

(3) PILOTS' ORGANIZATIONS

Apart from the 1850 public Pilot Corporation "The Corporation of the Pilots for and above the Harbour of Quebec" which was never activated (pp. 588 and ff.), at the time of the Commission's hearings the Montreal river pilots were grouped in two separate organizations of their own:

The United Montreal Pilots (Part I, p. 84) was a partnership agreement principally for the purpose of pooling and sharing the pilots' earnings but which also served to promote the professional interests of the group. This voluntary partnership comprised all the Montreal river pilots. It was allowed to lapse when the terminal date set out in the deed, December 31, 1968, was allowed to pass without the deed being extended by a further agreement.

The Corporation of Mid-St. Lawrence Pilots is a professional organization incorporated under Part II of the Federal Companies Act (Part I, p. 88), which had taken over the functions of the partnership and since January 1, 1969, has been the only organization now grouping the Montreal river pilots. It is not yet fully representative because a few river pilots have refused to join.

The administrative division of the Montreal river pilots for despatching purposes did not result in a division of their organizations. The river pilots of both sectors continued to belong to the same organizations and their *de facto* division is very slightly reflected in the internal organization of the Corporation.

The harbour pilots have their own organization. Soon after the creation of the harbour pilots' group, the "Corporation of the Montreal Harbour Pilots" was created by letters patent issued on January 2, 1958, under Part II of the Federal Companies Act (Part I, p. 88). All the harbour pilots are members.

As seen earlier, both groups of pilots are also represented by their own Pilots' Committees, which are distinct entities deriving their existence from the Pilotage District By-law. However, in practice, their functions are exercised by the Board of Directors of the respective Corporations.

The Corporation of Mid-St. Lawrence Pilots and the Montreal Harbour Pilots' Corporation are among the founding group members of the St. Lawrence Pilots' Federation. No doubt because of the dissident river pilots, on January 11, 1960, the United Montreal Pilots also sought admission as a group member, which request was granted (Ex. 1461(f)). This membership automatically lapsed when the United Montreal Pilots ceased to exist, with the result that the two remaining dissident pilots are *ipso facto* no longer active members of the Federation (Ex. 1539(i)).

The fact that both the Association and the Corporation of the Montreal river pilots were group members of the Federation and that, ex-

cept for the dissidents, the two organizations were composed of the same members, did not lead to double representation in the Federation. A practical view was adopted and for the purposes of representation and of assessment the two organizations were considered as one.

The delegate members (one for each 10 active members) are selected by the Corporation's Board of Directors. According to the practice followed, the members of the Board of Directors of the Corporation are *ex officio* delegate members. In addition, defeated candidates also become delegate members unless the general meeting decides otherwise.

(a) *The United Montreal Pilots*

Despite their unremitting efforts, the pilots of the District of Montreal never succeeded in obtaining an Act of incorporation such as was granted to the Quebec pilots in 1860. However, they achieved the same purpose unofficially by voluntarily renouncing free enterprise, arranging their own despatching and pooling their pilotage revenues, all as early as 1873 (vide pp. 592 and ff.). It would appear, however, that the first formal deed of partnership is the one signed December 27, 1918, where the name "United Montreal Pilots" was adopted. This step seems to have been taken in view of the Robb Commission's criticism of the Quebec and Montreal pilots' practice of pooling their pilotage revenues.

The 1918 deed, which was valid for 25 years, was extended for a further 25 years by an agreement signed by all pilots on January 25, 1943, after which it was allowed to lapse on December 27, 1968, (Exs. 771 and 771A). This deed was very similar in nature and content to the deed of *L'Association des Pilotes licenciés pour le Havre de Québec et en aval*, to whose study reference is made (vide pp. 266 & ff.). (Re the aims of the partnership, vide extract of the deed, Part I, p. 86.)

As in Quebec, the Corporation was created with the intention of superseding the partnership. For the same reason as in Quebec, i.e., because some pilots (8 out of 123) refused to join, the partnership was not dissolved, but through the same process its activities were limited to holding the annual general meeting which was merely a *pro forma* proceeding. However, the partnership was later dissolved automatically when its term expired December 27, 1968, without being extended. This created an awkward legal situation for the two remaining dissidents (p. 689) (Corporation's finance).

The procedure was the same as in Quebec. By a majority decision, the partnership deed was purported to be amended to provide for its identification with the Corporation By-laws, the decisions and the acts of which were supposed to be deemed *ipso facto* those of the partnership except when otherwise provided.

(b) *The Mid-St. Lawrence Pilots' Corporation*

Since 1952-53, on account of the increasing number of problems concerning the exercise of their profession, their remuneration and their working conditions, the pilots had been thinking of modifying substantially their partnership arrangement and possibly transforming it into an incorporated professional organization. During negotiation meetings with the representatives of shipping and the Pilotage Authority the pilots came to realize the necessity of having fully mandated representatives to speak and decide in the name of the group on questions of a professional nature.

On January 21, 1958, after hearing reports on the preliminary studies made on these questions by the Board of Directors and by the experts who had been consulted, the pilots at the Association's annual general meeting voted for incorporation and for the creation of a Federation (Ex. 778). At the general meeting of December 29, 1958, an *ad hoc* 14-member committee was formed, comprising the five Directors of the Association and nine pilots, six from the upper sector group and three from the lower sector, with the mandate of preparing a draft of the proposed charter and the necessary By-laws and meeting with the representatives of the other St. Lawrence pilots with a view to achieving a federation.

The Shipping Federation viewed with much apprehension the possible creation of a Pilots' Corporation and even more so a Federation grouping all the St. Lawrence pilots, and did all it could to prevent either becoming a reality (pp. 663 and ff.). This opposition did not improve the already strained relations between the two groups.

At the instigation of the Shipping Federation, the Pilotage Authority tried to dissuade the pilots from proceeding with their plan. Following a decision taken at the highest level of the Department, one of the senior officers of the Department went to Montreal to meet the legal adviser of the pilots. His mission was to express to the pilots' representatives and to their legal adviser the Minister's disapproval of their attempt to seek incorporation.

The charter of the new Corporation—the Mid.-St. Lawrence Pilots' Corporation—was issued by the Secretary of State of Canada on February 2, 1959.

The Corporation's charter, By-laws and structure are in substance the same as for the Lower St. Lawrence Pilots' Corporation which were studied on pp. 275 and ff.

The By-laws have been amended 14 times, the latest amendment being By-law No. 16 amending By-law No. 2 which was deposited in the Department of Consumer and Corporate Affairs on Nov. 19, 1969. By-law 14 is an amendment which provides for proxy voting at elections of Corporation

officers for pilots who can not attend because they are engaged in piloting vessels. This was rendered necessary by the continuing increase in winter navigation when it became obvious that a full attendance of pilots at the annual meeting would amount to a stoppage of work. However, this amendment, although deposited in the Department of Consumer and Corporate Affairs, became effective only in January 1970 when it was approved by the general meeting of the Corporation as required by sec. 85 of the General By-law (Ex. 773), which meeting, in fact, resulted in a stoppage of work, a situation which should not re-occur now that the amendment has been ratified.

Inter alia, the Corporation is purported to have full control over the pilots' earnings and the By-law purports to lay down that a pilot who has joined the Corporation can not withdraw from it of his own volition as long as he remains a licensed pilot, unless he is expelled by a decision of the Board of Directors.

The composition of the Board of Directors reflects the *de facto* division of the pilots. It consists of eight Directors, i.e., a President, two Vice-presidents, the former President *ex officio* and four Directors. The President is chosen one year from the pilots of one sector and the following year from the pilots of the other sector. The First Vice-president is chosen from the pilots of the sector to which the President does not belong and the Second Vice-president is chosen from the pilots of the other sector. The four Directors are selected in equal numbers from each group. The President is on the Board of Directors for two years, one as President and the other *ex officio* as Past President; the Directors are elected for a two-year term, two each year; the tenure of the Vice-presidents is one year. Except for the President and the Past President who can not remain as such for a further consecutive term, all others are eligible for re-election.

The main differences between this Board of Directors and the Association's are the rule that the President and the Past President are not eligible for re-election and the size of the Board—eight members instead of five.

The Directors are remunerated for time spent on Corporation business in the same way as in Quebec, i.e., free turns are granted.

The Secretary-Treasurer or the Secretary and the Treasurer are not necessarily chosen from the Directors, nor do they need to be members. They are appointed together with the other personnel whom the Board of Directors consider necessary to administer the Corporation. In fact, the present Secretary and two accountants in his office are not pilots.

One of the eight dissident pilots at the time of the Commission's hearings, pilot Laurent Hamelin, testified before the Commission and explained the circumstances. The reasons for their stand are the same as those

voiced by the dissidents in the Quebec District. They were satisfied with the partnership agreement but objected to the complete control the Corporation would have over their personal earnings and the wide discretionary powers given to the Board of Directors.

They also were frustrated by the discriminatory way they were treated at the preliminary meetings for the formation of the corporation when they tried to communicate their point of view to their fellow pilots. When a first proposal concerning incorporation was submitted to the pilots, pilot Hamelin and two other pilots consulted an independent legal adviser at their own expense. His opinion was not favourable to the proposal (vide Part I, p. 93). At the next meeting they requested the opportunity to have their legal adviser address the meeting to give their fellow pilots the benefit of his advice. This request was refused by the Chairman although the Association's legal adviser who had suggested incorporation was present. In their view this attitude adopted by the proponents of incorporation confirmed the objections and apprehension expressed in the legal advice they had received. After this, pilot Hamelin decided not to pursue his opposition since he was not in a financial position to oppose those in control of the Association who were in favour of incorporation.

After the formation of the Corporation in the winter of 1959, the dissident pilots received an invitation to attend the Association meeting but not the Corporation meeting which was to be held one day earlier. Following the advice of their legal adviser, pilot Hamelin and two other dissidents attempted to attend the Corporation meeting only to be enjoined by the President to leave since they were not members. The following day, they attended the Association meeting and asked for an explanation of various items on the agenda. However, the other pilots who had attended the Corporation meeting the day before objected to re-opening debate on questions that had already been studied and settled at that meeting. After this frustrating experience they did not attend future meetings of the Association.

Pilot Hamelin charged that the Corporation is much more expensive to operate than the Association was (pp. 693-5).

He objected to the changes the Corporation made in the pooling system and claimed that grading pilots as to competency created dissension because the pool was no longer divided into equal shares but only the remaining money in the pool was divided after bonuses were paid to Grade A pilots.

He complained that the financial statements given to the pilots by the Corporation are incomplete in that they show only the amount of money paid to each pilot out of the pool during the year, but do not indicate the amount his services yielded for the pool and that, therefore, the pilots are

unable to ascertain from these statements the actual cost of operating the Corporation (vide pp. 688 and ff. and pp. 797-800).

Pilot Hamelin stated, however, that there has never been any discrimination against the eight dissident pilots. No pressure whatsoever was exerted on them "to make them change their mind".

He opposed the recommendation of the Pilots' Federation that the administration of the pilotage service be entrusted to the pilots themselves through their Corporation because pilots are not business men and, furthermore, their workload leaves them no time for other business.

He participated in the 1962 strike, not so much out of conviction but to avoid difficulty with his colleagues.

(c) *The Corporation of the Montreal Harbour Pilots*

By the end of 1957, the 12 newly licensed pilots who formed the Montreal harbour pilots' group decided to form a professional organization and, following the example set by the St. Lawrence-Kingston-Ottawa pilots the year before from the ranks of whom some of them were recruited, opted for a corporation.

The letters patent were issued by the Secretary of State January 2, 1958, incorporating them under Part II of the Federal Companies Act (Ex. 792).

The nature of this Corporation and its aims are the same as those of the Corporation of the Lower St. Lawrence Pilots (vide pp. 272 and ff.) and the Corporation of the Mid-St. Lawrence Pilots.

Although, as for other similar Corporations, there is no automatic membership, all the pilots licensed as harbour pilots joined their Corporation as soon as they received their licence. Each also signed a power of attorney in the name of the Corporation authorizing it to receive on his behalf from the Pilotage Authority all pilotage monies owed him (Ex. 793).

The Corporation is administered by a five-member Board of Directors, a President, a Vice-president and three Directors whose term of office is limited to one year. The slate of Corporation officers and Directors between 1958 and 1964 shows that almost all harbour pilots have had an opportunity to sit on the Board of Directors of their professional corporation: 14 out of 16 had by then been Directors for at least one year.

Neither the Secretary nor the Treasurer need be a pilot. In fact, since the creation of the Corporation, these two posts have been entrusted to an insurance broker, Mr. Jacques R. Saucier, as a part-time paid occupation. Mr. Saucier is also Secretary-Treasurer of two other such Corporations, i.e., the Corporation of the St. Lawrence River and Seaway Pilots and the Corporation of the Upper St. Lawrence Pilots. He handles their affairs from his private office.

COMMENTS

As has been the case with the other Pilots' Corporations, all the Montreal harbour pilots who have been licensed since the formation of their Corporation have joined on a voluntary basis. With regard to the other Corporations, the question was raised whether newly licensed pilots are really in a position to make a free decision. They are unlikely to have had an opportunity to obtain details of all the implications and are under considerable indirect moral pressure in that they are in no position to take a firm stand against the group. Their motivation at that time must be to encourage recognition and acceptance by their fellow pilots. In the case of the Montreal harbour pilots, this moral pressure is intensified by the procedure for admission into the service, i.e., the first licence is probationary and a probationary pilot would feel it quite unwise to offend his fellows by refusing to join their Corporation when their favourable appraisal of his professional performance will be a deciding factor when the time comes to obtain his permanent licence. Therefore, it would appear that freedom of decision is purely theoretical and the new pilot has no choice but to join the Corporation. Once he has joined, the by-laws purport to deny him the right to resign his membership. It follows that, in practice, the Corporation is a compulsory professional association. While the result is highly desirable, it is considered that the method is wrong. This situation will be corrected if, as recommended by the Commission, each separate group of pilots automatically forms a statutory professional Corporation (vide Gen. Rec. 25, Part I, p. 549).

(d) *Finance*

While both the River Pilots' Corporation and the Harbour Pilots' Corporation operate as if they were a pooling partnership, their accounting procedure and their financial statements are not comparable because they adopt different pooling methods. Furthermore, although in practice their methods of remunerating the pilots are generally the same, i.e., a pooling system operated by the Pilots' Corporation, the governing legislation is different.

Their respective bookkeeping and records are audited by chartered accountants who certify the Corporations' annual financial statements.

Mid-St. Lawrence Pilots' Corporation

As is the case with the Quebec Pilots' Corporation, the financial operations of the Montreal River Pilots' Corporation extend into two distinct fields, i.e., the Corporation's own financial operations and the management and operation of the pool. By contrast, however, the Montreal By-law recognizes the right of the Montreal river pilots' professional organisation to receive payment of pilotage earnings on behalf of the river pilots and, hence, indirectly accepts their pooling arrangements.

Apart from the question of the By-law's legality, a further problem arose when it was not amended to make the pilots' earnings payable to the Pilots' Corporation instead of the United Montreal Pilots when this partnership was allowed to lapse at the end of 1968. When the Corporation became operative in 1959, it took over administration of the pool from the Association. The By-law, however, was left unchanged, presumably because the Corporation was not fully representative while the Association was. The Pilotage Authority is still making cheques payable to the United Montreal Pilots, which no longer exists, and the Mid-St. Lawrence Corporation has had to resort to the device (of dubious legality, to say the least) of a special bank account in the name of the "Corporation of the Mid-St. Lawrence Pilots in trust for the United Montreal Pilots" to be able to cash cheques and take possession of the pilots' earnings (Ex. 1539(i)). Because of the dubious legality of this By-law provision which is temporarily covered by the interim legislation of sec. 7 of the 1969 amendment to the Canada Shipping Act (p. 571), the Pilotage Authority does not intend to make the necessary amendment until the expected new Pilotage Act is passed (Ex. 1539(j)).

However, the cessation of the Association has complicated the operation of the pool because it is now limited to Corporation members since it is now governed solely by Corporation By-law No. 2. At each distribution, the two remaining dissident pilots are paid the dues they have earned by their services less the Pension Fund compulsory contribution and a prorated contribution toward the Corporation's administrative expenses. They are not made to share in the other group expenses, i.e., the Federation dues, since they no longer belong to the Federation, nor the group insurance premiums from which they no longer benefit. These two pilots, however, are governed by the same despatching procedure but do not profit from the sickness benefits provided under the pool regulations (Ex. 1539(i)). It is, *inter alia*, on account of situations of this nature that this Commission has made its General Recommendation 25 (Part 1, p. 549).

The Corporation's operations are financed in the same manner as in Quebec. Although section 74 of Corporation By-law No. 1 provides for the normal method of financing, i.e., regular and special dues, financial operations are conducted as if the Corporation were the pooling association, i.e., by paying its own administrative expenses as a first charge against the pool. The remarks on pp. 282 and 283 apply here.

The different procedure adopted for financial operations is the result of a basically different pooling system. Despite this difference, the same method of financial reporting is used in both Districts. This accurately reflects the system followed by the Quebec Pilots' Corporation but not the Montreal Pilot's Corporation procedure and, hence, causes considerable confusion.

While the method of determining the number of sharing rights is the same in principle, i.e., using turns, the basis of the value of these rights

and the manner of financing distribution are totally different. The basis of sharing is the aggregate amount of money actually available and not the amount of dues earned; in other words, receipts and not revenue. The only advantage of this system is that there is no problem financing distribution because funds are available to effect immediate payment. (For further comments on the propriety of such a pooling system, vide pp. 793 and ff.) Therefore, there is no advance or interim distribution, each one being complete and final. Hence, the value of a turn varies from one distribution to another within the same year and there are as many pooling periods as there are distributions. With this pooling method the real financial statements are the financial reports which accompany each distribution and not the Corporation's annual statements.

A statement of *Receipts* and *Disbursements* would appear to be the proper method for accounting for such pooling operations. The *Revenues* and *Expenses* statement, which is used instead, not only is meaningless for this purpose but creates confusion by showing large sums of undistributed earning which, if all the funds available were distributed, should then correspond to the accounts receivable, i.e., the dues earned but not yet collected on the distribution date.

Since cash must be retained to meet recurring or expected administrative expenses, this method of pooling makes it necessary to establish reserves which are deducted from the funds being shared. The confusion is further compounded because, as a rule, the net funds available after allowance has been made for these reserves is not fully shared but the amount to be shared is determined by administrative decisions of the Corporation's Board of Directors.

In fact, the procedure followed pertains to a company with shareholders but is inconsistent for a corporation created under Part II of the Federal Corporations Act and with the operation of a pooling system. The Corporation Directors are treating the pilots' earnings as if they were Corporation earnings over which the Corporation has unlimited powers. The aggregate undistributed earnings (cash and receivable accounts) are called the "Corporation Fund", and the pilots' shares take the form of dividends issued out of the Corporation's own profits at the complete discretion of its Board of Directors (this accounts for the even amount of a maximum share from the pool, e.g., the aggregate amount from all distributions in 1966 came to \$16,050; in 1967, \$16,000; in 1968, \$15,475). No doubt this is the cause of the complaint made by some pilots that the Corporation has failed to give a true and complete accounting of their earnings (pp. 686-7).

Exhibit 567, for instance, is the financial report which was sent to the pilots purporting to account for sharing the pool "for the month of May 1963". It consists of three statements:

- (i) an Assets and Liabilities statement showing the financial situation on May 31, after distribution;
- (ii) a Revenues and Expenses statement showing revenues earned and expenses incurred during the pooling period, which in this case corresponded to the month of May;
- (iii) a breakdown per pilot of the "regular distribution".

The *Assets and Liabilities* statement is a balance sheet as of May 31 which, after distribution, shows \$200,710 worth of assets as follows:

Funds available (on hand or in the bank).....	\$	2,067.64
Accounts receivable—		
Dues collected by the Pilotage Authority.....	73,937.62	
Dues earned but not collected.....	112,510.06	186,447.68
Deposit—Quebec-Hydro.....		25.00
Value of furniture less reserve for depreciation.....		12,169.68
Total assets.....	\$	200,710.00

The liabilities section consists of the following (the heading in italics does not appear on the statement, but was added by the Commission for better comprehension):

<i>Corporation's liabilities</i>		
Accounts payable.....	\$	6,582.90
Reserve for administration.....		3,000.00
Reserve for furniture purchase.....		(7,221.56)
<i>Assets belonging to the pilots</i>		
(called the Corporation Fund).....		198,348.66
Total liabilities.....	\$	200,710.00

The statement of Revenues and Expenses shows in the revenues column the pilots' earnings during the month—\$206,849.03 (most of which would account for the \$186,447.68 in accounts receivable shown on the balance sheet). The expenses column shows the aggregate amount of administrative costs of \$5,932.07 but gives no details. It also shows the aggregate amount of the non-pooled items paid to the pilots, the amount paid to the Pension Fund and the distribution of pooled money (called the "regular distribution") that was paid out to the pilots. The total was \$130,127.49, leaving a surplus for the month of \$70,789.47 (which was added to the "Corporation Fund" bringing it to \$198,348.66 as shown in the balance sheet). This "Corporation Fund" was not shared among the pilots to whom it belonged because there was no money available to make a larger distribution. The "Corporation Fund" in this instance represented mostly pilotage dues earned but not yet collected as of May 31.

The third document gives the details of those payments to the pilots called the "regular distribution", i.e., the share of the net pool paid to each pilot. The procedure followed by the Board of Directors in fixing the amount of a given "regular distribution" is, in conformity with the dividend procedure, to establish the amount of the maximum share to be paid, in this case \$930. The amount of partial shares is determined by the pilot's grade and the method of sharing turns. The details of the other pilotage earnings which are not pooled but paid to the pilots (movages, detentions, cancellations, transportation allowances and Grade A bonuses) are shown neither in this statement nor in other sections of the periodic distribution reports. Only the aggregate amount for each item appears in the statement of Revenues and Expenses.

The annual financial report (Ex. 785) takes the form of four documents made up according to the same procedure:

- (i) A balance sheet, i.e., a statement of Assets and Liabilities, shows the financial situation as of the last day of the financial year. The financial year used to coincide with the calendar year but since 1968 has terminated November 30. Therefore, when comparing the 1968 figures with those of previous years it should be borne in mind that the 1968 financial statement covers only 11 months' operations.

This statement, therefore, shows as of the last day of the financial year money still on hand and in the bank account, the various accounts receivable which are segregated by the year in which they were earned and the value of movable assets less depreciation. The liabilities section shows the reserve kept to meet the expected administrative costs of the Corporation, the reserve to compensate for the depreciation of movable assets and, finally, the "Corporation Fund" which, as of December 31, 1967, amounted to \$474,130.12. The fund on hand and in the bank was then \$125,482.06, most of which could have been shared and, according to the pooling rules, should have been shared among the pilots since there were no outstanding payable accounts.

- (ii) A second statement establishes the surplus on hand as of the end of the financial year. It consists of the surplus at the beginning of the year plus the increase or decrease in the two reserves mentioned above and the surplus or deficit of operations for the current year.
- (iii) The third statement is a statement of Revenues and Expenses showing the amount of dues earned by the pilots and other items of revenue to which the pilots and the Corporation became entitled during the year and the liabilities incurred during the year.

For 1967, revenue was as follows:

Dues earned by the pilots.....	\$ 2,523,010.41
Value of free turns paid by the Pilots' Federation.....	13,422.90
Interest on deposits.....	772.34
Total revenue.....	<u>\$ 2,537,205.65</u>

Expenses comprised the following:

Administration (details given).....	\$ 64,911.52
Group expenses (Federation dues, group insurance premiums)	98,437.37
Payments to pilots:	
Regular distributions.....	2,095,668.40
Non-pooled dues.....	170,012.21
Pension Fund compulsory contributions.....	253,788.87
Deficit.....	<u>(\$ 145,612.72)</u>

The deficit shown above is not, in fact, a deficit since the undistributed assets at the end of 1967, after deducting this deficit, still show an undistributed balance of \$474,130.12 (of which \$125,482.06 was in cash). This is a meaningless figure which is the result of adopting for financial statements the normal procedure of reporting the financial operations of a Corporation with its own assets while, in fact, these statements are supposed to report on the operation of the pool.

- (iv) The fourth statement shows what has been actually paid each pilot during the financial year and of what such payment consisted, i.e., his shares of the so-called "regular distributions" and the amount collected of the non-pooled dues he earned. It also shows the number of sharing turns to the credit of each pilot at the end of the year, the number of movages and Grade A trips he performed, the number of his detentions and cancellations and the number of times he was entitled to the transportation allowance for embarking or disembarking at St. Lambert lock. In 1967, the aggregate maximum amount of the shares from the pool for a pilot was \$16,000 and the maximum aggregate amount paid to a pilot was \$19,072.90, not counting the amounts paid on his behalf, i.e., contributions to the Pension Fund and group insurance and his Federation dues.

The confusion between the financial operations of the Corporation and those of the pool have led to the impression that administration under the corporation system has been substantially more expensive than under the association system. This impression, however, is easily dispelled when the annual statement of Revenues and Expenses is studied. By contrast with

the corresponding statement in the Quebec Corporation's financial report, the various items of expenditure are detailed and segregated and it is easy to distinguish those attributable to the Corporation's administration from group expenses and payments to the pilots.

In order to establish the true cost of the Corporation's operations, it is also necessary to obtain the monetary value of the free turns granted the Directors and other pilots for attending to the affairs of the Corporation, and for time spent for the benefit of the pilots as a group. As in Quebec, the practice of granting free turns began with the Corporation. The number of free turns so granted each year appears in the table on p. 795. Since no record was kept of the monetary value of these turns and the value varies from one distribution to another because of the way the river pilots operate their pool, this table shows the average value for the year.

The following table shows for the years 1955-1968 inclusive Association and Corporation expenditures segregated to show separately expenditures incurred as group expenses for the pilots and those for the operations of the Corporation, together with the value of free turns, in order to show accurately the cost of administering the Corporation.

Year	Total expenditures excluding payments to pilots and to Pension Fund	Expenditures other than administrative expenditures*	Administrative Costs		
			Expenditures	Monetary value of free turns	Total
Association					
1955.....	25,807.76	3,950.64	21,857.12	—	21,857.12
1956.....	30,977.93	4,913.88	26,064.05	—	26,064.05
1957.....	47,159.11	5,663.28	41,495.83	—	41,495.83
1958.....	48,389.25	5,328.00	43,061.25	—	43,061.25
Corporation					
1959.....	59,208.47	9,685.07	49,523.40	—	49,523.40
1960.....	67,132.29	16,892.50	50,239.79	11,065.56	61,305.35
1961.....	64,374.97	21,166.00	43,208.97	8,221.46	51,430.43
1962.....	86,188.25	36,925.00	49,263.25	14,677.16	63,940.41
1963.....	117,020.35	71,557.30	45,463.05	20,858.18	66,321.23
1964.....	107,738.28	63,633.64	44,104.64	12,040.50	56,145.14
1965.....	127,860.98	67,023.92	60,837.06	n/av.	n/av.
1966.....	138,854.07	75,794.68	63,059.39	n/av.	n/av.
1967.....	163,348.89	98,437.37	64,911.52	n/av.	n/av.
1968.....	159,057.48	100,079.35	58,978.13	32,486.16	91,464.29

*Not including capital cost of furniture purchased but including the share of depreciation reserve.

Total expenditures, apart from payments to the pilots and the Pension Fund, have increased greatly during the last 14 years (516.3%), but as is clearly apparent from the preceding table this is accounted for by expenditures

on behalf of the pilots for Federation dues and group insurance which have risen from \$3,950.64 in 1955 to \$100,079.35 in 1968. By contrast, administrative expenditures show a slight normal growth since the beginning of the Corporation.

The table p. 696 shows for a few selected years the breakdown of pool expenditures before payment to pilots and Pension Fund.

This table proves that administrative costs have increased at a normal rate taking into consideration inflation, the increase in the number of pilots and the numerous professional problems which required the Corporations' attention. Comparison with the expenses of the Quebec Pilots' Corporation shows that the increase over the same 14-year period has been much less pronounced—Quebec Corporation 298.6%, Montreal River Pilots' Corporation 169.8%.

The item *Statistics* accounted for expenditures incurred by the Corporation to keep accurate and detailed data. This project was discontinued in 1967 because of the cost and time involved and also because the required information is now available through the computer service of the Department of Transport.

Group expenses, however, have increased both in category and amount. The item *Association Dues* now comprises only the Pilots' Federation annual dues and special assessments (compulsory membership in the Canadian Merchant Service Guild was discontinued in 1966). Originally, the pilots did not carry any group insurance but in 1963 life, accident, sickness and group insurance was introduced, followed in 1966 by protection against suspension or loss of licence.

The comments on pp. 289 and 290 apply here *mutatis mutandis*. Vide also the comments on the pooling system, p. 801.

Harbour Pilots' Corporation

The financial operations and financing procedure of this Corporation are the same as those of the River Pilots' Corporation, but their financial statements are not comparable because their pooling systems differ and the regular Corporation's financial reports have been expanded to include a complete, accurate account of pooling operations.

Although no Corporation dues are charged (authorized by Corporation By-law No. 1, sec. 37, and By-law No. 3, sec. 9, Ex. 792), a \$150 initiation fee is imposed on new members pursuant to subsec. 37(a) of Corporation By-law No. 1 (amendment dated October 24, 1960). These fees are entered into the pool and shared with the other pooled revenues. The philosophy behind this charge is that the new members should be made to share in the expense the other pilots have had to bear to organize the Corporation and partial reimbursement is made to the other pilots by entering these fees into the pool. So far such initiation fees have been levied on four occasions.

MONTREAL RIVER PILOTS—ADMINISTRATIVE AND GROUP EXPENDITURES

Item of Expense	United Montreal Pilots		Corporation of Mid-St. Lawrence Pilots	
	1955	1958	1960	1964
<i>Administrative Expenditures</i>				
<i>Staff:</i>				
Salaries.....	\$ —	\$ —	\$ 17,083.46	\$ 17,995.00
Pension Fund.....	—	—	—	673.20
U.I.C. and Quebec Pension Plan.....	—	—	73.96	45.96
	—	—	17,157.42	18,040.96
<i>Office:</i>				
Electricity, telephone, rent and water.....	2,040.50	2,176.57	2,636.70	2,567.07
Insurance: fidelity, fire, theft, etc.....	283.17	285.00	652.07	767.78
Stationery, printing, etc.....	1,068.63	811.50	2,406.25	2,735.70
Stamps, telegrams and maintenance.....	532.46	541.53	1,546.80	1,239.12
Reserve for depreciation.....	788.30	830.14	1,346.71	1,621.10
Directors and Committees.....	4,528.21	4,545.42	9,588.10	7,700.31
Legal, advisers, auditors, economists: fees.....	12,120.50	32,636.58	14,393.75	5,942.79
Royal Commission on Pilotage.....	—	—	—	1,724.90
Statistics.....	—	—	—	1,140.95
Miscellaneous.....	495.35	1,234.51	511.99	623.96
Total administrative expenditures.....	21,857.12	43,061.25	50,239.79	44,104.64
<i>Group Expenditures</i>				
Group insurances.....	—	—	—	31,899.64
Insurance certificates.....	—	—	—	3,976.00
Dues to Associations.....	3,950.64	5,328.00	16,892.50	31,734.00
Total group expenditures.....	3,950.64	5,328.00	16,892.50	63,633.64
Grand Total.....	\$ 25,807.76	\$ 48,389.25	\$ 67,132.29	\$ 107,738.28
				\$ 159,057.48

SOURCE: Ex. 785.

There is also a difference from the point of view of the governing legislation: not only does the By-law not recognize the right of the Corporation to receive the pilots' earnings but it specifically establishes the method of remunerating the harbour pilots, i.e., a pooling system based on availability for duty, operated and managed by the Pilotage Authority itself (By-law sec. 46). This procedure was originally followed but was discontinued when the Authority was furnished with a power of attorney signed by each pilot authorising the Authority to pay the dues he earns to the Corporation on his behalf (Ex. 1501(a)). Since then the Pilotage Authority has handed over to the Harbour Pilots' Corporation all dues collected for movages in the harbour of Montreal, whether or not performed by harbour pilots, and has left it to the Corporation to distribute the earnings to the harbour pilots through the pooling system they themselves devised.

Because pooling operations are combined with the Corporation's operations, the regular financial statements of the Corporation would be almost meaningless if they were not supported by two statements which, by contrast with those of the Montreal River Pilots' Corporation, show complete details of the pooling system which disposes of all earnings. This can be achieved because the harbour pilots have adopted a true pooling procedure which is the same as the one in force in the Quebec District, except for the method of paying the pilots their share of the distribution. The pooling period extends over the calendar year; the number of sharing rights is determined by turns, i.e., in relation to work done; the value of the sharing rights is established on the basis of dues earned during the pooling period but shares are paid only out of dues so shared and as they are collected. Hence, the operations of a pooling period are not closed until the last of the pilotage dues for that pooling period are collected or are written off as bad debts.

The annual financial report (Ex. 802) comprises three statements:

- (i) a balance sheet as at the end of the financial year;
- (ii) a statement of Receipts and Disbursements for the financial year together with a supporting table giving details of payments made to each pilot on his share and other money owed him from the current pooling and on any outstanding balances from previous distributions;
- (iii) a complete financial statement amounting to a statement of Revenues and Expenditures explaining the pooling operations with its two supporting documents, a detailed statement of pool liabilities and a statement showing for each pilot the amounts to which he is entitled from the pool, what has been paid on this during a pooling period and what remains to be paid at the end of the pooling period.

The first statement is a balance sheet showing the situation as regards the Corporation's assets and liabilities at the end of the financial year, i.e., December 31. The only items in the assets column are "Money on hand

Study of Montreal Pilotage District

and in the bank" and "Accounts receivable". Because of special arrangements the Corporation was able to make, it does not own any office furniture or movable assets. The relatively small amount of administrative and clerical work is handled on a part-time basis by the Corporation's Secretary and Treasurer in his own personal office. The Corporation does not maintain any Corporation Fund or any reserve. In view of the method adopted for distributing each pooling, the accounts receivable are segregated by pooling periods. As at December 31, 1968, the balance sheet showed the following assets:

BALANCE SHEET

<i>Assets</i>	
Money on hand and in the bank.....	\$ 3,013.46
Accounts receivable for dues earned	
1966 season.....	\$ 36.80
1967 season.....	297.66
1968 season.....	39,310.43
	39,644.89
Total Assets.....	\$ 42,658.35

The liabilities section reflects the pooling system and the method of financing. Pooling is operated on the basis of earnings and liabilities. Liabilities incurred during a given pooling period which are outstanding at the end of that period are met only from the earnings of that period when they are collected. Administrative expenses are given priority over the outstanding balance of general distribution. No reserve is held for operating expenses that will be incurred at the beginning of the next pooling period; these are being met by borrowing from the money on hand and by effecting reimbursement as soon as sufficient funds become available from the pooling period concerned. Since all the earnings enter in the computation of the pilots' shares, there is no undistributed amount carried over to the next pooling period but only payable accounts.

Liabilities at the end of the 1968 financial year were as follows:

<i>Liabilities</i>	
Accounts payable for administrative costs.....	\$ 492.98
Accounts payable to the pilots	
Non-pooled money 1967 season.....	\$ 8.47
Non-pooled money 1968 season.....	4,153.93
Pooled money 1964.....	193.50
Pooled money 1966.....	105.70
Pooled money 1967.....	1,885.00
Pooled money 1968.....	35,818.77
	42,165.37
Total Liabilities.....	\$ 42,658.35

The second document is a statement of receipts and disbursements for the financial year which, therefore, reflects only cash transactions.

The receipts section first shows funds on hand and in the bank on the first day of the year, and then lists the aggregate pilotage dues collected by the Pilotage Authority and remitted to the Corporation during the year segregated by the pooling period to which they belong. Receipts for the year 1968 were as follows:

Cash on hand and in bank January 1, 1968.....		\$ 26,446.97
Receipts 1964 season.....	\$ 112.50	
Receipts 1966 season.....	72.45	
Receipts 1967 season.....	25,310.42	
Receipts 1968 season.....	228,930.70	
		<u>\$ 254,426.07</u>
Total.....		\$ 280,873.04

The disbursements statement shows payments made for administrative expenses during the year or outstanding from the previous year, payments for group expenses, i.e., Federation dues and group insurance, various payments to the pilots on the outstanding balance of their shares and other money owed them from various pooling periods and, finally, money on hand and in the bank at the end of the year. Disbursements for 1968 were as follows:

Administrative expenses		
Payment of outstanding accounts from the previous year.....	\$ 1,447.31	
Current costs.....		10,174.29
Group expenses		
Federation fees.....	\$ 3,500.00	
Group insurance.....	11,681.56	
		<u>15,181.56</u>
Payments made to the pilots		
Detentions 1964.....	6.00	
Detentions 1966.....	3.45	
Detentions 1967.....	3,494.97	
Detentions 1968.....	15,534.60	
		<u>19,039.02</u>
Net pooling 1967.....	45,017.40	
Net pooling 1968.....	187,000.00	
		<u>232,017.40</u>
Total disbursements.....	\$ 277,859.58	
Cash on hand and in the bank December 31, 1968.....		\$ 3,013.46

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

A third document is the calculation and distribution of the current pooling which is operated on the basis of revenues and expenditures. It shows all pilotage earnings, including those that belong to the Receiver General of Canada (radiotelephone rental charges) for the pooling period which corresponds to the calendar year. This is done by adding all the invoices sent by the Pilotage Authority for pilotage dues payable on account of movages in the harbour of Montreal and accessory dues earned by harbour pilots, i.e., detentions and cancellations. The net pooling is obtained by deducting earnings that do not enter into the pool, i.e., radiotelephone rental charges which belong to the Receiver General of Canada, detentions and cancellation charges which belong to the pilots concerned and administrative expenses incurred during the year. The amount left is the net pooling from which the pilots' shares are established. These shares are listed in one of the supporting documents.

In 1968, the net pooling income amounted to \$238,000.33 entitling each pilot to a share of \$11,900.00 plus 1 or 2 cents. The calculation of the net pooling income was as follows:

1968 earnings.....	\$ 269,946.13
Less:	
radiotelephone rental charges.....	\$ 1,590.00
detentions and cancellation charges.....	19,688.53
expenses for administration.....	10,667.27
Net pooling income.....	\$ 238,000.33

This is followed by a section showing how much of the net pooling income was paid to or on behalf of the pilots and how much still remains outstanding. The breakdown per pilot is given in the supporting documents. For 1968, this was shown as follows:

Payments made:	
On behalf of the pilots (insurance premiums and Federation dues).....	\$ 15,181.56
To the pilots.....	187,000.00
Balance of net pooling outstanding as payable accounts to the pilots.....	35,818.77
Net pooling income.....	\$ 238,000.33

The Harbour Pilots' Corporation financial statements clearly segregate group expenditures paid out of the pool on behalf of each individual pilot from administrative expenses. However, for comparative purposes they are grouped here (p. 701) in the same manner as on pages 284 and 694. Also to establish the real cost of administration, the value of free turns granted the Corporation Directors is indicated and added. The table is established on the basis of liabilities (not expenditures).

Year***	Total liabilities prior to distribution	Liabilities other than administrative liabilities	Administrative Cost		
			Administrative liabilities	Value of free turns**** to Directors	Total
1959/60.....	16,808.46	10,602.45*	6,206.01	nil	6,206.01
1960/61.....	14,141.32	9,633.26	4,508.06	1,332.09	5,840.15
1961**.....	15,715.40	10,514.40	5,201.00	819.54	6,020.54
1962.....	16,850.89	10,642.88	6,208.01	2,537.60	8,745.61
1963.....	20,750.17	11,794.53	8,955.64	4,130.28	13,085.92
1964.....	21,570.22	11,778.28	9,791.94	3,185.52	12,977.46
1965.....	26,513.02	17,579.80*	8,933.22	2,133.81	11,067.03
1966.....	29,245.32	19,659.48*	9,585.84	1,739.99	11,325.83
1967.....	25,206.94	15,224.41	9,982.53	1,764.85	11,747.38
1968.....	25,848.83	15,181.56	10,667.27	3,631.88	14,299.15

* including salaries of apprentices.

** 1/3/61-31/12/61 change from fiscal year to calendar year.

*** year 1958/59 not shown due to lack of complete information.

**** vide tables pp. 694 and 726.

The nature and amount of the various items of operating expenditures are fairly constant from year to year. The following is a breakdown of the Corporation's expenses for 1968:

Administrative Expenses

Secretary and Treasurer's remuneration.....	\$ 4,600.00	
Legal expenses.....	3,177.10	
Supervision of free moves.....	202.00	
Meeting expenses.....	271.59	
Expenses paid to Directors.....	934.19	
Convention expenses.....	425.85	
Stationery.....	152.44	
Telegrams and telephone.....	48.49	
Postage.....	62.00	
Bank charge.....	15.30	
Expenses for Royal Commission.....	51.50	
Christmas gifts and flowers.....	271.81	
Audit.....	450.00	
Miscellaneous.....	5.00	
		\$ 10,667.27
Other disbursements from the pool		
Insurance premiums.....	11,681.56	
Federation fees and conventions.....	3,500.00	
		15,181.56
Total disbursements from the pool prior to distribution to pilots.....		\$ 25,848.83

There is also an item of expense which occurs infrequently: apprentices' remuneration. It has always been the policy to remunerate harbour pilot candidates during their short training period. The necessary funds for the first group in 1957 and 1958 were provided by members of the Shipping Federation (pp. 677-8), and for later trainees by the harbour pilots from the pool as part of their administrative expenses (p. 679). To date, the pilots have paid the following amounts: 1959/60—\$1,890; 1965—\$4,800; 1966—\$4,180.

The Secretary's remuneration is 1.25% of the dues collected. The item of "Supervision of free moves" is the remuneration which is noted each year for the pilot who is charged with the responsibility of establishing which movages were effected without pilots by ships subject to the compulsory payment of dues.

The comments on pp. 289 and 290 apply *mutatis mutandis*. For the study of the pooling procedure and the Commission's comments, vide pp. 803 and ff.

(4) CONFLICTS BETWEEN PILOTS, SHIPPING INTERESTS AND PILOTAGE AUTHORITY

The tension and misapprehension that had been developing for many years can be mainly attributed to the following basic causes:

- (i) failure on the part of the Government and the Pilotage Authority to realize that the principles on which the statutory pilotage legislation was based no longer corresponded to modern requirements for the provision of an efficient, reliable pilotage service;
- (ii) unrelenting efforts on the part of the shipping interests to retain antiquated principles, such as free enterprise, keeping pilotage an open profession, the unrestricted right of a Master to choose his pilot, identification of the shipowner's interest with public interest, the special pilot system and denial to the pilots of the right to group themselves in a professional Corporation;
- (iii) insistence by the pilots, despite changing times and possible conflict with public interest, on assuming direction of, and responsibility for, the pilotage service.

The climate thus created caused an increasing number of conflicts which resulted in threats of strikes, and even strikes in 1898 and in 1962, and which also reflected adversely upon the quality and efficiency of the service. The Commission has reviewed and analysed the case histories of these conflicts and other similar occurrences in other Districts and with this background has formulated its General Recommendations (Part I, pp. 455 and ff.).

Since 1850, the pilots have been trying to obtain complete control over the provision of pilotage services and the exercise of the pilots' profession.

in the Montreal District. In substance, the pilots' requests today are the same as when they sought incorporation through an Act of Parliament in 1850 and later made repeated but unsuccessful attempts which led to the 1898 strike. Although the governing provisions of the statutory legislation have remained substantially unchanged, the factual situation is completely different in that the Pilotage Authority has recognized the necessity for a fully controlled service and has taken responsibility for its direction in the public interest.

For details of the conflicts between 1850 and 1954, vide pp. 587 and ff.

The pilots have retained an unfavourable impression of their relations with the Shipping Federation prior to 1956. Pilot Orance Hamelin complained about the overbearing, paternalistic attitude of the shipping interests at that time. He complained that the Federation acted as if it were the Pilotage Authority in that it convened the pilots to meetings for the purpose of studying pilotage problems and tariff matters but did not afford them an opportunity to present their point of view and then imposed decisions which it had previously arrived at. He stated that this situation arose because the pilots were not organized as a group and came to these meetings without sufficient background knowledge of the problems to be discussed. Although they undertook the necessary studies among themselves, they were unsuccessful because they lacked the advice of experts. These meetings were generally held in the premises of the Shipping Federation and were also attended by representatives of the Department of Transport who frequently arrived before the pilots' representatives. It was at one of these meetings that a representative of the Shipping Federation is said to have reproached the pilots for appearing without being properly organized and with no designated spokesman. It was at that time that the pilots decided never to attend future meetings without the assistance of someone who could speak for them.

The Montreal pilots then began serious studies of their problems and sought the advice of experts. This resulted in a brief they presented to the Pilotage Authority on March 8, 1957, which marked a turning point in relations between the pilots, the shipping interests and the Pilotage Authority. In this brief the pilots took the initiative and recommended the partition of the Montreal District into three distinct, autonomous Pilotage Districts, the abolition of the special pilot system and a substantial increase in rates. After prolonged, laborious negotiations between the pilots, the Shipping Federation and the Pilotage Authority, a compromise on two of the points was reached: half the requested increase in rates was granted and the division of pilotage duties was adopted as it exists today, i.e., the harbour pilots group was created and the *de facto* division of the District at Trois-Rivières was recognized for assignment purposes.

In a new brief in 1958 the pilots sought a completely new tariff structure but the Shipping Federation objected on the grounds that the proposed

changes were too involved to be fully studied in the time remaining before the opening of the navigation season and that, according to preliminary estimates, they would result in an unwarranted increase in pilotage revenue. The pilots and the Pilotage Authority agreed that consideration of the proposal should be postponed until after the next navigation season and that the consequences of the proposed system would be appraised in the interval. It was further agreed as an interim measure to grant a slight increase in the basic rates and to modify the detention provision.

In 1958, following the recommendations of the Shipping Federation, the Montreal Advisory Committee was created, principally to serve as a forum for negotiations between the parties involved. Many questions were debated, some successfully, e.g., the abolition of the special pilot system and the institution of pilot grades. The use of the Advisory Committee as a forum was abandoned because both the pilots and the Shipping Federation by-passed the Committee to make direct representations to the Pilotage Authority in Ottawa. The last such meeting was held February 27, 1959. For a summing up of the Committee's activities and the gradual deterioration of relations between the parties involved, vide pp. 661 and ff.

The main factor which seems to have caused the Shipping Federation's change of attitude towards the pilots was the intention of the pilots to group themselves in a professional corporation, which proposal the Federation tried to oppose by all means at its disposal from the moment it came to its knowledge. On January 7, 1959, in a letter addressed to Mr. A. Cumyn, Director of Marine Regulations, the Federation asked that action be taken by the Department of Transport to prevent the proposed incorporation, arguing that, if such a corporation were created and allowed to pool the pilots' earnings, it would in effect create a "closed shop" because the individual pilot would have no alternative to becoming a member of the corporation. They feared that the creation of a corporation would have the effect of concentrating authority in the hands of a small minority, the Board of Directors, which would act in the name of the group and the control it would have over the pilots' earnings could exercise undue pressure on the individual members. Furthermore, the Federation feared that the creation of a corporation would seriously restrict the efficiency of the control of the Pilotage Authority over the cost of the service and the discipline of pilots. As an alternative to incorporation, the Shipping Federation recommended that the pilots become Government employees. It would appear that this was the first time this proposal was made.

The Department of Transport had no legal means at its disposal to prevent the pilots from obtaining the type of incorporation they were seeking, i.e., under Part II of the Federal Companies Act, as had already been granted to other groups of pilots but, as seen earlier (p. 684), it tried unsuccessfully to dissuade the pilots.

At that time, the Shipping Federation experienced further disappointment when, despite its opposition, a 6 per cent increase was granted and the Pilotage Authority was legally unable to force the river pilots to terminate or commence a river trip at St. Lambert lock and yielded to the pilots' demand for an additional charge to compensate for the increase in length of the river trip (vide pp. 628-9).

In August 1959, the River Pilots' Corporation requested a 50 per cent surcharge for trips effected during that part of the year when adverse conditions usually prevailed, i.e., between November 1 and April 30. This proposal was considered unacceptable. Finally, a compromise was reached but only after difficult negotiations during which it was feared the pilots would resort to strike action. This threat induced the Pilotage Authority to seek the support of the shipping interests to prepare for such an eventuality. By Order in Council dated December 3, 1959, a compromise solution was approved by granting an hourly remuneration of \$3 not to exceed \$25 for each hour over 10 hours for a trip between Quebec and Trois-Rivières or Trois-Rivières and Montreal during the period of the year when navigation may well be hampered by ice, i.e., December 14-April 8.

In 1960, the parties became more entrenched in their positions. The pilots had become more conscious of their strength and, in order to present a united front, their members in the St. Lawrence Districts grouped themselves in a Federation. The St. Lawrence Pilots' Federation was granted its charter on November 5, 1959, and played a very active rôle.

On the other hand, the shipping interests had formed the opinion that the pilots' income had become disproportionately high and that the time had arrived to find a solution to the problem. Two facts contributed to this impression. First, there had been a sharp increase in gross pilotage revenues in 1959. In fact, that year had been exceptional. The opening of the Seaway had brought about a substantial increase in maritime traffic resulting in an increase of 33.76 per cent in the aggregate earnings of the river pilots and 90.53 per cent for the harbour pilots, instead of the 6 and 12 per cent that had been aimed at when, following the pilots' request, the Pilotage Authority, despite the opposition of the shipping interests, had increased the rates the year before. The Shipping Federation became determined that such errors in calculation should not be allowed to recur and decided that in future negotiations on rates a target income should first be established and the rates adjusted thereafter to meet the target. The Shipping Federation had come to realize that, contrary to the stand they had taken up to then, the pilots' status was not that of free entrepreneurs but of employees or quasi-employees of the Pilotage Authority. Hence, their remuneration would be a salary either directly or indirectly through a target income (Part I, pp. 144 and ff.)—a system that had already been adopted in England following the Letch Committee Report (Part I, p. 807). From 1960 on, the Shipping Federation was

to concentrate all its efforts on having this point of view accepted, and even went so far as to seek the support of public opinion.

The Shipping Federation's contention was supported by the statistics prepared by the Department of Transport relating to earnings and workload of pilots in the various Pilotage Districts which the Department had begun to publish that year. These statistics, especially the *effective pilot* figures, conveyed a false picture of the individual pilot's workload and earnings to the disadvantage of the pilots (Part I, pp. 147 and ff.). As was to be expected, since these statistics were taken at their face value by the shipping interests and the Pilotage Authority but were rejected by the pilots, negotiations were bound to be not only fruitless but likely to do further damage to relations between the parties.

On January 21, 1960, in a private meeting with the Deputy Minister of Transport, the Shipping Federation explained its apprehension. It argued the necessity of establishing criteria for fixing the pilots' remuneration, and the advantage of proceeding toward a certain equalization of income of the pilots in the various Districts. It felt that the question of pilots' remuneration should be considered as a whole and not piecemeal as had been the case so far. Experience had shown that an increase in the level of pilots' income in one District resulting from an increase in rates or a modification in the rate structure adopted because of the pilots' pressure was bound to result in demands by pilots of other Districts for modifications in their rates to bring their income to the new level. Apparently the Department was favourably impressed.

At the meetings which followed beginning on February 4, 1960, negotiations with pilots on rates were dealt with on a regional basis. The Shipping Federation tried without success to have the target income concept accepted.

Despite the fact that most of the pilots' proposals were either rejected or postponed, the shipping interests were disappointed by the lack of support they had received from the Pilotage Authority. In reply to the Deputy Minister's letter dated March 25, 1960, informing the Federation as to decisions reached by the Pilotage Authority on the pilots' proposals, the Shipping Federation expressed its general dissatisfaction in a letter to the Deputy Minister (Ex. 726).

"I have been directed to express the disappointment of our members in the general terms of your letter, particularly with respect to a number of items which are subject to further discussion between the shipping interests and the various St. Lawrence River Pilotage Districts. It is the view of our members that any uncertainty which may be shown by the Department can only lead to difficulties and in fact invite the same type of differences and difficulties with which we were plagued continuously during the 1959 season. If the Department feels it is unable to take a definite and firm stand on these items at this time, it is urged respectfully that any further discussions or negotiations with the pilots should be deferred until the close of the 1960 navigation season, which is in line with the policy previously advocated by your Department."

In this letter, the Shipping Federation renewed its 1957 proposals for the creation of a Central Pilotage Committee free from political pressure to act as adviser to the Pilotage Authority on matters relating to pilotage. If this recommendation were not implemented, the Federation requested the creation of a Commission of Inquiry to investigate pilotage problems in the St. Lawrence River area. The last paragraph of the letter explains the shipowners' point of view at that time:

"You will recall that over the past few years the Federation has, from time to time, revealed to your Department the necessity for more adequate control of pilotage in general, and that such control should be as free as possible from political pressures. The Federation is convinced that the time has now come when the Hon. Minister of Transport, as Pilotage Authority, must bring to a halt, by one means or another, the rapidly deteriorating situation due to the apparent refusal of pilots to accept any form of proper control, as evidenced by their continuing determination to demand unreasonable rewards and conditions."

The shipowners were convinced that their point of view was shared by the officials in the Department of Transport and that it had not prevailed only because the pilots had had political pressure brought to bear on the Minister who had the final responsibility for decisions. It was apparently for this reason that the Shipping Federation decided to appeal to public opinion.

In the spring of 1960, the Shipping Federation published and distributed a pamphlet (p. 349 and Brief 27, Vol. II, App. (49)) urging the creation without delay of a Royal Commission of Inquiry to inquire into the pilotage problems in the St. Lawrence region and stating the facts and arguments they had in support. Basing their argument on the statistics furnished by the Department of Transport, the Federation complained against the exaggeratedly high level to which the pilots' income had been allowed to rise, and denounced the procedure being followed to establish the rates, i.e.; by allowing pilots to participate in negotiations on tariff charges rather than limiting their intervention to fixing the amount of the annual remuneration they should receive, i.e., their target income or salary. They further contended that the pilotage service was organized in such a way that a small group of pilots could, by lobbying and personal contact with their Members of Parliament, bring undue political pressure to bear upon the Pilotage Authority, the Minister of Transport.

The publication of this pamphlet generated a spirited reaction by the pilots: they distributed *communiqués* to the press presenting their own point of view and accusing the Shipping Federation of distorting the facts.

It was in this tense atmosphere that negotiations were resumed in 1960. The pilots became extremely sensitive to all references to their earnings. In a new brief to the Pilotage Authority, the Pilots' Federation attacked the

methods used by the Department of Transport to establish pilotage statistics and set out six problems to which they demanded solutions:

- (i) foreign pilots piloting in Canadian waters;
- (ii) shipping representatives on the Board of Examiners;
- (iii) failure by the Pilotage Authority to readjust the tariff to compensate for the loss of unofficial revenue by the Quebec pilots following the abolition of the special pilot system and the adoption of the grade system;
- (iv) inadequacy of certain moorage rates in the harbour of Montreal;
- (v) undue delays in the collection of pilotage dues;
- (vi) delays by the Pilotage Authority in settling certain pilotage problems.

When the Shipping Federation was given a copy of the brief it is said to have been informed by the pilots' representative that they had told the Deputy Minister they would resort to strike action if their demands were not satisfied within a reasonable period of two weeks.

The Pilotage Authority did not yield to the pilots' pressure and, in a letter dated September 9, 1960, to the Pilots' Federation, the Minister of Transport reaffirmed the previous decisions taken on these various points, except for moorage rates in the harbour of Montreal which would be considered as soon as the statistics for 1960 became available.

The pilots, however, continued their efforts and succeeded in obtaining satisfaction for most of their demands when a new Minister of Transport was appointed, thereby averting the strike. For details, vide pp. 345-356.

For the purpose of the meetings to be held in the winter of 1961 when the tariff in the St. Lawrence River Districts were to be studied, the Shipping Federation, on December 14, 1960, submitted a brief to the Pilotage Authority (Ex. 688) which contained five basic recommendations:

- "(1) THAT the pilots in the St. Lawrence River Districts be appointed civil servants, or alternatively.
- (2) THAT the Pilotage Authority allow the shipping industry and the pilots to establish by collective bargaining a mutually satisfactory level of income for the pilots in each district and that, with such level of income being then guaranteed by the Government, the tariff required to produce such guaranteed income be then negotiated between the shipping industry and the Pilotage Authority.
- (3) THAT steps be taken to abolish the Corporations grouping the various pilots in the four districts of the St. Lawrence River or, if they are to remain in existence, that the Pilotage Authority exercise a very strict supervision over them and arrange the audit and inspection of the administration and operation of pools presently under their control.
- (4) THAT the Office of the Wreck Commissioner be re-established as it was formerly constituted for the purpose of holding public enquiries into shipping casualties in the St. Lawrence River and adjoining waters.
- (5) THAT the shipping industry be allowed to be represented on the Boards of Examination and Selection of Pilots."

Because its brief did not receive the expected support from the Pilotage Authority, the Shipping Federation, after having consulted the Dominion Marine Association and the Canadian Shipowners' Association, decided that it was preferable not to attend the winter meeting which had been convened for January 3, 1961.

The Federation was informed of the outcome of the meeting, first by a telegram from the Minister dated January 13, 1961, and by a copy of the minutes of the meeting which was forwarded later. As was to be expected, its point of view had not prevailed.

In order to press its proposals forward, the Shipping Federation decided to make representations directly to the Minister. The meeting took place February 7, 1961. The Minister did not believe in the possibility of making basic changes in the existing system but was more favourable to the question of establishing a target income and a guaranteed annual income. It was noted that in such a system there would be no place for negotiations on minor tariff items.

On March 17, 1961, at the annual convention of the Pilots' Federation, the Minister reminded the pilots that, if the provision of their services were to be subjected to unreasonable and unacceptable conditions, or if the way these services were being provided did not give satisfaction to the users, the pilots' own interests might thereby be placed in jeopardy, since it was to be expected that in the circumstances the shipowners might try to find an alternative solution.

At that time, the Pilotage Authority began to accept the principle of the Shipping Federation's proposal and in a letter dated May 24, 1961, the Minister informed the Shipping Federation that in future negotiations the pilots' representations on tariff items would no longer be considered "except where, for example, a matter of working conditions or hours of work might be involved."

In December 1961, the Federation of Pilots proposed to the Shipping Federation to hold between them preliminary meetings to the regular winter meetings. These meetings, however, did not take place, the pilots not having replied because the Shipping Federation had posed as a prerequisite that the principle of an annual guaranteed income be first accepted by them.

In February 1962, the Shipping Federation took the initiative for a meeting with the high ranking officers of the Department of Transport. At this meeting, the Deputy Minister is reported to have informed the Shipping Federation that the Department was in agreement with the target income proposal and that, following studies at the Departmental level, a \$12,000 annual income figure had been arrived at.

A meeting of all the interested parties was held in Montreal on February 26 and 27, 1962. The Pilots' Federation submitted a brief for each of the St.

Lawrence Pilotage Districts seeking further tariff revision in order to increase the gross pilotage earnings in each of them. The Department of Transport representatives urged the pilots to accept instead the principle of a guaranteed annual income but their efforts were met by strong opposition on the part of the pilots who refused to make this matter a subject for negotiations. Agreement was reached only on questions which did not conflict with the guaranteed income system; on the remaining questions, negotiations became deadlocked and the meeting broke up.

In a letter to the Deputy Minister, dated March 9, 1962, the Shipping Federation urged that steps be taken to resolve the questions of the method of calculating effective pilot statistics and the acceptance of a guaranteed annual income.

In the meantime, the Shipping Federation was trying to arrive at an agreement with the Montreal harbour pilots by direct negotiations. At a meeting held on March 8, 1962, the harbour pilots submitted that if their request for an increase in the moorage rates were granted they would in turn agree to a two-year rate freeze during which they would give consideration to the target income proposal and the amount to be guaranteed. On March 14, the Shipping Federation replied with a counter proposal: the moorage rates would be raised as requested provided the pilots gave their immediate approval to the policy of stable remuneration based on a target income proposal. These direct negotiations failed because the Pilotage Authority, without the Shipping Federation's knowledge at the time, had already approved the harbour pilots' request.

On March 20, 1962, during a private meeting with the Deputy Minister, the Pilots' Federation adopted for the other pilot groups the harbour pilots' proposal, i.e., if monetary concessions were granted, the various Pilots' Corporations would agree to a two-year freeze of rates, during which period they would study the Shipping Federation's proposal. The following day, the proposal was relayed by the Department of Transport to the Shipping Federation which was urged to meet not later than the following day with the Pilots' Federation for discussions. This the Shipping Federation declined to do since it had already arranged a meeting with the Minister for March 27.

The shipping interests' meeting with the Minister was preceded during the morning of March 27, 1962, by a meeting with the senior officers of the Department. The Shipping Federation repeated the counter proposal it had made to the harbour pilots. The Federation would agree to the financial concessions conditional on the immediate acceptance of their target income proposal. No agreement was reached. In the meeting which was to be the last one before the strike, the main questions discussed were the formula to be adopted for calculating the pilots' income and workload statistics.

There were no further developments between March 27 and April 4 when the Federation of Pilots informed the Minister by telegram that a special general meeting of all the pilots had been called for April 5 at midnight and that for the duration of the meeting no pilot would be available for duty. In other words, the pilots were going on strike (vide pp. 356-365 regarding the Quebec pilots' participation).

The following day, the Minister of Transport informed the House of Commons about the situation. He disclosed the pilots' current earnings and the extent of the increases they demanded, *inter alia*, an increase of 6 per cent for the Montreal harbour pilots and 15 per cent for Montreal river pilots.

However, the pilots' proposals—slightly modified—were to prevail. The Minister, in a letter dated April 5 addressed to the pilots' legal adviser, indicated that he was inclined to grant some pecuniary concessions in return for a rate freeze for a given period.

On April 6, in a telegram addressed to the Minister, the pilots reiterated their proposals.

On April 8, the Pilotage Authority addressed a telegram to each of the pilots ordering them back to work, but with no results.

Since the strike threatened to be of long duration, the Department of Transport together with the Shipping Federation at a meeting held on April 9 decided to take measures to restore maritime traffic despite the strike.

On April 10, the Minister of Transport informed the House of Commons that the time had come to institute a Commission of Inquiry for the purpose of conducting an inquiry in depth into pilotage. This inquiry was to be of a broader scope than that of the Shipping Federation's proposal under which it would have been limited to the problems of pilotage in the St. Lawrence Districts.

The Shipping Federation had urged the Pilotage Authority and the Department of Transport not to make any pecuniary concession to the pilots. For their part, they would do everything possible to restore and maintain maritime traffic on the River. This was done (vide p. 712). When it was realized that many vessels were proceeding without pilots, the Pilots' Federation in a counteraction despatched to all vessels at Les Escoumins, or arriving at Les Escoumins, a telegram warning them that licensed pilots were unavailable and that at that time of year, due to the absence of buoys, it would be dangerous to proceed without pilots. At the same time, it also sought the support of the members of the Canadian Merchant Service Guild by asking Canadian Masters and officers to refuse to leave their regular occupation for the purpose of navigating strike bound vessels.

On April 11, the representatives of the Pilots' Federation, together with their legal adviser, met with the Minister of Transport and submitted new and amended demands.

On April 12, the Deputy Minister of Transport met at Montreal with the Shipping Federation representatives in order to discuss with them the pilots' new proposals. He informed them that, in order to settle the strike, the Minister's intention was to grant the pilots some rate increases in return for a three-year tariff freeze and to institute a public inquiry into pilotage.

After the departure of the Deputy Minister, the Shipping Federation officers reviewed the situation and decided to inform the Minister (this was done) that their stand remained unchanged, i.e., in the circumstances no concession of any kind should be made to the pilots. However, if the Minister decided otherwise, the Shipping Federation would abide by his decision but they asked that before any action was taken the Minister's intention should first be communicated to them.

The Minister met with the Shipping Federation representatives the following day. The Shipping Federation tried, but to no avail, to dissuade the Minister from making any concession as a means of ending the strike. They argued that their technical committee was working efficiently and was able to maintain ships' movements throughout the strike-bound Districts, although more slowly than with pilots, but that the strike would not result in bringing traffic to a standstill. The terms of the settlement were listed in the following letter (Ex. 761) the Minister wrote on April 13, 1962, to Mr. Marc Lalonde, the pilots' legal adviser (translation):

"Ottawa, April 13, 1962.

Dear Mr. Lalonde:

Further to the meetings which we have had recently, I wish to inform you of the various items which I intend to propose to each of the Committees of the St. Lawrence River Pilots.

General Items for the River:

1. Calculation of Net Income

With regard to the calculation of net income, we are prepared to accept the formula by which each pilot will be allowed thirty days of sick leave or special leave annually, in order to arrive at the number of effective pilots.

2. Public Investigation

I will institute a public investigation with regard to pilotage in order to permit all interested parties to submit their respective problems, and in this way I hope that the problems will be solved.

3. We understand that each of the Committees concerned undertakes not to ask for changes in the Tariff of Pilotage Dues for a period of three years.

Special Items

Kingston

1. We will take the appropriate measures to ensure that the pilots of this district will no longer be required to take trips on Lake Ontario.

2. The necessary arrangements will be made to amend the basis of remuneration in this district, by replacing the present basis of remuneration by the day with a basis related to the number of trips taken, and we hope that the present disciplinary measures of this group will combat any abuses which might result therefrom.

Cornwall

1. My Department will develop a plan of apprenticeship for new pilots and this plan will be in force in 1963.
2. The Tariff of Pilotage Dues will be amended in such a way as to increase the tariff from \$145.00 to \$160.00.

Montreal Harbour

1. The Tariff of Pilotage Dues will be amended so as to increase the net income of the pilots by \$985.00 by adding to the existing scale two items for vessels of over 2,000 tons, net tonnage.

Montreal

1. The Tariff of Pilotage Dues will be amended in such a way as to increase the net income of each pilot by \$925.00 and consideration will be given to the fact that four pilots have been added to this district. This increase will be based equally on tonnage and draught.
In addition, the Tariff concerning movages for intermediate ports will be amended in order that the Tariff of Movages in Quebec Harbour may be adjusted to the level of the Tariff of Movages for Quebec Harbour as described in the Quebec By-laws.
2. Four additional pilots have been allotted to this district and six Class "C" pilots have already received temporary Class "B" Licenses.

Quebec

We agree to withhold action on the suggestion made by Treasury Board aimed at using part of the pilotage revenue to cover certain operating costs of pilot vessels and pilotage. These costs are presently being assumed by the Government and we will discuss this question again with Treasury Board.

The Tariff amendments will come into force on April 15, 1962.

Yours very truly,
LEON BALCER"

(5) DISPUTE BETWEEN THE MONTREAL HARBOUR PILOTS AND THE
CORNWALL PILOTS OVER THE CHANGEOVER POINT
AT ST. LAMBERT LOCK (EX.1331)

Much evidence regarding this dispute was brought before the Commission because it was a new problem and no settlement satisfactory to the parties involved had been reached at that time. As seen earlier (p. 627), the crux of the problem was the Pilotage Authority's inability to impose a decision due to the absence of a legally defined western limit for the Pilotage District of Montreal.

After the opening of the Seaway, the practice had been for downbound vessels to change pilots in St. Lambert lock and for upbound vessels to change wherever they stopped first, i.e., either in the lock itself, if the vessel had not to tie up at the wait wall, or, in that event, at the wait wall.

This procedure was a realistic compromise between the functions of the Cornwall pilots, which, among other things, consisted in the lockage of vessels, and the interests of shipping, which required that whenever possible vessels should not be required to stop for the sole purpose of embarking or changing pilots. This procedure was being followed and had been accepted by the Cornwall pilots. A dispute developed from 1962 when the Cornwall pilots refused to take over vessels from Montreal harbour pilots at the wait wall, thus requiring them to bring vessels inside the lock, whether or not they had tied up at the wait wall. Hence, the dispute affected only upbound vessels piloted by harbour pilots. The normal practice was followed in all cases for downbound vessels and for upbound vessels when piloted by river pilots.

The rift developed because the Cornwall pilots had occasionally not yet arrived when upbound vessels which had tied up at the wait wall had to proceed into the lock. The main cause of these delays may have been lack of waiting facilities for pilots (or pilot station) at the lock site, a situation which was later remedied. When this occurred, in order not to delay ships and Seaway operations, the Montreal pilot who had brought the ship to the wait wall was asked to do the lockage. The harbour pilots, however, required that this be treated as a second movage and had the Master sign a second source form with the result that there were two movage charges. This practice on the part of the harbour pilots continued until September 19, 1959, when one shipping company refused to pay the extra charge and shortly thereafter the others followed suit.

In the circumstances, it was decided by the Pilotage Authority that, since the shipowners refused to remunerate the harbour pilots for the extra service of moving an upbound vessel from the wait wall into the lock, the harbour pilots should not be required to provide this service. For the rest of the 1959 season and up to the beginning of the 1962 season the original practice was resumed, the harbour pilots quitting upbound vessels as soon as they tied up and the Cornwall pilots taking over whether they were at the wait wall or in the lock.

However, although the Cornwall pilots abided by the decision, they considered it only an interim measure and continued to press their demand that when Montreal harbour pilots were involved the changeover should take place in the lock itself. Their pressure bore results and on April 27, 1962, the Superintendent of Pilotage in Ottawa wrote to the District Supervisor reversing the previous decision and made St. Lambert lock the changeover point for the Montreal harbour pilots in all cases, whether or not upbound vessels had to tie up at the wait wall, without any extra remuneration. The pertinent part of this letter reads as follows (Transcript, Vol. 44A, p. 5099):

"Having in mind the dispute about the changing of pilots at St. Lambert Lock and the two meetings held in Montreal between the two groups concerned, we regret to see that a mutually satisfactory arrangement cannot be agreed upon. After full consideration of this problem, it is ruled that the changing of pilots

to take place in the St. Lambert Lock itself, where the Montreal harbour pilot will be replaced by the Cornwall District pilot, or vice versa . . .

You are to implement this ruling upon reception of this letter and inform the two corporations accordingly."

Very little evidence was offered as to the grounds for the attitude taken by each group of pilots and the events that prompted that reversal of instructions on the part of the Pilotage Authority. Captain F.S. Slocombe stated that this decision was taken because during the winter 1961-62 the Cornwall pilots had warned the Pilotage Authority that in future they would no longer abide by the previous decision and would no longer take charge of upbound ships with harbour pilots on board at the tie-up wall. Furthermore, the Pilotage Authorities and the Department of Transport were deeply involved in conflicts on a much larger scale that resulted at the beginning of the season in the general strike in all the St. Lawrence Districts. The Shipping Federation stated that the 1962 decision was taken despite its opposition.

In a memorandum dated May 17, 1962, it was suggested by the Superintendent of Pilotage that, at the beginning at least, rather than being a genuine dispute between the two groups of pilots, this was a concerted action to force the Pilotage Authority to grant the harbour pilots the extra remuneration they sought.

This would also explain why the Cornwall pilots did not take the same attitude toward vessels handled by the Montreal river pilots. The river pilots could not expect any pecuniary gain; first, they already had obtained a substantial increase in trip charges as well as transportation expenses when a river trip commenced or finished at St. Lambert lock (vide p. 785); second, they would be precluded from receiving a moorage charge for bringing a ship into the lock from the tie-up wall since moorages in the harbour of Montreal were beyond their competency.

The following is a pertinent excerpt from the memorandum:

"It appears that recently a number of the Harbour pilots would then demand additional payment for moorages which had not been completed without interruption. This unofficial suggestion later received attention by the pilots as a whole, with the result that the Cornwall pilots adopted the stand that henceforth they would not go below lock No. 1 so that all changes would take place in the lock itself. In the meantime, the general work stoppage took place, one of the results of which was that the Harbour pilots received an increase of approximately \$985 per pilot, with the added condition that there would be no requests for increase in tariff over the next three years in any of the St. Lawrence districts. The Montreal harbour pilots evidently realized that under these changed circumstances it would be difficult for them to carry out successfully their original intention of asking for a tariff increase and now wished to revert to the earlier basis of changing pilots at the wall below the lock. However, the Cornwall pilots were adamant in their refusal to accept the proposal to continue the old arrangement. At this junction the Department was compelled to step in and, after several meetings, at which Captain Gendron endeavoured unsuccessfully to have these two groups agree, an official order was issued stating that the change of pilot between the Harbour and Cornwall groups would take place in the lock."

However, the harbour pilots did not consider the dispute settled and, although they followed the instructions received, they renewed their efforts to return to the original practice unless they were remunerated for the extra service. Considerable correspondence and numerous meetings between all the parties concerned took place during the 1962 navigation season and the following winter. In 1963, this problem threatened to develop into a major crisis.

This was the situation when the Commission's hearings were held. From the evidence received, the position of each of the parties involved was as shown in the following paragraphs.

The *harbour pilots* requested the re-establishment of the original practice which had been followed without interruption in so far as the Montreal river pilots were concerned. This request became the subject of one of the recommendations made by the Federation of Pilots on behalf of the harbour pilots in their brief to this Commission. However, it was apparent from the evidence adduced in support that the real objection of the harbour pilots was the lack of remuneration for what they considered an extra service, although they did not make it their recommendation because they realized its weakness both in law and in fact. There was the three-year tariff freeze and they were aware that such a proposal would be vigorously opposed in the circumstances by the shipping interests, even though it could have been argued that this was a new situation which had developed since the settlement of the strike. There was, on the other hand, the overwhelming argument in favour of the recommendation as it stood, namely, the lack of definition of the western limit of the District (vide p. 565) which made it impossible for the Pilotage Authority to enforce its April 27, 1962, order.

As for the *Cornwall pilots*, they opposed the recommendation and for other legal reasons were in a position to impose their point of view on the Pilotage Authority. Contrary to the Montreal harbour pilots, the Cornwall pilots could not successfully attack at law the validity of a Pilotage Authority's order requiring them to take over from the harbour pilots at the tie-up wall since there could be no legal argument that the tie-up wall was situated well within the Cornwall District (vide p. 871), but they had a similar legal argument regarding the changeover point at the western end of the Cornwall District where they could force an issue should the Pilotage Authority decide against them in the St. Lambert lock dispute.

For reasons of an international nature, the common boundary between the Cornwall District and the Kingston District was established at St. Regis where the international boundary between Canada and United States westward runs midstream of the St. Lawrence River. Since St. Regis is a most impractical point for changing pilots, the realistic solution was adopted of effecting the changeover at Snell lock some six miles upstream. This proce-

dure avoided the necessity for organizing and maintaining at substantial cost a pilot vessel service at St. Regis, and saved shipping the additional fee for such service as well as the accompanying delay *en route*. However, the Cornwall pilots could not be required to pilot in waters outside the District for which they hold their licence and the fact that the six-mile stretch of the channel between St. Regis and Snell lock consists of waters belonging to both Canada and the U.S.A. apparently raised insuperable objections to moving the western Cornwall limit up to Snell lock, although this arrangement had been accepted by all parties as a gentleman's agreement unenforceable at law.

The Shipping Federation, as users of pilotage services, considered itself directly concerned in the St. Lambert lock dispute. Its main apprehension was that the settlement would be at the expense of the owners, and it was opposed to any solution that would increase rates. In its brief to this Commission, the Shipping Federation suggested the following compromise:

"...A possible solution to the problem would be to allow the Montreal Harbour pilot, if there is congestion at the lock, to leave his vessel at the lock-wall where, if there are 3 or 4 vessels waiting in turn, each of the pilots remaining on board may be detained waiting from 3 to 4 hours, but to post a Montreal Harbour pilot at the lock-wall for the purpose of handling each vessel as the time comes for her to enter Lock No. 1, thus releasing the 3 or 4 other pilots who would otherwise remain on board the vessels waiting for their turn."

It is interesting to note that the Shipping Federation had no illusions about the eventual solution (*vide* Shipping Federation's brief, p. 95).

The Department of Transport was in a very delicate position in that it could not impose a solution, but had to seek a compromise which would be accepted voluntarily.

This situation continued until the harbour pilots informed the Pilotage Authority in a letter dated May 15, 1963, that from May 27 they would cease to effect movages between the wait wall and the lock, invoking the statutory provision of sec. 361 C.S.A. to support their decision.

At the request of the Deputy Minister, the harbour pilots extended the deadline by one week and agreed to attend a meeting in Ottawa with the Cornwall pilots and officials of the Department of Transport. At this meeting, a compromise suggested by the Deputy Minister was accepted by the representatives of both pilot groups, subject to ratification by the two Pilots' Corporations. The Department of Transport was to have a study made of maritime traffic between the harbour of Montreal and St. Lambert lock with the aims of improving, if possible, the method of despatching pilots and reducing the harbour pilots' waiting periods at the wait wall. On behalf of the Cornwall pilots the Department was also to study the possibility of obtaining from the American authorities authorization to effect changeovers of Cornwall and Kingston pilots at the wait wall below Snell lock. On the other hand,

changeovers at St. Lambert lock would be governed by the following arrangements:

The Montreal harbour pilots would be responsible for conducting upbound vessels as far as the first position on the tie-up wall, or into the lock itself if it was unoccupied and ready on arrival; the harbour pilots would also move ships from one position to another along the wait wall up to position no. 1; the Cornwall pilots would take over either in the lock or at wait wall position no. 1.

This compromise was ratified by the Harbour Pilots' Corporation but the Cornwall Pilots' Corporation imposed a condition the harbour pilots found unacceptable: it demanded the same arrangements for downbound vessels. In other words, the harbour pilots would be required to relieve Cornwall pilots at the upstream wait wall whenever ships did not have direct access to St. Lambert lock.

The Pilotage Authority disregarded this demand by the Cornwall pilots and decided to impose the compromise solution it had suggested. The Cornwall pilots complied since, according to the terms of the compromise, the new procedure was to be only temporary until completion of the study previously agreed upon. This study was entrusted to the firm G. T. R. Campbell & Co., Naval Architects, Marine Surveyors and Consultants. They made a study of the traffic through the Seaway approach and the existing despatching procedure. In their report, dated October 17, 1963 (Ex. 917), they made many recommendations aimed at improving co-ordination between the various pilotage services, the Harbour Master's office and the various services of the St. Lawrence Seaway. With regard to the procedure for changeover of the Cornwall and Montreal pilots, they recommended that the original procedure be reinstated with the difference, however, that the Cornwall pilots be granted extra remuneration when they were required to take over at the downstream wait wall.

The officers of the Department of Transport did not concur with this solution because they felt it would not be acceptable to the Cornwall pilots and they feared that in retaliation these pilots would refuse to respect the gentleman's agreement about the changeover at Snell lock. It is obvious also that it was not intended to grant any extra remuneration to either group of pilots. It was pointed out that it was because the workload of the harbour pilots was lighter than the Cornwall pilots that the Department originally decided to have the change made at the lock itself.

Accordingly, in a letter dated December 2, 1963, the Deputy Minister of Transport informed the Presidents of both Pilots' Corporations of his intention to maintain the system adopted in 1963. The Pilotage Authority's decision was ill-received by the Montreal harbour pilots and on December 2, 1963, they informed the Pilotage Authority that they accepted the decision because they considered it to be only temporary since the question would be subject to review by the Royal Commission on Pilotage, and they stated that

their stand had not changed. Nor did the decision satisfy the Cornwall pilots, but they did not adopt such a conciliatory attitude. They stated that they would not agree to relieve Montreal harbour pilots below St. Lambert lock.

The intransigent attitude adopted by the Cornwall pilots obliged the Department of Transport to reconsider the matter. The conclusion was reached that it was no use to try to overcome their opposition and that another solution had to be found. It was decided to return to the 1962 solution with modifications, i.e., the harbour pilots would be required to bring ships into the lock and the additional remuneration they had first sought would be granted.

It was believed that this solution would be readily acceptable by both pilot groups, except possibly the amount of extra remuneration would have to be negotiated. At first, it was thought that a small increase in the hourly detention indemnity from \$3 to \$5 for delays incurred at the lock would suffice. Since the Shipping Federation's opposition was well known, it was not consulted.

On March 17, 1964, the Pilotage Authority informed the Shipping Federation and the two pilot groups of the decision, but to the amazement of the Pilotage Authority it was rejected by the Montreal harbour pilots who asked that the previous decision continue in force. Therefore, again there was an *impasse*. It was then decided to refer the question to the Minister himself for decision. The Minister convened a meeting with representatives of both pilot groups in the hope that an amicable solution could be reached. For the purpose of the meeting, each pilot group was asked to put its case in writing. The hoped for compromise was reached at this meeting held at the beginning of April 1964. The Montreal pilots accepted the latest decision, provided the amount of the proposed extra remuneration was increased.

After negotiations with the harbour pilots, the Pilotage Authority agreed to fix the extra remuneration for bringing a ship into St. Lambert lock from a moored position at the St. Lambert wait wall at \$20 plus \$5 per hour after the first hour computed from the time the ship first secures at the wait wall, or in cases when the pilot boards the ship at the wait wall, from the time he embarks to the time of securing in the lock. This last part of the extra remuneration was not to be considered a detention indemnity. The amendments to the tariff were sanctioned by P.C. 1964-644 dated April 30, 1964, finally concluding this protracted dispute. The only solution that could be found was at the expense of shipping because the Pilotage Authority was not in a legal position to impose a decision which was not accepted beforehand by both pilot groups involved, as evidenced by the incredible number of reversals of decisions by the Pilotage Authority. The question would still be unsettled if the shipowners' representative had challenged in court the validity of the Montreal Pilotage Authority's By-law provision fixing the extra remuneration.

neration on the ground that it is ultra vires since the Montreal Pilotage Authority is not in a position to establish that St. Lambert lock is within the limits of the Montreal District.

Since the new system came into force, the shipowners have complained that occasionally they are obliged to pay double detention for the same period of time, one to the harbour pilot who is on board the upbound vessel at the wait wall waiting its turn to enter the lock, and a second to the Cornwall pilot who is there waiting to take over when the ship has entered the lock.

In a letter dated July 3, 1964, the Shipping Federation denounced this situation in the following terms:

"It appears that, on many occasions, the Montreal Harbour pilots and the Cornwall pilots are both being detained for the same period of time at the St. Lambert Lock for the same ships and the net result is double detention to the vessels. It is difficult to imagine a more clear-cut case of inefficient administration and misuse of the pilots' time."

In support of this complaint, this Commission was informed that, in the case of the steamship firm Colley Motorships Limited, on ten occasions between June 19 and July 9, 1964, its vessels had been subjected to such double charges (Ex. 1420).

In reply to the Shipping Federation, in a letter dated July 3, the Deputy Minister of Transport indicated that the problem would be again reviewed at the beginning of the 1965 season. Since then, however, the governing provisions of the Montreal District tariff have not been revised but in June 1965, the detention provision in the Cornwall By-law was amended to count after one hour instead of two as before. At first sight this would appear to compound rather than correct the situation:

The complaint of the shipowners is not legally founded since the hourly rate payable to the harbour pilot is not an indemnity charge but merely one of two components of the rate for the special moorage from the wait wall to the lock, i.e., a \$20 charge for the first hour and \$5 for each additional hour or fraction thereof. The fact that the Cornwall pilot may be entitled to a detention indemnity for the time he waits after ordered time until the ship is handed over to him in the lock for reasons beyond the ship's control is a problem that pertains to the Cornwall District and is the result of abuse in the application of the detention charge which should be corrected.

The 1964 decision has not been changed since (except for the amount of the rates as a result of the general surcharge). However, the detention charges for the Cornwall pilots have been considerably reduced through more accurate despatching.

Therefore, the situation with regard to embarking and disembarking pilots in the St. Lambert lock area is as follows (Exs. 1539 (k) and (m)):

- (i) The Montreal pilot (harbour or river) boards a downbound vessel in the lock itself, although in the case of a trip the river pilot may

not take charge until he has passed the entrance to the Seaway (pp. 628-9).

- (ii) The Montreal pilot (harbour or river) disembarks from an upbound vessel that does not take a Cornwall pilot as soon as the vessel has to tie up, even if this is at the last position along the tie-up wall, and the vessel then proceeds from there without a pilot.
- (iii) In the case of an upbound vessel taking a Cornwall pilot:

If under the direction of Montreal river pilot, the Cornwall pilot takes over when the vessel is moored for the first time, even if this is at the last position downstream from the lock. This vessel is not moved along the wait wall into the lock either by the river pilot or by a Montreal harbour pilot but by the Cornwall pilot.

If under the direction of a harbour pilot, the changeover takes place in the lock itself. If the vessel has to tie up at the wait wall, it is moved from there along the wait wall into the lock by the harbour pilot, who then is paid the above-mentioned remuneration in addition to the normal moorage charge.

(Re the non-availability of pilots at the proper time, vide pp. 756 and ff.)

(6) LEAVE OF ABSENCE

(A) *River Pilots*

(a) *Rules governing leave of absence*

Leave of absence for river pilots has been strictly regulated since 1961 but only a few of the rules are in the By-law. The remainder were devised by the pilots themselves and accepted by the Pilotage Authority. They are enforced by the District Supervisor in so far as despatching is concerned by their inclusion in the administrative despatching rules, and by the Pilots' Corporation by their inclusion in the Corporation by-law provisions governing the administration and sharing of the pool.

The only legislative provisions are found in sec. 17 of Part I, General District By-law, which empowers the District Supervisor to grant leave of absence when a request is made, and recognizes a pilot's right to automatic sick leave for any period of incapacitation due to sickness or injury. The only stipulations are immediate notification to the Supervisor, the production of a medical certificate if requested by the Supervisor and a second medical opinion at the Supervisor's discretion.

Up to 1961, there were no other rules and the practice that prevailed was inherited from the time of free enterprise. The only ground on which the Supervisor could deny a request for leave of absence (except in a case of incapacitation due to illness or injury) was an actual or expected shortage of pilots.

Because of the unrestricted application of the equalization of trips rule, this unregulated right to leave of absence led to abuses by some pilots. For instance, the number of absentees was often quite large during week-ends and as many as 20 per cent were absent at the same time.

Since refusal could be justified only if the efficiency of the service might be impaired because of a shortage of pilots, the By-law requirement for prior authorization was not enforced strictly, and failure to obtain such authorization was not considered a disciplinary matter. The result was that the Pilotage Authority really had no control over the availability of pilots at any time.

This state of affairs lowered the efficiency of the service and, furthermore, the wide application given to the equalization rule affected the safety of navigation because pilots were likely to be overworked catching up turns when they returned to duty after a long period of absence.

The situation became so serious that the Pilotage Authority decided to intervene. It warned the Pilots' Committee that, unless they themselves took the necessary measures to regulate leave of absence, it would have to take the initiative and impose the required rules.

In 1961, the Pilots' Corporation devised a series of rules which were approved by the Pilotage Authority. The governing features were as follows:

- (i) non-applicability of the equalization of trips to periods of absence;
- (ii) regular and periodical leave of absence with remuneration;
- (iii) automatic sick leave with full, partial or no remuneration;
- (iv) absence from pilotage duty while on Corporation business or rendering services to the pilots as a group without loss of remuneration;
- (v) loss of remuneration for absence for other reasons, whether authorized or not.

To implement these aims, an equitable system was devised based on despatching turns. The equalization of trips principle ceases to apply in case of absence and instead the pilot concerned is credited with the missed turns for despatching purposes, i.e., the average number of turns performed during his absence by the pilots who were available for duty. Full or partial remuneration can be assured by not deducting from his full share all or part of the value of these missed turns as stipulated in the pooling rules, and remuneration can be denied by debiting his share with their full value.

The one exception to these rules concerns absence over which the pilot has no control, i.e., death of his wife or a close relative, birth of a child or an order to appear before a court. In any of these circumstances the pilot retains the privilege of equalizing, provided he so requests and succeeds in making up the missed turns before the end of the next pooling fortnight.

A pilot who misses an assignment because he could not arrive in time is not considered absent if the delay was not his fault. He is placed second in turn on his arrival and retains his equalization privilege.

(b) *Regular leave of absence and annual holidays*

The Pilotage Authority has approved a system of regular leave of absence on the principle that a pilot is entitled to a certain number of days of rest during the navigation season, and an extended annual holiday to be taken after the season ends. The pilots first suggested two days per month between May 1 and November 30 but this proposal was not accepted by the Pilotage Authority on the ground that it would have caused too frequent a rotation of the pilots on strength and a modified formula more in conformity with the nature of the service was arrived at. It provided for three periods of rest between April 1 and December 31 (no regular holiday was given when the pilotage demand is generally at its peak at the beginning and end of the normal navigation season): a three-day holiday between May 1 and June 30, a five-day holiday between July 1 and August 31 and a three-day holiday between September 1 and October 31. This was later changed to three periods of six days each. These holidays are compulsory and are taken in accordance with the list drawn up by the Pilots' Corporation prior to the opening of the navigation season after consultation with its members. When drawing up the list, consideration is given to the fact that the pilots are divided into two groups and arrangements are made to have an equal number of pilots on leave in each sector at the same time. Ex. 569 (the record of regular leave granted in 1963) shows that leave is spread out as uniformly as possible. The number of pilots enjoying such rest periods was as follows: April, November and December—none; May, June, September and October—three in each sector; July and August—five in each sector.

To ensure equal treatment and avoid crediting an unequal number of turns for an equal period of leave but in different periods of pilotage activity, the number of turns to be granted has been fixed arbitrarily. Formerly, it was two turns for each three-day leave and three turns for the five-day leave period but is now three turns for each six-day leave.

Since these rules are administrative only, they do not confer any right and the pilots continue to be governed by the By-law. Therefore, they remain liable to be called to service in case of a shortage. At the time of the Commission's hearings, however, this had never occurred.

It was reported that the leave system had given excellent results since its creation in 1961, *inter alia*, it was the main contributing factor for the substantial reduction in absenteeism since that time.

The annual holiday of one and a half months is taken by half the pilots at a time during the winter months when the demand for pilotage services is lowest. The pilots in each sector are divided into equal groups, one on leave

and the other available for service. Half the pilots are on leave from December 20 to February 8 and the other half from February 8 to March 31. The list is prepared by the Corporation.

(c) *Sick leave and absence on Corporation duty*

For absence due to illness, the rules provide for granting one turn for the first day, if it is one of the first two non-consecutive days of absence other than regular leave, and the daily average for subsequent days.

As for the District of Quebec, free turns are granted to compensate for time spent by the Directors on Corporation business and by others for the benefit of the group, except when this occurs during the winter months, at the fixed rate of one turn per day or fraction of a day.

Free turns are automatically granted for absence to attend meetings of the Board of Directors or meetings of the committees of the Corporation or the Federation. In all other cases, a resolution of the Board of Directors or the Administration Committee is required.

The table on p. 795 shows the number of free turns credited since the creation of the Corporation in 1959, together with the number of pilots who received them (Ex. 782).

(B) *Harbour Pilots*

(a) *Absence and leave system*

From the legislative point of view, the only variation in leave of absence as far as the harbour pilots are concerned is provided by sec. 51 of the By-law which allows a maximum of 15 days' sick leave with remuneration per navigation season, of which not more than seven days may be granted without a medical certificate. In practice, this provision is a dead letter although it is consistent with the method of remunerating the harbour pilots prescribed in sec. 46 of the By-law, i.e., the Pilotage Authority is supposed to remunerate them through a pooling system based on availability for duty. As seen earlier, the actual situation is altogether different since they have adopted in substance the system of their colleagues, the Montreal river pilots and the Quebec pilots, and operate it through their Corporation. They have devised their own despatching and pooling rules for dealing with absences (Ex. 570). The rules affecting despatching must meet the approval of the Pilotage Authority, after which they are implemented by the District Supervisor.

As is the case with the Montreal river pilots, the equalization of assignments principle is normally limited to periods of availability for duty. Hence, for despatching purposes, a pilot is credited upon his return with the turns lost during his absence. There are two exceptions to this rule. Equalization applies:

(i) on an optional basis for turns missed during absence due to illness or injury to a maximum of 15 days per navigation season;

(ii) to absence occasioned by the death or serious illness of a member of the pilot's immediate family.

There is regular, periodic, compulsory leave which must be taken according to a list prepared at the beginning of each navigation season by the Corporation's Board of Directors. In 1963, this consisted of one day of rest per week during the months of May, June, July and November, two days per week during the months of August, September and October and none during the months of April and December, making a total of about 45 days per navigation season. This has since been changed to three days of rest per ten days. The 1969 working rules provide that a pilot will be credited with one turn per day of regular leave of absence.

The harbour pilots on regular leave remain available for duty and could be given an assignment in case of emergency, as has occasionally occurred.

With regard to absence due to illness or injury, leave is automatic and the only conditions are that the pilot is obliged to report that he will not be available, and later, if the absence lasts more than seven days, to produce a medical certificate.

As far as despatching is concerned, turns lost during such an absence will be credited only if the pilot refuses to catch up; in other words, it is left to his decision whether to equalize or not. As will be seen later, the harbour pilots' pooling rules do not carry any indemnity provision for turns lost during such absence. Hence, the opportunity is given to catch up missed turns, thereby preventing a loss of income. However, sickness group insurance coverage entitles the pilots to certain indemnities whether or not they equalize (vide p. 796).

(b) *Free turns*

When Directors of the Corporation are absent to attend Board meetings during the navigation season, they are granted one turn with pooling rights per day or fraction of a day of absence. This is the procedure adopted by the other Corporations. The Federation (like the other Corporations) also pays the pool the value of the turns granted to a harbour pilot who attends its board meetings provided he fills one of the offices of President, Vice-president or Secretary of the Federation. The harbour pilots' navigation season commences when the Seaway opens and terminates when it closes.

The following table shows the number of free turns granted in this way.

All absences (except free turns granted to Directors) carry a loss of income which is relative or absolute depending whether or not the pilot is permitted to equalize. There is no automatic compensation since no sharing rights are granted.

MONTREAL HARBOUR PILOTS—ADMINISTRATIVE FREE TURNS

Year	For the Corporation		For the Federation and Guild		Amount Paid by the Federation and Guild
	Aggregate Turns	Aggregate Pilots	Aggregate Turns	Aggregate Pilots	
1959.....	nil	nil	nil	nil	nil
1960.....	57	5	nil	nil	nil
1961.....	29	5	nil	nil	nil
1962.....	80	5	nil	nil	nil
1963.....	132	5	9	1	\$288.00
1964.....	104	5	1	1	33.36
1965.....	63	5	5	1	169.35
1966.....	49	5	nil	nil	nil
1967.....	47	5	nil	nil	nil
1968.....	98	5	nil	nil	nil

SOURCES: 1959-1962—Ex. 801; 1963-1968—Ex. 802; and Ex. 1539(bb).

(7) SHIPPING CASUALTIES

The recurring types of shipping casualty emphasize the inherent navigational difficulties peculiar to this section of the St. Lawrence and show clearly the basic differences between navigation in the Montreal and Quebec Districts.

There are no long stretches of open water and, hence, no mishaps attributable to the neglect or misinterpretation of radar. Instead, the pattern of accidents relates to the hazards presented by navigation in comparatively narrow, winding dredged channels complicated by cross-currents, e.g., groundings, collisions resulting from passing in confined waters or caused by bank suction, touching the bottom of the channel as a result of overloading and miscalculating the tide below Trois-Rivières.

Furthermore, casualties in the Montreal District are generally less spectacular than in the Quebec District, since, in most cases, unseaworthy ships can be beached easily and rapidly, and, in addition, the maximum permissible speed in these channels can not exceed maximum manoeuvrable speed. Another factor which may account for the smaller number of serious casualties while navigating may be that navigation in such channels requires constant alertness by the pilots to verify their position.

In recent years, there have been no serious casualties while navigating in Montreal harbour, despite the extensive cross-traffic bound to or from the Seaway. This good record is mainly due to the traffic regulations enacted by the Port Authority and the Administrative traffic control it formerly exercised and which is now undertaken by the Montreal Centre of the Marine Traffic

Control System, and also to the closing of the Lachine Canal, thereby reducing traffic in the most difficult section of the harbour, the St. Mary's Current.

In the decade 1959-1968, the harbour pilots were not involved in any casualty while navigating through the harbour, and had only minor incidents while berthing, unberthing and anchoring. The record of the river pilots in this latter type of casualty is not, however, comparable because they are not limited to the harbour of Montreal but also handle ships in the intermediate ports and in the harbour of Quebec.

The fact that a pilot is involved in a shipping casualty does not necessarily mean that the casualty is his fault. In the period 1959-1968, there were 16 major casualties (not counting the sinking of the dredge *Manseau 101* in which a pilot was only quite indirectly involved) (pp. 729-30). In five of these cases, the collision or stranding was attributed to steering failure, in one case, the collision was the direct consequence of the hazards of winter navigation (pp. 199-200); others also occurred through circumstances beyond the pilot's control (e.g., see below). Some, however, were directly due to negligence and faulty navigation by pilots.

As for the Quebec District, the detailed analysis of these accidents or shipping casualties must, for all practical purposes, be limited to major disasters and other serious cases which were officially investigated under Part VIII of the Canada Shipping Act.

Appendices I A and II A list the casualties, accidents and incidents involving river and harbour pilots which were reported as shipping casualties (as the term is defined by sec. 551 C.S.A.) for the ten-year period 1959-1968. App. I A contains a detailed analysis of the 1965 and 1966 cases; App. II A for the years 1959 and 1968. These years were selected because they represent respectively the greatest and the least number of such annual events during the past ten-year period. Reference is made to Part II, pp. 88-90, for the method used in this Report to classify so-called shipping casualties.

(A) *Formal Inquiries*

From 1955 to 1969 inclusive, two Formal Investigations were conducted into shipping casualties involving a Montreal pilot (Ex.1539(q)).

(a) *Collision between M. V. Transatlantic and M. V. Hermes April 10, 1965 (Ex. 1468)*

The collision occurred in Lake St. Peter immediately past the downstream entrance into the dredged channel from the anchorage area at the Yamachiche bend formed by the enlargement southward of the dredged channel from a width of 550 feet to 2,000 feet. *M. V. Hermes* was proceeding downstream at full manoeuvring speed and on leaving the anchorage area

swung sharply to port and collided with the upbound M. V. *Transatlantic* which she was about to meet. On impact, M. V. *Transatlantic* caught fire and, despite the fact that she was beached, became a total loss. Three members of her crew died. M. V. *Hermes* was also severely damaged. The accident was due to the fact that when the *Hermes* entered the channel her starboard side passed too close to the south bank of the dredged channel and the bank suction effect made her sheer sharply to port out of control.

The weather and visibility were good but the regular floating aids to navigation were not yet in place and there was no mark to indicate the southeast entrance to the dredged channel. The channel curves slightly to the south in the anchorage area, the centre of the channel on both sides of the bend being purportedly indicated by two sets of leading lights, the Rivière-du-Loup range lights upstream from the bend and the Pointe-du-Lac range lights downstream from the bend, all four lights erected on piers on the lake bed off the channel.

The pilot of the *Hermes* was making his first trip of the season in that area. In the absence of buoys to mark the channel, he set course by the range lights as customary and as usual, made the slight indicated alteration to the south where the lines from the two sets of range lights intersected in the Yamachiche bend. It was a known fact that the Pointe-du-Lac range lights did not show the centre of the channel because the upstream pier had been displaced a number of years before in a southeast direction. He, therefore, set course accordingly as he had always done in the past. This time, however, it brought the ship far more to the south and too close to the bank because during the winters of 1964 and 1965 the pier had been further displaced southeastward, a fact that had not been reported. On April 3 and April 9, M. V. *Manchester Commerce* and S. S. *Carinthia* had also run out of control temporarily at the same place for the same reason, but these incidents had not been brought to the attention of the other pilots.

The Court found that the prime responsibility for the accident lay with the Department of Transport, Aids to Navigation Division, for failing to verify the alignment of the range lights.

It found that no fault could be attributed to the *Transatlantic* nor to her pilot, but that "fault of contributory negligence" was to be attributed to the pilot of the *Hermes*

"who was imprudent in deciding to meet the '*Transatlantic*' in the narrow part of the channel when he could have met her in the wide part of the Yamachiche anchorage and that he was in fault:—

- a) in going full speed into the narrow part of the channel when he had to meet a ship in it;
- b) in attempting this manoeuvre when buoy 51 L that was to serve him as a guide to indicate the entrance of the narrow channel was not in place;
- c) in following the line given by the Pointe du Lac ranges in line when he knew since last year that the lower range was not in place;

- d) in proceeding at full speed when it was the first time in 1965 that he was going down this part of the River as a pilot of a ship;
- e) neglecting to use his radio telephone."

The Court, however, ordered only a three-month suspension of the pilot's licence because of his previous good record and the fact that the basic responsibility lay with the Department of Transport.

As far as the pilot of M.V. *Hermes* was concerned, this finding was reversed in appeal by the Exchequer Court, the pilot being found blameless. The Court found that there appeared from the evidence to have been no good reason why the *Hermes* coming downstream should have stopped or reduced her speed in order to meet the *Transatlantic* in the anchorage section rather than in the dredged channel. The pilot was entitled to believe that his ship would meet the *Transatlantic* in a normal manner port to port without difficulty. The speed of the *Hermes* was 15 knots which was not full speed but full manoeuvring speed. The 550-foot channel allowed ample room for navigation having regard to the size of the two ships involved and, therefore, was not a narrow channel. For a downbound ship, it was normal practice to correct the situation created by the known displacement of the lower range light by keeping the ranges in line, thus placing her on the starboard side of mid-channel; for an upbound ship, to open the ranges astern to the north, thus placing her on her side of the true mid-channel and permitting a safe port-to-port meeting. The pilot had no reason to suspect that conditions had changed since the previous navigation season because no notification of any such change had been issued by the Department of Transport and there was no evidence that any other reason for concern had come to his attention. As for his failure to use radiotelephone, the Court found that prior to the sudden and unforeseeable sheering of M. V. *Hermes* both vessels were on their own side of the channel at a safe distance from each other and there was no obligation for either one to give out signals of any kind or use radiotelephone until the sudden and unexpected sheering to port and, of course, by then it was too late to discuss the situation over the radiotelephone. The Court also analysed the meaning of the term "wrongful act" or "default" found in subsec. 568(1) C.S.A (vide Part I, pp. 393 and 394).

(b) *Sinking of dredge Manseau 101, September 30, 1966 (Ex. 1529)*

The dredge *Manseau 101* sank on September 30, 1966, three-quarters of a mile west of the Quebec Bridge while being towed to the Bridge by three tugs from Montreal and attempting to cross to the north shore to seek shelter from the high seas created by the violent winds then prevailing. Ten men aboard the dredge were drowned. A pilot was only indirectly involved in that it was claimed that the cause of the sinking had been the wash caused by the downbound S.S. *Franconia* which allegedly was then proceeding at an illegal and dangerous speed under the circumstances.

The Court found that the cause of the casualty was that the dredge was not seaworthy. Although the pilot should have and could have reduced speed while overtaking the tow, thus reducing the waves created by the *Franconia's* passage, the Court could not conclude that the ship's wash was the cause, or even a contributory cause, of the disaster. The Court did not believe that the ensuing waves had been excessive or that they could have affected the dredge in any way if it had been seaworthy and there had not been openings on the deck.

(B) *Inquiries under Sec. 579 C.S.A.*

Inquiries into pilots' conduct were also held in two connections with casualties which occurred during the same period 1955-1969 inclusive.

(a) *M. V. Beechmore, grounding, August 5, 1961 (Ex. 1332)*

On August 5, 1961, a river pilot holding a Grade C licence (then limited to vessels not exceeding 2,000 NRT) boarded *M. V. Beechmore* at 1600 at the Shell Oil berth downstream from the Longue-Pointe anchorage in the harbour of Montreal for a downbound trip. The weather was clear with no wind. The first manoeuvre was to turn the ship since she was berthed starboard side to. The pilot did not ask for tug assistance. He first attempted to turn the ship around to port off the pier with the aid of the inshore eddy but this effort was unsuccessful and the ship simply drifted broadside down the River. He then proceeded upstream to a swinging berth at the lower end of the Longue-Pointe anchorage where he tried again to turn, this time swinging the ship on the line of the Tetreaultville range lights, but in doing so the stern fouled the bank and damaged the rudder and the propeller.

This was one of the cases where the Court of Inquiry under sec. 579 C.S.A. was being used as a means to enforce discipline on a pilot. The pilot was charged with failing to exercise due care and diligence for the safe conduct of the vessel under his charge contrary to the provision of sec. 39 of the By-law of the Pilotage District of Montreal (vide Part I, pp. 412-413 and 419-423). The Court concluded that the casualty was due to the lack of *expertise* of the pilot and found it hard to understand why he should think it necessary to turn the ship on the line of the range lights when to the north of the channel he had ample room and plenty of water for a ship of this draught with no anchored vessel or moving traffic to embarrass him. Even swinging on the line of the ranges would have been safe enough with a ship of this size if the pilot had exercised sufficient care. The Court posed the question how long this pilot "should be permitted to go on practising on other peoples' expensive ships" since it was the second time he had been involved in an accident of this nature. This was not, however, deemed sufficient to justify the cancellation of his licence and it was also felt that suspension would achieve little. Therefore, the Investigating Officer suggested

that the pilot's promotion from Grade C to Grade B be delayed until the expiration of two years after the date of the casualty, which recommendation was concurred in by the Minister of Transport.

(b) *M. S. Timna, grounding, August 19, 1961 (Ex. 1470(p))*

The vessel had left Trois-Rivières August 19, 1961, drawing at least 36 feet 6 inches, and reached St. Nicholas at low water. There she grounded in the channel suffering extensive damage. The Regional Superintendent of Pilots, who had made an administrative inquiry, had recommended that a Formal Investigation be held. Instead, the Minister decided to proceed under sec. 579 C.S.A. In the notice of inquiry served on the pilot September 21, 1961, he was told, *inter alia*, that he was required to attend the inquiry and could make his defence in person or otherwise and could adduce evidence or make a statement. This is a further instance where the Court of Inquiry under sec 579 C.S.A. was used to prosecute a pilotage By-law violation, and where the two legal capacities of the Minister of Transport, as such under sec. 579 and as Pilotage Authority were confused (Part I, pp. 412-414, and 421-422).

The Court convening order dated September 20, 1961, read as follows:

"Whereas, from the allegations contained in the annexed statement of the case, there is reason to believe that, the holder of Pilot Licence in the Pilotage District of Montreal, is from misconduct unfit to discharge his duties;

NOW THEREFORE pursuant to Section 579 of the Canada Shipping Act, Captain G. W. R. Graves, of the Department of Transport at Ottawa, is hereby appointed to hold an inquiry into the conduct of on August 19th, 1961, on the River St. Lawrence in the vicinity of St. Nicholas, P.Q., when on pilotage duty on board m.s. "TIMNA" and Mr. R. R. Macgillivray, Assistant Counsel, Department of Transport, is hereby appointed to assist in the inquiry."

The statement of the case read as follows:

"It is alleged that, on Saturday, August 19th, 1961, Mr., on duty as pilot on m.s. "TIMNA", on the River St. Lawrence, failed to exercise due care and diligence for the safe conduct of the vessel under his charge, in that he failed so to pilot the said vessel so as to avoid her grounding, contrary to the provisions of Section 39 of the By-law of the Pilotage District of Montreal."

The Court of Inquiry's conclusions and recommendations were as follows:

- (1) I can form no opinion as to what the draft of the ship actually was.
- (2) There seems to be little doubt that the ship grounded on the Pte. a Basile Range just below buoys 18Q and 19Q in the channel through St. Augustin Shoal. To borrow an expression used by one witness, she ploughed her way through the channel . . .
- (3) There is 35 feet of water in the Channel at St. Augustin Shoal at chart datum. The tide tables are available to the pilot and for this particular day they indicate low water at Quebec at 1915 E.D.S.T. with a level 1.2 feet above datum . . . This is the only information that the pilot could rely on and it was readily available to him. Further, he was told that the ship would be drawing 35'7". This gave him a clearance of 7.4 inches. As it was he

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assumed a draft of 36 feet with 37 feet of water, that is, 12 inches of water under the ship. This leads me to the conclusion that the allegations made in the Statement of the Case are substantiated, that pilot . . . did, in fact, fail to exercise due care and diligence for the safe conduct of the vessel under his charge and that he failed to pilot the "TIMNA" so as to avoid her grounding. It seems that the obvious and prudent thing to do in such a case would be to anchor and wait for more water.

- (4) My conclusions are based on a study of the transcript of evidence and the exhibits which were introduced, in conjunction with my observations of the witnesses . . .

RECOMMENDATIONS:—

- (1) I recommend that Mr. . . . licence as a pilot should be suspended for a period of two months from April 1st, 1962.
- (2) With regard to costs I should say that Mr. . . . was required to attend and was invited to make his defence in person or otherwise. He elected to retain counsel but this was his own choice and I do not consider that his expenses, or those of his solicitor, should be borne by the Department."

On March 29, 1962, the pilot's counsel appeared before the Court and pleaded verbally. On April 3, the Minister of Transport in his capacity as Pilotage Authority (and not as Minister of Transport under sec. 579 C.S.A.) rendered the following decision:

"CANADA SHIPPING ACT—MONTREAL PILOTAGE DISTRICT

In re: (Pilot's name)

M.S. "TIMNA"

Grounding in River St. Lawrence

19th August 1961.

ORDER OF THE PILOTAGE AUTHORITY.

Upon the report of Captain G. W. R. Graves of an inquiry conducted by him into the grounding of the M.S. "Timna", in the River St. Lawrence in the vicinity of St. Augustin Shoal on 19th August 1961 I find that the pilot of the ship, Mr. . . ., a licensed pilot of the Pilotage District of Montreal, failed to exercise due care and diligence for the safe conduct of the ship, contrary to the provisions of section 39 of the By-Laws of the Pilotage District of Montreal then in force, in that he proceeded at or near the time of lowest water into a relatively shallow portion of the Ship Channel with a ship that he knew to be very deep in the water when the prudent course would have been to anchor and wait for higher water.

I direct that the Pilot's Licence in the name of . . . be suspended for one month, the suspension to commence on the date of delivery up of the said Licence to the District Supervisor of Pilots upon demand being made therefor.

In arriving at this decision I have taken into account the fact that responsibility for the grounding of the M.S. "Timna" must be shared by the Master of the ship and the fact of Pilot . . . long record of good service prior to the grounding.

Dated at Ottawa this 3rd day of April, 1962.

(Signed) Léon Balcer,

Pilotage Authority for the

Pilotage District of Montreal."

This sentence was postponed at the request of the pilot's counsel to enable him to appeal the decision. In the meantime, the Department of Transport submitted the case to the Department of Justice for an opinion. On January 21, 1963, the Deputy Minister of Justice gave the requested opinion, the pertinent part of which reads as follows:

"... The power of the Pilotage Authority to suspend a pilot for breach of any of the Regulations contained in the By-law is subsection (2) of section 51 of the By-law. That section further provides in subsection (5) that the Superintendent shall give the pilot an opportunity to be heard personally and in writing. As far as I am aware, the Superintendent never gave the pilot in this case an opportunity to be heard, either personally or in writing, nor in fact, did he conduct any inquiry into this matter.

Although there is little doubt that the pilot had a full and ample opportunity to be heard by a person appointed under Section 579 of the *Canada Shipping Act*, that person purported, according to the transcript, to conduct a hearing as to whether there had been a breach of section 39 of the By-law. In my view, an inquiry under section 579 into the conduct of a pilot is for the purposes of enabling the Minister, not the Pilotage Authority, to discipline a pilot if he is satisfied, after the inquiry, as to any of the matters set forth in paragraphs (a), (b), (c) and (d) of subsection (5) of section 579.

I do not think that the facts constituting a breach of section 39 of the By-law would necessarily be one of the causes stipulated in subsection (5) of section 579.

In the present case, there is no suggestion that the Minister acted under this subsection or that the Minister acted at all because the suspension has been made by the Pilotage Authority and not by the Minister.

Accordingly, I do not think that the suspension is valid unless we could show that all the provisions of that By-law relating to a hearing such as subsection (5) of section 52 had been complied with and I do not think we are able to do so.

In respect of the request for a further inquiry under the *Canada Shipping Act*, I do not understand the purpose of any further inquiry but it seems to me that any further inquiry under the Act would not serve any useful purpose unless the Minister was prepared to discipline the pilot under the provision of the *Canada Shipping Act* and not as Pilotage Authority under the provisions of the By-law."

Since the appeal proceedings had not as yet been filed, the Minister of Transport decided to correct the procedural defect resulting from the fact that the decision had been rendered by the Pilotage Authority. Hence, one year later on April 4, 1963, the same decision was rendered but this time signed by the Minister of Transport as such. This decision was never implemented because a petition for *certiorari* was filed with the Exchequer Court. The grounds for the petition were the same as the pilot's counsel had invoked in the petition for *certiorari* which he had filed a few months earlier in the case of the alleged drunkenness while on duty of a pilot on board *M. V. Arrow* (vide pp. 385 and ff.) which was still pending.

A decision was never rendered by the Exchequer Court, a discontinuance being filed September 4, 1963. At the suggestion of the Department of Justice, the two cases were settled out of court, the Minister of Transport and Pilotage Authority having agreed not to pursue further the disciplinary proceedings in both cases (vide p. 388).

(c) *Preliminary Inquiries*

Between 1955 and 1967, apart from the cases which were later dealt with by a Court of Formal Investigation or by a Court of Inquiry under sec. 579, there were 20 preliminary inquiries into shipping casualties involving Montreal pilots. These casualties and their cause as established by the inquiries are (Ex. 1539(q)):

- (a) Grounding of the vessel *Vercharmian* on St. Augustin Shoal September 24, 1955; there was no failure on the part of the ship and the pilot was to blame.
- (b) Grounding near Grondines of the vessel *Troisdoc* September 25, 1955; the cause of the accident was lack of due care and diligence on the part of the pilot. His licence was suspended from November 16, 1955, to February 15, 1956.
- (c) Grounding of the vessel *Pindar* at Cap à la Roche April 19, 1956; the cause was the pilot's failure to gauge with accuracy the distance from the last known position and to make the required turn; conditions were difficult. His licence was suspended for a period of two weeks.
- (d) Grounding at Cap à la Roche of the vessel *Georgian Flame* April 19, 1956. The cause was the pilot's failure to manoeuvre the vessel with a reasonable degree of skill. His licence was suspended for one month (Ex. 1470(p)). The vessel suffered considerable damage (vide pp. 737-8).
- (e) Collision in the St. Lawrence River between the vessels *Restigouche* and *Manchester Port* November 21, 1957. It was held that the casualty was caused by lack of diligence, caution and prudence on the part of the two pilots, who had their licence suspended for a period of 14 days at the beginning of the navigation season.
- (f) Triple collision in the harbour of Quebec April 15, 1960, between the vessels *Avery C. Adams*, *Innstein* and *Roonagh Head*. The Master and the pilot of the *Avery C. Adams* were held at fault.
- (g) Grounding of the vessel *R. Bruce Angus* in the vicinity of Port St. Francis June 12, 1960. The pilot was found responsible and fined \$200.
- (h) Collision between the vessels *Belle Isle II* and *Holmside* in Lake St. Peter August 19, 1960. Both pilots were found to blame.
- (i) Grounding in the harbour of Montreal of the vessel *Weyburn* September 13, 1960. The harbour pilot was found to blame and his licence was suspended for two weeks.
- (j) Grounding of the *Manchester Fame* in the harbour of Montreal October 10, 1960, through the fault of the pilot.

- (k) Collision between the vessels *Prins Mauritz* and *Middlesex Trader* off St. Nicholas on April 6, 1965, due to adverse and unpredictable ice conditions (for full details, vide pp. 199-200).
- (l) Collision between the vessels *Eastern Shell* and *Mont Blanc* in the Cap à la Roche area September 3, 1965, with a pilot aboard the *Eastern Shell*; cause not mentioned.
- (m) Collision between the vessels *Surama* and *Sommaro* in the St. Lawrence Seaway below St. Lambert lock October 22, 1966, with harbour pilots on board both ships; cause not stated.
- (n) Collision between the vessels *Protinia* and *Katerina* off Confederation Point November 9, 1966; cause not given.
- (o) Grounding of the vessel *Sylvania* in the Bécancour Bend June 15, 1967, due to the pilot's negligence.
- (p) Grounding of the vessel *Yasushima Maru* near St. Antoine wharf December 5, 1967; cause not stated.
- (q) Grounding of the vessel *Tuscany* off Cap à la Roche January 10, 1968. The charge of negligence laid against the pilot was dismissed.
- (r) Collision between the vessels *Riviera* and *Patignies* while manoeuvring at Sections 58 and 59 of Montreal harbour September 19, 1968. There was a river pilot on board the vessel *Riviera*; cause, manoeuvring difficulties.
- (s) Grounding of the vessel *Atticos* in the vicinity of Lanoraie December 4, 1968; cause not given.
- (t) Grounding of the vessel *Aristanax* December 11, 1968, abeam of the lights of Bécancour on the north side of the channel in a snow squall; cause, adverse conditions.

(D) *Cases before the Admiralty Court and the Exchequer Court*

- (a) *Collision between the tank ship Britamlube and the Prins Frederick Willen June 20, 1958, in the harbour of Montreal*

The collision occurred in mid-channel in the upper part of the harbour between the downbound *Britamlube* and the upbound *Prins Frederick Willen* which, after leaving berth 24 where she was lying starboard side to, was crossing the channel in order to proceed upstream on her port side, a local practice for that part of the harbour in order to avoid the brunt of the St. Mary's Current.

The Admiralty Court (1959 Ex. Cr. 205) found that the casualty was solely due to the negligence of the pilot of the *Prins Frederick Willen*, in that, while his view of the downbound traffic was very limited and obstructed, he attempted to cross the channel without warning and without taking reasona-

ble precautions to ensure that this manoeuvre could be made without risk of collision with downbound shipping.

The Court added "the evidence leaves no doubt in my mind that, from the moment of casting off, it was the pilot's intention to cross and proceed up river on the port side of the channel. It was felt to justify such a course on the ground that it is a common practice for vessels to meet in the channel starboard to starboard in that area. I am advised however that although this practice is followed to some extent when downbound and upbound ships are meeting, such is the case only when the meeting vessels have exchanged signals and are agreed upon such course."

The decision was partly reversed in appeal in that the Exchequer Court (1960 Ex. Cr. 274) held in appeal that the *Britamlube* pilot was also to blame. It held that his failure to obtain permission from the Montreal Harbour Master to enter a dangerous and busy channel from the Lachine Canal, by steering a mid-channel course, particularly when his view was obstructed by two ocean-going vessels secured alongside berths 18 and 19, and his failure to sound the warning signal when opposite the Marine Tower in accordance with Harbour Regulations were acts of negligence on the part of the pilot in charge of the *Britamlube* and that they contributed to the collision.

A similar collision in the same circumstances occurred December 3, 1963, when S.S. *Manchester Merchant* downbound from the upper harbour collided with M.S. *Lionel* upbound after leaving the Seaway. Following this last casualty the Harbour Traffic Regulations were amended to prohibit ships from meeting in the St. Mary's Current and requiring ships coming from the Seaway and bound for the upper harbour to proceed downstream below the St. Mary's Current before turning upstream (vide pp. 635-6).

(E) *Discipline*

The situation with regard to the enforcement of discipline and the re-appraisal of pilots' qualifications is the same as described for the Quebec District and, although to a lesser extent, disciplinary measures taken have been challenged before the courts, e.g., the *Timna* case. Disciplinary powers were centralized in Ottawa and the local Superintendent was deprived of the limited powers he purportedly had before, thus making him to resort in certain cases to indirect punishment by removing a pilot's name from the roster and depriving him of the privilege of equalization.

The same passive attitude of non-involvement prevailed in Montreal (Part I, p. 428) as appears from the way two complaints made on the same day against the same pilot by the Masters of two different ships were dealt with.

On July 6, 1963, at about 1735, the Master of the *Thors-Carrier* reported to the Pilotage Authority that he was refusing pilot (Blank) who

had been assigned to his ship on the ground that he was unfit to pilot on account of drunkenness. The same day, at about 2230, the same action for the same reason was taken by the Master of the *Sterno*. The first complaint was not reported to the local Supervisor because one of the despatchers took it upon himself to decide that the complaint was not founded when he saw the pilot in the pilotage office after the incident. It was only after the second complaint was received that the local Supervisor was informed. The only action taken then was to remove the pilot's name from the list. But two days later, the pilot's name was reinstated because the Supervisor felt that he had not reasonable grounds to believe that the pilot had been under the influence of liquor, a fact that could have been definitely established had measures been taken to have the pilot's condition ascertained immediately when the complaints were made. The Supervisor's interpretation of the term "reasonable grounds" (By-law subsec. 14(3)) was obviously incorrect, and a most serious presumption resulted from the receipt of two separate identical complaints lodged a few hours apart by the Masters of two ships. This could not be mere coincidence (Exs. 723 and 746).

Since the pilot's condition was not ascertained immediately (as it should have been), the only source of evidence was the testimony of the persons on board both ships but they were not readily available because the ships had sailed. If the ships had not returned, such serious complaints would have had to be dropped for lack of evidence. It took three months for the investigation to be completed. It took the form of statements obtained from the Masters and other officers who had witnessed the pilot's condition. After the complaints had been investigated, a "show cause" letter was sent to the pilot concerned. One month later his licence was suspended for the remainder of the year, i.e., from November 15 to December 31, 1963 (Ex. 1539(s)).

The enforcement of discipline on the pilot involved in the grounding of the *Georgian Flame* at Cap à la Roche April 19, 1956, is an example of the "show cause" letter procedure that was followed at that time (Part I, p. 417). The finding of the Preliminary Inquiry into this casualty (Ex. 1470(p)) was that the pilot had failed to exercise a reasonable standard of skill and that, while the circumstances were not favourable, there was no reason for the vessel being allowed to run aground. Damage to the vessel was estimated at \$250,000. The Investigating Officer had recommended a one-month suspension of the pilot's licence. It was then the policy to use a "show cause" procedure whenever feasible. On June 12, 1956, the following "show cause" letter was sent by the Director of Marine Services to the pilot concerned (translation):

"Dear Sir:

The report of the Preliminary Inquiry held into the circumstances of the grounding of the ss. GEORGIAN FLAME on April 19th, 1956, at Cap a la

Roche, when that vessel was being conducted by you, finds that this accident resulted from your failure to manoeuvre the vessel with a reasonable degree of skill.

It is appreciated that the GEORGIAN FLAME, in the fully loaded condition that she was at the time, required careful manoeuvring. However, as the vessel is an ex-Park ship, you should have been well aware of the steering capabilities.

The direct cost of repairing the damage to the vessel caused by the grounding amounted to \$250,000, and considering the above factors the Pilotage Authority takes a most serious view of the accident.

Before a final decision is made in this matter you are hereby being given an opportunity of submitting your defence, and it is requested that you do so in writing within ten days of the receipt of this letter.

Yours truly,"

On June 19, 1956, the pilot replied that the accident was unavoidable and due to a combination of circumstances which he would explain in a defence that was to follow. This he submitted June 29 through his lawyer.

The pilotage adviser to the Minister, who reviewed the case in the light of the proffered defence, arrived at the same conclusion as the Investigating Officer, and the local Superintendent of Pilots received instructions from Ottawa to have the pilot appear before him to award him a one-month suspension. This was done.

In a telegram dated August 20, 1956, the United Montreal Pilots protested and requested an official inquiry. On August 22, 1956, the Merchant Service Guild also forwarded a telegram of protest on the ground that it was most unjust for the Pilotage Authority to make use of sec. 370 C.S.A. to suspend a pilot without a formal investigation and they demanded such an inquiry under sec. 555 C.S.A. The case was formally closed when on August 27 the Deputy Minister replied that the suspension had not been imposed on account of sec. 370 but for violation by the pilot of secs. 39 and 51 of the District By-law which make it an offence for a pilot to fail to exercise the utmost care and diligence in the safe conduct of a vessel under his charge.

5. PILOTAGE OPERATIONS

(1) PILOT STATIONS AND PILOT BOARDING STATIONS

Since the Montreal District is the second of a series of contiguous Districts along the St. Lawrence-Great Lakes sea route, boarding stations had to be established *en route* and at the extremities of both *de facto* divisions of the District, where a changeover of pilots is effected:

- (a) at Quebec within the joint area of both Districts of Montreal and Quebec, in the stream in the middle of the harbour off the Quebec pilot station;
- (b) off Pointe-des-Ormes, just upstream from Trois-Rivières at the *de facto* division line of the Montreal District;
- (c) in the St. Lambert lock area, west of Montreal.

In addition, a sub-boarding station exists at the two anchorages for the harbour of Montreal and the Seaway: Lanoraie and Longue-Pointe. The first enables a Master to discharge the river pilot if he expects to anchor for a considerable period; the second permits the changeover from a river pilot to a harbour pilot when an upbound vessel anchors there for any reason and for any length of time. Any movement upstream from Longue-Pointe anywhere within the harbour and up to St. Lambert lock that is not the uninterrupted continuation of a river trip is an exclusive prerogative of the harbour pilots. In addition, the river pilots will board or disembark at any berth within the District when it is the ship's destination or her point of departure, e.g., in the harbours of Quebec, Trois-Rivières, Sorel and Montreal, including Contrecoeur.

The Quebec boarding station (pp. 410 and ff.) and the St. Lambert lock boarding area (pp. 627 and ff.) have already been studied.

Three pilot stations are maintained:

- (a) The Quebec pilot station is shared with the Quebec District pilots. There the Montreal pilots purportedly come under the jurisdiction of the Quebec District Supervisor who, for this purpose, would become a delegate of the Montreal District Authority under the Montreal District Supervisor. However, there is no written delegation of powers from the Montreal Pilotage Authority, nor is there any text in the legislation giving him any power of supervision, direction or discipline over the Montreal pilots (vide pp. 212 and ff.). That part of the cost of administering the Quebec pilot station which is incurred on account of the Montreal river pilots is neither segregated nor estimated. The whole cost of the station is attributed to the Quebec District in the financial statements.
- (b) The Montreal pilot station was situated in the waterfront building of the Department of Transport on Sutherland Pier, but is now (1970) located on the 16th floor of the Board of Trade Bldg., Beaver Hall Hill. It serves as a joint pilot station for the pilots of the Montreal and Cornwall Districts, although for the latter it is not a meeting place or a reporting centre but merely the source of their despatching instructions. The station is the responsibility of the Montreal District Supervisor who, at the same time, performs the function of the Cornwall District Supervisor. The Montreal river pilots, upper section, the Montreal harbour pilots and the Cornwall pilots are despatched from this centre. The Regional Superintendent also has his office there. As of 1968, the Montreal pilotage office was administered by 22 D.O.T. officers and personnel, exclusive of the Regional Superintendent of Pilots, consisting of the District Supervisor of Pilots and one assistant, twelve despatchers, six accountants and two clerks (as compared to 15

all ranks for the Quebec station, including one District Supervisor). Formerly, the staff also comprised the personnel of the signal service whose functions are now performed by the St. Lawrence Marine Traffic Control System.

- (c) The Trois-Rivières pilot station is situated at Pointe-des-Ormes near the boarding area. It is a joint pilot station for the river pilots of both sectors. A pilot station is necessary at Pointe-des-Ormes because a changeover of pilots has been required at Trois-Rivières ever since the *de facto* division of the Montreal District.

Prior to 1949, when a pilot embarked, either at Montreal downbound or at Quebec upbound, he remained on board until the ship had reached its destination within the Montreal District or the District limit in case of a transit voyage. In 1949, it was arranged for a pilot completing a long trip to be relieved by a fresh pilot at Trois-Rivières with the changeover taking place in the harbour either at a wharf or in the stream. This system prevailed until 1957 when the requirement was extended to all pilotage trips (vide p. 617). The physical features of the channel off the wharves in Trois-Rivières harbour were not ideal for a boarding station and, when the frequency of boarding and disembarking by pilots increased, the area off Pointe-des-Ormes, 3.5 miles upstream, proved much more satisfactory. The relocation of the boarding station was brought to the attention of all interested parties by a Notice to Mariners dated May 27, 1957. Then the Department of Transport erected a wharf, completed in 1960 at a cost of \$99,762, to accommodate the pilot vessels. The Department of Transport also had a pilot station erected to accommodate the pilots and the despatching service.

The Trois-Rivières pilot station is a sub-station. It is managed under the supervision of the Montreal District Supervisor by a complement of nine: eight operations clerks under a senior clerk.

Sleeping and boarding accommodation are now readily available in the immediate vicinity of the pilot station. *Inter alia*, a hotel was erected by one of the co-owners of the launches providing pilot vessel service, mainly to accommodate their employees but the pilots as well.

Up to 1967, there was also a sub-station at Sorel which was maintained largely as part of the signal service. This sub-station was discontinued when the Marine Traffic Control System was initiated.

Requirements for pilots at other boarding places are met from these pilot stations, principally Montreal. As soon as the pilots disembark they come under the operational direction of one of the three pilot stations and must travel by land to boarding places as required, *inter alia*, Sorel, Contrecoeur, St. Lambert lock and the pilot vessel mooring bases at Lanoraie or Longue-Pointe anchorages.

COMMENTS

The advent of reliable communications and transportation facilities has improved the pilots' working conditions by reducing considerably their waiting time at boarding or pilot stations. In the process, the internal organization of these stations has been substantially altered but sometimes at the expense of efficiency and public interest because the nature and basic requirements of the service were lost sight of.

Since pilotage is a service to shipping, the basic requirement is that pilots should be readily available where and when requests are made for service, in other words, as inbound ships arrive. Hence, it is a professional requirement that pilots be immediately available for duty unless already on assignment or on leave or enjoying a rest period between assignments. Traveling time, standby time and waiting time for ship arrivals are just as much part of the pilots' duty time as when they are actually performing pilotage (and should enter into consideration when fixing the remuneration of those pilots whose status is employees or quasi-employees (vide Part III, pp. 210-213)). The pilots were right in criticising the duty time statistics compiled by the Department of Transport which took into consideration neither waiting time nor travelling time. Failure to allow for such periods is also one of the shortcomings of their pooling system which is based merely on the number of assignments performed rather than availability for duty.

In earlier days, all the Montreal pilots available for duty had to remain in Quebec in the vicinity of the boarding area in order to be on hand when incoming ships arrived. They watched for ships to appear in the river downriver from Pointe Lévis. Since the rule for ships in transit was that the first pilot who hailed a ship was employed, the pilots often passed beyond their District limits downstream as far as the Bic pilot station to be the first to offer their services. Since that time the pilots' working conditions have improved considerably. First, controlled despatching abolished competition but, since there was still inadequate warning of expected arrivals, the pilots had to spend their rest periods doing standby duty and maintain a continuous watch from the pilot station in order to be on hand when required (aspects of this system are still found in Pilotage Districts such as St. John's (Nfld.) Part III, p. 542 and, until recently, Sydney Part III, pp. 286-287). Second, radio communications now permit expected requirements for pilots to be estimated well in advance and despatching can be planned so that only the number required need be readily available. Third, telephone communications and fast transportation have also extended the concept of a pilot station to an area where pilots can remain at home, or in temporary residence away from home, until it is time to proceed to their assignments.

However, there are limits dictated by the exigencies of the service and the circumstances of each case.

If a pilot station in its original meaning is discontinued, means should be devised to provide the pilots with the latest information on all matters affecting the safe conduct of the ships they are about to pilot. In addition to being a place where the pilots wait for the arrival of the ships to which they have been assigned, the pilot station should also provide up-to-the-minute information on all matters affecting the safety of navigation, e.g., the latest Notices to Shipping, ineffective aids to navigation, weather and traffic conditions. When pilots are allowed to proceed directly from their residence to the boarding point, they can not obtain the required information unless an adequate briefing procedure exists. It should be compulsory in the interest of safety for pilots to be fully briefed before they embark and given all the facts that may affect the safety of navigation, including ships' peculiarities (vide pp. 413 and ff.). Experience has shown that when a pilot has boarded and the ship is under way he may have neither the time nor the opportunity to obtain this information because VHF communications are not immediately available.

A regular pilot station should be maintained when, due to local circumstances, the availability of the number of pilots required to serve expected arrivals can not be otherwise guaranteed and this *a fortiori* when public interest is involved. The likelihood of delay increases with the distance the pilots have to travel by land. The closer they live to the boarding point the fewer are the chances of traffic interruptions and, furthermore, a substitute can be more readily obtained if necessary.

In this framework, greater Montreal has become an extensive pilot station within which the pilots proceed from their residences direct to various boarding points. At times, they are obliged to travel long distances through heavy traffic and in adverse weather, with the result that they can not guarantee to be punctual. Until the opening of the Seaway in 1959, the occasional non-availability of a pilot at ordered time was acceptable because it simply meant delaying a departure when there were only a few small ships in transit and most of them dispensed with pilots. In addition, the boarding point for transit traffic was the entrance to the Lachine Canal in the heart of the city. The St. Lawrence Seaway created a totally different situation. St. Lambert lock, situated at the eastern end of Victoria Bridge, has become a very active boarding point for pilots of both Montreal and Cornwall Districts. Furthermore, the consequences of the non-availability of pilots assume larger dimensions there than anywhere else in the harbour because Seaway operations are delayed and a chain reaction develops. Therefore, it is imperative for the Pilotage Authority to devise a procedure which will ensure that ships are never delayed in the St. Lambert lock area because pilots are unavailable. The solution appears to be a regular pilot station near the lock where a number of pilots remain on standby ready to meet emergency situations. Late

reporting by pilots at the lock has been a major problem which apparently can not be resolved otherwise (vide pp. 755 and ff.).

Pilot stations are essentially matters of internal organization by those providing pilotage services and should not cause any inconvenience to shipping (vide Part II, p. 91). Therefore, it is wrong to impose extra expense on ships who embark or disembark a pilot at a given boarding area because the area in question is some distance from a pilot station, e.g., the travelling indemnity payable when a pilot embarks or disembarks in the St. Lambert lock area. Furthermore, this additional charge is discriminatory when similar charges are not made for other embarking points throughout the District, despite the fact that more land travel is involved, e.g., Sorel, Contrecoeur and Portneuf. The transportation expenses of pilots are no concern of the vessels employing them and should be reflected in the rates only indirectly, i.e., as general District expenses which are taken into consideration when the rates are established.

(2) PILOT VESSEL SERVICE

A regular pilot vessel service exists in areas where pilots regularly board vessels under way or at anchorage, e.g., the Quebec and Pointe-des-Ormes boarding stations and the sub-boarding stations at Lanoraie and Longue-Pointe anchorages. The occasional pilotage requirements in other areas are met by other means of transportation. It is a special characteristic of the Montreal District that these regular services are not provided by the Department of Transport, the Pilotage Authority or the pilots as a group but by private entrepreneurs.

These services are organized by the shipping interests through the Shipping Federation of Canada which negotiated rates directly with the launch operators concerned. The Pilotage Authority maintains an attitude of complete non-involvement by neither issuing pilot vessel licences as required by the Act (Part I, p. 307) nor fixing tariff charges. Consequently, pilot vessel charges do not form part of pilotage dues and are not billed for or collected by the Pilotage Authority. Failure by the pilots to provide pilot vessel service makes the compulsory payment system unenforceable (vide p. 427).

The pilot vessel service at the Quebec boarding station which serves the pilots of both Districts is described on pp. 423 and ff.

Pilot vessel service in the Trois-Rivières boarding area is provided by Three Rivers Boatman Limited, a private company controlled by a Montreal river pilot, Robert Houde.

In addition to pilot vessel service, the company provides general passenger and merchandise transportation by water for which, including the transportation of pilots, it holds a permit from the Provincial Public Service Board which also sets the fees for all these services. The ordinance

dated Sept. 9, 1960, provided the following rates for transporting pilots: \$7 to \$10 with a special rate of \$25 from December 1 to the close of navigation and from the opening of navigation until the River is free of ice (Ex. 738).

In 1963, pilot vessel service was provided by four launches authorized to transport six, eight and twelve passengers in addition to two crew members. The largest was specially built for winter transportation but proved inadequate for this purpose. In a brief to the Pilotage Authority dated August 30, 1965, the Federation of Pilots complained, *inter alia*, about the inadequacy of the pilot vessel service at the Pointe-des-Ormes station during the winter months (Ex. 1461(n)). Subsequently, the Department of Transport undertook to transfer one of the two pilot vessels customarily in service at Les Escoumins to Trois-Rivières if Three Rivers Boatman Limited was unable to supply a satisfactory vessel for winter service (Ex. 1461(q)).

As a result of the pilots' complaints the company had a new, larger vessel constructed specially for this purpose and it proved capable during the winter.

The company provides twenty-four hour service operating from an office in a building approximately opposite the pilot station.

The company keeps close liaison with the pilot station in order to ascertain the arrival time of the vessels which will change pilots. An employee in the company's office keeps a lookout for arrivals and notifies the pilot when a ship is sighted. The company bills agents or owners directly. Tariff increases are negotiated by the company with the Shipping Federation before the approval of the Provincial Transport Commission is obtained.

Pilot vessel service at Longue-Pointe is provided by another private company, Montreal Boatman Limited, incorporated under the Provincial Companies Act. The company is controlled by Mr. Eugène Houde, brother of the principal shareholder of Three Rivers Boatman Limited.

The company provides water transportation for passengers and merchandise to and from ships at Longue-Pointe anchorage. Transporting pilots amounts to about one-fifth of its total operations. No service is provided during the winter months because ships do not anchor then but proceed directly to their berths.

The company holds a permit from the Provincial Transport Board and a second permit from the National Harbours Board. The National Harbours Board permit authorizes the company, *inter alia*, to use in return for a specified rent a harbour location to establish its office and erect a wharf.

In 1961, a petition by Montreal Boiler, Scaling and Ship Repairs to provide the same type of service within the harbour of Montreal was rejected by the Provincial Transport Board when, after a public hearing, the Board found that the necessity for granting a second such permit for the harbour of Montreal had not been established.

The rates are also approved by the Provincial Transport Board. In 1963, the charge for transporting pilots was \$3.50 each way, the same as for other passengers except seamen for which it was \$1. For taking lines from a ship to a wharf (one motor boat and two men) the price was \$35 (Ex. 739).

The company operates five launches, two specially employed in transporting pilots and passengers. The other three transport merchandise and perform other harbour services. Two of the pilot launches are authorized to carry 20 passengers and are equipped with radiotelephones for communication between the company's office and the launches only.

The pilots who embark at Longue-Pointe proceed by land to the company office at berth 83.

There is also regular pilot vessel service at the *Lanoraie anchorage* during the normal navigation season. It is operated by a private launch owner, Mr. E. LaPointe of Lanoraie, under a provincial permit obtained in 1962. The Lanoraie anchorage is used by ships waiting for berthing space at Contrecoeur or Tracy, and for a berth at Montreal or for entrance to the Seaway when there is no space available at Longue-Pointe. When a vessel proceeds to anchorage at Lanoraie for any reason other than emergency or weather conditions, according to the despatching rules a pilot may stay on board for a maximum of twenty-four hours but can be relieved if he so requests as soon as the vessel is anchored (Ex. 1539(n)).

(3) TUG SERVICE

Quebec and Montreal are the only harbours where tugs are used to assist ships to berth and unberth. The berths in Sorel and Trois-Rivières are readily accessible without tugs. Tug service in Quebec has already been studied (pp. 427 and ff.).

McAllister Towing Limited operates in Montreal and also specializes in towing dead ships on the River and in the Seaway. In 1963, the firm operated ten tugboats varying from 750 to 1,440 h.p.

Most tug Masters have had extensive experience in Montreal, both towing and assisting in manoeuvring vessels. Except for the occasional complaint where often it is difficult to establish who is really at fault, the competence of the tug Masters is said to be adequate.

As a general rule, it is the Master of a ship who decides whether tugs will be needed for berthing and unberthing and, if so, how many, but he relies mainly on the advice of the pilot since he generally does not have the necessary knowledge of the key governing factor, local conditions.

By way of exception, when the safety of navigation is involved the Harbour Master has power to overrule the Master in this decision and order the number of tugs needed (National Harbours Board By-law A-1, sec. 36). This happens occasionally.

A request for tugs normally comes through the shipping agent, but sometimes directly from the pilot, particularly when additional tugs are required at the last minute. Since there is only one tugboat company in Montreal, problems like those in Saint John, N.B. do not arise (Part III, p. 101).

There are occasional disagreements about the number and size of tugs needed but, since this is a matter of *expertise*, the pilot's opinion generally prevails. On many occasions a pilot is given more tugs than he considers necessary but only because they have been ordered by the agent without consulting him. Agents know by experience the areas where a ship may need tug assistance to berth or unberth and they often take the initiative of ordering the number they feel may be needed.

Communications between pilot and tugs during manoeuvres are normally carried out through the VHF radiotelephone of Marine Traffic Control over the special frequency assigned for that purpose in the harbour of Montreal (all tugs carry this equipment). However, a system of sound signals remains necessary, partly because there are still a few river and harbour pilots who continue to prefer to transmit their orders to tugs by such signals, but mainly to provide an alternative in case of radio failure (Ex. 1539(p)).

The McAllister Towing Co. had adopted the policy of meeting with the pilots at the beginning of each navigation season in order to discuss their common problems and obtain their suggestions for improvements. The new code of signals was adopted at one of these meetings.

In the case of a tug and tow (generally as a dead ship) on a river trip, subsec. 22(2) of the District By-law authorizes the Superintendent to assign a river pilot to each vessel, in which event he must direct which of them shall be in charge. There is no similar provision for harbour pilots. Only one pilot is assigned to handle a dead ship within the harbour of Montreal. He directs manoeuvres from her bridge. This is considered a wise practice since a mariner fully acquainted with the harbour and expert in berthing and unberthing manoeuvres must always be on the bridge of a dead ship under way.

For a river trip with a dead ship, up to three tugboats may be used. The average speed is five knots. Pilots are not employed when small ships are towed. If pilots are required, two are assigned and the practice is for the two pilots to direct operations from the bridge of the leading tug taking turns relieving each other.

Dead ships are towed on the River both night and day but the pilots have occasionally asked that towing be discontinued at night for reasons of safety of navigation. The question was discussed at a meeting between the pilots and the company representatives at which a compromise was reached

whereby night towing would be discontinued whenever there was reason to believe that the safety of navigation was involved, e.g., if the dead ship had a tendency to pitch. In the five years preceding the Commission's hearings, night towing had to be interrupted only once for this reason when a tug and tow anchored for the night at Lanoraie.

The company also tows dead ships throughout the St. Lawrence Seaway. Two pilots are then employed, each one directing operations in turn. Mr. James McAllister, General Manager of McAllister Towing Limited, complained that when two pilots are assigned full dues are charged for each pilot. He recommended that the charge should be only one and a half times normal rates (vide p. 970).

(4) DESPATCHING PROCEDURE

(A) *Despatching Procedure for River Pilots*

As for the District of Quebec, river pilots are despatched through a roster system based on the equalization of turns rule. This method was originally adopted because of the special pilot system which made it impossible to operate a strict tour de rôle, and also because of the Pilotage Authority's refusal to establish and operate a pooling system as the basis of remunerating the pilots (pp. 429 and ff.).

The governing legislation is in substance the same as for the Québec District. The Supervisor is in charge of despatching and is to assign the pilots according to their grades and the equalization of turns principle. Only one pilot is to be assigned to a ship except for winter assignments and for navigation units when two pilots are to be assigned together.

These very general principles had to be implemented through administrative decisions or rulings. At first, there were unwritten rules modified and adjusted as circumstances required but, as the number of pilots increased, it became necessary to write some of them down and post them in the pilot stations where the pilots could consult them. Around 1960, a committee of pilots was appointed by the Corporation to revise and codify these rules. The new set prepared by the committee was approved by the Pilotage Authority and later adopted by the pilots' general meeting.

The Supervisor reported that codification had excellent results in that it put an end to most of the former discussions by pilots about the correct procedure in certain cases since these points of contention were clearly defined in the rules.

These rules are often amended, generally at the request of the Pilots' Committee, to introduce improvements or meet new situations (Ex. 565). Hence, the following review is limited to generalities without entering into detail.

(a) *Lower and upper sectors*

For the provision of pilotage services (except movements within the former limits of the harbour of Montreal) the District is divided into two pilotage sectors: the upper sector from Montreal to Trois-Rivières and the lower sector from Trois-Rivières to Quebec, with the harbour of Trois-Rivières being joint territory for both sectors.

The pilots are divided into two groups, one for each sector. The number in each group is arrived at by equalizing as nearly as possible the workload per pilot in both groups. This accounts for the fact that there are a few more pilots in the upper sector. In 1969, there were 72 pilots in the upper sector as against 68 in the lower sector—a total of 140. This difference was warranted by the fact that the aggregate workload is somewhat higher in the upper sector because there are a substantial number of trips to intermediate ports while almost all trips in the lower sector are transits.

When a pilot receives his licence he is posted to the sector where there is a vacancy but, if there is a vacancy in both sectors, to the one he prefers. A pilot already holding a temporary licence is given priority of choice over a newly licensed pilot. Pilots are not normally transferred from one sector to the other but there have been a few such cases within the first year of the licence. This was considered permissible because the pilots concerned were fresh from their training which extends over the whole District.

There is a pilot station at each end of each sector which also serves the pilots of the adjacent sector or District.

The pilots are despatched through a *tour de rôle* system based on the equalization of trips and according to their grades.

(b) *Tour de rôle*

The pilots are despatched for one-way trips only by the station to which they have reported and when a trip is completed they become the despatching responsibility of the nearest station.

Each of the three stations makes a new list at 10:00 A.M. daily: Quebec for despatching the pilots of the lower sector upbound, Montreal for despatching the pilots of the upper sector downbound and Trois-Rivières two lists—one for despatching the pilots of the lower sector downbound and one for despatching the pilots of the upper sector upbound. These four lists are all compiled on the following basis:

- (i) Pilots who arrive at the station before midnight are listed according to the equalization of trips principle, i.e., in the order of the despatching turns to their credit, those with a lesser number being given precedence so that they are made to perform an equal number of trips for equal availability. For those with an equal number of turns, precedence is according to the time of arrival at the station.

- (ii) Pilots who arrive after midnight do not equalize and are placed at the bottom of the list in the order of their arrival. This procedure ensures that a pilot fresh from an assignment is given adequate time to rest, and also avoids disarranging the tour de rôle since a pilot low on turns would otherwise become liable to be called prior to the expiration of his 10-hour rest period and, therefore, would have the right to refuse the assignment.
- (iii) A pilot returning from leave is placed on the list as if he had arrived from an assignment at 6:00 A.M. the day of his return, with the difference, however, that he equalizes when the list is made at 10:00 A.M.

However, there are two exceptions to these rules:

- (i) The pilot first on turn at the time the new list is made remains first on the new list. The same action is taken with respect to the second on turn when the first on turn is a Class C pilot.
- (ii) A pilot transferred from one station to another does not equalize when the new list is made if he is still at the station but retains the place he had on the previous list.

(c) *Despatching turns*

The despatching system was devised to equalize the pilots' workload calculated on the number of trips performed during the same period of availability without consideration for their actual duration. Occasionally this system results in a very unequal aggregate time spent on pilotage duty and when the special pilot system existed it resulted in a much heavier workload for the tour de rôle pilots (p. 592). Cancellations and movages are not included except indirectly to operate the tour de rôle.

The distribution of the trip workload in this fashion is achieved through the device of despatching turns (p. 116). They comprise:

(i) *Performed turns.* For this purpose, each sector is divided into two zones and a transit of a sector or a trip involving the two zones of a sector counts as one turn. A trip wholly performed within one zone counts as a half turn, unless the pilot has to travel by land to embark or return to his pilot station after disembarking, in which case it counts as one turn.

(ii) *Non-performed turns.* By contrast with the faulty procedure in the Quebec District in the application of the equalization of trips principle, pilots with a lower number of turns due to absence are not given priority on the roster. To prevent this, they are credited for tour de rôle purposes with the average number of turns credited during their period of absence to the pilots who were available for duty or with the specific number of turns provided in the rules for certain special types of absence. The non-performed turns become lost turns, free turns, leave turns or indemnity turns depending whether or not they carry pooling rights.

Non-performed turns are also added each fortnight, on the 15th and final day of each month, to all those whose aggregate number of despatching turns is lower than two below the average at that moment, thereby further limiting the application of the equalization of trips principle. There are three exceptions to this rule (Ex. 773):

- A Grade C1 pilot is allowed full equalization if the cause of discrepancy was lack of ships for his grade.
- If the non-performed turns were due to an absence on account of the death of a relative, the birth of a child or a court order, the pilot concerned is authorized to equalize despite these absences, but the privilege lapses at the expiration of the following fortnight.
- Since 1965, the privilege of equalizing has been extended to pilots who were absent because they were required to appear before a board or a commission, or who were taken off the roster following a shipping casualty, provided they were not found at fault or negligent and made up their missed turns before the end of the fiscal year.

(d) *Grades*

As seen earlier, the tour de rôle is made up without consideration for pilot grades. All the pilots on the roster in each station are on the same list following the procedure described above. Attention is given to grades only when despatching is being planned.

Pilots are assigned in advance following their order on the list in the chronological order of the ETA of ships in transit and ETD of ships in port, provided the ships fall within the limits of their grade, in which case the assignment is to the next on turn of the appropriate grade. Exceptions are made to this rule for Grade A and Grade C1 pilots. Since Grade C1 is a temporary grade for newly appointed pilots from which they are promoted after a relatively short period of time and is held by only a small number of the total strength, the tour de rôle is unlikely to be greatly disturbed on their account. The despatching rules provide that when a Grade C1 pilot is first on turn, the Grade B pilot after him is also to be considered as first on turn if a substitute is required.

While Grade A pilots may be assigned to ships of all types without restriction, their limited number requires that they be despatched with care so that enough of them will be available when requests are made by ships that come exclusively within their legal competence, i.e., ships of 8,000 NRT and over. The despatching of Grade A pilots used to be further complicated by the fact that, according to the pilots' own pooling arrangements, a Grade A assignment carried a \$15 to \$25 bonus for the pilot who performed the service and this was paid him out of the pool before sharing. This bonus was abolished when the pooling arrangements for the remuneration of pilots were

modified in September, 1969. In order to distribute Grade A assignments as equitably as possible among the Grade A pilots, a supplementary tour de rôle of Grade A pilots is maintained on which they rank according to the number of Grade A assignments performed. When a Grade A pilot is required, the assignment is given to the one on the supplementary list with the lesser number of Grade A assignments, provided he is available, irrespective of the place he occupies on the main roster. If he is not available, the assignment is given to the next on turn on the supplementary list. To ensure his availability, he is reserved as long as ten hours prior to the estimated time of arrival or departure of his ship. When not so reserved, a Grade A pilot keeps his place on the main tour de rôle and is despatched as if he were Grade B.

(e) *Rest periods between trip assignments*

After each trip a pilot is entitled to a rest period of 10 hours during which he can not be required to take a fresh assignment without his consent. For trips terminating at the pilot stations in Quebec or Trois-Rivières, or at the west end of the Montreal District, i.e., in Montreal harbour and in St. Lambert lock, the rest period begins the moment the pilot disembarks. When trips terminate at an intermediate port, the period runs from the time he reaches, or ought to have reached, the pilot station to which he has to report.

While the policy is to avoid asking pilots to take fresh assignments before their rest period has been completed, there are occasional exceptions when the demand for pilotage services is high.

(f) *Change of place on the roster and miscellaneous provisions*

Some leeway is given the pilots regarding their place on the list. They are authorized to change by mutual agreement, provided both pilots involved have had their ten-hour rest period and are of the same grade and, except for Grade A pilots, the difference between their despatching turns does not exceed two.

The despatching rules also contain a number of miscellaneous provisions to cover winter despatching and situations such as when a pilot can not be reached to receive despatching orders or is late reporting. It is also a regulation offence for a pilot not to remain available or to be late for an assignment without an acceptable excuse.

(g) *Movages*

Movages do not count as turns either for despatching or pooling purposes. They have always accounted for only a small portion of the aggregate workload and even more so since the Montreal harbour pilots became a separate group. The pilots who are available for duty at a station are required to handle the occasional movages in the area.

According to the practice followed, the Montreal pilots are not required to perform movages within the harbour of Quebec, although the Montreal

tariff carries rates for movages there. These are done exclusively by the Quebec District pilots. However, a movage charge is levied instead of a partial trip charge when an upbound trip is unexpectedly interrupted before a ship has proceeded beyond the western limits of the harbour. It has been the practice in such cases to make only the lesser charge (vide p. 783). Such occurrences do not create any despatching conflict because the pilot on board was assigned to a trip and not to a movage.

The creation of the group of harbour pilots for the harbour of Montreal has relieved the river pilots of most movages in their District. The river pilots have to attend to movages at other harbours or landing places, mainly Sorel and Trois-Rivières.

When a pilot performs a movage he keeps his turn on the main tour de rôle unless his turn comes for an assignment during that time. In that event, he is placed second on turn on the main list as soon as he returns from the movage.

Movages are effected mainly by pilots who volunteered for the extra work and a compulsory assignment is made only when there is a shortage of volunteers. For this purpose, a special list for movages is kept at both the Trois-Rivières and Montreal pilot stations. Movages in the harbour of Trois-Rivières are performed as far as possible by the pilots of the lower sector. When a pilot arrives at the station and volunteers to perform movages, his name is placed at the bottom of the movage list and struck off that list when he becomes fourth in turn on the main list. A movage is given to the first pilot in turn on the movage list provided he is available at the time. When no one on the movage list is available, the fifth on turn on the main list is assigned. Approximately the same procedure is followed for a movage requiring a Grade A pilot.

(h) *Despatching planning*

Planning consists of ascertaining in advance, even anticipating, the extent and nature of the demand for services and making the necessary arrangements to ensure the availability of the required pilots at the right time. It is as a result of such planning that Grade A pilots are earmarked for a Grade A assignment as long as 10 hours in advance in order to ensure their availability, and that pilots are transferred from one station to another to meet an expected shortage. The sophisticated radio communications now available make accurate planning feasible, thereby reducing the pilots' waiting time to a minimum and guaranteeing that pilots with the proper qualifications will be available.

Despatching is an inherent feature of controlled pilotage. It imposes on the Authority who has assumed the direction of the service the obligation to ensure efficient operations including a guarantee of the *expertise* and physical and moral fitness of the pilots assigned (Part I, pp. 328-329). It has become

its responsibility to ensure that pilots with the right qualifications are available when and where required and that vessels which have complied with the requirement imposed upon them by legislation are not delayed by the non-availability of pilots. As seen earlier, this responsibility in the District of Montreal assumes another dimension when the non-availability of pilots at the right moment may also impair the operation of the Seaway (pp. 742 and ff.).

When all licences carried the same competency and the pilots who were available for duty were required to remain at their pilot station, planning was a comparatively simple task. The only planning required then was for sufficient pilots to be on stand by at the station to meet the expected demand, but it became more exacting when the Pilotage Authority undertook to despatch pilots from their residences, because despatching orders had to be given sufficiently in advance to give them adequate time to travel. These difficulties were increased by the introduction of the grade system which reduced the choice of pilots with the necessary competence. Successful despatching requires early, accurate information about the demand for services and their nature.

To obtain such advance information has always been a problem both from the legal (Part I, pp. 230 and ff.) and practical point of view. Re notice of requirement, vide p. 442.

As far as ascertaining pilotage requirements is concerned, the Pilotage District of Montreal is in a privileged situation because the extent and nature of all incoming traffic are known well in advance since it has first to go through one of the adjacent Districts. Most of the required information for accurate despatching planning is now available, or at least should be available, from the Marine Traffic Control System on the St. Lawrence River which liaises with the similar system on the Seaway. The system provides the Pilotage Authority with the names and destination of all incoming ships and their up-to-the-minute progress. As far as pilotage service is concerned, all that ships are asked to state is the extent of their pilotage requirements *en route*. For ships in transit at the boarding stations of Quebec and Trois-Rivières or downbound from the Seaway, it is merely a matter of internal organization and liaison for the despatching office to establish accurately enough the time of requirement. In the case of a departure, however, it must be guided by information originating from the ship; a three-hour notice of requirement is asked for but at times such notice is too short, especially for Grade A assignments. As an added measure of precaution the despatching office keeps track of all ships that have berthed within the District or are at an anchorage; with the information they obtain from the various Port Authorities and by contacting the ship's agent when necessary they are able to establish well in advance the expected time of departure of most vessels.

While pilots are to remain available, irrespective of their place on the list, it had been the practice to give them advance notice when they became first on turn, or the equivalent because of their grade. This practice has now been abandoned as no longer necessary. A pilot now can ascertain at all times his place on the tour de rôle, as well as ETA's and ETD's, through a recorded telephone message which lists all this necessary information and is brought up to date every two hours. In addition, a pilot may call the despatching office for details.

Despatching orders are given to the pilots in sufficient time to enable them to travel from their place of residence to the embarkation point. In certain cases, this lead time is specified in the despatching rules, e.g., for boarding at the Quebec station two hours before ETA or ETD, except when boarding in the inner Princess Louise Basin, in which case it would be four hours before high tide to allow the pilot to embark two hours before the gates open; for boarding at Trois-Rivières, a pilot is given his despatching order when the ship passes Tracy or Batiscan; for a ship downbound on the Seaway, one hour and a half before she is expected to reach St. Lambert lock.

Delays occasioned by the occasional non-availability of pilots at St. Lambert lock pose a serious problem. For details and comments, vide pp. 755 and ff.

Any departure from the true concept of Grade A is liable to create the same difficulties caused by the special pilot system. For comments, vide pp. 673-4.

(B) Despatching Procedure for Harbour Pilots

There is no special legislation covering the despatching of harbour pilots. The few provisions in the District By-law appear in Part I, General, and apply equally to both groups of pilots. Hence, despatching is the responsibility of the District Supervisor of Pilots who is to operate a tour de rôle based on the equalization of assignments. A strict interpretation of the By-law would indicate that subsec. 10(2) does not apply to the harbour pilots since it refers to the equalization of trips and harbour pilots perform only movages. It is possible this was the intention but, if so, it should have been clearly expressed. However, the fact that the matter is contained in the general provisions which are applicable to all pilots indicates that there was merely a fault of correlation when the special provisions regarding the newly created harbour pilots were added as Part III.

In addition, the harbour pilots have also devised their own despatching rules which have been adopted by the Pilotage Authority (Ex. 570). Because there is only one pilot station and all pilots are of equal competency since there are no grades (except on the rare occasion when for a short period of time a pilot may hold a temporary licence), the despatching rules are few and simple.

These rules provide for despatching in accordance with a roster based on the equalization of assignments. The tour de rôle is made up daily at noon with the pilots listed according to the number of turns to their credit. There are no half turns. A movage counts for a turn, irrespective of the distance involved, as does a cancellation. For despatching purposes, the aggregate number of turns comprises actual movages performed, cancellations, free turns and lost turns. If two or more pilots have the same number of despatching turns, the one with the longer period of rest is listed first. The names of the pilots performing movages when the list is made up are not entered, nor are the names of those who are unavailable for duty for any reason.

After the list is compiled, it operates until noon the following day as an ordinary tour de rôle and names are added at the bottom in chronological order as the pilots terminate their assignments. By way of exception, a pilot who is more than three turns below the average is placed second in turn as soon as he has completed a movage.

In principle, the equalization rule applies only to pilots who become low on turns during availability for duty and does not cover turns missed on account of absence. The two exceptions to the rule concern turns missed due to absence for death or illness in the pilot's immediate family, or due to his illness or injury, in which cases the privilege is optional.

The harbour pilots are not required to remain at the pilot station when they are waiting for a ship or to call there after completing an assignment. Notices of assignment are given by telephone. Lead time varies according to the point where the pilot will have to embark. Similarly, on terminating an assignment, unless the pilot reports in person at the pilot station, he must telephone stating the time he finished so that his place on the tour de rôle can be established until the list is compiled the following day at noon.

Pilots have the privilege of exchanging turns, provided the difference in turns does not exceed three between the opening of the navigation season and Nov. 30 inclusive, and one thereafter.

(c) *Failures of the Despatching System;
St. Lambert Lock Problem*

Despatching, like any other system, is likely to encounter difficulties but when the causes are ascertained, measures can usually be taken to change the procedure or correct the shortcomings.

When a failure of the system has consequences for only one ship or one pilot, only reasonable measures to prevent a recurrence are necessary, but when the consequences are more far reaching, e.g., if a pilot of the correct grade, District and group is not available at St. Lambert lock at the proper time, the lock ceases to function and Seaway traffic is held up, the necessary remedial measures must be taken even if this means basic changes in the despatching system.

Study of the 21 instances complained of in 1961 and 1962 and investigated by the Regional Superintendent of Pilots reveals that the main reasons for the non-availability of pilots at St. Lambert lock were:

- (a) defective despatching planning, at times due to despatching error but mostly due to lack of accurate advance information on the demand for pilotage;
- (b) failure by the pilots to report.

Accurate advance information was lacking because there was no proper liaison between the various services connected with shipping, and the despatching office had to rely mostly on notices of requirement from vessels in order to ascertain the demand. Some vessels sent no notice or sent one too late to enable the despatching office to make the necessary arrangements for the assigned pilot to reach the boarding point in time. There were also occasions when Masters were not aware of the internal arrangements of the service and requested a pilot from the wrong group.

Various measures were taken to solve these problems. First, the contents of the notice of requirement were simplified and vessels were requested to state merely their ETA at the boarding point and destination. The despatching office then had to decide whether a harbour or a river pilot was required. Second, closer liaison was established between all services connected with shipping, such as the Seaway Traffic Control System, port Authorities and the pilotage despatching offices in the Quebec District, in order to keep track as far as possible of incoming traffic, anticipate the demand and plan despatching accordingly. Experience showed that ships' notices of requirement were often delayed on account of the failure of radio communications or because they were routed through port Authorities who failed to relay them immediately to the pilotage despatching office.

Hence, the major single improvement has been the creation of the Marine Traffic Control System which has rendered accurate advance planning of despatching possible, thereby overcoming the main cause of the non-availability of pilots. The VHF network of the system and a similar network on the Seaway provide reliable ship-to-shore communications. The traffic information the system furnishes provides the despatching office with a complete picture of maritime traffic throughout the St. Lawrence River and Seaway system, including such particulars as the name and destination of each ship and her up-to-the-minute progress through the system. Ships are no longer required to send the Pilotage Authority their ETA at the boarding station but only to state in a general notice which they send through the VHF network prior to entering the system their complete requirements for pilotage services *en route*. It then becomes the responsibility of the various pilotage officials to follow the ships' progress, determine their ETA at the various boarding stations and ensure that the proper pilots are available on arrival.

There remains, however, another source of delay which is an inherent weakness of the present despatching procedure, and, therefore, can not be overcome efficiently without making a basic change. Despatching pilots from their place of residence can be effective only if they live in the near vicinity of the boarding area: the longer the distance to be travelled by land, the greater the chance of being late reporting and the greater the consequences of failure to report.

The study made by the Regional Superintendent showed that four of the 21 cases resulted from failure by the pilot to report on time, despite correct despatching orders. In two cases, the pilots were late by a few minutes; in the third case, there was a 20 minute delay because the pilot went back to sleep after receiving his notice. The fourth case was the consequence of a dispute between the Cornwall pilots and the harbour pilots as to the place of change-over in the St. Lambert lock area. When a pilot is late reporting there is no way of knowing how late he will be or whether he will report at all, and it takes at least one hour to provide a substitute.

The Seaway Authority reported (letter dated Dec. 23, 1969, Ex. 1539(o)) that much progress has resulted since the creation of the Marine Traffic Control System. There are, however, still instances of a pilot failing to report at St. Lambert lock in good time. The problem is the same whether a Montreal pilot or a Cornwall pilot is involved. In order to minimize the extent of each delay, arrangements have been made that, as soon as it is found that a pilot has not arrived 15 minutes before ordered time, a report is immediately made by telephone to the pilotage despatching office so that alternative arrangements may be made with the least possible delay. Furthermore, each instance is later investigated by the Seaway and the Pilotage Authorities to ascertain the cause and to devise appropriate remedial measures whenever possible.

The recent situation according to Seaway statistics (Ex. 1539(o)) is as follows:

	1967	1968	1969
(a) Percentage of downbound vessels delayed due to the non-availability of pilots.....	0.878%	0.345%	0.534%
(b) Percentage of upbound vessels delayed due to the non-availability of pilots.....	0.209%	0.682%	0.678%
(c) Percentage of vessels indirectly affected thereby.....	0.414%	0.395%	0.128%

It has been reported that during the 1969 season there were about ten occasions when Seaway operations were delayed on account of the non-availability of pilots at the proper time. It is realized that all these delays

would be avoided if the pilots were required to report at the lock a reasonable time in advance, but the Pilotage Authority is in a dilemma because it is responsible for establishing the time of requirement but this must be accurate within one hour; otherwise, either the pilot will not be ready in time or the ship will be penalized through a detention charge resulting from the Pilotage Authority's faulty estimate. The By-laws of both Montreal and Cornwall Districts stipulate a detention charge if a pilot has to wait at St. Lambert lock more than one hour after ordered time. Therefore, the despatching office tries to establish as accurately as possible the time when pilots are required to embark and issues assignment orders accordingly.

There are a number of reasons why a pilot may report late: insufficient lead time, unexpected traffic problems, late despatching as a result of delayed information from the Traffic Information Centre. A Montreal pilot is despatched as soon as a downbound ship is reported leaving Côte Ste. Catherine lock. This gives the despatching office very little leeway because the pilot must have an hour to an hour and a half to reach the lock depending on traffic conditions. If there is any delay transmitting information from the Seaway to the despatching office through the Marine Traffic Information Centre, a pilot will not be reached in time, he will arrive late and there will be an inevitable delay at the lock.

COMMENTS

Mr. J. R. Burnside, who spoke on behalf of the Seaway Authority, expressed their great concern about the situation and urged that there be more flexibility in the procedure for despatching pilots. As a possible remedy, he suggested that when a relieving pilot was not available the pilot already on board should be required to bring the ship out of the lock to an anchorage or berth where she would not hamper traffic. Thus Seaway operations could continue without interruption.

This would be only a partial solution since a sizeable number of downbound vessels which require pilotage services in the Montreal District enjoy an exemption in the Cornwall District and, therefore, there is no pilot on board when they reach St. Lambert lock. Furthermore, it should be adopted only as a last resort because of the consequences it entails. Apart from the question of arranging for the changeover of a pilot where no pilot vessel service exists as well as the considerable loss of time for the ship concerned, serious legal and practical problems would be created because a pilot should not be allowed to pilot in waters with which he is not familiar. It would be necessary to extend the joint area of the Montreal and Cornwall Districts to include the necessary anchorages or berths on each side of St. Lambert lock and to train the pilots to operate in these new areas.

It is considered that the correct solution is to change the despatching procedure to ensure the availability of pilots with the required qualifications.

It is clear that traffic information now available makes it feasible to determine well in advance the extent and nature of pilotage demands at St. Lambert lock. Therefore, the only likely cause of delay is the unreliability of land transportation over long distances in adverse traffic conditions. The only certain preventive is to advance ordered time so far ahead that, if the assigned pilot fails to report at the lock punctually, the despatching office will have sufficient time in hand to assign a substitute who can reach the lock before the ship's arrival. Therefore, this would mean that the assigned pilot must receive his orders at least three to three and a half hours before the ship is expected and must also report to the despatching office by telephone, or other means, upon arrival. This should be not later than at least an hour and a half prior to the scheduled arrival of the ship. In case the pilot fails to report, the despatching office would then immediately assign a new pilot who would proceed to the lock without delay and take the assignment if the first pilot does not arrive in time.

On the other hand, if the Marine Traffic Control System were unable to provide the complete traffic and pilotage information required to plan despatching accurately and well in advance, the only solution would be to establish a formal pilot station in the St. Lambert lock boarding area. A reserve of pilots of the three groups would have to be maintained at all times. The standby pilots of the Montreal river group would be Grade B except for the rare occasions when Grade A ships were expected (vide pp. 742-3).

Whatever procedure is adopted, the governing legislation and despatching procedure should be sufficiently flexible to meet emergencies, and arrangements would have to be made so that pilots of both groups of Montreal pilots were on call. That pilots qualified for their assignments should be available at St. Lambert lock when ships require them is a matter of public interest which must take precedence over any consideration of internal organization. It follows that the first available pilot who is physically fit to take an assignment should be liable to be assigned, whatever his place on the tour de rôle, notwithstanding the despatching rules and, in the case of the Montreal pilots, their legal competency. Montreal river and harbour pilots both are equally capable of piloting ships from the lock to any berth within the harbour and the harbour pilots' operational area extends to Longue-Pointe anchorage. If no Montreal harbour pilot can be available in time, the assignment should be given to any available river pilot with the proper grade. The converse also holds. If a harbour pilot has to substitute for a river pilot, he should take the ship down to Longue-Pointe anchorage and be relieved there by a river pilot for the balance of the river trip. In such a case, the ship should be required to pay only the regular pilotage dues that would have been charged if the proper pilot had been available.

The detention clauses in the Montreal and Cornwall By-laws for time spent by the pilots in the St. Lambert lock boarding area awaiting the arrival of ships should be abrogated because they are inconsistent with the nature of a detention charge and are in conflict with the pilots' prime responsibility, i.e., to guarantee their availability in the boarding area (pp. 742-3 and pp. 974-5). Until these detention clauses are abrogated, the despatching office should resolve the dilemma in which they now find themselves in favour of public interest: it is preferable for a few ships to run the risk of paying a detention charge than to interrupt lock operations.

(5) WORKLOAD

In the Montreal District, workload has the same meaning and the same importance and has created the same problems as in the Quebec District because the services performed by the river pilots are of the same nature and the procedure for providing them is based on the same principles and governed by similar rules. The pilots' status and their mode of remuneration are also the same. Hence, the preliminary remarks on workload and statistics on pp. 445-448 apply to the Montreal pilots *mutatis mutandis*.

(A) *River Pilots' Workload*

Over the years, the working conditions of the Montreal river pilots have been greatly improved by such measures as a more efficient despatching procedure, modern communications, better traffic information, faster ships, the abolition of the special pilot system which interfered with the tour de rôle, the *de facto* division of the District which reduced the length of river trips by half, the creation of the harbour pilots group which relieved them of movages in the harbour of Montreal and, finally, periodical strength readjustments designed to maintain the individual workload at a reasonable level. The added strain on the pilots caused by the increasing number of larger vessels which generally load to the maximum permissible channel depth is offset to a great extent by constant improvements to the channel, modern aids to navigation and up-to-date information on maritime traffic and other matters affecting the safety of navigation provided by Marine Traffic Control through its reliable, efficient VHF radiotelephone system. Nevertheless, a river assignment in the Montreal District remains very exacting and leaves the pilot no opportunity to rest even in fine, clear weather. He must pay constant attention to navigational details as he proceeds through the narrow, winding dredged channel. This is the main reason why a full transit of the District of Montreal is a much more strenuous assignment than a full transit through the District of Québec, although both are approximately the same length, and justified dividing transit trips at Trois-Rivières. (vide p. 740).

When comparing workload with traffic statistics (whether in terms of trips or turns) with those of the District of Quebec, the Montreal figures must be halved since a full transit in the Montreal District counts for two trips or two turns but only one in the Quebec District (p. 114). Winter traffic is perforce less in the Montreal District since the Seaway is closed and all vessels to and from Montreal pass through the Quebec District whose traffic also includes vessels proceeding up the Saguenay River and no further up the St. Lawrence than Quebec harbour.

Furthermore, in the Montreal District the workload of the individual pilot is more evenly distributed because of the restricted and more realistic way the equalization of trips is applied (vide p. 747).

The following table shows the average workload per year from 1955 to 1968 expressed in number of trips and movages per year pilot. A trip here means a trip (assignment) and, therefore, one trip (vessel) in winter counts for two trips (assignment), except prior to 1960 when there is no record of how many times a second pilot was on board on winter assignments because this was an unofficial, private arrangement between the pilots and the shipping interests.

MONTREAL RIVER PILOTS—AVERAGE TRIPS, TURNS AND MOVAGES

Year	Average per Year Pilot		
	Trips (Assignment)	Sharing Turns	Movages
1955.....	123.1	123.1	55.3
1956.....	125.4	125.3	56.4
1957.....	147.9	147.8	27.0
1958.....	152.0	151.6	6.5
1959.....	161.0	161.3	6.3
1960.....	148.7	150.2	6.2
1961.....	148.4	154.3	8.9
1962.....	147.2	144.1	7.8
1963.....	155.3	143.9	8.2
1964.....	158.7	152.0	9.8
1965.....	148.7	148.7	11.7
1966.....	150.9	155.0	12.0
1967.....	132.5	141.2	7.7
1968.....	129.6	157.2	not av.

SOURCES: Tables on pp. 618 and 620.

Study of Montreal Pilotage District

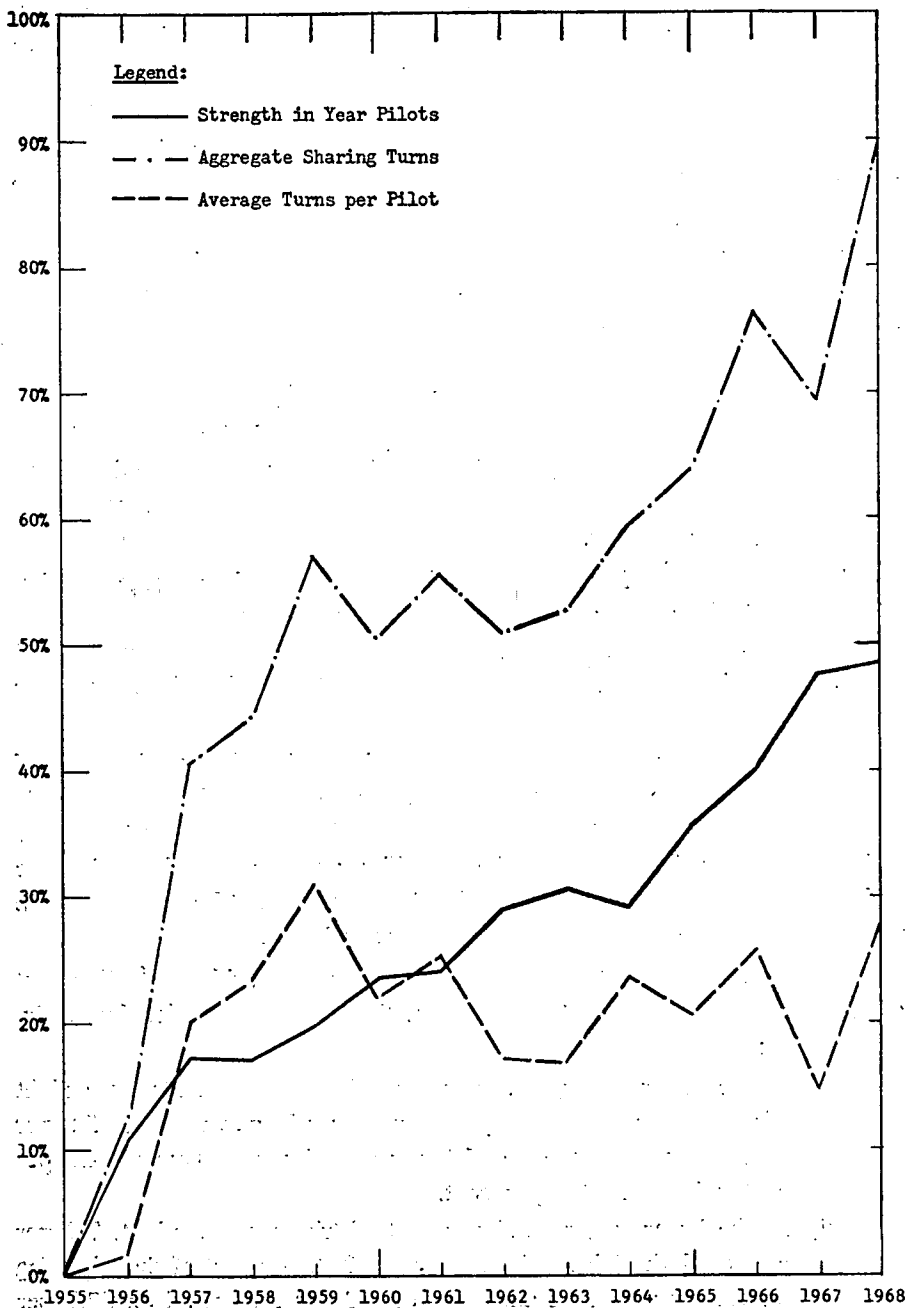
The Pilotage Authority and the pilots tried to keep the annual average workload per pilot as constant as possible by adjusting the number of pilots to the expected demand. The actual workload, however, may vary substantially because of a number of imponderables that may cause the actual demand to fluctuate, the most important of such factors in recent years being strikes in industries and services connected with shipping. Another factor relates to the readjustment process because increases in strength are effected through the issuance of permanent licences and, therefore, when a decrease is indicated it can not be effected except through normal attrition. The following table and graph show on the basis of sharing turns the result of this process from 1955 to 1968 by comparing the variation in aggregate workload, the pilots' strength in terms of "year pilots" and the average actual workload per year pilot.

MONTREAL RIVER PILOTS—
PER CENT INCREASE SINCE 1955
IN NUMBER OF PILOTS AND THEIR SHARING TURNS

Year	Strength in Year Pilots		Sharing Turns			
			Aggregate		Average per Year Pilot	
	Number	% Increase since 1955	Number	% Increase since 1955	Number	% Increase since 1955
1955.....	95.5	0	11,756	0	123.1	0
1956.....	105.4	10.4	13,205	12.3	125.3	1.8
1957.....	111.9	17.2	16,537	40.7	147.8	20.1
1958.....	111.8	17.1	16,950	44.2	151.6	23.2
1959.....	114.5	19.9	18,467	57.1	161.3	31.0
1960.....	117.9	23.5	17,714	50.7	150.2	22.0
1961.....	118.5	24.1	18,288	55.6	154.3	25.3
1962.....	123.2	29.0	17,749	51.0	144.1	17.1
1963.....	124.7	30.6	17,947	52.7	143.9	16.9
1964.....	123.3	29.1	18,740	59.4	152.0	23.5
1965.....	129.6	35.7	19,270	63.9	148.7	20.8
1966.....	133.7	40.0	20,726	76.3	155.0	25.9
1967.....	141.1	47.7	19,922	69.5	141.2	14.7
1968.....	141.8	48.5	22,284	89.6	157.2	27.7

SOURCES: Tables on pp. 618 and 620.

MONTREAL RIVER PILOTS—PER CENT INCREASE SINCE 1955 IN NUMBER OF PILOTS AND THEIR SHARING TURNS



SOURCE: Table p. 762.

The process has worked fairly well and the pilots' average workload has remained fairly constant since 1957, except for the years 1967 and 1968 when the expected traffic level was not reached on account of strikes, e.g., Seaway and longshoremen, that affected shipping adversely.

The average workload per pilot is maintained at a similar level in both sectors of the District through the same process. The number of pilots in the upper sector is slightly higher because of a somewhat greater aggregate workload (p. 746).

The criterion to establish the required pilots' strength is not, however, the aggregate annual workload but the expected workload in peak periods of a certain duration, thus ensuring that there will be enough pilots available to meet the demand without delaying ships for lack of pilots or overworking the pilots and adversely affecting the safety of navigation. The graph in Appendix IC shows the variation in demand on a monthly basis for the years 1963-1968 inclusive. The effect on the increase in winter navigation is clearly noticeable. On the other hand, probably because of strikes, there is no regular pattern from year to year.

The Department of Transport's statistics show that the average duration of pilotage trips per sector, i.e., time on duty on board vessels, varied from 6.5 hrs. in 1959 to 7 hrs. in 1963. This is corroborated by the records kept by the pilots themselves and furnished to this Commission. These will be analysed later.

These D.O.T average figures convey an imprecise picture of the pilots' workload (this is true of all Districts including Montreal) since assignments of the same type vary greatly in duration and difficulty, partly due to the size and type of ships, but mostly to the prevailing weather conditions. Pilotage assignments are performed at all hours and, hence, can not be compared with professions and occupations calling for regular hours.

A survey carried out by the Pilots' Corporation (vide p. 449) about climatic conditions in 1962 (table 1-A, p. 56, Pilots' Federation brief, Ex. 671) shows:

- (i) In the upper sector, 47.2 per cent of trip assignments were night trips, 8.9 per cent on very dark nights; rain was met on 15.8 per cent of the trips, fog on 11.8 per cent, ice and snow on 2.9 per cent, wind on 14.3 per cent.
- (ii) In the lower sector, 53.4 per cent of trips were at night, 7.9 per cent on dark nights; rain was met on 16.2 per cent of the trips, fog on 12.5 per cent, ice and snow on 1.3 per cent, wind on 22.7 per cent.

While this survey discloses that adverse visibility and weather conditions are less prevalent than in the District of Quebec, their effects are more serious because of the greater difficulties attending navigation in the narrow, winding, dredged channel throughout most of the District.

Time engaged in piloting is only part of the time the pilots spend on their duties. The same survey established that in a week a Montreal pilot's time on duty was spent on the average as follows:

- (i) total time between the time a pilot was told by the despatcher to report to a ship and the time he had to report on board (ordered time): 8 hrs. 33 min. in the upper sector and 7 hrs. 44 min. in the lower sector (as compared to 16 hrs. 48 min. for a Quebec pilot);
- (ii) aggregate waiting time after ordered time before departure (time sailed): upper sector 2 hrs. 23 min.; lower sector 59 min.;
- (iii) aggregate time aboard piloting: 25 hrs. 25 min. and 29 hrs. 12 min. respectively (for the Quebec pilot: 30 hrs. 36 min.);
- (iv) travel time upon arrival from vessel to pilot station: 2 hrs. 59 min. and 56 min. the Quebec pilot: 44 min.);
- (v) total time between ordered time and arrival time at the station after completing trip: 31 hrs. 6 min. and 31 hrs. 17 min. respectively (in Quebec, 34 hrs. 22 min.);
- (vi) for pilots of both sectors, aggregate time on movages: 19 min. and compass adjustments: 10 min.;
- (vii) aggregate time travelling by land: 4 hrs. 54 min. and 3 hrs. 40 min. respectively;
- (viii) aggregate time spent at pilot station away from domicile including 10-hour rest period between assignments: 45 hrs. and 54 hrs. 4 min. respectively.

The demand for pilotage has no set pattern: the busiest and least busy months vary from year to year. For the years 1962, 1963, 1964, the aggregate number of trips performed in these months by the busiest pilot and by pilot B. Bélanger—a Grade A pilot of the upper sector, vide p. 767—are as follows. On account of the more rational method of applying the equalization of trips principle, the workload discrepancy between pilots is small in terms of trips. The busiest pilot is the one whose aggregate hours of duty in the performance of any type of pilotage service (trips, movages, compass adjustments, etc.) and including detention time is the greatest for that month. This accounts for the apparent discrepancy in the table which takes only the number of trips into account.

Study of Montreal Pilotage District

Year	Busiest Month	Busiest Pilot	Pilot B. Bélanger	Least Busy Month	Busiest Pilot	Pilot B. Bélanger
1962.....	July	23 trips	21 trips	Sept.	20 trips	18 trips
1963.....	Nov.	19 trips	21 trips	May	18 trips	18 trips
1964.....	July	25 trips	22 trips	Sept.	21 trips	21 trips

The difference between the incidence of transit trips in the lower and the upper sectors is quite apparent from the breakdown of trips performed by the busiest pilot. In two cases, September 1962, and July 1964, the busiest pilot was from the lower sector and all his trips were transits. By contrast, 6 of the 23 trips by the pilots of the upper sector in July 1962 were not full transits but between intermediate ports and Montreal harbour or the Seaway. In November 1963, the ratio was 7 out of 19; in May 1963, 6 out of 18; in September 1964, 5 out of 21. Pilot Bélanger's ratio in July and September 1964 was even greater: 11 out of 22, and 12 out of 21 respectively.

These figures, however, convey a very imperfect picture of how the pilots' time is spent in the discharge of their pilotage duties. They have no regular duty hours and may be required to take charge of a ship at any time of the day or night after a sufficient rest period. At the conclusion of outbound assignments they normally return to their home station on inbound assignments and, because the despatching list at the station where they disembark is governed by the same rules, they must spend approximately the same time there waiting for assignments as when at home. Since the traffic pattern is irregular and many trips in the upper sector commence or terminate at an intermediate port, the pilots there often have to travel by land to take up, or report back from, an assignment. Also for a number of reasons the duration of the same type of trip varies at times substantially.

In order to give a clear view of how a pilot's time is spent during a given month, a Grade A upper sector pilot, Bernard Bélanger, kept a complete log of his pilotage activities for the years 1961 to 1964 inclusive (Ex. 781). A detailed analysis was made of pilot Bélanger's workload for the months of June 1962, 1963 and 1964 to correspond with a similar analysis made in the District of Quebec (p. 460) (Appendix IB(2)(a)). From the graph showing the distribution of his time during these three months, the following conclusions can be drawn, *inter alia*:

- (i) The distribution of his time on a 24-hour basis was as follows:

Distribution of Pilot's Time	Comparative Analysis of Pilot Bélanger's Total Aggregate Time during the Month of June											
	1962				1963				1964			
	no.	days	hrs.	mins.	no.	days	hrs.	mins.	no.	days	hrs.	mins.
Trips.....	18	4	6	45	21	5	2	30	20	5	7	30
Movages.....	1		2	15	0			0	0			0
Total time piloting.....		4	9	0		5	2	30		5	7	30
Detentions.....	2		8	15	1			30	0			0
Cancellations.....	0			0	0			0	0			0
Awaiting departure after embarking.....	11		4	45	11		7	45	8		8	10
Total time on board.....		4	22	0		5	10	45		5	15	40
Travelling.....	7		11	35	0			0	5		7	5
Away from home between assignments*.....	16	9	9	30	10	13	7	20	12	11	13	50
At home:.....												
On leave.....	1	2	13	00	1			25	0			00
Between assignments*.....	11	12	15	55	10	10	9	30	12	12	11	25
Total Time.....		30	00	00		30	00	00		30	00	00

*Including travelling time to and from assignments.
SOURCE: EX. 781.

MONTREAL RIVER PILOTS—DURATION AND INCIDENCE OF VARIOUS TYPES OF TRIPS DURING 1962, 1963 AND 1964 BY PILOT BERNARD BÉLANGER DURING JUNE AND BY BUSIEST PILOT IN BUSIEST AND LEAST BUSY MONTHS

Duration of Trips Between:	Trois-Rivières to Montreal		Montreal to Trois-Rivières		Trois-Rivières to Quebec		Quebec to Trois-Rivières		Trois-Rivières to St. Lambert		St. Lambert to Trois-Rivières		Other Trips		Grand Total	
	Trips	%	Trips	%	Trips	%	Trips	%	Trips	%	Trips	%	Trips	%		
13-14 hours.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	
12-13 ".....	1	—	—	—	—	—	—	—	—	—	—	—	—	—	2	
11-12 ".....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	
10-11 ".....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	
9-10 hours.....	4	—	—	—	—	—	—	—	—	—	—	—	—	—	8	
8-9 ".....	4	—	1	—	—	—	3	—	—	—	—	—	—	—	13	
7-8 ".....	15	—	2	—	2	—	4	—	3	—	—	—	—	—	29	
6-7 hours.....	15	—	3	—	10	—	3	—	—	—	—	—	—	—	34	
5-6 ".....	10	—	25	—	4	—	7	—	—	—	—	—	—	—	56	
4-5 ".....	—	—	14	—	6	—	1	—	—	—	—	—	—	—	26	
3-4 hours.....	—	—	2	—	—	—	—	—	—	—	—	—	—	—	9	
2-3 ".....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	
1-2 ".....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	
0-1 ".....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	
Total Trips.....	49	—	47	—	22	—	23	—	9	—	16	—	19	—	185	
Summary:	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	
0-4 hours.....	—	—	2	4.2	—	—	—	—	—	—	—	—	11	57.9	13	7.0
4-7 ".....	26	53.1	42	89.4	20	90.9	11	47.8	—	—	11	68.8	7	36.8	116	62.7
7-10 ".....	22	44.9	3	6.4	2	9.1	12	52.2	7	77.8	2	12.5	1	5.3	50	27.0
10-14 ".....	1	2.0	—	—	—	—	—	—	2	22.2	3	18.7	—	—	6	3.3
Total Trips.....	49	100.0	47	100.0	22	100.0	23	100.0	9	100.0	16	100.0	19	100.0	185	100.0

SOURCES: Ex. 781—Pilot Bernard Bélangé during June, 1962, 1963 and 1964.
 Ex. 791—Busiest pilot during least busy months of 1962, 1963 and 1964.
 Ex. 790—Busiest pilot during busiest months of 1962, 1963 and 1964.

- (ii) In June 1962, he did 14 transit trips (one of which was interrupted at Lanoraie to bunker), 4 partial transits (one of which was interrupted by anchoring off Sorel because a berth was not available) and one movage; he had to travel by land between pilot stations, once to or from an intermediate port (not counting St. Lambert) seven times. In June 1963, his 21 assignments were all full transit trips, including one trip which was not completed until June 1. There was no travel by land between stations or between intermediate ports and stations. In June 1964, he did 17 full transits and 3 partial transits but no movages; he travelled once by land between stations and four times to or from an intermediate port.
- (iii) The aggregate time shown as detention includes only idle time on board *en route* on account of stress of weather or because of unavailability of berth upon arrival; it does not include time awaiting a ship's departure after reported time because the available data do not establish ordered time.
- (iv) Between assignments, he always had more than the prescribed 10-hour period of rest.
- (v) Re irregular working hours, in June 1962, on two occasions he was piloting at midnight and on six at noon in June 1963; eight times at midnight and twice at noon; in June 1964, twice at midnight and 10 times at noon.

For the busiest pilot in the busiest months and the least busy months, a similar analysis is found in Appendix IB(3).

The duration of trips varies greatly for a number of reasons, e.g., ship's speed and availability of berths. Downbound trips are generally shorter and trips to or from St. Lambert lock take longer. The table p. 768 shows the duration and incidence of various types of trips during 1962, 1963 and 1964 by pilot Bernard Bélanger during June and by the busiest pilot in the busiest and least busy month of these years.

COMMENTS

It is apparent from the foregoing analysis that the Montreal river pilots are not overworked. Their workload is divided in a more orderly fashion than in the Quebec District and there is no danger that they will be overworked in the process of catching up with missed turns since the equalization of trips principle is applied realistically and the rules governing the tour de rôle apply equally to all pilot stations. Pilots who arrive from an assignment after midnight (0001) do not equalize that day but are placed at the bottom of the list in the order of their arrival.

An unnecessary amount of travelling time could be saved if the exclusive legal competency of Grade A pilots were limited only to the most difficult

assignments for which the Grade B pilots are generally considered not to have the necessary *expertise* (pp. 750-1).

(B) *Harbour Pilots' Workload*

As seen earlier, the Montreal harbour pilots were created as a group in 1957 for the sole purpose of handling movages within Montreal harbour proper, i.e., to the downstream limit at the end of Montreal Island. Since their area of operations is small, they are never obliged to remain away from home waiting for assignments. When they complete a movage, they return either to the pilot station or to their domicile, in the latter case reporting by telephone to the pilot station.

Movages take considerably less time than river trips but the harbour pilots have more assignments. This fact explains their different type of schedule and duration of regular leave which is granted on a weekly rather than a monthly basis as for the river pilots (p. 723).

All these factors make the nature and distribution of their workload and their working conditions quite different from those of the river pilots.

(a) *Aggregate workload*

In its appraisal of the aggregate workload of the harbour pilots, the Department of Transport has used the same method as for the river pilots, i.e., limiting statistics to the number of movages and the time taken to effect them.

The following table shows the average workload per year expressed in number of despatching turns and sharing turns per year pilot from 1958 to 1968.

MONTREAL HARBOUR PILOTS—AVERAGE ANNUAL WORKLOAD

Year	Average per Year Pilot	
	Despatching Turns	Sharing Turns
1958.....	421.7	421.7
1959.....	581.2	570.1
1960.....	427.8	426.5
1961.....	370.9	396.0
1962.....	363.7	365.3
1963.....	375.9	365.3
1964.....	458.2	453.6
1965.....	502.8	450.2
1966.....	444.0	429.1
1967.....	362.6	355.9
1968.....	290.9	321.1

SOURCES: Tables pp. 619 and 620.

The harbour pilots were particularly affected by the strikes which disrupted the Montreal waterfront and tied up Great Lakes shipping as is apparent from their fluctuating workload, especially the substantial decrease in the individual workload since 1966. This was partially corrected in 1969 when their number was reduced to 19 by not seeking a replacement for a pilot who retired voluntarily.

Sharing turns give a broader picture of the pilots' workload in that, while one moveage assignment corresponds to one sharing turn, they also include cancellations and free turns granted for work on behalf of the Corporation.

For the same reasons as the pilots in other groups, the harbour pilots have also contested the statistics compiled by the Department of Transport charging that they convey a false—or at least an incomplete—picture of their time on duty. However, when these figures are considered strictly for what they represent, they give valuable and reliable information and a reasonably complete picture can be obtained by making allowance for the remaining factors: travelling time, waiting time before departure and, to a much lesser extent, time at home awaiting assignments.

Appendix II C(1) is a graph which shows the monthly fluctuation in the aggregate demand for the period 1963-1968. There is very little work for the harbour pilots during the winter months because, on one hand, the Seaway is closed and, on the other, river traffic is relatively small, there is no congestion in the harbour and ships are brought directly to, and conducted from, their berths by the river pilots.

According to the Department of Transport's effective pilots statistics, the average time on duty per day for an effective pilot for the years 1960 to 1964 was respectively 3.2 hrs., 2.8 hrs., 2.6 hrs., 2.8 hrs. and 3.3 hrs. The survey made by the Federation of St. Lawrence River Pilots in 1962 corroborates these averages and adds certain details. Their findings are stated in weekly aggregate averages as follows:

- (i) Aggregate time between notice of assignment and order time—12 hrs. 46 min.
- (ii) Aggregate time between ordered time and departure time—7 hrs. 8 min.
- (iii) Aggregate pilotage time, i.e., between departure time and disembarking time—12 hrs. 38 min.
- (iv) Travelling time by land—not stated.

A pilot's travelling time by land to reach a ship from his residence or return to his residence after his assignment varies substantially according to the location of his residence, his method of transportation and traffic conditions. For example, pilot Lavoie, who resides in the north of the city, stated

that on the average it takes him two hours and a half travelling time to reach a ship from his residence and return after an assignment.

The Federation's survey also indicates that more than two-thirds of the movages are effected during daylight hours. Out of the 1,554 movages covered by the survey, only 469 (30.3 per cent) were effected at night (Federation of St. Lawrence River Pilots' brief, table 1-A, p. 56, Ex. 671).

Averages can not convey a realistic picture unless work is uniformly spread out during the period over which the averages are taken and working hours are constant throughout. This is certainly not the case with pilotage. In order to be in a position to appreciate more fully the nature and the extent of a pilot's workload and the irregularity of his working hours, actual cases must be studied over a period of time. As far as the harbour pilots are concerned these cases are representative of the group on account of the strict application of the equalization of assignments principle and the fact that the work week is the same for all pilots because of their leave system.

Like the river pilots, the harbour pilots have no set demand for their services but find a variation from year to year and from month to month, largely due to unpredictable factors. For the years 1962, 1963 and 1964 the following tables summarize the most pertinent information drawn from the workload of the busiest pilot during the busiest month and least busy month of the years 1962, 1963 and 1964 (Exs. 788 and 789). An upbound assignment is counted as one movage, whether or not it terminates in a move along the wait wall, and the aggregate time of movages for upbound assignments includes the full period of the assignment, i.e., from the time the ship departs until the harbour pilot leaves the ship in the lock, including any time taken for moving the ship along the wait wall. The averages at the end of the table are self-explanatory.

(b) *Pilot J. J. Ménard's workload*

Pilot J. J. Ménard gave details of his pilotage time for the months of May—September 1964. The following table gives a summary of similar pertinent information to that drawn from the data furnished by the busiest pilots (Table p. 773).

In order to give a better picture of overall duty time and the irregularity of assignments and working hours, Appendix II B(1) is a graph showing the actual distribution of the pilotage time of pilot Ménard for the month of June 1964. Travelling time from or to his residence to or from assignments is not shown. Unlike many other pilots, the Montreal harbour pilots are not concerned with travelling time: since there is only one pilot station, there is no travelling between stations; since their work is confined to the port

MONTREAL HARBOUR PILOTS—SUMMARY OF WORKLOAD TIME OF BUSIEST PILOT DURING BUSIEST AND LEAST BUSY MONTHS IN 1962, 1963 AND 1964

Year Month	Morage Time Piloted		Time Waited after Boarding		Cancellation Time Lost		Total Assignment Time on Duty	
	No.	hrs. mins.	hrs. mins.	hrs. mins.	No.	hrs. mins.	No.	hrs. mins.
<i>Busiest Month</i>								
1962 October.....	52	73 20	62 10	0 00	0	0 00	52	135 30
1963 November.....	51	61 00	76 55	7 10	3	7 10	54	145 05
1964 November.....	46	60 25	84 55	9 10	3	9 10	49	154 30
<i>Least Busy Month</i>								
1962 May.....	42	49 50	61 50	1 05	2	1 05	44	112 45
1963 August.....	41	52 40	32 50	2 10	2	2 10	43	87 50
1964 August.....	50	65 20	63 10	0 30	1	0 30	51	129 00

	Hrs.	Mins.
<i>Average for both busiest and least busy months combined</i>		
Average time piloted per morage.....	1	17
Average time waited after boarding per morage.....	1	21
Average duration of a morage.....	2	38
Average time spent on a cancellation.....	1	41

SOURCES: Exs. 788 and 789.

MONTREAL HARBOUR PILOTS—SUMMARY OF WORKLOAD TIME OF PILOT J. JULIEN MENARD—
MAY—SEPTEMBER 1964

Month	Movement Time Piloted										*Cancellation Time Lost; and Time Waited after Boarding	Total Assignment Time on Duty						
	Time Piloted in Upbound Movements to St. Lambert Lock Interrupted at Wait Wall					Time Piloted of All Other Movages							Total Movement Time Piloted					
	No.	to wait wall		to lock wall		total		No.	hrs. mins.					No.	hrs. mins.			
		hrs.	mins.	hrs.	mins.	hrs.	mins.		hrs.	mins.					hrs.	mins.		
May.....	10	8	40	17	50	26	30	41	55	30	41	82	00	44	45*	52	126	45
June.....	9	12	25	12	25	24	50	39	51	40	39	76	30	39	30	48	116	00
July.....	11	10	00	35	35	45	35	47	60	10	58	105	45	54	45	58	160	30
August.....	7	8	30	10	55	19	25	29	31	05	36	51	00	33	00	36	84	00
September.....	8	8	30	13	35	22	05	38	50	15	38	72	20	36	05	46	108	25

Average	
Hrs. Mins.	
Average total movement time piloted per movement.....	1 37
Average time waited after boarding per movement.....	52
Average duration of a movement.....	2 29
Average time spent on a cancellation.....	30

*Only one cancellation in May involving thirty minutes; remainder of time waited after boarding.
SOURCE: Ex. 1416.

of Montreal, there is no travelling by land from a pilot station to intermediate ports. The distance to be travelled by land varies greatly depending how far the pilots live from the harbour. Therefore, while this factor has to be taken into consideration, lack of complete information prevents accurate statistics being compiled and the time taken by any one pilot can not be quoted as representative.

From this graph, the following information, *inter alia*, can be drawn:

- (i) The distribution of pilot Ménard's time on a 24-hour basis for the month of June 1964 was as follows:

Assignment	Aggregate Time			Average				
				Per Event		Per Day		
	No.	hrs.	mins.	hrs.	mins.	No.	hrs.	mins.
Movages.....	48	76	30*	1	36	1.6	2	33
Cancellations.....	0							
Detentions†.....	9	not/av.				0.3		
Time waited after boarding.....	44	39	30		54	1.5	1	19
Regular leave.....	4	96	00	24	00		3	12
At home between assignments‡.....	48	508	00	10	35		16	56
Total time.....		720	00				24	00

*For breakdown, vide preceding table.

†Time included in movages.

‡Including travelling time to and from assignments.

SOURCE: Ex. 1416.

- (ii) The aggregate time shown as detention is the period between the time the pilot reported to the time the ship departed, because the data available are insufficient to calculate true detention time.
- (iii) The distribution of work on a daily basis was:
- | | |
|---|----|
| Number of regular holidays (1 day per week) | 4 |
| Number of days availability without assignments | 2 |
| Number of days with one assignment | 3 |
| Number of days with two assignments | 15 |
| Number of days with three assignments | 6 |
- (iv) Re irregular working hours, assignments were distributed as follows:
- | | |
|-----------------------|----|
| Between 0001 and 0600 | 9 |
| Between 0600 and 1200 | 8 |
| Between 1200 and 1800 | 16 |
| Between 1800 and 2400 | 14 |

- (v) The harbour pilots depend greatly on Seaway traffic. Of the 48 movages performed by pilot Ménard in June 1964, 34 were to or from St. Lambert lock, 9 of which were upbound movages interrupted by tying up at the wait wall. Most of the 14 other movages were from anchorage to an elevator berth or between elevator berths, a great number of which involved Seaway vessels.

6. PILOTAGE REVENUE AND TARIFF

PREAMBLE

The tariff rate has a direct impact on the Montreal pilots' remuneration because it is related to their pilotage earnings.

The remarks made concerning the system prevailing in the Quebec District, pp. 463-466, apply here, except for the following:

- (a) The same method was used after 1962 to raise the pilotage dues without changing the tariff structure by the device of surcharges. However, the amount of the surcharges is not the same:
 - (i) For river pilots, the first surcharge was 11 per cent in 1965 increased to 16 per cent in 1966, 22 per cent in 1967 and 31.15 per cent in 1969.
 - (ii) For the harbour pilots, it amounted to 10 per cent in 1965 and was raised to 15 per cent in 1966, 21 per cent in 1967 and 39.15 per cent in 1969.
- (b) The financial statements do not segregate the dues collected pursuant to the compulsory payment system, since for both groups of pilots these dues are paid to their respective pool for sharing.
- (c) The sole revenue from pilotage dues to the Pension Fund of the river pilots is their compulsory contribution. The harbour pilots do not have a Pilot Fund and, hence, the total amount of the dues collected (except for radiotelephone rental charges) is paid into their pool.

(1) PILOTAGE REVENUE AND TARIFF—RIVER PILOTS

The following table analyses the river pilots' pilotage earnings for the years 1955, 1959, 1962 and 1968, and also shows in percentage the general relative importance of each item of dues accruing to them.

(A) *Pilotage Voyage Charges (Trip Charges)*

Income from this type of pilotage service has always accounted for most of the earnings accruing to the pilots; more so since 1958 when the river pilots ceased to perform movages in Montreal harbour. Trip revenues

MONTREAL RIVER PILOTS—COMPARATIVE ANALYSIS OF EARNINGS AND DISTRIBUTION OF PILOTAGE DUES

Pilotage Dues	1955	1959	1962	1968
A. PILOTAGE DUES EARNED				
I. Dues accruing to pilots:				
(a) Trips—tonnage	\$ n/av.	\$ n/av.	\$ 373,496.70	\$ 599,092.35
draught	n/av.	n/av.	1,280,193.49	1,672,491.78
winter tariff	—	—	42,847.87	104,815.50
			2.5	4.3
total earned by trips	88.1%	97.6%	97.8%	96.5%
(b) Movages*	\$865,458.12	\$1,490,079.06	\$1,696,538.06	\$2,376,399.63
(c) Detention	105,845.50	23,692.00	19,257.50	24,474.48
(d) Cancellation	9,965.00	12,675.00	13,993.00	53,353.85
(e) Travel allowance (St. Lambert lock)	608.00	930.00	660.00	1,122.26
	0.1	0.1	0.04	0.04
	—	—	4,827.00	7,589.91
	—	—	0.3	0.3
Total dues accruing to pilots	\$981,876.62	\$1,527,376.06	\$1,735,275.56	\$2,462,940.13
	100.0%	100.0%	100.0%	100.0%
II. Dues accruing to Receiver General of Canada:				
Radiotelephone charges	—	—	—	29,965.00
Total Pilotage Dues Earned	\$981,876.62	\$1,527,376.06	\$1,735,275.56	\$2,492,905.13
B. DISTRIBUTION OF PILOTAGE DUES EARNED				
I. Payable to, or on behalf of, pilots:				
(a) Payable to Pension Fund on behalf of pilots—compulsory deductions	\$ 98,187.66	\$ 152,737.61	\$ 173,527.56	\$ 246,294.01
(b) Payable to pilots (Corporation)	883,688.96	1,374,638.45	1,561,748.00	2,216,646.12
	10.0%	10.0%	10.0%	10.0%
	90.0	90.0	90.0	90.0
Total payable to, or on behalf of, pilots	\$981,876.62	\$1,527,376.06	\$1,735,275.56	\$2,462,940.13
	100.0%	100.0%	100.0%	100.0%
II. Payable to Receiver General of Canada:				
Total Distribution of Pilotage Dues Earned	\$981,876.62	\$1,527,376.06	\$1,735,275.56	\$2,492,905.13

SOURCE: Ex. 534(b).
 *Since 1959, includes the \$20 Seaway non-compulsory charges (vide p. 781).

accounted for 88.1 per cent of the total pilots' earnings in 1955 but (excluding Seaway charges) rose to 97.6 per cent in 1959 and still accounted for 96.5 per cent in 1968.

According to the District tariff structure, there are three types of charge that may apply to the computation of dues for pilotage performed during a trip: basic rates, Seaway charge and winter tariff. For dead ships the rates are increased by 50 per cent. There is also the St. Lambert lock travelling allowance charge which is studied on pp. 785-6.

The 1927 tariff provided special rates for towed ships which were deleted during the 1947 tariff revision. In 1950, a 50 per cent additional charge was imposed but for movages only. It was only in 1961 that this addition was extended to trip rates. It is not possible to ascertain from the financial statements the relative importance of the 50 per cent increase for trips with dead ships because revenues derived from that source are not segregated. It may be fairly assumed that they amount to comparatively very little.

Prior to 1961, trip revenues were not broken down by components of the trip charge. In 1962, trip charges (excluding Seaway charges) accounted for 97.8 per cent of the pilotage dues accruing to the pilots. Of these, the draught rate accounted for 73.8 per cent, the tonnage rate 21.5 per cent and the winter tariff 2.5 per cent. In 1968, due to the trend to larger ships and the gradual disappearance of smaller ones and also because of the limitation placed on maximum draught by the available channel depth, tonnage revenues showed a percentage increase and draught revenues a percentage decrease. In that year, trip charges (excluding Seaway charges) accounted for 96.5 per cent of the pilots' earnings, draught charges, 67.9 per cent, tonnage, 24.3 per cent and winter tariff, 4.3 per cent. The Seaway charges yielded 0.3%. They are included in movage revenue (vide p. 781).

(a) *Basic rates*

While the amount of trip rates has been repeatedly changed, the trip rate structure has remained substantially the same. In the 1927 tariff, which retained the features of the past, trip rates were governed by three factors: draught, class of ship and distance run. Draught was the sole basic component as was then the general custom. The draught rate varied according to the type of ship—towed, inland, coastal, ocean-going or sailing ship—and in that order. For instance, the rate per foot draught for a full transit from Quebec to Montreal for these types of ships was respectively \$2, \$3.25, \$3.50, \$4 and \$4.20 (an outbound trip for a sailing ship cost much less, \$2.80 per foot draught). As for distance run, the system was the same as today, the District being divided into four zones at Portneuf, Trois-Rivières and Sorel. The draught rate increased with the number of zones covered during a trip but the rate considered on a zone basis decreased with the number of zones covered.

This feature has been retained since. A special rate was provided for trips wholly contained in the fourth zone (Sorel—Montreal).

The 1927 tariff remained unchanged until 1935 when it was reduced by a general 4 per cent decrease which lasted until 1941, and from 1941 to 1947 by a general surcharge which varied from year to year between 10 and 25 per cent.

In 1947, the tariff provisions were amended and simplified; the same basic structure was maintained but the special charge for the fourth zone was abandoned; the category of sailing ships was deleted and the rates were increased. This tariff was increased by two surcharges of 10 and 12 per cent in 1948 and 1949 until it was replaced in 1952.

The main change in the 1952 tariff was the introduction of a second component in the basic rate, a tonnage rate which, in contrast to the draught rate, did not vary with the length of the trip. The draught rate was made uniform for all types of ships (except towed) but continued to vary according to the number of zones involved.

In 1959, the tonnage component was also made to vary with the number of zones involved but this time the increase was in direct proportion to the number of zones, increasing from one-fifth of a cent for one zone to four-fifths of a cent for a full transit.

The previous tariffs had always provided for minimum and maximum charges. In 1959, the maximum for the tonnage charge was raised from 7,500 to 15,000 NRT.

The present trip rates were established in 1962 and have not been altered since, except for surcharges.

The present trip rate structure is based on three elements: basic rate, distance run and type of ship.

- The basic rate consists of two variable components based on draught and tonnage.
- Distance run is computed according to the previous four-zone system, the common limits of which are still Portneuf, Trois-Rivières and Sorel
- Ships are divided into two categories: small local ships, i.e., coastal and inland water ships not exceeding 2,000 NRT, and others. The pilotage or movage of a dead ship calls for a 50 per cent increase in the normal rates.

Distance run and type of ship are taken into account by fixing different rates for the components of the basic rate with minimum and maximum charges.

- (i) The draught rate is the same for all vessels but varies with the number of zones involved as follows: \$3.37, \$4.65, \$5.93 and \$7.21 per foot draught.

- (ii) The tonnage rate varies both as to type of ship and distance run. For small coastal and inland vessels, there is an invariable flat rate of \$20.41; for other ships, one-quarter of a cent per NRT per zone (one cent for a full transit).
- (iii) Minimum and maximum charges are provided. For small coastal and inland vessels the minimum charge varies according to the number of zones as follows: \$66.60, \$75.48, \$84.36 and \$93.24. For other ships, there is a minimum for both components. The minimum draught charge varies with the number of zones: \$53.98, \$74.40, \$94.91 and \$115.44 and there is no maximum. The minimum tonnage charge, however, is \$20.41 irrespective of the number of zones. The maximum tonnage rate is \$38.28 per zone, making a maximum tonnage charge of \$153.12 for a full transit.

COMMENTS

Although it is true that the tariff structure is governed by the characteristics of the various services being performed and, therefore, can not be exactly the same for all Districts, the basic principle remains the same. It is considered that the Montreal tariff structure for a trip charge is unnecessarily complicated in the following respects:

- (i) The draught component should be deleted (Part I, p. 164 and pp. 176 and ff.).
- (ii) Except for dead ships, all distinctions between ships based on class should be deleted. A regular trader should not be compelled to employ a pilot because of her size or the competence in local navigation of her Master or other officer(s), if she does not constitute a danger to navigation (Gen. Recs. 22 and 23, Part I, pp. 532 and ff.). On the other hand, if the Master of such a ship wishes to avail himself of the services of a pilot, he should pay regular rates and there should be a minimum so that the pilot will be assured of reasonable compensation (Part II, p.351).
- (iii) The sole component of the basic rate should be maximum gross tonnage (Part I, p. 176, p. 181).
- (iv) There should be no maximum charge and the tonnage charge ceiling should be abandoned.

The higher rate per zone for shorter trips appears to be a discriminatory feature against the intermediate ports. No ship or port should receive less favourable treatment as a result of the internal organization adopted by the Pilotage Authority and the pilots for the provision of services. Above a minimum rate, all trips should be treated alike when determining the cost to shipping, unless there are special services to be rendered in a particular locality. Since most traffic is in transit, it is to be expected that the pilotage

service will be organized to meet this type of demand in the most efficient manner, i.e., by maintaining at the upper and lower ends of the River a pilot station where pilots are available in sufficient numbers. It is also logical that the inconsiderable requirements at intermediate ports should be treated for organizational purposes as cases of exception, since it would be an unwarranted waste of the pilots' time to maintain a reserve at these ports when they can readily travel by land from the nearest pilot station when required. If, however, the demand at such intermediate ports were to become substantial, a pilot station would be justified.

A fortiori, there should not be different rates for transit trips between two pilot stations because one trip finishes or begins at an intermediate pilot station and the other is a full transit trip. This is a feature remaining from the past which can not be justified now that the District is divided *de facto* at Trois-Rivières. The rates should be the same for a transit trip in either sector and a full transit through the two sectors should call for two trip charges and not a lesser amount.

(b) *Seaway charge*

The tariff provides for a flat \$20 charge which is added to the trip charge in the case of trips involving a transit of the approach to the Seaway, i.e., between the Seaway entrance in the harbour and St. Lambert lock. This charge is not subject to the compulsory payment rule and is applied only when the pilot, at the Master's request, has actually piloted in that sector of the Seaway. For the background of this extraordinary situation in a District where the payment of the dues is deemed to be compulsory, vide p. 628.

The revenue from this source is not segregated in the statistical data contained in the Pilotage Authority's annual reports, but is included with revenue from movages. In 1968, it represented 0.3% of the total revenue. The following table shows for the calendar years 1963-1968 the number of times such a charge was made and the aggregate amount of dues (surcharge included) represented (Ex.1539(t)):

Year	Number of times	Revenue
1963.....	252	\$5,040.00
1964.....	272	\$5,440.00
1965.....	262	\$5,816.40
1966.....	327	\$7,586.40
1967.....	293	\$7,149.20
1968.....	310	\$7,564.00

In addition, the river pilots are entitled to a travelling allowance of \$3 (plus surcharge) each time they board or disembark at St. Lambert lock, whether or not they have piloted, or will pilot, through the Seaway approach (vide pp. 785-6).

(c) *Winter tariff or assistant pilot's remuneration*

While the remuneration of the second pilot on winter trips is not a new feature, it became a new tariff item only in 1961 when the practice was officially recognized and special rates provided for it. As in the District of Quebec, it takes the form of a surcharge which is added between December 1 and April 8, whether one or two pilots are assigned. The winter surcharge equals the trip dues but with a ceiling of \$100. The winter rate and its ceiling, like other tariff items, have been affected since 1965 by the general surcharge as amended. As a result of the increasing number of ships navigating during the winter, this item reached 4.3 per cent in 1968; it represented only 2.5 per cent of the pilots' earnings in 1962. Since this covers only the winter surcharge, the incidence of the aggregate dues earned through winter trips will be somewhat more than twice as much. The comments on p. 470 also apply here.

(d) *Other components*

Since 1963, the financial statements have segregated as a separate component of the trip charge what is called tonnage overcharge. In fact, this is not a component but merely reflects the readjustment of the tonnage of ships under foreign measurements to British measurements (vide Part I, p. 168). It forms part of tonnage revenue and should not be segregated. If it is desirable to indicate the savings made by remeasuring, a footnote would suffice. In 1968, this accounted for 0.3 per cent of total earnings.

As indicated above, the 50 per cent surcharge for trips affecting dead ships is not segregated.

COMMENTS

In the Montreal District, for tariff purposes there is no such category of vessels as Class A vessels for which a special surcharge is added in Quebec. Ships falling under the exclusive competency of Grade A pilots (over 8,000 NRT) pay dues at the same rates as the others but the aggregate amount is larger on account of the per ton charge. At present, the maximum tonnage is fixed at 15,312 tons, i.e., a maximum charge of \$153.12 for a 1¢ per ton rate. As stated earlier, it is considered that this ceiling should be deleted.

It is also considered that in this regard the Montreal tariff structure is preferable to the Grade A surcharge provided by the Quebec tariff. There should be no relation between the tariff and the grading of pilots which is merely an internal aspect of the pilotage service designed to provide a small group of highly competent pilots to handle the most difficult assignments.

(B) *Movage Rates*

Since the creation of the Montreal harbour pilots' group in 1957, it has been beyond the Montreal river pilots' competency to perform movages in the

harbour of Montreal. Although the harbour pilots' territorial competency does not extend farther downriver than the end of Montreal Island and, therefore, does not cover the whole of the harbour, a ship's movement within Montreal harbour but commencing or terminating below the end of the Island is, for pilotage purposes, a trip within the fourth pilotage zone and not a movage, e.g., a trip between the upper part of Montreal harbour and Contrecoeur.

Although the Montreal tariff contains rates for movages in the harbour of Quebec, these movages are handled exclusively by the Quebec District pilots, and only the few upbound ships which did not proceed beyond the harbour upstream limits are shown as movages for billing purposes (vide pp. 751-2). The small number of movages performed by the Montreal river pilots are performed mainly at Trois-Rivières and Sorel.

The pilotage revenue derived from movages in 1955 amounted to 10.8 per cent of the pilots' earnings but dropped to 1.5 per cent in 1959 after the creation of the Montreal harbour group. In 1968, it amounted to only 1 per cent. These statistics from 1959 on are misleading because the \$20 non-compulsory Seaway charge and compass adjustment revenue are wrongly shown under movages (vide pp. 781 and 786).

The rates for so-called movages in the harbour of Quebec were made to coincide with the applicable rates in the Quebec tariff.

Other movages are charged as a flat rate of either \$16 or \$25, the criterion being whether a pilot happens to be available in the harbour when the assignment is made. These rates are also affected by the general surcharge of 1965 as amended to date.

COMMENTS

It is considered that this rate structure is illegal in that it discriminates against certain ships by making the amount of the dues dependent upon a criterion which is solely dependent upon the internal organization of the service. A ship should neither be penalized nor benefit because a pilot is or is not available at an intermediate port. The cost of transporting pilots by land should be part of service administrative expenses taken into consideration when the rates are fixed and prorated among all movages (Part I, p. 154).

Furthermore, the movage rate should be based on both the nature of the movage being performed and also the size of the ship, i.e., her maximum gross tonnage (Part I, p. 154).

(c) *Detention*

Revenue from detention rose from 1 per cent in 1955 and 0.8 per cent in 1959 and 1962 to 2.2 per cent in 1968 due to the 1965 By-law

amendment which increased the number of cases for which detention is paid:

- (a) Detention on board a vessel:
 - (i) from March 16 to December 31, except if attributable to stress of weather or adverse tide or ice conditions;
 - (ii) between January 1 and March 15 for any reason.
- (b) For waiting to board a ship after ordered time, or the time the pilot actually reported, if later:
 - (i) at any time of year while waiting to board at St. Lambert lock;
 - (ii) between January 1 and March 15:
 - at any wharf throughout the District awaiting a scheduled departure;
 - at the Trois-Rivières pilot station awaiting a scheduled arrival.

The rate is set at \$3 per hour up to a maximum of \$25 per day; it is payable after the first hour, except in the two last cases only after the first six hours. Detention is also subject to the general surcharge.

COMMENTS

As elsewhere, some of the detention provisions in the Montreal District result from the incorrect assumption that the charge is a kind of remuneration for idle time when in reality it is merely an indemnity payable when there is a breach of contract. After a pilot has boarded a ship at ordered time or when a ship passes a boarding station, there is an implied contractual obligation that the pilot will bring the ship to her destination as speedily as safety permits. If the shipping agent or Master interferes, he should indemnify the pilot but, if the delay is due to causes beyond the Master's or agent's control, this is *force majeure* as far as he is concerned and no indemnity should be payable. To prescribe a detention charge in such cases amounts to an increase in the trip rate for idle time on board — a situation which should not be allowed in a system where the pecuniary consideration of the pilotage contract is based on the nature of the service being performed and not on time involved (vide Part II, pp. 157 and ff.). Delays *en route* for any other reasons are normal hazards which should have been taken into consideration when the trip rates were established. Winter trips are, however, cases of exception to the rule.

It is part of the pilot's function to wait at the boarding station for ships to arrive. The ETA's ships are required to give are only a means to help improve the pilots' working conditions; a ship should never be penalized when she is behind her ETA due to circumstances beyond her control. This is particularly true of ETA's at St. Lambert lock for downbound ships because

delays on the Seaway occur for reasons quite beyond the control of Masters, especially now that ordered time is determined (as it should be) by the despatching staff of the Pilotage Authority. There is no particular reason why a detention charge should be provided for St. Lambert lock and not for the other boarding points for ships in transit. This provision should be deleted. (Vide further comments, pp. 740 and 759-60.)

Winter navigation is a case of exception. Here again, since ordered time is set by the despatching office of the Pilotage Authority based on information from Traffic Control on the progress of the ship concerned and existing weather conditions, there should be very few occasions when detention applies at Trois-Rivières, provided the despatching office obtains systematic reports of the ship's progress from Traffic Control and makes any necessary amendments to the despatching orders before the pilot actually reports. The latest By-law provision on the subject, which was added in 1965 (P.C. 1965-1173), gave effect to a recommendation made by the Pilots' Federation to this Commission on behalf of the Montreal river pilots.

(D) *Cancellation*

The revenue yielded from this source has always been small. In 1965, it amounted to \$608 representing 0.1 per cent of the pilots' earnings and in 1968, \$920 representing 0.04 per cent of their earnings.

The cancellation tariff provision (sec. 9) is identical with the provision for the District of Quebec and the comments on p. 474 apply here.

Like the detention item, it was also introduced in 1937.

(E) *Travelling Allowance*

As a rule, the rates are the pilots' gross remuneration and include whatever they have to pay in travelling expenses (except pilot vessel service, p. 743) to board or return to a pilot station or their residence after disembarking. This includes the cost of travelling between stations when transferred by land. Reimbursements to pilots of their travelling expenses should be effected from the gross pilotage revenue of the District as District operating expenses.

In 1959, one exception was made to the rule to cover Montreal District trips when the river pilots either boarded or disembarked in the St. Lambert lock area. As part of the compromise solution to the dispute over the extension of river trips in cases of ships in transit (p. 628), an additional charge of \$3 was added to the trip charge in the guise of a travelling allowance to indemnify the pilots for the extra travelling expenses they had to incur proceeding to or from the lock. While the other extra remuneration amounting to \$20 can be charged only if the pilot performs pilotage duties on

that part of the Seaway, the \$3 travelling allowance is chargeable in all cases. These charges have also been increased since through the general surcharge.

This item of revenue accounted for 0.3 per cent of the pilots' earnings in 1962 and 1968.

COMMENTS

It is considered that this travelling allowance is an unwarranted exception to the tariff structure. There is no reason why shipping should have to pay travelling expenses when pilots happen to embark or disembark at St. Lambert lock but not at other points in the District, such as Sorel and Contrecoeur, or even berths at the downstream extremity of Montreal harbour. It is obvious that this was a compromise solution which the Pilotage Authority was forced to accept because it could not impose a decision for lack of a legal definition of the upstream limit of the District.

(F) *Compass Adjustments*

The Montreal tariff correctly provides a special charge for compass adjusting in the form of a flat rate currently fixed at \$25. This item is also affected by the general surcharge.

The financial statements do not segregate the revenue derived from this source but incorrectly include it with movage revenue. However it is of little importance in relation to the aggregate revenue. The financial statements no longer give a breakdown of movages but, when they did, compass adjustments amounted to no more than 1 per cent of the total.

(G) *Unofficial Earnings*

As in Quebec up to 1960, unofficial earnings were paid to pilots in contravention of sec. 372 C.S.A. These were the bonuses paid to the special pilots and the unofficial remuneration of the assistant pilot on winter assignments.

These irregularities were corrected when the special pilot system was abolished and when the second pilot requirement on winter trip assignments was officially recognized. At present, the pilots receive no unofficial remuneration.

(H) *Pilotage Dues Payable to the Receiver General of Canada*

In the Montreal District, the only type of such dues which, according to the regulations, are collected on behalf of, and paid to, the Receiver General of Canada are radiotelephone rental charges. Now that the VHF network is set up, ships taking pilots are required to have VHF radiotelephone facilities

on board but, if a ship is not so equipped, the pilot embarks with a portable radiotelephone set rented to him by the Department of Transport. The rental charge is in turn imposed on the ship in the form of a pilotage charge (added in 1966) of \$15 for a pilotage trip and \$5 for a movage. These rates are not affected by the general surcharge. For the years 1966, 1967 and 1968 this item brought the Government \$14,695, \$29,765 and \$29,965 respectively.

In the Montreal District, as seen earlier, the required pilot vessel services are provided neither by the Government nor the Pilotage Authority nor the pilots but by a private enterprise as arranged by the shipping interests themselves through the Shipping Federation of Canada (pp. 743-5). Pilot boat charges are collected by the launch operator directly from the agents; they are not considered pilotage dues and are not reflected in the financial statements. For comments on this practice, vide p. 743.

(2) PILOTAGE REVENUE AND TARIFF—HARBOUR PILOTS

The harbour pilots' sources of revenue are movages, additional charges when upbound movages are interrupted at the St. Lambert wait wall, detentions and cancellations. The rates for all these have been increased since 1965 through the general surcharge which was mentioned earlier.

In addition, ships not equipped with VHF radiotelephone are required to pay \$5 rental for the portable set the pilots bring on board. This charge is not affected by the surcharge.

The following table analyses the harbour pilots' pilotage earnings for the years 1958, 1959, 1962 and 1968, as shown by the financial statistics contained in the Pilotage Authority's annual reports. These statistics are somewhat misleading in that they do not segregate the additional charge of \$20 for the first hour and \$5 for each additional hour (Schedule, subsec. 5(1)(e) and sec.11) which is added to the regular movage charge when an upbound movage is interrupted by the ship tying up at the St. Lambert wait wall. However, further confusion is added by including in the movage revenue the dues yielded by the first part of this rate (the \$20 charge for the first hour) and in the detention revenue the dues yielded by the second part of the rate (the \$5 for each additional hour).

(A) *Movage Rates*

Movage earnings account for the bulk of the harbour pilots' revenue: in 1958, 97.2 per cent and in 1968, 92.1 per cent. The percentage decrease in 1959 resulted from an amendment to the tariff granting the pilots a detention indemnity for waiting to board at St. Lambert lock, thus increasing revenue from this source from 0.8 per cent to 5 per cent.

When the harbour pilots' group was formed in 1957, their remuneration was governed by the 1952 tariff whose structure was the same as for trip

MONTREAL HARBOUR PILOTS—COMPARATIVE ANALYSIS OF EARNINGS AND DISTRIBUTION OF PILOTAGE DUES

Pilotage Dues	1958	1959	1962	1968
A. PILOTAGE DUES EARNED				
I. Dues Accruing to Pilots:				
(a) Movages.....	\$110,269.50	\$202,770.50	\$193,707.25	\$247,040.30
(b) Detention.....	872.00	10,904.00	6,942.00	19,694.35
(c) Cancellation.....	2,316.50	2,498.00	1,120.00	1,621.48
Total Dues Accruing to Pilots.....	\$113,458.00	\$216,172.50	\$201,769.25	\$268,356.13
	100.0%	100.0%	100.0%	100.0%
II. Dues Accruing to Receiver General of Canada:				
VHF radiotelephone.....	—	—	—	1,590.00
Total Pilotage Dues Earned.....	\$113,458.00	\$216,172.50	\$201,769.25	\$269,946.13
B. DISTRIBUTION OF PILOTAGE DUES EARNED				
I. Payable to Pilots.....				
	\$113,458.00	\$216,172.50	\$201,769.25	\$268,356.13
	100.0%	100.0%	100.0%	100.0%
II. Payable to Receiver General of Canada.....				
	—	—	—	1,590.00
Total Distribution of Pilotage Dues Earned.....	\$113,458.00	\$216,172.50	\$201,769.25	\$269,946.13

SOURCE: Ex. 534(b).

rates, i.e., based on zones and types of ship. The harbour, which at that time did not extend downstream farther than the east point of Montreal Island, was divided into three zones, the demarcation points being berth 19 and berth 50. The rate was \$13 for a movage within the first zone and \$16 within zone 2 or zone 3 and between zones 1 and 2. For the longest movage, i.e., between zones 1 and 3, the rates varied depending whether the ship belonged to one of the two special categories defined in the trip rates, i.e., \$20 for inland waters and coastal vessels not exceeding 2,000 NRT, and \$32 for all other vessels. The same classification also applied to movages whose point of départure or point of origin was Vickers shipyard, in which case the rates were respectively \$16 and \$25.

In 1958, the movage rates were indirectly increased by the addition of a uniform \$2 charge in the guise of a transportation allowance which was to be raised in 1959 to \$3 for movages whose point of origin or destination was St. Lambert lock. Also, in 1959, a new situation was provided for, i.e., a movage whose point of origin or destination was St. Lambert lock, with rates of \$20 and \$32 respectively according to the ship's category.

The basic reform took place when the By-laws were consolidated in 1961. The provisions for the so-called transportation allowance were deleted and it was compensated for by the indirect increase which resulted from abandoning the zone system and making the higher rates per category of ship applicable to all movages.

The tariff structure was again amended in 1962 by creating two new categories of larger ships and setting higher rates, i.e., \$36.50 for ships between 3,000 and 5,000 NRT and \$41 for ships with greater tonnage.

The only further modification was the additional charge imposed as a result of the compromise solution to the St. Lambert lock dispute, i.e., when a vessel is moved by a harbour pilot from a moored position at the wait wall into the lock during a movage originating in the harbour, an additional charge of \$20 for the first hour and \$5 for each additional hour is made (Schedule, subsec. 5(1)(e) and sec. 11).

All these rates have been increased since 1965 by the general surcharge mentioned above.

When they appeared before this Commission, the harbour pilots made two recommendations:

- (a) that the principle of grading movage fees with ships' tonnage be extended beyond the 5,000-ton limit through an additional charge per extra 1,000 tons;
- (b) that the \$3 transportation allowance when embarking or disembarking at St. Lambert lock, not withdrawn in the case of river pilots, be reinstated.

Study of Montreal Pilotage District

The main reason advanced in support of the first recommendation was that moving larger ships is much more difficult and takes longer. The pilots suggested that the per thousand-ton additional rate be imposed up to a ceiling of 15,000 NRT, and supplied for 1962 the breakdown of the movages they had performed with ships exceeding 5,000 NRT. These totalled 1,210 and accounted for 21.4 per cent of all movages.

5,000 to 6,000 tons	585
6,000 to 7,000 tons	209
7,000 to 8,000 tons	151
8,000 to 9,000 tons	37
9,000 to 10,000 tons	93
10,000 to 11,000 tons	25
11,000 to 12,000 tons	13
12,000 to 13,000 tons	63
13,000 to 14,000 tons	34
Total:	<hr/> 1,210 <hr/>

The argument in favour of the second recommendation was that the harbour pilots were discriminated against since the river pilots continued to enjoy the allowance. The Shipping Federation was strongly opposed because of the principle involved and felt that acceptance would create a precedent with far-reaching consequences. It was pointed out that the general so-called travelling allowances the harbour pilots enjoyed prior to 1961 were, in fact, disguised additional charges which were treated as such by the pilots themselves by including them in the pool, and had never been considered as belonging to the pilots who actually incurred the expenses.

COMMENTS

The Commission concurs with the principle of the pilots' first recommendation but considers that the system of categories should be replaced by the same kind of tariff structure as the Commission recommended for trip rates, i.e., a minimum charge applicable to all vessels below a given gross tonnage above which an additional charge would be made according to a per ton rate of the ship's maximum gross tonnage. There should be no ceiling, ships being required to contribute toward the support of the pilotage service strictly according to their size.

On the other hand, the second recommendation is obviously ill-founded. The so-called travelling allowance for the river pilots was an error in the first place, the result of a compromise solution that the Pilotage Authority was forced to accept in the circumstances, which should be abolished (p. 628). There is no objection to reimbursing the pilots their travelling

expenses but this is a matter of internal organization which does not concern shipping. Whether or not a pilot has to travel to, or return from, a particular boarding place depends upon service arrangements, i.e., whether pilot stations have been created and, if so, where they are situated, and ships and places should not be discriminated against on that account. The aggregate expenses the pilots have to incur in the performance of their duties must be taken into consideration when the rates are established so that the expected yield from dues will leave the pilots adequate net remuneration. Thus, the pilots' expenses form part of the District and service expenses and are prorated fairly among all the users.

(B) *Detention and Cancellation Charges*

The tariff sections dealing with detention and cancellation are common to both river and harbour pilots. The remarks and comments on pp. 784-5 apply *mutatis mutandis*.

As remarked earlier, the financial statements give the wrong impression because the \$5 hourly rate after the first hour for that part of a movage between the wait wall and St. Lambert lock has been wrongly considered a detention charge. This is incorrect since it is not remuneration for idle time but for pilotage service being performed during all or part of the time. There was no excuse for entering it under detention because it is made the subject of a separate tariff provision (sec. 11) while the detention provisions are contained in sec. 7.

The first source of confusion is the manner in which the additional charge for an upbound movage interrupted at the wait wall was dealt with in the tariff. As a result of the 1964 compromise (p. 719), the rates for a movage whose destination was St. Lambert lock were:

- (a) If the movage is uninterrupted and the ship enters directly into the lock, only the basic movage charge is payable varying with the size of the ship as provided in the tariff subsecs. 5(1)(a), (b), (c) and (d).
- (b) If the same type of movage is interrupted at the wait wall, an additional charge becomes payable. In this case, time becomes significant since the period between the moment the ship first ties up at the wait wall until she is finally secured in the lock depends upon traffic and, therefore, may be quite substantial. Hence, it was realistic that the remuneration for that element of the pilotage service should be partly based on the time involved. The following solution was adopted: lockage is treated as part of the movage and the remuneration for it is included in the applicable basic movage rate; the series of berthings and unberthings at the various wait wall positions (including the resultant idle time between each

move) is considered extra service for which the remuneration is realistically fixed at \$20 for the first hour and \$5 for any extra hour or fraction of hour.

There seems to be no reasonable explanation why the tariff provision for the second part of the additional charge was made the subject of a separate provision (sec. 11) and was not embodied in the same provision dealing with the first part of the extra charge which was correctly added to para. (e) to subsec. 5(1), unless it was an attempt to obscure the real impact of the concession made to the pilots despite the owners' stern opposition. There is no record in the Pilotage Authority's annual statement of the amount of revenue yielded by the first part of the additional charge since the sums collected were included in the aggregate figure of movage revenue. The revenue yielded by the second part of the additional charge was segregated for one year only, 1964, when it practically equalled the revenue from the true detention charge (detention revenue—\$8,925; revenues from sec. 11—\$7,204). Thereafter, it was included under detention. In 1965, the amount more than doubled, being \$19,001 (Ex.1539(r)).

COMMENTS

It is considered that the tariff provision should be corrected by incorporating sec. 11 with subsec. 5(1)(e) of the tariff. The revenue yielded by sec. 11 should be counted as movage revenue and not as detention revenue. On account of the importance of the question, it would be advisable for information purposes to segregate the revenue for services rendered at the wait wall and show it as a separate item.

(c) *District Revenue Derived from Sources Other than Pilotage Dues*

There are three types of such extraneous revenue: examination fees, licence fees and fines. The revenue from these sources is very small and is not reflected in the District financial statements which are limited to pilotage dues. However, the fines imposed are listed for information purposes in the general commentaries accompanying the financial statements.

With regard to the river pilots, the By-law provides for the payment of a \$10 fee for granting an apprentice licence (subsec. 28(1)(d)) and a \$15 examination fee (subsec. 36(1)) but there is no fee for obtaining a pilot's licence.

With regard to the harbour pilots, the By-law provides for a \$5 examination fee (subsec. 49(2)), a \$10 fee for a probationary licence (subsec. 50(1)) and a further \$10 fee for a permanent licence (subsec. 50(3)).

As to the legality of the examination fee, vide Part I, p. 106. It is considered that the practice of imposing licence fees is a relic of free enter-

prise which has no place in a pilotage service fully controlled and provided by a Pilotage Authority whose employees the pilots have become, at least *de facto*. These licence fees should be abolished (Part I, p. 260). The aggregate amount of fines imposed on pilots each year is minimal. For instance, in 1968, three fines aggregating \$75 were imposed on river pilots and none on harbour pilots.

In the absence of a Pilotage Authority's expense fund, the revenue from licence fees and examination fees is paid upon receipt by the Pilotage Authority to the Consolidated Revenue Fund of Canada (Part I, p. 101).

Sec 708 C.S.A. is followed regarding the disposal of fines. Those imposed on river pilots are credited to the Pension Fund of the Montreal river pilots, while those imposed on the harbour pilots are paid to the Consolidated Revenue Fund of Canada, since the harbour pilots have no Pilotage Fund.

7. PILOTS' REMUNERATION AND POOLING SYSTEM

(1) RIVER PILOTS

Since 1918 (p. 604), the Montreal river pilots' basis of remuneration has been shares computed in accordance with a pooling system which the pilots have always operated themselves. Contrary to the situation that existed in Quebec, these arrangements have always been unofficial and the result of private agreements among the pilots, because they never succeeded in obtaining the same type of public corporation as the Quebec pilots did in 1860. From 1918 to 1968, the agreement was contained in a deed of partnership drawn up specially for that purpose. The partnership, to which all the Montreal river pilots belonged, was known as the *United Montreal Pilots* (p. 683). Since the partnership lapsed on December 31, 1968, the pooling rules have been contained in By-law No. 2 of the Mid-St. Lawrence Pilots' Corporation. They amount to a tacit deed of partnership through which the administration of the pool is entrusted to the Corporation (Part I, p. 91). The pooling operations are not extended to dissident pilots who, in 1969, had not as yet joined the Corporation (p. 689). The pooling rules are being constantly and substantially modified and, therefore, the following study will be limited to only the main features of the system.

For the same reasons as in Quebec, the Montreal pilots have adopted an incomplete and complicated *sui generis* pooling system and have retained it, despite the fact that for all practical purposes they are now in a position to operate a true and complete pool based on availability for duty. The special pilot system which prevented sharing the workload equitably has been abolished since 1959, and the Pilotage Authority has shown itself prepared to collaborate with the pilots by following any equitable despatching rules they may wish to establish.

The system is basically the same as in the Quebec District, i.e., equalization of trips, free turns, compulsory periodical leave and averaging the monetary value of trips (pp. 480 and ff.).

The main differences between the pooling systems of the Quebec pilots and the Montreal river pilots are:

- (a) While sharing rights are determined on the basis of trips performed during each pooling period, the value of a full share is based only on that portion of the money available for sharing at the distribution date which the Board of Directors decides to share (and not on the value of trip dues earned during the pooling period).
- (b) Each distribution (every fortnight in the regular navigation season) is final and the pilots' shares are paid in full. Hence, there are as many pooling periods per year as distributions and the value of a turn varies between distributions.
- (c) The method of determining partial shares differs (p. 481). It is based on despatching turns, with the deduction of an amount representing the value of turns which do not carry remuneration, and half value of those which carry half remuneration.

Turns not performed carry sharing rights as determined by the pooling rules applicable to each type of such turns. There are six cases where turns not performed carry full or partial pooling rights:

- (a) administrative free turns for non-availability due to Corporation or group business;
- (b) regular leave turns;
- (c) free turns granted for an extended period of duty in the event of a shipping casualty;
- (d) turns missed during the two first non-consecutive 24 hours of absence;
- (e) missed turns credited for sharing purposes only on condition that they are performed during the next pooling period;
- (f) indemnity turns for absence due to illness.

The following table shows the administrative free turns granted since 1959 when provision was made for them in the Corporation By-laws. Since the value of the turn changes from one distribution to another, the monetary value of the turns quoted is calculated on the basis of the yearly average, but for those granted for attending to Federation business the amount quoted is what was charged to, and obtained from, the Federation.

The Corporation was unable to furnish from readily available records the data shown as non-available but the information provided is considered sufficient to provide a reasonable appraisal of the incidence of free turns as administrative expenses.

MONTREAL RIVER PILOTS—FREE TURNS CREDITED TO DIRECTORS AND MEMBERS OF COMMITTEES

Year	Average Value of Sharing Turns	Corporation				Federation			Total Amount of Free Turns
		Number of:		Monetary Value of Free Turns	Number of:		Amount Paid by Federation		
		free turns	pilots sharing		free turns	pilots sharing			
1959	\$ 68.72	.....	.....	\$ .....	.....	.....	\$ .....	.....
1960	83.83	132	8	11,065.56	.....	.....	.....	.....
1961	79.82	103	8	8,221.46	.....	.....	.....	.....
1962	99.17	148	8	14,677.16	n/av.	2	766.03	15,443.19	
1963	108.92	191.5	8	20,858.18	n/av.	n/av.	n/av.	n/av.	
1964	104.70	115	8	12,040.50	n/av.	n/av.	n/av.	n/av.	
1965	118.64	n/av.	8	n/av.	n/av.	2	5,329.71	n/av.	
1966	178.33	n/av.	8	n/av.	49	1	11,394.05	n/av.	
1967	115.94	n/av.	8	n/av.	37	1	13,422.90	n/av.	
1968	102.48	317	8	32,486.16	42	1	15,277.20	47,763.36	

SOURCES: Tables on pp. 618 and 694 and Ex. 785.

In Quebec, free turns are also granted to replace turns missed during an assignment of unusual duration for reasons beyond the pilot's control and considered normal hazards of the pilot's profession. However, in Montreal, this is limited to the case when a pilot has to remain on board a ship after a shipping casualty (Corporation By-law No. 2, subsec. 5(e)). The Quebec provision is more equitable in that it extends to other normal hazards such as a non-pilotage strike and other fortuitous events, thereby correcting one of the injustices created by pooling based on the number of trip assignments rather than on availability for duty.

With regard to turns missed during the compulsory regular holidays, the Montreal pilots have decided to grant a fixed number of turns for both despatching and pooling purposes, irrespective of the actual number of turns missed during the holiday period. Sec. 12 of By-law No. 2 provides that the number of turns so granted is to be decided by the Board of Directors. This they do at the beginning of the season. At the same time, they decide the number and duration of the various compulsory regular holidays and draw up the holiday list, now three turns for each six-day holiday period (p. 723).

Sec. 10 also authorizes a pilot to take at his own discretion during the year two non-consecutive days of absence with full remuneration and without his place on the tour de rôle being affected. To achieve this, the pilot is granted for both despatching and pooling purposes the average number of turns performed by the other pilots during the period in question. This applies to the two first absences in the year that are not regular holidays but including absences due to illness. To take advantage of this privilege the pilots must give prior notice to the Secretary-Treasurer of the Corporation.

As a rule, the equalization applies only within a pooling period and terminates at each distribution since each is final. As seen earlier, to deprive a pilot who has been absent of the benefit of equalization, he is credited for despatching purposes with the number of turns he missed. An exception is made for those absences of short duration which are beyond the pilot's control, i.e., the death of his wife or a close relative, or a court order. Provided the pilot concerned has notified the Secretary-Treasurer in advance, the equalization privilege is extended to the end of the next pooling period. Therefore, if he has been unable to make up the lost turns during the pooling period when the absence took place, he is credited with the missed turns for pooling purposes only, thereby receiving a full share as if he had not been absent. He will then be required to make up the missed turns within the next pooling period, otherwise his share in the next distribution will be decreased by the value of the turns he has failed to perform.

By the 1965 amendment to the pooling rules, the restricted application of the equalization rule was relaxed to prevent a pilot from suffering a pecuniary loss through absence imposed upon him, e.g., preventive suspen-

sion or attendance at investigations or disciplinary proceedings, if eventually he is found not guilty of the offence or of negligence. He will be reimbursed the amount deducted from his share at the various distributions on account of the turns he missed during his forced absence as he succeeds in making them up, provided he does so during the fiscal year.

The Montreal pilots' pooling arrangements also provide for sickness benefits which amount to half remuneration over a consecutive period not to exceed two years and for further such periods, provided that between them the pilot has been on active duty for three months without interruption. No distinction is made whether or not the illness or injury is due to the service. If absence due to illness happens to be the first or second absence of the year not counting regular holidays, full remuneration is provided for the first day. To achieve this, the pilot is granted for each day the average number of turns performed by the pilots who were available for duty. When distribution is made, there is no deduction for the first day of absence if it happens to be one of the two for which he is entitled to receive full remuneration. For all the other days of such absence the turns so granted are half value, such value being determined according to a complicated process which will be explained later.

This sickness benefit continues to be paid even after the pilot has been retired due to physical or mental unfitness, in which case it is reduced by the amount of the pension he receives from the Pension Fund (By-law No. 2, subsec. 11(h), 1968 amendment). For this purpose and also for the purpose of group insurance benefits, the pilot retains his Corporation membership for the required period, despite his retirement as a pilot (By-law No. 2, subsec. 7(c), 1968 amendment).

To be entitled to sickness benefit the pilot must make an application within 30 days of the beginning of his absence, provide a medical certificate and submit to a medical examination if so requested by the Board of Directors. The decision of the Board of Directors is final (By-law No. 2, subsec. 10(e) and sec. 11).

For other absences the pooling rule provides that at distribution time the pilot concerned will lose the value of the average number of turns done by the pilots who were available for each day of his absence, except the first day for which his share is to be debited by the value of a full turn, which amounts to a penalty since the daily average is always a fraction of one turn.

(a) *Pooling Procedure*

While the Montreal river pilots base their pooling system on the same general principles as the Quebec pilots, the procedure adopted is quite different. The ensuing system leaves much to be desired from the point of view of equity in that it does not assure a pilot of an equal share of the pilotage dues earned by his services and those of the pilots employed during the same period.

The main reason why such a pooling procedure developed is doubtless the difficulty of obtaining sufficient funds to cover each distribution. An equitable system provides for the complete sharing of all money earned during the pooling period to the extent of each member's participation in the workload, whether that participation is determined in terms of availability for duty, e.g., the British Columbia District, or in the number of work units performed, e.g., Quebec District or the Montreal harbour pilots. Since a sizeable part of the dues earned during the pooling period will still be outstanding when the shares are established at the end of the period, the problem of financing the distribution arises. This problem has been solved in a number of ways: the British Columbia pilots have created a reserve fund of their own (Part II, p. 185); the Quebec pilots pay the outstanding amount of the shares as funds become available after a temporary reserve has been set aside to meet current liabilities, irrespective of the pooling periods to which the collected earnings belong; as was seen earlier, the Montreal harbour pilots do not finance the outstanding amount of the shares but make payments as dues earned during the pooling period concerned are collected.

The Montreal river pilots have adopted a system whose only advantage is the simplicity of its financing arrangements: while sharing rights are determined on the basis of work done during the pooling period, the value of a share is determined by the amount of money on hand which forms part of the pool after deducting a reserve for expected administrative or group expenses. Hence, with this system the value of the full share bears no relation to the average value of the work the pilots have done during the pooling period. The lack of equity of the system is compounded when the amount that will actually be shared is left to be decided arbitrarily by the Corporations' Board of Directors or Board of Control. Subsec. 8(b) of By-law No. 2 leaves it to the Board to decide how much of the accumulated funds they consider it prudent to share. The ensuing distributions have, in fact, become dividends (p. 689). Such a procedure is in conflict with the nature of pooling, may give rise to much abuse and may result in depriving a pilot of part of his just share.

Distribution is to be made during the navigation season every month, or more often as directed by the Board of Directors (By-law No. 2, subsec. 8(a)). Each distribution marks the completion of a separate pooling period and is final. More and more exceptions are being made to this rule by amendments to By-law No. 2 in the direction of a single pooling period corresponding to the Corporation's fiscal year with advance distributions.

(b) *Extent of Distribution*

Administrative and group expenses are paid as incurred out of funds on hand (subsec. 7(a)). Dues that do not form part of the pool, i.e., dues for movages, detentions and cancellations. Seaway charges and St. Lambert lock

transportation allowances, are also set aside for payment direct to the pilots who earned them (less the 10 per cent compulsory contribution to the Pension Fund). Up to 1969, Grade A pilots were also paid a bonus out of the common fund for each Grade A trip they performed. The Board of Directors then decides how much of the remaining available funds will be distributed among the pilots according to their respective sharing rights (subsec. 8(b)). The method normally used is to fix the amount of a complete share, e.g., in 1963, it was established at \$650 per distribution during the navigation season, provided there were sufficient funds available to effect full payment, and the undistributed surplus was to be divided during the winter season as determined by the Board of Directors.

(c) *Establishment of Sharing Rights*

The method used here is not at all the same as in the Quebec District. Sharing turns are not used and sharing rights are established on the basis of despatching turns. Despatching turns used to commence at zero for all pilots on the first day of the Corporation's fiscal year, notwithstanding the actual number of turns each pilot had to his credit on the last despatching list. By an amendment dated Sept. 9, 1969, credit is now given to those who on account of their rank on the tour de rôle had done a few more turns than others with equal availability. Those with two turns below the average start at zero on the new list; those with one turn below the average start with one turn; those with the average start with two turns; and those with turns over the average are given, in addition to the two turns for the average, the number of turns they had over the average (By-law No. 2 subsec. 5(b)).

Two factors determine whether a pilot will receive a full share and, if not, what will be his portion of a full share: grade and availability for duty.

Up to 1969, Grade A and Grade B pilots were both entitled to a full share and Grade A's received prior to distribution their bonus for each Grade A assignment performed (subsec. 9(b)). A full share for pilots Grades C.1, C.2 and C.3 was respectively 65%, 75% and 85% of the full share of Grade A or B pilots. The Sept. 1969 amendment abolished the bonus for Grade A pilots and established the value of a full share in relation to the full share of the Grade A pilot, i.e., Grade A, 100%, Grade B, 92%, Grade C.3, 78%, Grade C.2, 69% and Grade C.1, 60%.

The effect of availability on a pilot's share is determined by a combination of the assignment list and the type of turns credited to each pilot since the previous distribution.

At the end of each day, all pilots should have the same number of turns on the despatching list, plus or minus one or two. For those with constant availability, any difference is accounted for by the fact that occasionally certain pilots perform no assignment because of the particular demand for pilotage services and their place on the tour de rôle. The difference in number

of turns can never become larger than one or two because of the equalization process, as would otherwise occur in a strict tour de rôle in view of the unequal duration of trips.

The number of turns of those who have been absent are brought to parity with those who were available for duty in order to prevent the absentees from equalizing. This is done by calculating daily the average number of turns performed by those who were available for duty. This average is established separately for each sector by dividing the number of turns actually performed on that day by the number of pilots who were available for duty; the resulting average is always a fraction of a turn—larger in peak periods and smaller in low periods (subsec. 5(c)). The number of turns credited during a period of absence through such daily averages is adjusted by the Secretary-Treasurer to the nearest turn or half-turn (subsec. 10(e)). There are exceptions to this rule where the absentees will be credited a pre-determined number of turns which will be, in effect, either a reward or a punishment depending whether the turns so granted carry sharing rights or not. For instance, a day or a fraction of a day for a Director or member of a committee on Corporation duty counts for one full turn (sec. 4); one turn is credited for the first day of each absence which is not covered by a special provision in the by-laws but for the rest of the absence only the average is credited. For regular holidays the number of turns fixed by the Board of Directors is credited—for a six-day holiday this has been three turns and is, therefore, approximately the average.

The actual share of a pilot in any distribution is calculated by deducting from the full share the value of the full or fractional turns that do not carry sharing rights (vide p. 794). Up to 1965, the value of a turn for such deduction was established in the form of an average value by dividing the aggregate value of the pilotage dues earned during the pooling period (i.e., since the last distribution) by the number of turns performed by all the pilots.

In 1965, the method of establishing the average value of a turn was changed by basing it on the average value of turns during the preceding fiscal year computed by dividing the aggregate trip dues earned during that year by the aggregate number of turns performed by all the pilots.

The 1969 amendment to the pooling by-law was aimed *inter alia* at correcting the lack of equity in the system which resulted in newly appointed pilots sharing in pilotage earnings to which they had not contributed. The new subsection 12(b) now provides that members share only in revenue earned after they become members of the Corporation. The Secretary-Treasurer is required to make the necessary adjustment at the last distribution of the financial year.

COMMENTS

The rules governing the operation of this pooling system are very complex. The confusion is compounded by the multiple amendments made almost every year in an effort to make it more equitable. But an equitable pooling will never be achieved in this way since the system itself is basically wrong; a new system must be devised to place both sharing rights and the value of shares on the same basis, i.e., dues earned and availability for duty during the pooling period.

(d) *Pilotage Income*

What constitutes the pilots' income from pilotage is a matter of semantics (Part II, pp .132 and ff.). Since the status of the Montreal river pilots is quasi-employees, their pilotage remuneration may be said to consist of the money which is paid them periodically by their Corporation ("take home pay"). This comprises the non-pooled pilotage dues they have earned and which are paid to them after deducting the compulsory contribution to the Pension Fund, their share of the pooled funds, payments made on their behalf such as their contribution to the Pension Fund, to the Quebec compulsory pension plan, premiums to their various group insurances, Federation dues and assessments and, finally, their share of their Corporation and group expenses. Since they, like the pilots in the Quebec District, pay the cost of their land transportation—even when they transfer from one station to another—it is necessary to deduct from the money they receive the aggregate cost of such transportation so that their remuneration can be compared with the amount received by the pilots in other Districts who are reimbursed such expenses. No record of these disbursements has been kept but they have been estimated to average \$1,600 per pilot annually. For the Commission's attitude to this practice, vide. p. 786.

For the years 1955 to 1968, the full share from the pool of Grade A and Grade B pilots was as follows:

1955.....	\$ 8,205.00	1962.....	\$12,000.00
1956.....	8,710.00	1963.....	12,250.00
1957.....	9,030.00	1964.....	12,090.00
1958.....	8,665.00	1965.....	13,050.00
1959.....	9,415.00	1966.....	16,050.00
1960.....	11,065.00	1967.....	16,000.00
1961.....	11,015.00	1968.....	15,475.00

In addition, for the years 1966, 1967 and 1968, the \$158.40 premium of the Quebec Pension Plan was paid on behalf of each pilot.

In addition to his share from the common pool, each pilot received the non-pooled items of revenue that he earned personally, and the Grade A pilots received their Grade A bonuses. The following table shows for the same period the aggregate of Grade A bonuses and non-pooled earnings and the number of pilots to whom they were paid:

MONTREAL RIVER PILOTS—GRADE A BONUS, NON-POOLED EARNINGS AND NUMBER OF PILOTS SHARING

Year	Total Pilots Sharing In Pool	Non-Pooled Earnings											
		Grade A Bonus		Seaway Charges and Movages		Detention		Cancellation		Transportation			
		pilots sharing	aggregate amount	pilots sharing	aggregate amount	pilots sharing	aggregate amount	pilots sharing	aggregate amount	pilots sharing	aggregate amount		
1955	97	.....	\$.....	96	\$53,107.50	96*	\$9,459.45*	.....	.....	.....	\$.....
1956	109	.....	.....	107	59,800.00	107*	12,176.70*	.....	.....	.....	.....
1957	115	.....	.....	113	31,175.00	111*	8,984.25*	.....	.....	.....	.....
1958	115	.....	.....	113	7,470.00	106*	8,311.95*	.....	.....	.....	.....
1959	120	33	53,050.00	116	17,428.90	113	\$10,302.75	51	\$ 693.00	66	2,977.00		
1960	125	32	48,625.00	117	16,529.25	114	14,380.20	71	1,089.00	63	4,071.00		
1961	124	36	60,070.00	119	18,799.20	119	15,681.60	66	1,071.00	62	4,830.00		
1962	125	39	64,345.00	117	17,115.75	118	12,115.80	43	585.00	60	4,827.00		
1963	132	40	71,570.00	125	18,481.95	126	14,803.20	71	1,044.00	67	5,245.00		
1964	128	36	63,460.00	119	22,761.02	123	18,255.60	65	873.00	64	5,747.90		
1965	135	47	71,405.00	131	31,104.91	131	29,065.91	81	1,274.85	71	6,693.30		
1966	138	57	90,275.00	132	34,426.95	136	38,257.17	95	1,665.45	75	8,428.44		
1967	143	67	94,395.00	133	24,731.85	141	41,929.04	84	1,512.72	74	7,443.60		
1968	149	76	100,475.00	139	22,436.08	143	48,031.51	76	1,010.16	77	7,594.50		

*Detention and cancellation figures combined.
SOURCE: Ex. 785.

The sudden drop in 1957 and 1958 in the aggregate amount of revenue derived from movages is due to the creation of the harbour pilots group who took over from the river pilots the movage assignments in the harbour of Montreal. The Seaway charge was introduced in 1959 and the amount it yielded was included in the financial statistics with movage revenue, thus confusing the picture (vide p. 783).

As in Quebec, this method of remuneration produces appreciable differences between the remuneration of the various pilots each year. Low income results because of lower grade, or because the pilot concerned was not on strength for the whole of the year or was absent. The table on p. 804 shows for each year 1955-1968 the number of pilots whose remuneration fell in the various thousand dollar brackets. Each underlined figure indicates the thousand dollar bracket in which the average net remuneration per year pilot falls.

In the Montreal District up to 1961, the river pilots also received extra unofficial revenue derived from the remuneration of the second pilot in winter and the bonus paid by companies to their special pilots. There is no record of the amounts so paid and they were not shared. It would appear that the average of \$1,500 per pilot estimated for the Quebec pilots would also apply here.

The large undistributed balance and unshared earnings at the end of each fiscal year, referred to in the Corporation financial statements as the Corporation Fund (e.g., on Dec. 31, 1967, it amounted to \$474,130.12, vide p. 692), falsifies the pilots' true earnings. In order to correct this, and for the other reasons mentioned on p. 491, the table p. 805 was compiled on a basis to indicate average remuneration per year pilot with no consideration for grades. The earnings shown comprise all pilotage earnings, i.e., pooled and non-pooled earnings. The comments on p. 493 apply *mutatis mutandis*.

(2) HARBOUR PILOTS

(a) *Method of Remuneration and Pooling System*

Sec. 46 of the District By-law provides that the harbour pilots are to be remunerated through a pooling system based on availability for duty and operated by the Pilotage Authority. The factual situation, however, is quite different: although the pilots are remunerated through a pooling system, it is one they have devised themselves and which is administered by their Corporation (vide pp. 697 and ff.).

The pooling procedure they actually follow makes their pooling system most equitable and relatively simple. The only drawback (which has little importance on account of the small amounts involved) is the method they

MONTREAL RIVER PILOTS—COMPARATIVE ANALYSIS OF INCOME BRACKETS*

Income Bracket	Number of Sharing Pilots													
	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
\$19—20,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	2	.....
18—19,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	28	31	1
17—18,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24	25	63
16—17,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41	39	26
15—16,000	.....	.....	.....	.....	.....	.....	.....	.....	1	1	29	9	10	28
14—15,000	.....	.....	.....	.....	.....	.....	.....	23	31	30	18	6	4	1
13—14,000	.....	.....	.....	.....	.....	10	18	10	3	3	50	1	13	5
12—13,000	.....	.....	.....	.....	2	18	17	53	51	62	8	1	3	7
11—12,000	.....	1	.....	.....	24	61	57	12	9	8	8	10	.....	4
10—11,000	1	8	3	.....	9	7	5	3	10	6	6	1	6	1
9—10,000	29	55	92	2	64	7	6	8	5	8	.....	1	1	1
8—9,000	53	28	8	101	8	4	5	3	8	3	1	1	7	2
7—8,000	6	9	2	6	4	5	5	4	2	.....	.....	.....	.....	1
6—7,000	2	1	6	1	1	3	3	5	1	.....	8	.....	.....	.....
5—6,000	2	.....	2	1	1	1	1	2	1	2	3	4	1	3
4—5,000	2	5	.....	.....	.....	.....	.....	.....	2	1	.....	.....	1	1
3—4,000	1	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	1
2—3,000	.....	1	1	2	.....	3	1	2	3	.....	.....	.....	.....	2
1—2,000	.....	1	.....	.....	4	3	4	.....	3	1	1	1	.....	2
0—1,000	1	.....	1	2	3	3	1	.....	2	3	2	2	.....	.....
Total Number of Sharing Pilots	97	109	115	115	120	125	124	125	132	128	135	138	143	149

*Before taxes and personal deductions, but after Pension Fund compulsory contributions and group expenses including share of Corporation expenses, CMSG fees and Pilots' Federation dues.
SOURCE: Ex. 785.

MONTREAL RIVER PILOTS—AVERAGE REMUNERATION PER YEAR PILOT

Year	Share of Total Revenues Accruing to Pilots		Share less Contribution to Pension Fund		Share less Pension Fund Contribution and Association or Corporation Administrative Costs		Share of Administrative Cost per Year Pilot in Per Cent
	Amount	% Increase or decrease since 1955	Amount	% Increase or decrease since 1955	Amount	% Increase or decrease since 1955	
1955.....	\$ 9,167.23	.0%	\$ 8,192.39	.0%	\$ 7,963.52	.0%	1.0%
1956.....	9,600.67	4.7	8,582.21	4.8	8,334.92	4.7	.9
1957.....	8,916.27	-2.7	7,981.66	-2.6	7,610.83	-4.4	.9
1958.....	9,196.69	0.3	8,240.79	0.6	7,855.62	-1.4	.9
1959.....	11,524.96	25.7	10,306.72	25.8	9,874.20	24.0	.9
1960.....	11,632.75	26.9	10,457.42	27.6	8,937.44	12.2	.8
1961.....	11,812.63	28.9	10,589.57	29.3	9,155.55	15.0	.8
1962.....	13,158.88	43.5	11,808.49	31.9	10,289.49	29.2	.7
1963.....	14,364.64	56.7	13,057.71	59.4	11,525.87	44.7	.7
1964.....	15,616.13	70.3	14,039.52	71.4	12,584.17	58.0	.8
1965.....	17,765.34	93.8	15,997.00	95.3	n/av.	n/av.	n/av.
1966.....	19,398.76	111.6	17,613.89	115.0	n/av.	n/av.	n/av.
1967.....	17,981.61	96.1	16,182.97	97.5	n/av.	n/av.	n/av.
1968*	16,053.73	75.1	14,380.72	75.5	12,735.70	59.9	.7

*Due to a change in the financial year to make it end Nov. 30, 1968 consisted of only 11 months.
 SOURCES: Tables on pp. 620 and 694, and Ex. 785 (Schedule "A").

have adopted for paying the pilots their shares based on dues earned during the pooling period. Payments are effected as the dues outstanding at the end of the pooling period are collected and, hence, a small portion of the shares remain unpaid, even for a number of years. This has the theoretical advantage of simplicity in bookkeeping to handle bad debts because these can be written off by debiting the shares for that pooling period *pro rata*. In practice, however, this advantage is very minor since the incidence of bad debts is minimal. For details and incidence of accounts written off, see Table, pp. 816-7.

The pooling period extends over the calendar year with an advance distribution every fortnight during the navigation season. The amount of the shares is established at the end of the year in relation to the work the pilots have done and the dues earned during the pooling year (p. 697).

This practice, however, is at variance not only with the provisions of the District By-law but also with the unwritten pooling rules. It is obvious that these rules were copied from the Montreal river pilots' unsatisfactory system. Rather than try to correct the situation by amending the pooling rules, the harbour pilots merely followed a more equitable procedure without reflecting it in their written rules. This practical solution has not created any problem because of the small number of pilots, the fairness of the system and the complete and very clear accounting the pilots are given of pooling operations (pp. 696 and ff.). However, the situation should be corrected, at least by rewriting the pooling rules to conform with the practice being followed.

The rules which are purported to define the pooling system and govern its operation are contained in By-law No. 3 of the Corporation as amended, By-law No. 6 approved by the Secretary of State on August 13, 1963, being the most recent amendment. Re the legality of such by-laws, vide Part I, pp. 89 & ff. Their main features are:

- (i) They purport to give the Corporation complete control over the pilots' earnings and the pilots have no right to intervene as individuals.
- (ii) All pilotage dues earned by the pilots or paid under the compulsory payment system form part of the common fund to be shared among the pilots, with the exception that dues paid on account of detention or bonuses paid in addition to pilotage dues, as provided in the tariff, belong to the pilots who earned them. To date, the only non-pooled revenue has been detention earnings.
- (iii) Collection costs are to be pro-rated on all money collected whether belonging to the pool or not. This provision has no application at present since collections are made by the Pilotage Authority.

- (iv) The By-law provides that the sharing rights of each pilot are to be based on work done in accordance with the turn system but does not state the basis on which the value of the turn is to be calculated. The procedure followed is to determine the value on the basis of dues earned (and not collected) during the pooling period. In fact, the By-law provides only for periodical final distributions, the amount being left to the discretion of the Board of Directors, but this procedure is not followed.
- (v) The share of a probationary pilot is two-thirds the share of a permanent pilot.
- (vi) Turns missed on account of unavailability for duty and credited for despatching purposes so as to prevent the equalization procedure from applying (pp. 724 and ff.) do not carry sharing rights except in one case, i.e., administrative free turns granted the Directors are one turn for each day or fraction of a day of absence. The ensuing loss of earnings for turns lost during absence due to illness or injury is compensated in part in two ways:
 - If a pilot wishes to equalize he may do so, but to a maximum of fifteen days of such absences per navigation season (p. 725).
 - The pilots have taken out group insurance coverage (p. 819) which, *inter alia*, provides indemnity for loss of salary from the seventh day of absence due to illness and from the first day if due to injury, whether or not attributable to the service.

The method of accounting for pooling operations clearly reflects the true situation (pp. 700-701).

COMMENTS

There is no valid reason why the harbour pilots did not adopt a complete pooling system comprising all pilotage earnings and based on availability for duty. The only explanation seems to be the influence of environment: they adopted the system of their immediate colleagues, the other St. Lawrence River groups. As seen above, they even copied the deficient pooling rules of the Montreal river pilots but do not follow them.

Another pretext may have been the fact that, according to the District By-law, their despatching was to be governed by the equalization of trips principle. This was not a serious obstacle for the Pilotage Authority would have amended the By-law in this regard if the harbour pilots had so requested, especially in view of the discriminatory consequences resulting from its present application, i.e., cancellations and movages count equally for one turn, irrespective of the duration and length of the latter.

(b) Pilotage Income

Because of their status as quasi-employees, the remuneration (“take home pay”) of the harbour pilots (like the river pilots, p. 801) may be defined as revenue received from the pool, i.e., their share of the pool and payments made from it on their behalf—group insurance premiums, Federation dues and assessments, Canadian Merchant Service Guild membership dues and their share of Corporation and group expenses—plus any non-pooled dues they have earned. There are no deductions for either Pilot Fund or Pension Fund.

The harbour pilots are not reimbursed for land transportation expenses incurred travelling to and from movage assignments. The Commission possesses no information to establish the extent of such expenses even approximately but it can be assumed that they are substantially less than those of the river pilots since the harbour pilots’ sphere of operations does not extend beyond the city side of the harbour, except for St. Lambert lock.

For several years all the harbour pilots have been entitled to a full share of the pool. There are three reasons:

- except for newly licenced pilots during their one-year probationary period, there are no grades;
- the only retirement from their group occurred in 1969 and there was no replacement;
- there is practically no absenteeism.

The following table shows for the years 1959—1968 the number of pilots sharing, the number who obtained a full share and the amount of such full share.

Year	Total Pilots Sharing	Pilots Receiving Full Share	Amount of Full Share
1959.....	16	12	\$13,558.40
1960.....	16	16	9,968.83
1961.....	16	14	11,244.35
1962.....	16	16	11,788.89
1963.....	16	16	12,183.96
1964.....	16	16	14,715.73
1965.....	18	15	15,701.94
1966.....	20	16	15,738.33
1967.....	20	16	13,575.60
1968.....	20	20	11,900.02

SOURCE: Ex. 802.

The only non-pooled item of revenue is the amount derived from detention charges: each pilot receives dues from this source earned during movages he performed.

The aggregate detention revenue for each year (of which each pilot received a different fraction) was as follows:

1959.....	n/av.	1964.....	\$16,128.00
1960.....	\$ 9,952.00	1965.....	20,905.13
1961.....	6,549.00	1966.....	20,973.45
1962.....	6,942.00	1967.....	20,724.38
1963.....	7,583.00	1968.....	19,688.53

Because there are no grades there is little difference from year to year in the aggregate amount each pilot receives from the pool and from non-pooled sources, as is clearly evident from the following table which shows for the years 1959—1968 the number of pilots whose remuneration fell in the various thousand dollar brackets. Each underline indicates the thousand dollar bracket in which the average net remuneration per year pilot falls, vide p. 803.

MONTREAL HARBOUR PILOTS—COMPARATIVE ANALYSIS OF
INCOME BRACKETS*

"Take Home" Net Income† Bracket	Number of Sharing Pilots										
	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	
\$16-17,000.....							<u>2</u>	9			
15-16,000.....	12						13	<u>7</u>			
14-15,000.....						<u>16</u>	1	2	3		
13-14,000.....									<u>14</u>		
12-13,000.....				1					3	<u>15</u>	
11-12,000.....		<u>16</u>	<u>15</u>	<u>15</u>	<u>16</u>						5
10-11,000.....			1								
9-10,000.....											
8- 9,000.....											
7- 8,000.....											
6- 7,000.....											
5- 6,000.....	1										
4- 5,000.....							1	2			
3- 4,000.....							1				
2- 3,000.....	2										
1- 2,000.....	1										
0- 1,000.....											
Total Number of Sharing Pilots.....	16	16	16	16	16	16	18	20	20	20	

* Before taxes and personal deductions, but after compulsory contributions to insurances and group expenses, including share of Corporation expenses, CMSG fees and Pilots' Federation dues.

† During the years 1959-1963, detention and other unpooled items paid directly to pilots were shown only as a lump sum payment without listing separately the actual amount paid to each pilot; as these are part of a pilot's "take home" taxable income, they have been prorated: 1959-1963, detention; 1959-1960, reimbursable expenses; 1959, moyages and cancellations; 1961, free moves.

SOURCES: Tables pp. 621 and 701 and Ex. 802.

The table p. 811 shows the average remuneration of the pilots according to the principal meaning given to the term (p. 491) calculated on the aggregate amount of pilotage earnings accruing directly or indirectly to the pilots, on the basis of *year pilot*. The resultant average figures correspond very closely to the actual remuneration most pilots draw, since their share in the pool is based on the full amount of dues earned, and also because most of them receive a full, equal share.

COMMENTS

Since the pilots' remuneration is based on dues paid by ships, their level of remuneration has been greatly affected in recent years by the numerous strikes which interfered with Seaway traffic (the source of their principal demand for services), despite the substantial increase in rates they obtained through the 1967 general surcharge increase from 15 to 21 per cent. This is the main weakness of such a method of remuneration. In 1969, the pilots succeeded in obtaining two corrective measures: another substantial increase in rates (the surcharge was raised from 21 to 39.15 per cent), and a decrease in strength from 20 pilots to 19 (5 per cent).

The Commission considers that this insecurity of income is detrimental to the service and that a new system should be adopted (vide Part I, pp. 137 and ff. and Gen. Rec. 21, pp. 528—531).

8. DISTRICT FINANCIAL ADMINISTRATION

PREAMBLE

Financial administration in the District of Montreal is conducted along the same general lines as in the District of Quebec. The main differences in the applicable legislation are:

- (a) While sec. 328 C.S.A. applies to the District of Montreal and, therefore, makes it possible for the District to be financially independent and self-supporting, no part of the District's operating expenses are paid out of pilotage dues or licence fees, as is the case in all other Districts where the Minister is the Pilotage Authority.
- (b) District operating expenses are assumed by the public through the Department of Transport and expenditures are authorized in the annual estimates of the Department.
- (c) The Authority bills for, and collects, pilotage dues without charge to the pilots and acts only as trustee. It has no funds or assets of its own.
- (d) The Department of Transport provides portable VHF radiotelephone sets to the pilots without cost when required by the device of increasing pilotage dues to cover the expense of such service in the case of ships not so equipped.

MONTREAL HARBOUR PILOTS—AVERAGE REMUNERATION PER YEAR PILOT

Year	Share of Total Revenue Accruing to Pilots		Share less Contribution to Insurance		Share less Association or Corporation Administrative Costs		Share of Administrative Cost per Year Pilot in Per Cent
	Amount	% Increase or decrease since 1959	Amount	% Increase or decrease since 1959	Amount	% Increase or decrease since 1959	
1959	15,268.96	0	14,906.47	0	14,460.00	0	7.2
1960	11,971.41	-21.6	11,516.95	-22.7	11,151.94	-22.9	6.2
1961	12,434.14	-18.6	12,031.99	-19.3	11,655.70	-19.4	6.2
1962	12,610.77	-17.4	12,145.59	-18.5	11,598.99	-19.8	6.3
1963	12,657.89	-17.1	12,116.73	-18.7	11,298.86	-21.9	6.2
1964	15,728.57	3.0	15,200.43	2.0	14,389.34	-0.5	6.3
1965	17,287.29	13.2	16,741.15	12.3	16,086.30	11.2	5.9
1966	17,079.68	11.9	16,522.51	10.8	15,923.26	10.1	5.3
1967	14,897.94	-2.4	14,311.72	-4.0	13,724.35	-5.1	5.0
1968	13,417.81	-12.1	12,833.73	-13.9	12,118.77	-16.2	5.0

SOURCES: Tables on pp. 620 and 701, and Ex. 802.

- (e) Neither the pilots nor the Pilotage Authority has any responsibility for furnishing pilot vessel service anywhere in the District. This service is provided the pilots free of charge following a general agreement reached by the Shipping Federation of Canada on behalf of ship owners with the launch owners who provide vessels at the various boarding areas, i.e., Quebec, Trois-Rivières, Lanoraie and Longue-Pointe. Pilot vessel charges are not considered pilotage dues: hence, they are not collected by the Pilotage Authority but directly by the launch owner concerned.
- (f) The District By-law does not fix the river pilots' mode of remuneration but provides that the aggregate dues collected, without differentiating whether for services rendered or on account of the compulsory payment system, are to be paid by the Pilotage Authority to the Pilots' Association (now defunct) after deducting the radiotelephone rental charges and the compulsory contribution to the river pilots' Pension Fund, both of which are to be forwarded to the Chief Treasury Officer of the Department of Transport (By-law, sec. 21).
- (g) The By-law establishes the harbour pilots' mode of remuneration and requires the District Supervisor to pool all pilotage earnings, including those resulting from the compulsory payment system, to compute the share of each pilot at the end of each month on the basis of time worked and to pay each pilot such share (By-law, sec. 46); as seen earlier, no heed is taken of this provision and the same procedure as for the river pilots is followed by the Pilotage Authority.

Re the cost to the Government of operating pilot stations, reference is made to the study by the Commission's consulting accountants in Part I of the Report, Appendix IX. The share of the cost attributed to the Montreal District in 1965 was \$167,000 discounting the cost of the Marine Reporting Service which has now been replaced by the more sophisticated and more expensive Marine Traffic Control System whose cost is no longer shown as a pilotage expense.

A new item of cost to the Government has been added since 1966 by providing the pilots VHF portable radiotelephone sets. Apart from the cost of repairs and maintenance for which no details are available, the capital expenditure on this account for the District of Montreal as of December 31, 1968,

was \$101,400 including depreciation, of which the Government recovered \$77,360 in rental dues up to that date. The details are as follows:

Year	Cash Expenditure	Rental Dues		
		River Pilots	Harbour Pilots	Total Receipts
	\$	\$	\$	\$
1966.....	24,300	14,695	575	15,270
1967.....	31,300	29,765	770	30,535
1968.....	18,000	29,965	1,590	31,555
Total.....	\$73,600			\$77,360

SOURCES: Exs. 534(b) and 1295.

The method of collecting the pilotage dues and the accounting procedure are the same as described on pp. 495-498.

The table pp. 814-15 shows the amounts written off as bad debts 1958-1968 and the percentage they formed of the aggregate earnings for 1957. It also shows the earnings which at the end of each year had been outstanding for more than twelve months as well as the current earnings not received at that date.

The table pp. 816-17 contains similar information for the harbour pilots since their formation in 1957.

As in the District of Quebec, the Authority's annual reports, which purport to be annual financial statements of the Pilotage Authority, are nothing more than a series of details relating to pilotage money and are included in the reports mainly for statistical purposes.

The Pilotage Authority's annual statement reflects the practical organization that has resulted from the Minister being the Pilotage Authority of the adjacent Districts of Montreal and Cornwall, both administered from Montreal by the same Supervisor and staff. The annual reports cover the situation with regard to the three groups of pilots, i.e., the Montreal river pilots, the Montreal harbour pilots and the Cornwall pilots, as if they were all in the same District, and a chapter is devoted to each group.

The table p. 818 shows for the period 1955-1968 the total amount of earned dues that were payable directly or indirectly to the Montreal river pilots. It does not include the radiotelephone rental charges, which accrue to the Receiver General of Canada when collected, or the negligible aggregate fines imposed on pilots, which accrue to the Pension Fund.

MONTREAL RIVER PILOTS—BAD DÉBITS AND CURRENT ACCOUNTS UNPAID

Year	Navigation Season	Written Off		Outstanding as at December 31			Current Year	
		Amount per Season	% of Pilotage Earnings	Amount per Season	Total Amount	% of Pilotage Earnings	Total Amount	% of Pilotage Earnings
1958	1957	\$ 121.42	0.01%	\$ 579.00	\$ 579.00	0.1%	\$26,237.09	2.3%
1959	1957	50.00	0.08	70.00	70.00	0.01	73,686.08	4.8
1958	1958	1,103.64						
1960	1957	35.00	0.002	—	3,958.79	0.3	46,375.93	3.1
1959	1959	—						
1961	1959	120.00	0.01	2,928.46	3,958.39	0.2	62,798.38	4.0
1960	1960	38.82						
1962	1959	171.88	0.03	2,756.58	4,243.95	0.2	62,419.08	3.6
1960	1960	216.21						
1961	1961	129.58						
1963	1959	212.43	0.02	2,544.15	4,031.52	0.2	110,826.95	6.2
1960	1960	—						
1961	1961	—						
1962	1962	190.49						

1964.....	1959	2,544.15	0.1	—	1,760.68	0.1	84,747.84	4.4	
	1960	—	}	813.72					
	1961	—		556.40					
	1963	3.24		390.56					
1965.....	1960	—	}	813.72	3,758.05	0.2	186,221.92	8.1	
	1961	—		556.40					
	1963	—		390.56					
	1964	18.50		1,997.37					
1966.....	1960	—	}	813.72	4,085.02	0.2	177,782.30	6.9	
	1961	—		556.40					
	1963	—		390.56					
	1964	—		1,497.25					
	1965	690.64		827.09					
1967.....	1960	1,205.22	}	608.46					
	1961	—		390.56					
	1963	—		521.87					
	1964	—		—					
	1965	—		596.35		2,117.24	0.1	269,035.78	10.7
	1966	—		772.63					
1968.....	1966	—	}	733.24	1,505.87	0.1	237,915.08	9.7	
	1967	—		—					
Total Written Off.....		\$6,851.22							

SOURCE: Ex. 785.

Study of Montreal Pilotage District

MONTREAL HARBOUR PILOTS—BAD DEBITS AND CURRENT ACCOUNTS UNPAID

Year	Navigation Season	Written Off		Outstanding as at December 31			Current Year	
		Amount per Season	% of Pilotage Earnings	Amount per Season	Total Amount	% of Pilotage Earnings	Total Amount	% of Pilotage Earnings
1960	..... Previous } 1959 }	\$ 684.00	0.4%	\$ 803.00	\$ 803.00	0.4%	\$ 856.00	0.5%
1961	..... 1959 } 1960 }	182.00	0.1	556.00 105.00	661.00	0.3	13,627.00	6.8
1962	..... 1959 } 1960 } 1961 }	110.00	0.1	n/av. n/av. n/av.	632.00	0.3	6,756.50	3.3
1963	..... Previous } 1962 }	48.88	0.02	n/av. n/av.	n/av.	—	n/av.	—
1964	..... Previous } 1963 }	41.00	0.02	—	—	0.0	20,156.75	8.0
1965	..... 1964	64.00	0.02	236.00	236.00	0.1	36,731.10	12.6

1966.....	1964	—	—	199.50			
	1965	33.00	0.01	500.50	700.00	0.2	13,920.40
							4.3
1967.....	1964	—	—	112.50			
	1965	—	—	286.00			
	1966	—	—	109.25	507.75	0.2	25,608.08
							8.6
1968.....	1964	—	—	—			
	1965	286.00	0.1	—			
	1966	—	—	36.80			
	1967	—	—	297.66			
					334.46	0.1	39,310.43
Total Written Off.....		\$1,448.88					14.7

SOURCE: Ex. 802.

MONTREAL RIVER PILOTS

Year	Gross Pilotage Earnings	% Increase since 1955
1955.....	\$ 981,876.62	0%
1956.....	1,136,223.78	15.7
1957.....	1,120,384.78	14.1
1958.....	1,142,768.57	16.4
1959.....	1,530,617.06	55.9
1960.....	1,494,712.75	52.2
1961.....	1,589,814.54	61.9
1962.....	1,735,275.56	76.7
1963.....	1,781,657.37	81.5
1964.....	1,925,391.60	96.1
1965.....	2,296,521.83	133.9
1966.....	2,578,496.28	162.6
1967.....	2,523,324.19	157.0
1968.....	2,462,940.13	150.8

SOURCE: Ex. 534(b).

The following table is on the same basis, except that it refers to the pilotage dues that were payable directly or indirectly to the harbour pilots. It includes neither the radiotelephone rental charges nor fines imposed on harbour pilots, which, because they have no pension fund, are paid to the Receiver General of Canada according to sec. 708 C.S.A.

MONTREAL HARBOUR PILOTS

Year	Gross Pilotage Earnings	% Increase since 1958
1957.....	\$ 46,351.00	*
1958.....	113,458.00	0%
1959.....	216,172.50	90.5
1960.....	191,542.50	68.8
1961.....	199,013.02	75.4
1962.....	201,769.25	77.8
1963.....	202,187.37	78.2
1964.....	251,623.75	121.8
1965.....	292,091.28	157.4
1966.....	322,647.83	184.4
1967.....	298,523.42	163.1
1968.....	268,356.13	136.5

*The percentage increase is based on the 1958 figures because 1957 is not a representative year since it was a period of organization and the harbour pilots were not in actual operation until the concluding months.

SOURCE: Ex. 534(b).

9. PENSION FUND

The Montreal harbour pilots as a group do not yet have the advantage of a plan which provides them with pension or retirement benefits but they have certain protection that would pertain to a pilot fund through a group insurance policy (Ex. 805) which guarantees a monthly indemnity for loss of earnings due to illness or injury, a special benefit for loss of earnings if a licence is withdrawn due to physical unfitness, major medical coverage and a \$10,000 death benefit doubled in case of accidental death.

The Montreal river pilots possess the second oldest Pilot Fund in Canada. It was created as a separate entity in 1812 when the joint Decayed Pilot Fund created in 1805 for the benefit of all the pilots on the St. Lawrence River was divided to form a separate fund for "the pilots for and above the Harbour of Quebec". By contrast with the Quebec pilots, the Montreal pilots were never legally entitled to the trusteeship and the management of their Pilot Fund and these were always exercised by the Pilotage Authority. The Montreal Pilot Fund ceased to be governed by its own statutory provisions when the last provisions of exception concerning it disappeared in 1934 with the abrogation of sec. 484, 1927 C.S.A., thus placing the Fund completely under the provisions of general application of the Canada Shipping Act. For the study of these provisions of general application, reference is made to Part I, pp. 438-447.

Pursuant to sec. 366, 1934 C.S.A., the Fund is under the joint trusteeship of the Minister of Transport and the Minister of Finance. Apart from the applicable statutory provisions, it is governed by the regulations made by the District Pilotage Authority under subsec. 319(*l*), 1934 C.S.A. and 329(*m*) C.S.A., the last series of which were confirmed by the Governor in Council by P.C. 1955-29/1712 on November 16, 1955, and by sec. 21 of the District General By-law which provides for the collection of compulsory contributions. The full cost of administering the Fund is assumed by the Government.

The sources of revenue of the Fund are compulsory contributions, investment revenue and fines imposed on the river pilots. By contrast with the policy followed in the District of Quebec, the revenue paid on account of the compulsory payment system does not accrue to the Pension Fund but is paid with other pilotage earnings, after deduction of the 10 per cent compulsory contribution to the Pension Fund, to the pilots through their organization for distribution as part of their remuneration. The interest yielded on investments has shown a marked increase since 1957 when a new investment policy was adopted at the pilots' instigation. The revenue from fines is minimal.

A pilot is entitled to pension benefits when his retirement takes place not earlier than age 65, except when an earlier retirement is due to physical or mental unfitness. Subsec. 329(*i*) C.S.A. states that the age of 65 is

the normal pension age. A pilot has the right to remain on active service until he reaches the ultimate retirement age of 70, provided he remains physically fit. It is reported that prior to 1954 the majority of retirements took place at or about the age of 65 and practically all the pilots who retired at an earlier age did so for medical or similar reasons. Since then, however, a tendency has developed for pilots to remain in the service up to the age of 70, a practice of obvious financial advantage to both the pilots and the Pension Fund.

Prior to 1954, pension benefits were a fixed amount for each year of service, a system which caused a substantial actuarial deficit. Since 1954, the amount of benefit is directly related to the pilot's own contributions to the Fund, except for a minimum pension of \$1,250 per annum.

In the case of an earlier retirement due to physical or mental disability, the pilot is entitled to the pension then accrued to him and to the same guaranteed minimum. For a forced retirement on account of a shipping casualty, the pilot is entitled to the actuarial equivalent of a pension accrued to him on the date of his retirement. For a forced retirement due to misconduct or use of alcohol or drugs, and in the case of a voluntary retirement before reaching a normal pension age, the pilot is merely reimbursed his contributions to the Fund.

The pension benefits of a pilot's widow are half his pension but not less than \$650 per year, which ceases to be payable in case of remarriage. The children of a deceased pilot receive no pension benefit if their mother receives a pension, otherwise the children under 18 receive the pension their mother would have been entitled to and share it among themselves. If there is only one child, the pension is half what his mother would have been entitled to. Of all the pension schemes in Districts where the Minister is the Pilotage Authority, this is the only one where the children of a deceased pilot are not entitled to receive pension benefits as long as the mother receives them.

The trusteeship and administration of the Pension Fund are the responsibility of the Minister of Transport and the Minister of Finance. Up to 1960, they made investments without consulting the pilots. Since 1960, the pilots have taken considerable interest in the administration of their Pension Fund and the suggestions they have since made upon the advice of an investment consultant are generally being followed. They have succeeded in obtaining approval to extend the investment field beyond the limitations imposed by sec. 366, 1934 C.S.A., i.e., "Dominion bonds or other Government securities approved by the Governor in Council". Bonds from the provinces as well as bonds of federal and provincial Crown corporations were acquired. Investments in municipal corporations were denied (re details of portfolios for the years 1958/59-1965 inclusive, vide Ex. 533).

The shift from Federal Government bonds toward higher yielding provincial government securities, together with the new mode of determining benefits adopted in 1954, has gradually improved the financial standing of the Fund. The \$541,236.98 actuarial deficit of 1954 had been reduced to \$267,680 by 1959 and on December 31, 1963, was only \$75,166. The Commission's actuarial consultant, basing his study on a more realistic interest rate, reported an actuarial surplus of \$7,167 as of December 31, 1963 (the consultant's report is reproduced *in extenso* as App. XII of Part I).

The Pilots' Federation has recommended that the provisions of the Canada Shipping Act dealing with Pilot Funds should be abolished and that the question of pension plans be left to be decided by the pilots as a group through their Corporations. Their arguments in support are briefly that the present provisions of the Canada Shipping Act are too strict and outdated, especially the restrictions on investments. They also consider it abnormal that the pilots as a group are not entitled to devise and administer their own pension scheme.

Since the time of the Commission's hearings, the Montreal pilots have tried to have their Pension Fund transferred to their Corporation in the same way as this was done by the B.C. pilots (vide Part I, p. 453 and Part II, pp. 189-195). This has been agreed to in principle by the Department of Transport: as of Jan. 27, 1970, the proposed trust agreement and pension scheme were being studied by officials of the Departments of Transport and Finance (Ex. 1539(v)).

For a study of the legal situation of Pension Funds and the Commission's remarks and recommendations, vide Part I, C. 10, and Recommendation 39.

Chapter D

For Recommendations affecting this District, see Section Five.

Chapter E

APPENDICES

I. MONTREAL RIVER PILOTS

APPENDIX A

Shipping Casualties, Accidents and Incidents with a Montreal River Pilot on Board:

- (1) Table—Comparative statistical analysis during the ten-year period 1959-1968 inclusive.
- (2) Summary—Detailed analysis for the years 1965 and 1966.

APPENDIX B

- (1) Graphs—(a) June 1962 workload of Montreal river pilot J. B. Bélanger.
(b) June 1963 workload of Montreal river pilot J. B. Bélanger.
(c) June 1964 workload of Montreal river pilot J. B. Bélanger.
- (2) Tables—(a) Comparative detailed analysis of workload of pilot J. B. Bélanger for the month of June for the three-year period 1962, 1963 and 1964.
(b) Comparative summary of workload of pilot J. B. Bélanger during the month of June for the three-year period 1962, 1963 and 1964.
- (3) Tables—(a) Comparative summary of workload of busiest pilot during busiest month for the three-year period 1962, 1963 and 1964.
(b) Comparative summary of workload of busiest pilot during least busy month for the three-year period 1962, 1963 and 1964.

APPENDIX C

Trips by Montreal River Pilots Each Month during 1963-1968 Inclusive:

- (1) Graph—(a) Between Montreal and Trois-Rivières.
(b) Between Quebec and Trois-Rivières.
- (2) Table—Aggregate number.

APPENDIX D

Montreal River Pilots—Comparative Analysis of Winter Navigation Trips:

- (1) Table—Total number of trips.
- (2) Table—Total full and half trips.
- (3) Table—Number of uninterrupted trips.
- (4) Table—Number of trips interrupted for night.
- (5) Table—Number of trips interrupted for ice.
- (6) Table—Number of trips interrupted for other than night or ice.
- (7) Table—Number of trips with vessel reinforced for ice.
- (8) Table—Number of trips with vessel not reinforced for ice.
- (9) Table—Comparative summary of winter navigation trips.

II. MONTREAL HARBOUR PILOTS

APPENDIX A

Shipping Casualties, Accidents and Incidents with a Montreal Harbour Pilot on Board:

- (1) Table—Comparative statistical analysis during the ten-year period 1959-1968.
- (2) Summary—(a) Detailed analysis for the year 1959.
(b) Detailed analysis for the year 1968.

APPENDIX B

- (1) Graph—June 1964 workload of Montreal harbour pilot J. J. Ménard.
- (2) Tables—(a) Analysis of workload of pilot J. J. Ménard for the month of June 1964.
(b) Summary of workload of pilot J. J. Ménard for the month of June 1964.
- (3) Table—Comparative summary of workload of busiest pilot during busiest and least busy months for the three-year period 1962, 1963 and 1964.

APPENDIX C

Trips by Montreal Harbour Pilots Each Month during 1963-1968 Inclusive:

- (1) Graph—Comparison during the years 1963-1968.
- (2) Table—Aggregate number during the years 1963-1968.

I. MONTREAL RIVER PILOTS

Appendix A (1)

COMPARATIVE STATISTICAL ANALYSIS OF SHIPPING CASUALTIES, ACCIDENTS AND INCIDENTS WITH A MONTREAL RIVER PILOT ON BOARD DURING THE TEN-YEAR PERIOD 1959-1968 INCLUSIVE

Details	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
A. EVENTS WHILE NAVIGATING										
I. MAJOR CASUALTIES (with or without loss of life)										
a. Loss or abandonment of ship.....	—	—	—	—	2*	—	2	1	—	—
b. Major strandings.....	—	—	2	—	1†	—	1	1	1	1
c. Heavy damage to ships (other than above).....	—	1	2	—	3	—	4	3	1	—
II. MINOR CASUALTIES (without loss of life)										
a. Minor strandings.....	20	10	17	9	7	4	10	—	6	9
b. Minor damage to ships.....	2	6	11	5	3	6	2	—	2	1
	22	16	28	14	10	10	12	—	8	10
III. ACCIDENTS (without damage to ships)										
a. Damage to buoys.....	2	—	—	1	2	1	1	1	1	—
b. Other.....	1	—	—	—	—	—	—	—	1	—
	3	—	—	1	2	1	1	1	2	—
IV. INCIDENTS (without any damage whatsoever)										
a. Touching bottom in channel.....	1	13	7	9	5	15	14	10	13	11
b. Other.....	2	3	1	7	1	1	1	—	—	—
	3	16	8	16	6	16	15	10	13	11
TOTAL EVENTS WHILE NAVIGATING..	28	33	38	31	21	27	32	14	24	22

Appendix A (1)—Concluded

	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
B. EVENTS WHILE BERTHING, UNBERTHING, ANCHORING OR ENTERING SEAWAY										
I. MAJOR CASUALTIES (with or without loss of life)										
a. Major strandings.....	—	1	—	—	—	1	—	—	—	1
b. Heavy damage to ship.....	—	—	—	—	—	—	—	—	—	—
II. MINOR CASUALTIES (without loss of life)										
a. Minor strandings.....	—	—	1	—	4	—	4	—	—	1
b. Minor damage to ship.....										
i. Striking pier or installation.....	17	22	20	23	14	14	13	8	15	15
ii. Striking vessel berthing or unberthing.....	8	3	2	5	—	2	5	4	5	—
iii. Striking vessel at anchorage or lock.....	1	2	2	2	4*	1	—	3	—	—
iv. Other.....	2	1	2	3	2	3	4	3	—	—
	28	28	27	33	24	20	26	18	20	16
III. ACCIDENTS (without damage to ships)										
a. Damage to pier or installation.....	1	2	—	—	3	4	1	1	—	1
b. Damage to buoys.....	1	—	—	—	—	1	2	—	—	—
c. Other.....	—	—	—	—	—	1	—	1	—	—
	2	2	—	—	3	6	3	2	—	1
IV. INCIDENTS (without any damage whatsoever)										
a. Striking pier or installation.....	—	—	3	2	3	—	10	5	5	1
b. Striking vessel at pier.....	—	2	—	—	1	1	1	3	—	—
c. Striking vessel at anchorage or lock.....	—	—	—	—	—	1	2	—	—	1
d. Striking buoys.....	—	—	—	—	—	5	4	3	2	6
e. Other.....	—	—	1	—	1	—	4	—	7	—
	—	2	4	2	5	7	17	11	7	8
TOTAL EVENTS WHILE BERTHING, UNBERTHING, ANCHORING OR ENTERING SEAWAY.....	30	33	31	35	32	34	46	31	27	26
GRAND TOTAL.....	58	66	69	66	53	61	78	45	51	48

SOURCE: Exhibit 1467.

*During one of these events, a river pilot was on board one of the vessels and a harbour pilot on board the other.

†Three river pilots were involved: two on board one of the vessels and one on board the other.

Appendix A (2)

DETAILED ANALYSIS FOR THE YEARS 1965 AND 1966 OF SHIPPING CASUALTIES, ACCIDENTS AND INCIDENTS WITH A MONTREAL RIVER PILOT ON BOARD

The years 1965 and 1966 had, respectively, the greatest and least number of events in the past ten-year period. The details are as follows:

1965

A. EVENTS WHILE NAVIGATING

I. MAJOR CASUALTIES (with or without loss of life)

(a) *Loss or abandonment of ship*

1. April 10—*Transatlantic* and *Hermes* collided at eastern exit of Yamachiche anchorage on Lake St. Peter—vide p. 727.
2. September 3—*Eastern Shell* and schooner *Mont Blanc* collided at Cap Lévrard during fog and latter vessel sank—vide p. 735.

(b) *Major stranding*

1. April 10—*Tore Knudson* at St. Augustin Shoal; caused by ice.

(c) *Heavy damage to ship* (other than above)

1. April 6—*Middlesex Trader* and *Prins Mauritz* collided at western end of St. Augustin Bar off St. Nicholas—vide p. 735.

II. MINOR CASUALTIES (without loss of life)

(a) *Minor strandings*

1. May 24—*Angelic* at Trois-Rivières; caused by pilot error—pilot reprimanded.
2. June 21—*Maren Maersk* at Trois-Rivières; caused by pilot error—pilot reprimanded.
3. June 24—*Charny* at Lotbinière; caused by steering gear failure.
4. July 25—*R. Bruce Angus* at Trois-Rivières; caused by pilot error.
5. July 26—*Hadar* at Trois-Rivières; caused by pilot error—pilot cautioned.
6. July 27—*Frank A. Sherman* at Trois-Rivières; caused by pilot error.
7. August 28—*Monte Penalara* at Pointe des Ormes; caused by pilot error—pilot reprimanded.
8. October 26—*Gray Master* at Pointe des Ormes when manoeuvring.
9. October 27—*Kasimov* at Contrecoeur; caused by steering gear failure.
10. November 27—*Sunmount* at Grondines; caused by weather and visibility.

(b) *Minor damage to ships*

1. November 17—*Aristogelos* lost anchor fluke at Pointe Confederation.
2. November 27—*Lind* lost anchor at Trois-Rivières when manoeuvring.

III. ACCIDENTS (without damage to ships)

(a) *Damage to buoys*

1. September 16—*Beate Bolton* believed to have struck buoy off Wolfe's Cove.

(b) *Other*—Nil

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IV. INCIDENTS (without any damage whatsoever)

(a) *Touching bottom in channel*

1. January 13—*Jos. Simard* at Ile-aux-Vaches Traverse; caused by engine failure.
2. March 3—*Hudson Transport* at Lake St. Peter; caused by heavy ice.
3. April 3—*Manchester Commerce* at Lake St. Peter; caused by bank suction—vide p. 728.
4. April 12—*Irvingwood* at Pointe Bigot; caused by engine failure.
5. April 30—*Lyngenfjord* at Trois-Rivières; caused by power failure.
6. August 28—*Dea Brovig* at Ile Hertel; caused by vessel sheering passing another ship.
7. September 14—*Inland* at Varennes; caused by pilot error—pilot reprimanded.
8. September 23—*Valdahan* at Lotbinière; caused by fog.
9. October 27—*Tynemouth* at Contrecoeur; caused by vessel avoiding *Kasimov*.
10. November 5—*Rimouski* at Ste. Anne de Sorel; caused by engine failure.
11. November 27—*Irvinglen* at Pointe Aubin; caused by anchor dragging in gale force wind.
12. December 3—*Luebrenau* at Longue Pointe when manoeuvring.
13. December 14—*Argentina* at Lake St. Peter; caused by power failure.
14. December 25—*Hudson Transport* at Lake St. Peter; caused by poor visibility.

(b) *Other*

1. October 7—*Maridan C.* struck by *Amanda Transport* at Pte. Citrouille; caused by suction.

B. EVENTS WHILE BERTHING, UNBERTHING, ANCHORING OR ENTERING SEAWAY

I. MAJOR CASUALTIES (with or without loss of life)

— Nil

II. MINOR CASUALTIES (without loss of life)

(a) *Minor strandings*

1. March 29—*Varhemus* when berthing at Shed 11 at Trois-Rivières; caused by silting.
2. May 10—*Tindfjell* when anchoring in Varennes Channel during fog.
3. June 2—*P. M. Crosbie* in Montreal harbour; caused by pilot error—pilot reprimanded.
4. December 4—*Sunvard* when anchoring at Ste. Croix during fog.

(b) *Minor damage to ship*

(i) *Striking pier or installation*

1. February 13—*Fenja Dan* struck quay in Montreal harbour when manoeuvring in ice with Master handling own ship.
2. April 19—*Northern Shell* struck quay in Montreal harbour; caused by current.
3. May 15—*Learina* struck pier when manoeuvring in Quebec harbour.
4. May 24—*Angelic* struck quay in Montreal harbour; caused when tow line parted.
5. June 2—*Alberto Lollighetti* struck quay at Contrecoeur; caused by wind.
6. June 6—*Piran* struck quay at Montreal; caused by engine failure.
7. September 20—*T. R. McLagan* struck quay in Montreal harbour; caused by current.

8. September 26—*Flying Independent* struck quay in Montreal harbour; caused by tug.
9. November 4—*Arion* struck quay at Montreal when manoeuvring.
10. November 11—*Benitsk* struck elevator loading duct in Montreal harbour; caused when tow line parted.
11. November 14—*Krasnouralsjk* struck pier at Sorel; caused by wind.
12. December 15—*Holtheim* struck quay in Montreal harbour when manoeuvring.
13. December 17—*Manchester Spinner* struck quay and grounded at Ile Ronde when manoeuvring in strong current.

(ii) Striking vessel berthing or unberthing.

1. May 13—*Stolt Bjorn* struck *Thomas* at Montreal harbour quay; caused by engine failure.
2. May 21—H.M.S. *Scarborough* struck H.M.S. *Tenby* in Montreal harbour; caused by C.O. handling ship when manoeuvring.
3. August 22—*Westmount* struck *Polyxene C.* at Montreal harbour quay; caused by wind.
4. September 18—*Georgian Bay* touched *Marmarion* at Montreal harbour quay; caused by Master's error when handling own ship.
5. November 8—*Empress of England* collided with *Lifjord* at Wolfe's Cove; caused by manoeuvring in reduced visibility.

(iii) Striking vessel at anchorage or lock—Nil

(iv) Other

1. March 10—*J. W. Paulin* struck heavy ice with bow in Lake St. Peter.
2. September 21—*Athenian* lost anchor at Batiscan when cable parted.
3. November 20—*World Charity's* lifeboat damaged by overhanging crane when berthing at Trois-Rivières.
4. November 27—*Francisca Sartori* caught tow line in propeller in Montreal harbour when manoeuvring.

III. ACCIDENTS (without damage to ships)

(a) *Damage to pier*

1. December 7—*Antonio* struck loading chute at Sorel; caused by insufficient light on quay and chute overhanging dockside.

(b) *Damage to buoys*

1. April 23—*Manchester Merchant* struck drifting buoy when anchoring at Pointe des Ormes.
2. November 24—*Dalny* struck buoy with propeller in Montreal harbour when manoeuvring, setting buoy adrift.

IV. INCIDENTS (without any damage whatsoever)

(a) *Striking pier or installation*

1. April 3—*Beaverash* struck quay in Montreal harbour; caused by ice.
2. May 9—*Irish Cedar* struck quay in Montreal harbour; caused by current.
3. May 14—*Mitshurinsk* struck pier in Montreal harbour when manoeuvring.
4. May 23—*Mashashima Maru* struck quay in Quebec harbour; caused by tug.
5. August 16—*Lucretia* struck quay at Trois-Rivières when manoeuvring.
6. August 24—*Sugar Transporter* struck quay in Montreal harbour when manoeuvring.
7. August 27—*Rythme* struck quay in Montreal harbour when manoeuvring.

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8. September 28—*Stolt Avenir* struck quay at Trois-Rivières when manoeuvring.
 9. September 30—*Morgana* struck quay at Trois-Rivières when manoeuvring.
 10. October 14—*Oriental Trader* struck pier in Montreal harbour when manoeuvring.
- (b) *Striking vessel at pier*
1. October 19—*Nasia River* touched *City of Birkenhead* when manoeuvring at Montreal harbour quay.
- (c) *Other*
1. January 15—*Jos. Simard* struck heavy ice when anchoring at St. Nicholas during fog.
 2. April 29—*Kovrov* struck buoy off Wolfe's Cove; caused by tug failure.
 3. August 10—*Dimitros* grounded in Sorel harbour; caused by over draught.
 4. August 14—*Mellum* struck bank anchoring in Lake St. Peter during dense fog.
 5. October 17—*Cape Breton Miner* rubbed bank at Seaway entrance when manoeuvring.
 6. October 21—*Oriental Trader* touched buoy at Trois-Rivières; caused by engine trouble.

1966

A. EVENTS WHILE NAVIGATING

I. MAJOR CASUALTIES (with or without loss of life):

(a) *Loss or abandonment of ship*

1. September 30—*Manseau 101* (dredge) sank near Quebec Bridge in the St. Lawrence River after losing its stability due to its state of unseaworthiness, resulting in ten lives lost—vide p. 729.

(b) *Major stranding*

1. September 27—*Akademic Schumansky* struck bottom near Deschailions; caused by over draught.

(c) *Heavy damage to ship* (other than above)

1. June 9—*Comeaudoc* collided with *Vancalt* off Pointe Citrouille; caused by steering gear failure in *Vancalt*.

II. MINOR CASUALTIES (without loss of life):

—nil

III. ACCIDENTS (without damage to ships):

(a) *Damage to buoy*

1. September 23—*T. R. McLagan* struck buoy off Longue-Pointe when turning in wind.

(b) *Other*—Nil

IV. INCIDENTS (without any damage whatsoever):

(a) *Touching bottom in channel*

1. January 8—*Rava Russkala* in Lake St. Peter; caused by ice conditions.
2. February 24—*Hudson Transport* at Champlain; caused by heavy ice.
3. May 1—*Rudolf Oldendorf* in Vercheres Channel; caused by pilot error.

4. July 5—*Redwing* off Pointe Citrouille; cause unknown.
5. September 20—*Hein Hoyer* off Longue-Pointe; caused by engine failure.
6. October 5—*Stolt Avenir* at Trois-Rivières; caused by pilot error.
7. October 29—*Border Falcon* at Hertel Island; caused by engine failure.
8. November 4—*Liquilady* at Cap St. Michel while under tow.
9. November 22—*Frank A. Sherman* on the St. Lawrence River during fog.
10. December 5—*Brilliance* off Grondines during fog.

(b) *Other*—Nil

B. EVENTS WHILE BERTHING, UNBERTHING, ANCHORING OR ENTERING SEAWAY

I. MAJOR CASUALTIES (with or without loss of life):

—nil

II. MINOR CASUALTIES (without loss of life):

(a) *Minor strandings*—Nil

(b) *Minor damage to ship*

(i) Striking pier or installation:

1. April 26—*Rasnoeselo* touched quay at Sorel while manoeuvring.
2. May 12—*Nymphe* struck quay at Sorel during wind.
3. May 17—*Thorshope* struck quay while unberthing at Montreal; caused by wheelsman's error.
4. June 9—*Atlantic Hope* struck quay at Sorel during heavy wind.
5. August 11—*Venus* struck quay while berthing at Trois-Rivières; caused by shallow water and deep draught of vessel.
6. September 18—*Cadiz* struck quay while berthing at Montreal; caused by wrong engine movement.
7. September 25—*Helga Witt* struck quay at Trois-Rivières while manoeuvring.
8. September 30—*Tobias Maersk* struck quay while berthing at Montreal.

(ii) Striking vessel berthing or unberthing:

1. June 20—*Prospero* touched moored *Detector* at Trois-Rivières quay during wind.
2. July 6—*Frankcliffe Hall* grounded in Montreal harbour and touched *Gloxinia* in the process during a wind squall.
3. September 24—*Belline* struck unnamed vessel when berthing at Trois-Rivières.
4. December 7—*Lunderfjell* touched *Fallsenstein* when unberthing in Montreal harbour; caused when tow line slipped off hook.

(iii) Striking vessel at anchorage or lock:

1. May 13—*Grovsdale* touched *Susan Fritzen* when anchoring at Lanoraie; caused by windlass failure.
2. May 19—*Nervion* struck anchored *Shelter Bay* at Sorel when manoeuvring in wind.
3. November 9—*Protinia* struck anchored *Katerina* off St. Nicholas during fog—vide p. 735.

(iv) *Other*

1. April 29—*Sir Thomas Shaughnessy* struck bridge abutment in Sorel harbour when manoeuvring.
2. August 17—*Montreal City* bumped St. Lambert lock wall with her stern when manoeuvring.
3. December 3—*Katerina* accidentally dropped her anchor off Pointe des Ormes; caused by windlass failure.

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III. ACCIDENTS (without damage to ships):

(a) *Damage to pier or installation*

1. October 25—*Yuri Gagarine* struck and demolished crane on wharf at Sorel; caused by pilot error.

(b) *Damage to buoys*—Nil

(c) *Other*

1. September 4—*Exilona* struck tie-up wall during wind.

IV. INCIDENTS (without any damage whatsoever):

(a) *Striking pier or installation*

1. May 6—*Mormacsaga* struck quay while unberthing at Montreal.
2. June 24—*Pic River* struck quay in Quebec harbour when manoeuvring.
3. November 16—*Cairnglen* struck Sorel quay when manoeuvring.
4. November 22—*Charlton Mira* struck quay at Montreal when manoeuvring.
5. December 6—*Rudolf Oldendorf* struck quay unberthing at Trois-Rivières.

(b) *Striking vessel at pier*

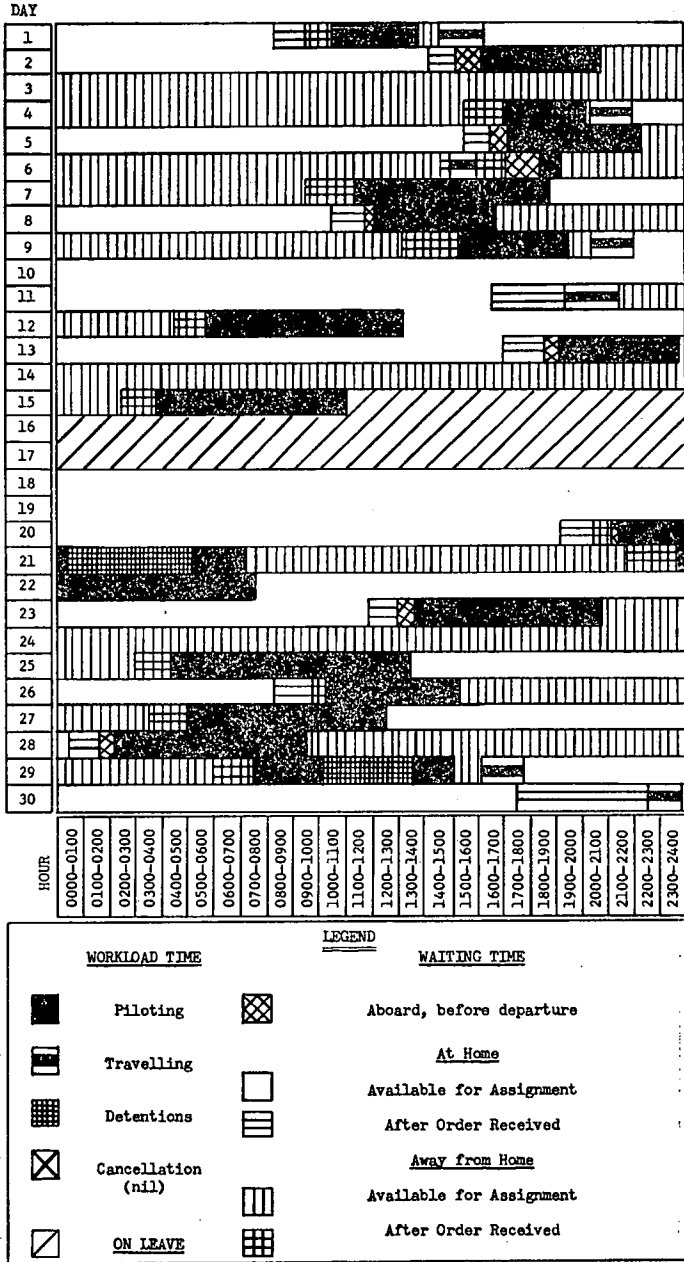
1. April 25—*P. M. Crosbie* touched *Charny* while berthing in Montreal harbour.
2. July 6—*Mormaerland* touched *Hiram* while unberthing at Trois-Rivières during wind.
3. September 2—*Yildun* drifted alongside *Mormac dawn* at her Montreal harbour berth; caused by engine trouble.

(c) *Other*

1. June 2—*Komsomolobz Uzbekistana* touched bottom in Montreal harbour; caused by wheelsman's error.
2. June 12—*Mormacpine* grounded in Montreal harbour; caused by pilot error.
3. July 30—*Kertis* touched channel bank in Montreal harbour; caused by engine failure.

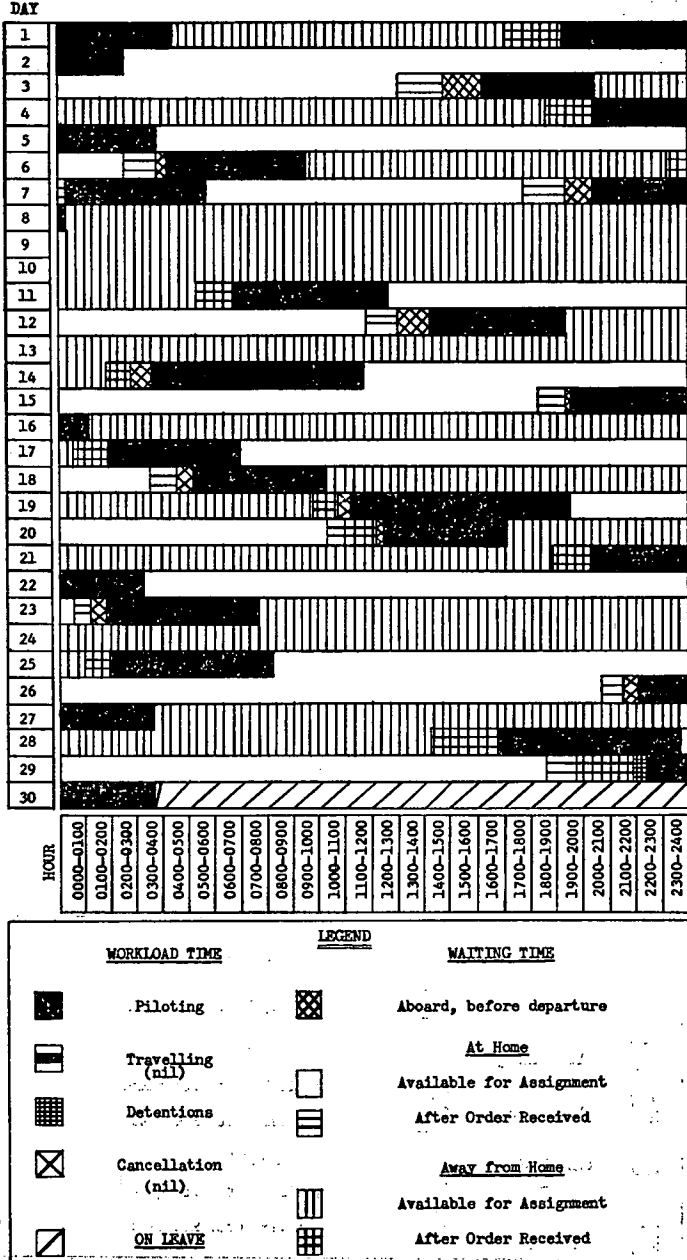
SOURCE: Exhibit 1467.

Appendix B (1) (a)
 JUNE 1962 WORKLOAD OF MONTREAL RIVER PILOT
 J. B. BÉLANGER



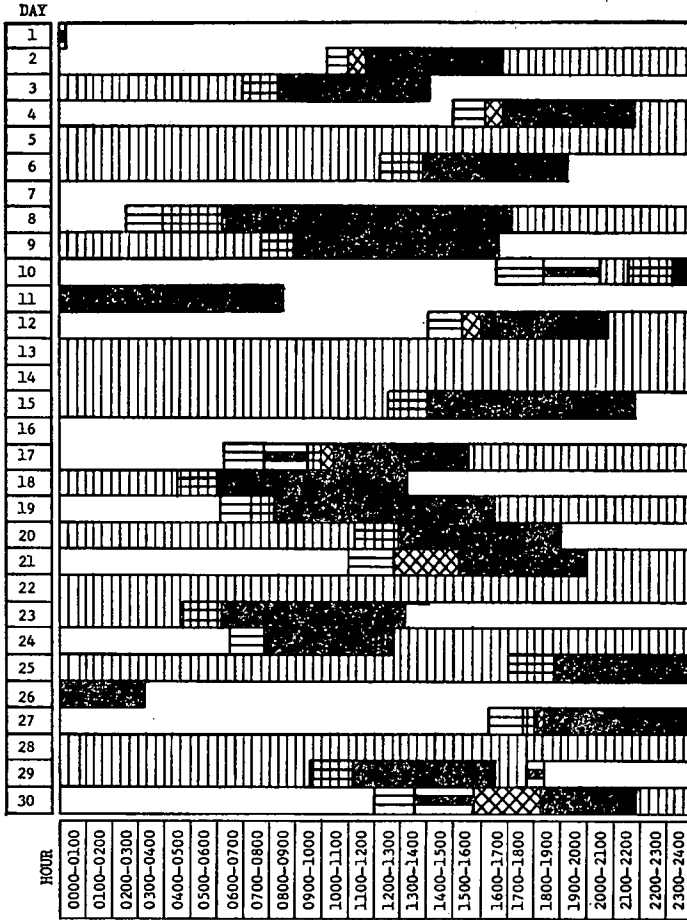
SOURCE: Appendix B (2) (a).

Appendix B (1) (b)
 JUNE 1963 WORKLOAD OF MONTREAL RIVER PILOT
 J. B. BÉLANGER



SOURCE: Appendix B. (2) (a).

Appendix B (1) (c)
 JUNE 1964 WORKLOAD OF MONTREAL RIVER PILOT
 J. B. BÉLANGER



WORKLOAD TIME		LEGEND		WAITING TIME	
	Piloting		Aboard, before departure		At Home
	Travelling		Available for assignment		After order received
	Detentions (nil)		Away from Home		Available for Assignment
	Cancellation (nil)		After order received		
	ON LEAVE (nil)				

SOURCE: Appendix B (2) (a).

Appendix B (2) (a)

COMPARATIVE ANALYSIS OF WORKLOAD OF PILOT
J. B. BÉLANGER DURING THE MONTH OF JUNE FOR
THE THREE-YEAR PERIOD 1962, 1963 AND 1964

Item	June 1962				June 1963				June 1964			
	Dates	days	hrs.	mins.	Dates	days	hrs.	mins.	Dates	days	hrs.	mins.
<i>Trips</i>												
Montreal- Trois-Rivières.....	2	4	30		1	4	25		2	5	10	
	5	5	5		3	4	10		4	5	0	
	8	4	40		6	5	20		12	4	40	
	13	4	35		7-8	3	55		21	4	45	
	23	7	5		12	5	10		24	4	40	
	28	7	20		15-16	5	40		—		0	
	—		0		18	4	55		—		0	
	—		0		23	5	50		—		0	
	—		0		26-27	5	30		—		0	
	<hr/>				<hr/>				<hr/>			
	1	9	15		1	20	55		1	0	15	
Trois-Rivières- Montreal.....	7	7	30		1-2	7	20		3	5	45	
	12	7	25		4-5	7	25		6	5	25	
	15	7	15		7	5	30		15	7	45	
	25	9	5		11	5	50		20	6	5	
	27	7	25		14	8	10		23	7	0	
	—		0		17	5	5		—		0	
	—		0		19	8	10		—		0	
	—		0		21-22	7	0		—		0	
	—		0		26	6	10		—		0	
	—		0		28	7	0		—		0	
	<hr/>				<hr/>				<hr/>			
	1	14	40		2	19	40		1	8	0	
St. Lambert- Trois-Rivières.....	20-21	4	55		20	4	40		8	10	55	
	26	5	0		29-30	5	15		19	8	10	
	—		0		—		0		27	5	35	
	<hr/>				<hr/>				<hr/>			
	9	55			9	55			1	0	40	
Trois-Rivières- St. Lambert.....	21-22	7	45		—	0			9	7	40	
	—		0		—	0			10-11	9	20	
	—		0		—	0			18	7	15	
	—		0		—	0			25-26	8	30	
	<hr/>				<hr/>				<hr/>			
	7	45			0				1	8	45	
Trois-Rivières- Sorel.....	4	3	10		—	0			—		0	
	9	4	10		—	0			—		0	
	29	2	40		—	0			—		0	
	<hr/>				<hr/>				<hr/>			
	10	0			0				0		0	

Item	June 1962				June 1963				June 1964			
	Dates	days	hrs.	mins.	Dates	days	hrs.	mins.	Dates	days	hrs.	mins.
Sorel-Trois-Rivières ..	—		0		—		0		17	5	5	
Trois-Rivières- Contreccœur.....	—		0		—		0		29	5	15	
Contreccœur- Trois-Rivières.....	—		0		—		0		30	3	30	
St. Lambert- Lanoraie.....	1	3	10		—		0		—		0	
		3	10				0			13	50	
<i>Movages: Sorel.....</i>	6		45		—		0		—		0	
	29	1	30		—		0		—		0	
		2	15				0				0	
Total Time Piloting...		4	9	0		5	2	30		5	7	30
<i>Detentions</i>												
Lanoraie.....	21	4	50		—		0		—		0	
Sorel.....	29	3	25		—		0		—		0	
Seaway.....	—		0		29		30		—		0	
		8	15				30				0	
<i>Cancellations.....</i>			0				0				0	
<i>Awaiting Departure after Embarking</i>												
Montreal.....	2		15		3	1	25		2		40	
	5		40		6		25		4		45	
	8		20		11	1	00		12		40	
	13		30		12	1	10		21	2	30	
	23		40		15		10		24		10	
	28		30		18		45		—		0	
	—		0		23		35		—		0	
	—		0		26		40		—		0	
		2	55			6	10			4	45	
Trois-Rivières.....	—		0		14		50		—		0	
	—		0		19		30		—		0	
St. Lambert.....	1		10		20		15		27		15	
	20		15		—		0		—		0	
Sorel.....	6	1	20		—		0		17		30	
Contreccœur.....	30		5		—		0		30	2	40	
		4	45			7	45			8	10	
<i>Travelling</i>												
Montreal-Trois- Rivières.....	11	2	5		—		0		10	2	5	
Trois-Rivières- Sorel.....	6	1	50		—		0		—		0	
Montreal-Sorel.....	—		0		—		0		17	1	40	
Sorel-Montreal.....	4	1	35		—		0		1		15*	
	9	1	40		—		0		—		0	
	29	1	40		—		0		—		0	

*remainder of 31/5/64 travelling

Study of Montreal Pilotage District

Item	June 1962				June 1963				June 1964			
	Dates	days	hrs.	mins.	Dates	days	hrs.	mins.	Dates	days	hrs.	mins.
Montreal-Contrecœur.....	30		1	10	—			0	30		2	5
Contrecœur-Montreal.....	—			0	—			0	29		1	0
Lanoraie-Montreal.....	1		1	35	—			0	—			0
			11	35				0			7	5
<i>Waiting away from Home—Available for Assignment</i>												
Trois-Rivières.....	2-4	1	18	50	1		12	35	2-3		14	10
	5-6		16	25	3-4		22	10	4-6	1	14	25
	6-7		14	15	6		13	40	8-9		14	35
	8-9		20	30	8-11	3	5	5	10		1	5
	11		2	30	12-14	1	6	30	12-15	2	15	50
	12		4	30	16-17		23	20	17-18		13	0
	13-15	1	2	45	18-19		23	35	19-20		18	50
	21		14	35	20-21	1	1	40	21-23	1	8	45
	23-25	1	6	15	23-25	1	17	20	24-25	1	4	20
	26-27		12	15	27-28	1	10	40	27-29	1	9	35
	28-29		20	30	—			0	30		2	10
		8	13	20		12	16	35		10	20	45
Sorel.....	4			10	—			0	—			0
	9			55	—			0	—			0
	29		1	5	—			0	—			0
Contrecœur.....	—			0	—			0	29		1	15
Lanoraie.....	1			50	—			0	—			0
		8	16	20		12	16	35		10	22	0
<i>Waiting away from Home—after Order Received</i>												
Trois-Rivières.....	4		1	35	1		2	10	3		1	20
	6			15	4		1	50	6		1	35
	7		1	50	6-7		1	5	9		1	15
	9		2	5	11		1	25	10		1	40
	12		1	15	14			55	15		1	30
	15		1	15	17		1	25	18		1	30
	21		2	0	19		1	0	20		1	40
	25		1	20	21		1	30	23		1	25
	27		1	30	25		1	0	25		1	45
	29		1	25	28		2	25	29		1	40
			14	30			14	45			15	20

Item	June 1962				June 1963				June 1964				
	Dates	days	hrs.	mins.	Dates	days	hrs.	mins.	Dates	days	hrs.	mins.	
St. Lambert lock.....	1		1	0	—			0	—			0	
	20			40	—			0	—			0	
	26			30	—			0	—			0	
Sorel.....	6			20	—			0	17			30	
Contrecoeur.....	30			10	—			0	—			0	
			17	10			14	45			15	50	
<i>Waiting at Home— Available for Assign- ment.....</i>	1		8	10	2- 3	1	10	30	1- 2	1	9	55	
	1- 2		22	0	5- 6		22	45	3- 4	1	0	55	
	4- 5		17	30	7		11	55	6- 8	1	7	15	
	7- 8		15	40	11-12		23	15	9-10		23	55	
	9-11	1	18	35	14-15	1	6	30	11-12	1	5	30	
	12-13	1	3	50	17-18		20	30	15-17	1	8	30	
	18-20	2	19	10	19-20		14	50	18-19		16	50	
	22-23	1	4	20	22-23		21	15	20-21		16	0	
	25-26		18	50	25-26	1	12	20	23-24		17	20	
	27-28		12	5	28-29		18	50	26-27	1	13	0	
	29-30		23	45	—			0	29-30		17	20	
			11	19	55		9	18	40		11	16	30
<i>Waiting after Order Received.....</i>	1		1	20	3		1	45	2			50	
	2		1	40	6		1	15	4		1	5	
	5		1	5	11		1	40	8		3	40	
	8		1	15	12		1	10	10		1	50	
	11		2	45	15		1	5	12		1	20	
	13		1	40	18		1	0	17		1	30	
	20		1	20	20		1	55	19		2	10	
	23		1	10	23			45	21		1	45	
	26		1	30	26			55	24		1	20	
	28		1	10	29		3	20	27		1	50	
	30		5	5	—			0	30		1	35	
			20	0			14	50			18	55	
<i>On Leave.....</i>	15-17	2	13	0	30		20	25	—			0	
		30	0	0		30	0	0		30	0	0	

SOURCE: Ex. 781.

Appendix B (2) (b)

COMPARATIVE SUMMARY OF WORKLOAD OF PILOT
J. B. BÉLANGER DURING THE MONTH OF JUNE FOR
THE THREE-YEAR PERIOD 1962, 1963 AND 1964

Item	June 1962			June 1963			June 1964		
	Turns*	hrs.	mins.	Turns	hrs.	mins.	Turns	hrs.	mins.
<i>Trips</i>									
Montreal-Trois-Rivières.....	6	33	15	9	44	55	5	24	15
Trois-Rivières-Montreal.....	5	38	40	10	67	40	5	32	0
St. Lambert-Trois-Rivières.....	2	9	55	2	9	55	3	24	40
Trois-Rivières-St. Lambert.....	1	7	45	—	0	0	4	32	45
Sorel-Trois-Rivières.....	—	0	0	—	0	0	1	5	5
Trois-Rivières-Sorel.....	3	10	0	—	0	0	—	0	0
Contreccœur-Trois-Rivières.....	—	0	0	—	0	0	1	3	30
Trois-Rivières-Contreccœur.....	—	0	0	—	0	0	1	5	15
St. Lambert-Lanoraie.....	1	3	10	—	0	0	—	0	0
Total Trips.....	18	102	45	21	122	30	20	127	30
<i>Movages: Sorel.....</i>	2	2	15	—	0	0	—	0	0
Total time piloting.....	20	105	0	21	122	30	20	127	30
<i>Detentions</i>									
Lanoraie.....	1	4	50	—	0	0	—	0	0
Sorel.....	1	3	25	—	0	0	—	0	0
Seaway.....	—	0	0	1	30	0	—	0	0
<i>Cancellations.....</i>	—	0	0	—	0	0	—	0	0
Total Time Chargeable.....	22	113	15	22	123	0	20	127	30
<i>Travelling</i>									
Montreal-Trois-Rivières.....	1	2	5	—	0	0	1	2	5
Sorel-Montreal.....	3	4	55	—	0	0	1	15	15
Montreal-Sorel.....	—	0	0	—	0	0	1	1	40
Trois-Rivières-Sorel.....	1	1	50	—	0	0	—	0	0
Contreccœur-Montreal.....	—	0	0	—	0	0	1	1	0
Montreal-Contreccœur.....	1	1	10	—	0	0	1	2	5
Lanoraie-Montreal.....	1	1	35	—	0	0	—	0	0
Total Travelling Time.....	7	11	35	—	0	0	5	7	5
Total Workload Time.....	22	124	50	22	123	0	20	134	35
<i>Waiting Time—</i>									
<i>Aboard, before Departure</i>									
Montreal.....	6	2	55	8	6	10	5	4	45
Trois-Rivières.....	—	0	0	2	1	20	—	0	0
St. Lambert.....	2	25	0	1	15	0	1	15	0

*In tables of this nature, turns should be taken to mean times in connection with items other than assignments.

Item	June 1962			June 1963			June 1964		
	Turns	hrs.	mins.	Turns	hrs.	mins.	Turns	hrs.	mins.
Sorel.....	1	1	20	—	0		1		30
Contrecoeur.....	1		30	—	0		1	2	40
Total Waiting Time Aboard.....	10	4	45	11	7	45	8	8	10
Total Time on Assignments.....		129	35		130	45		142	45
<i>Away from Home</i>									
Trois-Rivières.....	11	219	50	10	319	20	11	276	5
St. Lambert lock.....	3	2	10	—	0		—		0
Sorel.....	3	2	30	—	0		1		30
Contrecoeur.....	1		10	—	0		1	1	15
Lanoraie.....	1		50	—	0		—		0
Total Waiting Time Away From Home.....	19	225	30	10	319	20	13	277	50
Total Time Away From Home.....		355	5		450	5		420	35
<i>At Home</i>									
Available for assignment.....	11	285	55	10	234	40	11	280	30
After order received	11	20	0	10	14	50	11	18	55
Total Time Available For Duty.....		659	0		699	35		720	0
<i>On Leave.....</i>	1	61	0	1	20	25	—		0
		720			720			720	
		(30 days)			(30 days)			(30 days)	

SOURCE: Appendix B (2) (a).

Appendix B (3) (a)

COMPARATIVE SUMMARY OF WORKLOAD
OF BUSIEST MONTREAL RIVER PILOT DURING BUSIEST MONTH
FOR THE THREE-YEAR PERIOD 1962, 1963 AND 1964

Summary of Workload	July 1962 Pilot Gaston Daneau			November 1963 Pilot J. A. M. Couët			July 1964 Pilot Adrien Arcand		
	Turns	hrs	mins.	Turns	hrs.	mins.	Turns	hrs.	mins.
<i>Trips</i>									
Montreal-Trois-Rivières.....	8	45	5	6	30	25	0	—	—
Trois-Rivières-Montreal.....	9	70	45	6	40	20	0	—	—
St. Lambert-Trois-Rivières.....	0	—	—	3	25	40	0	—	—
Trois-Rivières-St. Lambert.....	0	—	—	1	8	30	0	—	—
Quebec-Trois-Rivières	0	—	—	0	—	—	13	87	15
Trois-Rivières-Quebec	0	—	—	0	—	—	12	70	40
Other.....	4	19	50	3	9	50	0	—	—
<i>Movages</i>	1	—	40	5	incl. in trips		6	8	30
Total Piloting	136		20	114		45	166		25
<i>Detention</i>	8	43	50	6	65	20	2	8	30
<i>Cancellation</i>	0	—	—	0	—	—	0	—	—
<i>Travelling</i>	0	—	—	1	3	0	0	—	—
Total Workload	180		10	183		5	150		55
<i>Waiting</i>									
Away from home.....	9	264	45	9	196	25	19	288	15
At home, available.....	10	299	5	10	340	25	13	280	50
	31 days			30 days			31 days		

SOURCE: Ex. 790.

Appendix B (3) (b)

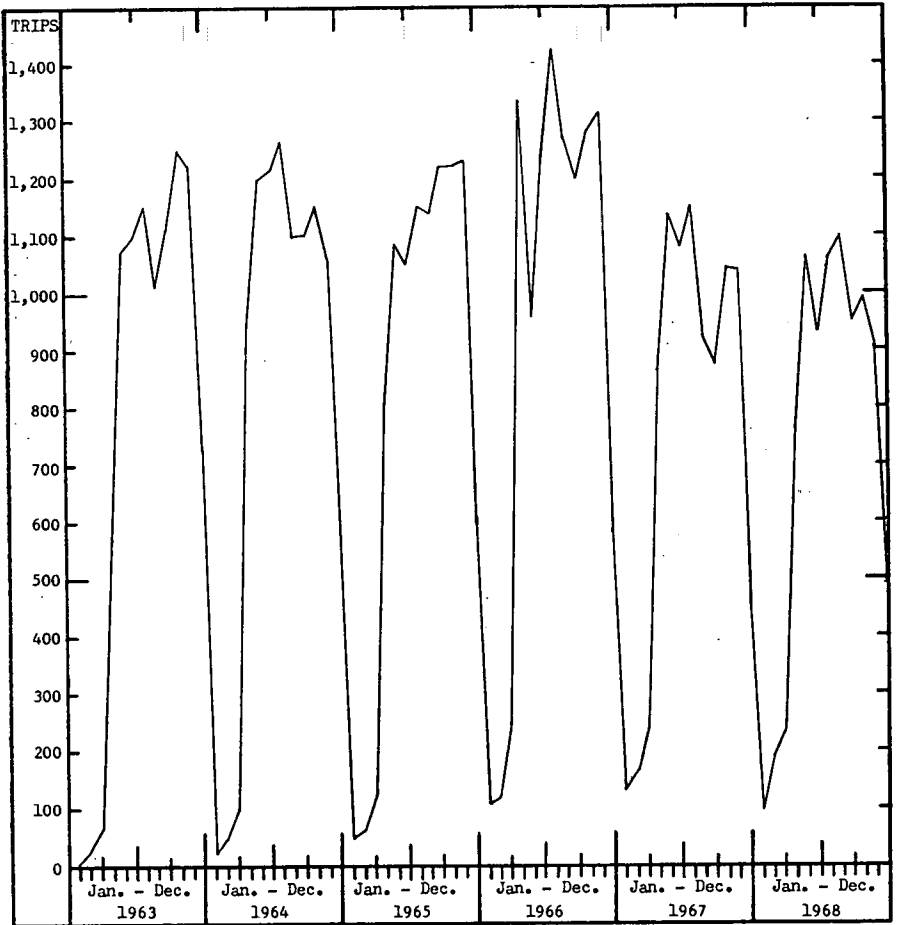
COMPARATIVE SUMMARY OF WORKLOAD OF
BUSIEST MONTREAL RIVER PILOT DURING LEAST BUSY MONTH
FOR THE THREE-YEAR PERIOD 1962, 1963 AND 1964.

Summary of Workload	September 1962 Pilot Henri Bernier		May 1963 Pilot G. E. Perreault		September 1964 Pilot Horace Perron	
	Turns	hrs. mins.	Turns	hrs. mins.	Turns	hrs. mins.
<i>Trips</i>						
Montreal-Trois-Rivières.....	0	—	5	25 5	8	43 50
Trois-Rivières-Montreal.....	0	—	7	49 55	8	52 40
St. Lambert-Trois-Rivières.....	0	—	3	15 0	2	12 45
Trois-Rivières-St. Lambert.....	0	—	1	13 30	3	30 20
Quebec-Trois-Rivières	10	75 15	0	—	0	—
Trois-Rivières-Quebec	10	55 30	0	—	0	—
Other.....	0	—	2	10 30	0	—
<i>Movages</i>	0	—	0	—	1	incl. in trips
Total Piloting.....		310 45		114 0		139 35
<i>Detention</i>	2	28 0	4	35 20	3	3 55
<i>Cancellation</i>	0	—	0	—	0	—
<i>Travelling</i>	0	—	0	—	1	3 20
Total Workload.....		158 45		149 20		146 50
<i>Waiting</i>						
Away from home.....	10	244 35	9	184 50	11	194 45
At home, available.....	11	316 40	10	409 50	11	378 25
		30 days		31 days		30 days

SOURCE: EX. 791.

Appendix C (1) (a)

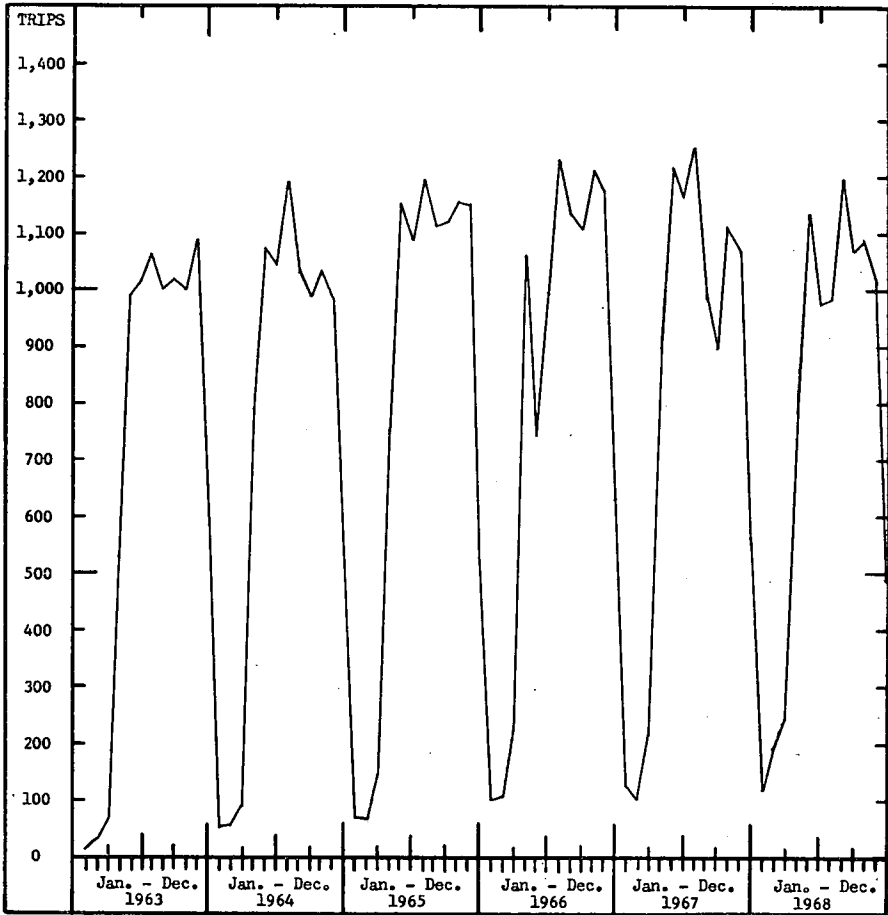
COMPARISON OF TRIPS EACH MONTH DURING 1963-1968
BY MONTREAL RIVER PILOTS BETWEEN MONTREAL
AND TROIS-RIVIÈRES



SOURCE: Appendix C (2).

Appendix C (1) (b)

COMPARISON OF TRIPS EACH MONTH DURING 1963-1968
BY MONTREAL RIVER PILOTS BETWEEN QUEBEC
AND TROIS-RIVIÈRES



SOURCE: Appendix C (2).

Appendix C (2)

AGGREGATE NUMBER OF TRIPS BY MONTREAL RIVER PILOTS
EACH MONTH DURING 1963-1968

Month	1963	1964	1965	1966	1967	1968
<i>(a) Between Montreal and Trois-Rivières</i>						
January.....	1	22	56	110	129	98
February.....	27	52	65	120	155	191
March.....	67	98	127	239	238	235
April.....	577	947	797	1,338	864	766
May.....	1,071	1,207	1,086	958	1,135	1,062
June.....	1,097	1,216	1,054	1,231	1,080	928
July.....	1,150	1,266	1,152	1,423	1,151	1,062
August.....	1,014	1,106	1,143	1,273	921	1,098
September.....	1,116	1,108	1,211	1,200	876	947
October.....	1,249	1,154	1,215	1,282	1,045	991
November.....	1,222	1,065	1,236	1,316	1,040	908
December.....	727	582	596	583	453	493
<i>(b) Between Quebec and Trois-Rivières</i>						
January.....	17	50	68	102	124	119
February.....	34	54	64	107	102	193
March.....	67	92	145	226	221	244
April.....	531	790	755	1,061	903	785
May.....	987	1,074	1,149	742	1,217	1,137
June.....	1,018	1,043	1,091	998	1,166	975
July.....	1,066	1,187	1,195	1,230	1,248	985
August.....	1,000	1,030	1,114	1,134	985	1,195
September.....	1,021	998	1,120	1,108	899	1,068
October.....	1,002	1,034	1,157	1,209	1,116	1,087
November.....	1,091	984	1,153	1,178	1,068	1,013
December.....	686	519	523	630	554	489
<i>(c) Total Number of Trips per Year</i>						
(i) Upper Sector.....	9,318	9,823	9,738	11,073	9,087	8,779
(ii) Lower Sector.....	8,520	8,855	9,534	9,725	9,603	9,290
(iii) TOTAL.....	17,838	18,678	19,272	20,798	18,690	18,069

SOURCE: EX. 1539(y).

Appendix D
MONTREAL DISTRICT
COMPARATIVE ANALYSIS OF WINTER NAVIGATION TRIPS

(1) TOTAL NUMBER OF TRIPS

Date	Total Trips Upbound and Downbound				Total Trips Upbound				Total Trips Downbound						
	1960/61	1961/62	1962/63	1963/64	1964/65	1960/61	1961/62	1962/63	1963/64	1964/65	1960/61	1961/62	1962/63	1963/64	1964/65
Dec. 1-7.....	304	320	412	449	331	94	112	144	181	124	210	208	268	268	207
8-15.....	112	144	169	288	196	45	52	63	107	46	67	92	106	181	150
16-31.....	12	21	24	115	101	5	5	10	27	34	7	16	14	88	67
	428	485	605	852	628	144	169	217	315	204	284	316	388	537	424
Jan. 1-15.....	0	2	2	12	18	0	1	1	7	8	0	1	1	5	10
16-31.....	0	2	6	15	3	0	1	5	7	3	0	1	1	8	0
Feb. 1-15.....	0	4	9	26	36	0	3	3	14	18	0	1	6	12	18
16-28.....	8	8	22	20	48	5	3	14	8	24	3	5	8	12	24
Mar. 1-15.....	11	29	18	57	56	5	17	10	29	28	6	12	8	28	28
16-31.....	15	29	47	41	71	11	16	28	28	45	4	13	19	13	26
	34	74	104	171	232	21	41	61	93	126	13	33	43	78	106
Apr. 1-8.....	23	35	20	147	112	20	30	16	102	66	3	5	4	45	46
TOTAL TRIPS.....	485	594	729	1,170	972	185	240	294	510	396	300	354	435	660	576

SOURCE: Exhibit 1464(f). (NOTE: Full transit counts as two trips; half transit counts as one trip.)

Study of Montreal Pilotage District

(2) TOTAL FULL AND HALF TRIPS

Date	Full Transits—Upper and Lower Sectors				Half Transits—Lower Sector				Half Transits—Upper Sector						
	1960/61	1961/62	1962/63	1963/64	1964/65	1960/61	1961/62	1962/63	1963/64	1964/65	1960/61	1961/62	1962/63	1963/64	1964/65
		70	80	124	150	108	6	4	8	8	4	18	28	12	23	12
<i>Upbound Trips</i>	30	38	48	74	34	6	3	9	10	5	9	11	6	23	7
Dec. 1-7.....	2	2	4	14	26	2	3	2	10	4	1	0	4	3	4
8-15.....															
16-31.....	102	120	176	238	168	14	10	19	28	13	28	39	22	49	23
Jan. 1-15.....	0	0	0	2	4	0	1	1	5	2	0	0	0	0	2
16-31.....	0	0	2	6	0	0	1	3	0	1	0	0	0	1	2
Feb. 1-15.....	0	0	2	12	16	0	2	1	1	1	0	1	0	1	1
16-28.....	4	2	12	8	24	0	1	1	0	0	1	0	1	0	0
Mar. 1-15.....	4	14	10	26	26	0	2	0	2	1	1	1	0	1	2
16-31.....	10	16	24	22	44	1	0	2	5	1	0	0	2	1	0
Apr. 1-8.....	18	32	50	76	114	1	7	8	13	5	2	2	3	4	7
Total Upbound.....	6	28	6	86	62	8	2	8	9	0	6	0	2	7	4
	126	180	232	400	344	23	19	35	50	18	36	41	27	60	34
<i>Downbound Trips</i>	150	140	230	214	180	22	27	18	18	11	38	41	20	36	16
Dec. 1-7.....	46	72	82	146	126	9	7	10	12	12	12	13	14	23	12
8-15.....	6	10	8	56	52	1	4	4	20	7	0	2	2	12	8
16-31.....	202	222	320	416	358	32	38	32	50	30	50	56	36	71	36
Jan. 1-15.....	0	0	0	2	8	0	1	1	3	2	0	0	0	0	0
16-31.....	0	0	0	2	0	0	1	1	4	0	0	0	0	2	0
Feb. 1-15.....	0	0	4	8	14	0	1	2	2	2	0	0	0	2	2
16-28.....	2	4	6	12	24	0	1	1	0	0	1	0	1	0	0
Mar. 1-15.....	6	10	8	24	26	0	2	0	2	0	0	0	0	2	2
16-31.....	2	12	18	6	24	1	0	1	3	1	1	1	0	4	1
Apr. 1-8.....	10	26	36	54	96	1	6	6	14	5	2	1	1	10	5
Total Downbound.....	2	0	4	28	40	1	2	0	5	0	0	3	0	12	6
	214	248	360	498	494	34	46	38	69	35	52	60	37	93	47
GRAND TOTAL.....	340	428	592	898	838	57	65	73	119	53	88	101	64	153	81

(3) NUMBER OF UNINTERRUPTED TRIPS

Date	Full Transits—Upper and Lower Sectors				Half Transits—Lower Sector				Half Transits—Upper Sector						
	1960/61	1961/62	1962/63	1963/64	1964/65	1960/61	1961/62	1962/63	1963/64	1964/65	1960/61	1961/62	1962/63	1963/64	1964/65
<i>Upbound Trips</i>															
Dec. 1-7.....	36	48	112	96	80	6	4	8	7	3	16	28	12	22	12
8-15.....	12	16	40	26	12	6	2	9	7	2	8	11	6	23	6
16-31.....	2	0	2	8	6	1	3	2	4	2	1	0	4	2	4
Jan. 1-15.....	0	0	0	0	2	0	0	0	5	2	0	0	0	0	1
16-31.....	0	0	0	6	0	0	1	3	0	1	0	0	0	1	2
Feb. 1-15.....	0	0	0	12	6	0	2	1	1	1	0	1	0	1	1
16-28.....	0	0	8	6	22	0	1	1	0	0	1	0	1	0	0
Mar. 1-15.....	2	6	8	18	20	0	2	0	2	0	0	1	0	1	2
16-31.....	8	14	22	22	36	1	0	2	5	1	0	0	2	1	0
Apr. 1-8.....	4	8	2	80	56	6	1	8	8	0	5	0	2	7	4
Total Upbound.....	64	92	194	274	240	20	16	35	39	12	31	41	27	58	32
<i>Downbound Trips</i>															
Dec. 1-7.....	106	108	208	168	138	21	24	18	18	9	34	39	20	34	14
8-15.....	32	48	66	86	82	8	7	10	12	11	10	12	14	19	12
16-31.....	0	6	4	36	30	1	4	4	20	7	0	2	2	9	7
Jan. 1-15.....	0	0	0	2	8	0	1	1	3	2	0	0	0	0	0
16-31.....	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0
Feb. 1-15.....	0	0	0	6	12	0	1	1	2	2	0	0	0	2	1
16-28.....	0	0	2	10	20	0	1	1	0	0	1	0	0	0	0
Mar. 1-15.....	0	2	2	20	20	0	1	0	2	0	0	0	0	2	2
16-31.....	0	6	10	6	18	1	0	0	3	1	0	1	0	4	1
Apr. 1-8.....	0	0	0	18	32	1	1	0	3	0	0	2	0	11	6
Total Downbound.....	138	170	292	352	360	32	41	36	66	32	45	56	36	83	43
GRAND TOTAL UNINTERRUPTED.....	202	262	486	626	600	52	57	71	105	44	76	97	63	141	75

(4) NUMBER OF TRIPS INTERRUPTED FOR NIGHT

Date	Full Transits—Upper and Lower Sectors				Half Transits—Lower Sector				Half Transits—Upper Sector						
	1960/61	1961/62	1962/63	1963/64	1964/65	1960/61	1961/62	1962/63	1963/64	1964/65	1960/61	1961/62	1962/63	1963/64	1964/65
<i>Upbound Trips</i>															
Dec. 1-7.....	30	32	12	38	18	0	0	0	0	0	1	0	0	1	0
8-15.....	18	22	8	46	20	0	1	0	2	0	1	0	0	0	0
16-31.....	0	2	0	6	20	0	0	0	0	2	0	0	0	0	0
Jan. 1-15.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16-31.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb. 1-15.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-28.....	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0
Mar. 1-15.....	0	4	2	8	6	0	0	0	0	0	0	0	0	0	0
16-31.....	0	2	2	0	6	0	0	0	0	0	0	0	0	0	0
Apr. 1-8.....	0	20	0	2	6	0	1	0	0	0	0	0	0	0	0
Total Upbound.....	48	82	28	102	76	0	2	0	2	2	2	0	0	1	1
<i>Downbound Trips</i>															
Dec. 1-7.....	36	32	22	38	34	1	3	0	0	1	3	2	0	0	1
8-15.....	12	24	16	52	28	1	0	0	0	1	1	1	0	2	0
16-31.....	0	4	4	18	14	0	0	0	0	0	0	0	0	1	0
Jan. 1-15.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-31.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb. 1-15.....	0	0	2	2	2	0	0	0	0	0	0	0	0	0	0
16-28.....	0	0	2	2	2	0	0	0	0	0	0	0	0	0	0
Mar. 1-15.....	0	2	2	4	6	0	1	0	0	0	0	0	0	0	0
16-31.....	0	0	8	0	4	0	0	1	0	0	0	0	0	0	0
Apr. 1-8.....	0	0	2	6	6	0	1	0	0	0	0	1	0	0	0
Total Downbound.....	48	62	58	122	96	2	5	1	0	2	4	4	0	3	1
GRAND TOTAL INTERRUPTED FOR NIGHT.....	96	144	86	224	172	2	7	1	2	4	6	4	0	4	2

(5) NUMBER OF TRIPS INTERRUPTED FOR ICE

Date	Full Transits—Upper and Lower Sectors				Half Transits—Lower Sector				Half Transits—Upper Sector						
	1960/61	1961/62	1962/63	1963/64	1964/65	1960/61	1961/62	1962/63	1963/64	1964/65	1960/61	1961/62	1962/63	1963/64	1964/65
<i>Upbound Trips</i>															
Dec. 1-7.....	4	0	0	0	0	0	0	0	1	1	1	0	0	0	0
8-15.....	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1
16-31.....	0	0	0	0	0	1	0	0	5	0	0	0	0	0	0
Jan. 1-15.....	0	0	0	2	2	0	1	0	0	0	0	0	0	0	0
16-31.....	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Feb. 1-15.....	0	0	2	0	10	0	0	0	0	0	0	0	0	0	0
16-28.....	4	2	2	0	2	0	0	0	0	0	0	0	0	0	0
Mar. 1-15.....	2	4	0	0	0	0	0	0	0	0	1	0	0	0	0
16-31.....	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr. 1-8.....	2	0	4	0	0	2	0	0	1	0	1	0	0	0	0
Total Upbound.....	14	6	10	2	16	3	1	0	8	1	3	0	0	0	1
<i>Downbound Trips</i>															
Dec. 1-7.....	8	0	0	0	2	0	0	0	0	1	1	0	0	0	0
8-15.....	2	0	0	2	6	0	0	0	0	0	0	0	0	2	0
16-31.....	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan. 1-15.....	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
16-31.....	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0
Feb. 1-15.....	0	0	2	0	0	0	0	1	0	0	0	0	0	1	0
16-28.....	2	4	2	0	2	0	0	0	0	0	0	0	0	0	0
Mar. 1-15.....	6	6	4	0	0	0	0	0	0	0	1	0	0	0	0
16-31.....	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr. 1-8.....	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Total Downbound.....	28	16	10	4	10	0	0	1	1	1	3	0	1	2	0
GRAND TOTAL INTERRUPTED FOR ICE.....	42	22	20	6	26	3	1	-1	9	2	6	0	1	2	1

(6) NUMBER OF TRIPS INTERRUPTED FOR OTHER THAN NIGHT OR ICE

Date	Full Transits—Upper and Lower Sectors				Half Transits—Lower Sector				Half Transits—Upper Sector						
	1960/61	1961/62	1962/63	1963/64	1964/65	1960/61	1961/62	1962/63	1963/64	1964/65	1960/61	1961/62	1962/63	1963/64	1964/65
<i>Upbound Trips</i>															
Dec. 1-7.....	0	0	0	16	10	0	0	0	0	0	0	0	0	0	0
8-15.....	0	0	0	2	0	0	0	0	0	3	0	0	0	0	0
16-31.....	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
Jan. 1-15.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-31.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb. 1-15.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-28.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar. 1-15.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-31.....	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
Apr. 1-8.....	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
Total Upbound.....	0	0	0	22	12	0	0	0	1	3	0	0	0	1	0
<i>Downbound Trips</i>															
Dec. 1-7.....	0	0	0	8	6	0	0	0	0	0	0	0	0	2	1
8-15.....	0	0	0	8	10	0	0	0	0	0	0	0	0	2	0
16-31.....	0	0	0	0	8	0	0	0	0	0	0	0	0	0	1
Jan. 1-15.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-31.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb. 1-15.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16-28.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar. 1-15.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-31.....	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
Apr. 1-8.....	0	0	0	4	2	0	0	0	2	0	0	0	0	1	0
Total Downbound.....	0	0	0	20	28	0	0	0	2	0	0	0	0	5	3
GRAND TOTAL INTERRUPTED FOR OTHER THAN NIGHT OR ICE.....	0	0	0	42	40	0	0	0	3	3	0	0	0	6	3

(7) NUMBER OF TRIPS WITH VESSEL REINFORCED FOR ICE

Date	Full Transits—Upper and Lower Sectors				Half Transits—Lower Sector				Half Transits—Upper Sector						
	1960/61	1961/62	1962/63	1963/64	1964/65	1960/61	1961/62	1962/63	1963/64	1964/65	1960/61	1961/62	1962/63	1963/64	1964/65
<i>Upbound Trips</i>															
Dec. 1-7.....	0	2	6	10	12	0	0	0	1	0	0	0	0	0	1
8-15.....	2	2	10	12	10	1	0	0	1	1	0	1	0	0	0
16-31.....	0	0	0	12	16	0	0	0	3	2	0	0	1	2	2
Jan. 1-15.....	0	0	0	2	4	0	1	1	2	2	0	0	0	0	2
16-31.....	0	0	2	6	0	0	1	3	0	1	0	0	1	2	2
Feb. 1-15.....	0	0	2	12	16	0	2	1	1	1	0	1	0	1	1
16-28.....	4	2	12	8	24	0	1	1	0	0	1	0	1	0	0
Mar. 1-15.....	4	14	10	26	26	0	2	0	1	1	1	0	1	1	2
16-31.....	8	8	18	10	22	1	0	2	4	1	0	1	1	0	0
Apr. 1-8.....	0	4	2	2	14	0	1	0	1	0	0	0	0	0	2
Total Upbound.....	18	32	62	100	144	2	8	8	14	8	2	3	2	6	12
<i>Downbound Trips</i>															
Dec. 1-7.....	4	0	12	14	16	0	0	0	0	2	0	0	0	1	1
8-15.....	2	2	8	10	8	0	0	0	1	0	0	1	1	2	2
16-31.....	0	0	2	28	8	0	1	0	2	3	0	0	2	4	0
Jan. 1-15.....	0	0	0	2	8	0	1	1	0	2	0	0	0	0	0
16-31.....	0	0	0	2	0	0	1	1	3	0	0	0	0	2	0
Feb. 1-15.....	0	0	4	8	14	0	1	2	2	2	0	0	2	2	2
16-28.....	2	4	6	12	24	0	1	1	0	0	1	0	1	0	0
Mar. 1-15.....	6	10	8	24	24	0	2	0	1	0	0	0	2	2	2
16-31.....	2	12	18	6	20	0	0	1	3	1	1	1	0	4	1
Apr. 1-8.....	0	0	2	2	10	0	0	0	0	0	0	0	0	0	1
Total Downbound.....	16	30	60	108	132	0	6	6	12	10	2	2	2	14	13
GRAND TOTAL REINFORCED FOR ICE.....	34	62	122	208	276	2	14	14	26	18	4	5	4	20	25

Study of Montreal Pilotage District

(8) NUMBER OF TRIPS WITH VESSEL NOT REINFORCED FOR ICE

Date	Full Transits—Upper and Lower Sectors				Half Transits—Lower Sector				Half Transits—Upper Sector							
	1960/61	1961/62	1962/63	1963/64	1964/65	1960/61	1961/62	1962/63	1963/64	1964/65	1960/61	1961/62	1962/63	1963/64	1964/65	
		70	78	118	140	96	6	4	8	7	4	18	28	12	23	11
<i>Upbound Trips</i>																
Dec. 1-7	28	36	38	62	24	5	3	9	9	4	9	10	6	22	7	
8-15	2	2	4	0	10	2	3	2	7	2	1	0	4	2	2	
16-31	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	
Jan. 1-15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16-31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Feb. 1-15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16-28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Mar. 1-15	2	8	6	12	22	0	0	0	1	0	0	0	0	0	0	
16-31	6	24	4	84	48	8	1	8	8	0	6	0	2	7	2	
Apr. 1-8																
Total Upbound	108	148	170	300	200	21	11	27	36	10	34	38	25	54	22	
<i>Downbound Trips</i>																
Dec. 1-7	44	70	74	136	118	22	27	18	18	9	38	41	20	35	15	
8-15	6	8	6	28	44	9	7	10	11	12	12	12	13	22	10	
16-31	0	0	0	0	0	1	4	4	18	4	0	2	2	10	4	
Jan. 1-15	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	
16-31	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	
Feb. 1-15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16-28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Mar. 1-15	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	
16-31	0	0	0	0	4	1	0	0	1	0	0	0	0	0	0	
Apr. 1-8	2	0	2	26	30	1	2	0	5	0	0	3	0	12	5	
Total Downbound	198	218	300	390	362	34	40	32	57	25	50	58	35	79	34	
GRAND TOTAL NOT REINFORCED FOR ICE	306	366	470	690	562	55	51	59	93	35	84	96	60	133	56	

(9) COMPARATIVE SUMMARY OF WINTER NAVIGATION TRIPS

Summary	Number of Trips Upbound and Downbound				Number of Trips Upbound				Number of Trips Downbound						
	1960/61	1961/62	1962/63	1963/64	1964/65	1960/61	1961/62	1962/63	1963/64	1964/65	1960/61	1961/62	1962/63	1963/64	1964/65
(1) Total Number of Trips															
Dec. 1-31.....	428	485	605	852	628	144	169	217	315	204	284	316	388	537	424
Jan. 1-Mar. 31.....	34	74	104	171	232	21	41	61	93	126	13	33	43	78	106
Apr. 1-8.....	23	35	20	147	112	20	30	16	102	66	3	5	4	45	46
Total.....	485	594	729	1,170	972	185	240	294	510	396	300	354	435	660	576
(2) Total Full and Half Trips															
Full transits.....	340	428	592	898	838	126	180	232	400	344	214	248	360	498	494
Half transits:															
Lower sector.....	57	65	73	119	53	23	19	35	50	18	34	46	38	69	35
Upper sector.....	88	101	64	153	81	36	41	27	60	34	52	60	37	93	47
Total.....	485	594	729	1,170	972	185	240	294	510	396	300	354	435	660	576
(3) Uninterrupted Trips															
Interrupted Trips															
(4) For Night.....	104	155	87	230	178	50	84	28	105	79	54	71	59	125	99
(5) For Ice.....	51	23	22	17	29	20	7	10	10	18	31	16	12	7	11
(6) For Other.....	0	0	0	51	46	0	0	0	24	15	0	0	0	27	31
Total.....	485	594	729	1,170	972	185	240	294	510	396	300	354	435	660	576
(7) Reinforced for Ice	40	81	140	254	319	22	43	72	120	164	18	38	68	134	155
(8) Not Reinforced for Ice.....	445	513	589	916	653	163	197	222	390	232	282	316	367	526	421
Total.....	485	594	729	1,170	972	185	240	294	510	396	300	354	435	660	576