, each within its area of jurisdiction. This has resulted in basic changes in the organization of Districts No. 1 and No. 2.

The 1970 version of the Memorandum contains an agreement for a new rate structure based on ships' dimensions to reflect more adequately the relative importance of different assignments. This agreement was immediately implemented by appropriate amendments to the Canadian and United States Great Lakes Pilotage Regulations (pp. 67-8).

(1) CENTRAL AUTHORITY

A prominent feature of the present system is a dual Central Authority presiding over the pilotage service throughout the Great Lakes. Its Canadian and United States components are not only distinct and independent entities but are also dissimilar in composition and function and, at times, governed by different principles. While they operate independently, their jurisdiction coincides at all levels, particularly in the sphere of operations. The necessary coordination is effected through agreements reached by both Governments. Their instrument is the Memorandum of Arrangements which defines the joint policies and directives governing organization and administration.

The functions of the United States central Pilotage Administration are shared between the President of the United States, whose only role is the definition by proclamation of the designated areas (p. 40), and the Secretary of Transportation (formerly the Secretary of Commerce), who is responsible for the implementation of the Great Lakes Pilotage Act of 1960. However, in practice, the United States Central Authority is a separate branch of the Department specially created for this purpose, the *United States Great Lakes Pilotage Administration*, to whose Director the Secretary has delegated by regulations almost all the powers and responsibilities he derives from the

Act (p. 41). Except for defining designated waters, the Director has authority to make all the regulations necessary for implementing the Act and also is responsible for licensing and its related powers.

However, the Act does not authorize him to participate directly in actual service operations. The underlying principle is that pilotage is performed by private entrepreneurs in the number deemed necessary to meet the demand, their availability being a statutory condition of their registration certificates. The Act provides for curtailing the free enterprise system, but in a very limited way and with no possible direct involvement by the Government.

If a voluntary association of pilots exists in a given sector and volunteers to operate a pilotage pool, the Director, if he is satisfied that such association is able to discharge this function adequately, may then authorize the formation of a pool, entrust its operation to the association and establish such rules and regulations as he considers necessary for its operation (for the meaning of pilots' pool under U.S. legislation, vide p. 45). If no pool exists, his sole function with regard to operations is surveillance to ensure that the pilots make themselves available and remain fit and competent. Where a pool exists, his responsibilities for its operations are limited to ensuring that the pilots abide by the rules and regulations he has established and that the association responsible for the pool discharges its obligations properly. If the association fails to do so, he may withdraw his authorization and appoint another voluntary association to operate the pool, provided such association exists and volunteers to accept this responsibility. Failing this, disorganization follows and free enterprise is restored. Then each pilot, alone or with others, must take the necessary steps (including pilot vessel service) to ensure his own availability and to compete with his colleagues for employment. Such a situation nearly occurred in 1970 when the pilots' associations operating the United States pools in Districts Nos. 2 and 3 threatened to go into bankruptcy if their demands for rate increases were not met.

The Canadian Central Authority consists of the Governor in Council, whose sole function is regulation-making in the limited fields under Part VIA C.S.A. (sec. 375c) (vide p. 11), and the Minister of Transport. The only functions explicitly given to the Minister of Transport in the Act are determining the number of pilots and licensing with its related powers (pp. 18 and ff.). Although Part VIA contains no section concerning the operational organization of the service and this field is not one that may be covered by regulations authorized under Part VIA (p. 25), the Minister follows the practice that has been in effect for a great number of years in those Canadian Pilotage Districts where the efficiency and reliability of the provision of services are required in the public interest (Part I, pp. 77 and ff.) and has assumed full responsibility for the administration of the pilot stations created as one of the Canadian responsibilities under the Memorandum of Arrangements. Furthermore, the Canadian Central Administration, by contrast

with its U.S. counterpart, not only directs and manages the service at local level but the Minister is also the employer of Districts Nos. 2 and 3 Canadian pilots. They are his salaried employees, while those in District No. 1 and Lake Ontario have the status of his *de facto* employees. Through his local representatives, the Minister is pool authority (in the U.S. meaning of the term) of U.S. pilots when they come under the jurisdiction of a Canadian pilotage office.

(2) PROVISION OF SERVICES

In conformity with the compromise solution reached by both countries, services were first provided through a type of Sailing Master arrangement but this has since developed towards a true pilotage system. The pilots were at first divided into three distinct groups, each with exclusive jurisdiction within its District but with shared jurisdiction over the adjacent undesignated waters. Hence, District No. 2 pilots had exclusive jurisdiction over, and full responsibility for, providing services in the designated waters of that District, i.e., the Welland Canal and the western sector from Southeast Shoal to Port Huron, and over the undesignated waters of Lake Erie since they are not adjacent to any other District. They also shared jurisdiction and responsibility with District No. 1 pilots in the undesignated waters of Lake Ontario and its ports and, at the other end of the District, with District No. 3 pilots in the huge expanse of Lakes Huron and Michigan and their ports. Experience proved that the dispersal of District pilots over such a wide area was detrimental to operations and to the pilots' *expertise*. Gradually, the District pilots are being relieved of pilotage in undesignated waters and this function is being taken over by lake pilots. One such group was created for Lake Ontario, and a second for Lakes Huron and Michigan. However, District No. 2 pilots still have full responsibility for Lake Erie, and District No. 3 pilots for Lake Superior. District No. 2 has lately been divided into two independent sectors, each with its own group of pilots.

Another organizational feature is parity in the participation of United States and Canadian pilots. Originally, the arrangement was for overall parity with participation of pilots of both countries in each sector. This has now been changed to overall parity, but not necessarily with participation in each sector. This change has so far been implemented only in District No. 2. Pilotage in the Welland Canal sector, which is wholly situated in Canadian territory, now comes under the exclusive administrative jurisdiction of Canada and services are provided by Canadian registered pilots only. The United States pool has complete jurisdiction over the service in the western sector of District No. 2 and, except for the limited participation of Canadian registered pilots in Canadian ports, assignments are carried out by U.S. registered pilots.

(3) DIRECTION OF PILOTAGE OPERATIONS

Considerable progress has been made in sharing responsibility for operational administration. At first, except for District No. 3 and the undesignated waters of Lake Superior which were made the exclusive responsibility of the United States Pilotage Administration, responsibility was shared by placing despatching stations alternatively under Canadian or United States jurisdiction, and not as a function of a District or a distinct group of pilots. Each District except No. 3 came under two administrative authorities, one U.S. and one Canadian, and each pilot came under a number of administrative authorities with control being determined by the place where he happened to be at any given time.

A pilotage office was established at each boarding station. Its functions were to organize, manage and operate the boarding station (including pilot vessel service where required) and to handle the billing, collection and distribution of pilotage fees earned from assignments within its jurisdiction without distinction as to the nationality of the pilots or the groups to which they belonged. Each pilotage office was to be, and has remained, financially self-supporting. Operating expenses are met as they are incurred from earnings collected and are prorated among the pilots' groups according to agreements reached jointly by the Canadian and U.S. administrations.

The nature and scope of the jurisdiction of each pilotage office were defined in the Memorandum of Arrangements, and the coordination of their operations was arranged at local level by the administrative authorities concerned through mutually agreed rules called *Working Rules and Dispatching Procedures*, which were also approved by the U.S. and Canadian Pilotage Administrations. Such approval is required by the U.S. Great Lakes Regulations which give them the status of legislation as far as U.S. pilots are concerned (pp. 43 and ff.). There is no similar provision in Part VIA and, therefore, these rules do not form part of Canadian pilotage legislation (pp. 5, 12, 20-1, 21 and 25). They are nothing more than administrative standing orders since their legality is not based on specific statutory provisions (p. 25). Moreover, the rules for Districts Nos. 1 and 2 became obsolete when their organization was changed in 1968 and 1969.

According to the original scheme, the Cornwall boarding station was made a Canadian responsibility. Following arrangements made with the Cornwall District Authority, it despatched the Cornwall pilots downbound, and District No. 1 pilots upbound, and handled despatching requests in the half of each District situated on both sides of the boarding area. The next boarding area, situated at Cape Vincent, was made a U.S. responsibility. It despatched the pilots whose assignments commenced or finished at Cape Vincent, i.e., District No. 1 pilots for downbound in-District assignments, District No. 1, District No. 2 and Lake Ontario pilots (after lake pilots were appointed) for lake assignments originating from Cape Vincent, and

also handled other pilotage demands within the half of District No. 1 and Lake Ontario situated on each side of the boarding station. The Port Weller pilotage station was made a Canadian responsibility while the Port Huron and Detour stations were allocated to the United States.

Some of these arrangements have since been changed. The whole of the Great Lakes system is now divided into two areas for operational and administrative purposes. The lower part from Cornwall to Port Colborne comes under Canadian administration, the upper part from the Detroit change-point to the Head of the Lakes remains a U.S. responsibility, and both countries have shared but distinct responsibilities over the intermediate waters from Port Colborne to the Detroit change-point. Except as modified for District No. 2, joint participation by pilots of both countries in each sector has been retained.

These modifications, together with electronic developments, have permitted a unified administration (including despatching) within each sector. Efficiency has increased and expenses have been lowered. Cape Vincent's only responsibility is to maintain a boarding area and its despatching and administrative functions are performed by the Cornwall pilotage office. The Port Weller station continues to be responsible for all pilotage operations on the Welland Canal and for the Canadian share of operations between Port Colborne and the Detroit change-point.

(a) Great Lakes District No. 1

District No. 1 is serviced by two groups of pilots (excluding the Lake Ontario pilots whose registration certificates extend to the designated waters of Kingston harbour):

- the Canadian pilots of the Cornwall Pilotage District, whose legal competency has been extended to the five and a half mile sector of the Great Lakes system extending from the upstream District limit to Snell lock (vide Part IV, p. 899);
- the Canadian and U.S. pilots registered for District No. 1, whose legal competency covers the rest of the designated waters of the District, i.e., from Snell lock to the head of the River (re added competency and shared responsibility over Lake Ontario undesig-nated waters, vide p. 162).

For all practical purposes, the St. Regis/Snell lock sector is dealt with as if it formed an integral part of the Cornwall Pilotage District and District No. 1 began at Snell lock. All aspects of pilotage relating to the St. Regis/Snell lock sector have been dealt with in Part IV of the Report under the Cornwall Pilotage District, to which reference is made. Therefore, in this part of the Report, the term "Great Lakes Pilotage District No. 1" means the sector of the St. Lawrence River extending from Snell lock to Lake Ontario.

Since the opening of the Seaway in 1959, the pilotage organization has been basically modified three times, but these alterations have not been properly reflected in the governing regulations, rules and orders. The result is that, from the legal point of view, the situation has always been a hodge-podge of inadequate and conflicting provisions, a number of which were retained despite the fact they had become irrelevant in the changed factual context. From the organizational point of view, the Cornwall/Lake Ontario sector (which became Great Lakes District No. 1 in 1961) may be considered in four time stages:

- At the time the Seaway opened in 1959, the pilotage service in the boundary waters of the St. Lawrence River was being performed exclusively by Canadian licensed pilots under the St. Lawrence-Kingston-Ottawa District Pilotage Authority, whose jurisdiction was limited to Canadian waters. The division of this District leading to the creation of the Kingston District in 1960 was an immediate step toward the formation of Great Lakes District No. 1. Pilotage continued to be provided exclusively by Canadian licensed pilots under Canadian management, i.e., the Kingston Pilotage District Authority. District organization and pilotage operations were dealt with in the General By-law (Ex. 432).
- When District No. 1 became operative in the 1961 season through the combined effect of Part VIA C.S.A. and the United States Great Lakes Pilotage Act of 1960 and regulations made thereunder, it extended over all the waters in the sector on both sides of the boundary. As an interim measure until arrangements for the agreed U.S. participation in administration at District level could be made, the service continued to be performed as previously organized under the sole administrative direction of the Kingston Pilotage Authority. However, the U.S. registered pilots participated and the competency of the Kingston District pilots was extended to the U.S. designated waters of District No. 1 and the undesignated waters of Lake Ontario. This is the type of organization which was reflected in the Kingston District General By-law as amended in 1961 which, despite the many changes that have taken place, has not been modified since (Ex. 432).
- With the 1962 season, the District organization was changed to meet the requirements of the Memorandum of Arrangements, i.e., sharing of administrative and operational functions on the basis of pilotage offices (pilot pools). The Canadian Administration's local responsibility was limited to operating the Cornwall pilotage office, while the upstream pilotage office was, in accordance with United States regulations, formed into a U.S. pool whose administration and operations were entrusted to one of the two existing voluntary

associations of District No. 1 United States pilots, the St. Lawrence Seaway Pilots Association. The pilotage office, situated at the upstream boarding station of District No. 1, was relocated from Kingston to Cape Vincent, N.Y. Thus began for District No. 1 the system of two despatching and administrative authorities, both independent and financially self-supporting, each with its own exclusive jurisdiction. The necessary co-ordination was effected through joint rules devised by the two local administrative authorities and approved by the two Central Administrations. The latest of these rules are contained in a document entitled "Working Rules and Despatching Procedures, Great Lakes Pilotage District No. 1" dated February 1, 1965, as amended up to July 10, 1968, and are still in effect (Ex. 432).

—After the dual administrative authority system proved inadequate, a return was made in the 1968 shipping season to the single authority system, and District No. 1 was made for administrative and operational purposes the sole responsibility of the Canadian Administration. The basic change which has now been in effect for two navigation seasons has not as yet been reflected in the Working Rules and Despatching Procedures.

Therefore, at present the only official regulations, rules and orders governing the organization and operation of the pilotage service in District No. 1 are (Ex. 432):

- Kingston District General By-law (P.C. 1960-1573, dated November 17, 1960) as amended for the first and last time on April 27, 1961 (P.C. 1961-622);
- Working Rules and Despatching Procedures, Great Lakes Pilotage District No. 1, dated February 1, 1965, as amended to July 10, 1968.

(i) *Kingston Pilotage District General By-law*

District No. 1 is the only area in the Great Lakes system where a Pilotage District exists under Part VI C.S.A. Because only Canadian waters can form part of a Pilotage District under Part VI, the Kingston Pilotage District consists of only the Canadian part of District No. 1. Re the compatibility of a Canadian Pilotage District created under Part VI with the pilotage system created jointly by Part VIA C.S.A. and the United States Great Lakes Pilotage Act of 1960 (especially a sector of the Great Lakes system consisting of boundary waters), reference is made to pp. 28-30.

Prior to 1961, the pilotage service which had been established under Canadian management in that sector since 1934 as a Pilotage District under Part VI C.S.A. was working satisfactorily (despite the problem of boundary waters) because, on one hand, neither the U.S. Congress nor the State of

New York had legislated in the field of pilotage and, on the other, there was no attempt by Canada to make pilotage compulsory, either directly or indirectly, in the international section of the St. Lawrence River. The Pilotage District scheme of organization—despite the incompatibility of its governing provisions resulting from the fact that some of the pilots' assignments were outside Canadian waters—was, short of enacting *ad hoc* statutory provisions, the only available means of public control to ensure the qualifications of the pilots through the licensing process available to Pilotage Authorities.

The joint enactment of Part VIA C.S.A. and the United States Great Lakes Pilotage Act of 1960 provided for an *ad hoc* licensing scheme specially devised to meet the situation created by the boundary waters in the Great Lakes system, but the Pilotage District organization as permitted under Part VI C.S.A. was retained simply because it was assumed that it provided a method of directing the provision of services by Canadian pilots if they refused to become civil servants (pp. 25–6). When pilotage on the Great Lakes was first organized under Part VIA, the intention was that all Canadian pilots would be Crown employees under the prevailing rate system, but this plan failed as far as District No. 1 was concerned when the Kingston District pilots refused to become salaried employees and insisted on retaining their existing status, i.e., quasi-employees whose remuneration is determined by the dues earned by their services. Under these circumstances, the Pilotage District arrangement was retained, despite the dual licensing process it implied for Canadian pilots, so that the Government could administer the service through the Pilotage Authority.

The Kingston General By-law contains the usual *ultra vires* provisions found in the By-laws of other Pilotage Districts created under Part VI. Its illegality was compounded by the 1961 amendment which was intended to cover the new pilotage organization envisaged by Part VIA. The amendment was obviously an interim measure to meet the new situation where services were to be provided on an equal basis by pilots of both nationalities. It is obvious that the By-law was to be abrogated, or at least modified, when a U.S. voluntary pilots' association would be entrusted with the Cape Vincent pool. Pending such an eventuality, the Canadian Administration was required, as in the past, to take full responsibility for the administration of the enlarged District and the direction of the service.

The 1961 amendment purported to give the Kingston Pilotage Authority full control over all pilotage earnings of Canadian and U.S. pilots and for their collection and sharing (after meeting its administrative expenses) under a pooling system based on availability for duty. Obviously, these provisions had no legal effect because they did not fall within the limits of the delegation of the regulation-making powers of a District Pilotage Authority

appointed under Part VI. In fact, the new provisions inserted in the By-law by the 1961 amendment were merely the details of the joint organization agreed upon by the Canadian and United States Pilotage Administrations.

The main features of the Canadian Pilotage District By-law as amended in 1961 are as follows:

- It applies exclusively to Canadian pilots licensed by the Pilotage Authority, except for pilotage fees and control over pilotage revenues, which provisions are purported to apply to registered pilots as defined in sec. 375A C.S.A., i.e., Canadian and U.S. registered pilots as well.
- The control provided by sec. 15 over the provision of services (despatching) is compulsory only for Canadian pilots whose number on the active list shall not exceed 20; the By-law is silent as to the despatching procedure to be followed.
- The Canadian pilots as a group play only a consultative rôle in the organization; for this purpose, they are represented by the usual Pilots' Committee.
- The Canadian pilots registered for Great Lakes District No. 1 must also hold a licence for the Kingston District in order to comply with Part VI C.S.A. The U.S. registered pilots have been specifically exempted from this obligation by the addition of sec. 356A C.S.A. The licensing requirements contain the usual details found in other similar By-laws but are much more complete than the general requirements contained in the Canadian Great Lakes Pilotage Regulations. Licensed pilots are to be recruited from the ranks of qualified, experienced mariners. There is no apprenticeship as such, but the pilot's *expertise* is to be appraised by his performance and record during one year of probation. As a pre-requisite to licensing, actual experience in the navigation of District waters is required. The candidate must have served as Master or deck officer in vessels trading regularly throughout the District for two of the five years immediately preceding the date of examination. The subject-matters of the examination are stated: local knowledge, Rules of the Road for the Great Lakes, St. Lawrence Seaway Regulations, regulations of the various harbours within the District and other pertinent data. Finally, the By-law establishes the procedure for the appointment and composition of the Board of Examiners.
- With regard to licensed pilots (hence, Canadian pilots), the By-law contains the usual provisions regarding an eyesight and hearing examination, the procedure to be followed in case of unfitness for duty due to physical or mental disability, the general duty and

conduct of pilots and regulation offences. It also purports to give the Pilotage Authority disciplinary powers over licensed pilots for violations of the By-law.

- The By-law purports to make the pilotage fees which are fixed by the Governor in Council in the Great Lakes Pilotage Regulations made under subsec. 375c(1)(e) part of the By-law as pilotage dues. This is an unauthorized delegation of regulation-making powers by the District Pilotage Authority. The conflicting provisions of Part VIA on this subject have not been resolved as they should have been in the Act. The Pilotage Authority can not proceed in this way to give the status of pilotage dues to rates which are to be established and amended by another authority, especially when they are to some degree outside its regulatory jurisdiction, because they apply to services which are partly or wholly rendered outside the District limits.
- Prior to the 1961 amendment, the rôle of the District Pilotage Authority in respect of pilotage earnings was limited to collections. Dues were payable to the Authority but, once collected, had to be remitted in full to the pilots who had rendered the services, since there was no pilot fund and all the District administrative costs were assumed by the Department of Transport. This situation changed basically with the implementation of Part VIA and the Memorandum of Arrangements which required the pilotage service to be financially self-supporting and Canada and the United States to participate jointly in the provision, organization and administration of the service and the costs involved. The new financial provisions of the 1961 amendment were deemed to apply to all pilots registered for District No. 1 (hence, including U.S. pilots) and purported to give complete authority and control over the pilotage revenues of these pilots to the Kingston Pilotage Authority, and to establish their mode of remuneration. All pilotage earnings (including Lake Ontario earnings by District No. 1 pilots) are payable to the Kingston Pilotage Authority, the District Supervisor is the sole collecting agent and any receipts collected by a pilot must be remitted to him. Each month the Supervisor must dispose of all the funds he has accumulated as follows:
 - first, to pay District operating expenses, i.e., his salary, the salaries of other employees of the Authority, office and communications expenses;
 - at the end of each month, to share the net earnings, including fees earned for assignments in undesignated waters, on the basis of time worked by each pilot during the month;
 - to pay each U.S. pilot his share computed as above;

—to deduct from the aggregate share of Canadian pilots the cost of their transportation between Cornwall and Snell lock, and between Kingston and vessels off Alexandria Point, and to pay to each his share of the remaining net revenue.

Sec. 24 of the Kingston By-law deals with "contract pilots". These were transitory provisions which now serve no purpose since the last of the former contract pilots has retired (vide Part IV, pp. 876 and 930). The legal status of these former pilots is worth considering since it is an example of pilotage services being provided within the Great Lakes system by licensed but unregistered pilots. These contract pilots did not come within the scope of Part VIA C.S.A. since they were employed by companies operating vessels excluded from the application of Great Lakes pilotage legislation. However, they had to meet the qualifications and be licensed as pilots because they remained pilots in the Canadian meaning of the term, i.e., they did not belong to the regular complement of ships they were piloting and were prohibited by secs. 354 and 356A C.S.A. from piloting the Canadian waters of District No. 1 unless they held a licence for the Kingston Pilotage District. As licensed pilots, they were bound by the District General By-law and by the statutory provisions applying to licensed pilots. Although there is a provision in the By-law that in case of a shortage of regular pilots they could be required by the District Supervisor to serve in ships other than their company's ships, this provision became partly inoperative since their lack of a registration certificate precluded them from piloting vessels subject to the compulsory pilotage requirements of Part VIA. However, there would have been no legal objection if such pilots had been requested to perform pilotage assignments in excluded vessels.

(ii) Working Rules and Despatching Procedures

With the 1962 navigation season, the temporary organization under sole Canadian management ceased and the St. Lawrence Seaway Pilots Association, Inc., took over the operation of the U.S. Cape Vincent pilot station. Co-ordination between the two administrative offices proved to be difficult, the main subjects of contention being the despatching rules and the transportation of Canadian pilots from Kingston to the Cape Vincent boarding area (pp. 217 and ff.). The Canadian Supervisor of Pilots in charge of the Cornwall office commented in his 1962 annual report (Ex. 843):

"The basic rules drawn up for the 1961 Season were accepted for use at both Cape Vincent and Cornwall Offices. However it is noted that under the existing arrangements there could be radical differences in the rules unless agreement was enforced by some means or an other.

Attempts were made to have differences harmoniously settled between the respective pilots' committees but no great success was obtained from these efforts. The toleration of mutual necessity was achieved—no more."

Several differences of opinion had arisen between Canadian and United States pilots. The principal difficulties related to the adoption by the United States pilots, prompted by the Canadian pilots, of despatching rules based on the questionable system of equalization of trips (vide Part IV, Recommendation No. 8, pp. 1020–24). Although the Canadian pilots, in contrast to their U.S. counterparts, had only an indirect and non-official advisory rôle, the Board of Directors of both groups often met and discussed matters of common interest. The Canadian pilots at the Commission's hearings stated that the difficulties they had encountered disappeared after changes occurred in the Board of Directors of the U.S. pilots' association. They pointed out, however, that under the then prevailing organization such difficulties were likely to occur again.

This is the situation which prompted the recommendation made at the Commission's hearings that this dual organization be abolished and District No. 1 be made a full Canadian responsibility with pilotage being performed solely by Canadian pilots under Canadian management. In their brief to the Commission the pilots had already recommended that an agreement be reached between Canada and the United States "for better co-ordination of the current administration of pilotage in the Kingston District." (pp. 70–1).

Both administrative authorities finally agreed upon joint operating rules, the latest version being the document entitled "Working Rules and Despatching Procedures, Great Lakes Pilotage District No. 1" as amended to July 10, 1968. These rules were devised jointly and issued by the two operational authorities: the St. Lawrence Seaway Pilots Association, Inc., in charge of the Cape Vincent pilotage office, and the District Supervisor of Pilots in charge of the Cornwall pilotage office. They were approved by the two Pilotage Administrations.

The purpose of these rules is stated in the preamble (Ex. 432):

"The fundamental reasons for these rules and/or instructions are to establish a system whereby; fair and equitable distribution of work is assured all District No. 1 pilots; provision is made for proper and efficient service to vessels; despatchers and pilots are provided with clear instructions as to despatching procedure; proper control of assignment lists and records is maintained."

In brief, these working rules deal with the following subjects:

General Rules:

- Pilots are not to perform any pilotage service except as directed by the despatchers. In the event of a dispute, the order is to be carried out and the matter brought to the attention of the District Supervisor or the President of the U.S. Association as the case may be.
- Cape Vincent is a mandatory change-point.

- Pilots on board ships are to obtain from the Master the next pilotage requirement and transmit the information two hours prior to arrival at the next boarding station, together with the ship's ETA at that station.
- Pilots are to report without delay to the nearest pilotage station the completion of all assignments.

Tour de Rôle Lists, Absences and Vacations

Pilots are taken on charge by the despatching station where they complete an assignment and are to be despatched according to a tour de rôle based on the equalization system without consideration for nationality. Except for a few special cases, equalization does not apply to turns missed during absences, whether authorized or not. There are provisions for mid-summer vacations. (For the study of the despatching rules for regular and winter seasons, vide pp. 240-2.)

Disciplinary Procedure

- The document defines a series of offences which are considered to render the offender (whether a Canadian or United States registered pilot) subject to disciplinary action (subsec. N-1):

“N-1 Any United States or Canadian pilot who, without good cause:

- (a) refuses or fails to comply with or submit to the appropriate rules, procedures and/or authorities herein;
- (b) refuses to accept an assignment, or obey a despatcher's or supervisor's orders;
- (c) fails to report for or carry out an assignment received;
- (d) fails to report when or where ordered;
- (e) during the course of his duties, boards or services a vessel, or attempts to do so, or otherwise assumes a duty status while intoxicated or impaired by intoxicants or drugs;
- (f) while rendering his service, conducts himself in a manner which is unbecoming a gentleman and brings discredit upon himself, other registered pilots, the pilotage service or his association;
- (g) while rendering his service, refuses or fails to comply with or submit to the applicable rules, regulations, procedures or authorities of the St. Lawrence Seaway Authority, the St. Lawrence Seaway Development Corporation, and of any other Governmental agency;
- (h) is unavailable without advance notice, fails to report or keep the appropriate pilotage office informed as to his whereabouts as required, is unaccounted for, or is otherwise unavailable by application of rule D-1;
- (i) arrives late for an assignment, after receiving the proper notice authorized under C-1;

will be deemed to have violated these working rules and despatching procedures.”

—All violations of the rules and procedures, including the offences just quoted, must be reported to the President of the U.S. association in the case of a U.S. pilot, and to the District Supervisor of Pilots in the case of a Canadian pilot, for investigation and disciplinary action where indicated. Furthermore, all pilots, despatchers and other employees or officers of the pilot stations are required to notify the appropriate administrative authority whenever it appears that a pilot may “be physically or mentally incompetent or too intoxicated to perform his duties and/or whose despatch might therefore endanger the public interest or marine safety.”

Miscellaneous Provisions

Section O deals with the provisions that apply only to United States pilots, such as compulsory attendance at the regular bi-annual meetings of the Association and Corporation, the procedure for the pooling and distribution of pilotage receipts earned by United States registered pilots and the procedure for the payment of the administrative expenses of the Association which have not already been reimbursed as costs of operating the Cape Vincent pool, the creation of a pilots’ tribunal for disciplining United States pilots for infractions of the working rules and despatching procedures and any other authorized rules, orders or procedures of any Pilotage Authority (the expression to be taken in its general and natural meaning). The tribunal is a three-man Rules and Trial Committee elected by the Association membership. It conducts trials in accordance with the rules and procedures it has drawn up and has power to issue warning letters, impose fines and/or penalties not exceeding \$300 and suspension for a period not exceeding one week, or both.

An attempt was made to give these working rules a semblance of legality as far as the Canadian pilots are concerned by stipulating in subsec. P-2 that they were “made by the District Supervisor of Pilots in accordance with the authority given him by Section 3 of the Kingston Pilotage District General By-Law” which purports to give the Supervisor power to make orders for carrying out the By-law effectively and, *inter alia*, to “make orders with respect to . . . the conduct of pilots . . .”. Most of the provisions contained in these working rules far exceed the scope of mere administrative orders and take on the nature of regulations. A Pilotage Authority has no power under sec. 329 C.S.A. to redelegate its regulation-making power (Part I, pp. 289 and ff.) but, even if such redelegation were valid, a delegate can not have more power than the delegant and the Pilotage Authority is unable to make regulations whose application extends beyond the limits of the District. Furthermore, the requirements of the Regulations Act have not

been complied with and these working rules can not be deemed to be regulations for the Canadian registered pilots of District No. 1 since the only regulations permissible under Part VIA C.S.A. must be made by the Governor in Council.

Nevertheless, the Canadian pilots are considered still governed by the Kingston District General By-law for subsec. P-3 of the working rules provides:

"P-3 Canadian Pilots are at all times subject to the Canada Shipping Act and Kingston Pilotage District General By-law. These working rules shall not supersede either the Act or the By-Laws at any time."

This stipulation increases the confusion because many of the provisions of the two documents are incompatible, e.g., the District Supervisor has exclusive jurisdiction over despatching Canadian pilots and collecting and sharing their earnings but the By-law states that sharing should be based on time worked while the working rules provide for sharing on the basis of trips. In this connection it should be noted that not more than 20 Canadian pilots can ever be made available for assignments.

In practice, however, the By-law provisions that conflict with the working rules are merely ignored. Furthermore, they are not, in the practical context, capable of proper application. It would not have been conducive to efficiency if all the District pilots were not to be governed by the same working and despatching rules.

(b) *Lake Ontario—Undesignated Waters*

Three groups of pilots are legally competent to pilot in the undesignated waters of Lake Ontario. According to the original plan, the pilotage demand in such waters was to be met jointly by the pilots of adjacent Districts. Hence, the registration certificates of Districts Nos. 1 and 2 pilots are endorsed for pilotage in the undesignated waters of Lake Ontario. Since then, as the Sailing Master approach was gradually abandoned, pilots have been appointed with registration certificates limited to the undesignated waters of Lake Ontario and, in order to avoid unwarranted change-overs, their legal competency extended to the designated waters of Kingston harbour. The Lake Ontario pilots now handle such pilotage almost exclusively and have proved most efficient, especially when piloting in and out of Lake Ontario ports.

Despatching and its related administration are shared between the two local administrative authorities responsible for despatching in the two adjacent District boarding areas, i.e., Cape Vincent and Port Weller. Up to 1968, the U.S. pool at Cape Vincent was responsible for despatching to lake assignments originating in Cape Vincent or within the sector of Lake Ontario placed under its jurisdiction. Since 1968, this task and the administrative work related to it have been handled by the District No. 1 Canadian administrative authority from the Cornwall pilotage office. The Canadian

administrative authority in Port Weller is responsible for assignments originating in the Port Weller boarding area or in the sector of Lake Ontario coming under its jurisdiction, including Toronto and Hamilton.

The operations of these two pilotage offices are governed by joint working rules, the latest of which are dated September 1, 1965. They have not been amended to reflect the 1968 change in the administrative organization of District No. 1. These rules are entitled "Joint (Interpool) Working Rules and Dispatching Procedures For Lake Ontario Assignments, District Nos. 1 and 2 Great Lakes Pilotage" (Ex. 1013(A)). They were devised jointly by the U.S. Administrative Authority of the Cape Vincent pilot station, the St. Lawrence Seaway Pilots Association, and the Canadian Administrative Authority at Port Weller, i.e., the Canadian Supervisor of Pilots in charge of the eastern sector of District No. 2. They were approved by the District No. 2 U.S. association of pilots (Lakes Pilots Association, Inc.), the Canadian administration's representative in District No. 1 (the Supervisor of Pilots, Cornwall) and by the two Central Administrations, the U.S. Great Lakes Pilotage Administration and the Canadian Department of Transport. The approval of the lake pilots as a group was not obtained, presumably because as such they have no administrative responsibility.

These rules are drafted along the same lines as the District No. 1 rules already studied. The basic governing principle is established in the preamble: pilotage on Lake Ontario is to be performed primarily by Lake Ontario pilots. The expression "a lake pilot" or "Lake Ontario pilot" is defined as a Canadian or United States pilot registered for service on Lake Ontario only. The pilots of Districts No. 1 or No. 2 are referred to as "District" or "in-District" pilots. What is meant by "Lake Ontario pilotage" is not defined but it appears from the extent of the Lake Ontario pilots' registration that it includes pilotage in the designated waters of Kingston harbour.

The main features of these rules are briefly as follows:

General Rules

- The Cape Vincent and Port Weller pilotage stations are responsible for despatching to Lake Ontario assignments and are to keep each other informed of the disposition of lake and in-District pilots employed on Lake Ontario.
- Each station has the authority to restrict the services of its own in-District pilots to their District and, if necessary, to recall in-District pilots taken on charge, or about to be taken on charge, by the other station.

Disciplinary Procedures

The rules contain a list of offences which are substantially the same as those contained in District No. 1 working rules. A pilot alleged to have committed an offence is taken off the tour

de rôle and marked unavailable. He may not be despatched until he has reported to his home station for whatever disciplinary action is deemed appropriate. Any violation by either lake or in-District pilots is to be reported to the Great Lakes Pilotage Administration, if committed by a U.S. pilot, and to the Port Weller or Cornwall Supervisor, if a Canadian pilot.

Despatching Procedures

Lake pilots available for assignment at a pilot station are given precedence over the pilots of the District where the station is situated, but pilots of the other District are given precedence for a return trip. District pilots are to be returned to their District station if there is no assignment for them within 10 or 12 hours after their arrival at the out station or after their rest period, if one was taken. For details of despatching procedures, vide pp. 240-2.

Lake Pilots Pooling and Availability

Lake pilots, Canadian and United States, are deemed to have agreed to pool all their pilotage earnings for equal sharing among themselves on the basis of days available. Removal from the tour de rôle for cause is for a minimum of one day. Days of absence for illness (not more than five days per season), for authorized absence for family emergency and for other authorized reasons are counted as days of availability. For a more detailed study of the pooling system, vide pp. 322-3.

These rules do not contain a provision similar to the one in District No. 1 working rules to give them (as far as Canadian pilots are concerned) a semblance of legislative authority, for the obvious reason that even the Canadian parts of the undesignated waters of Lake Ontario are outside Kingston District limits. These rules have no binding effect upon the Canadian Lake Ontario pilots because Part VIA C.S.A., unlike the United States Act (pp. 31 and ff.), does not contain provisions for establishing legislation governing the direction of the service. Since these pilots are not Crown employees, these rules can not be imposed as if they were the orders of an employer, nor can they be imposed under regulations made under Part VI C.S.A. since they are not licensed pilots (Ex. 1541(v)). Furthermore, the Canadian lake pilots operate illegally when they perform pilotage in Kingston harbour because they do not hold a pilot's licence issued under Part VI C.S.A. (Ex. 1541(v)). The exception provided in sec. 356A is limited to pilots registered by the United States licensing authority. Canadian registered pilots must also be licensed by the District Pilotage Authority to be entitled to undertake pilotage in any part of the District. It would be an unwarranted imposition on both shipping and on the service to require a District No. 1 pilot to relieve a lake pilot for a lake assignment involving Kingston if the

lake pilot happens to be a Canadian pilot. Therefore, it is considered that this irregularity should be corrected either by granting the Canadian lake pilots a licence for Kingston harbour or making these waters undesignated.

(c) *Great Lakes District No. 2*

District No. 2 was originally organized along the same lines as District No. 1 but the general inadequacies of this arrangement were increased because the District was an artificial creation. The confined waters are excessive in length and the District is not continuous but is separated by a long expanse of undesignated waters (Part I, Gen. Rec. 8, p. 476).

The downstream limit of District No. 2 at Port Weller is 340 miles from the upstream limit at Port Huron. The District consists of two sectors of designated waters separated by 190 miles of the open waters of Lake Erie, i.e., the 25-mile Welland Canal where transits still average 12 hours, and the 125-mile stretch from Southeast Shoal to Port Huron.

Like District No. 1, District No. 2 was originally serviced by one single group of pilots of both nationalities with equal territorial competency who individually participated in the same way and to the same extent in meeting the pilotage demand which came under the group's responsibility. Their registration extends to both sectors of the District and is endorsed for the undesignated waters adjacent to District No. 2, i.e., all the Great Lakes except Lake Superior, including all their ports and harbours. Up to 1970, their services were available throughout this huge area. Since the 1970 re-organization, the District has been serviced by two separate groups of pilots:

Welland Canal pilots, all Canadian registered pilots and prevailing rate employees of the Department of Transport with *de facto* exclusive jurisdiction over the Welland Canal sector and shared jurisdiction over the adjacent undesignated waters;

District No. 2 western sector pilots, divided into two groups, each with its exclusive jurisdiction:

- a few Canadian registered pilots, also Department of Transport prevailing rate employees, whose field of operations is limited to movages in and trips from (but not into) the Canadian ports on the Detroit and St. Clair Rivers;
- U.S. registered pilots with *de facto* exclusive jurisdiction over the rest of District No. 2 western sector and shared jurisdiction in adjacent undesignated waters.

The pilotage organization of the Port Weller/Sarnia area, which became Great Lakes District No. 2 in 1961, may be divided into three stages (for developments prior to 1959, vide pp. 53–8):

- (i) When the Seaway opened in 1959, the Port Weller/Sarnia services were performed by a group of Canadian and U.S. pilots under the

administrative direction of the Department of Transport through two pilot stations, Port Weller and Sarnia, one at each end of the District. There was no pilotage in the open waters of the adjacent Lakes, including Lake Erie, despite the fact that pilots had to travel across it, since there was no boarding station at the western end.

- (ii) The original organization of Great Lakes District No. 2 under dual management in accordance with the 1961 Memorandum of Arrangements had the downstream pilot station at Port Weller under Canadian management and the upstream pilot station (relocated from Sarnia to Port Huron) under U.S. management, each responsible for the pilotage operations originating from its pilot station or within its half of the District and of the adjacent undesignated waters as then defined in the Memorandum. The pilots' competency had by then been extended to all undesignated waters adjacent to District No. 2.
- (iii) The 1969 *de facto* partition of the District made the Welland Canal to all intents and purposes a separate District under Canadian management, and the western sector of District No. 2 separate under exclusive U.S. management. Both administrations have shared, but distinct, jurisdiction over Lake Erie, and shared jurisdiction with the administrative authority of the next District over undesignated waters separating their Districts.

The organization first adopted for Great Lakes District No. 2 violated all the basic principles of pilotage organization and was an anomaly by normal pilotage standards. This caused constant problems and disputes which only radical changes could resolve. The main weaknesses were:

- (i) grouping two separate, remote areas of confined waters in one District when each should have been a separate District;
- (ii) failure to establish a boarding station at the downstream end of the western sector;
- (iii) retention of the Sailing Master concept, as a result of which the District pilots were required to provide pilotage in the huge expanse of adjacent open water.

The immediate cause of this deplorable state of affairs was that the re-organization of the pilotage service (which the Shipping Federation of Canada had initiated at its own expense) had not been completed when District No. 2 was created in 1961.

The Shipping Federation's aim when it began re-organizing the pilotage system on the Great Lakes for the benefit of its members in 1958 was the implementation of the proposal it had made during the public hearings held in the United States in 1957 on Bill HR 7515 (p. 53), i.e., that organized

pilotage be limited to the restricted areas of the connecting channels of the Great Lakes system. The creation of the Port Weller/Sarnia pilotage area was merely a first step in that direction.

Obviously, the fundamental principles of pilotage organization as well as the geographical features of the transit route required the creation of two separate pilotage services, one limited to the Welland Canal sector with a boarding area at both ends, and a second for the confined waters of the connecting channels between Lake Erie and Lake Huron, again with a pilot station and a boarding area at each end.

The Port Weller/Sarnia pilotage area was a bold departure from the former Sailing Master system but was only a first step toward the desired goal. No doubt the cost of establishing a pilot station and a boarding area at the western end of Lake Erie prevented the immediate implementation of the whole proposal. Port Weller, Port Colborne and Port Huron present no more problems than are met when a boarding area has to be established in open waters for pilotage into any port. The situation differs at the western end of Lake Erie on account of shallow flats which necessitate many miles of confined waters, and the absence of a port, or a centre easily accessible by road, in the immediate area where a pilot station can be established and from where a pilot vessel service to and from the boarding area can be operated. The head of the approach channel to the Detroit River is situated eight miles from the nearest headland on the Michigan side and nine miles from the Ontario side. An alternative site would have been some 34 miles eastward from the head of the east outer channel, i.e., in the area of South-east Shoal, at the entrance to Pelee Passage. Other possible sites are on the Ontario side of the Lake, west of Pelee Passage, where there is deep water about a mile from the shore. Such sites would require vessels to detour somewhat from their direct route and navigate without a pilot through Pelee Passage, the only narrow section in the area, but this should not inconvenience a qualified mariner any more than crossing the Straits of Mackinac between Lake Huron and Lake Michigan. Since the cost of establishing and maintaining a boarding station at any of these sites was estimated more expensive than at the other boarding stations located in the immediate vicinity of the channel, the open waters of Lake Erie were retained in the pilotage area for the time being.

The pilotage service was taken over in 1959 by the Department of Transport which was administering it as such when negotiations began for the organization of the contemplated joint pilotage service for the Great Lakes system. As seen earlier, the initial proposal by United States interests was the perpetuation of the former Sailing Master system. The Canadian Government, with its considerable experience in pilotage organization, especially on the St. Lawrence River, took the opposite position and advocated the Shipping Federation's proposal. The compromise reached as a temporary

measure until the organization could be revised in the light of actual experience accepted the re-establishment to a certain extent of the Sailing Master system in that a limited pilotage requirement was imposed for navigation in the open waters of the Lakes, and the Port Weller/Sarnia area as then operated was changed to District No. 2.

The Canadian Government and the Shipping Federation have since continued to advocate the complete abolition of pilotage requirements in the open waters of the Lakes and the establishment of a boarding station at the western end of Lake Ontario at Southeast Shoal (hence, the partition of the District). These proposals have so far been opposed by the United States authorities, but the original organizational concept was basically modified in practice. The Sailing Master concept has been abandoned and the two sectors of District No. 2 have become two separate, independent entities.

A first step in the re-organization of the District was the gradual withdrawal of District No. 2 pilots from undesignated waters pilotage on Lake Ontario and on Lakes Huron and Michigan. This resulted from the creation of two lake pilot groups and a gradual increase in the number of lake pilots. The Port Weller District Supervisor stated in his 1963 Annual Report (Ex. 1023):

"The use of lake pilots on Lake Ontario and Lakes Huron and Michigan restricted district pilots to their own district to a large extent and proved beneficial to the entire district operation. It is hoped a similar condition will prevail next season."

Great operational difficulties were met from the beginning because of the size of the District. In his 1965 Annual Report, the District Supervisor of Pilots, Port Weller, recommended the partition of the District:

"We wish to offer for your consideration a proposal that the district be made more flexible or manageable by subdividing into different areas, and creating pools of pilots at different places. We have in mind a station at Detroit. All pilots embarking and debarking at this spot. Ships in Toledo and Detroit could be serviced from this pool. At Detroit there would be no difficulty with pilot boats or weather. The cost would be considerably less than in more exposed areas."

Because the District was not subdivided into two separate sectors, each provided with its own group of pilots, and all pilotage requirements were still met by the two pilotage stations located far apart at each end of the District, there continued to be a considerable wastage of the pilots' time. The Port Weller District Supervisor complained in his 1966 Report:

"The ports of Toledo and Detroit were particularly congested with many ships having only a few hours cargo work before sailing, as a result, pilots were detained on board these vessels, anticipating early departure; in other cases ships were anchored in the stream off Detroit and some off Toledo 13 miles out in the lake with pilots aboard. An all out effort was made to remove pilots from these vessels when possible. This met with moderate success."

"It is obvious that the needless detention of pilots aboard ships waiting to handle cargo is the major cause of pilot shortage. The need for positive action is apparent since methods previously tried have met with little real success."

The compulsory removal of pilots at Detroit and Toledo upon arrival at the dock or a safe easy anchorage appears to be the answer."

In 1968, the Canadian and United States authorities decided to establish on a trial basis a change-point at Detroit but without the partition of the District it could not succeed. There were also a number of contributing factors related to the operation of the U.S. pool at Port Huron which led to the abandonment of the experiment after a few days (vide pp. 255-6).

Effective the beginning of the 1969 season, District No. 2 was formally divided into two *de facto* separate, independent Districts, at least from the operational point of view, each with its own group of pilots, and a mandatory change-point was established off Detroit.

The "Working Rules and Dispatching Procedures Great Lakes Pilotage District No. 2" dated May 15, 1967 (Ex. 1012) are the latest set of rules for the District. As of December 1970, they had not been modified to reflect the basic organizational changes since they were drafted. New rules are being prepared (see p. 259) but, in the meantime, the 1967 rules are being followed in both sectors to the extent they do not conflict with the new system. Like the District No. 1 working rules, they have been devised by the two administrative local authorities who, in 1967, were jointly responsible for pilotage operations in District No. 2, i.e., the Canadian District Supervisor in charge of the Port Weller pilotage station and the Lakes Pilots Association, Inc. responsible for the operation of the U.S. pool at Port Huron. These rules were approved by both Canadian and U.S. Great Lakes Pilotage Administrations.

Like other working rules, their purpose is three-fold as stated in the preamble:

- to establish a system assuring the pilots a fair and equitable distribution of work;
- to provide vessels with proper and efficient service;
- to provide pilots and despatchers with clear instructions on despatching procedures and proper control and maintenance of assignment lists and records.

The main features of these rules are as follows:

Definition of Administrative Jurisdiction

- (i) The Port Weller pilotage office's jurisdiction extends over all assignments originating at Port Weller, in the Welland Canal area and at Cleveland or Port Stanley or any other Lake Erie port east of those two ports.
- (ii) The Port Huron pilotage office's jurisdiction extends over all pilotage assignments originating at Port Huron, in the western sector of District No. 2 and at Lake Erie ports situated west of Cleveland and Port Stanley.

This provision was not amended to reflect the 1968 extension of the Port Huron office's jurisdiction on the U.S. side of Lake Erie eastward up to and including Ashtabula (pp. 255-6) or the 1970 reorganization.

Disputes over Despatching Orders

These are to be settled by the administrative authority with jurisdiction over the locality concerned, irrespective of the nationality of the pilot. If a dispute can not be settled immediately, the despatching order is to be carried out and the dispute attended to later; if it can not be settled at the local level, it is to be reported for joint adjudication by the President of the Lakes Pilots Association, Inc. and the Port Weller Supervisor.

Definition of "Pilotage Authority"

For the purpose of these rules, this expression means the Canadian Supervisor of Pilots at Port Weller and the Lakes Pilots Association, Inc. acting through officers delegated by the Association for this purpose. These rules purport to give these two so-called Pilotage Authorities power to redelegate their authority to despatchers or any other employees.

Pilots' Source Forms

Each pilot is responsible for completing his source form on which, *inter alia*, he should enter times and information regarding boarding, leaving a vessel, arrivals and departures from harbours, anchoring and departures from anchorages and passing Port Colborne, Port Weller, Southeast Shoal and Lake Huron Lightship, the name of the relief pilot at lock 7 and indicate whether pilotage was performed at the Master's request in Lake Erie, as well as any unusual circumstances. Separate source forms are to be filed for in-District and lake assignments. Source forms must be signed by the Master who is also to endorse specifically any performance of Lake Erie pilotage.

Despatching Procedure

In-District despatching is to be carried out according to a strict tour de rôle, i.e., in the order that names appear on the assignment list, names being added at the bottom of the list of the pilot station in whose jurisdiction the pilot is at the moment, at the time specified in the rules—generally as he becomes available for duty. When a pilot's turn comes, he may be sent to an in-District or lake assignment, the order of despatching among pilots on lake assignments being governed by the appropriate joint interpool working rules. A few pilots are to be made available at Port Weller

on the basis of a 12-hour turn of duty as harbour pilots for the purpose of bringing upbound ships from the anchorage area to lock 1. For details of the despatching rules, vide pp. 257 and ff.

Discipline of Pilots

Like those previously studied, these rules contain a list of specific offences which are in substance the same as those on pp. 160-1. The alleged commission of any of these offences results in the pilot concerned being taken off the assignment list for at least 24 hours, to be reinstated only when directed by the appropriate "Pilotage Authority", to whom the case is to be referred for investigation and disciplinary action if indicated.

The rules also contain certain provisions applicable only to U.S. pilots and U.S. stations which, *inter alia*, deal with the disciplinary powers of the Lakes Pilots Association over the U.S. pilots, whether or not they are members of the Association.

Subsection P-2 stipulates, "Canadian Pilots are also subject to the disciplinary measures contained in the Canadian Great Lakes Pilotage Regulations and the General Departmental policy on discipline promulgated by the Deputy Minister of Transport."

The District No. 2 working rules do not have the binding effect of legislative provisions in so far as they apply to Canadian pilots but they are binding as orders issued by their employer, the Canadian Government or the Department of Transport on its behalf.

(d) *Lake Huron/Lake Michigan Undesignated Waters*

Pilotage in this part of the Upper Lakes comes under the joint competency of three groups of pilots: District No. 2 and District No. 3 registered pilots whose registration certificates are endorsed for that sector, and the pilots whose registration certificates are limited to that sector, i.e., the Lake Huron/Lake Michigan pilots. Lake pilots have been appointed officially as such since 1965 but before that some District pilots had been exclusively reserved for lake assignments. At present, the lake pilots handle about half the pilotage demands in this sector.

The pilotage operations in the Lake Huron/Lake Michigan sector are now (and always have been) directed and administered by the local U.S. administrative authorities responsible for the Port Huron and Detour pilot stations, i.e., the Lakes Pilots Association, Inc. and the Lake Superior Pilots Association, Inc. respectively, and the pilot station jointly established by the two authorities at Chicago. There has never been any Canadian participation in the direction of the service in this sector.

The "Joint (Interpool) Working Rules Great Lakes Pilotage Districts Nos. 2 and 3" date from October 25, 1963 (Ex. 1013(B)). They have not

been amended since, despite the subsequent creation of the lake pilots group. However, their provisions remain applicable *mutatis mutandis* because the rules provided for the allocation of pilots of both Districts as lake pilots (the system in force prior to 1965).

These rules were drawn up by the two U.S. pilots' associations concerned with the Port Weller Canadian Supervisor of Pilots. They have been approved by the U.S. Administrator but do not purport to have received the approval of the Canadian administration.

These rules are based on the same principles as the joint interpool rules for Lake Ontario:

Definition of Administrative Jurisdiction

- (i) District No. 2 station, Port Huron, makes all lake assignments originating there or from any Lake Huron port closer to Port Huron than Detour;
- (ii) conversely, District No. 3 station, Detour, is responsible for lake assignments originating there and for other assignments closer to Detour than Port Huron;
- (iii) the Chicago pilotage office is responsible for all assignments originating in Lake Michigan.

Lake Pilots

They have precedence over District pilots except for assignments which would return a District pilot to his District.

District Pilots

They may be recalled to their District at any time and must be returned if no return assignment is expected within 12 hours of their arrival.

Despatching Disputes

These are to be settled by the official of the Association with jurisdiction over the locality concerned. If no solution can be reached, the dispute is to be reported to, and resolved by, the Administrator, United States Great Lakes Pilotage Administration, no distinction being made when the offender is a Canadian registered pilot.

These rules do not have the binding effect of legislative provisions on Canadian pilots. The situation here is the same as in District No. 2 as far as the effect of the working and despatching rules on Canadian pilots is concerned (pp. 257-9), with the added difference that for operational purposes the Canadian pilots in that sector come exclusively under U.S. management.

(e) *Great Lakes District No. 3*

Pilotage services west of Detour are provided by a single group of pilots composed of U.S. registered pilots and a few Canadian registered pilots. The U.S. pilots have the same status as in the other Districts, i.e., they are self-employed but are forced into compulsory partnership under the pool arrangements in the United States Great Lakes pilotage legislation. On the other hand, the status of the Canadian pilots is the same as in District No. 2, i.e., they are Canadian Government employees under the prevailing rate system who have been placed under the authority of the U.S. pool for despatching purposes.

The original concept of equal participation in administration in each District was never applied to District No. 3 which has been under U.S. management since its creation. The only Canadian participation is at the policy level through the Memorandum of Arrangements and at the service level through the presence of a few Canadian registered pilots. There is only one official pilot station (Detour) whose operation has been entrusted to the local U.S. Pilots' Association, the Lake Superior Pilots Association, Inc.

At the Commission's hearings it was stated that the Department of Transport maintains only very slight contact with the Canadian pilots of District No. 3, although they are its employees. It appears that the presence of Canadian pilots in District No. 3 is merely a matter of allowing them to work in that District in order to keep a Canadian stake there.

According to the original concept of organization, the pilotage demand in the undesignated waters of Lake Superior and its ports became the responsibility of the pilots of District No. 3, the only adjacent District. In fact, St. Marys River and Lake Superior and its ports are considered one huge District as far as pilotage is concerned. This explains why, in contrast to the situation that developed on the other Lakes (except Lake Erie), no pilots were ever appointed solely for the undesignated waters of Lake Superior. The territorial competency of the District No. 3 pilots also extends to the undesignated waters of Lakes Huron and Michigan.

Here again, it was the Shipping Federation which assisted in the formation in 1959 of the third pilotage area consisting of the confined waters of the connecting channels between Lake Huron and Lake Superior which was to become District No. 3 under Great Lakes pilotage legislation. The service was provided by a number of U.S. pilots who had been serving in that area and who grouped themselves and formed the association which still exists today. However, the Shipping Federation, in conformity with the organizational principles it was advocating, urged the formation of separate local pilotage services in the main ports of Lake Superior, i.e., Duluth/Superior and Fort William/Port Arthur, with no pilotage in the open waters of Lake Superior or on Lake Huron or Lake Michigan.

This was the actual situation when the connecting channel consisting of St. Marys River and the Sault Ste. Marie locks became the designated waters of Great Lakes District No. 3. Because of the compromise solution on pilotage in the open waters of the Lakes which Canada had to accept, this ideal organization was radically changed. The competency of the District No. 3 pilots was extended to all adjacent open waters with exclusive jurisdiction on Lake Superior and in its ports, and shared jurisdiction with District No. 2 pilots over Lake Huron and Lake Michigan and their ports. By that time, privately operated port pilotage had disappeared. Requirements at Fort William/Port Arthur had been met for some years by two pilots whom the Minister of Transport had registered and stationed there for local services pending the organization of the District. This arrangement was taken over by the U.S. pilots' association when it was authorized to form the pilots' pool for District No. 3. A pilot station was established at Duluth/Superior and a few District No. 3 pilots were stationed at Fort William/Port Arthur to attend to port requirements when not on translake assignments (p. 273).

The provision of services is governed by the "Pool Working Rules and Dispatching Procedures Great Lakes Pilotage District No. 3" as amended March 1, 1965 (Ex. 1090(B)), which were drawn up and issued by the only administrative authority involved, the Lake Superior Pilots Association, Inc., and approved by the United States Great Lakes Pilotage Administration. There was no official Canadian participation at any stage.

The rules set up a unified service for District and Lake Superior assignments and port pilotage at Thunder Bay and Duluth. They combine the operational features common to District and Interpool Rules. The main features are:

- Apart from the open waters of Lake Superior, three pilotage areas have been established: the designated waters of the District, Duluth/Superior and Thunder Bay (Fort William/Port Arthur).
- The pilots are divided into "assigned area pilots" and "general assignment pilots".
- The number of pilots to be attached to, and stationed in, each area is determined by experience to meet the local demand. Before the opening of the navigation season, the United States pilots choose by order of seniority the area to which they wish to belong; when the area positions are filled, the rest of the pilots become general assignment pilots. The Canadian pilots are rotated through all areas and categories in order to participate in all phases of the workload and earnings of the District.
- Separate assignment lists are kept at each place for the various types of assignment, and among pilots of the same group a strict tour de rôle applies.

- Local work is normally done by the area pilots of the locality who, in addition, will be given a translake assignment if no pilot from another area is awaiting a return trip and no general assignment pilot is at the station concerned awaiting assignment. General assignment pilots are given priority over area pilots for translake assignments.
- An area pilot may not be unduly retained in a distant area and, unless a return trip is expected within the specified time, he must be returned to his own area by land transportation. However, all pilots are liable to be transferred by land to any point in the District where a shortage of pilots has developed.

Like the working rules in other Districts, there is a list of offences which here automatically entail two administrative punishments. First, there is punishment resulting from the application of a special rule, i.e., the offender is marked unavailable and taken off all assignment lists for 24 hours with the pecuniary loss this may entail. When the 24-hour period is up, provided he has personally notified the station that he is now available, he is placed first on the translake list ahead of all pilots on station and available but behind those already ordered, and at the bottom of all the other lists. Second, the infraction also renders him liable to disciplinary action by the Pilots' Association's Examining Board in the case of a United States pilot and by the Canadian Authority in the case of a Canadian pilot.

For translake assignments to Lake Huron and Lake Michigan, District No. 3 pilots are governed by the Interpool Rules. When outside their District, they come under the jurisdiction of the Port Huron District No. 2 pilotage office and the Chicago Joint District No. 2 and No. 3 out-District office for return assignments.

4. PILOTS

(1) NUMBER OF PILOTS

In a pilotage organization where the provision of services is regulated administratively, several questions are interrelated: the number of pilots, workload and, if the organization is to be financially self-supporting, administrative costs and rates. In the Great Lakes system, other factors arising from the joint organization further complicate matters.

The exercise of the pilots' profession on the Great Lakes is not open to all qualified candidates since both Part VIA C.S.A. and the United States Great Lakes Pilotage Act make provision for limiting the number of pilots. Part VIA deals with the matter only indirectly: it gives the Minister power to fix the number of Canadian registered pilots but remains silent on the subject of the criteria by which he is to be governed in the exercise of this:

apparently discretionary power (p. 11). However, the Canadian Government is bound in this respect by the United States/Canada agreement contained in the February 19, 1960, exchange of aide-mémoire (pp. 61-3).

The United States Great Lakes Pilotage Act also authorizes fixing by administrative decision the permissible number of pilots but goes further by establishing the criteria by which the Secretary is to be guided, i.e., meeting the demands created by the pilotage requirements imposed on ocean-going vessels, equitable participation by the registered pilots of both countries in the provision of services and authorization for the Secretary to arrange with his Canadian counterpart, the Minister of Transport, the number of pilots to be registered in each country (subsec. 4(d)).

In the first Memorandum of Arrangements, the Secretary of Commerce and the Minister of Transport agreed in 1961 on the method of achieving such equitable participation by pilots of both countries, i.e., overall parity in the number of Canadian and United States pilots in the system with participation by pilots of both nationalities in all parts of the service, although not necessarily in equal numbers at the local level. This aim, however, could not be attained forthwith, mostly because there were insufficient qualified U.S. candidates to meet the U.S. quotas. The target year to achieve parity was set at 1965 and interim establishments were agreed on, subject to periodic revisions. Except in District No. 1 where the number of available Canadian pilots exceeded the agreed establishment by four, all vacancies and/or additional pilot requirements were to be filled by United States registered pilots.

Overall parity of numbers was reached in June 1964 and the transitory provisions of the 1961 Memorandum were deleted in 1966. The Memorandum of that year merely stated that the Secretary and the Minister were to determine the number of pilots to be registered and the waters for which they were to be registered, and that "United States and Canadian registered pilots shall participate equally in the pilotage services required on the Great Lakes so that there shall be an equal number of Canadian and United States registered pilots." That year an exception to the rule was made because of the legal problem created by the fact that the St. Regis/Snell lock six-mile sector was being serviced by Canadian licensed pilots of the Pilotage District of Cornwall who did not hold registration certificates. It was agreed that these pilots would be registered under Part VIA C.S.A. for services in that sector (Part IV, pp. 899 and ff.), the total of these certificates to count as two Canadian certificates for the purpose of calculating parity. The latter part of this provision was deleted in 1968 and these accessory and limited certificates no longer counted in the calculation.

Parity was not achieved in 1968 when it became necessary to reduce the establishment; uniform reductions could not be made, no doubt on account of the commitments arising from permanent registration certificates. Under the circumstances, this rigid requirement was relaxed in the 1969 Memo-

random by the addition of the phrase "as far as practicable". Except for the 1961 version, the Memorandum did not thereafter deal with the actual number of Canadian and United States pilots, either on a local basis or overall; this was left to be determined by agreements at the administrative level.

The application of the rules that normally govern fixing the number of pilots in a given locality is complicated by several situations and considerations resulting from the strange and unorthodox way pilotage was organized in the Great Lakes system. Normally, the main criterion is that the number of pilots should be those needed to meet the expected demand for pilotage in the locality concerned during lengthy peak periods without the pilots being overworked, but, since the day-to-day demand is quite unpredictable, it would be a waste of the pilots' time to attempt to meet peak demands of short duration. Irregular demands are characteristic of pilotage and the pilots should expect to assume a heavier workload for short periods (as they have always willingly done) and, in the circumstances, the non-availability of a pilot for a reasonable period of time is a normal, unavoidable inconvenience which shipping should be expected to bear with. Since recurring fluctuations are predictable, the number of pilots should not be increased simply to permit periodic holidays fixed in advance but the pilots should be expected to take their holidays and prolonged rest periods in turn when the demand for pilotage is low, subject, however, to be recalled if the situation changes. Unless navigation is year-round, there should be no system of annual vacations during the navigation season; instead, annual holidays should be taken during the winter months.

A further rule applies when the pilots' remuneration depends upon fees earned by their services. This brings up the whole question of their remuneration and the cost of the service to shipping because, in these circumstances, a larger number of pilots means smaller remuneration unless rates can be raised without becoming unreasonable (Part I, p. 143). On the other hand, not only should the Authority strive to provide the pilots with adequate remuneration commensurate with their responsibilities and the quality of their services, but also the combination of their remuneration and other service benefits should be an incentive to attract candidates with the highest qualifications.

The application of these general rules was extremely complicated in the Great Lakes system for a number of reasons, *inter alia*:

- the principle of parity in the number of Canadian and U.S. pilots, and the requirement that pilots of both nationalities should participate in the provision of services in each sector;
- the disparity of status between pilots performing similar assignments;
- the loss of pilots' time on board vessels due to circumstances beyond their or their organization's control;

—the waste of expert services and pilots' time due to the application of the Sailing Master concept.

The requirement of overall parity is an artificial element which was one result of the original concept of equal U.S. and Canadian participation in the organization, administration and provision of services at all levels and in all sectors. This original system has not proved efficient and has gradually been amended so that the parity requirement has lost its original importance, e.g., it no longer applies in the Welland Canal sector which is now under exclusive Canadian management and where all services are provided by Canadian pilots.

This 1969 re-organization of District No. 2 also corrected the disparity in the pilots' status. In theory, the problem remains for the District No. 3 and Lake Huron/Lake Michigan pilots but, in practice, there is no serious difficulty because the two sectors concerned are under U.S. management and the great majority of the pilots are U.S. citizens.

Disparity in status causes a detrimental conflict of interests. While the Canadian Authority is bound to assure its pilot employees adequate, reasonable working conditions and, therefore, will consider the number of pilots mainly in relation to a fair distribution of the workload, the U.S. Authority must give primary consideration to the effect on the remuneration of the U.S. pilots who are compelled to belong to a pool and receive a share of the net revenue. As Crown employees, the Canadian pilots consider that an increase in their number improves their working conditions but to the U.S. pilots this means less remuneration. This basic conflict of interests has been a continuous source of disagreement and dispute between Canadian and U.S. pilots. In the working rules for District No. 2 an exception had to be provided to exclude the U.S. pilots from the mandatory changeover at lock 7, an amendment for which the Canadian pilots had been pressing for many years in order to improve their working conditions. District No. 1 and Lake Ontario pilots are not faced with this problem because the status of the Canadian and U.S. pilots there is the same.

In addition to being very unpopular with the District pilots and a serious waste of *expertise*, the Sailing Master concept caused a considerable loss of time which necessitated the appointment of a larger number of District pilots than would otherwise have been needed. Although the District pilots' territorial competency continues to extend to the open waters adjacent to their District, to all intents and purposes the Sailing Master concept has now been abandoned (except for District 3 pilots) and now lake pilots have completely replaced Districts 1 and 2 pilots for assignments on Lakes Ontario, Huron and Michigan and in their ports.

The loss of pilots' time on board due to congestion in the locks is beyond the control of the pilotage service and is unavoidable when the traffic exceeds Seaway capacity. Great progress has been made in this

respect in recent years by better planning and improved lockage procedure (pp. 91 and 108 and ff.), e.g., the average transit time for the Welland Canal (the sector worst affected) was reduced from an average of 20 hours to 12 hours.

The imposition of unwarranted pilotage requirements for the purpose of increasing revenue is both abusive and self-defeating. There is a tendency to resort to this expedient when the aggregate income is considered insufficient to meet expenses and provide the pilots with adequate remuneration. The problem becomes particularly acute when there is a decrease in the demand for pilotage, such as occurred in recent years, and has led the U.S. administration to try to deny unregistered pilots the right to provide services to ships which do not come under, or have complied with, the compulsory pilotage requirements (p. 123). It also encouraged the Cape Vincent pool to try to trick Masters of vessels which had the right to dispense with a registered pilot on board on Lake Ontario to employ a registered pilot for pilotage in Hamilton and Toronto instead of a port pilot (p. 128-9). Unless the decrease is only a temporary fluctuation, the obvious solution is an appropriate decrease in the pilots' strength, and this has been the remedial action taken in recent years. However, a reduction in strength is a slow process if all registration certificates are of a permanent nature, in which case it can be achieved only through normal attrition. Since an immediate decrease in numbers is not practicable, pilots other than Canadian Crown employees asked for a substantial increase in pilotage rates. Their demands were partly met but the Canadian veto on granting the full increase resulted in strike action by some groups of U.S. pilots and threats by U.S. associations operating pools to declare bankruptcy (p. 293).

Re statistics on pilots' establishment and strength, reference is made to the Statistical Report Great Lakes Pilotage, 1968, reproduced as Appendix A. Table 1 of Part I gives the establishment agreed upon between the Secretary and the Minister since 1961, broken down by District and by Canadian and U.S. pilots. Table 2 of Part I gives the same information but shows the actual strength at the end of each year. These tables, however, do not convey a true picture because they do not segregate District pilots from lake pilots who are attached to the District for administrative purposes only. The required information was sought and obtained from the Department of Transport (Ex. 1541(o)).

(a) *District No. 1*

The following two tables provided by D.O.T. show the fluctuation over the years of the pilot establishment and the actual strength of Canadian and United States pilots for District No. 1 and for Lake Ontario.

For the years 1961 to 1963 the actual strength of Canadian pilots was greater than shown (p. 180) (i.e., 24 in 1961 and 21 in 1962 and 1963) due

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to the number of Canadian pilots who held permanent licences for the Kingston District prior to the organization of District No. 1. According to the Memorandum of Arrangements, only 20 Canadian pilots could be on the active list at one time; when vacancies occurred, they were filled by the pilots in excess of the establishment before new U.S. pilots could be appointed.

DISTRICT NO. 1
NUMBER OF PILOTS AUTHORIZED
(By Date of Change)

Date	Total Number of Pilots	District Pilots		Lake Ontario Pilots	
		American	Canadian	American	Canadian
1961 - May.....	32	12	20	nil	nil
1961 - August.....	32	12	20	nil	nil
1962 - July.....	36	12	20	2	2
1963 - March.....	39	12	20	4	3
1964 - June.....	40	12	20	4	4
1965 - January.....	42	12	20	5	5
1965 - July.....	44	12	20	5	7
1966 - May.....	50	14	20*22	7	7
1966 - June.....	50	14	20*22	7	7
1966 - July.....	50	14	20*22	7	7
1967.....	50	14	20*22	7	7
1968.....	46	14	19	6	7
1969.....	46	14	19	6	7
1970.....	46	13	19	7	7

*Under date of 29 July 1965, two Canadian positions allocated for St. Regis/Snell Lock Pilotage; on 10 May 1966, the two compensating U.S. positions were allocated to District Pilots.

DISTRICT NO. 1
NUMBER OF PILOTS ON ROLLS
(Including Applicants Temporarily Registered)

(Dec. 31st)	Total Number of Pilots	District Pilots		Lake Ontario Pilots	
		American	Canadian	American	Canadian
1961.....	32	12	20		
1962.....	36	12	20	2	2
1963.....	38	12	20	3	3
1964.....	40	12	20	4	4
1965.....	42	12	20	5	5
1966.....	48	14	20	7	7
1967.....	49	14	20	8	7
1968.....	46	14	19	6	7
1969.....	46	14	19	6	7
1970.....	45	13	18	7	7

Following the protest of the District pilots against Lake Ontario assignments, lake pilots were appointed. Since 1967, District No. 1 pilots

have not been required to perform lake assignments: they are handled by lake pilots, and occasionally by District No. 2 pilots.

(b) *District No. 2*

The following two tables supplied by D.O.T. convey the same information for District No. 2 and the Lake Huron/Lake Michigan pilot group.

DISTRICT No. 2
NUMBER OF PILOTS AUTHORIZED
(By Date of Change)

Date	Total Number of Pilots	District Pilots		Lake Pilots	
		American	Canadian	American	Canadian
1961 - May.....	56	9	47		
1961 - August.....	60	15	45		
1962 - July.....	60	21	39		
1963 - March.....	60	26	34		
1964 - June.....	64	31	33		
1965 - January.....	95	35	43	10	7
1965 - July.....	95	35	43	10	7
1966 - May.....	100	35	43	15	7
1966 - June.....	100	35	43	15	7
1966 - July.....	100	35	43	15	7
1967.....	100	35	43	15	7
1968.....	87	34	41	7	5
1969.....	75	33	42	*	*
1970.....	74	32	42	*	*

*Positions allocated to District No. 3.

DISTRICT No. 2
NUMBER OF PILOTS ON ROLLS
(Including Applicants Temporarily Registered)

(Dec. 31st)	Total Number of Pilots	District Pilots		Lake Pilots	
		American	Canadian	American	Canadian
1961.....	59	15	44		
1962.....	62	24	38		
1963.....	63	29	34		
1964.....	73	36	37		
1965.....	85	35	40	5	5
1966.....	93	38	47	5	3
1967.....	94	41	45	4	4
1968.....	89	33	45	7	4
1969.....	74	32	42	*	*
1970.....	72	31	41	*	*

*Positions allocated to District No. 3.

The main problems that had to be faced in connection with the number of pilots in District No. 2 were:

- the increase in pilotage demand up to 1965;
- the loss of pilots' time in Welland Canal operations, especially when congested, and in the intermediate ports of their lengthy District, especially Toledo and Detroit, and their extensive commitments in undesignated waters;
- the decrease in the number of ships since 1966.

(c) *District No. 3*

The following tables provided by D.O.T. contain similar information for District No. 3. The lake pilots are those for Lake Huron and Lake Michigan who are now attached to District No. 3 rather than District No. 2 for administrative purposes. There is no separate lake pilot group for Lake Superior.

DISTRICT No. 3
NUMBER OF PILOTS AUTHORIZED
(By Date of Change)

Date	Total Number of Pilots	District Pilots		Lake Pilots	
		American	Canadian	American	Canadian
1961 – May.....	16	13	3		
1961 – August.....	16	13	3		
1962 – July.....	16	13	3		
1963 – March.....	16	13	3		
1964 – June.....	16	13	3		
1965 – January.....	16	12	4		
1965 – July.....	16	12	4		
1966 – May.....	16	12	4		
1966 – June.....	16	12	4		
1966 – July.....	20	14	6		
1967.....	20	14	6		
1968.....	18	14	4		
1969.....	27	14	4	5	4
1970.....	28	16	4	4	4

DISTRICT No. 3
 NUMBER OF PILOTS ON ROLLS
 (Including Applicants Temporarily Registered)

(Dec. 31st)	Total Number of Pilots	District Pilots		Lake Pilots	
		American	Canadian	American	Canadian
1961.....	14	14			
1962.....	19	16	3		
1963.....	17	14	3		
1964.....	15	12	3		
1965.....	16	13	3		
1966.....	20	14	6		
1967.....	18	14	4		
1968.....	18	14	4		
1969.....	27	14	4	5	4
1970.....	26	15	4	3	4

(2) RECRUITING AND APPRENTICESHIP

The availability in the Great Lakes system of a large pool of qualified mariners experienced in navigating the confined waters of the designated areas and conversant with Seaway procedure and lockage operations has proved the ideal source for recruiting pilots. Since the candidates have proven qualifications of the highest standard, the training they require is limited to experience in handling ocean-going vessels. For a similar situation, compare the Pilotage District of Cornwall (Part IV, pp. 934-938).

Canadian Great Lakes legislation does not cover the training of pilot candidates (p. 16). The United States regulations provide that pilot candidates may be required to undergo the training programme adopted by the pool responsible for pilotage operations in the sector in which they wish to be registered (pp. 43, 46 and 47).

The Canadian pilots in Districts Nos. 1 and 2 have repeatedly requested that an apprenticeship system be organized officially.

In practice, an unofficial training system has developed. District pilots are recruited from lake pilots. Since applicants are already qualified mariners with experience in navigating the Great Lakes system, they are first registered as lake pilots, either for Lake Ontario or for Lake Huron/Lake Michigan, but are not given any guarantee that they will ever become District pilots.

While they serve as lake pilots, they gradually acquaint themselves with the peculiarities of ocean-going vessels on their various lake assignments and when handling them in the ports situated in undesignated waters. When a vacancy occurs in a District establishment, a candidate is normally chosen from the Lake Ontario pilots for District No. 1 and from the Lake Huron/Lake Michigan pilots for District No. 2 or District No. 3. The chosen candidate is required to accompany a registered pilot on a number of District assignments until it is considered that he has become sufficiently familiar with its features. His training is completed by actual pilotage assignments which he performs alone while holding a probationary registration certificate unlimited as to type or size of ship (Ex. 1541(p)).

The U.S. administration follows the same practice. The expressions "applicant pilots" or "applicants temporarily registered" used in the U.S.-Canada Statistical Report (vide Appendix A) Part I, Tables 2, 5(a) and 5(b), mean lake pilots (Ex. 1541(p)).

Great Lakes shipowners have complained that this system is siphoning off a great number of experienced Masters and mates from the commercial trade to become Cornwall District or Great Lakes pilots by offering them greater remuneration and better working conditions than the shipowners. The Great Lakes shipowners add that in this way the Canadian and United States Governments make them bear the cost of training pilots for the benefit of another category of vessels. In order to meet their own requirements for Masters and navigating officers, the scarcity of trained personnel obliges them to train men on the job and pay for qualification courses. The benefit of all this effort and expense is lost when the men they have qualified are taken away from them to become pilots (Ex. 1541(g)).

COMMENTS

The training system is realistic but it is considered that it should be defined in legislation in order to ensure a high standard of qualifications and prevent arbitrary decisions.

The Great Lakes shipowners' complaint is not well founded for it is in the public interest to attract the best available candidates to the pilotage service and to recruit from the ranks of experienced local mariners. The possibility of a shipowner losing the navigating officers he has trained is not exclusively related to pilotage because there is nothing to prevent such officers from leaving for employment with another owner who offers better remuneration or working conditions. The problem should not be as acute as before since the demand for candidates should have decreased now that the system is fully organized, the pilots are somewhat over strength and pilotage traffic is declining. Its importance will be further reduced if compulsory

pilotage requirements are not extended to cases where the services of a pilot are not really needed, e.g., in the open waters of the Lakes.

(3) PILOTS' ORGANIZATIONS

In their Great Lakes pilotage legislation Canada and the United States have a basically different concept of pilots' organizations. Neither Act provides for automatic association, corporate or otherwise, and neither makes it illegal for the pilots to form any number of voluntary associations if they so elect. However, the U.S. legislation assumes this will take place in sectors where there is a requirement to regulate the provision of services.

As seen earlier (pp. 38 and 45), under the United States legislation, the Government may not assume the management and direction of the service. This function may be undertaken only by a voluntary association of all or some of the pilots (complete membership is not required). In a given locality, there may be a number of separate associations but all the U.S. pilots there will be automatically subject to the operational and administrative control of the association chosen by the Great Lakes Pilotage Administrator to create and operate a pilots' pool. While membership in the association is voluntary, every pilot must belong to the pool. Since the pool is operated by the association, any pilot who is not a member of that association has no legal voice in its organization and operation except by making representations to the Administrator in the discharge of his surveillance duties and as the authority responsible for making the regulations under which the association operates the pool. If no voluntary association exists or if none is willing to operate a pool, the pilots become private contractors.

By contrast, the associations which the Canadian pilots may form are not recognized in the Canadian Act. Nevertheless, the fact that they have no official status does not prevent them from playing an important part.

The Commission shares neither of these extreme and opposite views in areas where pilotage is considered a public service, and has expressed its views in Part I, General Recommendations, particularly Nos. 14 and 25 (Part I, pp. 495 and 549). While it is considered that the pilots in a given locality should be compulsorily grouped in a statutory professional corporation, it is also believed that, because of the possibility of conflicting interests, such corporations must not be entrusted with the task of operating the service where pilotage is necessary in the public interest. This responsibility should be assigned to a disinterested public agency.

The situation with regard to Canadian and U.S. pilots' organizations has changed little since the time of the Commission's hearings. Information about the Canadian organizations has been brought up to date to the extent deemed necessary for the purposes of this Report. As far as

the U.S. associations are concerned, the information obtained at the hearings supplemented by official documents suffices to illustrate their rôle in the overall organization and permit an appraisal of the validity of the system.

(a) *District No. 1*

In District No. 1 there are two pilots' organizations: the St. Lawrence Seaway Pilots Association, now grouping all the United States registered pilots for District No. 1 and Lake Ontario, and the Corporation of the Upper St. Lawrence Pilots, which groups all the Canadian pilots registered for District No. 1, but not the Canadian Lake Ontario pilots. In addition, the Canadian District registered pilots, as licensed pilots for the Pilotage District of Kingston, are also represented by the usual Pilots' Committee (Part I, pp. 82 and ff.) which, under the District General By-law, is their official representative both as a group and as individuals. As in the other St. Lawrence River Districts, the Board of Directors of the Pilots' Corporation automatically forms the Pilots' Committee.

(i) *St. Lawrence Seaway Pilots Association, Inc.*

The St. Lawrence Seaway Pilots Association, Inc., is the voluntary U.S. pilots' association which had been authorized by the Administrator to form and operate the former U.S. Cape Vincent pilots' pool. When District No. 1 was created in 1961, the 12 United States pilots formed two associations. It was only in 1962 that one of these, the St. Lawrence Seaway Pilots Association, was authorized to form and operate the Cape Vincent pool, although it did not include all the U.S. registered pilots. It appears that since then the association obtained as members all the U.S. registered pilots, not only of District No. 1 but also of Lake Ontario.

Until the Cape Vincent U.S. pilots' pool was disbanded in 1969 (pp. 305-6) because dual administration was not considered conducive to the efficiency of operations and administration, the St. Lawrence Seaway Pilots Association despatched pilots for assignments originating at Cape Vincent or in the adjacent areas of District No. 1 and Lake Ontario under its jurisdiction, and attended to the ensuing administration, *inter alia*, the collection of pilotage fees, and made the necessary arrangements to provide pilot vessel service at Cape Vincent (p. 217 and ff.). Since 1969, this association has had no official status or official rôle in the organization of the service. Presumably, it continues to include the U.S. pilots of District No. 1 and Lake Ontario but as a voluntary professional association.

(ii) *Corporation of the Upper St. Lawrence Pilots (Ex. 848)*

The Corporation of the Upper St. Lawrence Pilots includes as members all the licensed pilots of the Kingston District—hence, all the Canadian registered pilots of Great Lakes District No. 1, but not the Canadian Lake Ontario registered pilots.

Prior to the partition of their District, the Canadian pilots of the St. Lawrence-Kingston-Ottawa District had formed in 1956 the first corporation of pilots ever incorporated under Part II of the Federal *Companies Act* under the name of "Corporation of the St. Lawrence-Kingston-Ottawa Pilots" (Part I, p. 87, Ex. 806). In 1961, following the division of the District, the Kingston pilots formed their own corporation under the name "Corporation of the Upper St. Lawrence Pilots" on the same model. On account of the transitory arrangements for allocating the pilots of the former District to either of the two new Districts and the possibility of transfer, it was provided that, if a pilot was transferred from the Kingston District to the Cornwall District, he would automatically become a member of the Cornwall Pilots' Corporation, which by then had changed its name to "Corporation of the St. Lawrence River and Seaway Pilots".

The purposes of the Corporation as set out in the letters patent are those stated in Part I, pp. 87-89. The Corporation's charter, by-laws and structure are, in substance, the same as those of the other pilots' corporations of the St. Lawrence Pilotage Districts and like them it purports to have full control over the pilots' earnings. Once a pilot is a member, he is supposed to be unable to withdraw from the Corporation of his own volition as long as he remains a licensed pilot, unless he is expelled by decision of the five-member Board of Directors. For further details regarding the nature and structure of this type of corporation, reference is made to Part IV, pp. 275 and ff.

One peculiarity it has inherited from the former Corporation is admission fees. Effective October 1, 1961, all new members were required to pay an entrance fee of \$1,500 in five equal yearly instalments into a special fund which, according to the By-law (By-law No. 2, secs. 13 to 17), can not be spent except as authorized by a resolution at a general meeting of the members. In fact, however, a special fund is not maintained but the revenues from this source are credited to the pool towards payment of general expenses. The philosophy behind this entrance fee is that the new members should be required to pay a contribution towards the cost of the organization from which they benefit; this organization has been paid for by the other members and those who still belong are thus reimbursed proportionately.

The Corporation is operated as if, in addition to being a professional organization, it was also a partnership for the purpose of pooling pilotage revenues, but this is incompatible with Part II of the Federal *Companies Act* under which the charter was granted. The comments on the legal situation in Part I, pp. 90 and ff., and Part IV, pp. 283 and ff., apply here.

Hence, the financial operations and procedure are the same as those of the Cornwall Pilots' Corporation and other similar corporations grouping pilots of the St. Lawrence Pilotage Districts. The pilotage earnings of all the pilots are dealt with as if they were the Corporation's own earnings out of

which it first finances its operations and meets group expenditures, then shares the remainder among the Corporation's members according to the pooling rules contained in the Corporation by-law.

The pooling procedure is the same as that adopted by the Montreal harbour pilots and the Cornwall District pilots (Part IV. pp. 803 and ff., and pp. 977 and ff.). Pooling is based on dues earned and shares unsettled at the end of the pooling period are paid to the pilots as outstanding earnings are collected.

In 1964, the financial year was made to coincide with the calendar year; until then, it had ended February 28. Hence, the financial statement for the year 1964 covers only ten months but this did not affect revenues since there is no pilotage in January and February. The only difference is that the expenditures are slightly lower than they would normally have been, since the limited administrative expenses for those two months were covered by the previous financial period.

The small amount of administration connected with pooling and Corporation operations is not extensive enough to justify a full-time staff. The Corporation shares the services of the part-time Secretary-Treasurer with the Montreal Harbour Pilots' Corporation and the Cornwall Pilots' Corporation. The three Corporations also employ the same chartered accountants. Furthermore, since the Corporation adopts the same pooling system as these other two Corporations, the result is the same book-keeping system and the same format for the annual financial statements concerning both financial and pooling operations.

The annual financial report (Ex. 861) consists of four statements:

- a balance sheet as of the last day of the financial year;
- a statement of receipts and disbursements for the financial year together with a supporting table giving details of the payment made to each Canadian pilot of his share from the current pooling and outstanding balances from previous distributions;
- a complete financial statement explaining the pooling operation with supporting documents;
- a statement of expenditures itemizing the cost of administering the service in District No. 1 by the Kingston Pilotage Authority and, prior to 1969, by the U.S. Pilots' Corporation in the operation of the Cape Vincent pool.

The first three statements are the same as those in the Cornwall Pilots' Corporation financial statement. The fourth, which was added in 1967, is merely informative since the financial operations it reflects are beyond the control of the Corporation. It serves, however, as a kind of accounting by the Corporation for its mandate to verify the handling of pilotage revenues

by the authority charged with the administration of the service in the District and to ensure that the expenditures it charged against the aggregate revenues before remitting to the Corporation the shares owing to its members were justified and legally incurred. Under the Great Lakes pilotage arrangements, the pilotage organization of each sector must be financially self-supporting and operational expenses must be shared equally among those who benefit from them. In District No. 1, these expenditures comprise the operating cost of the Cornwall and, prior to 1969, the Cape Vincent pilotage offices, with no part being assumed by either Government as is normally done by the Canadian Government in Pilotage Districts where the Minister is the Pilotage Authority.

The aggregate administrative costs, less the portion of the Cape Vincent operational expenses charged to the Lake Ontario pilots, are assumed by all the U.S. and Canadian District No. 1 pilots proportionate to their share of pilotage revenue.

The description of, and information given with regard to, these three statements in Part IV, pp. 699-702, apply here *mutatis mutandis*. The financial statement for 1968 (Ex. 861) is used to illustrate the process. The balance sheet as of December 31 showed the following assets and liabilities:

ASSETS		
Money on hand and in bank.....		\$93,806.23
Receivable accounts		
Kingston Pilotage Authority		
1966 season.....	451.54	
1968 season.....	43,918.67	
	<hr/>	44,370.21
St. Lawrence Seaway pilots		
1966 season.....		325.40
		<hr/>
		44,695.61
Total assets.....		<hr/> <hr/> \$138,501.84
LIABILITIES		
Accounts payable		
Secretary-Treasurer.....	849.05	
Legal fees.....	4,872.40	
Others.....	185.45	
	<hr/>	5,906.90
Non-pooled money		
1968 detentions.....	2,933.50	
1968-69 winter earnings	1,638.50	
1968 reimbursements.....	42.24	
	<hr/>	4,614.24
Pooled money		
1966.....	982.75	
1967.....	188.71	
1968.....	126,809.24	
	<hr/>	127,980.70
Total liabilities.....		<hr/> <hr/> \$138,501.84

Study of Pilotage in Great Lakes System

Since the second document is a statement of receipts and disbursements for the financial year, it reflects cash transactions only. This statement for 1968 shows:

RECEIPTS

Balance on hand and in bank, January 1, 1968.....	\$ 66,958.24
<i>Kingston Pilotage Authority</i>	
1966 season.....	142.64
1967 season.....	12,797.65
1968 season.....	318,420.00
	<hr/>
	331,360.29
<i>St. Lawrence Seaway pilots</i>	
1966 season.....	103.24
1967 season.....	19,738.98
	<hr/>
	19,842.22
Winter earnings (1967-68).....	2,009.71
Reimbursement of expenses (Guild meeting).....	190.00
	<hr/>
	353,402.22
	<hr/>
Total receipts.....	<u>420,360.46</u>

DISBURSEMENTS

<i>Administrative expenses</i>	
Secretary-Treasurer.....	3,500.00
Administrative costs.....	3,869.61
Canadian pilots' pilot vessel service	
Wolfe Island (Dougan).....	5,616.00
<i>Group expenses</i>	
Federation fees.....	3,325.00
Group insurance.....	16,124.28
1967 outstanding payable accounts.....	3,145.53
<i>Payments to the pilots</i>	
Non-pooled items	
1964 detentions and reim-	
bursable expenses.....	50.00
1966 detentions and reim-	
bursable expenses.....	40.00
1967 detentions and reim-	
bursable expenses.....	3,385.00
1968 detentions and reim-	
bursable expenses.....	4,773.40
1967 winter earnings.....	2,025.69
	<hr/>
	10,274.09
Pooled earnings	
1964.....	453.17
1967.....	92,446.55
1968.....	187,800.00
	<hr/>
	280,699.72
	<hr/>
Total disbursements.....	<u>\$326,554.23</u>
	<hr/>
Cash on hand and in bank December 31, 1968.....	<u>\$ 93,806.23</u>

The supporting tables give details of payments to each pilot or on his behalf during the year covering what was owed him for the current pooling period and was outstanding from previous pooling periods.

The third document, the accounting statement of pooling operations, shows the share of the Canadian pilots of net pilotage revenues earned during the year (not collected) and other earnings accruing to the pool, if any, e.g., the amount that may be paid to the Corporation by the Federation for free turns and the amounts paid by newly licensed pilots as initiation fees. It also shows the computation of the sharing turn after deducting the expenses of District Canadian pilots and the Corporation, as well as earnings that do not form part of the pool. The calculation of the net pooling income for 1968 was as follows:

<i>Earnings</i>	
1968 earnings of Canadian pilots.....	\$403,495.08
Initiation fees.....	300.00
Total.....	<u>\$403,795.08</u>
<i>Less</i>	
Administrative expenses of Kingston Pilotage Authority and Cape Vincent pool	
Share of Canadian District pilots.....	36,422.40
Kingston Pilotage Authority's administrative expenses chargeable only to Canadian District pilots	
Taxi.....	6,430.75
Dougan pilot vessel service.....	5,600.00
Corporation's administrative expenses.....	13,276.51
Non-pooled items	
Detentions.....	7,706.90
	<u>69,436.56</u>
Net pooling income.....	334,358.52
Total.....	<u>\$403,795.08</u>

The net value of the turn (\$217.40) was arrived at by dividing the net pooling amount by the number (1538) of sharing turns. A supporting table shows how much of the net pooling income was paid to, or on behalf of, the pilots and how much was outstanding on December 31. A breakdown per pilot is given in addition to the aggregate amount. For 1968, the aggregate figures were shown as follows:

Regular Pooling Net.....	<u>\$334,358.52</u>
Payments made	
On behalf of the pilots	
Insurance.....	16,124.28
Federation fees.....	3,325.00
Initiation fees.....	300.00
	<u>19,749.28</u>
To pilots.....	187,800.00
Balance of net pooling outstanding as payable accounts to the pilots.....	126,809.24
Total.....	<u>\$334,358.52</u>

The fourth statement establishes the share of the Canadian District pilots in the cost of operating the Cornwall and Cape Vincent pilotage offices which are common to the United States and Canadian District pilots. The statement for 1968 is as follows:

"EXPENDITURES

Kingston Pilotage Authority and Cape Vincent Station

Employees Salaries and Benefits.....	\$30,669.58
Office Space and Equipment Rental.....	1,858.62
Repairs Office Equipment.....	43.30
District Administrative Travel.....	98.64
Telephone.....	4,040.00
Teletype.....	2,161.08
Postage and Express.....	228.41
Stationery and Supplies.....	546.09
Cape Vincent Station Cost.....	5,920.00
Cape Vincent Pilot Boat.....	37,871.40
Stationery (Cape Vincent).....	171.12
Rental—Building and Equipment.....	57.00
Loss on U.S. Exchange.....	4.50
	<hr/>
	83,669.74
Less: Refund from Lake Pilots.....	18,434.30
Total Cost.....	<hr/>
	65,235.44
Portion Applied to Canadian Pilots [according to the Memorandum of Arrangements]: 55.86%.....	<hr/>
	36,422.40

As was done in Part IV for Pilots' Corporations in the other St. Lawrence Districts for comparative purposes and to establish the real cost of administration, the following table computed on the basis of liabilities (not expenditures) shows, for the years 1962–1969, the total pool liabilities, i.e., which have to be paid out of the common fund, segregated into group liabilities, i.e., group insurance premiums, St. Lawrence Pilots' Federation fees, Merchant Service Guild dues and Corporation administrative and operating liabilities. In order to establish the real administrative cost, the aggregate value of the free turns granted to Directors attending to Corporation business

has been computed and added to the monetary liabilities to form the actual costs of administration which appear in the last column. These liabilities and costs are only those that result from the Corporation's activities or from the decision of the pilots as a group and which do not concern the Pilotage Authority. They are met out of the aggregate share of the Canadian pilots of the net revenues of District No. 1 after the District operating costs of the two administrative authorities, prior to 1969 and, since then, of the single administrative authority have been deducted, and also the special costs which are chargeable only to the Canadian pilots, i.e., taxi transportation between Cornwall and Snell lock and other similar transportation costs including the Dougan pilot vessel service at Wolfe Island. Vide for comparative purposes, the similar table showing the pool liabilities of the Cornwall pilots, Part IV, p. 945.

DISTRICT NO. 1 CANADIAN PILOTS

Pool Liabilities and Administrative Costs Prior to Distribution to Pilots

Year	Pool Liabilities		Administrative Costs		
	Total Prior to Distribution	Other than Admini- strative Liabilities	Liabilities	Value of Free Turns to Directors	Total
1962.....	\$27,098.09	\$13,836.24	\$13,261.85	\$ n/av.	\$ —
1963.....	26,861.85	18,292.80	8,569.05*	5,138.27	13,707.32
1964.....	27,229.81	17,112.86	10,116.95	n/av.	—
1965.....	29,053.62	19,417.28	9,636.34	2,048.15	11,684.49
1966.....	37,485.72	21,353.54	16,132.18	1,658.10	17,790.28
1967.....	34,095.70	20,147.78	13,947.92	174.05	14,121.97
1968.....	34,735.50	19,449.28	15,286.22	217.40	15,503.62
1969.....	30,464.34	20,400.24	10,064.10	449.84	10,513.94

*Excluding turns (\$551.68) paid to P. Pelletier.
SOURCE: Ex. 861.

The following table gives the details of the administrative liabilities and group expenses (pool liabilities other than administrative) for the first full year of operation of the Corporation and for 1969. The year 1966 was added since it was the one in which administrative liabilities were the highest.

Study of Pilotage in Great Lakes System

	1962	1966	1969
<i>Administrative Liabilities</i>			
Sec.-Treas.'s remuneration.....	\$ 2,200.00	\$ 4,282.57	\$ 6,388.15
Legal fees.....	5,980.51	8,449.75	955.95
Telephone and telegraph.....	364.13	274.98	127.84
Flowers and Christmas gifts.....	239.58	217.00	179.22
Convention expenses.....	366.05	450.35	248.66
Postage.....	504.50	236.40	95.00
Stationery and printing.....	168.51		155.58
Meeting expenses.....	—	93.03	18.35
Bank charges and sundries.....	128.53	—	153.05
Directors' expenses and allowances.....	2,722.54	1,017.10	1,114.30
Audit.....	587.50	1,111.00	628.00
	<u>\$13,261.85</u>	<u>\$16,132.18</u>	<u>\$10,064.10</u>
<i>Pool Liabilities Other than Administrative</i>			
Insurance premiums.....	\$ 9,636.24	\$16,273.54	\$16,125.24
Federation fees and Guild dues.....	4,200.00	5,080.00	4,275.00
	<u>\$13,836.24</u>	<u>\$21,353.54</u>	<u>\$20,400.24</u>
Total liabilities from the pool.....	<u>\$27,098.09</u>	<u>\$37,485.72</u>	<u>\$30,464.34</u>

The number of pilots was not a contributing factor in the increase in group liabilities since those who shared in the pool decreased from 21 in 1962 to 19 in 1969. Affiliation fees have remained much the same: they were highest in 1963 when each pilot was assessed \$150 for his share in the expenses incurred by the Federation in connection with this Commission. These fees were somewhat reduced when compulsory membership in the Guild was discontinued in 1967. The increase in group expenses in the item "Group Insurance" is due to the higher coverage the pilots decided to take out in 1965.

Recurrent administrative liabilities have remained stable. The Secretary-Treasurer's remuneration was increased in 1966 from 1 per cent to 1½ per cent of the pilotage earnings received. The two items that have fluctuated most are Directors' allowances and expenses and legal fees. These items are unpredictable—they vary from year to year depending upon the number of problems and disputes affecting the pilots as a group which the Board of Directors and the Corporation's legal advisers have to deal with. If these occurred during the navigation season, they are also reflected in non-financial costs, i.e., free turns. Administrative costs, contrasting with the situation in similar Corporations, have remained substantially the same and reached their lowest level in 1969.

The Corporation Directors, in addition to reimbursement of their expenses, are remunerated indirectly through the allocation of one-half turn per day's meeting during the navigation season and a \$15 per day allowance for meetings held during the winter season. They have to submit a detailed expense account covering their travelling and living out expenses.

At the time of the Commission's hearings, the Board of Directors of the Corporation met at least once a month. In order to keep the members informed about their activities, the minutes of Board meetings were read at the annual general meeting.

The Corporation is a group member of the Federation of the St. Lawrence Pilots (Ex. 853) and sends three delegates to its meetings (Ex. 855). The dues payable to the Federation on this account are the same for all group members on a per capita basis for both regular dues and special assessments. The same method of assessing dues for the Canadian Merchant Guild applied until compulsory membership was discontinued in 1966.

The audits made by the Corporation auditors cover only Corporation money and do not include the verification of financial documents filed either by the Kingston Pilotage Authority or by the U.S. pilots' pool.

For a study of the pooling procedure, vide pp. 316 and ff.

COMMENTS

As already pointed out (vide Part IV, p. 289), there is a basic error in the way the financial reports are presented in that the pilots' earnings are shown as assets and revenues of the Corporation and the operation of the pool as part of the Corporation's own financial operations.

If the Corporation is to continue to operate and manage the pooling of the pilots' earnings, in order to regularize the financial operations of the Corporation, it would be necessary to implement the Commission's General Recommendation 25 and the procedure suggested therein (Part I, pp. 549 and ff.). Until this is done, it is considered that the financial operations of the Corporation should be segregated from those of the pool. The first step in that direction would be to provide the Corporation with funds of its own through the imposition of Corporation dues. The financial report should also reflect the true legal situation and deal separately with the Corporation and the Trust Fund it administers.

(b) *Lake Ontario Sector*

As indicated in the Joint (Interpool) Working Rules and Dispatching Procedures for Lake Ontario Assignments, the Canadian and U.S. registered pilots for Lake Ontario have formed a partnership for the purpose of pooling their pilotage earnings, the sharing being based on availability for duty (Ex. 1541(u)). The pooling used to be administered on behalf of the Lake Ontario pilots by the Cape Vincent pool; this function is now attended to by the Canadian administrative authority of District No. 1.

The U.S. Lake Ontario pilots are members of the St. Lawrence Seaway Pilots Association. Active membership in the Corporation of the Upper St. Lawrence Pilots was refused the Canadian Lake Ontario pilots, probably because this Corporation operates as a pooling partnership for the Canadian pilots of District No. 1, which precludes the admission of members who can not be part of the pooling procedure. However, the Canadian Lake Ontario pilots are treated unofficially as honorary members; they are invited to attend the Corporation's general meetings but they may not vote (Ex. 848). Two Canadian Lake Ontario pilots are also members of the Corporation of Professional Great Lakes Pilots (Ex. 1541(q)).

(c) *District No. 2, Lakes Huron/Michigan Sector and District No. 3.*

The Canadian and U.S. pilots in the sectors west of Lake Ontario have formed three associations:

- The "Corporation of Professional Great Lakes Pilots" consisting of all the remaining Canadian pilots.
- The "Lakes Pilots Association, Inc.", the U.S. pilots of District No. 2 and the Lake Huron/Lake Michigan sector.
- The "Lake Superior Pilots Association, Inc.", which covers U.S. District No. 3.

(i) *Corporation of Professional Great Lakes Pilots (Exs. 1049 and 1541(q)).*

The Corporation of Professional Great Lakes Pilots is the Canadian professional pilots' organization which now groups with one exception all the Canadian pilots who are prevailing rate employees of the Government, i.e., the Canadian pilots registered for District No. 2, District No. 3 and the Lake Huron/Lake Michigan sector. As noted earlier, two Canadian Lake Ontario pilots have joined the membership.

It is strictly a professional organization. There is no need for any pooling arrangements since the prevailing rate pilots receive a fixed salary. The Corporation finances its operations through corporate dues which are currently fixed at \$40 per month or \$480 per year.

In 1956, the Canadian Sailing Masters who then provided the pilotage service on the Great Lakes had grouped themselves into an association named "The Great Lakes Pilots Association of Canada". This association lapsed after its abortive attempt to block the reorganization of the pilotage service on the Great Lakes (pp. 54 and ff.).

In 1961, the majority of the Canadian registered pilots in District No. 2 (Government employees) formed the Corporation of Professional Great Lakes Pilots. The letters patent were issued on December 5, 1961, under Part II of the Companies Act. The charter is similar to the charters of the

various pilots' corporations of the St. Lawrence River Districts and the purposes set out in the letters patent are almost a verbatim reproduction of those found in the other charters (for text, vide Part I, pp. 87-89) even including the clause concerning the pooling of the pilots' earnings, which is incompatible with the employees' status of the Corporation members. The Corporation By-laws (except for Part II dealing with the pooling procedure, which has been omitted) have also been similarly inspired, so much so that the terms "licence of pilot" and "pilot's licence" were retained despite the fact that all the Corporation members hold a registration certificate and not a pilot's licence. They contain the usual provisions which purport to render membership compulsory once a pilot has been admitted as a member and as long as he retains his right to exercise his profession, unless expelled. The analysis of the Quebec Pilots' Corporation By-laws, Part I, pp. 84-85, and the Commission's comments (Part IV, pp. 263 and ff.) apply here *mutatis mutandis*.

The activities of the Corporation are limited to those of a professional association, i.e., promoting the professional interests of its members and advising on the organization of the service within the territorial competency of its members. At the beginning, the Corporation, which did not then represent the whole group of pilots, experienced difficulty obtaining recognition by the Department of Transport of its representative capacity (Exs. 1052 and 1053). It is not yet recognized as a bargaining unit for labour relations purposes (Ex. 1054) but is now recognized as a *bona fide* professional group and regularly makes representations to the Department of Transport in the form of briefs and memoranda (Ex. 1055). The Corporation's Board of Directors regularly meets with its U.S. counterpart to discuss problems of mutual interest but, since it has no official rôle to play in the administration of the service, its decisions have no binding effect.

Since January 1966, the Corporation has been a group member of the Federation of the St. Lawrence Pilots but it is not affiliated with the Canadian Merchant Service Guild, in which membership is on an individual and voluntary basis.

(ii) *Lakes Pilots Association, Inc.*

The Lakes Pilots Association, Inc., is the voluntary association of the U.S. pilots of District No. 2 which was authorized to form and operate their pool, i.e., the Port Huron pilotage office. Up to the 1969 change in the organization of the District, it was one of the two administrative authorities, both with separate but co-ordinated jurisdiction. It has now exclusive administrative jurisdiction over the western sector of the District.

(iii) *Lake Superior Pilots Association, Inc.*

The Lake Superior Pilots Association, Inc., groups all the United States pilots registered for District No. 3. It is the sole administrative authority for

District No. 3 and Lake Superior, with joint jurisdiction with the District No. 2 Lakes Pilots Association, Inc., over Lakes Huron and Michigan. Even before the Great Lakes pilotage legislation came into force, the organization of the pilotage service in that area had always been left to the initiative of the U.S. pilots. This state of affairs was given official recognition when organizational arrangements were devised. The Memorandum of Arrangements of 1961 made the administration of the provision of services in District No. 3 and on Lake Superior an exclusive U.S. responsibility, and the U.S. Great Lakes Pilotage Administrator gave official recognition to this Association for the operation of the U.S. pilots' pool which they had created long before and had operated up to then.

The Lake Superior Pilots Association, Inc., was formed on July 8, 1959, in accordance with the provisions of the Minnesota Business Corporation Act, mainly to provide pilotage service in the third restricted pilotage area that the Shipping Federation of Canada was then organizing, i.e., St. Marys River and Sault Ste. Marie locks. When District No. 3 was organized and pilotage requirements were extended to the open waters of Lake Superior and the ports situated thereon, the Association took over the port pilotage services that had been established privately at Duluth and Thunder Bay.

One purpose of the Corporation, as defined in its charter, is "to render pilots and piloting service to domestic and foreign vessels traveling the Great Lakes and the St. Lawrence Waterway" (Ex. 1377).

After a great deal of study, the pilots chose to adopt the corporate form. Their decision was based on legal advice as to the joint liability of each pilot for the negligence of one of their members if they formed a partnership. The corporate structure is such that persons in management positions who are not pilots may become shareholders and members. There are two classes of stock:

- Class A, which is voting stock and limited to one share per person;
- Class B, or non-voting shares which may be held in any number.

Stock ownership is restricted to registered pilots and individuals actually employed by the Corporation, with the further requirement that at least three-fourths of all voting shares must be held by registered pilots. In October 1964, there were no non-pilot stockholders, except three retired pilots whose stock had not yet been purchased.

When a pilot leaves the Corporation, his stock is redeemable at the value determined by the stockholders themselves at the time.

However, in so far as the operation of the pool is concerned, the Association operates as a non-profit organization and any funds belonging to the pool which remain at the end of the operating season are distributed to the pilots or allocated to their retirement fund. The Corporation has set up a profit-sharing retirement fund for the benefit of its members.

The Corporation carries a liability insurance policy which also covers liability for negligence by each member of the Corporation up to \$500,000, with \$500 deductible for each accident.

The affairs of the Corporation are managed by a nine-member Board of Directors elected at the annual meeting of the stockholders for a term of one year. They need not be stockholders. At the time of the Commission's hearings, however, there were only five Directors (Ex. 1377). The day-to-day Corporation business is handled by a full-time business manager whose duties cover all administration, despatching, book-keeping, servicing and the preparation of reports. He is assisted by a full-time despatcher under his orders in Duluth and two other despatchers on a contractual and part-time basis at Detour and Thunder Bay.

The Corporation has three committees: an Examining Committee, composed of five Directors, whose primary function is to screen and process new applicants for pilots' registration and which also deals with disciplinary matters in cases involving United States pilots; a Navigation Committee, composed of three members, which deals with recommendations about aids to navigation; an Auditing Committee, appointed by the President, which audits the Corporation's books.

(4) STATUS OF PILOTS

Preamble

Despite appearances, the status of the various Great Lakes registered pilots is remarkably similar: none are self-employed, independent private entrepreneurs, all are employees of an administrative authority and in each sector they all operate under the same working rules and conditions. The only differences are the legal nature of their employment, the identity of their employer and their system of remuneration.

U.S. Great Lakes pilotage legislation makes the U.S. pilots self-employed private contractors and avoids direct provision for employee status, but it is drafted in such a way that they have no alternative but to become employees wherever the U.S. and Canadian authorities have decided that the service should be controlled and directed administratively (regarding the lack of choice to remain free lance pilots where "pilots' pools" have been created, vide p. 45). In fact, one of the basic principles of the organization contemplated when the Great Lakes pilotage legislations were first enacted was that the provision of services should be fully controlled administratively. The first Memorandum of Arrangements contained detailed measures to this effect and provided for the establishment of a number of pilotage offices throughout the Great Lakes system whose administrative jurisdiction covered every sector

and left no locality where a pilot could act independently. In the subsequent versions of the Memorandum, details were deleted but the principle remained.

The fact that the identity of the employer may be complex and multi-level does not alter the basic situation but may complicate and hamper the effective exercise of authority.

In Part I of the Report, p. 76, a distinction was made between the true status of employee which results from an explicit contract of employment, and the status of *de facto* employee resulting from the subordinate position in which a pilot is placed, normally by applicable legislation, thus preventing him from acting as a free, self-employed entrepreneur.

All the U.S. Great Lakes registered pilots have the same status of *de facto* employees. Their immediate employer is the administrative authority of the pilot station (or pilots' pool) where the pilots have to report for duty in accordance with the applicable working and despatching rules. Ideally, there should be only one administrative authority per group of pilots, but three factors alter the situation: the necessity for continuity of service, the agreement to have joint U.S. and Canadian participation in all sectors and the Sailing Master concept. As a result, when the pilots are assigned they come under the jurisdiction of a number of administrative authorities who temporarily exercise full jurisdiction over them in the performance of their duties. These local authorities not only issue assignment orders but also handle all the related administrative work, i.e., collecting pilotage fees and paying each pilot directly, or his nominee on his behalf, the fees so collected less his prorated share of the pilot station's operating expenses. Each group of U.S. pilots has made arrangements to pool their earnings and the partnership to which they belong is their nominee for this purpose.

The policy is now to appoint a single administrative authority for a given group of pilots. District No. 1 and District No. 3, as well as each of the two sectors of District No. 2, now have their own authority and, as a rule (except for District No. 3), District pilots do not perform assignments outside their District or sector. The previous system of dual authority now applies only to the lake pilots (and to a lesser extent to the Welland Canal pilots for assignments across Lake Erie), a feature that will have to be retained as long as pilotage remains compulsory in the open waters of the Lake.

The situation is the same for the Canadian pilots registered for District No. 1 and Lake Ontario and, for operational purposes, for the other Canadian registered pilots, i.e., for Districts Nos. 2 and 3 and for Lake Huron/Lake Michigan. The status of these pilots, however, differs in that they are true employees, their employer being the Government of Canada through the Department of Transport which pays them an established salary. The immediate employer of these Government employees remains the local administrative

authority, whether Canadian or U.S., and the only difference in administrative functions is that their net earnings belong to their employer.

The fact that under the pilots' pool system the local U.S. administrative authority must be a voluntary pilots' association gives some of the U.S. pilots direct participation in the operational functions of the service. This does not apply, however, to all U.S. pilots, since a number of them come under the jurisdiction of Canadian local authorities and they are not all members of the associations operating the U.S. pools. For the Commission's views on the pilots operating the service themselves, vide Part I, Gen. Rec. 14.

The discrepancy between the methods of remunerating Canadian and U.S. pilots has been the main source of difficulty when they work together, particularly in District No. 2 up to 1969, because of conflicting incentives. Since the earnings of the U.S. pilots are based on shared revenue, they have a direct interest in increasing rates and limiting their number as much as possible. They have proved generally opposed to long rest periods, holidays and vacations which reduce their individual working time and earning potential. On the other hand, the Canadian pilots receive a fixed salary and their main concern is to improve their working conditions. Hence, they demanded shorter hours, which necessitated the establishment of intermediate changeover points, adequate mandatory rest periods between assignments, regular leave and holidays, all of which resulted in an increase in their number. There are also conflicting views on how to deal with absence without leave. The U.S. pilots' philosophy is that the only way a pilot can be penalized for missing his turn is to make him lose his position on the assignment list by placing him at the bottom when he again becomes available, thereby extending the period during which he will not earn any fees. On the other hand, this procedure only improves the working conditions of a Canadian pilot on salary by affording him a rest period and the Canadian authorities feel that a pilot should receive no pay during his absence (with a minimum deduction of one day's pay) and that his name should be placed at the top of the roster when he returns to duty. This conflict of interests has been resolved in District No. 2 because Canadian and U.S. pilots no longer share the same territorial jurisdiction.

(a) *Prevailing Rate Employees*

While the Commission has favoured the status of public employees for pilots where the service is necessary in the public interest (Part I, Gen. Rec. 24, p. 545), it is not satisfied that the prevailing rate system is suitable for them. A study of the situation, together with the Commission's comments and recommendations, will be found in Part III, pp. 206-213 and pp. 292-295. It should be noted, however, that the situation has changed basically, in practice if not in law, since the Commission's hearings. *Ad hoc* arrangements have been developed to meet the special requirements of the pilotage profession. Constant availability is allowed for by basing the work week on avail-

ability for duty, irrespective of the hours actually spent on assignments, and irregular demand by providing additional remuneration for extra time over the basic 50 hours worked in periods of peak demand. The system has been improved with experience, e.g., various methods of recompensing overtime were tried but remained unsatisfactory until the basic principle of equal remuneration for equal availability was applied by pooling overtime pay. It appears that the Great Lakes pilots who are prevailing rate employees are now satisfied with this *ad hoc* system; the next step is to give it legal effect by embodying it in the law, preferably in the contemplated Pilotage Act.

The employment of pilots under the prevailing rate system has been another innovation of the Canadian Great Lakes pilotage administration. To evaluate its effectiveness, it is worth while to review the circumstances prevailing when the decision was taken and experience since. Like all other special features of the Great Lakes pilotage organization, the system has changed progressively, at least in practice.

When the Department of Transport decided to make the Canadian pilots in the Great Lakes system actual employees, this was not new because the Sarnia/Port Weller pilots already had this status in 1959 when the Department took over from the Shipping Federation of Canada responsibility for pilotage in that sector (p. 60). No problems were created for the Shipping Federation because the terms of employment were subject to private contractual arrangements which were drawn up to meet local requirements, but the Department of Transport encountered a serious legal problem since they had to fit the employment of the pilots into the existing legislation, none of which had been specifically devised to deal with such a situation. They could be employed by the Government under either the Civil Service Act through the Civil Service Commission, or the Financial Administration Act, sec. 7, which authorizes the Treasury Board to make regulations to cover certain exceptional cases. The Civil Service Act obviously did not apply and the solution was either to draft *ad hoc* regulations under the Financial Administration Act or fit the pilots into existing regulations, i.e., the *Ships' Officers and Crews Regulations* or the *Prevailing Rate Employees General Regulations*. Although the pilots have much in common with other mariners, their working conditions are quite different and the *ad hoc* regulations drawn up for ships' officers and crews could not apply. The obvious solution was to enact special regulations to meet the requirements of the pilotage service but this was not done, probably because in 1959 the final arrangements for Great Lakes pilotage legislation and organization had not yet been concluded. The general provisions of the *Prevailing Rate Employees General Regulations* were used. These regulations had not been drafted to cover such a situation and their application to the pilots was bound to cause misunderstanding, dissatisfaction and serious problems unless they were replaced by adequate legislation as soon as final agreement was reached on Great Lakes pilotage matters.

On February 19, 1959, the Treasury Board, acting under the authority of subsec. 7(c) of the Financial Administration Act, directed that, effective April 1, 1959, the remuneration of ships' pilots in the Port Weller/Sarnia area would be \$950 per month with a work week consisting of 40 working hours, and made the Prevailing Rate Employees General Regulations applicable to them, except for a few sections (T.B. 544540). On March 20, 1959, T.B. 546155 approved the same conditions of employment for the Kingston District pilots to whom a proposal to become Crown employees was being made in the meantime. On March 26, 1959, T.B. 545627 amended the establishment of positions for Marine Services of the Department of Transport by adding the following seasonal positions: 1 Master Pilot, 45 Ship Pilots and 4 Transport Operating Clerks 1. A decision dated May 26, 1959 (T.B. 546155-2 and T.B. 544540-2) with retroactive effect to April 1, again altered the conditions of employment by specifying that the monthly remuneration was all inclusive in that there would be no additional payment for overtime. T.B. 546155-3 and T.B. 544540-3 dated January 28, 1960, changed the work week from 40 to 48 hours effective April 1, 1960. These orders were replaced, effective April 1, 1960, by a new order (T.B. 560527 dated February 25, 1960) to the same effect, except that it no longer applied to the Kingston pilots who had rejected the offer. It increased the monthly salary to \$1,200 but the provision covering the work week was omitted. In succeeding years, the monthly remuneration was gradually raised: \$1,340 effective April 1, 1961 (T.B. 577620 dated March 9, 1961), \$1,380 effective April 1, 1962 (T.B. 597200 dated June 26, 1962) and \$1,425 effective April 1, 1964 (T.B. 625002 dated May 14, 1964) (Ex. 1362).

This was the situation when the Commission held its hearings on the Great Lakes. The District No. 2 pilots expressed their acute discontent with the system and advocated the abolition of direct employment in favour of the status of *de facto* employees enjoyed by the Kingston pilots and their U.S. colleagues in District No. 2. They complained that they were not consulted before their remuneration and working conditions were established by Treasury Board and were particularly concerned because they always received much less than the U.S. pilots who were paid on a "share-the-revenue" basis.

The Commission called as witnesses the officers of the Department of Transport and the Department of Labour who were responsible for applying the Prevailing Rate Regulations to the pilots. Their testimony showed a confused and unsatisfactory state of affairs. The general regulations, which had been devised mainly for casual labourers, proved to be inadequate for, and irreconcilable with, a service staffed by experts who can not readily be replaced and whose constant availability day and night throughout the navi-

gation season is a fundamental requirement which precludes regular, predetermined working hours. The application of the Prevailing Rate Regulations despite these incompatible factors was bound to confuse the procedure and give rise to arbitrary decisions.

The Director of the Labour Standards Branch of the Department of Labour tried to justify the application of the Prevailing Rate Regulations to the pilotage service by referring the Commission to one sub-paragraph of the definition of the term "employee" in the said regulations, i.e., "a person . . . whose remuneration is based on rates of pay prevailing in the appropriate area in Canada for work comparable to the class of work he does." However, he left the Commission unconvinced since this was an incomplete quotation; there are two other prerequisites, the second of which was not met as far as the pilots are concerned, i.e., "... whose duties are not professional, semi-professional, managerial or clerical in character . . ." (subsec. 2.(h)(ii)).

The other key provision is the procedure for establishing rates of pay. Subsec. 5.(1) provides that "the rate and conditions of pay" are to be authorized by the Treasury Board on the basis of a recommendation by the Department of Labour. The Department of Labour official took great pains to explain that his Department confined its recommendation to the Treasury Board to the rate of pay. Not only did it fail to define the nature and extent of the services to which the proposed rate applied, but did not even take these factors into consideration, although their recommendation was supposed to be appropriate remuneration for the services actually rendered by the pilots.

According to the Regulations, the rate of pay is to be based "on rates of pay prevailing in the appropriate area in Canada for work comparable to the class of work he does." The Dept. of Labour took as its point of comparison the Kingston District pilots on the false assumption that their services were comparable to those rendered by District No. 2 pilots. It also rejected as a basis of comparison the earnings of the U.S. registered pilots in District No. 2 who shared the same workload with the Canadian District No. 2 pilots and under the same working conditions. Its reasoning was these pilots did not operate in Canada but it is a fact that District No. 2 U.S. pilots were operating in the same area of Canadian and U.S. waters as their Canadian colleagues, and that the work performed by the pilots of both countries was not only comparable but was identical.

The revelation at the Commission's hearings of the true situation had effective results: a more rational approach was adopted and the system has been greatly improved. The pilots are now kept informed and consulted and the procedure for establishing rates of pay has been basically modified. Pilots are allowed to make proper representations and when a comparison is made

with other groups of pilots all factors are taken into consideration. The proposal to the Treasury Board dated October 15, 1965, from the Department of Transport for establishing rates of pay effective April 1, 1965, contained a detailed analysis of the conditions of employment of District No. 2 pilots compared with the pilots in the Cornwall and Kingston Districts. This comparison showed that the working conditions of the pilots in District No. 2 were not similar to those in the Kingston District and that their individual workload was much heavier. During 1965, the District No. 2 pilots averaged 88.4 hours monthly piloting, detention and travelling time as compared to 33.7 hours for the Kingston District pilots. Mention was made in the proposal that representations had been received from the staff organization of District No. 2 Canadian pilots, the Corporation of Professional Great Lakes Pilots. On October 25, 1965, T.B. 646877 established, retroactive to April 1, 1965, a new scale of rates, i.e., \$1,080 per month basic with individual compensation at time and a half for overtime beyond the basic work week of 40 hours piloting in designated and undesignated waters. Detention on board in harbour was to count for one hour's pay for six hours of detention time. Payment during the season was to be at the rate for a 50-hour week average. Overtime was to be compensated at the end of the season in cash or leave at the option of the employee.

It was soon realized that the new system created other problems: on one hand, it reduced the pilots' base pay for superannuation purposes and, on the other, seriously complicated accounting. The Pilots' Corporation made representations that the additional compensation should be paid on the basis of availability and not the amount of individual overtime, thus retaining an incentive to spread the workload as evenly as possible. It was also realized that the new method of computing overtime would be unduly complex and might be misinterpreted and misunderstood, particularly with respect to detentions out of harbour. After discussions with the pilots, a solution was found. T.B. 652402 dated March 17, 1966, retroactive to April 1, 1965, re-established the monthly rate at \$1,485. The basic work week was established at 50 hours using the eight-month season as the shift cycle and a flat amount of \$200 per month for time spent on assignments in excess of the normal work week was granted, "such payment to be made on the basis of availability days per month for each pilot."

This new method proved to be an oversimplification which failed to provide additional remuneration commensurate with actual overtime. After one year's trial, the method of remunerating overtime was again modified and further improvements were made to the working conditions. T.B. 659765 dated September 6, 1966, with effect from April 1, 1966, increased the rate of pay to \$1,675 per month. One day of rest per week was allowed with compensation at the value of one day of pay when the requirements of the

service did not permit the pilot to take it. The \$200 per month compensation for overwork was replaced by a variable seasonal allowance based on the "group average excess workload" calculated in accordance with a complex formula detailed in the order. Effective April 1, 1967 (T.B. 674891 dated November 24, 1967) the monthly rate was increased to \$1,820. On January 20, 1969 (T.B. 020746), the monthly rate was raised to \$1,925 effective April 1, 1969. The overtime formula was abandoned effective April 1, 1968, and each pilot was to be remunerated for the time he personally worked in excess of an average of 50 hours per week at $1\frac{1}{2}$ times his hourly rate. It is worth noting that the order granted the authorization, which the Department of Transport had sought, to meet with representatives of the Corporation of Great Lakes Pilots for negotiations on the subject of pay and working conditions for the 1968 and 1969 navigation seasons. The last method of computing overtime remuneration never became effective as such because it again failed to take into consideration that it is availability that must be remunerated. A 1969 amendment (T.B. 025213 dated March 11, 1969, with retroactive effect to April 1, 1968) provided for pooling overtime extra remuneration at time and a half the hourly rate, the aggregate amount being shared equally among the pilots on the basis of availability.

On March 20, 1969 (T.B. 687295) the monthly rate was raised to \$1,925 with retroactive effect to April 1, 1968, and \$2,026 effective April 1, 1969. The method of pooling overtime, effective April 1, 1968, was restated in different language but remained basically the same.

As a result of negotiations between the Department of Transport (with the approval of Treasury Board) and the Corporation of Professional Great Lakes Pilots in the last part of 1970, the remuneration, terms and conditions of employment of Prevailing Rate Employee pilots were again substantially modified (T.B. 702129, approved Feb. 4, 1971). The main changes may be summed up as follows:

- basic monthly rate, effective April 1, 1970, raised by 6% from \$2,026 to \$2,148;
- payment of the aggregate salary for the navigation season spread over 12 months so that the pilots receive a pay cheque every two weeks throughout the year (this, however, does not apply for superannuation purposes nor to the actual duration of employment which is limited to the navigation season);
- full monthly credits for annual leave and sick leave granted for each month a pilot has worked 10 days or more, and four extra days of rest per complete operational month;
- the system of work week and overtime abolished; since it is the pilots' availability which counts, they are now paid on this basis irrespective of the hours worked during any given period; as an

interim measure and for the 1970 season only, \$1,200, supplementary allowance granted each pilot in lieu of overtime previously paid for under the pooling formula.

In recent years, the same Treasury Board Minutes have applied *in extenso* to District No. 3 Canadian pilots and to the Lake Huron/Lake Michigan pilots but the monthly rate for the latter group is lower. Effective April 1, 1967, it was established at \$1,400 and progressively raised to \$1,792, effective April 1, 1970. The four extra days of rest provision does not apply to lake pilots.

The Public Service Staff Relations Act is now deemed to apply to ships' pilots. By a decision of the Public Service Staff Relations Board, dated October 6, 1969 (Ex. 1541(r)), the Canadian Merchant Service Guild has been certified as bargaining agent for the prevailing rate pilots of Sydney and Goose Bay, who were constituted as a unit of employees for collective bargaining. On account of the opposition of the Corporation of Professional Great Lakes Pilots who intervened in the proceedings, the Guild failed to be so certified for all Canadian prevailing rates pilots, as was intended. At present, the Canadian Great Lakes pilots who are Crown employees do not form part of any bargaining unit under the Public Service Staff Relations Act. However, their professional organization has effectively performed this rôle unofficially with the Treasury Board and the Department of Transport.

Among the fringe benefits to which the pilots become entitled as public employees are the reimbursement of all expenses incurred for travelling and living out in the exercise of their duties, or the payment of a non-accountable monthly allowance for that purpose; retirement and superannuation benefits on the basis of a shared contribution between the pilots and the Government; death benefits; annual leave; sick leave; special leave and compensation for legal holidays; participation in the Government's surgical-medical and hospital insurance coverage (with the premium shared with the Government); Workmen's Compensation coverage. For details of the actual remuneration of salaried pilots, see pp. 316 and ff.

(b) *De Facto Employees*

The Canadian registered pilots for District No. 1 and for Lake Ontario are exceptions to this prevailing rate employees' status.

Canadian District No. 1 pilots, i.e., the Kingston pilots, rejected the offer to become prevailing rate employees when it was made to them (p. 29); and preferred to retain the status they had enjoyed up to then, i.e., quasi-employees whose remuneration depends upon the dues their individual services, or those of all the pilots of the group, have earned. In fact, like the other pilot groups of the St. Lawrence Districts, the Kingston pilots have unofficially created, and are operating, their own pooling (pp. 320-1). For the Commission's views on such status, the pooling system as a method

of remunerating pilots and the questions of target income, maximum revenue and guaranteed minimum income, reference is made to General Recommendations 14, 20, 21, 24 and 25 (Part I, pp. 495, 521, 524, 545 and 549).

The Canadian Lake Ontario pilots have the status of *de facto* employees (in contrast to the Canadian Lake Huron/Lake Michigan pilots) merely because they were originally considered District No. 1 pilots with limited competency who were also potential District pilots. No attempt was made to alter their status when they developed into a sizeable group.

(c) *Pre-season and Post-season Pilotage*

Before and after the Seaway is closed, a few vessels may continue as far downstream as Prescott for a number of days, and the Welland Canal sometimes remains open longer than the rest of the Seaway. Since the limited demand for pilotage at these times can readily be met on a voluntary basis, the Canadian pilots in District No. 2 are, as a group, entered on, and removed from, the payroll on fixed dates. However, in District No. 3 the pilots are kept individually on the payroll as long as they are required. The cut-off date is given by the U.S. pool to the Department of Transport and holiday pay then starts. After the close of the navigation season, the pilots are free to volunteer and those who do so are despatched on a tour de rôle basis. During this period, the pilots are paid the dues they earn by their services.

This problem does not affect the Kingston District pilots and they continue to be paid their share of the net pilotage earnings on the basis of availability (Ex. 1541(t)).

(5) REAPPRAISAL AND DISCIPLINE

Preamble

In view of the general misconception of these two separate but related subjects (pp. 23-4), it is pertinent to restate the distinctions briefly. For a detailed study, vide Part I, C.9 and the Commission's General Recommendations 26-38 (Part I, pp. 556 and ff.).

Reappraisal must not be confused with discipline, nor licensing with directing the service, but discipline is related to all three functions.

Reappraisal is part of the licensing process. Its purpose is to ensure that the licensee remains fit and qualified as long as he holds his licence (known under Part VIA as a *registration certificate* in the case of a pilot, and *certificate of qualification* in the case of a ship's officer). The exercise of the pilot's profession, like any other, can not be restricted except through unequivocal, valid legislation and only to the extent so provided. Unless there

is a specific provision to the contrary, a licence is not a privilege but an acquired right of which a pilot can not be deprived except as specifically provided in the governing legislation.

Control over the provision of pilotage services pertains to another field altogether. For the pilots, it entails absence of freedom to exercise their profession and prevents them from acting as self-employed entrepreneurs. This absence of freedom may result either from a contract or from legislation. A pilot freely abandons his status as an independent contractor when he enters into a contract of employment or into a partnership agreement with his fellow pilots to share pilotage tasks. The state may also deprive a pilot of the free exercise of his profession and subject him to administrative control when public interest demands, but only through specific legislation.

Discipline is exercised in two distinct fields: first, professional ethics, or what might be termed the code of service discipline, i.e., the list of offences that can be created in the Act or by regulations; secondly, the coercive provisions designed to enforce the orders of the authority, i.e., the offences that may be created by administrative regulations, such as working rules, despatching procedures and the orders of the administrative authority and its despatchers. Both types of offences should be dealt with as penal matters. On the other hand, a pilot who commits any of the most serious offences or repeats lesser ones creates a presumption of unreliability and should be reappraised for moral unfitness, provided always that this action and its extent are specifically provided for in the governing legislation.

Unless specifically stated in legislation, a given status may not be made one of the terms and conditions of a pilot's licence. Hence, in a pilotage area where licensing exists, possession of a licence is an implied prerequisite for a contract of engagement; otherwise, the contract would be null and void as against public interest. However, unless specifically provided for in legislation, the converse would not be true (Part I, Rec. 12, pp. 491-3).

(a) *Summary of Provisions Affecting Discipline*

U.S. and Canadian Great Lakes pilotage legislation has been studied at various places in the Report in connection with aspects of control over pilots; these observations are summed up to provide a comprehensive view.

The situation is fully covered in United States Great Lakes pilotage legislation. The duration of the registration certificate, the required qualifications and the terms and conditions of the certificate which are not already stipulated in the Act are to be established by regulations and the licensing authority has power to suspend or withdraw the registration when the qualification standards are no longer met or when the pilot violates the terms and conditions of his certificate (pp. 36 and 44).

The U.S. Act provides for the establishment of full control over the provision of services through the device of the pilots' pool. A pilot using the facilities of the pool, irrespective of his nationality (U.S. Great Lakes Pilotage Regulations, sec. 401.340) is subject to its rules, regulations and punitive sanctions. These rules and regulations become part of pilotage legislation and, hence, any violation renders the U.S. offender liable to lose his registration certificate as a result of reappraisal proceedings. A U.S. pilot who refuses to join the pool is deemed to be unavailable and, hence, in violation of one of the terms and conditions of his certificate (p. 45).

When a U.S. pilot comes under exclusive Canadian jurisdiction it is not clear whether failure to comply with any of the local working and despatching rules or the despatcher's orders renders him subject to reappraisal under sub-sec. 4(c) of the United States Great Lakes Pilotage Act, since these rules and orders do not form part of U.S. legislation. The question has now arisen because U.S. pilots are serving in District No. 1 and on Lake Ontario, both of which are under the exclusive administrative jurisdiction of Canadian authorities. The existing operational rules no longer apply and the new rules will not form part of U.S. legislation. It would appear that secs. 401.210 and 401.340 of the Regulations would be sufficient authority in this respect: one of the terms and conditions of a U.S. pilot's registration certificate requires him to be "continuously available under the terms and conditions as may be approved or prescribed by the Administrator" and to use the established facilities and services, U.S. or Canadian, under pain of being considered unavailable. There is no problem where operational rules have been established jointly by U.S. and Canadian pools because approval by the Administrator makes them part of U.S. legislation.

By contrast, Part VIA is silent on all aspects of reappraisal, pilotage offences, the code of service discipline, operational authority and penal sanctions. Unless Part VI C.S.A. is brought into application by the creation of a Pilotage District, the only possible offences a Canadian registered pilot may be charged with are those in secs. 369 and 371 (p. 28) and they can not lead to the suspension or withdrawal of his registration certificate. None of the statutory courts which may be convened under Part VIII C.S.A. has any power over a pilot's registration certificate (p. 28). The disciplinary powers the Department of Transport has over the registered pilots who are its prevailing rate employees are merely of a contractual nature and may affect only the pilots' remuneration and employment but not their certificates. There is no legislative provision to make despatching and working rules (and the pilotage offences defined therein) binding on a registered pilot as such; they may be binding only as employer's orders for those pilots who are Crown employees. However, they have no binding effect where the contractual relationship does not exist, e.g., U.S. registered pilots under Canadian jurisdiction, or the

Canadian registered pilots of District No. 1 or Lake Ontario. The Kingston Pilotage District By-law can not serve any useful purpose in this regard (pp. 154 and ff.) since Part VI C.S.A. does not provide for the operational control of the service (Part I, C. 9). For the study of disciplinary and re-appraisal powers under Part VIA, vide pp. 12, 23 and 24.

The binational character of the Great Lakes system is a serious impediment to carrying out the necessary inquiries, to the judicial process involved in the exercise of reappraisal powers and to the enforcement of discipline because neither Canada nor the U.S. has extended the necessary extra-territoriality to the authorities and courts concerned. Re the investigation of shipping casualties in U.S. waters involving a Cornwall District pilot, see Part IV, p. 951.

At the time of the Commission's hearings, the Supervisors for the Kingston District and Port Weller reported that they had had very little difficulty over pilots' discipline. In District No. 2, disciplinary measures had to be taken in 1963 against Canadian pilots for being under the influence of intoxicating liquor. There had also been a number of lesser offences involving the despatching rules, mostly due to the pilots' heavy workload. Because of the shortage of pilots, it was not always possible to provide a relief at lock 7 in the Welland Canal for pilots who had been on duty over 15 hours and the despatchers then had no alternative but to order the pilots to remain on board. Some pilots refused to do so on the ground of the safety of the ship, alleging that they were too tired to perform their duties. These cases were dealt with administratively and days of suspension were awarded after the pilots concerned were given an opportunity to present their defence. The legality of such proceedings was never challenged in court (Exs. 1005(c.III), 1017 and 1056).

COMMENTS

Canadian Great Lakes pilotage legislation is deficient in three main areas:

- provisions to define, affirm and sanction the surveillance and reappraisal powers of administrative authorities;
- authority to direct and control the provision of services by Canadian registered pilots;
- parallel legislation by Canada and the U.S.A. to assist the authorities of both countries to proceed against offenders.

These deficiencies weaken authority and prejudice both the interests of the service and the safety of navigation. Remedial action should be taken without delay.

Except for the extension of extra-territoriality, which should be settled by treaty, the other requirements affecting licensing, reappraisal, discipline,

operations and related functions are the same as for the rest of Canada and Gen. Recs. 14 and 26-38 inclusive (Part I, pp. 495-9 and pp. 556-81) apply to the Great Lakes system as well. The complex factual situation has been somewhat simplified in recent years by discontinuing dual operational authorities.

While the Commission fully approves of the provision in various operational rules authorizing preventive suspension, it disagrees with the automatic punishment the imposition of such suspension involves. These rules require the despatcher to take a pilot's name off the despatching list for 24 hours when any of the situations listed occurs and, whether or not the pilot was at fault, he is considered unavailable for that period with the financial loss this may entail. In addition to possible injustice to the pilot concerned, this rule—as worded—may prove prejudicial to the safety of navigation because, in view of the possible consequences, a despatcher will hesitate to take a pilot off the list merely on suspicion that he is not physically fit, although public interest requires preventive suspension on the slightest suspicion and until such suspicion is dispelled. For the Commission's views on preventive suspension and the circumstances in which it should be imposed, reference is made to Gen. Rec. 29 (Part I, p. 563).

(6) SHIPPING CASUALTIES

Except for the Welland Canal sector which is fully situated in Canadian waters, shipping casualties involving pilots in the Great Lakes system come under the exclusive jurisdiction of either the Department of Transport or the U.S. Coast Guard for investigation purposes, depending whether the casualty occurred in Canadian or U.S. waters. The investigatory and remedial powers of each of these authorities are limited because their restrictive territorial jurisdiction has not been extended (as it should have been) to cover the common waterway. Reappraisal of a pilot's qualifications is part of the licensing function (Part I, C.9) and, therefore, each of the licensing authorities, i.e., the U. S. Great Lakes Administrator and the Minister of Transport, should have been provided with the necessary means and accessory powers, untrammelled by the question of territoriality but limited to their licencees, to permit the discharge of this essential part of their responsibilities. The result is the present unsatisfactory situation where these authorities can not carry out a complete and proper investigation and, in any event, would be powerless to take the proper remedial action against a pilot of the other nationality. A shipping casualty involving a Canadian registered pilot but occurring in the U.S. part of the Great Lakes system would be investigated by the U.S. Coast Guard; it would submit to the Minister of Transport the result of its investigation together with its recommendations if it considered reappraisal or disciplinary action was indicated. This is the

limit of its powers over Canadian pilots. On the other hand, the U.S. Coast Guard possesses effective remedial powers when the pilot involved is a U.S. citizen, i.e., withdrawal or suspension of the pilot's Certificate of Competency, which is a prerequisite for the validity of the registration certificate (p. 35). The evidence gathered by the U.S. Coast Guard is not admissible in evidence before any Canadian court and whatever findings they may have arrived at have absolutely no binding effect on a Canadian registered pilot. Under Part VIA C.S.A., the Minister of Transport, as licensing authority, has no investigating powers and the inquiry and courts he may convene under Part VIII C.S.A. (Preliminary Inquiry, Court of Formal Investigation and Court of Inquiry as to the Competency and Conduct of Officers) are without jurisdiction outside Canadian waters (for a similar situation, see Part IV, p. 950).

Appendix B is a table of casualties, accidents and incidents involving Canadian and U.S. Great Lakes registered pilots which have been reported to the Canadian authorities as shipping casualties, as the term is defined in sec. 551 C.S.A., for the years 1964–1969. This list is, therefore, incomplete in that it does not include casualties in U.S. waters with U.S. pilots involved (Ex. 1541(dd)). Except for District No. 3, these statistics convey a satisfactory picture of the situation because of the relatively equal participation of U.S. and Canadian pilots in the other sectors. There is one comparative table for each of the five groups of pilots, together with a detailed analysis of the cases, their nature and causes, for the year when there was the largest number of occurrences for each group. Reference is made to Part. II, pp. 88–90, for the definition of the method used in this Report for classifying so-called shipping casualties.

The casualty record of each group clearly reveals the different nature of their pilotage service, where the difficulties mainly lay and the adverse effect of spreading their services over an extended territory, thereby limiting their *expertise*.

The record of District 1 pilots is comparable to the Cornwall Pilotage District, as was to be expected because of the great similarity between the services they render. There are very few events in the course of navigation because any problems created by the physical features of the channel or by currents are easily solved. Apart from causes over which the pilot has absolutely no control, e.g., engine breakdown or failure to implement his orders, reduced visibility due to fog or other form of adverse weather remains the only serious natural hazard to contend with. Embarking and disembarking pilots in the stream at the Cape Vincent boarding station is a manœuvre fraught with danger when wind prevails because the boarding area is narrow and unsheltered and, if a ship has to slow down below her manœuvring speed, she is liable to be blown ashore (pp. 221 and 235). Bank suction is also a common cause of casualties due to the width of the

channels: if a ship passes too close to the edge of a narrow, dredged channel she is drawn toward the bank—a situation the pilots are well aware of and should be able to handle.

Most incidents, however, occur while manœuvring at close quarters during a lockage—the effect of wind on a light or partially laden ship is the main hazard to contend with—but damage is always relatively minor because vessels proceed very slowly during this process.

The clean record of the Lake Ontario pilots mainly reflects the absence of particular hazards while navigating the open waters of Lake Ontario; the minor casualties in which they were involved occurred during berthing and unberthing assignments.

At first view, the District No. 2 pilots have the worst record but this is more apparent than real since they are the largest group. However, it is also believed that dispersing their services from Lake Ontario to Lake Michigan has not been conducive to them acquiring the high standard of local *expertise* required to transit the Welland Canal and the congested channels of the Detroit River and St. Clair River safely and efficiently.

The lake pilots of the Lake Huron/Lake Michigan sector again have a clean record. These pilots were at times required to proceed to District 2 as part of their training as potential pilots for that District (pp. 183–4) and this explains their involvement in accidents as far east as the Welland Canal. The remarks concerning the Lake Ontario pilots apply here as well.

The almost impeccable record of the District No. 3 pilots is partly due to the fact that the available statistics show only a very small portion of their activities, i.e., they relate only to casualties in Canadian waters. As far as the Sault Ste. Marie locks are concerned, the statistics cover only the seldom-used Canadian lock and for casualties elsewhere only those in which the few Canadian pilots were involved. Therefore, the picture is far from complete. These figures reflect, however, the fact that open water navigation, which accounts for most of the services rendered by District 3 pilots, presents no particular hazard. It should also be noted that there is only one lock to be negotiated and, by comparison, there is much less traffic in the St. Marys River.

5. PILOTAGE OPERATIONS

PREAMBLE

In the continuous waterway formed by the St. Lawrence River and the Great Lakes system pilotage is a necessary service because legislation in both Canada and the United States requires that ships be navigated in specified confined areas and that a pilot be on board in the open waters of the Lakes. Since this service is provided by different groups of pilots *en route*,

each within its own sector, boarding areas must be established at changeover points at the limits of the territorial competency of each group, and at intermediate points if a complete transit of a District or sector would entail an abnormal workload. To achieve the best results the authorities in charge of operations at the boarding areas must coordinate their planning and other activities. Their main objects are to avoid delaying ships for lack of pilots in the boarding area and, at the same time, to distribute the pilots' workload as fairly as possible under reasonable working conditions with the least possible expense and waste of time.

Planning in recent years has been greatly facilitated by the coordinated maritime traffic information services which through the VHF network of the Traffic Control Systems provide pilotage offices with timely details of each vessel's requirements at each boarding area or port. There is now no direct radio communication between stations and ships, and ETA's at the next boarding area are no longer necessary because despatchers can follow the progress of ships through the system and, since they are aware of overall traffic conditions, are in the best position to establish in advance the time when relief pilots will be required (pp. 110 and ff.).

Normally, pilotage services are provided by experts in navigating a given sector of confined waters who do not proceed beyond that sector. For the Commission's views on the criteria for establishing such sectors, which under Part VI C.S.A. should usually form separate Districts, reference is made to Gen. Rec. 8 (Part I, p. 476). The same criteria apply when, for any reason, the District is divided into sectors (as in the Montreal Pilotage District with its *de facto* division at Trois-Rivières (Part IV, p. 622)). In such cases, the pilots are restricted to their own sector in order to ensure that their local *expertise* will be not only maintained but increased by continuous experience.

Pilotage operations in the Great Lakes system were prejudiced when these basic concepts were not followed. The compromise solution accepted in 1961 required the District pilots to provide services in the open waters of the Lakes and, as a result, they became a combination of Sailing Masters with general experience and average local skill and pilots in the Canadian meaning of the term. The Great Lakes pilots were to be registered for the confined waters of one District and also for all adjacent undesignated waters. The requirement to pilot in open waters has been maintained but, in view of operational problems, the waste of time of specially trained pilots and their constant complaints, a return to the Canadian system was gradually effected by appointing pilots registered for undesignated waters only, thereby reserving District pilots for in-District assignments. A recent development in the same direction has been the creation in District No. 2 of a special group of pilots for the Welland Canal.

Uninterrupted pilotage services can be assured only if the authority responsible for operations at a boarding station and adjacent areas is granted jurisdiction (either original or secondary) over all the pilots who are to be despatched from that station and those areas (Part I, Rec. 9, p. 482). Thus, a pilot in the course of his duties would come under the jurisdiction of a number of distinct operational authorities, depending where his assignments ended; these authorities are limited in the control of his activities by his territorial competency and by the complicated despatching and working rules which apply in various Districts and sectors of the system.

Coordination of the service (including pilot vessels at changeover points) also requires the establishment of boarding areas where all pilots terminating or commencing an assignment have legal competency to pilot (Part I, p. 481). The governing legislation fails to provide for joint territory where boarding stations are established. Originally, this posed no problem (and still does not) where the boarding station is situated in *undesigned waters*, because the jurisdiction of the District pilots extends to all undesigned waters adjacent to their District. However, the legal problem is inescapable where the boarding station is situated in *designed waters*, e.g., Cape Vincent. An indirect solution would be to extend the jurisdiction of the Lake Ontario and District No. 2 pilots to the waters of District No. 1 as far as the eastward limit of the Cape Vincent boarding area.

In a system where the pilotage service is to be financially self-supporting, all the pilots must share equitably in the operational expenses involved to the extent they use and benefit from accessory services.

The dual administration resulting from the joint U.S.-Canada agreement to participate at all levels became a serious bone of contention and proved unsound economically because of unnecessary duplication. In recent years, the general organization for the provision of services has also been altered to provide for sharing operational functions on a District basis and, in District No. 2, on the basis of separate designated zones (pp. 151-2).

(1) DISTRICT NO. 1

As in the Cornwall District, almost all ships are in transit and, hence, boarding areas had to be established at each end of the District where it is safest, most convenient and most economical for pilots and ships. At the eastern end of the District, such a site was the Snell lock area where the changeover between the Cornwall District pilots and the Great Lakes District No. 1 pilots can take place while ships are secured either at the wait wall or in the lock. This location posed no problem for the District No. 1 pilots since it was well within their territorial jurisdiction and was the obvious choice, but it created for the Cornwall pilots a serious legal problem which

to date is only partly solved (Part IV, p. 899 and Rec. No. 3, p. 1009). At the western end of the District, however, the changeover must be in the stream since the nearest place where vessels in transit can tie up is across Lake Ontario at lock 1 in the Welland Canal. Therefore, this necessitated a pilot vessel service located near the western limit of the District. It was established in the relatively sheltered area off Cape Vincent, well inside the designated waters of District No. 1, thus creating a problem as to the legal competency of pilots other than District No. 1 pilots who must use the boarding station (p. 216). Bulletins, including Notices to Mariners, in the Cape Vincent pilotage office provide the pilots with District information. There are similar bulletin boards at the pilots' accommodation at Alexandria Point and Snell lock.

(a) *Cape Vincent Pilot Vessel Service Dispute*

Prior to the opening of the Seaway, the normal channel traversed Kingston harbour where Kingston Pilotage District pilots and Sailing Masters changed over with the assistance of the pilot vessel service provided by an independent contractor, Captain L. S. Dougan. After the opening of the Seaway, the boarding station was transferred to the St. Lawrence River between Cape Vincent (N.Y.) and Alexandria Point (Wolfe Island) which had become part of the Seaway main channel and, hence, was the regular route for ships in transit, and even for vessels upbound to Kingston whose draught did not permit them to use the shallower northeast approach.

In 1961, the first year District No. 1 existed, pilotage operations were conducted as in the past, as a temporary arrangement pending the creation of the U.S. pilots' pool at Cape Vincent, i.e., the organization and direction of the provision of services were handled by the Canadian Kingston Pilotage District staff with a pilotage office at Cornwall and another at Kingston, the only difference being that 12 of the 32 pilots available for despatching were United States registered pilots. Both Canadian and United States pilots were despatched at the western end of the District by the Kingston office. They were not required to report in person at the pilot station when available for duty but were despatched from their home or place of residence in the immediate vicinity of the boarding station on the U.S. or Canadian side where the despatcher concerned telephoned them their assignment orders. The two U.S. associations operated their own pilot vessel service from Cape Vincent while the Canadian pilots continued to use Captain Dougan's service between the boarding station and Kingston. At the eastern boarding station, transportation to or from Snell lock was each pilot's own responsibility. For this reason, the U.S. pilots who preferred to reside in Massena were left free to make their own arrangements at their own expense. At first, the same system obtained for transportation between Cornwall and Snell

lock but abuses crept in and the Department of Transport decided to draw up a fixed rate contract with a taxi firm (vide Part IV, p. 956).

These arrangements were changed drastically in 1962. The St. Lawrence Seaway Pilots Association, Inc., which then included only 5 of the 12 U.S. registered pilots, had been authorized by the U.S. Great Lakes Pilotage Administration to form and operate the Cape Vincent pool. The Kingston pilotage office was closed and replaced by one at Cape Vincent manned by employees of the U.S. Association. The Cape Vincent pool took over despatching from that area and, as then provided for in the Memorandum of Arrangements, became responsible for billing and collecting pilotage fees for both U.S. and Canadian pilots. The Canadian administration performed the same functions at the Cornwall station. Immediately, there was a dispute over the discretionary powers which the United States legislation gave a minority group of pilots to bind all the pilots on financial matters connected with the organization and operation of the pool. Without consulting either the Canadian Authority or the Canadian pilots, the U.S. Association cancelled the previous pilot vessel service arrangements and established new ones on a different basis. It contracted out the service to a U.S. private entrepreneur, limited it to the boarding area itself (except for the occasional case where a pilot had to embark or disembark at the Lake Ontario approach to Kingston harbour) and prohibited the use of Kingston as a boarding area for ships in transit. The method of paying for pilot vessel service was changed: it was no longer on a trip basis which permitted each pilot or group of pilots to meet its own transportation expenses but, instead, the U.S. Association obligated the pool to pay the private contractor \$32,000 for the season. This amount had been calculated on the basis of the expected traffic at \$10 per trip. These arrangements placed the Canadian pilots at a substantial disadvantage in that, as a group, they were called upon to pay about two-thirds of the total but were still obliged to pay approximately the same amount as before for their transportation between Alexandria Point and Kingston, i.e., across Wolfe Island by taxi and from Wolfe Island to Kingston by pilot vessel (the ferry service was infrequent and did not operate at night).

The U.S. Association argued that the pool's responsibility for pilot vessel service extended no further than transporting the pilots between vessels and the nearest shore (Cape Vincent), that the pool had no obligation to embark and disembark Canadian pilots elsewhere and, hence, embarking and disembarking them at Alexandria Point was already a concession. Thus, the Canadian pilots were responsible for any extra transportation expenses if they chose to reside at Kingston rather than Cape Vincent.

Considered strictly from the point of view of U.S. pilotage legislation the U.S. pilots' reasoning was correct, and so it was held to be by the U.S.

and Canadian administrations, but when considered in the actual context it became an abuse of power. The Canadian pilots protested and refused to accept the *fait accompli* and the ensuing dispute, plus other existing points of contention, severely strained relations between the two groups of pilots. The Canadian pilots refused to use the Cape Vincent pilot vessel service (they used it only 240 times during 1962) but continued to use and pay for Capt. L. S. Dougan's services. They also often brought ships through Kingston harbour rather than the Cape Vincent boarding area. The matter was finally settled when the U.S. Association agreed to reverse its stand on the method of payment for pilot vessel service. By an agreement signed December 5, 1962, between the Corporation of Upper St. Lawrence Pilots, representing the Canadian pilots, and the St. Lawrence Seaway Pilots Association, the latter agreed that, commencing in 1963, the contract with the launch owner for pilot vessel service would be on a per trip basis as had been formerly the practice. The rates were set at \$10 for transportation between ship and Cape Vincent, \$9 between ship and Alexandria Point. Transportation between Alexandria Point and Kingston would remain the Canadian pilots' own responsibility or, as an alternative, a \$7.50 boat charge between Cape Vincent and Kingston was offered them. In addition, the U.S. Association agreed to reimburse the Canadian pilots the sum of \$10,750 by instalments to cover their share of the cost of pilot vessel service imposed on them in 1962 (Ex. 871). The Canadian pilots opted for the first solution, i.e., to embark and disembark at Alexandria Point and provide their own transportation between there and Kingston, for which they continued to use Capt. Dougan's services.

Although the District is now under sole Canadian management, these arrangements still stand. Ironically, since the beginning of the 1970 season, all the Canadian pilots have used Cape Vincent as their base and Capt. Dougan is seldom called upon to transport them to or from Kingston. The present pilot boat charge to the pilots at Cape Vincent is \$16.20 per trip (Ex. 1541(s)).

Pilot vessel service has to be provided occasionally at the Lake Ontario approach to Kingston off Snake Island at the northwest end of the harbour. Since this is a long distance from Cape Vincent, both Canadian and U.S. pilots ordinarily use one of Capt. Dougan's launches.

The 1961 Memorandum of Arrangements provided that income from pilotage fees would be divided between the United States and Canadian pools of each District *pro rata* to the "actively participating United States and Canadian registered pilots" after deducting the operating expenses of both pools. It added that the expenses charged in connection with the operation of the pool should be as prescribed by the Minister and the Secretary. This provision was interpreted as giving the Minister and the Secretary exclusive jurisdiction over the operating expenses of the Canadian

and U.S. pool respectively, but not as requiring their joint approval. Although the Department found a number of objectionable features in the operating expenses of the Cape Vincent pool, it came to the conclusion that it could not find any adequate legal basis to challenge the arrangements and the resultant financial responsibility of the Canadian pilots. The text of the Memorandum of Arrangements on this matter has not changed in substance. This source of contention has been eliminated as far as the Canadian pilots are concerned now that the District is under sole Canadian management because, although they have no official voice in District administration, they always have had substantial influence unofficially. It is assumed that the U.S. pilots are afforded a similar opportunity to express their views either through direct representations to the Cornwall Supervisor or at the U.S. Administrator's level.

COMMENTS

It is considered that the restrictive interpretation given the text was erroneous since it conflicts with the basic principles and intent of the Memorandum of Arrangements. The Memorandum is not legislation and, therefore, has no legally binding effect but it does create a moral obligation on the part of the two Governments to respect its text and spirit in their administrative decisions. The Cape Vincent administrative pool undoubtedly derived from the United States Great Lakes pilotage legislation alone its power to enter into a contract with a third party for pilot vessel service and, therefore, neither the Canadian Pilotage Authority nor the Canadian pilots in District No. 1 had any official voice in the matter. What can be criticized (although inexperience with the system may well have been the main cause) is that the arrangements were announced as a *fait accompli* rather than a proposal. Under these circumstances, operating expenses can not have any binding effect on the pool but only on the Association operating the pool, unless and until approved by the U.S. Administrator. Before granting such approval, the spirit of the Memorandum of Arrangements and simple justice require that those called upon to pay be at least consulted.

(b) *Wolfe Island Cut Dispute*

With the opening of the Seaway, Kingston harbour became obsolete as a changeover area for pilots, since it was by-passed by the Seaway channel south of Wolfe Island and direct access to the St. Lawrence River through the North Channel and the Wolfe Island Cut was not dredged to Seaway depth. The boarding area was relocated on the main channel between Cape Vincent and Alexandria Point; all ships in transit, irrespective of their draught, were to use it in order to facilitate operations in the boarding area and pilots were required not to bring any ship into Kingston unless it was her destination.

In 1962, during the dispute over pilot vessel service, some Canadian pilots brought their ships through the Wolfe Island Cut into Kingston in order to avoid using the Cape Vincent facilities. In addition to upsetting calculations of the cost of operating pilot vessels at Cape Vincent, operations at the boarding station were complicated because whenever the next on turn for a Lake Ontario assignment was a U.S. pilot he had to travel to Kingston to embark. In the summer of 1962, the Kingston District Supervisor was instructed by D.O.T. that this practice was to cease, since orderly despatching required all vessels in transit to proceed *via* Cape Vincent.

The Canadian pilots had the safety factor in their favour. Wolfe Island Cut is not dangerous within its draught limitations and Kingston harbour is safer for embarking and disembarking a pilot under way, since both are sheltered and free from currents as opposed to the strong currents in the relatively narrow passage between Cape Vincent and Wolfe Island. On the strength of this argument, the Canadian pilots had tried previously to have Wolfe Island Cut enlarged and dredged to Seaway depth. The implementation of this proposal, which had been accepted at first, was delayed and then rejected on economic grounds (p. 106). Wolfe Island Cut has not been used since the settlement of the pilot vessel dispute, except for light draught vessels bound to or from Kingston. The Working Rules and Despatching Procedures provide (subsec. A-4) that "All vessels are to be piloted via Cape Vincent Channel unless bound to or from the port of Kingston when they may use Wolfe Island Cut, if conditions are suitable."

(c) *Despatching Operations*

Planning. Originally, the planning of pilotage operations was necessarily the local responsibility of each pilotage office and depended upon the notices of requirement which ships were expected to give each pilot station sufficiently in advance to enable it to arrange for a pilot to be available when they arrived. Ships often failed to comply or gave inaccurate ETA's, thereby creating serious planning problems which the pilot station tried to prevent by exchanging traffic information and enlisting the assistance of the pilots on board who were required to ascertain pilotage requirements at the next boarding station and transmit such information a few hours before arrival. The recent creation of a network of marine information services (p. 110) has permitted accurate long-range planning of pilotage operations at each boarding station and centralization of District administration. Thus, in District No. 1, all planning (including Lake Ontario assignments) is now done at the Cornwall pilotage office. It has become the operational headquarters of District No. 1 and Cape Vincent is now merely a change-point for pilots.

Despatching procedure. These changes have not altered the despatching procedure which has remained the same and continues to be governed by the 1965 rules as amended (pp. 158 and ff.).

These rules are based on the equalization of trips system, the same as prevails in the St. Lawrence River Pilotage Districts. Presumably the Canadian pilots were instrumental in having this principle accepted and this may explain why the adoption of joint working rules became a serious point of contention in 1961 and 1962. No doubt the U.S. pilots considered the system unnecessarily complicated and not in conformity with the 1961 Memorandum of Arrangements which provided that the pilots were to be despatched on "a turn-for-turn" tour de rôle basis without regard for nationality. But the Canadian pilots had valid arguments similar to those which had warranted the adoption of the equalization of trips system in the Quebec and Montreal Pilotage Districts, i.e., failure to provide for the compulsory pooling of pilotage earnings as a necessary consequence of distributing the workload through compulsory despatching (Part IV, pp. 429 and ff.). The legislation failed to recognize (and still does) the basic principle governing the remuneration of pilots who are forced into the status of *de facto* employees, i.e., pilots of the same group should receive equal remuneration for equal availability. For the purpose of remuneration, the pilots were still considered free entrepreneurs and, therefore, their official remuneration was to consist of the pilotage fees each one earned by his services, less his pro-rated share of the operating expenses of each pilot station computed on the basis of his actual earnings from assignments originating from that station. The equalization of trips system was the only equitable way of preventing some pilots from making a larger number of trips (hence, more earnings) than other pilots with equal availability but who had the misfortune to obtain longer assignments due to bad weather, traffic congestion or other reasons. An alternative solution to the complicated equalization of trips system would have been single pooling of all pilotage earnings (such as has been adopted jointly by the U.S. and Canadian Lake Ontario pilots). However, since the Canadian and U.S. pilots formed their own separate pools, the equalization system remained the only equitable means of achieving equal remuneration.

The equalization system worked satisfactorily as long as flat rates were charged. Substantial discrepancies in the official revenue of each pilot are to be expected now that the rates vary with ships' dimensions. The equalization of trips system remains a final alternative and the circumstances which forced the pilots to adopt it should be corrected. For the Commission's views on the system, reference is made to Part IV, Recs. 8 and 9, pp. 1020 and ff.

The basic operational features adopted in 1962 have been retained ever since. In addition to the equalization of trips principle referred to earlier, they are:

- (i) The provision of services is fully controlled by a despatching system and no pilot may undertake any pilotage duty except as

directed by the despatcher under whose jurisdiction he is at the time.

- (ii) All pilots are treated alike, irrespective of nationality or the number in their group.
- (iii) All pilots are considered equally qualified and no distinction can be made about degrees of professional competency, not even in the case of a probationary pilot.
- (iv) Reflecting the fact that the service is mainly for ships in transit through the District, pilotage operations are based on one-way assignments. A pilot normally remains with the ship if a transit trip is temporarily interrupted by a call at an intermediate port, but a relief pilot will be provided if the ship then turns around.
- (v) Lake Ontario assignments for District No. 1 pilots are treated as cases of exception, Cape Vincent is a mandatory change-point, a lake assignment is given to a District pilot only as a last resort and a District pilot may not be unduly retained for lake duty and must be returned if he is needed for an in-District assignment.
- (vi) In case of emergency, all rules may be disregarded.

Assignment list. One despatching list is maintained for each of the two boarding stations. On each list appear the names of all pilots on station with their up-to-date lake and District trip credits and the time the name was entered. The names of all the other pilots are also shown with their trip credits together with the reason for their non-availability at the station concerned.

The list is adjusted twice daily at 0900 and 2100 according to the equalization of trips method, the pilots being listed in the order of their trip credits and precedence given to those with the smaller number of credits. An exception is made for those whose name has been entered on the list within the nine hours preceding the adjustment: they remain at the bottom of the list in the order they were entered (to assure them proper rest) and they equalize at the next readjustment, provided they have not been given an assignment by then.

Pilots are assigned in their order on the list, except for a lake assignment that has to be attended to by a District No. 1 pilot. In such a case, the assignment is given to the first pilot ready for orders who is more than one lake trip behind the pilot first on turn.

A pilot is given his assignment order two hours prior to the vessel's ETA or ETD and he is expected to arrive at the boarding area at least 15 minutes prior to ordered time. Shorter notice does not entitle a pilot to refuse the assignment and he must proceed as soon as possible.

Pilots are not relieved because an assignment lasts longer than usual, whatever the cause of the delay may be. However, pilots are changed after

a minimum of 24 hours of duty when all the necessary inquiries have been conducted and release granted in the event of long delays in transit due to a shipping casualty, extensive engine repairs, reloading cargo, etc., where a pilot's presence on board is required by the Master. The extent of relief duty is 48 hours, provided the ship has not sailed when the 48 hours expire.

Movages. Movages are attended to, if at all possible, on a voluntary basis. A movage assignment is offered to the first five pilots on the tour de rôle and, if none accepts, to any other pilot who volunteers. If no one accepts the assignment, the first pilot on turn is then ordered. At the completion of the movage, the pilot is reinstated on the assignment list in the position he held before the movage assignment but he is granted a 10-hour rest period before being placed second on turn.

The definition of "movage" in the Despatching Rules does not conform to the definition in the Kingston District General By-law (subsec. 2(g)) or in the Great Lakes Pilotage Regulations, amended (subsec. 2(cc)) or to the indirect definition in sec. 357 C.S.A. (Part I, pp. 135 and 217). It is not restricted to the movement of a ship within a harbour but also comprises trips of shorter duration, such as a trip in and out of the harbour of Kingston via the western entrance, a trip between the ports of Prescott and Ogdensburg, a trip from Snell lock to Massena or a trip between Snell lock and Eisenhower lock.

Trip credits. "Trip credits" is another term for "turns" used in other despatching rules (Part IV, p. 115). All in-District trip assignments count for one trip credit; lake trips count for one credit, provided the vessel was piloted; movages do not count for credits and, hence, their performance does not affect the position of a pilot on the assignment list except for an applicable rest period. There are also credits added for assignments lost due to absence for which equalization does not apply.

Trading turns. A pilot is authorized to trade turns with another pilot on station, provided the difference between their total trips is less than two and they have had their rest period.

Special rules at beginning and end of navigation season. In order to take care of the unidirectional traffic that occurs at the beginning and end of the season, the rules contain special provisions. At the opening of navigation, all pilots commence duty at Cornwall. Upon completion of their up-bound assignment, except for the first pilot on turn at Cape Vincent, they immediately return by land transportation to Cornwall. The pilot who was retained at Cape Vincent because he was the first on turn there may be relieved and allowed to return to Cornwall by land transportation after 12 hours on station, provided he so desires and his services are not required within the next six hours. This rule is obviously to correct the injustice that would result from the equalization of trips system, since he would otherwise be forced into a position of being substantially in arrears. Other pilots are

kept at Cape Vincent from time to time to meet expected requirements. After traffic is stabilized and due notice has been given to all pilots, the normal practice is resumed. The same system applies in reverse towards the end of the navigation season when traffic is mostly downbound. The date is established by the operational authority.

Absence. As a rule, the equalization procedure does not apply to periods of unavailability. Instead, when a pilot returns to duty after a period of absence, he is credited for despatching purposes with one trip credit for the first day of absence, and for subsequent days the average number of trip credits earned by the pilots who were available. One trip credit for the first day of absence is in itself a penalty since the daily average is always a fraction of a trip.

The rules provide a few exceptions, i.e., types of absence during which the pilot is not marked as being unavailable, thus permitting him to catch up with his lost trip assignments:

- (i) three days of illness during one navigation season, provided the pilot so elects;
- (ii) three days per season for special events, such as birth and death in the immediate family;
- (iii) absence for attendance at Pilots' Corporation meetings or for conducting business on pilotage matters, unless the pilot concerned requests to be marked unavailable, in which case the one-credit penalty for the first day will not be applied, and credit adjustment will be as specified by the Corporation;
- (iv) forced absence due to being called as a witness or party in any legal proceeding or hearing in respect of his licence or registration.

Winter navigation. The winter season extends from the date the Canadian and United States Great Lakes Pilotage Administrations fix as the end of the regular navigation season (which coincides with the closing of the Seaway) to the date established by the same authorities for the opening of navigation (generally the opening of the locks). During the winter season, pilotage services in District No. 1 are provided on a voluntary basis. However, in the event there are insufficient volunteers, pilots will be ordered from the tour de rôle as it stood at the end of the season. The list of volunteers is established on November 15, and after November 30 volunteers may not withdraw from this list. The winter tour de rôle is operated according to the same procedure. Winter earnings pertain in full to the pilots who earned them and are not subject to deduction for office and other expenses. However,

pilots are to pay their own travelling expenses, including pilot vessel service (p. 208) (Ex. 1541(t)).

In-season vacations. A mid-summer vacation programme may be authorized provided it does not interfere with the efficiency of the service and all United States and Canadian pilots participate equally.

It has been the custom since the creation of the District for all the pilots to take a seven-day mid-season holiday when the demand for service is low. In 1968, the vacation scheme had to be cancelled when the Seaway strike was settled to ensure that traffic would not be delayed for lack of pilots.

At the time of the Commission's hearings, the schedule was drawn up by the President of the U.S. pilots, the President of the Canadian pilots and the Canadian District Supervisor who met and compiled the list by lot.

In addition, in the early years of the District when the Canadian pilots were over strength and only 20 could be on the active list at the same time, the surplus pilots had to be forced to take leave of absence. Their off-duty periods were so arranged that all Canadian pilots would serve an equal period of time during the season. The order of these enforced holidays was also established by drawing lots. This system was abandoned when the number of Canadian pilots was finally down to 20 in 1965.

Two-pilot requirement. The despatching rules do not allow the despatching of two pilots jointly in any circumstances.

In their brief to the Commission, the Canadian pilots of District No. 1 recommended that two pilots be jointly assigned to tugs and tows because of the extensive duration of transit trips by such composite units (as much as 20 to 30 hours for one transit). They also asked that the requirement be applied to all vessels after December 1 because bad weather usually prevails at that time of the year and a second pilot would help to speed up trips. For the Commission's views on rigid dates being fixed in the regulations for this purpose, reference is made to Part IV, Rec. 10, p. 1026.

The joint assignment of two pilots has now been approved by a provision inserted in the U.S. Great Lakes Pilotage Regulations, 1970 amendments, pursuant to the agreement reached on the matter which was included in the 1970 Memorandum of Arrangements (pp. 42-3). The United States Regulations now provide that two pilots may be jointly assigned at a ship's request when deemed necessary in the interest of safety because of "anticipated long transit, uncommon ship size, adverse weather and sea conditions or other abnormal circumstances." Such a decision is to be taken by either the Director, Great Lakes Pilotage Staff, U.S. Coast Guard, or the Regional

Superintendent of Pilots, Department of Transport. The charge to the ship shall be one and one-half times the regular charge. The subject-matter is only indirectly covered in the Canadian Great Lakes Pilotage Regulations since they do not contain any provision concerning pilotage operations but merely provide a one and one-half times charge if and when two pilots are assigned (p. 25).

Although the despatching rules have not been amended in this connection, the situation is covered generally because the rules may be departed from as a case of emergency if authority is obtained from the United States Director or the Canadian Regional Superintendent.

(d) *Workload*

Except for Lake Ontario assignments which District No. 1 pilots no longer perform, the workload of the pilots in Great Lakes District No. 1 has the same characteristics as in the Cornwall District (Part IV, p. 961). Both Districts tend to have the same clients, i.e., mostly ocean-going vessels in transit through the St. Lawrence Seaway. They are both contiguous sectors on the St. Lawrence River between Lake Ontario and Montreal. The length of the trip is somewhat longer in District No. 1 (105 compared to 78 miles) but this is compensated by the fact that there is one less lock (3 compared to 4). The duration of transits is affected by the same factors: speed limit, weather conditions and locks where there may be considerable delay when traffic is congested.

As usual, the pilotage statistics available from various sources do not agree and the lack of definition of the data used makes accurate reconciliation impossible, but the discrepancies are not overly great and the various kinds of information provided suffice to convey a general picture.

The most comprehensive statistics available are the Statistical Reports Great Lakes Pilotage, jointly prepared by the U.S. and Canadian Pilotage Administrations (Ex. 1542) (the 1968 Report is reproduced as Appendix A). Unfortunately, the original format adopted in 1963 when the first Report was published has not been altered to reflect the basic changes that have taken place since and, therefore, their value is only general. They fail to segregate District and lake pilots and all statistical information regarding the latter is integrated with that about the pilots of the District to which they are attached. Hence, for the purpose of these statistics, Lake Ontario pilots are treated as District No. 1 pilots; Lake Huron/Lake Michigan pilots were listed as District No. 2 pilots up to 1968 and are now shown as District No. 3 pilots.

The following table is a compilation of various statistics and represents the aggregate workload of District No. 1 pilots (Lake Ontario pilots

excluded). These statistics did not permit segregating the number of assignments into designated and undesignated waters assignments. The term "assignments" includes movages and cancellations. The information was not segregated on the basis of Canadian and U.S. pilots because in the context of District No. 1 such a distinction is meaningless.

WORKLOAD OF DISTRICT No. 1 PILOTS*

Year	Number of Assignments†	Hours on Assignment‡			Total
		Designated Waters	Undesignated Waters	Detentions and Delays	
1961.....	3,405	30,574.8	7,573.4	5,902.9	44,148.2
1962.....	3,193**	30,753.3	n/av.	n/av.	n/av.
1963.....	2,765	27,104.0	1,502.6	2,995.4	31,602.0
1964.....	3,125	31,317.5	1,144.1	4,588.6	37,050.2
1965.....	3,514	35,974.5	1,701.4	6,076.6	43,752.5
1966.....	3,191	32,349.4	350.5	5,020.7	37,720.6
1967.....	2,911	29,228.4	12.6	2,771.3	32,012.3
1968.....	2,687	27,875.8	23.5	2,945.6	30,844.9
1969.....	2,716	27,464.4	nil	3,353.9	30,818.3
1970.....	2,477	25,064.3	nil	3,902.9	28,967.2

*Canada and U.S. combined, not including Lake Ontario pilots.

†Including movages and cancellations.

‡Including movages (cancellations not included because they are in number only).

**Taken from 1962 Kingston District Annual Report listing trips by District pilots as 2883 in-District and 310 on Lake Ontario.

SOURCE: EX. 1215.

The detailed statistics available for 1967, 1968 and 1969 made possible the preparation of the following table representing the distribution of District No. 1 pilots' workload (Lake Ontario pilots excluded) both from the point of view of the number of trip charges and of hours on duty. In District No. 1, a trip assignment coincides with a trip charge (except when two pilots are despatched jointly). The difference in totals compared with the previous table arises from the fact that the assignment figures also include movages and cancellations. However, they are very few, e.g., in 1969, there were 11 cancellations and one movage.

DISTRICT No. 1 PILOTS*—DISTRIBUTION OF WORKLOAD

Year	Sector of Assignment	Number of Trip Charges	Hours on Assignment	
			Trip Assignments	Detentions and Delays
1967.....	In-District.....	2,897	29,223.0	n/av.
	Lake Ontario.....	1	11.0	n/av.
	Total.....	2,898	29,234.0	2,771.3
1968.....	In-District.....	2,677	27,832.0	2,939.6
	Lake Ontario.....	4	32.7	6.0
	Total.....	2,681	27,864.7	2,945.6
1969.....	In-District.....	2,701	27,484.8	3,353.9
	Lake Ontario.....	nil	nil	nil
	Total.....	2,701	27,484.8	3,353.9

*Not including Lake Ontario pilots.

SOURCE: Ex. 1215.

The two preceding tables prompt the following remarks:

- The first Lake Ontario pilots were appointed in 1962 and as their number increased (p. 180) they gradually relieved the District pilots from duty in undesignated waters.
- Most detentions resulted from vessels stopping at an intermediate port *en route* to load or unload. In accordance with the despatching procedure, the pilot remains on board. For instance, in 1969, vessels were detained at Prescott and Ogdensburg 133 times for an aggregate of 1,003.5 hours. Most of the delays occurred at Snell lock when pilots waited to board incoming ships—in 1969, this occurred 328 times for an aggregate of 605.6 hours.
- There are very few movages and cancellations, e.g., in 1969, there were 11 cancellations and only one movage. The movage took place at Ogdensburg and took 24 minutes.
- In order to obtain a more complete picture of the pilots' time on duty, travelling time should be added, i.e., transferring from one station to the other or joining a ship at an intermediate port or returning from such a port at the conclusion of an assignment. No travelling time statistics are available but the aggregate should not be considerable, especially compared with the other Districts and sectors of the Great Lakes system, since most assignments here are full transits, the distance between the two stations is not great and transfers between stations are not overly time-consuming because adequate land transportation is available.

The actual workload of District No. 1 pilots has decreased considerably and, in 1968 and 1969, reached an all time low under the combined impact of the lake pilots gradually taking over from the District pilots undesignated waters assignments and, after 1965, the gradual decrease in in-District demand. The impact of the latter factor on the individual pilot's workload was somewhat offset by a reduction in the number of District pilots when the few vacancies created by normal attrition were not filled (p. 180).

— Since very few ocean-going ships call at any District No. 1 ports, this stretch of the River serves mainly as one part of their route westward and almost all assignments are full transits. This is well illustrated by the breakdown of the 1969 trip-assignment figures (Ex. 1215):

		No.	%
Full trips	(between Kingston/Cape Vincent and Cornwall/Massena/Snell lock / Eisenhower lock).....	2,624	97.1
2/3 trips	(between Prescott/Ogdensburg and Snell lock, or between Cape Vincent and Iroquois lock).....	20	0.7
1/3 trips	(between Kingston/Cape Vincent and Prescott/Ogdensburg).....	51	1.9
Others	.....	6	0.3
		2,701	100.0

As in the Pilotage District of Cornwall, the duration of a full transit does not depend so much on a ship's speed as on outside factors such as weather conditions and, mainly, congestion in the locks. In recent years, on account of complaints of property owners along the St. Lawrence, speed limits have been strictly enforced, resulting in a slight increase in the minimum duration of a transit. The average transit time, as quoted in the District Annual Reports (Ex. 843), is 12 hours for the years 1964 and 1965.

With good weather and favourable traffic conditions a full transit takes eight hours but under adverse conditions assignments may occasionally be much longer than the average. This is well illustrated in the following analysis of the workload of a typical District pilot which appears in the 1968 Kingston Pilotage Authority's Annual Report (Ex. 843) (vide also p. 235 and p. 238).

District Pilot J. Bell	Assignments	
	1967	1968
Total number of assignments.....	85	82
Total hours on assignment.....	947 hrs. 25 mins.	906 hrs. 30 mins.
Average length of assignment.....	11 hrs. 08 mins.	11 hrs. 03 mins.
Shortest time Cape Vincent to Snell lock....	8 hrs. 00 mins.	8 hrs. 00 mins.
Longest assignment.....	22 hrs. 45 mins.	53 hrs. 00 mins.

The average workload per District No. 1 pilot has always been, and still is, greater than the workload of the Cornwall pilots, despite the fact that the aggregate District workload is approximately the same, because at first the District No. 1 pilots had also to attend to Lake Ontario assignments but mainly because the number of Cornwall pilots has always been greater (Part IV, p. 924).

The official "effective pilots" figures can not be used to ascertain the average yearly workload per pilot because those available do not segregate Lake Ontario pilots from District No. 1 pilots. The following averages were arrived at by averaging the workload of the 80 per cent of the pilots participating who were the busiest. The year 1965 was chosen because it was the year when the aggregate workload in the District was the heaviest; the years 1968 and 1969 to show the most recent statistics (and also for District No. 2 to show the effect of the 1969 reorganization).

AVERAGE WORKLOAD OF THE 80% OF THE PILOTS WHO WERE BUSIEST

Year	Number of Days in Navigation Season	Average Number of Assignments per Pilot		Average Hours on Assignment per Year					
		per Season	per Day	designated waters	un-designated waters	detentions and delays	total	per Day	per Assignment
1965.....	241	111.1	0.5	1,143.2	54.6	191.6	1,398.4	5.8	12.5
1968.....	247	82.4	0.3	855.6	0.9	88.5	945.0	3.8	11.5
1969.....	248	82.8	0.3	840.3	nil	104.7	945.0	3.8	11.4

SOURCES: Exs. 1215 and 1542.

The effect of the tour de rôle based on the equalization system is noticeable from the statistics (Ex. 1215) for the year 1969, when the 19 Canadian and the 14 U.S. pilots were available for the entire season with the exception of a few days for illness and seven days' mid-summer compulsory leave each. The following table shows how the workload of District assignments was shared among the pilots.

HOURS ON ASSIGNMENT BY DISTRICT NO. 1 PILOTS DURING 1969*

Number of Assignments	Number of Participating Pilots	Average High/Low Hours per Assignment	Total Hours on Assignment per Pilot
85	1	11.6	987.7
84	3	11.3—11.2	946.5 945.3 943.5
83	12	11.9—10.7	970.0 964.1 951.2 935.8 935.3 931.7 923.5 912.4 899.7 898.2 895.5 891.6
82	15	12.3—10.7	1,009.0 1,004.1 990.9 984.7 962.6 959.0 942.2 941.6 937.4 934.5 911.0 906.1 902.3 892.9 874.4
81	1	10.6	859.3
72	1	12.1	874.3
Total 2,716	33	12.3—10.6	30,818.3
Average per pilot 82.3		11.3	933.9

*Canadian and U.S. pilots combined (not including Lake Ontario pilots).
SOURCE: Ex. 1215.

These statistics show:

- (i) The two pilots last on the list had fewer trips because of absence due to illness but all the others were fully available. The small differences in the aggregate number of assignments performed are accounted for by the position they held on the tour de rôle at the end of the season.

- (ii) All Canadian pilots, except one, performed the maximum average of trips or were not below by more than two turns. According to their pooling arrangements, this entitled them to a full and equal share of their aggregate earnings. The last pilot on the list was a Canadian pilot whose aggregate period of illness during the season exceeded three days (p. 225). The pilot with 81 trips was a U.S. pilot, Luther Young, who was ill at the end of the season and died Jan. 8, 1970.
- (iii) Thirty-one pilots were constantly available. The effect of the tour de rôle based on the equalization of trips principle was an equal sharing of the workload in number of assignments but quite an unequal sharing in aggregate time on duty. The discrepancies at times are huge, for instance:
 - Three pilots who did 82 assignments were on duty longer than the 16 pilots who did more assignments.
 - The Canadian pilot who did only 72 assignments was on duty the same aggregate time as one pilot who did 82 assignments; the average duration of assignment was 12.1 hours in one case but 10.7 hours in another. Pilot Young's average short assignment (10.6 hrs.) is no doubt mainly accounted for by the fact that he became ill at the end of the season but had been constantly available up to then and had performed the maximum permissible number of assignments when the best conditions prevailed for fast trips.

The distribution of the aggregate pilotage workload follows the same pattern as in the Cornwall District (Part IV, p. 965 and pp. 999–1001). Navigation is closed for the months of January, February and March, the beginning of April and the last part of December. The pilotage workload normally follows a predictable pattern and is divided fairly equally from month to month with a slight decrease in the summer. Advantage is taken of the slack period to allow for a mid-summer seven-day vacation which results in maintaining the monthly workload of the pilots on duty at approximately the same level every month throughout the navigation season. At the beginning and end of the season, traffic is unidirectional which, with the combined effect of poor weather conditions, results in a heavier workload in aggregate time of duty per pilot, although the number of assignments remains the same.

In recent years, this normal pattern was often disrupted by unpredictable events, such as adverse weather conditions (fog, for instance, especially if it lasts several days, brings traffic to a halt and vessels wait in port ready to depart as soon as better conditions prevail), a shipping casualty blocking the channel, strikes in industries or services directly or indirectly connected with shipping. When normal conditions again prevail, there is often a

COMPARATIVE DISTRIBUTION OF A CANADIAN AND A U.S. PILOT'S TOTAL

Distribution of Total Aggregate Time	April	May	June	July
	No. hrs. mins.	No. hrs. mins.	No. hrs. mins.	No. hrs. mins.
Canadian Pilot J. G. Conrad Hamelin				
Trips: District.....	5 48 25	14 156 35	11 171 51	13 144 30
Lake Ontario.....			2 20 00	
Movages.....				
Cancellations.....				
Detentions* en route.....		1 9 00		
Land travel (between station/ outport)†.....	4	1	3	2
Waiting at outports for assignment.....	31 05	201 50	198 49‡	144 75
At home between assignments§.....	640 30‡	376 35‡	329 20‡	454 15‡
	30 days	31 days	30 days	31 days
U.S. Pilot Edmund F. Fleming				
Trips: District.....	7 86 25	13.1 163 50	13.1 152 50	11.8 138 35
Lake Ontario.....				
Movages.....				
Cancellations.....				
Stand-by duty.....				
Detentions*.....				
Land travel (between station/outport)†.....	4	3	3	3
Waiting at outports for assignment.....	42 40	128 55	111 30	111 15‡
At home between assignments§.....	590 55‡	451 15	455 40	494 10‡
	30 days	31 days	30 days	31 days

sudden demand for pilotage which can not be met forthwith. Such peaks of relatively short duration are a common feature of the pilots' profession which they are accustomed to take in stride.

As elsewhere, irregular hours of duty are part of the normal working conditions of District No. 1 pilots. Provided he has had the necessary rest, the first duty of a pilot is to be available when his turn comes at any time of the day or night. This is why the pilots rightly consider that, except when they are on authorized leave of absence or during their rest period, they are always on duty.

The regular distribution of pilotage work throughout the pilotage season and the irregular hours that pilots had to keep in the performance of their duties is apparent from the records some pilots kept of the complete use of their time over certain periods up to 1964. The records for that year are considered more representative of the actual situation because there

AGGREGATE TIME ON A 24-HOUR BASIS DURING APRIL-DECEMBER 1964

August	September	October	November	December	Total
No. hrs. mins.	No. hrs. mins.	No. hrs. mins.	No. hrs. mins.	No. hrs. mins.	No. Days
11 105 05	12 136 45	12 129 10	12 153 00	2 72 45	92 46.6
.....	.....	.....	2 21 00	.....	4 1.7
.....	.....	.....	.....	.....	Nil
.....	.....	.....	.....	.....	Nil
.....	.....	.....	.....	.....	1 .4
3	3	6	3	2	27 †
..... 202 40†	..... 77 30	..... 102 15	..... 141 49†	..... 28 45†	..... 47.0
..... 436 15†	..... 505 45†	..... 512 35†	..... 404 11†	..... 642 30	..... 179.3
31 days	30 days	31 days	30 days	31 days	275 days
14 150 00	11 131 20	15 156 15	12.6 190 55	2.4 70 15	121 51.7
.....	.....	.....	1 13 45	.....	1 .6
.....	.....	.....	.....	.....	Nil
.....	.....	.....	1 48 00	.....	1 2.0
.....	.....	.....	.....	.....	Nil
5	3	7	3	2	33 †
..... 148 29†	..... 104 30	..... 121 10†	..... 165 27†	..... 17 30†	..... 39.6
..... 445 31†	..... 484 10†	..... 466 35†	..... 301 53†	..... 656 15	..... 181.1
31 days	30 days	31 days	30 days	31 days	275 days

*On board between ordered and sailing times, if any, included in *Trips*. †Included in *Waiting at outports and/or At home*. ‡Includes *Land travel* time. §Includes, re Pilot Hamelin—compulsory leave June 30–July 5, and holidays August 9–15, and re Pilot Fleming—holidays July 26–August 1.

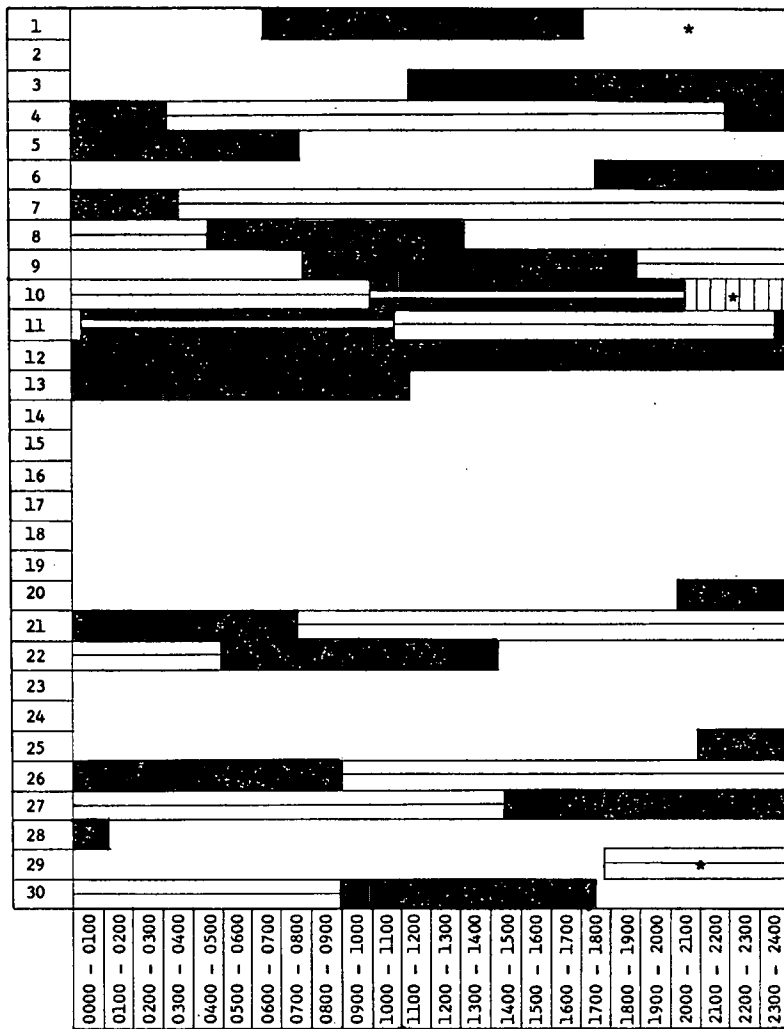
SOURCE: Ex. 838 (Kingston Pilotage Authority).

were then very few Lake Ontario assignments (89 out of a grand total of 3,122). However, the aggregate workload was somewhat heavier than in recent years. Canadian District pilot J. G. C. Hamelin and U.S. District pilot E. F. Fleming kept complete statistics of their 1964 season and the table on pp. 234–5 shows the analysis of their records on a monthly basis.

Analysis of their records provides, *inter alia*, the following information:




- (i) Both pilots were involved with a vessel grounding at the Cape Vincent boarding area. On June 21, the vessel pilot Hamelin had just boarded went aground in Alexandria Bay and his tour of duty extended over two days (56 hrs. 51 min.), mostly in detention time. On November 25, pilot Fleming was on standby duty for 48 hours (pp. 224–5) on board a vessel which had grounded at Cape Vincent.

NOVEMBER 1964 WORKLOAD OF DISTRICT NO. 1
CANADIAN PILOT J. G. CONRAD HAMELIN



LEGEND:

Waiting between Assignments:

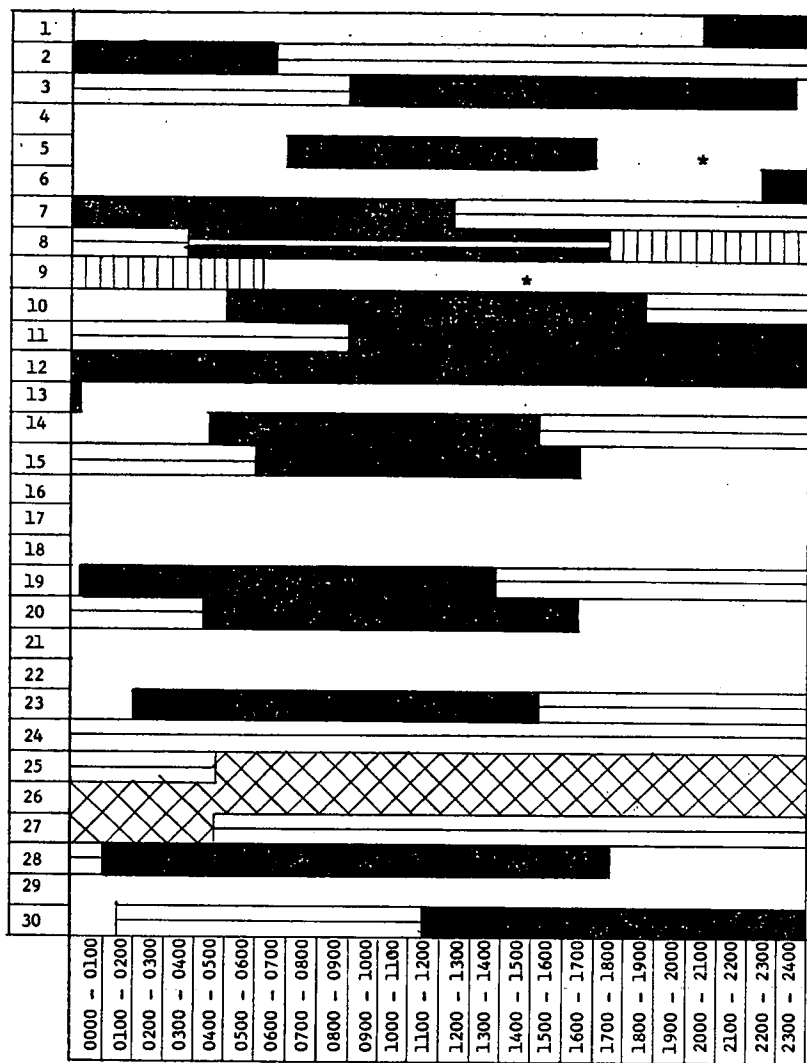
-  Piloting in District
-  Piloting on Lake Ontario
-  Including travel between stations and/or outposts

☐ At home (Cornwall)

☐ Cape Vincent

☐ Lake Ontario (Port Weller)

20



LEGEND:

Waiting between Assignments



Piloting in District



At home (Massena)



Piloting on Lake Ontario



Cape Vincent



Stand-by duty



Lake Ontario (Hamilton)



Including travel between stations and/or outports.

- (ii) Pilot Hamelin had two trips of extensive duration: November 11, 35 hours 35 min., due to foggy weather; December 3, 54 hours, cause for the delay not stated. Pilot Fleming had four trips of unusual duration: May 10, 20 hours 40 min., reason not stated; November 11, 39 hours 10 min., due to dense fog; December 2, 28 hours 30 min., reason not given; December 5, 32 hours 45 min., reason not given.
- (iii) Pilot Hamelin was on six-day compulsory leave twice: June 30-July 5 and Nov. 14-19. There are no such entries in pilot Fleming's record. In 1964, the Canadian pilots were still over strength and compulsory leave had to be taken so that not more than 20 Canadian pilots would be on active duty at the same time (pp. 176-8).

The month of November was the busiest in 1964. The two graphs on pp. 236-7 show the distribution of pilot Hamelin's and pilot Fleming's time on a 24-hour basis for the month of November. It was also their busiest for that year, despite the fact that pilot Hamelin was on leave for six consecutive days.

The analysis of the duty time of these two pilots in November 1964 shows the irregularity of their working hours (a characteristic of the profession) and also the frequency of assignments of longer than normal duration in Districts where, due to the existence of locks, traffic congestion is bound to occur. In 21 cases, the trip was in progress at noon and in 11 at midnight. Out of a total of 25 District trips, four, all downbound, took less than 10 hours, the fastest 8 hours 30 min. Most took between 10 and 15 hours and the longest took 21 hours 30 min., 35 hours 35 min. and 39 hours 10 min. In the last two cases, the delay was due to fog. Despite the fact that November was the busiest month of the year, pilot Hamelin was not involved in pilotage on 9 calendar days and pilot Fleming on 8 days, one of which he spent at the Cape Vincent station.

(2) LAKE ONTARIO

Preamble

According to the original arrangements, the pilotage services required on Lake Ontario and in its ports were to be the joint responsibility of the Districts No. 1 and No. 2 registered pilots, with the exception of Kingston which could only be served by District No. 1 pilots because it was part of the designated waters of that District. This holdover from the discarded Sailing Master system conflicted with the true definition of pilot as a qualified expert in the navigation of a limited sector of confined waters. From the beginning, the pilots in Districts 1 and 2 complained and repeatedly requested

to be relieved of assignments in undesignated waters. They argued that such an extended territory was not conducive to the efficient operation of in-District service, led to a waste of experts' time and involved the individual pilot in financial loss because lake assignments were much less remunerative. Opposition was not limited to Canadian pilots but came from U.S. pilots as well: it is reported (Ex. 843) that a District No. 1 U.S. registered pilot repeatedly refused to undertake Lake Ontario assignments in 1961 and another resigned when he found there was no way to avoid them. The absurdity of the situation is self-apparent when it is realized that District 2 pilots, specially selected and trained to manoeuvre ocean-going vessels through the Welland Canal and its locks and navigate them in the congested, confined waters of the Detroit and St. Clair Rivers, were being wasted on simple translake assignments which any qualified mariner with general knowledge of Great Lakes navigation could handle. The vast extent of their pilotage territory results in considerable loss of time travelling or waiting either on board or at outports. The statistical records (p. 264) show that District No. 2 pilots spent on the average the same amount of time piloting outside their District as in, and with even more aggregate detention time.

The administrative authorities suffered no illusions about the relative unimportance of pilotage in the open waters of the Great Lakes in relation to the safety of navigation. When pilots were in short supply, priority was given to District assignments and vessels were issued waivers for undesignated waters (p. 142). As the demand for lake pilotage increased with the disappearance of vessels whose officers were able to meet the requirement for two round trips to qualify for a "B" certificate, a sensible solution was devised. This consisted of relieving the District pilots of this unwanted responsibility as much as possible by appointing pilots registered solely for undesignated waters. The lake pilots were gradually increased with the result that, despite the considerable increase in demand during the last five years, a Lake Ontario assignment is now a rare occurrence for a District pilot and they are now in sufficient numbers to meet both normal requirements and the occasional peak period. In his 1968 report, the District No. 1 Canadian Supervisor of Pilots reported on the Lake Ontario pilots' performance in these terms:

"These men did excellent work and were the epitome of co-operation. They took assignments without question, were seldom unavailable and threw their own rules to the wind to ensure ships were serviced."

Despite the presence of a now sizeable group of Lake Ontario pilots, lake assignments remain within the legal competency of Districts 1 and 2 pilots and they are still liable to be called upon during the occasional shortage of lake pilots.

There is no pilot vessel service specially organized for undesignated waters assignments. For those originating or terminating at Cape Vincent or

Port Weller, the boarding station pilot vessel service is used jointly. When a pilot has to board or disembark off a port, the despatching office responsible for the assignment makes the necessary transportation arrangements using local facilities.

(a) *Working Rules and Despatching Procedures*

The despatching responsibility for lake assignments is shared between the District No. 1 operational authority (formerly the Cape Vincent pilotage office) and the District No. 2 eastern sector operational authority. Their activities are governed and co-ordinated through the *Joint (Interpool) Working Rules and Despatching Procedures for Lake Ontario Assignments* (Ex. 1013 (A)). Under these rules, the District No. 1 despatching office situated at Cornwall is responsible for lake assignments westbound from Cape Vincent or originating from the ports of Cobourg and Rochester and any other Lake Ontario port east of these two ports. The District No. 2 despatching office at Port Weller is responsible for Lake Ontario assignments eastbound from Port Weller or originating from any of the Lake Ontario ports west of Cobourg and Rochester, including Toronto and Hamilton. For the arrangements concerning the contribution of the lake pilots toward the cost of operation of the two despatching offices, vide p. 311.

The main operational features of these rules may be summed up as follows:

- (i) Lake Ontario pilotage is to be performed primarily by Lake Ontario pilots. If a District pilot is sent on a lake assignment through necessity, he is given priority for a return trip to his District, and is returned by land if no return assignment is expected within 12 hours, or prior to that if so requested by his District operational authority.
- (ii) A District or lake pilot comes under the jurisdiction of the despatching authority for the port or place where his lake assignment terminates; hence, he has to report immediately to the District No. 1 operational authority, or the Port Weller pilotage office, as the case may be.
- (iii) At Cape Vincent and Port Weller, subject to the return trip priority of a District pilot, lake pilots are assigned to duty according to a regular tour de rôle. Their names are placed at the bottom of the list as they become available for duty. The equalization of trips system is not used and trip credits or turns are not counted.
- (iv) Reflecting the difference in pilotage duties between District assignments and lake assignments, there is no automatic rest period after the completion of a lake assignment unless the pilot finds he is so tired that he is unable to accept another lake assignment without rest.

- (v) Assignment orders are given at least two hours prior to the time of reporting or leaving by land transportation, but pilots may waive this requirement. When ordering a pilot, the despatcher has to take into consideration the transportation problems involved.
- (vi) Pilots may exchange turns once on the tour de rôle with the approval of the despatcher but a second exchange is barred until the assignment for which they have traded has been completed.
- (vii) To meet an expected demand, lake pilots may be transferred between stations in the order they appear on the list after those needed for local requirements have been retained. They are placed at the bottom of the list of the station where they are transferred in the order they appeared on the list of the station from which they came.
- (viii) In order to provide a more efficient and more economical pilotage service between Hamilton or Toronto and Port Weller, one lake pilot is kept exclusively for such assignments when a sufficient number of lake pilots become available. The tour de rôle does not apply to pilots so assigned and they are placed on duty in rotation every eight days.
- (ix) Lake pilots travelling by land from Cape Vincent to Port Weller are required to report to the Port Weller pilotage office from Toronto or Hamilton in case there are requirements at lake ports. A similar interim report to Cape Vincent must be made by pilots arriving at Kingston by land.

The situation regarding pre-season and post-season assignments and two-pilot assignments is the same as described for District 1 pilots (pp. 224-5 and 226-7).

From the point of view of stress, fatigue and difficulties, pilotage in undesignated waters can not compare with pilotage in designated waters and this fact is realistically recognized in the working rules. In principle, a pilot is not considered in need of a rest after a lake assignment before being re-assigned to duty. In a number of cases, a pilot is taken on board because of the legislative compulsory requirement but no use is made of his services except when entering the restricted waters of a port or a boarding area. Navigation in the open waters of the Great Lakes is not a demanding task for a qualified mariner: the courses are straight and there are no tides or cross-currents. Therefore, the pilots usually have ample opportunity to rest *en route*. Occasionally when navigation is difficult, it is the pilot's responsibility to decide whether or not he will be sufficiently rested for a further assignment; if not, he is entitled to request a rest period. Hence, duty time and workload on lake assignments and District assign-

ments are so different that they can not be compared and any comparison would be not only meaningless but misleading.

(b) *Workload*

The Commission has tried to decipher the various statistics available in order to establish the nature and extent of the pilotage demand in the undesignated waters of Lake Ontario and its ports, to establish the fluctuations over the years and determine the extent of the participation in the provision of such services by each of the three groups of pilots responsible, i.e., Lake Ontario pilots, District No. 1 pilots and District No. 2 pilots. This has proved almost impossible (unless all the records since 1961 are reanalysed and reclassified) and the task is not considered justified for the purposes of the Report. The main problem is that originally it was not contemplated that these assignments would be performed by a separate group of pilots. As a result, the assignments of the Lake Ontario pilots are included with those of District No. 1 pilots and the undesignated waters assignments of District No. 2 pilots are not segregated to show whether they were performed on Lake Ontario, Lake Erie, Lake Huron or Lake Michigan.

The following table was compiled from the assignment statistics available from Ex. 1215.

WORKLOAD OF LAKE ONTARIO PILOTS*

Year	Number of Assignments†	Hours on Assignment‡			Total
		Designated Waters	Un-designated Waters	Detentions and Delays	
1961.....	nil	nil	nil	nil	nil
1962.....	n/av.	n/av.	n/av.	n/av.	n/av.
1963.....	851	20.1	8,451.0	3,707.2	12,178.3
1964.....	1,441	298.3	13,273.7	2,587.2	16,159.2
1965.....	1,656	nil	15,305.5	2,606.3	17,911.8
1966.....	2,070	nil	18,421.0	2,530.9	20,951.9
1967.....	2,085	nil	17,586.1	2,990.0	20,576.1
1968.....	2,216	nil	19,287.5	2,073.3	21,360.8
1969.....	2,266	nil	20,569.4	1,761.1	22,330.5
1970.....	2,126	nil	19,029.1	1,597.9	20,627.0

*Canada and U.S. combined.

†Including movages and cancellations.

‡Including movages (cancellations not included because they are in number only).

SOURCE: Ex. 1215.

The statistics available for the years 1967, 1968 and 1969 indicate the extent of the pilotage demand for Lake Ontario and how the resultant workload was shared between the three groups of pilots operating in this sector.

DISTRIBUTION OF LAKE ONTARIO WORKLOAD ASSIGNMENTS*

Year	Pilots on Assignment	Number of Trip Charges	Hours on Assignment		
			Pilotage	Detention	Total Hours
1967	District No. 1.....	2	12.6	n/av.	n/av.
	Lake Ontario.....	2,009	17,584.5	n/av.	n/av.
	**District No. 2.....	74	618.5	137.4	755.9
	Total	2,085	18,215.6	n/av.	n/av.
1968	District No. 1.....	4	32.7	6.0	38.7
	Lake Ontario.....	2,120	19,278.3	2,073.3	21,351.6
	District No. 2.....	27	93.4	10.0	103.4
	Total	2,151	19,404.4	2,089.3	21,493.7
1969	Lake Ontario.....	2,195	20,581.6	1,759.6	22,341.2
	District No. 2.....	24	106.5	4.0	110.5
	Total	2,219	20,688.1	1,763.6	22,451.7

*On the basis of trip and detention charges.

**In 1967, 18 of the trip charges are credited to Lake Huron/Lake Michigan pilots. This is no doubt accounted for by the fact that the U. S. Lake Huron/Lake Michigan pilots were considered District 2 pilots in training (pp. 183-4) and such assignments formed part of their practical experience.

SOURCE: Ex. 1215.

The table on p. 244 shows the average workload of the Lake Ontario pilots calculated in the same way as for District No. 1 pilots (p. 231) and for the same years.

These three tables prompt, *inter alia*, the following remarks:

- The lake pilots' aggregate workload has increased steadily over the years under the impact of two factors: the gradual decrease in "B" certificate-holders (pp. 140-2) and the gradual withdrawal of Districts 1 and 2 pilots from Lake Ontario assignments. The effect on the individual pilot of such an increase was corrected by readjustments in their number: a gradual increase in the period 1962-1967 from 4 to 15 and a reduction to 13 in 1968.
- Because there are widely separated ports around the Lake, land travel must be substantial but, unfortunately, no statistical data are available.
- There are few movages (e.g., 63 in 1969) which, except for the odd occasion, occur only in the harbours of Hamilton and Toronto. In pilots' time, they must account for much more than the short duty time recorded since a pilot has to travel long distances to attend to a movage and then return to his station if the movage did not occur when he happened to be in the port concerned. For 1969, there were 11 cancellations in all.

AVERAGE WORKLOAD OF THE 80% OF THE PILOTS WHO WERE BUSIEST

Year	Number of Days in Navigation Season	Average Number of Assignments per Pilot		Average Hours on Assignment					
		per Season	per Day	per Year				per Day	per Assignment
				designated waters	undesignated waters	detentions and delays	total		
1965.....	241	163.4	0.7	nil	1,525.8	264.6	1,790.4	7.4	11.0
1968.....	247	163.7	0.7	nil	1,436.6	159.9	1,596.5	6.5	9.8
1969.....	248	178.3	0.7	nil	1,602.1	146.2	1,748.3	7.0	9.8

SOURCES: Exs. 1215 and 1542.

The average duration of the longest trip on Lake Ontario is somewhat over 12 hours. Trips take longer in unfavourable weather but traffic congestion is not a problem in open waters. In the various ports, only a slight delay can be expected when a berth happens to be unavailable on arrival.

Most Lake Ontario assignments are transit trips between Districts 1 and 2, trips to or from Toronto and Hamilton and between those two ports and Port Weller. There are only occasional trips to other Lake Ontario ports by vessels subject to pilotage requirements.

The following table gives the breakdown of the aggregate Lake Ontario assignments for the years 1967, 1968 and 1969:

Lake Ontario Assignments	1967		1968		1969	
	No.	Average Duration	No.	Average Duration	No.	Average Duration
<i>TRIPS (Upbound and/or Downbound)</i>						
Cape Vincent/						
Port Weller.....	778	10.7	999	10.7	1,011	10.8
Hamilton.....	120	12.5	104	12.7	130	13.0
Toronto.....	508	11.1	441	11.2	525	11.3
Rochester.....	22	6.7	15	6.8	6	6.0
Oswego.....	10	4.3	6	4.3	4	5.4
Kingston.....	2	2.4	2	2.2	0	.....
Other.....	5	7.0	21	10.3	24	11.8
Port Weller/						
Kingston.....	0	.....	2	10.0	3	10.9
Oswego.....	6	10.3	1	8.9	0	.....
Rochester.....	4	6.6	3	9.3	3	6.9
Toronto.....	322	3.0	267	3.1	319	3.1
Hamilton.....	119	3.1	131	3.6	75	3.3
Port Weller.....	2	1.8	27	1.2	14	2.1
Other.....	2	5.7	4	7.2	3	5.2
Hamilton/						
Kingston.....	3	12.5	0	.....	0	.....
Oswego.....	2	14.6	1	10.3	0	.....
Rochester.....	2	9.2	2	10.7	0	.....
Toronto.....	129	3.7	103	3.6	95	3.7
Hamilton.....	4	1.5	1	.5	0	.....
Other.....	0	.....	1	15.8	0	.....
Toronto/						
Kingston.....	1	14.7	1	11.2	0	.....
Oswego.....	2	9.8	2	11.6	1	9.5
Rochester.....	23	8.6	12	8.1	3	8.9
Toronto.....	5	2.2	0	.....	2	1.0
Other.....	11	10.0	5	7.8	1	6.9

Study of Pilotage in Great Lakes System

Lake Ontario Assignments	1967		1968		1969	
	No.	Average Duration	No.	Average Duration	No.	Average Duration
Other /						
Kingston.....	1	5.8	0	.....	0	.....
Other.....	1	1.3	0	.....	0	.....
Total Trips and Average Duration	2,084	8.7	2,151	9.0	2,219	9.3
MOVAGES						
Port Weller.....	1	1.2	1	.7	0	.....
Hamilton.....	32	1.4	22	1.4	12	1.7
Toronto.....	59	1.4	59	1.2	51	1.4
Rochester.....	1	1.3	0	.....	0	.....
Cape Vincent.....	1	1.6	0	.....	0	.....
Total Movages and Average Duration	94	1.4	82	1.2	63	1.5

Detentions and delays are not substantial, e.g., in 1968, detentions occurred on 168 occasions, an aggregate of 511.1 hours, and delays in 491 cases, an aggregate of 1,248.5 hours, as compared with the aggregate duration of trips and movages in undesignated waters totalling 20,708.1 hours.

In his 1968 annual report, the Canadian Supervisor for District No. 1 gave the following figures regarding the workload of a typical Canadian lake pilot for 1967 and 1968.

Lake Ontario Pilot E. B. Crites	1967	1968
Days available.....	244	247
Days unavailable.....	0	0
Total assignments.....	166	165
Hours on assignment.....	1,488 h. 30 m.	1,422 h. 35 m.
Hours per assignment.....	8 h. 54 m.	8 h. 36 m.

The table (p. 247) and the graph (p. 248) are an example of how a lake pilot's time is employed. Because the tour de rôle works on the basis of availability for duty and the length and duration of assignments vary greatly, the aggregate workload may change to some extent, both in number of assignments and aggregate time on actual pilotage duty, from one pilot to another with equal availability during the same period. The case studied is the employment of time of the busiest lake pilot in the busiest month of 1964, i.e., pilot F. J. Brady in November 1964.

LAKE ONTARIO CANADIAN PILOT FREDERICK J. BRADY

Distribution of Total Aggregate Time on a 24-hour Basis	November 1964		
	number	hours	minutes
Trips			
Cape Vincent—Port Weller.....	4	56	00
Port Weller—Cape Vincent.....	10	111	18
Cape Vincent—Toronto/Hamilton.....	3	44	18
Toronto—Cape Vincent.....	3	43	24
Between Port Weller/Toronto/Hamilton.....	5	18	36
Kingston—Kingston.....	1	2	36
Total trips.....	26	276	12
Movages.....	0		00
Cancellations.....	0		00
Detentions* <i>en route</i>	7	28	18
Travelling.....	14		†
Waiting at outports for assignment.....	15	223	30‡
At home (Cape Vincent) between assignments.....	12	192	00‡
Grand Total.....	74	720 hours	

*On board prior to sailing time, if any, included in *Trips*.

†Included in *waiting at outports* and *at home*.

‡Includes *travelling* time between stations and/or outports.

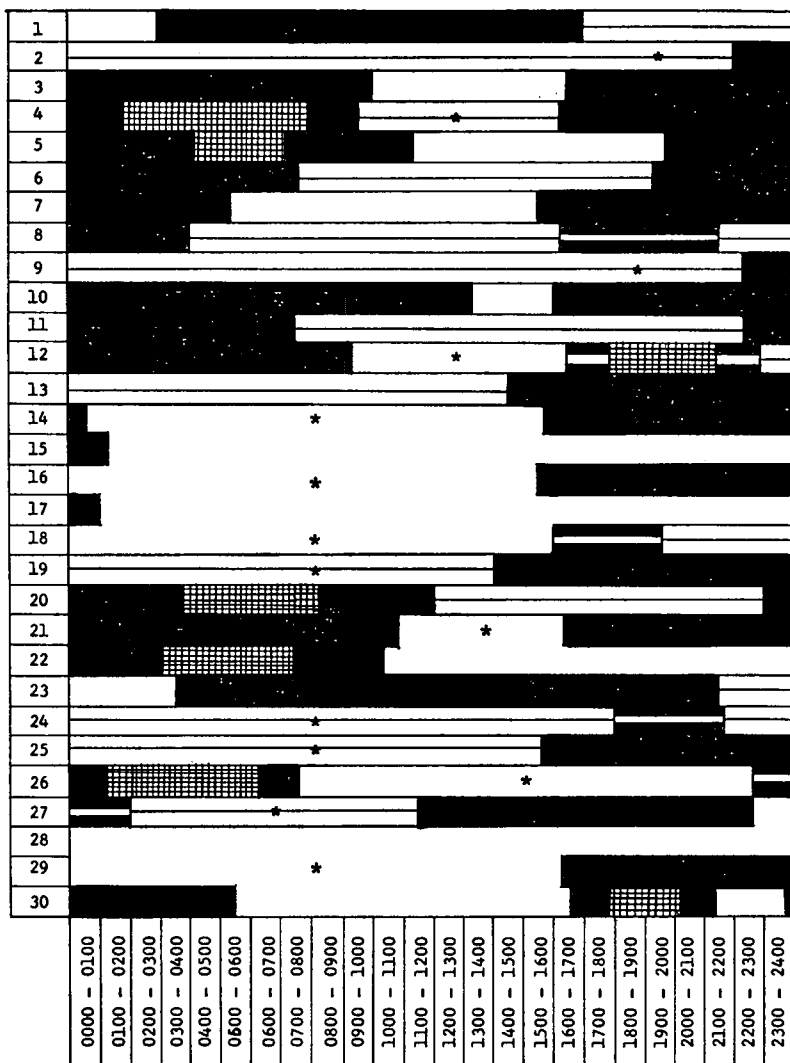
SOURCE: Ex. 1302.

At first sight, the lake pilots' aggregate workload may appear twice that of the District pilots (and frequently with little rest between assignments)—the explanation lies in the different nature of pilotage duties in undesignated waters. The graph shows, *inter alia*:








- (i) Out of the 26 assignments pilot Brady had during his busiest month in 1964, seven lasted much longer than 15 hours (including detention *en route*), the longest being 22 hours; six assignments took less than seven hours and the bulk, 13, took between nine hours and 15 hours.
- (ii) There was only one calendar day when he was not engaged in pilotage but, despite the large number of assignments he performed, on six occasions the time between assignments (including travelling time) exceeded 24 hours, the longest being 42 hours. On seven occasions, the time between assignments (including travelling time) was less than 10 hours, the shortest being 2 hours 48 minutes at Cape Vincent between two full transit trips (Nov. 10).

The table on p. 249 is a breakdown by number of assignments and aggregate hours of duty of the workload per pilot. It shows the result of a tour de rôle based on strict availability for duty. For the year 1969, all these pilots had equal availability of 248 days, except the sixth pilot who was absent one day and the 13th pilot who was absent 41 days.

NOVEMBER 1964 WORKLOAD OF LAKE ONTARIO PILOT FREDERICK J. BRADY



LEGEND:

-  Piloting between Cape Vincent and Lake Ontario
-  Piloting between Lake Ontario Ports
-  Detention En Route (location on graph approximate)
-  Including travel between stations and/or outposts.
-  Waiting between Assignments
-  At Home
-  Away from Home

Pilots in Order of No. of Assignments	No. of Assignments	Hours Sailing	Hours Detention and Delay	Total Hours on Board
1st.....	201	1,761.4	133.1	1,894.5
2nd.....	184	1,817.8	182.1	1,999.9
3rd.....	181	1,652.2	120.9	1,773.1
4th.....	180	1,664.9	142.1	1,807.0
5th.....	178	1,631.1	98.6	1,729.7
6th.....	175	1,628.8	131.5	1,760.3
7th.....	175	1,392.9	176.9	1,569.8
8th.....	173	1,631.3	136.2	1,767.5
9th.....	173	1,458.7	174.6	1,633.3
10th.....	171	1,579.2	145.8	1,725.0
11th.....	169	1,404.5	166.9	1,571.4
12th.....	167	1,648.9	87.5	1,736.4
13th.....	138	1,297.7	64.9	1,362.6

SOURCE: Ex. 1215.

While at first sight it would appear from this table that a tour de rôle based on availability for duty does not ensure equitable distribution of the workload, this is not so; even if it were, this is not the criterion in the pilotage service. Such statistics are incomplete regarding the actual time on duty of a pilot in that travelling time between port and pilot station and waiting for ship's arrival also form part of pilotage duty. The criterion for sharing pilotage work and, hence, the basis for pilot's remuneration is availability for duty.

(3) DISTRICT No. 2

From the operational point of view, Great Lakes District No. 2 has been beset by problems (still partly unsolved) which arose largely because the basic principles of pilotage organization (pp. 165 and ff.) were not followed. The only practical solution is a complete reorganization to which the 1969 changes are a major contribution. The main weakness has been the tremendous waste of valuable time as the pilots travel long distances to and from assignments and lose many hours waiting at outports and idling on the open Lakes.

(a) *Undesignated Waters Pilotage Problem*

In District No. 2 this waste of time has been reduced to a great extent by gradually allocating assignments in undesignated waters to lake pilots—now the District pilots handle only a few Lake Ontario assignments and have been completely relieved of this task in Lakes Huron and Michigan since 1969 (Table, p. 264). At the time of the 1969 reorganization, the Lake Huron/Lake Michigan pilots, who had previously been shown as

attached to District No. 2, were transferred to District No. 3, probably to emphasize this basic operational change for similar purposes (Tables pp. 181, 182 and 183). However, the problem remains in its entirety on Lake Erie because the absence of a convenient boarding station at its western end has precluded the appointment of lake pilots. The Detroit change-point established in 1969 is not suitable for this purpose.

(b) *Port Weller Boarding Area Problem*

Since uninterrupted pilotage service is required, the obvious change-point for the pilots at the eastern limit of the District is lock 1 or its eastern approach wall, in which case it would be theoretically possible to dispense with pilot vessel service there. This proved impracticable because there was an inordinate waste of time resulting from the frequent traffic congestion which obliged vessels to wait in the anchorage area off Port Weller, often for many hours, so that embarked pilots had to be authorized to disembark and fresh pilots provided when ships could proceed into the canal. Another governing factor is that vessels subject to compulsory pilotage which take advantage of the "B" certificate release in undesignated waters arrive without a pilot on board and generally require one to enter the lock. The lack of legal competency of pilots (other than District No. 2 pilots) to perform lake assignments is not a serious objection because District No. 1 pilots already possess the necessary *expertise* and Lake Ontario pilots can easily acquire it. Downbound vessels have no difficulty leaving lock 1 and proceeding through the entrance channel to the open waters of Lake Ontario.

Originally, there was some doubt whether Port Weller was in designated waters but this was only a theoretical argument since it is clearly part of the Welland Canal. Any ambiguity has now been removed by the 1968 amendment which located for upbound vessels the downstream limit of the District in Lake Ontario off Port Weller (p. 14).

When the Port Weller/Sarnia pilotage area was first organized, no pilotage service was provided in the open waters of Lake Ontario and, hence, upbound ships arrived at the entrance to the Welland Canal without a pilot and, since no pilot vessel service was available, Masters were required to bring their ship into the lock, or to the approach wall if there was a delay. It is considered this was an unduly risky alternative to a pilot vessel service, although the problem was not so crucial at the time since there was much less traffic and the only ocean-going vessels were small (pp. 53-4). Nevertheless, this practice is undesirable where traffic is likely to be congested and every effort should be made to expedite ships' movements.

When experience proved the necessity for regular pilot vessel service at Port Weller, the Department of Transport made the necessary arrangements through the Supervisor of Pilots with a private contractor, Lakeshore Transportation Company (T.B. Minute 594907 dated April 12, 1962, Ex. 1032).

The service was provided by M.V. *Qu'Appelle* at \$12.50 per one-way trip. The cost of this service is entered as an operating expense of the Port Weller pilotage office (pilots' pool). Pilotage fees are all inclusive and remain the same whether or not a pilot vessel is used.

The procedure was for pilots to change over at the boarding area off Port Weller, unless the pilot in charge of a lake assignment belonged to District 2 or a vessel on an upbound trip had to wait in the anchorage area before proceeding into the canal. District 1 pilots were not allowed to pilot up to or from lock 1 because at that time it was situated, both for upbound and downbound movements, well inside the designated waters of District 2 to which their registration certificate did not extend. The same restriction was applied *a fortiori* to the Lake Ontario pilots when they were appointed.

Bringing vessels from the anchorage area to the wait wall or into the lock proved to be very time consuming. The District 2 pilots assigned for a canal transit had to embark at the boarding area or in the anchorage area and navigate into the lock, generally after securing at the wait wall and moving along it. This process would average four to five hours for a vessel third in turn. To curtail this loss of pilots' time, a port pilot system was developed in 1964, i.e., the District 2 pilots commenced or finished assignments at lock 1 and the port pilots, working 12-hour shifts, attended to all movements between the boarding or anchorage area and the lock. Each inbound ship was brought to the wait wall and left there while the port pilot attended to the movements of other ships until her turn came to move along the wall. For a time, this service was provided by two unregistered pilots, prevailing rate employees of the Department of Transport, with their remuneration forming part of the expenses of operating the Port Weller pilot station. When the experiment proved satisfactory, this port service was made the responsibility of the District registered pilots and they were taken in turn off the tour de rôle for that purpose. While this feature is still provided for in the Working Rules and Despatching Procedures, it was abandoned, no doubt because the problem was no longer as serious as in the early years. Traffic congestion at Port Weller has been substantially reduced as a result of improved Seaway operations. In 1968, the District limit was realistically amended for downbound vessels (p. 14) and District No. 2 pilots can now disembark at lock 1. Another significant factor must have been the difficulty of remunerating U.S. pilots when they provided this service.

In 1963, complaints were received that ships were delayed because a pilot vessel was not available. These delays occurred occasionally because there was only one launch in service. When an upbound ship requested a pilot and the launch was unavailable, the ship would lose her turn to enter

the canal. The Department of Transport conducted a survey which justified the complaints and decided the best solution was to curtail pilot vessel service as much as possible. However, because of the financial implications for the pilot vessel operator, implementation of this decision was deferred until the 1964 season. The result of the survey and the decision taken are contained in a letter dated June 17, 1963, from the Port Weller Supervisor to Lakeshore Transportation (Ex. 1010):

"The Department has surveyed the pilot boat service at Port Weller in view of questions raised by the Shipping Federation of Canada and United States Great Lakes Pilotage Administration.

The conclusion has been reached that considerable time is lost exchanging pilots off Port Weller station and sometimes delays have resulted in ships losing turns into the canal. This is no reflection on the pilot boat service.

It has been decided that Lake pilots will bring ships into the wall at Port Weller and will take ships out from Lock #1 to Lake Ontario, and such ships whose masters are familiar with these waters will bring their ships into Port Weller and take their ships out.

This Procedure may result in a marked drop in your revenue. Bearing this in mind the Department has deferred implementation of this order until the opening of 1964 season in order to allow you to recoup your capital investment represented by boats, etc."

Nevertheless, it was recognized that a pilot vessel service had to be retained for situations listed in a memorandum dated June 12, 1963, from the Port Weller Supervisor to the Superintendent of Pilotage:

"Ships are often delayed at the Port Weller entrance to the canal for various reasons such as canal congestion and weather conditions. It is unreasonable to keep a pilot sitting on a ship at anchor for any period from 6 to 48 hours waiting to disembark in the harbour.

Ships in possession of a B certificate are not all familiar with the area, in some cases a junior officer carries the certificate. Two voyages hardly familiarizes a ship handler with the harbour under varying conditions and it is our opinion many ships would enter this harbour at night without a pilot.

On occasions transfers of pilots are effected on the lake because of arrival of lake pilots from other ports by land. These despatches could not be effected without a boat."

When the Lake Ontario pilots heard of the proposal, they intimated that they would charge the normal berthing fee if they were required to berth ships at lock 1.

The proposal was put into effect with the 1964 season, although by that time the pilot vessel service operator had already remedied the situation with the addition of a second vessel, the *Razalia*. In order to give him the necessary financial incentive to maintain the service for those occasions when it was still required, an increase in the trip fee was granted in the fall of 1964.

However, except for downbound vessels, the previous practice has been resumed and pilots for upbound vessels change over off Port Weller by pilot vessel (Ex. 1541(v)).

(c) *Welland Canal and Lock 7 Change-point*

The transit of the 27.6-mile Welland Canal is exacting and time consuming. Originally, a normal transit took close to 24 hours and, despite numerous improvements in Seaway procedures (p. 91), still averages 12 hours. For this reason, Port Weller was a mandatory change-point on upbound trips, even if the pilot taking the lake assignment belonged to District 2, since it was considered that navigation in the canal and locks required the pilot's constant attention and continued alertness, both of which are reduced if he is tired. To expedite traffic in the 7-mile stretch between Port Weller and Thorold where 7 of the 8 locks are located (pp. 90–91) a change-point was established at lock 7 so as to provide well rested pilots on downbound trips. The Canadian pilots had an additional reason for requesting this relief even for upbound trips: they considered the transit of this sector a reasonable period of duty. Their stand was opposed by the U.S. pilots who, on account of their different method of remuneration, had another motivation (p. 201). The dispute was settled by a compromise: lock 7 became a mandatory change-point for Canadian pilots but optional for U.S. pilots (p. 259). This problem no longer exists because the Welland Canal sector has been served exclusively since 1969 by Canadian pilots who are prevailing rate employees. The pilots change over in the lock.

(d) *Port Colborne Boarding Station*

Pilotage was not instituted at Port Colborne until 1968, probably as a result of the change that year in the definition of the designated waters of District No. 2. Up to then, it was not clear whether Port Colborne as such was in designated waters since the western sector was described merely as "the Welland Canal". In contrast to Port Weller, Port Colborne has substantial activities of its own as well as being the entrance to the Welland Canal. All doubt was resolved by the August 28, 1968, amendment which placed the upstream limit of the designated waters in that sector well off Port Colborne (p. 14). The few requirements for pilot vessel service off Port Colborne were increased only slightly by the small number of vessels coming from or going to a port situated in the undesignated waters of Lake Erie. Previously, they had to embark a pilot only before proceeding into the Welland Canal, or disembark a pilot when proceeding from the Welland Canal into Lake Erie, but now came under the same obligation if Port Colborne was their destination or the origin of their trip. Because Lake Erie lacked both lake pilots and a pilot boarding station at its western end, all other cases caused no problem since a District No. 2 pilot who was equally competent in the eastern and the western sectors of the District had to be carried on board across the Lake. In cases involving a transit of the Welland Canal, the pilots changed over at lock 7 and boarded or disembarked at the berth when a ship sailed from or to Port Colborne. This situation prompted the Port Weller Super-

visor to remark in his 1968 annual report that a pilot vessel service at Port Colborne would prove very expensive if the infrequent demand was to be related to cost.

The service was established September 9, 1968, under a contract with a local private contractor at \$27.50 per pilot trip. It was paid for out of the operating expenses of the Port Weller pilot station.

The need for this service increased substantially as a direct result of the *de facto* division of District No. 2 in 1969 when Port Colborne became the downstream limit of the U.S. pilots, e.g., non-exempt ships engaged in the Sandusky trade are required to take a pilot. The present practice for up-bound trips is that a Welland Canal pilot is in charge as far as Port Colborne where a U.S. pilot boards and conducts the ship to Sandusky (Ex. 1541(x)). This is apparent from the substantial increase in the cost of the service: in 1968, from Sept. 9 to Dec. 7, the total was \$2,702.50 but for the 1969 season, \$41,249.95 (Ex. 1023). However, the Port Colborne boarding station is not used by Welland Canal pilots assigned to ships crossing Lake Erie—they change over at lock 8 (Ex. 1541(w)).

(e) Loss of Pilots' Time in the Western Sector

District No. 2 was organized in the same way as District No. 1 with a pilot station at each end. This system is satisfactory when assignments are almost exclusively to ships in transit but is inadequate when a substantial portion of the demand is for port pilotage, especially if ports are a significant distance from the nearest boarding station. There are a number of very busy ports in the western sector of District 2, all a substantial distance from the only pilot station that existed in that sector prior to 1969, Detroit 50 miles from Port Huron, 110 from Toledo, and 145 from Sandusky. The two busy ports situated in the undesignated waters of Lake Erie and also under the jurisdiction of the pilot station at Port Huron are Cleveland and Ashtabula, respectively 210 and 280 miles distant. Without a pool of readily available pilots in the southern part of the sector, it has been a physical impossibility for the Port Huron administrative authority to provide even reasonably efficient service at these ports and shipping was greatly inconvenienced. Since the pilots had to report to the Port Huron station at the conclusion of assignments in that sector and were despatched from that station to meet requirements in these ports, they lost considerable time travelling back and forth or idling on board vessels whose Masters preferred to detain them during their stay in port rather than risk delay if a pilot was not available at departure.

In his 1964 annual report (Ex. 1023), the Port Weller District Supervisor stated that despite 732 waivers granted that year (vide p. 144) and the employment of two port pilots for Port Weller, the total time lost by ships awaiting pilots in the District had been "stupendous". He added that the value of the Port Weller service was considerably reduced when canal pilots

were in short supply because it was pointless to bring ships to the lock if there were no pilots to proceed up the canal. He added:

"In conclusion it must be mentioned that a great number of ships were delayed at various places awaiting for pilots, but chiefly at Port Weller. Due to the nature and size of this district, a great deal of pilots' time is occupied waiting for berths, waiting to finish handling cargo and considerable time in travel.

Efforts to remove pilots from ships in harbour have been frustrated by agents and shipmasters who do not give proper information to despatching authority especially when pilots are in short supply.

Public transportation is not good as would be expected in the industrial heart of North America, and this also nullifies the value of removing pilots and returning them to station."

In his 1965 annual report, he suggested dividing the District and establishing a pilot station at Detroit in an effort to improve the efficiency of the service without further increasing the number of pilots:

"We wish to offer for your consideration a proposal that the district be made more flexible or manageable by subdividing into different areas, and creating pools of pilots at different places. We have in mind a station at Detroit. All pilots embarking and debarking at this spot. Ships in Toledo and Detroit could be serviced from this pool. At Detroit there would be no difficulty with pilot boats or weather. The cost would be considerably less than in more exposed areas."

In 1966, the loss of pilots' time in the western sector was as crucial as ever and he remarked in his annual report:

"The ports of Toledo and Detroit were particularly congested with many ships having only a few hours cargo work before sailing, as a result, pilots were detained on board these vessels, anticipating early departure; in other cases ships were anchored in the stream off Detroit and some off Toledo, 13 miles out in the lake with pilots aboard. An all out effort was made to remove pilots from these vessels when possible. This met with moderate success.

... It is obvious that the needless detention of pilots aboard ships waiting to handle cargo is the major cause of pilot shortage. The need for positive action is apparent since methods previously tried have met with little real success.

The compulsory removal of pilots at Detroit and Toledo upon arrival at the dock or a safe easy anchorage appears to be the answer."

The U.S. Pilots' Association responsible for operations in the western sector failed to take the necessary measures to assure the ready availability of pilots, at least in the main District ports of Detroit and Toledo, and shipping made repeated, bitter complaints. These spurred the Canadian and United States Great Lakes Pilotage Administrations to intervene. They required the Port Huron administrative authority to establish a mandatory change-point at Detroit and placed Ashtabula and Cleveland under the western sector in order to lessen the distance to a pilot station. Probably because the establishment of the change-point and pilot station at Detroit conflicted with their pecuniary interests, the U.S. Pilots' Association gave the proposal only half hearted support and it was unsuccessful. In his 1968 annual report the Port Weller Supervisor commented:

"The mandatory pilot change at Detroit was never effective and was abandoned after a few days trial. There were several reasons. It was found that the pilotage

staff was too small; there being only thirty-one effective U.S. pilots in the district as opposed to an expected force of forty-five U.S. pilots. A second reason was the failure to establish a Tour de Role at Detroit as would be normally expected. The pilots were all stationed at Port Huron which wasted a lot of time.

The second operational change - the placing of the ports of Ashtabula and Cleveland under the despatching control of Port Huron instead of Port Weller. This change was agreed to by Canadian Authority on the premise that a Tour de Role would be established at Detroit because Detroit is the hub of the western end of the district. The travel time was expected to be three hours to Cleveland or Toledo. The Tour de Role was never established at Detroit and pilots were still ordered back to Port Huron from Cleveland, Toledo, and Detroit. The result was no saving in pilots' travel time and a great increase in pilots' travel expenses, which is a waste of money."

In the circumstances, the U.S. and Canadian Pilotage Administrations were obliged to take action at the organizational level. In 1969, they made a *de facto* division of the District and restricted the pilots' territorial competency. Thus, a pilot boarding station and a pilot station at the southern end of the western sector became operational necessities as noted in (g) hereunder.

(f) *Port Huron Boarding Station*

The Port Huron boarding station, situated some 8½ miles above the head of the St. Clair River where the deep waters of Lake Huron commence, is not difficult to operate. Pilot vessel service is essential. At present, it is provided by a local private entrepreneur as arranged through the pilotage administrative authority.

(g) *Operational Re-organization, 1969*

The 1969 re-organization (p. 166) set up a system of assignment areas. This actually made each sector of designated waters a separate District and divided Lake Erie pilotage assignments between the two Districts on the basis of types of assignment. A boarding area (referred to in the agreement as the Detroit mandatory change-point) had to be established at the western end of Lake Erie. Furthermore, District No. 2 pilots were relieved of all Lake Huron and Lake Michigan assignments and a similar ban was apparently placed on Lake Ontario assignments. Services in Canadian and U.S. assignment areas were made the exclusive jurisdiction of Canadian and U.S. pilots respectively; the only exception was that two Canadian pilots were to be retained in the western sector to provide service for local Canadian ports.

The Canadian assignment areas are:

(i) Welland Canal.

(ii) Lake Erie:

—transit trips both ways between Port Colborne and the Detroit change-point;

—one-way Lake Erie transits from Port Colborne past the Detroit change-point and into the harbour of Detroit, but not the reverse.

(iii) Western sector of District No. 2:

- the exclusive jurisdiction of the two Canadian pilots in the western sector is limited to movages in Canadian ports on the Detroit and St. Clair Rivers and one-way trip assignments from these ports to the Detroit change-point, but not the reverse.

The U.S. assignment areas are:

(i) Western sector of District No. 2:

- exclusive jurisdiction except for movages and one-way trip assignments reserved for the two Canadian pilots.

(ii) Lake Erie:

- all assignments except those allocated to the Welland Canal pilots, i.e., transit trips between Port Colborne and the Detroit change-point and one-way trips from Port Colborne to Detroit.

In other words, District No. 2 was divided into three pilotage zones: the Welland Canal, Lake Erie and the western sector of the District. The Welland Canal pilots, all Canadians, were given exclusive jurisdiction in the canal as well as most of the assignments in the undesignated waters of Lake Erie, but no jurisdiction in the western sector, except for Lake Erie transits to or from the Detroit change-point and to (but not from) Detroit harbour. The U.S. pilots were given exclusive jurisdiction over pilotage assignments within the western sector (except movages in Canadian ports in that sector and downbound trips from those ports to the Detroit change-point) and all other Lake Erie assignments.

The new system has been in operation now for two seasons and is reported "working effectively" (Ex. 1541(w)). The Detroit change-point is located in mid-stream off Detroit and is served by a pilot vessel used primarily to transport mail from Detroit. The cost of service—\$5 per trip—is paid initially by the Port Huron office and the Port Weller office reimburses its share at the end of the season.

(h) *Working Rules and Despatching Procedures*

The latest rules and procedures are dated 1967 (p. 169). Although they have now become almost obsolete, they are still being followed as far as general principles are concerned, until new rules and procedures are drafted for each sector. Individual provisions are applied in the light of the factual situation resulting from re-organization (p. 259).

The first despatching rules were issued March 15, 1962, when the District was temporarily under exclusive Canadian management. District operations were directed from Port Weller and the Sarnia/Port Huron despatching office was considered a satellite of the Port Weller headquarters to which it was required to make daily reports and whose instructions it was required to obey. The rules provided that the pilots were to be assigned

from either pilot station, as far as practical in regular turns, i.e., according to a strict tour de rôle with names being placed at the bottom of the list as soon as assignments were considered completed. Changes of turns were not authorized. A pilot who happened to be in any harbour was expected to handle movages of other vessels there. Except in case of urgency, the pilots were to be given a minimum two-hour advance notice of an assignment. Pilots were assigned to duty as if they were Sailing Masters. Since Port Weller was a mandatory change-point, District No. 2 pilots on a Lake Ontario assignment were not allowed to proceed westward through the canal. The only other mandatory change-point applied to Lake Erie assignments to ports east of Cleveland, in which case the pilot concerned had to embark or disembark at Port Colborne. In all other cases, a pilot had to remain on board from Port Weller to the ship's destination, even in Lake Michigan, unless it was in District No. 3 or Lake Superior, in which case the District No. 2 pilot proceeded as far as Detour. The reverse applied to a downbound trip, e.g., a pilot boarding a ship at Chicago was expected to remain until she reached Port Weller. The exception for the Lake Erie assignments was soon deleted and the Sailing Master procedure then applied to all cases.

Provision was made for deleting from the assignment list one pilot during periods of congestion to bring ships from the anchorage to the tie-up wall below lock 1.

The 1964 rules placed the Port Huron and Port Weller pilotage offices on an equal basis and established a line joining Cleveland and Port Stanley as the division between their zones of jurisdiction. When the pilots completed an assignment, they were to report to the appropriate office and were not authorized to leave except as instructed by the despatcher. The assignment list at each station remained a true tour de rôle and the pilots were placed at the bottom of the list when they became available. They were guaranteed twelve hours' rest between assignments. The Sailing Master concept of despatching was retained and even extended, e.g., a pilot arriving at Port Weller from a Lake Ontario assignment was given the option of remaining on board and transiting the canal unless the ship was required to anchor off Port Weller. However, unless the canal trip was only partial, lock 7 became a mandatory relief point (provided relief pilots were available) but a pilot boarding at lock 7 on a downbound trip was not to be relieved at Port Weller if required for a Lake Ontario assignment. Observing that Lake Huron/Lake Michigan pilots were available and return trips had to be provided for District 3 pilots who had finished an assignment at Port Huron, Port Huron became a mandatory change-point for District 2 pilots (unless otherwise instructed by the despatcher) in which case they were to continue as far as Detour or the destination in Lake Huron or Lake Michigan. However, District 2 pilots downbound at Port Huron were expected to remain on board and continue without relief for the full transit of the District

unless they asked for relief. The provision for local service at Port Weller was retained and the duty period was not to exceed 12 hours.

These rules were superseded by new rules which became effective May 15, 1967 (p. 169). The main changes were as follows:

- (i) Port Weller became a mandatory change-point. District No. 2 pilots on lake assignments had to bring ships into the tie-up wall of lock 1, unless it was necessary to anchor off Port Weller, in which case they were relieved.
- (ii) Lock 7 remained a mandatory change-point for both upbound and downbound vessels, provided a relief was available. However, U.S. pilots on a full transit had the option of going through lock 7 without relief, provided they notified the despatcher upon arrival at lock 8 downbound or on receiving the assignment upbound. Automatic relief at lock 7 was to follow if the option was not claimed at the proper time.
- (iii) On a downbound assignment, pilots boarding at lock 7 were not to be relieved at Port Weller if required for Lake Ontario duty.
- (iv) At Port Huron, the changeover rules remained the same.
- (v) The rest period between assignments was increased to 14 hours, but did not apply to movages effected in the vicinity of the boarding station.
- (vi) The monthly rest period, which was previously available only to Canadian pilots, was extended to all pilots.
- (vii) Pilots who are officers of a U.S. Pilots' Association were authorized to be absent to attend meetings or conduct pilotage business without incurring the 24-hour-minimum-off-the-list penal sanction; they were to be placed at the bottom of the list as soon as they became available.

As stated earlier, the 1967 rules became obsolete with the 1969 *de facto* division of the District into Canadian and U.S. sectors, but new rules have not yet been devised and the former rules are still being applied with the necessary changes being made informally to meet the new conditions.¹

(i) *Pre-season and Post-season Pilotage*

The Canadian pilots in District No. 2 are considered off duty between the closing and opening of the navigation season. The few demands for

¹ New rules regarding the Canadian pilots of District 2 and the Port Weller despatchers have been drawn up with effect at the beginning of the 1971 season. They reflect the 1969 change in District organization and the 1971 amendments to the working conditions of Canadian prevailing rate pilots as provided for in Treasury Board Minute 702129, approved Feb. 4, 1971 (p. 206). They provide for reciprocal despatching service of the pilots of one sector by the administrative authority of the other sector when required, e.g., despatching by the Port Weller station of U.S. pilots from Port Weller on Lake Erie assignments. Lock 7 is now a mandatory change-point except for partial transits.

service just after the closing or before the opening of the navigation season and for icebreakers are handled by Canadian and U.S. pilots who volunteer. They are paid directly the dues they earn. Pre-season and post-season pilotage do not come within the terms and conditions of their employment as Crown prevailing rate employees (Ex. 1541(t)).

(j) *Workload*

The workload of District No. 2 pilots (except for Lake Ontario assignments which they now very seldom perform and Lake Huron/Lake Michigan assignments of which they were completely relieved in 1969) has the same general characteristics as the workload in other Districts but the vast size and peculiarities of District No. 2 make it a special case which is virtually impossible to compare as far as workload statistics are concerned. Such comparisons were frequently made in the past but they resulted in oversimplification and led to conclusions which were not only meaningless but actually misleading. The nature and characteristics of the pilots' workload vary basically in each of the three areas of the District.

- (i) The *Welland Canal* is unique in Canada. Pilotage there consists of 27.6 miles of artificial channel, including seven locks and one guard lock. Local knowledge is of little significance since there are few problems not found in similar canals elsewhere and the prime requirement is shiphandling of the highest standard, especially in the case of ocean-going vessels. Since more than half the 12 hours' average transit time is spent in the first nine miles where all the true locks are situated (lock 8 is a guard lock), this section is considered a full assignment for workload purposes. However, although the exacting pilotage duties involved in making a safe and speedy transit require a pilot's full attention, he has reasonable periods of rest between movements at the wait walls or in the locks. The rest of the transit is straight canal pilotage with no unusual difficulties except those created by the numerous bridges and the strong current below bridge 20 at Port Colborne (p. 91). Travel by land is also no problem in this sector because distances are short and connections adequate: the average time between Port Weller and Port Colborne is one hour.
- (ii) *Lake Erie* (including its undesignated waters) requires mostly uncomplicated open water navigation with safety enhanced by the practice of following separate upbound and downbound shipping lanes. Except in adverse conditions, a pilot has considerable time to rest *en route* after he has given his orders and turned over to the officer of the watch. His personal attention is required only in Pelee Passage, entering or leaving Port Colborne or other Lake Erie ports and in the confined channels leading to or from Toledo or Detroit

at the end or beginning of a translake trip. The nature of the pilots' workload in this sector of District No. 2, including most of its designated waters, can not be compared with District No. 1, and only partly with Lake Ontario, because there is a substantial amount of pilotage in the confined waters at the western end of Lake Erie.

- (iii) In the *western sector* of the District, which overlaps the Lake Erie sector described earlier because there is no boarding station at the western end of the Lake, there is river and port pilotage only. A pilot must pay constant attention while under way and has no opportunity for worthwhile rest. Although the physical features of the channels and ports do not present problems as severe as those in the Montreal District, the intense traffic creates unusual navigational hazards.

As in District No. 1 (vide p. 227), it has been equally difficult to obtain reliable statistics. Assignments could not be segregated under designated and undesignated waters but, wherever possible, a distinction has been made between Canadian and U.S. pilots. This is important to show the effect on the workload up to 1968 (hence, on pilotage fees earned) of each group of pilots resulting from the difference in the working rules for holidays, the mandatory change-point for Canadian pilots at lock 7 and the different motivation of the two groups resulting from the basic disparity between their methods of remuneration and, in 1969, the effect of the *de facto* division of the District.

The table on p. 262 represents the aggregate workload of District No. 2 pilots (Lake Huron/Lake Michigan pilots excluded).

This table prompts the following remarks, *inter alia*:

- These statistics take into account movages and cancellations. Their aggregate number is small, mainly because a moveage in any District No. 2 port is considered a partial trip for tariff purposes (p. 288). Hence, the moveage statistics show only those in ports in undesignated waters, e.g., in 1969, the trip charge statistics contained such items as 155 trips Detroit/Detroit and 189 trips Toledo/Toledo; the 1968 report shows that the District pilots handled 41 movages aggregating 53.9 hrs. and that there were 12 cancellations altogether.
- The increase in the number of assignments from 1963 on is mainly due to the mandatory change-point at lock 7 for Canadian pilots. On the average, the U.S. pilots have fewer assignments but spend a greater number of hours on them (vide also year 1965 in Table, p. 265).
- The effects of the reorganization of the District in 1969 are clearly apparent. The number of assignments has greatly increased, despite the fact that the pilotage demand decreased substantially after 1966, and remains approximately the same as in 1968 (pp. 99–102). This

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WORKLOAD OF DISTRICT NO. 2 PILOTS

Year	District No. 2 Pilots*	Number of Assign- ments†	Hours on Assignment‡			Total
			Designated Waters	Undesignated Waters	Detentions and Delays	
1961	Total.....	3,537§	n/av.	n/av.	n/av.	n/av.
1962	Total.....	3,517	n/av.	n/av.	n/av.	190,858.9
1963	Canadian.....	2,763	36,379.4	21,841.3	35,486.6	93,707.3
	U.S.....	1,754	27,748.6	21,750.0	33,481.9	82,970.6
	Total.....	4,517	64,128.1	43,591.3	68,968.5	176,677.9
1964	Canadian.....	3,232	38,279.6	19,803.4	32,122.2	90,205.2
	U.S.....	2,485	33,850.4	25,622.7	39,712.9	99,186.0
	Total.....	5,717	72,130.0	45,426.1	71,835.1	189,391.2
	Port Weller.....	641	974.5	nil	19.9	994.4
	Total.....	6,358	73,104.5	45,426.1	71,855.0	190,385.6
1965	Canadian.....	3,862	45,617.1	24,793.5	39,410.6	109,821.2
	U.S.....	2,754	36,254.3	33,293.9	46,589.4	116,137.6
	Total.....	6,616	81,871.4	58,087.4	86,000.0	225,958.8
1966	Canadian.....	3,524	37,642.5	20,282.2	34,098.7	92,023.4
	U.S.....	2,261	31,471.0	22,155.7	36,594.8	90,221.5
	Total.....	5,785	69,113.5	42,437.9	70,693.5	182,244.9
1967	Canadian.....	3,143	30,664.4	17,650.0	27,474.1	75,788.5
	U.S.....	2,279	27,233.6	23,893.3	31,126.3	82,253.2
	Total.....	5,422	57,898.0	41,543.3	58,600.4	158,041.7
1968	Canadian.....	3,523	34,064.0	18,701.7	29,060.2	81,825.9
	U.S.....	2,134	22,819.5	16,028.9	27,542.6	66,391.0
	Total.....	5,657	56,883.5	34,730.6	56,602.8	148,216.9
1969	Canadian.....	4,604	30,447.4	12,579.5	3,156.0	46,182.9
	U.S.....	3,072	18,732.3	14,503.3	32,447.1	65,682.7
	Total.....	7,676	49,179.7	27,082.8	35,603.1	111,856.6
1970	Canadian.....	4,409	31,501.6	12,122.2	3,507.0	47,130.8
	U.S.....	2,830	18,636.1	12,121.1	21,816.4	52,573.6
	Total.....	7,239	50,137.7	24,243.3	25,323.4	99,704.4

*Not including Lake Huron/Lake Michigan pilots.

†Including movages and cancellations.

‡Including movages (cancellations were shown by number only).

§The figure of 3,728 assignments contained in Ex. 1542 erroneously includes 191 District No. 1 Lake Ontario assignments from Port Weller.

SOURCES: Exs. 1215, 1542 (1961-1962 number of assignments) and 1298 (1962 total hours on assignment).

is due to the establishment of a mandatory change-point at Port Colborne for U.S. pilots and at Detroit for Canadian pilots. Significantly, the aggregate number of trip charges has remained the same (vide Table, p. 264). The hours of detention of the Canadian pilots (except for the two allocated to the Canadian ports in the western sector) have been drastically reduced because these services are now limited to the Welland Canal sector and full transits of Lake Erie. This, however, still remains a problem for the U.S. pilots who take assignments in Lake Erie ports and U.S. ports in the western sector.

- The influence of lake pilots taking over lake assignments (other than Lake Erie) is apparent in the decrease in undesigned hours on assignment and in detention from 1966 on.

The detailed statistics available for 1967, 1968 and 1969 permit the preparation of the table on p. 264 representing the distribution of District No. 2 pilots' workload (lake pilots excluded), both from the point of view of number of trip charges and hours on duty. Generally, a trip assignment coincides with a trip charge (except when two pilots are jointly despatched) but, because of the unusual nature of District 2, a trip assignment in most cases counts for a number of trip charges, e.g., prior to 1969, a trip assignment from lock 7 to Port Huron counted for three trip charges: one designated charge for the transit from lock 7 to Port Colborne, one undesigned charge from Port Colborne to Southeast Shoal and one designated charge from there to Port Huron. This is the explanation of the larger aggregate number.

This table prompts the following considerations:

- Prior to 1969, assignments were given to all District No. 2 pilots, irrespective of their nationality, on the basis of a strict tour de rôle; the sector to which a pilot was assigned at a given moment depended completely upon the nature of the pilotage demand at the time and his place on the list at that station. This is why, prior to 1969, Canadian and U.S. pilots alike were called upon to render pilotage services in all five sectors. The difference in the number of assignments of the two groups is accounted for mainly by their difference in number (p. 181) and to a much lesser extent by the fact that some U.S. pilots may have elected not to be relieved at lock 7.
- However, the picture is quite different in 1969. It is apparent that there was a slight period of adjustment but the effect of the reorganization is obvious: District pilots are relieved of lake duties and Welland Canal assignments are no longer shared between Canadian and U.S. pilots. The apparent sharing in the western sector is explained by the fact that the Lake Erie transits which were

DISTRICT NO. 2 PILOTS*—DISTRIBUTION OF WORKLOAD

Sector of Assignment	District No. 2 Pilots	1967			1968			1969		
		Number of Trip Charges	Hours on Assignment		Number of Trip Charges	Hours on Assignment		Number of Trip Charges	Hours on Assignment	
			Trips	Detentions and Delays		Trips	Detentions and Delays		Trips	Detentions and Delays
Lake Ontario.....	Canadian.....	13	90.5	9.5	16	75.1	10.0	24	106.5	4.0
	U.S.....	43	353.4	60.8	11	18.3	nil	nil	nil	nil
	Total.....	56	443.9	70.3	27	93.4	10.0	24	106.5	4.0
Welland Canal.....	Canadian.....	2,774	16,996.5	535.0	3,058	19,465.1	870.8	4,477	24,740.5	850.9
	U.S.....	1,669	12,750.7	615.6	1,598	10,770.9	486.7	26	79.2	93.7
	Total.....	4,443	29,747.2	1,150.6	4,656	30,236.0	1,357.5	4,503	24,819.7	944.6
Lake Erie..... (undesignated waters)	Canadian.....	1,578	15,003.4	8,351.3	1,682	16,928.6	9,658.1	1,064	12,473.0	588.4
	U.S.....	1,612	16,000.4	7,841.9	1,352	13,620.5	9,075.2	1,649	14,477.0	173.1
	Total.....	3,190	31,003.8	16,193.2	3,034	30,549.1	18,733.3	2,713	26,950.0	761.5
Western Sector.....	Canadian.....	2,313	13,666.0	17,550.6	2,406	14,598.9	18,006.1	1,212	5,706.9	1,539.6
	U.S.....	2,581	14,482.9	19,527.9	2,159	12,048.6	17,237.1	3,798	18,653.1	19,435.9
	Total.....	4,894	28,148.9	37,078.5	4,565	26,647.5	35,243.2	5,010	24,360.0	20,975.5
Lakes Huron/ Michigan	Canadian.....	95	2,546.4	1,027.7	57	1,679.9	515.2	nil	nil	nil
	U.S.....	304	7,453.9	3,080.1	91	2,413.4	795.9	nil	nil	nil
	Total.....	399	10,000.3	4,107.8	148	4,093.3	1,311.1	nil	nil	nil
Grand Total.....		12,982	99,344.1	58,600.4	12,430	91,619.3	56,655.1	12,250	76,236.2	22,685.6

*Not including Lake Huron/Lake Michigan pilots.

SOURCE: Ex. 1215.

made the exclusive jurisdiction of the Welland Canal pilots include a designated trip charge in the western sector, i.e., for the part of the transit between Southeast Shoal and the Detroit change-point (and the port of Detroit in the case of an upbound trip), and to a much smaller extent by the work performed by the two Canadian pilots allocated to the Canadian ports in the western sector. Of the 26 assignments by U.S. pilots in the Welland Canal sector, 17 took place in Port Colborne since it was within the jurisdiction of the U.S. pilots for their Lake Erie assignments.

—Detentions and delays occur mainly in the western sector ports, as is clearly shown by the 1969 statistics. Substantial detentions and delays are still met but only in the western sector and during assignments carried out by U.S. pilots.

The yearly increases or decreases in the aggregate workload do not necessarily mean a similar fluctuation in the individual pilot's workload because the number of pilots was increased from time to time to meet increased demand (p. 181) and, when demand declined, vacancies caused by normal attrition were left unfilled. Instead of the "effective pilots" base, the average statistics were compiled by the same method as used for District No. 1 pilots (p. 231), i.e., by averaging the workload of the 80 per cent of the pilots who were the busiest. 1965 was chosen because it was the year when the aggregate workload was heaviest, 1968 to show the actual workload just before reorganization and 1969 to show the effect of reorganization on individual pilots.

AVERAGE WORKLOAD OF THE 80% OF THE PILOTS WHO WERE BUSIEST

Year	Number of Days in Navigation Season*	Average Number of Assignments per Pilot		Average Hours on Assignment					
		per Season	per Day	per Year				per Day	per Assignment
				desig-nated waters	undesig-nated waters	detentions and delays	total		
1965	Can. 245	93.6	0.4	1,102.9	588.7	952.9	2,644.5	10.8	28.3
	U.S. 240	75.5	0.3	1,015.3	903.7	1,289.9	3,208.9	13.4	42.5
	Total	84.9	0.3	1,061.1	739.2	1,113.8	2,914.1	12.0	34.3
1968	Can. 242	79.1	0.3	774.5	441.2	684.8	1,900.5	7.9	24.0
	U.S. 242	71.0	0.3	767.3	544.3	933.3	2,245.0	9.3	31.6
	Total	75.8	0.3	771.6	483.4	786.7	2,041.7	8.4	26.9
1969	Can. 245	109.6	0.4	727.5	304.2	76.5	1,108.2	4.5	10.1
	U.S. 245	119.5	0.5	554.0	509.8	1,104.5	2,168.3	8.9	18.1
	Total	113.8	0.5	654.8	390.4	507.6	1,552.8	6.3	13.6

*Since the number of days in the 1965 navigation season differed between Canadian and U.S. pilots, the total was pro-rated at 242.6 for the "per day" figures.

SOURCES: Exs. 1215 and 1542.

This table prompts the following remarks:

- The effect of withdrawing District pilots from Lake Ontario and Lakes Huron and Michigan assignments becomes apparent when the 1965 and 1969 figures are compared: the aggregate number of assignments per season per pilot increased by 34.0 per cent but the aggregate number of hours on assignment per year decreased by 46.7 per cent.
- The combined effect of the non-compulsory changeover at lock 7 for U.S. pilots and their incentive to work longer hours is apparent from the 1965 statistics: they averaged fewer assignments but more aggregate hours on duty than the Canadian pilots.
- The effect of the 1969 reorganization is also obvious. The mandatory change-points at Port Colborne and in the stream off Detroit led to a larger number of shorter assignments. The allocation to Canadian pilots of the Welland Canal sector and Lake Erie transits resulted in the almost complete disappearance of their former detentions and delays. On the other hand, the U.S. pilots, who now have to meet practically all pilotage needs in western sector intermediate ports and Lake Erie ports, are detained and delayed more frequently.

Contrasting with District No. 1, a large number of assignments begin or end in District or Lake Erie ports. Since the available statistics (Ex. 1215) are based on trip charges, it is impossible to ascertain exactly the percentage of full transits between Port Weller and Port Huron but a fair picture appears when the statistics for each sector are compared. For example, in 1969:

- in the Welland Canal sector, 96 per cent of the trip charges are for trips between Port Weller and lock 7, and between lock 7 and Port Colborne;
- in Lake Erie undesignated waters, 57 per cent of the trip charges are for full transits between Port Colborne and Southeast Shoal, and the busiest port is Cleveland which accounts for 29 per cent of the partial trips in Lake Erie;
- in the western sector, 63 per cent of the trip charges are for trips between Southeast Shoal and Detroit, and between Detroit and Port Huron; the busiest ports are Detroit and Toledo but, because the statistics make no distinction between the Detroit change-point and the port of Detroit, it is not possible to ascertain the number of cases where Detroit was involved as a port.

The following table lists the assignments most often performed in 1969.

From—To	No of Trip Charges	Average Duration in Hours Excluding Detentions
Port Weller—Lock 7.....	2,157	6.1
Lock 7—Port Colborne.....	2,169	5.1
Port Colborne—Southeast Shoal.....	1,534	11.5
Port Colborne—Cleveland.....	315	12.5
Port Colborne—Buffalo.....	73	2.9
Southeast Shoal—Buffalo.....	45	15.2
Southeast Shoal—Cleveland.....	481	3.5
Cleveland—Buffalo.....	13	12.9
Southeast Shoal—Detroit.....	1,593	4.8
Southeast Shoal—Port Huron.....	46	10.0
Port Huron—Detroit.....	1,555	6.1
Southeast Shoal—Toledo.....	456	4.6
Port Huron—Toledo.....	29	9.9
Detroit—Toledo.....	285	4.7

These statistics give only a partial statement of the actual workload because they fail to take into account time taken by pilots to proceed to and from assignments or between stations when transferred. Except for distance, travelling between stations corresponds approximately to the situation in other Districts but travelling time to and from assignments is a special factor which has no counterpart anywhere on the Great Lakes (except in undesignated waters) or elsewhere in Canada. The cause is the number of in-District and Lake Erie ports, especially in the western sector, which must be serviced from distant pilot stations (p. 166). Unfortunately, this significant addition to the workload is totally ignored in the available statistics. The *de facto* division of the District in 1969 practically eliminated this problem for the Welland Canal pilots and the establishment of a pilot station at Detroit reduced travelling time as well as detentions and delays.

(4) LAKE HURON/LAKE MICHIGAN SECTOR

(a) *Operational Procedures*

The development of operational procedures in the Lake Huron/Lake Michigan sector followed the same pattern as on Lake Ontario but at a later

date and not as yet to the same extent. A group of lake pilots for this area was first unofficially formed in 1964 as trainees for District No. 2 (this accounts for the occasional trip assignments some of these lake pilots were still performing in that District as late as 1967). District 2 pilots were gradually replaced for Lake Huron and Lake Michigan assignments and have been completely relieved of this function since 1969. The same is not true, however, of District No. 3 pilots who continue to provide services in that sector under the Joint Working Rules (p. 172); indeed, their participation increased substantially in 1969; despite the fact that the Working Rules give the lake pilots precedence over District pilots, which merely indicates that the number of the former is insufficient to meet the demand. If pilotage in the open waters of the Lakes is to continue, this situation should be corrected so that District pilots are assigned only to the designated waters for which they are specially trained.

As on Lake Ontario, pilotage operations in the Lake Huron/Lake Michigan sector are the joint responsibility of the administrative authorities responsible for the nearest District boarding stations. They have devised Joint Working Rules to coordinate their operations—the latest version is dated October 25, 1963 (p. 171). To reduce detention and extensive travelling as much as possible at the important Lake Michigan ports, the two administrative authorities established jointly a satellite pilotage station at Chicago.

The Interpool Working Rules contain very few provisions. They have the same operational features as those adopted for Lake Ontario. Lake assignments are normally to be performed by lake pilots and District pilots are assigned only when no other pilots are available at their District boarding station for either a lake or a return assignment. A District pilot is to be returned to his station if there is no assignment expected for him within the next 12 hours at the station where he reported at the end of a lake assignment. In conformity with the nature of open water pilotage, there is no automatic rest period between assignments but, if a pilot feels tired, he will be granted 12 hours' rest upon request when he arrives. A separate list of lake pilots is kept by each of the three stations and they are assigned in accordance with a strict tour de rôle.

The comments (pp. 241–2) on the basic differences between pilotage duties in designated and undesignated waters apply here and the situation regarding pre-season and post-season pilotage is the same as in Districts 1 and 2 (pp. 224–5 and 241).

(b) Workload

The following table shows the respective share of the Lake Huron/Lake Michigan pilots' workload. They have not been further segregated by nationality—this information would be meaningless in the local context since the

despatching rules contain no provisions of exception on this basis. The table is based on statistics covering trip and detention charges because the assignment statistics do not segregate lake assignments in this sector from other lake assignments performed elsewhere by Districts 2 and 3 pilots.

DISTRIBUTION OF LAKE HURON/LAKE MICHIGAN
WORKLOAD ASSIGNMENTS*

Year	Pilots on Assignment	Number of Trip Charges	Hours on Assignment		
			Pilotage	Detention	Total Hours
1967	District No. 2.....	399	10,086.5	4,107.8	14,194.3
	Lake Huron/Lake Michigan..	771	16,984.2	7,496.7	24,480.9
	District No. 3.....	577	12,063.3	n/av.	n/av.
	Total.....	1,747	39,134.0	n/av.	n/av.
1968	District No. 2.....	148	4,116.7	1,311.1	5,427.8
	Lake Huron/Lake Michigan..	1,014	21,907.7	4,750.4	26,658.1
	District No. 3.....	597	13,401.1	2,890.1	16,291.2
	Total.....	1,759	39,425.5	8,951.6	48,377.1
1969	District No. 2.....	nil	nil	nil	nil
	Lake Huron/Lake Michigan..	784	23,110.7	3,550.9	26,661.6
	District No. 3.....	795	17,347.5	3,211.8	20,559.3
	Total.....	1,579	40,458.2	6,762.7	47,220.9

*On the basis of trip and detention charges.
SOURCE: EX. 1215.

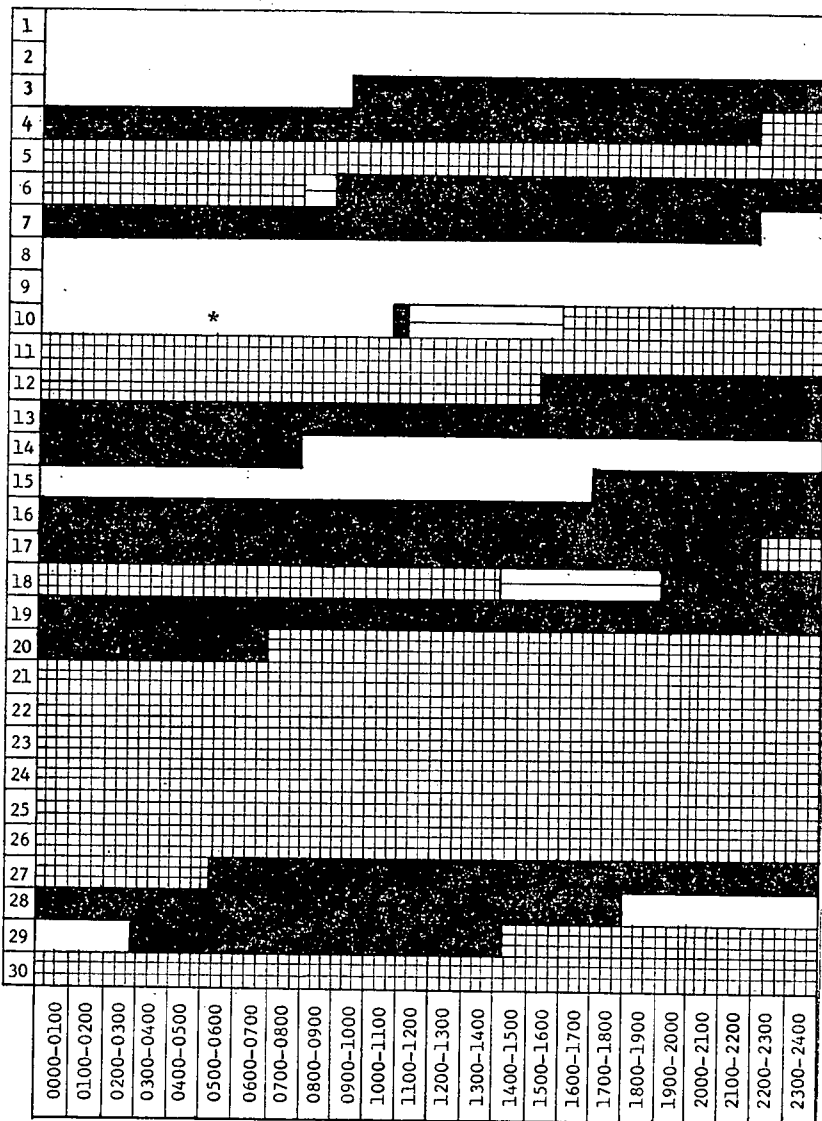
The number of assignments per lake pilot has increased substantially but the aggregate workload has remained practically the same. This is mostly due to withdrawing from lake duties the District No. 2 pilots who were given precedence for return trips and who could not be given any assignment from an outstation or outport other than a return assignment to the District pilot station. Hence, the lake pilots were left with assignments to other outports where detention and delays occurred. The occasional trip by lake pilots into District 2 as pilots-in-training has now ceased. Their daily average workload appears quite heavy compared with District pilots and the average duration of assignments very extensive; in fact, these figures are not comparable because of the basic difference in the nature of the duties involved (p. 260).

The graph on p. 271, which shows the workload of the busiest pilot, Herman S. Burch, during September 1964, the least busy month, is a typical example of the employment of the time of the Lake Huron/Lake Michigan pilots. His aggregate time on duty—549.4 hours—consisted of 252.3 hrs. on board in undesignated waters and 297.1 hrs. detention. The statistical information furnished (Ex. 1303) does not give the complete details of each assignment. A round trip from the despatching station to an outport and return is counted as one trip assignment and the time spent at an outport by a pilot at a ship's request is recorded as detention and charged as such. The available data do not identify outports and show only the aggregate time on board on pilotage duties. Therefore, for this graph, time on pilotage duties has been arbitrarily divided into one-half for outgoing trips and one-half for return trips.

The details and nature of the duty time of pilot Burch in September 1964 are:

- At the beginning of the month, counting from 0001/September 1, he waited for an assignment at Port Huron two days and 9.4 hours.
- On September 3, a trip from Port Huron to Chicago took 36.6 hours and he was detained with the ship (presumably at Chicago) 34 hours.
- On September 6, he waited one hour at Chicago before being given a fresh assignment. The return trip to Port Huron took 37 hours.
- He then waited at Port Huron two days and 10 hours before being finally sent by land or air to Chicago for a moveage.
- After a few hours at Chicago, he was given a return assignment to Port Huron—this took 88 hours: 40.7 pilotage duties and 47.3 detention.
- After 38 hours at Port Huron, he was given an assignment to Detour—this took 69.1 hours: 53.1 pilotage duties and 16 detention.
- After waiting five hours at Detour, he was given an extended trip which eventually returned him to Port Huron (no doubt involving an outport where he was extensively detained); the assignment lasted approximately ten days: aggregate 72.7 hours pilotage duties and detention six days and 22.2 hours.
- At Port Huron, he waited 8.9 hours for a trip to Detour—this was not terminated at midnight September 30 and had by then lasted 45.1 hours: 11.5 pilotage duties and 33.6 detention.

SEPTEMBER 1964 WORKLOAD OF LAKE HURON/LAKE
MICHIGAN U.S. PILOT HERMAN S. BURCH



LEGEND

Waiting between Assignments:

Piloting

☐

Port Huron/Sarnia*

Other*

Detention

6

Including travel time

Study of Pilotage in Great Lakes System

The following table lists the lake assignments most often performed in 1969.

From—To	No. of Trip Charges	Average Duration in Hours Excluding Detentions
Port Huron—Chicago.....	492	39
Port Huron—Milwaukee.....	210	33
Port Huron—Detour.....	221	13.7
Port Huron—Bay City.....	61	12.2
Port Huron—Green Bay.....	30	29
Detour—Chicago.....	56	25
Detour—Milwaukee.....	33	19.2
Detour—Green Bay.....	14	16.2
Chicago—Bay City.....	20	39.8
Chicago—Green Bay.....	19	23.1
Chicago—Milwaukee.....	205	8.2

The next table shows the average workload of lake pilots calculated in the same way as for District No. 1 pilots (vide p. 231) for the same years.

AVERAGE WORKLOAD OF THE 80% OF THE PILOTS WHO WERE BUSIEST

Year	Number of Days in Navigation Season*	Average Number of Assignments per Pilot		Average Hours on Assignment					
		per Season	per Day	per Year				per Day	per Assign- ment
				desig- nated waters	undesig- nated waters	detentions and delays	total		
1965	242.6	59.1	0.2	78.7	1,487.9	976.5	2,543.1	10.5	43.0
1968	242	94.5	0.4	1.4	1,753.3	393.1	2,147.8	8.9	22.7
1969	241	84.0	0.3	nil	2,270.0	371.7	2,641.7	11.0	31.4

SOURCES: EXS. 1215 and 1542*.

*Since the number of days in the navigation season for 1965 differed between Canadian and U.S. pilots, the figure was pro-rated.

Here again, the foregoing workload statistics are quite misleading in that they do not take into account either the considerable travelling time involved for District pilots when obliged to return from an outstation or an outport to their District station, and for pilots of all categories when they have to proceed between an outport and a pilot station to join a ship or after the completion of an assignment, or the travelling time involved when transferred from one station to another.

(5) DISTRICT NO. 3 AND LAKE SUPERIOR

Operations in District No. 3 are still conducted in accordance with the original organizational concept, i.e., the pilots have exclusive jurisdiction over a sector of designated waters plus added jurisdiction over adjacent undesignated waters which they share with the pilots of any contiguous District. Under these arrangements, District 3 pilots have exclusive jurisdiction over both the designated waters extending from Detour to Gros Cap as well as Lake Superior and its ports since there is no other District contiguous to Lake Superior. According to the same original concept, they also participate in pilotage on Lakes Huron and Michigan, formerly with District 2 pilots, then with Lake Huron/Lake Michigan pilots after their appointment, and exclusively with the latter since 1969. Surprisingly, despite the fact that Lake Huron/Lake Michigan pilots have precedence over District 3 pilots for assignments on these Lakes, both groups share the workload almost equally because of the inadequate number of lake pilots.

District 3 pilots are Sailing Masters rather than pilots in the Canadian meaning of the term. They have not experienced the same operational evolution that took place in the other Districts for a number of significant reasons:

- District transits are relatively short because the distance from Point Iroquois light to Point Detour light is only 57 miles (p. 85);
- there are no serious navigational problems;
- congestion is unlikely since only one lockage is involved and there are four parallel U.S. locks and one smaller Canadian lock to accommodate vessels;
- the comparatively light demand for pilotage which permits the District pilots, despite their small number, to attend to their other extended undesignated waters pilotage duties without any adverse effect on their availability for District duties.

In these exceptional conditions no serious problem has developed and the original organizational concept was retained.

Boarding areas have been established at each end of the District: in Lake Huron, off Detour Reef light at the entrance to Detour Passage, and at the lower end of Lake Superior, between Gros Cap Reefs light and buoy 45 just inside the imaginary line running from Point Iroquois light to Jackson Island. Pilot vessel service at each station is supplied by independent contractors under arrangements made by the U.S. Pilots' Association responsible for the pool (p. 173).

The two main ports in Lake Superior are Duluth-Superior and Thunder Bay. There are no specific boarding areas established and pilots embark and disembark at berths, or off the harbour in open water near the fairway buoy, or in the anchorage area. In both harbours, pilot vessel service is available from local operators. Until the 1970 tariff amendment, the cost of pilot vessel service in undesignated waters formed part of the pilots' reasonable travelling expenses which vessels were called upon to pay in addition to pilotage fees. Since 1970, pilotage rates have been all inclusive.

(a) *Despatching Operations*

Because that part of the Great Lakes system lacks a Marine Information Service network, pilotage operations are planned on the basis of the ETA's which ships are required to give plus other information transmitted by pilots and exchanged between pilotage offices.

The provision of services in District 3 and on Lake Superior is governed by the "Pool Working Rules and Dispatching Procedures Great Lakes Pilotage District No. 3" as amended March 1, 1965 (Ex. 1090(b)). Their main operational features are summed up on pp. 174-5.

On account of the distance involved, to save travelling time and cost and to assure the local availability of pilots the combined area of District No. 3 and Lake Superior is dealt with for operational purposes as if it consisted of three District-like areas—the St. Marys River, the port of Duluth-Superior, and the port of Thunder Bay—separated from one another by the open waters of Lake Superior. District 3 pilots are divided into three groups of area pilots and one group of general assignment pilots. The despatching rules combine the features of District and undesignated waters operations; area assignments are, as a rule, to be attended to by the pilots of the area concerned unless a shortage has developed; lake assignments are performed by general assignment pilots, but an area pilot has precedence for a lake assignment which returns him to his area; an area pilot is returned overland if a return lake assignment is not expected shortly.

Combined operations in District 3 and Lake Superior are conducted from three pilot stations: the Duluth headquarters and two satellite stations situated at Sault Ste. Marie and Thunder Bay. The activities of District 3 pilots in Lakes Huron and Michigan come under the jurisdiction of the

Sault Ste. Marie pilot station, Port Huron District 2 pilot station and the common pilot station at Chicago, and are governed by the "Joint (Interpool) Working Rules Great Lakes Pilotage Districts Nos. 2 and 3" (pp. 171-2). Information is exchanged between all offices twice daily, thus enabling the Duluth headquarters to keep close track of its pilots. Billing and collection of pilotage fees are carried out from Duluth.

At Sault Ste. Marie, three assignment lists are maintained: river assignments, translake assignments and local movages (including partial trips between Sault Ste. Marie and Gros Cap). A pilot who has been unavailable without authorization is placed upon his return at the top of the translake list and at the bottom of the two others. At Duluth-Superior and Thunder Bay, two lists are maintained: one for port pilotage and one for translake assignments.

A general assignment pilot goes on the list at whatever point he disembarks and is required to perform all services rendered by pilots in the area where he is then stationed. When overland transfers are required, the general assignment pilots first on the list are to be transferred before local pilots.

At the opening of the navigation season, area pilots may be sent to Port Huron in order to assist the initial surge of traffic into Lake Superior, and general assignment pilots to assist as lake pilots for movements into Lakes Huron and Michigan.

The normal minimum assignment notice is to be given three hours before ordered time, or before the hour of departure of the necessary transportation when travel is involved. A pilot reporting in upon completion of an assignment is entitled to a 10-hour rest period, provided he requests it; if so, he is not placed on the area or harbour list but holds his position on the translake list since he will have ample opportunity to rest while carrying out a translake assignment.

(b) *Workload*

The workload of District No. 3 pilots has all the characteristics of the workload of lake pilots because lake assignments occupy the majority of their time.

The following table shows the aggregate workload of District 3 pilots (excluding Lake Huron/Lake Michigan pilots attached to District 3 in 1970). The available statistics did not permit segregating the number of assignments into designated and undesignated waters, and even less making separate lists for Lake Huron/Lake Michigan and Lake Superior. The term *Assignment* in this table includes movages (which are numerous, e.g., 749 in 1969, aggregating 1404.5 hours) and cancellations (which are negligible,

e.g., 30 in 1969). The information was not segregated on the basis of Canadian and U.S. pilots because such a distinction is meaningless in the context of District 3.

WORKLOAD OF DISTRICT NO. 3 PILOTS*

Year	Number of Assignments†	Hours on Assignment‡			Total
		Designated Waters	Undesignated Waters	Detentions and Delays	
1963	1,707	5,276.9	20,494.2	10,100.9	35,872.0
1964	2,177	8,607.4	22,694.9	7,906.3	39,208.6
1965	2,349	8,654.7	22,567.4	4,919.0	36,141.1
1966	2,275	6,458.2	25,065.6	5,611.1	37,134.9
1967	1,739	5,219.3	24,303.0	6,138.7	35,661.0
1968	2,070	3,911.8	21,514.0	3,757.4	29,183.2
1969	2,290	3,092.2	25,342.2	4,041.8	32,476.2
1970	1,868	3,719.9	22,460.9	3,426.5	29,607.3

*Canada and U.S. combined, not including Lake Huron/Lake Michigan pilots.

†Including movages and cancellations.

‡Including movages (cancellations are in number only).

SOURCE: EX. 1215.

Falling pilotage traffic (pp. 97 and ff.) has resulted in a decrease in the in-District workload but, on the other hand, the undesignated waters workload has remained generally stable except for the 1966 peak. The lessened demand was offset by the diminishing number of "B" certificate-holders (pp. 140-2). The increase in the undesignated waters workload in 1969 should be attributed to the withdrawal of District 2 pilots from the Lake Huron/Lake Michigan sector (vide table p. 264).

The detailed statistics available for 1967, 1968 and 1969 have permitted the preparation (as for other Districts and areas) of a table showing the distribution of the District 3 pilots' workload from the point of view of both the number of trip charges and hours of duty. The trip charge statistics do not include movages or cancellations. It is surprising to find that Lake Huron/Lake Michigan assignments have always accounted for a substantial part of the workload of these pilots: e.g., in 1969, 48.3 per cent of the total trip charges and 60.8 per cent of total hours on pilotage assignments. It should be noted that that year they had to absorb the part of the Lake Huron/Lake Michigan workload formerly handled by District 2 pilots because the number of lake pilots was not increased proportionately. Great care should be taken when comparing the workload statistics of other Districts or areas since the characteristics and nature of workloads are not the same.

DISTRICT NO. 3 PILOTS*—DISTRIBUTION OF WORKLOAD

Year	Sector of Assignment	Number of Trip Charges	Hours on Assignment	
			Trip Assignments	Detentions and Delays
1967	Lake Huron/Lake Michigan.....	578	11,870.9	n/av.
	District No. 3.....	770	5,217.0	n/av.
	Lake Superior.....	508	11,229.1	n/av.
	Total.....	1,856	28,317.0	n/av.
1968	Lake Huron/Lake Michigan.....	597	13,399.9	2,890.1
	District No. 3.....	607	3,911.8	284.6
	Lake Superior.....	320	6,641.8	582.7
	Total.....	1,524	23,953.5	3,757.4
1969	Lake Huron/Lake Michigan.....	795	16,449.7	3,211.8
	District No. 3.....	504	3,092.7	215.8
	Lake Superior.....	346	7,492.3	791.6
	Total.....	1,645	27,034.7	4,219.2

*Exclusive of Lake Huron/Lake Michigan pilots.
SOURCE: EX. 1215.

The average statistics arrived at by the same method as used for District No. 1 (vide p. 231) and for the same years are as follows:

AVERAGE WORKLOAD OF THE 80% OF THE PILOTS WHO WERE BUSIEST

Year	Number of Days in Navi- gation Season*	Average Number of Assignments per Pilot		Average Hours on Assignment					
		per Season	per Day	per Year			total	per Day	per Assign- ment
				desig- nated waters	undesig- nated waters	detentions and delays			
1965	233.7	131.7	0.6	490.8	1,245.6	269.1	2,005.5	8.6	15.2
1968	234	103.9	0.4	273.9	1,372.2	226.7	1,872.8	8.0	18.0
1969	241	117.9	0.5	195.0	1,544.1	226.7	1,965.8	8.2	16.7

SOURCES: EXS. 1215 and 1542*.

*Since the number of days in the 1965 navigation season differed between Canadian and U.S. pilots, the total was pro-rated at 242.6 for the "per day" figures.

The individual workload in number of assignments has decreased somewhat since 1965, despite the fact that the number of District No. 3 pilots has decreased by two (p. 183). The total number of hours on duty has remained the same but the nature of pilotage duty has changed substantially: there is a 60.3 per cent decrease in time spent in designated waters but a corresponding increase in time spent in Lake Huron/Lake Michigan where pilotage duties are of the same nature as on Lake Ontario (pp. 238 and ff.) but take longer because of the Lakes' extent.

Very few ocean-going ships call at District 3 intermediate ports and almost all assignments are full District transits. This is well illustrated by the breakdown of the 1969 trip assignments figures (Ex. 1215):

	No.	%
Full trips (between Detour and Gros Cap).....	457	90.7
Partial trips (Detour to Sault Ste. Marie).....	31	6.2
Gros Cap to Sault Ste. Marie.....	15	3.0
Others.....	1	0.1
	<hr/> 504	<hr/> 100.0

For a comparison of traffic in District No. 1, see the table on p. 230.

The average duration of a full transit was 6.3 hours; a partial trip between Detour and Sault Ste. Marie averaged 6.4 hours since it included berthing or unberthing; the 14 partial trips between Gros Cap and Sault Ste. Marie (Ontario) averaged 1.9 hours; the one partial trip between Gros Cap and Sault Ste. Marie (Michigan) took 5.8 hours.

In 1969, there were 366 trip charges for Lake Superior assignments. The lake assignments most often performed, their aggregate number and average duration for that year were:

Gros Cap-Duluth	250	24.3 hours
Gros Cap-Thunder Bay	88	17.1 hours
Duluth-Thunder Bay	28	14.2 hours

(c) *Problem of Equitable Sharing of Workload*

At the time of the Commission's hearings, complaints were made that the operational procedure in force did not produce equitable sharing of the pilots' workload either in number of assignments or in aggregate time. Because of their official method of remuneration the result was a substantial difference in their earnings and, therefore, it was charged that the system was not in conformity with the governing principle that all pilots should have an equal opportunity to share workload and earnings.

COMMENTS

It is possible that the procedure could be improved upon but the complaint as stated is ill-founded. Those who complained failed to recognize that pilotage is a service to ships and the first requirement is to meet their needs, whenever and wherever they may arise, at the least cost. They also failed to take into consideration that no two pilotage assignments are exactly alike—this is particularly true in District No. 3.

If the basic principle governing the definition of the pilots' range of operations had been observed, i.e., if they had been restricted to confined waters so that the extent of their operational territory corresponded to a normal turn of duty (Part I, pp. 477 and 479), the time problem would still have remained but in reduced form. In fact, even after the *de facto* division of District 2, this problem was quite unresolved in the western sector because the large number of partial trips and the numerous factors which make similar assignments vary so widely in duration prevent an equal distribution of the workload, either in number of assignments or in aggregate time on duty, and even less in both at the same time. Such a goal is impossible to attain in the pilotage service because the authority in charge does not control the governing factors. It may try to correct some inequalities through the adoption of working rules especially designed to meet local conditions but these will meet only partial success, e.g., in the St. Lawrence River Pilotage Districts and Great Lakes District No. 1, the administrative authorities, at the request of the pilots, have accepted the equalization of trips system. Because most assignments in these Districts are similar (full transits), the highly complicated despatching procedure associated with the system achieves some equality in the number of assignments performed each year by each pilot but there is a wide variation in the distribution of the workload from the point of view of time on duty (pp. 275 and ff.) (for the Commission's views on the merit of such a system, vide Part IV, pp. 462-3). Obviously, the equalization of trips principle can not be applied in the western sector of District 2 because the majority of assignments there are so different.

As proved by experience, the required system is one which will ensure equal treatment for all pilots under working rules designed to meet the pilotage demand efficiently throughout the whole area of operations. Some variation in the number or duration of assignments is unavoidable. Substantial differences which result when some pilots are allocated to a particular place or area should be adjusted by controlling the number of pilots so detached or effecting a rotation, as provided for instance in District No. 2 Working Rules for pilotage duties at Port Weller (p. 251).

Where pilots are not salaried employees, the root of the problem lies in the erroneous basis of remunerating them, i.e., work done rather than availability as if they were free entrepreneurs, although they are not. This has been

clearly realized by the pilots themselves who generally have pooled their earnings so that all pilots with equal availability receive an equal share irrespective of their individual number of assignments or aggregate pilotage time. When this is done, there is no problem, provided all the pilots in the group are parties to the pooling partnership, e.g., the Canadian and U.S. Lake Ontario pilots. Difficulties are bound to arise when all the pilots are not governed by the same arrangements for pooling.

(d) Complaint by District No. 3 Administrative Authority Concerning Lack of Direct Communication with the Canadian Authority

One of the recommendations made to this Commission by the Lake Superior Pilots Association was that, as administrative authority of District No. 3, they be given more right to decision at local level. At the Commission's hearings, they explained that they have particularly in mind a direct channel of communication with the Canadian Department of Transport, since they were operating a service extending over Canadian as well as U.S. territory and a few Canadian pilots who are employees of the Department of Transport came under their operational and administrative jurisdiction.

At that time, the U.S. Great Lakes Pilotage Administrator had informed the Association that all communications between them and the Department of Transport regarding the operation of the authorized pool in District 3 should be directed through the office of the Administrator. According to the Association, these instructions created a handicap and made it impossible to work out common problems adequately. For instance, the Association felt that the problem of equal participation of Canadian pilots in all phases of pilotage operations could have been easily settled by direct discussion with the Department of Transport.

At that time, the situation arose only in District 3 because it was the only District where the Department of Transport was not represented at the District level (there is no Canadian pilotage office in District 3). A similar situation is now likely to occur in all Districts and sectors since the principle of dual local administrative authorities has been completely abandoned.

It is considered that a local administrative authority should have full power to deal directly with anyone concerning matters coming under its exclusive jurisdiction, irrespective of the nationality of the parties concerned or of any other functions they perform. In this case, the Canadian Department of Transport, *vis-à-vis* the Pilots' Association, was not being approached as one of the two Central Authorities of the Great Lakes pilotage organization but merely as an organization directly involved in local administration. To use the Central Authority simply as a go-between, appears to be a cumbersome and inadequate procedure. If the Canadian Department of

Transport felt that it was unjustly dealt with by the U.S. Pilots' Association, then, like any other party who believes it has been treated unfairly, it could have discussed the matter with the Administrator and, if necessary, with the Secretary of Transportation. However, it should be noted that under U.S. legislation neither could interfere with the administrative decision taken by the Association, provided such decision was within its jurisdiction and was not an illegal abuse of power (the U.S. Central Administration has no direct power over actual operations). The Department of Transport's intervention with the U.S. Central Authority might then have resulted in the Administrator amending the regulations governing the administration and operation of the U.S. pool concerned.

6. FINANCIAL ADMINISTRATION, RATES AND PILOTS' REMUNERATION

PREAMBLE

The basic principles governing the financing of the joint pilotage service in the Great Lakes system are:

- the service is to be financially self-supporting;
- the operating expenses of the central administrations are borne by each Government.

Each pilotage office (pilots' pool) formerly was an independent unit from the accounting as well as the operational point of view. It financed its operations through deductions at source from the fees earned by the pilots from assignments originating from that office, and billing and collecting were the responsibility of the assigning pilotage office. This procedure proved costly and unnecessarily complicated and was modified when Districts Nos. 1 and 2 were reorganized.

(1) COST TO GOVERNMENTS

Any pilotage expenses not covered by pilotage revenues but by the Government concerned are met by the Great Lakes Pilotage Administration of each country (p. 151), i.e., in the United States, the Great Lakes Pilotage Administration, an administrative entity formerly of the Department of Commerce, now of the Department of Transportation, through the U.S. Coast Guard; in Canada, the section of the Department of Transport responsible for implementing Part VI C.S.A. which operated the Port Weller/Sarnia service prior to the creation of District No. 2 and which, with the Minister, became the Canadian Great Lakes Pilotage Administration under Part VIA C.S.A. The costs of these Pilotage Administrations are borne by the respective Governments, except for the negligible contribution by

candidates for pilots' registration certificates and ships' officers' certificates of qualification (p. 24).

The Commission has no information on the amount paid by the United States Government for pilotage on the Great Lakes.

The pilotage expenses incurred by the Canadian Department of Transport are shown in *Public Accounts* as an aggregate. Since the function of the Canadian Great Lakes Pilotage Administration has not been entrusted to a section of the Department of Transport especially created for that purpose but is exercised as an added function by its Pilotage Section, there is no means of ascertaining accurately the share of the Department's expenditures attributable to its function as Canadian Pilotage Authority under Part VIA C.S.A., or determining what part of the cost of the Ottawa headquarters can be attributed to the Pilotage Districts created under Part VI C.S.A. Under these circumstances, it was necessary to adopt an arbitrary method of apportioning the cost of the Ottawa pilotage headquarters between the various Pilotage Districts and Great Lakes Districts. The Commission's consultant accountant used for this basis the incidence of the total cost of the service to shipping in each such District related to the aggregate total cost for Canada (Ex. 1295 and Part I, Schedules, pp. 636-638). The result of this apportionment 1961-1969 is as follows:

Year	Total HQ Cost All Districts	Great Lakes System Share
1961.....	\$ 84,000	\$24,994
1962.....	122,000	26,193
1963.....	114,000	25,285
1964.....	130,000	28,574
1965.....	148,000	34,617
1966.....	150,000	33,000
1967.....	211,000	46,420
1968.....	241,000*	53,020
1969.....	264,000*	58,080

*Includes expenditures for the Pilotage Task Force.

The Canadian Government, in contrast to the United States Government, also has financial commitments at the operational level, not because it has assumed the administrative function of the pilotage offices which were made a Canadian responsibility (pp. 67-8) (these remain financially self-supporting), but because of the method of remunerating the Canadian registered pilots in Districts 2 and 3 and the Lake Huron/Lake Michigan sector.

In accordance with the governing principle that each pilotage office should be financially self-supporting, all expenses incurred by the Canadian Government in manning and operating the Canadian pilot stations in Districts 1 and 2, i.e., Cornwall and Port Weller, are paid out of the pilotage revenues earned by the pilots (irrespective of their nationality) who use these offices. The expenses of the U.S. pilotage offices (pilots' pools) are met in the same way. Hence, the Canadian Government bears no part of these expenses. Its financial involvement consists in the difference between what would have been the remuneration of the Canadian pilots registered in Districts 2 and 3 and in the Lake Huron/Lake Michigan sector if they had been paid the net revenue earned by their services and the salary paid them by the Government as prevailing rate employees. This aggregate difference means either a surplus or a deficit for the Government. The Department of Transport's financial report (Ex. 1295) does not segregate the figures relating to the Lake Huron/Lake Michigan pilots which were included in District 2 figures; and since 1967-68 no longer shows segregation by District. The table on p. 284 shows the details and extent of such financial involvement for the fiscal years 1960-61 to 1969-70 inclusive.

(2) COST TO SHIPPING

Cost to shipping is the aggregate amount vessels pay for pilotage, i.e., pilotage fees properly speaking (the price fixed in legislation for the various types of pilotage services), indemnity charges such as for detention, delay and cancellation, accessory expenses such as land transportation, and any other payments expected officially or unofficially from vessels (or some of them) for services, e.g., the unofficial remuneration for pilot apprentices paid by vessels of members of the Shipping Federation of Canada in the St. Lawrence River Pilotage Districts (Part IV, p. 237), or the hire price of pilot vessels where such service is privately organized and has no official status (Part IV, pp. 423-6 and 743-5). In the Great Lakes system, vessels are required to pay only charges listed in the tariff.

(a) *Rate Structure*

According to the agreement between Canada and the United States, the tariff in the Great Lakes Pilotage Regulations of each country must be the same. Rate modifications are preceded by agreements between both Governments and those are ratified by an amendment to the Memorandum of Arrangements.

When the joint tariff was first established in 1961, ships' dimensions were not a factor in computing rates, presumably on account of the basic differences between the U.S. system of measuring ships' tonnage and the British system which is in use in Canada (Part I, p. 167). It is worth noting

COST TO GOVERNMENT

Revenue and Expenditures	1960-1961	1961-1962	1962-1963	1963-1964	1964-1965	1965-1966	1966-1967	1967-1968	1968-1969	1969-1970
<i>District No. 2</i>										
Pilots' share of net revenue..	\$536,000	\$649,000	\$495,000	\$482,000	\$529,000	\$729,000	\$701,000	\$641,000	\$1,040,000	\$907,000
Less pilots' expenditures:										
Salaries and allowances....	511,000	502,000	384,000	394,000	407,000	608,000	705,000	810,000	1,052,000	993,000
Fringe benefits.....	63,000	76,000	59,000	64,000	65,000	89,000	116,000	98,000	134,000	199,000
Travel and other.....	3,000	4,000	52,000	36,000	36,000	49,000	51,000	61,000	13,000	10,000
	577,000	582,000	495,000	494,000	508,000	746,000	872,000	969,000	1,199,000	1,202,000
Surplus or (deficit).....	(41,000)	67,000	nil	(12,000)	21,000	(17,000)	(171,000)	(328,000)	(159,000)	(295,000)
<i>District No. 3</i>										
Total revenue accruing to pilots.....			\$49,000	\$35,000	\$58,000	\$54,000	\$57,000	Included in District No. 2 above.		
Less pilots' expenditures:										
Salaries and allowances.....			32,000	31,000	36,000	38,000	53,000			
Fringe benefits.....			5,000	5,000	5,000	5,000	7,000			
Travel and other.....			2,000	2,000	4,000	4,000	5,000			
			39,000	38,000	45,000	47,000	65,000			
Surplus or (deficit).....			10,000	(3,000)	13,000	7,000	(8,000)			

SOURCE: Ex. 1295.

that prior to 1961 when pilotage in the Kingston District was solely under Canadian control the rate structure was based on ships' tonnage and draught (p. 50).² In designated waters, distance run became the only governing factor and flat rates were established according to the type of trip. In undesignated waters, where most trips were long and varied greatly both in length and type, the time factor was used instead and a flat rate was set for a given period of time.

The structure was not satisfactory because it discriminated against smaller vessels (Part I, p. 157). The Canadian and U.S. Governments indicated their intention to amend the rate structure to allow for ships' characteristics, vide this excerpt from the preamble to the 1967 Memorandum of Arrangements (Ex. 1400):

"In the past six years, with the introduction of newer and larger ships with more sophisticated navigational equipment and altered traffic patterns, pilotage requirements in those waters governed by the agreement have changed considerably. As a result, the present pilotage system and its rate structure, designed to meet the requirements of 1961, do not meet the requirements of today.

Accordingly, the United States and Canada have initiated an overall review of the present pilotage system and its rate structure on the basis of which a new system and structure can be established before the navigational season of 1968."

It was, however, only in 1970 that a system agreeable to both countries could be devised. The 1969 version of the Memorandum contains the following progress report:

"...The present rate structure does not take into consideration the size of a vessel or, in some cases the length of the voyage, and should be replaced with a new structure that more effectively measures pilot workload. The Minister and Secretary have agreed that the new rate structure is to be developed and made effective prior to the 1970 shipping season."

The two Governments finally agreed on a new formula which became effective July 7, 1970 (p. 25). This formula (length \times breadth \times moulded depth, divided by 10,000) is applied to each ship to obtain a "pilotage unit" number which, when utilized with a corresponding "weighting factor" will class a ship in one of four categories permitting a spread of flat rates according to her dimensions. Pilotage unit classifications and their corresponding weighting factors are:

Range of Pilotage Units	Weighting Factors
0- 99 units.....	.85
100-129 units.....	1.00
130-159 units.....	1.15
160 and over.....	1.30

² In the Port Weller/Sarnia sector, however, the Shipping Federation of Canada had established the flat rate system. For instance, the 1958 tariff (Ex. 1240) provided a flat rate of \$200 for the full transit plus a \$12.50 charge each time a pilot vessel was used.

The basic or flat rate set out in the tariff is multiplied by the weighting factor to obtain the appropriate pilotage charge.

The Commission did examine such a method of computing pilotage dues (Part I, particularly pp. 174–5) but came to the conclusion that maximum gross tonnage, British measurement, is more practical on account of its ready availability (Part I, p. 180). No doubt the basic difference between the U.S. system and the British (or IMCO) system of measuring ships created difficulties and this *ad hoc* measurement system was adopted as a compromise.

Designated waters rates have been, as a rule, all inclusive, i.e., including berthing and unberthing, pilot vessel service and pilots' land transportation. By contrast, undesignated waters rates do not include berthing and unberthing charges and, until recently, did not include pilot vessel service and the cost of the pilots' land transportation. Since transportation charges varied not only on account of a ship's destination but also because of the place where the pilot happened to be when assigned, they caused many disputes. Since 1970, the new undesignated waters rates have also been all inclusive, except for berthing and unberthing charges.

(i) *Trip rates*

Designated waters trip rates. The basic trip rate is an all inclusive flat rate for a given trip; the actual charge varies from ship to ship through the application of the weighting factor described earlier.

The main trip rate is the through transit rate applicable both upbound and downbound. For this purpose, District 2 has always been dealt with as if each of its two sectors formed separate Districts.

Depending upon local circumstances, three methods are employed to provide for partial transits:

- An *ad hoc* rate for a given partial trip defined in the tariff; it is used where all the intermediate ports are situated along the full transit route, e.g., District 1, the Welland Canal and District 3.
- A rate per zone (e.g., Quebec Pilotage District, Part IV, p. 467) or different rates per zone or group of zones (e.g., Montreal Pilotage District, Part IV, p. 778). The latter is used in the western sector of District 2, e.g., all trips fully contained in the tariff zone of the designated waters of Lake Erie call for the same rate, e.g., Sandusky–Toledo, Southeast Shoal–Sandusky or Toledo.
- Distance run; this is flexible but cumbersome and serves as an omnibus provision for cases not otherwise covered; generally, a per-mile rate with a minimum and a maximum charge instead of the former method of prorating the full transit charge on the distance piloted. In the Welland Canal sector, there is an additional charge for each lock transited.

Undesignated waters trip rates. The basic trip rate for undesignated waters is based on the time factor. As for all other rates, the actual charge to a ship is arrived at through the application of the weighting factor formula. A rate is provided for a given period of duty. Duty in undesignated waters merely means that a pilot is on board at the disposal of the Master, whether or not any use is made of his services. This excludes occasions when a pilot is on board as a passenger, e.g., when a ship enjoys an indirect exemption from taking a pilot in undesignated waters because one of her officers holds a "B" certificate for the waters concerned and the pilot has to be carried on board to ensure his availability when entering designated waters, e.g., all Lake Erie trips involving navigation west of Southeast Shoal (because of the absence of a pilot boarding station), or elsewhere in undesignated waters when this is a more efficient way of providing a pilot for service at an outport.

Originally, the time rate was established on the basis of a 24-hour period or part thereof; as of July 7, 1970, it has been altered to a six-hour period or part thereof.

By contrast with a designated waters trip, the rate for an undesignated waters trip is not all inclusive—any berthing charges are added. Up to July 1970, pilots' travelling expenses, including pilot vessel service charges, were also recoverable from ships.

(ii) *Berthing charges*

Berthing and unberthing (referred to in the tariff as "docking" and "undocking") have usually been considered an inherent part of a trip or movage and this was the practice until 1962 when a berthing charge was added for undesignated waters to encourage pilots already on board to perform port pilotage where this service existed (p. 123). Contrasting with the trip charge to which it is an accessory, the berthing charge is applicable only if the service has actually been rendered.

(iii) *Movages*

The Great Lakes Pilotage Regulations contain the usual definition of the term "movage", in *résumé*, movement of a ship wholly within a harbour (subsec. 2(cc)). Hence, this meaning applies throughout the Regulations, including the tariff. To ensure clarity, the same meaning should have been retained in all other rules and orders connected with the Great Lakes Pilotage Administration. Unfortunately, "movage" is given a different connotation in District 1 Working Rules (Ex. 432, sec. F-1) where for despatching purposes it is unintentionally used to refer to short trips in order to give pilots on the tour de rôle credit for a full trip. For tariff purposes, these so-called movages are trip assignments (Ex. 1541(y)).

Movages, designated waters. Originally, the tariff did not contain any provision for movages in designated waters. Such an item was first intro-

duced for District 3 in 1962 and for District 1 in 1966. It takes the form of an all inclusive basic rate, originally set at \$50 and later raised to \$120 in District 1 and \$125 in District 3 (subject to variation through the application of the weighting factor).

In District 2 there is no provision for movages, with the result that a movage in any of the ports of that District, whether in the Welland Canal sector which includes, *inter alia*, Port Colborne, or the western sector, calls for the basic trip rate for a partial trip in the tariff zone in which the port is situated, e.g., in the case of a movage in the harbour of Detroit (item 1(b)(viii)), \$125; for a movage in Port Colborne, it would appear that the minimum basic fee of \$120 would apply (item 1(b)(i)) (Ex 1541(y)).

Movages, undesignated waters. The item that had been added in this regard in 1962 has now been deleted, effective July 1970, with the result that a movage in any port situated in undesignated waters is now identified as a trip. Therefore, a movage in Toronto, for instance, which in 1969 cost \$39 plus transportation expenses and in July 1970 cost \$60 all inclusive, since August 12, 1970, has cost a minimum of \$180 provided the duration of the movage does not exceed 6 hours, i.e., the basic trip rate of \$60 for Lake Ontario for a 6-hour period and two berthing charges of \$60 each for unberthing and berthing (subject to variation through the application of the weighting factor); if the movage is from an anchorage to a berth or vice versa, it will be \$120 (Ex. 1541(y)).

(iv) *Travelling expenses (including pilot boat charges)*

One of the governing criteria for devising a tariff is that nothing should be left to chance or to be determined in any other way than by regulation, and that the actual fees should be capable of actual computation from the tariff (Part I, p. 149). It is the responsibility of the individual pilot (and, hence, of the District or sector) to be available wherever his services may be required within that District or sector; conversely, it is a condition of the exercise of his profession that he be disembarked at a port or landing place in his District or sector. The expenses involved in a pilot embarking or returning from an assignment are primarily a matter of internal organization. Poor organization (such as resulted from the application of the Sailing Master concept or as prevailed until recently in the western sector of District 2) results in considerable travelling costs as well as wastage of pilots' time. Some vessels should not be penalized by being required to pay higher dues than other vessels on that account. Rates are standard charges and, therefore, they must always produce the same revenue for the same service to the same vessel. Random charges resulting from the recovery from ships of travelling expenses violate such a rule (Part I, pp. 151-3).

The tariff for undesignated waters assignments violated this principle and, until it was rectified July 8, 1970, it was a continuous cause of dissatisfaction and frustration to shipping and a constant source of dispute. Now the pilots' travelling costs, including pilot vessel charges, are borne either by the pilot himself or form part of the District or sector organization; their incidence has been taken into consideration with other administrative and operational costs when the rates were fixed so as to spread them uniformly among all users (Ex. 1541(z)).

The practice of adding a pilot boat charge to the pilotage fees does not violate this principle. It is merely a method of devising the tariff to meet different circumstances, for instance, a trip assignment involving a berthing differs from one where the pilot is relieved in the stream (vide Part IV, p. 1018 and Part I, p. 183).

(v) *Indemnity charges*

Detentions and delays. The detention provisions contained in the tariff correspond, except for the case of a ship's late arrival at a boarding station, to the true nature of the term, i.e., an indemnity charge (vide Part II, pp. 157-8), a penalty or an additional charge for time lost by the pilot beyond the terms of his pilotage contract for which the ship is responsible either by default or on request. Since 1966, distinction has been made between detention and delays. Detention occurs when a trip is interrupted *en route* for the convenience and advantage of the ship, whether it be to load or discharge cargo or for any other reason. This, therefore, excludes trip interruptions due to conditions beyond the ship's control, weather or ice conditions and traffic congestion. An exception is now made with regard to the so-called winter season (Part IV, pp. 927 and 1026), i.e., between December 1 and April 8, when detention will be charged even if the trip interruption *en route* is due to these uncontrollable factors. On the other hand, delays mean the time lost by a pilot awaiting a ship's arrival or departure or at the end of an assignment if retained by the Master for the ship's convenience. This indemnity rate applies *from* the first hour except in the case of time lost due to waiting for a ship's arrival or departure, in which case it applies only *after* the first hour.

Cancellations. Re the nature of cancellation charges, vide Part II, p. 164. A flat rate is provided as a cancellation indemnity plus a detention charge if the cancellation occurs later than one hour after the pilot has reported at or after ordered time.

(vi) *Two-pilot rates*

In cases where two pilots may be jointly assigned to a ship or a ship unit (pp. 226-7), a 50 per cent surcharge is added to the charge that would normally have been made if only one pilot had been assigned.

(vii) *Navigation of dead ships and tug and tow "navigation units"*

The tariff does not provide for any special rate in these cases. Hence, unless such instances are considered exceptions and two pilots are jointly assigned, the rates will be those applicable when a ship is navigated under her own power, and in the case of a navigation unit, as if it were a ship. Nor is there provision for tugs and tows which are not dead ships. The weighting factor will apply only to tugs, since it is based on the dimensions of a "ship" and not a vessel. The use of the term "ship" in legislation where the term "vessel" is normally used indicates a clear intention to make a distinction. (For the meaning of the terms "ship" and "vessel", vide Part 1, pp. 213 and ff.)

COMMENTS

The structure of trip rates for designated waters is now generally adequate following the introduction of the weighting factor formula. Despite its theoretical advantage, the Commission had recommended against the adoption of a special ships' measurement system for computing pilotage charges because of the practical disadvantages involved, i.e., first, obtaining the required information, second, making the necessary calculations. Vessels should not be delayed solely to provide measurements. The Commission advocated ships' gross tonnage, British measurement, because of its representative value for ships' dimensions and also its availability (Part I, p. 180). It is agreed that modern calculating machines simplify the clerical work involved.

The Commission considers, however, that the trip rate structure would be improved if it were devised to meet the different situations where a substantial part of the pilotage traffic is in transit. The single all inclusive rate is satisfactory only when applied to similar services. It is the obvious method for port pilotage where practically all trip assignments involve pilot vessel service and berthing or unberthing, but this is not so where the Pilotage District or sector is an intermediate part of a waterway and most traffic is in transit. In such a case, the rates should be devised so as to provide a different charge to cover situations where a pilot boards or disembarks in the stream or at a berth. This would mean reducing the trip rate, extending the berthing charge to trips in designated waters and introducing the customary pilot boat charge. For a comparable situation, vide Part IV, p. 1018.

In the Commission's opinion, the absence of a rate for movages in District 2 is a serious deficiency in the tariff. The applicable rates should reflect the differences in objective value between different types of services (Part I, pp. 153-4). If a movage does occur in this District, the charge made appears disproportionately high.

Indemnity charges should apply only when the detention or delay is the ship's responsibility, and not (except during the winter season) when due to events over which the ship has no control. The detention and delay provisions in the tariff are realistic in this regard except when a ship arrives late at a boarding station. In the St. Lawrence Seaway system, a Master can not guarantee a time of arrival because traffic congestion at locks or a Seaway traffic operator's instruction may negate his forecast. In fact, pilotage despatchers aided by the constant flow of information they receive from Traffic Information Centres are in a much better position to ascertain when pilots are required and, in practice, they decide ordered time on this basis. Any error on their part or any delay due to circumstances beyond a ship's control should not penalize the ship. The same principle applies elsewhere. If it is considered reasonable that a ship should not be penalized on account of detention *en route* due to circumstances beyond her control, then, for the same reason, a ship arriving late at a boarding station should also be excused; if the cause of delay can not count as a detention indemnity for the pilot on board, neither should it count as a delay indemnity for the pilot waiting at the boarding station (vide similar recommendations re the Montreal District tariff, Part IV, pp. 784-5, and for comments, pp. 741-3 and 759-60, and re the Cornwall Pilotage District tariff, pp. 974-5).

The tariff is also deficient in that it does not provide for navigation units. Reference is made to the Commission's comments on the matter, Part I, p. 181.

(b) *Rate Increases*

The tariff as first introduced in 1961 was amended nine times. The increases were neither simultaneous nor uniform for all Districts and sectors, but varied from one District or sector to another and in amounts necessary to adjust for local revenue requirements.

Without entering into all details, the general picture appears in the trip rates for full transits which account for most of the pilotage revenue. These rates (disregarding the weighting factor) have varied as follows:

- In District 1, they were raised six times from \$200 as they were in 1961, i.e., once a year from 1966 to 1969 inclusive and twice in 1970, to \$332 basic rate—an overall increase of 66%.
- In District 2, a transit of the Welland Canal increased from \$125 to \$430, and between Southeast Shoal and Port Huron from \$125 to \$300; they have increased by 244% and 140% respectively.
- In District No. 3, a transit trip between Detour and Gros Cap rose from \$200 to \$370, an increase of 85%.

For undesignated waters, the \$50 rate for each 24-hour period plus travelling expenses has now become for each 6-hour period or part thereof

\$60 for Lake Ontario, \$65 for Lake Erie, \$60 for Lakes Huron and Michigan and \$65 for Lake Superior, including travelling expenses (P.C. 1970/1411 dated Aug. 11, 1970). It is difficult to evaluate the actual importance of these increases because the incidence of travelling expenses formerly recoverable from ships is not known.

Other items have also increased substantially, e.g., the detention charge which was originally \$5 per hour with a \$50 maximum per 24-hour period was raised in 1970 to \$10 per hour or part thereof with a maximum of \$160 per 24-hour period.

Tariff increases have been an annual occurrence in all Districts and sectors since 1967—they even occurred twice in 1970 one month apart—following demands by the pilot groups whose remuneration depends upon the net pilotage revenue earned by their services or those of all the pilots in the group. Pressure by the Canadian prevailing rate employee pilots for salary increases and improved working conditions has also had its effect on rates, although in less obvious fashion. The Canadian Government was forced to increase tariffs in order to offset the salary increases granted its employees and the increasing cost of the pilotage offices it operates, but this has been a much less pressing factor because the Government has always been prepared to accept a reasonable operational deficit when circumstances did not warrant a large rate increase. The operating expenses of pilotage offices are recurring fixed liabilities which have been mounting from year to year while District pilotage traffic has been substantially diminishing under the impact of a number of factors, principally the economics of lake voyages for ocean-going vessels (p. 134). The combined impact of these two factors and the resultant overbearing of pilots which can not be reduced except through normal attrition (p. 179) has made the rates insufficient to provide the pilots with an adequate annual income commensurate with their responsibilities.

On the other hand, the Shipping Federation bitterly opposed the pilots' demands because they threatened the survival of trade by ocean vessels in the Great Lakes system. Higher dues for vessels subject to compulsory pilotage make them unable to compete with lake vessels. Increasing the rates would become a self-defeating process: greater aggregate revenues would not necessarily result because a number of marginal operators would be forced out and the demand for pilotage would fall. It is a vicious circle which can be broken only by dealing with other governing factors such as administrative and operational costs, the number of pilots and unjustified compulsory pilotage.

The Canadian and U.S. Pilotage Administrations are gradually reducing the number of pilots in order to match the diminishing demand by not filling vacancies caused by normal attrition. Steps have been taken to

curtail the administrative overhead by such measures as abandoning dual but separate authorities in Districts (pp. 147-8). But the most significant remedial action would be to dispense vessels from pilotage requirements in open waters, thereby substantially decreasing aggregate pilotage costs and helping to restore the competitive position of ocean-going vessels.

The pressing demands by the pilots for annual rate increases and the equally strong opposition of the Shipping Federation have resulted in a substantial deterioration in relations between all the parties involved and, hence, the survival of the system is threatened. The veto in recent years of the Canadian Pilotage Administration has resulted in strikes by U.S. pilots and threats by U.S. pools to go into bankruptcy (p. 179), a recourse which is open to them under their system if the Pilots' Corporation responsible for operating a pool is unable to meet its liabilities and still provide the pilots with a reasonable income.

(c) *U.S. and Canadian Currency Problems*

While the U.S. Great Lakes Pilotage Act calls for identical rates in the legislation of both countries, this aim was never achieved as far as the payers (shipowners) are concerned. The wording of the Pilotage Regulations is the same in all respects (including the amounts to be paid) on both sides of the border but the cost to shipping varied because the rates are expressed in each country's own currency and not in absolute monetary values. Like tonnage measurement discussed on p. 286, this is another small point on which an agreement is difficult to achieve between two countries because of national pride.

The first Memorandum of Arrangements (1961, subsec. 3(h), Ex. 1400) provided that each pilotage station (pilots' pool) would bill pilotage fees in its respective currency. Short of expressing rates in absolute monetary values, this was the most logical solution, first, because a pilotage station is to be governed by the legislation of the country which has established it, second, unity of rates was achieved within the jurisdiction of each pilotage station. This was modified two years later through an amendment to the Memorandum by which the currency to be applied would be determined by the nationality of the pilot, U.S. or Canadian, who was given the assignment. The result was a variation in dues according to the vagaries of the *tour de rôle*.

COMMENTS

Except for the principle involved, this was a practical solution in the beginning because the two currencies were almost at par, but the difference became substantial when the Canadian dollar was pegged at 92½¢ U.S. on May 2, 1962. The disparity has been less pronounced since the Canadian

dollar was allowed to fluctuate freely in June 1970, but there is no guarantee that the gap will not widen at some future date.

This system is basically wrong because it discriminates against those vessels which are charged higher fees than others for the same service. The method adopted for the provision of services is strictly a matter of internal organization, and the fact that participation by both countries at all levels had been agreed to is immaterial as far as the users of the service are concerned. Any administrative difficulties that may be created by a uniform system of payment are no concern of shipping.

Despite its apparent simplicity, the present system of billing a vessel in the currency of the pilot who renders the service still causes extensive administrative complications: each pilotage office has constant exchange problems, in that charges billed in the other currency have to be converted to the office's currency once collected for the purpose of apportioning its operating expenses; when the pilots or their nominees are paid their net earnings, these should be in their currency, thus requiring a further conversion for the pilots who are not of the same nationality as the pilotage office; when the currency rate has changed substantially between the date the fees were earned and the date of the distribution, some pilots suffer a substantial loss which can not be prevented except at the expense of a complicated bookkeeping procedure which will prove self-defeating on account of the additional administrative costs involved.

It might be difficult to resolve the problem by adopting a formula, as was done for the rate structure (p. 286). Because there is a constant fluctuation in the exchange rate, it appears that no simple formula can be devised here. Since the 1969 reorganization, there has been no problem in District 2 because the various pilotage services that may be rendered are divided by types on the basis of the nationality of the pilots. A complete solution would be the extension of a similar procedure to the other sectors of the Great Lakes system.

If joint and equal participation in the provision of services is to be retained in some sectors, it is considered that the solution should be a return to the original principle that charges are made in the currency of the assigning office. This principle should not only be enunciated in the Memorandum of Arrangements but should be included in the U.S. and Canadian Great Lakes Pilotage Regulations.

(d) Aggregate Cost to Shipping

(i) By sector

Because of the overlapping ranges of activities of the pilots of the various groups and since, up to 1966 inclusive, the only identification given for sectors where fees were earned was whether they resulted from

designated waters or undesignated waters charges, it has not been possible to show from the available statistics the cost to shipping by sector for the years preceding 1967 as in the previous volumes of the Report. The data available for the years 1967, 1968 and 1969 have such segregation for those three years.

COST TO SHIPPING IN DISTRICT NO. 1 (DESIGNATED WATERS)

Year	Pilots	Trips	Movages	Detentions and Delays	Cancel- lations	Total
1967	District No. 1.....	\$640,985.48	\$ 485.00	\$8,040.50 ^a		\$649,510.98
1968	District No. 1.....	686,421.80	1,387.00	\$10,814.50	\$180.00	698,803.30
1969	District No. 1.....	732,960.20	78.00	17,680.50	414.00	751,132.70 ^b

^aArrived at by subtracting from available total charges for trips and movages.

^bCalculated total shown does not agree with given total of \$750,568.45 in exhibit.

SOURCE: Ex. 1215.

COST TO SHIPPING IN WELLAND CANAL SECTOR OF DISTRICT NO. 2 (DESIGNATED WATERS)

Year	Pilots	Trips	Movages	Detentions and Delays	Cancel- lations	Total
1967	District No. 2.....	\$512,348.50	^a	\$2,249.00	\$205.00 ^b	\$514,802.50
1968	District No. 2.....	684,147.35	^a	4,229.00	nil	688,376.35
1969	District No. 2.....	673,409.35	^a	4,037.00	225.00	677,671.35

^aA movage in District No. 2 is counted as a partial trip; vide p. 288.

^bArrived at by subtracting from available total charges for trips, detentions and delays.

SOURCE: Ex. 1215.

Study of Pilotage in Great Lakes System

COST TO SHIPPING ON LAKE ONTARIO (UNDESIGNATED WATERS)

Year	Pilots	Pilotage Fees						Recoverable Transportation Expenses*		Grand Total
		Trips	Movages	Detentions and Delays	Cancellations	Berthings*	Total	Travelling	Pilot Boats	
1967	District No. 1	\$ nil	\$ 50.00	\$ nil	\$ nil	\$ 25.00 ^a	\$ 75.00	\$ nil	\$ nil	\$ 75.00
	Lake Ontario	103,560.00	6,691.50		42,917.00 ^a		153,168.50	28,306.37	30,092.93	211,567.80
	District No. 2	2,765.00	75.00	40.50			3,787.36 ^c	250.48 ^d	261.94 ^d	4,299.78
	Lake Huron/Lake Michigan ^f	900.00	nil	40.00	nil	36.00	976.00	156.66 ^d	122.62 ^d	1,255.28
	Total	\$107,225.00	\$ 6,816.50		\$43,965.36		\$158,006.86	\$28,713.51	\$30,477.49	\$217,197.86
1968	District No. 1	\$ 191.00	\$ nil	\$ nil	\$ nil	\$ nil	\$ 191.00	\$ 57.24	\$ 32.20	\$ 89.44
	Lake Ontario	125,225.00	7,379.00	7,347.00	1,008.00	43,325.00	184,284.00	29,522.99	34,979.70	248,786.69
	District No. 2	1,357.00	nil	nil	nil	36.00	1,393.00	116.75 ^d	21.20 ^d	1,530.95
	Total	\$126,773.00	\$ 7,379.00	\$ 7,347.00	\$ 1,008.00	\$43,361.00	\$185,868.00	\$29,696.98	\$35,033.10	\$250,598.08
1969	Lake Ontario	\$143,939.00	\$ 6,363.00	\$ 7,162.75	\$ 408.00	\$47,393.00 ^a	\$205,265.75	\$31,626.56	\$36,474.00	\$273,366.31
	District No. 2	1,559.00	nil	nil	nil	486.00 ^e	2,045.00	1,335.08 ^f	290.00 ^f	3,670.08
	Total	\$145,498.00	\$ 6,363.00	\$ 7,162.75	\$ 408.00	\$47,879.00	\$207,310.75	\$32,961.64	\$36,764.00	\$277,036.39

*Recoverable transportation expenses and berthing charges apply only to undesignated waters sectors.

†U.S. pilots in training as District No. 2 pilots.

^aArrived at by subtracting all available figures from total (Can. and U.S. pilots combined).

^bCalculated by subtracting all available figures in each undesignated waters sector from total (Can. and U.S. pilots combined) and prorating for each.

^cCalculated by prorating total (Can. and U.S. pilots combined) for each sector of undesignated waters applicable.

^dAs transportation expenses are not detailed and exact segregation by sector is not possible, approximate figures were arrived at by taking the proportion of the undesignated waters trips in each sector.

^eApproximate figure calculated from the number of berthings performed at the applicable rate (\$36 prior to August 1, 1969, and \$39 after that date).

^fIn view of the division of assignments in 1969 into sectors by nationality of pilots, the transportation charges incurred by Canadian pilots were attributed to Lake Ontario assignments, and those by U.S. pilots were attributed to Lake Erie assignments, District No. 2 pilots having performed no assignments in the Lake Huron/Lake Michigan sector in 1969.

SOURCE: Ex. 1215.

COST TO SHIPPING IN LAKE ERIE SECTOR (UNDESIGNATED WATERS)

Year	Pilots	Pilotage Fees					Recoverable Transportation Expenses*		Grand Total
		Trips	Movages	Detentions and Delays	Cancellations	Berthings*	Total	Total	
1967	District No. 2.....	\$128,675.00	\$ 475.00	\$ 6,538.50	.....	\$31,956.16 ^a	.....	\$11,866.70 ^c	\$179,511.36
1968	District No. 2.....	198,159.00	1,474.50	19,426.25	216.00	37,154.50	256,430.25	17,184.90 ^c	276,736.35
	Lake Huron/Lake Michigan.....	73.00	nil	nil	nil	nil	73.00	nil	73.00
	Total.....	\$198,232.00	\$1,474.50	\$19,426.25	\$216.00	\$37,154.50	\$256,503.25	\$17,184.90	\$276,809.35
1969	District No. 2.....	\$191,169.00	\$ 954.00	\$29,430.75	\$228.00	\$36,965.00 ^d	\$258,746.75 ^e	\$23,645.48 ^f	\$302,827.23

*Recoverable transportation expenses and berthing charges apply only to undesignated waters sectors.

^aCalculated by subtracting all available figures in each undesignated waters sector from total (Can. and U.S. pilots combined) and prorating for each.

^bCalculated by prorating total (Can. and U.S. pilots combined) for each sector of undesignated waters applicable.

^cAs transportation expenses are not detailed and exact segregation by sector is not possible, approximate figures were arrived at by taking the proportion of the undesignated waters trips in each sector.

^dApproximate figure calculated from the number of berthings performed at the applicable rate (\$36 prior to Aug. 1, 1969, and \$39 after that date).

^eCalculated by subtracting all available figures from the Lake Ontario undesignated waters total.

^fIn view of the division of assignments in 1969 into sectors by nationality of pilots, the transportation charges incurred by Canadian pilots were attributed to Lake Ontario assignments, and those by U.S. pilots were attributed to Lake Erie assignments, District No. 2 pilots having performed no assignments in the Lake Huron/Lake Michigan sector in 1969.

SOURCE: Ex. 1215.

**COST TO SHIPPING IN WESTERN SECTOR OF DISTRICT NO. 2
(DESIGNATED WATERS)**

Year	Pilots	Trips	Movages	Detentions and Delays	Cancel- lations	Total
1967	District No. 2.....	\$505,745.00	^a	\$150,207.00	\$ nil	\$655,952.00
1968	District No. 2.....	656,922.00	^a	193,859.35	171.50	850,952.85
	Lake Huron/Lake Michigan ^b	414.00	^a	50.75	nil	464.75
	Total.....	\$657,336.00		\$193,910.10	\$171.50	\$851,417.60
1969	District No. 2.....	618,714.00	^a	126,382.50	459.00	745,555.50

^aA movage in District No. 2 is counted as a partial trip; vide p. 288.

^bU.S. pilots in training as District No. 2 pilots.

SOURCE: EX. 1215.

COST TO SHIPPING IN DISTRICT NO. 3 (DESIGNATED WATERS)

Year	Pilots	Trips	Movages	Detentions and Delays	Cancel- lations	Total
1967	District No. 3.....	\$156,018.00	\$132.50	\$917.50 ^a		\$157,068.00
1968	District No. 3.....	170,802.00	nil	\$742.50	nil	171,544.50
1969	District No. 3.....	145,619.00	39.00	987.75	nil	146,645.75

^aArrived at by subtracting from available total charges for trips and movages.

SOURCE: EX. 1215.

COST TO SHIPPING IN LAKE HURON/LAKE MICHIGAN SECTOR (UNDESIGNATED WATERS)

Year	Pilots	Pilotage Fees					Recoverable Transportation Expenses*			Grand Total
		Trips	Movages	Detentions and Delays	Cancellations	Berthings*	Total	Travelling	Pilot Boats	Total
1967	District No. 2	\$ 38,365.00	\$ 2,467.50	\$ 2,975.00		\$10,320.98 ^a	\$ 54,128.48 ^b	\$ 3,538.09 ^c	\$ 3,647.54 ^c	\$ 7,185.63 ^c
	Lake Huron/	68,720.00	7,862.50	6,246.50		23,610.00 ^e	106,439.00	11,987.19 ^c	9,383.19 ^c	21,370.38 ^c
	Lake Michigan	46,330.00	7,590.00		\$12,491.59 ^a		66,411.59 ^b	7,541.79	11,861.01	19,402.80
	District No. 3									
	Total	\$153,415.00	\$17,920.00		\$55,644.07 ^e		\$226,979.07	\$23,067.07	\$24,891.74	\$47,958.81
1968	District No. 2	\$ 21,189.00	\$ 1,426.50	\$ 3,708.00	\$ 36.00	\$ 1,192.75 ^e	\$ 27,552.25 ^d	\$ 1,837.34 ^c	\$ 333.71 ^c	\$ 2,171.05 ^c
	Lake Huron/	117,837.00	13,216.50	22,133.75	775.00	43,740.25	197,702.50 ^b	21,941.93	12,513.18	34,455.11
	Lake Michigan	68,571.00	29,349.50	15,535.50	396.00	19,888.00	133,740.00	20,153.45 ^c	14,228.35 ^c	34,381.80 ^c
	District No. 3									
	Total	\$207,597.00	\$43,992.50	\$41,377.25	\$ 1,207.00	\$64,821.00	\$358,994.75	\$43,932.72	\$27,075.24	\$71,007.96
1969	Lake Huron/	\$110,439.00	\$ 7,733.00	\$19,320.75	\$ 300.00	\$26,995.70 ^e	\$164,788.45 ^b	\$22,087.15 ^c	\$14,304.68 ^c	\$36,391.83 ^c
	Lake Michigan	89,130.00	51,936.00	17,652.00	978.00	36,233.73 ^e	195,949.73 ^b	26,968.54 ^c	13,314.15 ^c	40,282.69 ^c
	District No. 3									
	Total	\$199,569.00	\$59,669.00	\$36,972.75	\$ 1,278.00	\$63,249.43	\$360,738.18	\$49,055.69	\$27,618.83	\$76,674.52

*Recoverable transportation expenses and berthing charges apply only to undesignated waters.

^aCalculated by subtracting all available figures in each undesignated waters sector from total (Can. and U.S. pilots combined) and prorating for each.^bCalculated by prorating total (Can. and U.S. pilots combined) for each sector of undesignated waters applicable.^cArrived at by subtracting all available figures from total (Can. and U.S. pilots combined).^dArrived at by subtracting totals of other sectors undesignated waters from total for District No. 2 pilots in undesignated waters.^eCalculated by subtracting all available figures—in undesignated waters of Lake Huron/Lake Michigan and Lake Superior, for both Lake Huron/Lake Michigan pilots and District No. 3 pilots—from total (Can. and U.S. pilots combined) and prorating balance per number of berthings performed in each sector.^fAs transportation expenses are not detailed and exact segregation by sector is not possible, approximate figures were arrived at by taking the proportion of the undesignated waters trips in each sector.

SOURCE: Ex. 1215.

COST TO SHIPPING IN LAKE SUPERIOR SECTOR (UNDESIGNATED WATERS)

Year	Pilots	Pilotage Fees				Recoverable Transportation Expenses*		Grand Total
		Trips	Movages	Detentions and Delays	Cancellations	Berthings*	Total	
1967	District No. 3.....	\$ 38,010.00	\$47,391.00		\$19,786.41 ^a		\$105,187.41 ^b	\$121,126.69
1968	District No. 3.....	31,360.00	63,235.00	\$2,862.30	171.50	\$11,331.00	108,959.80 ^b	124,697.25
1969	Lake Huron /	2,962.00	117.00	396.50	nil	6,168.55 ^c	9,644.05 ^b	10,615.50
	Lake Michigan	38,265.00	32,854.00	4,252.25	111.00	8,284.02 ^c	83,766.27 ^b	101,030.27
	District No. 3.....							
	Total 1969.....	41,227.00	32,971.00	4,648.75	111.00	14,452.57	93,410.32	111,645.77

* Recoverable transportation expenses and berthing charges apply only to undesignated waters sectors.

^a Calculated by subtracting all available figures in each undesignated waters sector from total (Can. and U.S. pilots combined) and prorating for each.

^b Calculated by prorating total (Can. and U.S. pilots combined) for each sector of undesignated waters applicable.

^c Calculated by subtracting all available figures—in undesignated waters of Lake Huron/Lake Michigan and Lake Superior, for both Lake Huron/Lake Michigan pilots and District No. 3 pilots—from total (Can. and U.S. pilots combined) and prorating balance per number of berthings performed in each sector.

^d As transportation expenses are not detailed and exact segregation by sector is not possible, approximate figures were arrived at by taking the proportion of the undesignated waters trips in each sector.

SOURCE: Ex. 1215.

(ii) *By groups of pilots*

Because of the direct relation between the cost to shipping (gross pilotage revenue) and the remuneration of the pilots or the share of the net pilotage revenue which is paid to the Canadian Government where the Canadian pilots are Government employees, statistics are available on the cost to shipping for services rendered by each group of pilots in all the various sectors over which their competency extends.

COST TO SHIPPING BY GROUPS OF PILOTS

Year	Group* of Pilots*	Pilotage Fees	Boat Charges	Travel Expenses	Total
1961	District No. 1.....	\$ 578,686.06	\$ n/av.	\$ 7,120.44	\$ n/av.
1962†		628,139.90	‡	13,066.52	641,206.42
1963		617,484.65	15,048.48	11,995.02	644,528.15
1964		607,030.30	1,969.28	1,096.88	610,096.46
1965		673,170.75	2,857.40	1,658.52	677,686.67
1966		667,236.55	543.40	298.81	668,078.76
1967		649,585.98	nil	nil	649,585.98
1968		698,935.30	32.20	57.24	699,024.74
1969		750,568.45	nil	nil	750,568.45
1970		798,003.61	nil	nil	798,003.61
1963	Lake Ontario.....	\$ 96,182.20	\$ 14,542.98	\$ 11,820.41	\$ 122,545.59
1964		106,240.00	18,996.02	12,422.46	137,658.48
1965		115,505.00	22,351.30	15,588.83	153,445.13
1966		139,910.00	28,610.73	26,061.78	194,582.51
1967		153,168.50	30,092.93	28,306.37	211,567.80
1968		184,343.00	34,979.70	29,522.99	248,845.69
1969		205,265.75	36,474.00	31,626.56	273,366.31
1970		297,091.75	13,103.40	11,456.81	321,651.96
1961	District No. 2.....	\$ 901,860.75	\$ n/av.	\$ 9,732.88	\$ n/av.
1962†		965,960.72	n/av.	12,574.24	n/av.
1963		1,142,352.18	5,885.86	9,214.36	1,157,452.40
1964§		1,289,535.00	4,381.00	7,654.19	1,301,570.19
1965		1,518,025.00	8,599.90	13,646.97	1,540,271.87
1966		1,440,540.00	3,348.30	10,681.56	1,454,569.86
1967		1,397,291.00	3,909.48	15,655.27	1,416,855.75
1968		1,825,267.70	3,476.11	19,138.99	1,847,882.80
1969	Can.	891,150.35	290.00	1,335.08	892,775.43
	U.S.	793,170.75	20,435.00	23,645.48	837,251.23
		\$ 1,684,321.10	\$ 20,725.00	\$ 24,980.56	\$ 1,730,026.66
1970	Can.	1,145,596.25	72.00	26.10	1,145,694.35
	U.S.	844,578.40	6,540.00	7,498.80	858,617.30
		\$ 1,990,174.65	\$ 6,612.00	\$ 7,525.00	\$ 2,004,311.65

*Can./U.S. combined, with the exception of 1969 and 1970 District No. 2 pilots.

†Can./U.S. currency without adjustment for premium or discount.

‡Included in piloting charges.

§Including Port Weller harbour pilots.

SOURCES: Exs. 1215 and 1373.

Study of Pilotage in Great Lakes System

Year	Group of Pilots*	Pilotage Fees	Boat Charges	Travel Expenses	Total
1964	Lakes Huron/Michigan....	\$ 84,520.00	\$ 7,758.00	\$ 5,230.76	\$ 97,508.76
1965		84,595.00	7,327.90	6,912.88	98,835.78
1966		130,295.00	11,456.46	9,090.41	150,841.87
1967		106,439.00	9,505.81	12,143.85	128,088.66
1968		197,877.75	12,513.18	21,941.93	232,332.86
1969		174,432.50	14,686.53	22,676.75	211,795.78
1970		359,219.88	5,351.64	10,227.70	374,799.22
1962	District No. 3.....	\$ 315,857.53		\$ 18,146.82	\$ 334,004.35
1963		\$ 318,157.39	\$ 11,155.39	16,213.85	345,526.63
1964		393,475.00	13,111.00	14,907.66	421,493.66
1965		400,175.00	12,413.75	15,936.41	428,525.16
1966		373,165.00	16,352.00	20,454.57	409,971.57
1967		328,667.00	13,737.32	21,604.76	364,009.08
1968		414,251.30	20,741.04	29,378.21	464,370.55
1969		279,716.00	25,137.51	46,972.07	351,825.58
1970		602,232.38	6,198.12	13,073.27	621,503.77

(3) FINANCIAL OPERATIONS

The principles governing the financial administration of the service have remained substantially the same since 1961 and the main changes have been organizational.

As is the case for operations, each pilotage office (U.S. pilots' pool) is an independent, self-supporting unit for financial administration. As the centre responsible for all operational requirements in the area under its jurisdiction, it can not be identified with any particular group of pilots and its operating expenses are met by all the pilots who have the benefit of its services and in relation to such benefit.

A pilotage office's operating expenses are financed from the pilotage revenue derived from those services which originated in the area under its jurisdiction. Hence, *inter alia*, as a means of ensuring that pilots meet their required contribution to these costs, each pilotage office was given full control over the revenue earned by pilots in its area of jurisdiction, including billing and collection of fees and accessory charges related to such services.

When pilotage earnings are collected, they are dealt with as if they belonged to the pilotage office and it pays from them its operating expenses as they are incurred. The operational surplus, or net revenue, belongs to the pilots or their representatives. The exact share of each pilot in the net revenue is ascertained at the end of the navigation season, advance monthly payments are made from funds available after a reserve has been set aside for anticipated expenditures and the final adjustment is effected at the end of the season when final accounting is established. The distribution of their

net revenues to the pilots who participate is on the basis of cash on hand and not earnings.

The first method of distribution, as contained in the 1961 Memorandum of Arrangements, was on the basis of a true pooling of pilotage revenues, with the net being shared on the basis of availability for duty, i.e., "on a pro-rata basis according to the actively participating United States and Canadian registered pilots." This is the ideal method but it applies only when each pilotage office deals with a single group of pilots—this is not the case in the Great Lakes system because of the continuity of the service throughout. In 1961, this caused few difficulties because the pilotage offices were identified with the various District pilot groups, except for reciprocal services in undesignated waters, and this difficulty was solved in the Memorandum by fixing an arbitrary contribution to the operating expenses of a pilotage office by the pilots of another District who had been served by it for undesignated waters assignments. In such a case, billing was done by the despatching District and it retained 25 per cent of the fees collected as its payment for administration (despatching and collecting), the remaining 75 per cent being sent "to the pilot's own District". This arrangement proved unsatisfactory because, except for District No. 3, it did not correspond to reality, since there was no such administrative entity as a Pilotage District (Districts 1 and 2 had two separate, independent pilotage offices within their respective limits).

These arrangements were changed by the first amendment to the Memorandum of Arrangements (entered into force February 21, 1963, with retroactive effect as of October 15, 1962). Dual pilotage pools were established and the original Sailing Master concept again prevailed. Determining a pilot's availability at each of the two pilotage offices in his District must have proved complicated. The net lake pilotage revenues paid to the District by other pilotage offices created more difficulties. These problems were resolved by changing the basis of the distribution of the net revenue to the actual contribution of each pilot to the gross revenue of the office, i.e., "on a pro-rata basis according to active participation by United States and Canadian registered pilots." To avoid double contributions to administrative expenses, as would have occurred if the net earnings remitted by other District offices were included in the pilotage fund of any of the District pools, the reciprocal function for lake assignments was limited to despatching; billing and collecting of fees and accessory charges were made the responsibility of the nearer pilotage office of the pilot's own District. The fees (but not the pilot boat charges) when collected formed part of the revenue of the pilotage office of the District to which the pilot belonged adjacent to the undesignated waters where the services were rendered. Despatching for return lake assignments became a reciprocal service free of charge.

The same principles were retained in the 1966 Memorandum of Arrangements but were expressed more clearly:

"5. (a) The office dispatching a pilot shall be responsible for collecting and accounting for pilotage revenues for that service except that, when a pilot is dispatched by a dispatching office outside his district, the billing and accounting will be the responsibility of the nearest billing office in his own district.

(b) The costs of operating and dispatching and related services shall be determined by the Secretary and the Minister and shall be paid out of the pilotage revenues and, except as provided in paragraph (c), the remainder divided into United States and Canadian shares in proportion to the revenues for pilotage services rendered by United States and Canadian registered pilots, respectively."

By this time, Lake Ontario pilots had been appointed and, although attached for administrative purposes to District No. 1 (in fact, to the U.S. Cape Vincent pilotage office), they formed a separate group. For despatching purposes, they came equally under the jurisdiction of the Cape Vincent and Port Weller pilotage offices depending on the zone of Lake Ontario where they happened to be at the conclusion of a lake assignment. However, being attached to District No. 1, Cape Vincent was their nearer home station and, since they could not perform any in-District assignments, it was their only pilot station. As far as financial administration was concerned, this situation permitted a return to the original method of distributing Cape Vincent net revenues accruing to the lake pilots, i.e., on the basis of daily availability. This amounted to establishing true pooling for the Lake Ontario pilots, U.S. and Canadian alike, their remuneration being unrelated to the aggregate amount of earnings their personal services brought into the common fund (which differed from pilot to pilot because of the different types of assignment given them through the luck of the tour de rôle) but on the basis of the most equitable consideration, i.e., their availability for despatching under common despatching rules:

"(c) The United States and Canadian shares of the pilotage revenues collected for services by pilots registered only for service in Lake Ontario shall be determined on the basis of the number of days on which United States and Canadian pilots, respectively were on duty or available for pilotage service."

The advent of the Lake Ontario pilots created a situation of exception for which no provision had been made. Despatching of Lake Ontario pilots from Port Weller was free of charge (except for pilot vessel service) because the lake pilots were considered District 1 pilots for that purpose. However, when the stage was reached that the lake pilots handled most assignments on Lake Ontario, the balance between despatching services that had existed when lake assignments were performed only by District 1 and District 2 pilots was altered and Port Weller provided many more free despatchings for the so-called District 1 pilots than Cape Vincent for District 2 pilots. The District 2 pilots then requested that the lake pilots be made to contribute to the Port Weller station's operational expenses.

The Port Weller Supervisor of Pilots had already brought the problem to the attention of the Pilotage Authority in his 1964 annual report (Ex 1023):

"We think it appropriate to draw to your attention the volume of work done by this office servicing Lake Ontario pilotage. We would point out that usually much more of the despatcher's time is consumed effecting these despatches because of communication difficulties and the demand for these few pilots.

This service is performed from this office free of charge and we sometimes incur telephone charges in order to effect a despatch when other means of communication are not available.

Part of the earnings of the Lake Ontario pilots is retained by #1 District for billing and despatching services. We are in effect subsidizing #1 District."

In his 1963 report, he had said:

"In addition to the increased paper work in the district business, we have found considerable time is consumed despatching Lake Ontario pilots to service harbour movements in Toronto and Hamilton. We have a record of 710 despatches to these ports and Lake Ontario transits.

This service is supplied at no cost and it would appear now that some despatching fee should be charged for this additional service."

This problem has now been settled. Lake Ontario pilots are now assessed \$1.70 per despatch from the Port Weller office (Ex. 1541(u)).

These arrangements have remained substantially the same. The main modification appeared in the 1969 Memorandum of Arrangements which authorized the Secretary and the Minister to make whatever arrangement they might deem appropriate with regard to financial operations.

For District No. 1, this resulted in centralizing the administration, including its financial operations, in the Cornwall office, and the Cape Vincent station became merely a boarding station. District 1 pilots now come under the jurisdiction of a single administrative authority and there is no obstacle to establishing a true pooling system. This, however, was not done and the distribution of the District pilots' net revenue has officially continued to be effected on the basis of their individual contribution to their pilots' pool (except for the Lake Ontario pilots where a true pooling system was retained). Up to 1970, District 1 pilots were scarcely affected because the same result is arrived at (except for differences caused by the rate of exchange) through the despatching system based on the equalization of trips which the pilots adopted. This ensures an equal division of trip assignments among all pilots and, hence, of their resulting revenues, since the great majority of their trips are full transits carrying an identical charge. The same satisfactory result may no longer be obtained: since the adoption of the weighting factor in July 1970, earnings for comparable assignments may now vary by as much as 52.9% (i.e., between the lowest weighting factor, 0.85, and the highest, 1.30) depending upon the size of the ship. This new factor has rendered the equalization system obsolete as a means of ensuring equitable sharing of pilotage revenues.

The situation with regard to Lake Ontario pilots has remained unchanged except that the administration formerly performed by the Cape Vincent office is now discharged by the Cornwall office which, in addition to handling their despatching for lake assignments through its Cape Vincent satellite office, supervises the pooling of their net earnings from all services they have rendered, including those originating from the Port Weller station to which the \$1.70 flat charge for administration and the pilot vessel service charges continues to be paid.

But for the Canadian Government as employer of the Canadian pilots in the Lake Huron/Lake Michigan sector and District 3 (and to a lesser extent now in District 2), the problem of sharing pilotage revenues equally remains in its entirety. While all pilots in each group, Canadian and U.S. alike, are governed by the same working rules and despatching procedures, the great disparity between assignments precludes an equal sharing of the workload either from the point of view of the number of similar assignments or aggregate duty hours. This proved to be a serious source of contention between the Department of Transport and the Lake Superior Pilots Association operating the District 3 pilots' pool. It was charged that the Canadian pilots were discriminated against by being given fewer but more time-consuming assignments. The result was an above average workload in terms of aggregate time on duty but, under the prevailing arrangements, a smaller share of net earnings. If Canadian participation is to be retained, the only solution to the problem is to establish a true pooling arrangement which will provide each pilot or his representative an equal share of net earnings for equal availability.

The accounting operations of the U.S. pools are governed by regulations made in this connection by the U.S. Great Lakes Pilotage Administrator: "The Great Lakes Pilotage Uniform Accounting System Manual" (46CFR 403). Since the Canadian pilotage offices are operated by the Department of Transport, their accounting procedures are governed by the Department of Transport Accounting Manual, sec. 5, subsec. 3, relating to Kingston and Port Weller Pilotage Authorities (Ex. 1498(c)) and are subject to audit by Government auditors.

Since 1966, the Memorandum of Arrangements has provided that the accounts of each despatching office are to be subject to joint audit by designated representatives of the Secretary and the Minister.

The Memorandum of Arrangements, however, does not provide for the joint approval of proposed expenditures by U.S. pilot pools or Canadian pilotage offices, and the lack of some means of control on behalf of all those who are eventually called upon to pay liabilities so incurred has

caused several serious arguments. One such a case is the 1962 Cape Vincent pilot vessel dispute (p. 217), and others also occurred, mainly in District 3 (pp. 314-5). A principal source of contention under the U.S. system is the distinction made between common operating costs which should be borne by all the pilots who benefit from pool services and the costs that are incurred for the Pilots' Association as such (for the Commission's views on such a situation, vide Part I, pp. 554-6). The complete independence enjoyed by the U.S. Associations in the organization and operation of pool services has also resulted at times in very high operational costs that could have been avoided.

There are no fully informative statistics on the cost of operating pilotage services in the eight Districts and sectors of the Great Lakes system, or with regard to each of the pilots' groups. The Commission has tried to prepare such comparative tables from the available annual financial and audit reports of the five administrative authorities, but the task proved impossible due to the lack of uniformity in accounting systems and the numerous changes in accounting procedures. Since, no doubt, all the financial documents are available at each pilotage office, it might be possible to compute the desired statistics, but the extensive work and cost such a task would have involved were not considered warranted for the purpose of this Report, especially since a sufficient picture can be established from the available statistics and financial statements.

The joint *Statistical Report Great Lakes Pilotage* (Ex. 1542) which is issued annually by the Canadian and U.S. Central Authorities contained, up to 1968, a cumulative table of pilotage receipts and expenditures (shown in U.S. currency) by year (vide *Appendix A*, Part III, Table 7 of the Statistical Report) dividing the information on the basis of the original system of organization by Districts. To appreciate the meaning of the terms *Gross Earnings* and *Expenses* used in this table, reference should be made to Table 3 which shows the details of the figures quoted for the year 1968.

The 1969 annual report did not carry the same cumulative table but contains Table 3 wherein, for the first time (but for District 1 only), a distinction is made between the river (District) pilots and the Lake Ontario pilots. This table is reproduced hereunder (the figures are also expressed in U.S. currency) so as to provide the 1969 figures required to complete the comparison referred to earlier. The segregation between Canadian and U.S. pilots for District 1, Lake Ontario and District 3 is meaningless.

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Therefore, for the purpose of the table below, the figures have been combined. It is, however, quite relevant in District 2, especially in 1969, because of the *de facto* division of the District on the basis of the nationality of the pilots (except for the two Canadian pilots performing special assignments in its western sector).

	Total	District No. 1		District No. 2		District No. 3
		River	Lake	U.S.	Canada	
<i>Revenue</i>						
Pilotage revenue.....	\$3,119,603	\$717,838	\$196,864	\$791,620	\$824,046	\$589,235
Reimbursable subsistence and travel.....	121,729	—	28,880	21,769	1,235	69,845
Reimbursable boat charges.....	94,647	—	34,114	20,408	268	39,857
Reimbursable despatching and accounting charges.....	22,115	16,084	—	3,850	2,181	—
Total revenue ¹	\$3,358,094	\$733,922	\$259,858	\$837,647	\$827,730	\$698,937
<i>Expenses²</i>						
Pilots' subsistence and travel..\$	125,845	\$ —	\$ 28,880	\$ 28,383	\$ 1,235	\$ 67,347
Boat charges.....	227,146	34,693	34,114	42,618	56,446	59,275
Despatching and accounting....	213,635	49,031	18,265	57,754	56,513	32,072
Communications.....	21,025	3,519	—	4,682	2,654	10,170
Other.....	49,315	8,824	—	9,496	5,139	25,856
Total expenses ¹	\$ 636,966	\$ 96,067	\$ 81,259	\$142,933	\$121,987	\$194,720
Excess of pilotage revenue over pilotage expenses ¹						
	\$2,721,128	\$637,855	\$178,599	\$694,714	\$705,743	\$504,217
Number of assignments.....	15,826	2,716	2,266	3,072	4,604	3,168

¹Amounts shown are in U.S. dollars.

²Expenses are those recognized in inter-association settlements.

As a result of the gradual abandonment of the Sailing Master concept of organization, a sector or a group of sectors (except for District 3) has come to be identified with a group of pilots. Therefore, it has been possible from the 1969 financial statements to establish the aggregate amount and details of the operating expenses on such a basis, except for District 3 and the Lake Huron/Lake Michigan pilots who are now attached to it. This study establishes the situation as it now stands.