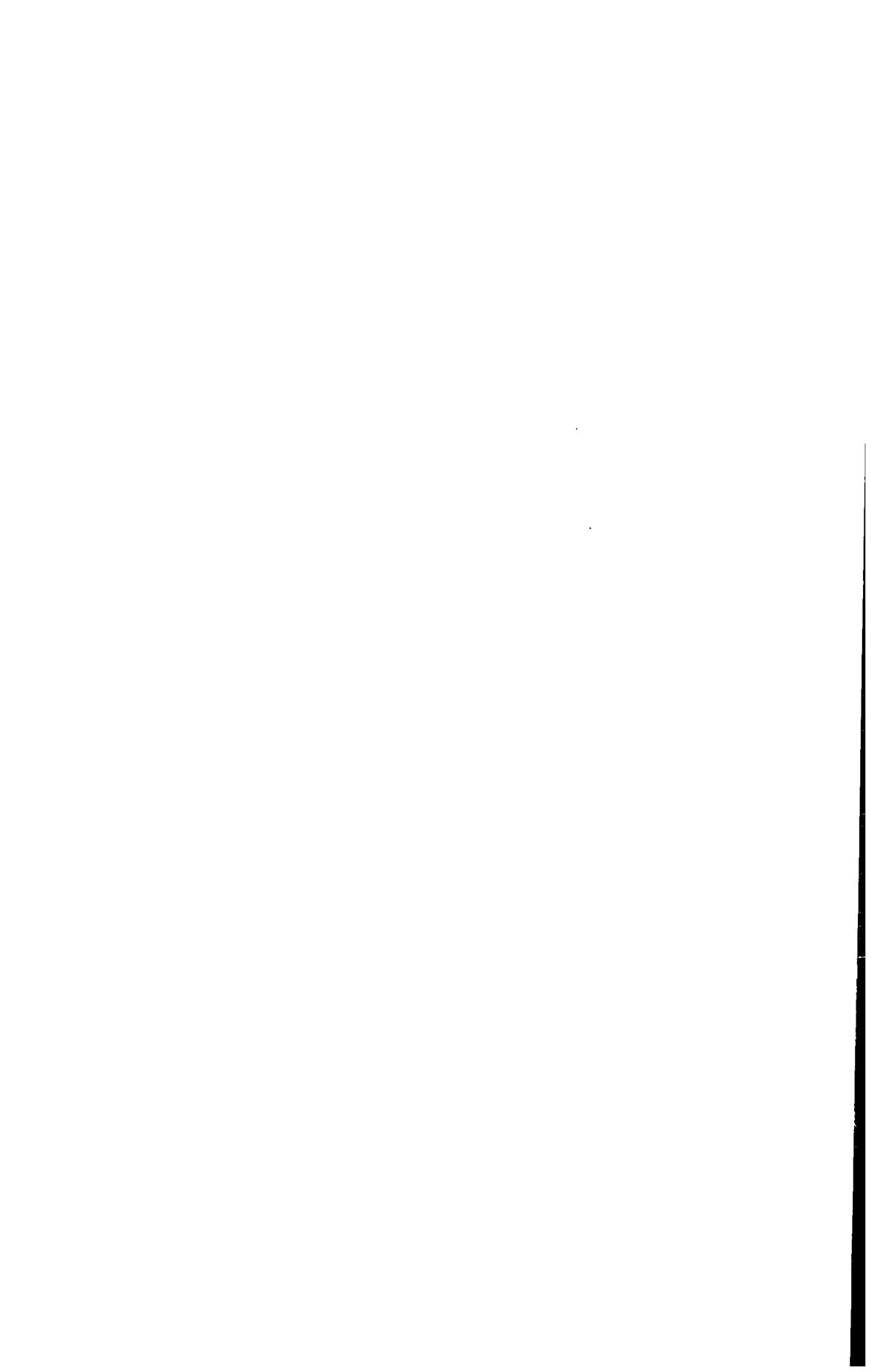


Section Three

PILOTAGE DISTRICT OF CHURCHILL



Chapter A

LEGISLATION

1. LAW AND REGULATIONS

PREAMBLE

There is no special provision in the Canada Shipping Act which applies solely to the Pilotage District of Churchill; the District legislation takes the form of an Order in Council, a General By-law and regulations which are studied hereunder.

(1) GOVERNOR IN COUNCIL ORDERS MADE PURSUANT TO THE CANADA SHIPPING ACT

The only Order in Council of this nature is P.C. 1416 dated July 13, 1933, which created the District, fixed its limits, appointed its Authority and ordered the compulsory payment of pilotage dues (Ex. 611). This P.C. has never been revoked or amended.

The Governor in Council acted under the authority of secs. 398, 412 and 414 of the 1927 Canada Shipping Act which correspond in substance to secs. 324, 326 and 327 of the existing Act.

(a) *Creation of the District*

The Order in Council referred to above merely provides that, pursuant to the aforesaid sections of the Act, "a Pilotage District to be known as the Churchill Pilotage District be established with the following limits". The reasons that prevailed for the creation of a Pilotage District in that area are not disclosed but they are obvious from contemporaneous events (vide *History of Legislation*).

(b) *District Limits*

The limits of the District, which are the same as those of the harbour, are thus fixed:

"To include all the waters of Hudson Bay and the Churchill River within the following described boundaries: Commencing at the northern extremity of Eskimo Point and running on a course due north to a point distant five nautical miles from the Eskimo Point beacon; thence on the circumference of a circle with the said beacon as a centre, easterly and southerly to the shore of Hudson Bay at the high water line; thence following the said high water line westerly to Cape Merry;

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thence following the high water line on the eastern shore of the Churchill River upstream as far as the tide ebbs and flows; thence across the Churchill River to its western shore; thence northerly and following the high water line down stream to the point at Old Fort Prince of Wales and across to Eskimo Point and to the place of beginning," (Ex. 1471(c)).

(c) *Pilotage Authority*

In the Order in Council, the Pilotage Authority is designated as follows: "... pursuant to section 414 of the said Act, the Minister of Marine is appointed the Pilotage Authority for the said District".

There is no longer such an office as the Minister of Marine. In other Districts where the Minister was the Pilotage Authority it was felt advisable to amend the previous appointments by a new Order in Council in order to designate the Pilotage Authority correctly. The last such Order in Council was passed August 15, 1956 (P.C. 1956-1264, Ex. 1143, which revoked the previous Order in Council dated June 30, 1933, P.C. 1307). All the Districts for which the Minister of Transport was Pilotage Authority were listed except Churchill which was omitted for reasons unknown.

However, this omission is of no consequence. P.C. 1956-1264 was useful and desirable for the purpose of clarifying the legal position but it was unnecessary because the point had been covered in the various acts which defined the changes made in the former Department of Marine and which had the additional effect that the Minister of Transport was to perform the functions of the Minister of Marine.

(d) *Compulsory System*

In the Order in Council which created the District, the Governor in Council, pursuant to sec. 412 of the 1927 Canada Shipping Act, made the payment of pilotage dues compulsory.

(2) PROVISIONS NOT EMANATING FROM THE C.S.A. AFFECTING THE ORGANIZATION OF THE PILOTAGE DISTRICT

In the Pilotage Districts where the Minister is the Pilotage Authority there is generally an Order in Council authorizing the Department of Transport to furnish the pilot vessel service and the pilot stations and to assume their costs. There is no such Order in Council for the District of Churchill as the pilot vessel service is not furnished by the Department of Transport, and there is no pilot station nor any local staff. What little administration there is, is carried out at Ottawa headquarters on the strength of the reports furnished by the two pilots.

No specific authority was required to authorize the National Harbours Board to place their harbour tugs at the disposal of the pilots for pilot vessel service.

(3) PILOTAGE AUTHORITY ENACTMENTS
APPROVED BY GOVERNOR IN COUNCIL

(a) *Appointment of Secretary-Treasurer and Payment of District Expenses (sec. 328, Canada Shipping Act)*

As is the practice in Districts where the Minister is the Pilotage Authority, no Secretary-Treasurer has been appointed. There is no Order in Council made under sec. 328 Canada Shipping Act to authorize the payment of District operating costs out of pilotage revenues and no such authorization was ever sought. The cost of the pilot vessel service to the pilots is fixed by the District General By-law (subsec. 5(2)) as the amount of the pilotage dues charged ships for this purpose which the National Harbours Board has accepted as the price of its services. According to the By-law provision, the pilot boat charge is paid over to the National Harbours Board when collected.

(b) *Delegation of Powers by the Minister as Pilotage Authority (subsec. 327(2) Canada Shipping Act)*

At no time did the Churchill Pilotage Authority pass any by-law pursuant to subsec. 327(2) by which any of the powers of the Pilotage Authority were delegated. There is not even such a delegation in the District General By-law passed under sec. 329 where it is generally found. Churchill is not provided with a local representative of the Pilotage Authority and there is no Superintendent or Supervisor of Pilots.

(c) *Exemptions and Withdrawal of Exemptions (secs. 346, 347 and 357 Canada Shipping Act)*

The Churchill Pilotage Authority has made no by-law pursuant either to subsec. 346(c) or sec. 347, or subsec. 357(2), nor is the subject dealt with in the General By-Law made and approved pursuant to sec. 329 as is done elsewhere (vide Part I, p. 248).

Therefore, all the statutory exemptions of sec. 346 prevail and no exemption is provided for small foreign vessels under 250 tons because the Pilotage Authority has not seen fit to do so as was permissible under subsec. 346(c). Hence, any small ships of non-Dominion registry, even yachts or fishing vessels however small, are subject to the payment of dues (Part I, p. 227).

There is, however, an exemption which is indirectly and purportedly granted by the General By-law resulting from the definition of the word "vessel" in the Interpretation section (subsec. 2(f)) which does not correspond to the definition of "vessel" in the Canada Shipping Act. By the

By-law definition "an undecked barge that has no living accommodation and that is not self-propelled" is excluded from the meaning of "vessel" for which pilotage dues are provided in the schedule of the By-law. This provision is illegal (vide Part I, pp. 218 and ff.).

(d) *General By-law Passed Under Sec. 329 Canada Shipping Act*

The General By-law now in force was approved by P.C. 1966-1623 dated August 24, 1966 (Ex. 611). It has since been amended in 1967 (P.C. 1967-1819 dated Sept. 21, 1967). The 1966 Order in Council repealed the previous General By-law, P.C. 1961-1799 dated December 14, 1961, as amended by P.C. 1964-958 dated June 25, 1964, which revoked P.C. 1960-873 dated June 23, 1960 (Ex. 1471(d)) which repealed the first General By-law that existed for the District, i.e., P.C. 1546 dated August 1, 1933 (Ex. 1471(a)).

This By-law is unique because of its brevity. It is probable that the Pilotage Authority felt no further legislation was indicated because of the special circumstances and conditions at Churchill. In any event, the Pilotage Authority took advantage of only three provisions of sec. 329 C.S.A. and, therefore, the powers derived from the By-law are very limited.

Apart from the contentious exemption for "undecked barge", the By-law contains only the following provisions:—

- (i) Pilots are licensed by the Authority. The only prerequisites for the candidate are to be a Canadian citizen aged 25 or over, to hold a certificate of competency not lower than Master of a home-trade steamship (unlimited as to tonnage) or second mate of a foreign-going steamship, and to be physically and mentally fit and of good character. Local knowledge of the District is not a requirement and there is no apprenticeship system.
- (ii) Term licences, valid for the navigation season only, are issued. A provision to that effect which was contained in subsec. 3(3) of the 1960 By-law, had been omitted in the 1961 By-law with the result that, according to the general rule, licences issued for Churchill were permanent subject to the age restriction in sec. 328 C.S.A. The Pilotage Authority was asked to explain the reason and in reply, it was stated:

"It appears that when the by-law was amended in 1961 the relevant section was considered to be unnecessary since the pilots are appointed by virtue of their positions as Port Wardens.

However, I see flaws in this argument and we will arrange to reinsert the section at the appropriate time". (Ex. 1471(m)).

As indicated, the correction was made shortly afterwards when the existing General By-law was confirmed August 24, 1966.

¹ Through a clerical error the penultimate word of the definition of vessel, i.e., "not" was omitted in the 1966 By-law.

- (iii) The dues collected belong to the pilots in equal shares on the basis of days available for duty, the pool being kept by the Authority.
- (iv) All pilotage dues take the form of a flat uniform rate. The charge for each pilotage either inward or outward is \$55 (raised to \$60 in 1967) applicable to all ships irrespective of their size. In addition, there is a pilot boat fee of \$25 which is to be paid to the National Harbours Board when its boat is used for that purpose. The move-charge is \$40.

Because the Pilotage Authority has not made the necessary regulations, it does not have, *inter alia*, any power "for ensuring their (the pilots') good conduct on board ship and ashore and their duty on board and on shore", or to regulate their number, or to retire before the expiration of his licence a pilot who has become mentally or physically unfit, or to make the dues payable to the Pilotage Authority.

2. HISTORY OF LEGISLATION

PREAMBLE

(a) *Historical Background (1610-1931)*

Manitoba is the only prairie province with a deep-sea port. Unlike other pilotage Districts in Canada, Churchill is of comparatively recent creation having been established in 1933.

The Hudson's Bay Company's association with Churchill and the latter's development into a commercial seaport are generally well known. The following is a brief sketch of historical and more modern events that led to, inspired and then created the port of Churchill.

Churchill is situated at the mouth of the Churchill River which flows into Hudson Bay some 980 miles from the entrance to Hudson Strait which Captain Henry Hudson entered on August 3, 1610, in his search for a northwest passage and which now bears his name.

The tragic story of the casting adrift of Henry Hudson and a few sick sailors by his mutinous crew in the spring of 1611, never to be heard of again, and descriptions of his adventures and discoveries and those of other explorers that followed him, are matters of record.

On September 7, 1619, the Danish Captain Jens Munk, also in search of a northwest passage, came to Churchill River and established his winter quarters at the mouth. With Captain Munk were a chaplain and 64 men. Sickness overtook them and only Captain Munk and two men survived. They left Churchill on July 16, 1620, in their small ship the *Lampren* and reached Denmark on September 25 of the same year.

Eleven years later, in 1631, Captain Luke Foxe in the ship *Charles* and Captain Thomas James in the *Henrietta Maria* arrived on the scene and established their headquarters at Churchill from where they shipped furs to England.

A significant development in the history of the Bay was the result of journeys made by two French fur-trading adventurers, Radisson and Chouart, who are said to have reached Hudson Bay overland from Canada in 1662, to find the area rich in furs. Receiving little encouragement from France, Radisson and another Frenchman, named Groseilliers, succeeded in persuading English noblemen and merchants of the importance of their discoveries. Subsequently, a vessel was sent into the Bay in 1668 to trade in furs. This venture was attended by such success that on May 2, 1670, King Charles II of England granted a charter of incorporation to "The Governor and Company of Adventurers of England Trading into Hudson Bay". The Hudson's Bay Company was thus formed with Prince Rupert as its first Governor. The royal charter gave the company rights over the entire drainage basin of Hudson Bay, or Rupert's Land as it was later called. This territory extended to the Rocky Mountains in the west and south to what are now the western states of the U.S.A. For over 200 years, the Hudson's Bay Company exercised its monopoly despite opposition from home and foreign sources.

In 1685, Lord John Churchill, later the famous Duke of Marlborough, was elected Governor of the Hudson's Bay Company. In that year, the first outbound shipment of whale oil consisting of 38 casks left Churchill. In 1686, the small settlement known as Munk's Harbour, after Captain Jens Munk, as well as by several Indian names, was named Churchill and in 1689 the "Churchill Post" was founded by the Hudson's Bay Company.

Over two centuries later, the growing importance of Canada's commerce and overseas trade prompted active attention to the potential qualities of Churchill as a seaport to provide a shorter route for grain shipments from the southwest prairies of Canada to overseas ports. Other considerations were to establish closer federal relationships with the Eskimos and Indians, to assist national defence, and to develop the northeastern Arctic. The Government approved this development and a railway line was laid to link Churchill with The Pas.

On March 29, 1929, the Hudson Bay Railway was completed with Churchill as its northern terminal. In the meantime, the construction of the harbour, wharves, grain elevator and port facilities was nearing completion.

Churchill was opened as a commercial port in September, 1931. At that time and for the next few years, the maintenance and operation of the port was conducted through the Federal Department of Railways and Canals.

(b) *Initial Stage, 1931-32*

The opening of the port of Churchill in 1931 was marked by the arrival of two ocean-going ships which subsequently sailed loaded with grain. At

that time, the harbour was supervised by Mr. D. W. McLachlan, the Engineer-in-charge. During the initial two years of the port's operation, the piloting of ships, inwards and outwards, was arranged by Mr. McLachlan by employing Captain Pentz, a Master of one of the port construction tugs, who was well acquainted with the harbour, its tides and currents, to act as pilot without a licence. There appears to be no record of the pilotage charges, if any, that were levied for these services.

(c) *Period 1933-1937*

By Order in Council P.C. 1250 dated June 28, 1933, (Ex. 1471(c)), the port of Churchill was proclaimed a public harbour, its limits were defined, and Mr. George Kydd, Resident Engineer of the Department of Railways and Canals at Churchill, was appointed Harbour Master without remuneration.

The Pilotage District of Churchill was established by Order in Council P.C. 1416 dated July 13, 1933, its limits were defined and the Minister of Marine was appointed Pilotage Authority. The limits of the District were defined by the same wording as those used in P.C. 1250, defining the limits of the Public Harbour since which time both have remained unchanged.

Order in Council P.C. 1546, dated August 1, 1933, confirmed the first By-law for the District (Ex. 1471(a)). It provided for the appointment of the Superintendent as the local representative of the Authority, but no delegation of powers was made to him except for safeguarding the pilotage dues which, when collected by the Collector of Customs, had to be deposited in a bank account in the name of the Superintendent. It was not stated how the pilotage revenues were to be disposed of. The deficiency was soon realized and in 1934 a new By-law was added by P.C. 534, dated March, 1934, which provided that the dues could be expended "as the Pilotage Authority directs to defray the costs of supplying and maintaining a pilot boat or boats, or for any other purpose of the pilotage district". This was a blanket authority for the Pilotage Authority to dispose of the pilotage money. It was approved by the Governor in Council but the authority for such approval is not qualified except, as stated earlier, "under the provision of the Canada Shipping Act, chapter 186 R.S.C. 1927". Its legality is open to question.

The dues inward or outward were a flat rate of \$50, no provision being made for pilot boat service. This is the extent of the provisions of the 1933 and 1934 By-laws.

The Department of Railways and Canals used its tugboats as pilot boats and assigned its tugmasters to provide pilotage service. Therefore, all pilotage dues collected were paid out by the Pilotage Authority to the Department of Railways and Canals (Ex. 1471(f)).

This system of pilotage and disposing of pilotage revenues was continued in 1934, 1935 and 1936. In 1937, the Port of Churchill was transferred to the National Harbours Board, and for that year the pilotage fees

Study of Churchill Pilotage District

collected were "remitted to the National Harbours Board, which Board pays the wages of the pilots and operates the boats necessary for pilotage service" (Ex. 1471(f)).

Arrivals and departures of ocean-going vessels piloted during the season of navigation (about three months) in the years 1933, 1934, 1935 and 1936, including their average net tonnage and pilotage revenue (Ex. 614(a)) were:

Year	No. of ships	Average Net Tonnage	Pilotage Revenue
1933.....	12	3,015	\$1,200.00
1934.....	15	3,055	1,500.00
1935.....	9	3,235	900.00
1936.....	15	3,443	1,500.00

(d) *Period 1937-1964*

By section (d) of Order in Council P.C. 397 dated February 7, 1937, the Public Harbour of Churchill including all the waters of Hudson Bay and the Churchill River within the boundaries as established by Order in Council P.C. 1250 dated June 28, 1933 (previously referred to) was transferred to the National Harbours Board for administration, management and control, effective January 1, 1937. In July of that year the Harbour Master, Mr. W. R. Meadows, an appointee of the National Harbours Board, was appointed Acting Superintendent of Pilots in lieu of Mr. George Kydd. When his appointment lapsed, he was not replaced and the office of Superintendent of Pilots has since been deleted from the By-law.

For the next twenty years the same pilotage system was continued and the total pilotage dues were transferred to the National Harbours Board. In the early 1940's and in the years to follow, the Port Warden was issued with a temporary licence, to act as pilot, when required, in addition to the tugboat captains who were employees of the National Harbours Board. In 1957, arrangements were made between the National Harbours Board and the Pilotage Authority whereby the Port Warden and/or Deputy Port Warden received the pilotage dues for piloting ships, less the charges for the use of the pilot vessel, i.e., \$25 or \$15 for each service depending on the vessel used, which were paid to the National Harbours Board (Ex. 1471(e)).

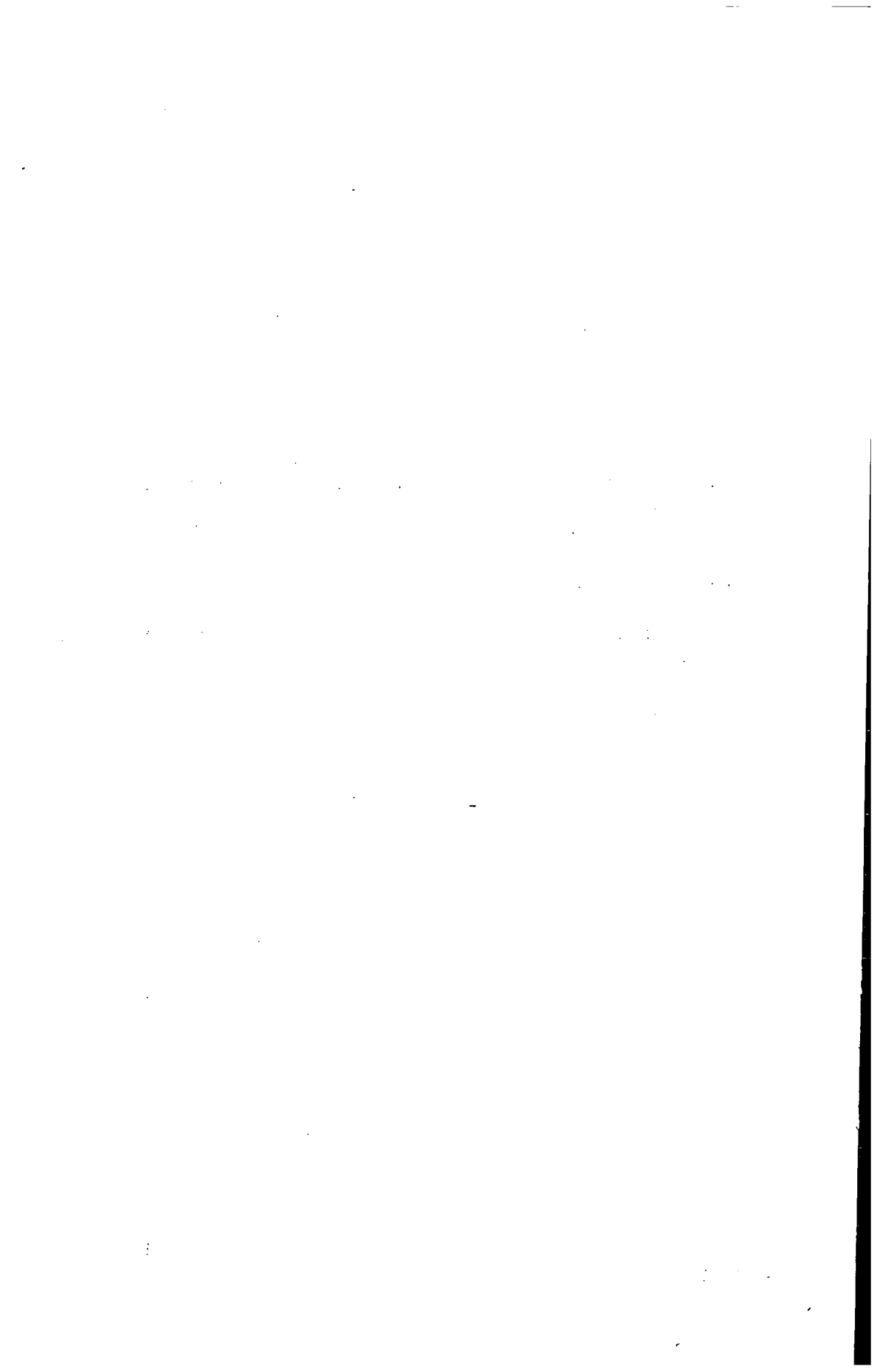
There were no further changes in the By-law until it was revoked in 1960 by Order in Council P.C. 1960-873 which substituted a new General By-law (Ex. 1471(d)).

Chapter B

BRIEFS

No briefs were presented but on October 29, 1963, Captain C.H.R. Mundy and Captain E.S. Wagner called on the Commission at Ottawa and left a copy of a memorandum they had just submitted to the Pilotage Authority (Ex. 614(A)). They stressed that the introduction of 24-hour pilotage service had increased their burdens and recommended:-

- (a) more office staff;
- (b) an increase in the tariff;
- (c) a new method of computing pilotage fees on either net or gross tonnage.



Chapter C

EVIDENCE

1. GENERAL DESCRIPTION

(1) DISTRICT LIMITS

The limits of the District, which correspond to the limits of the Harbour (P.C. 1250, June 28, 1933 (Ex. 1471(c))), were defined in P.C. 1416 dated July 13, 1933, which established the service. In short, the District consists of the navigable portion of Churchill River, i.e., where the harbour lies, plus an area which extends five miles from the river's mouth into Hudson Bay.

(2) PHYSICAL FEATURES

The Port of Churchill, situated at the entrance to Churchill River, has the shortest season of navigation of any seaport in Canada. It generally opens about the third week in July and closes about the third week in October. Fresh water ice forms up the river which passes out through the harbour and its appearance may be expected any time after the middle of October.

The population of 1,900 consists almost entirely of officials and workmen, who are engaged in the operation of the port, and their families (Ex. 609A).

The earliest date on which a merchant ship, subject to additional minimum marine insurance premiums, is allowed to pass Cape Chidley at the entrance to Hudson Strait, when bound for Churchill, is July 23, provided the Canadian Government Coast Guard patrol vessel advises the Master that ice conditions are such that it is safe to do so (Ex. 609). However, the Department of Transport neither gives nor withholds permission for vessels to enter Hudson Strait (Ex. 610, p. 24).

(a) *Ice in Hudson Strait*

Ice in this area comes from three sources: (a) Baffin Bay or Arctic ice, consisting of floes, bergs and growlers, or very small bergs, which are the most formidable dangers to navigation. Some enter the Strait through Gabriel Strait and some south of Resolution Island. This ice drifts westward in the

Strait helped by easterly winds and currents. Icebergs may be met with anywhere between Resolution Island and 290 miles westward to Charles Island (Ex. 609, p. 12). (b) Foxe Channel, some 480 miles west of Resolution Island, where ice is created locally and forms large floes. (c) "Winter ice" formed locally in small bays along the shores of the Strait, gradually creating a broad coastal ice belt which breaks up in June. The central part of the Strait does not freeze over but for about eight months of the year it is rendered practically impassable by great ice floes carried back and forth by the tidal currents.

(b) *Ice in Hudson Bay*

For the most part, the ice in Hudson Bay is winter ice, formed locally. It generally forms along the shore and in bays early in November and closes the mouths of rivers by the end of that month. In general, the ice develops a thickness of from three to four feet and extends off the east shore for 60 to 70 miles reaching out to the islands in that area, and in the remainder of the bay it extends from one to five miles.

During the winter the shore ice is broken by gales into large floes which frequently form "rafted ice" or sheet piled upon sheet by force of contact between large floes and forming ice 20 to 30 feet in thickness.

Winter ice disintegrates about the end of June but "rafted ice" remains in the southern part of the bay until the end of July. "However, it is not likely to interfere with the steamer's track to Churchill" (Ex. 609).

The foregoing ice conditions vary from year to year depending on the severity of the winter, summer temperatures, and general weather conditions.

(3) MARITIME TRAFFIC

Maritime traffic to and from Churchill consists mostly of foreign-going vessels engaged primarily in the export of grain to overseas destinations, some coastal vessels, including oil tankers, trading to and from Canadian maritime ports, and small local craft. Churchill is the chief distributing centre of the Hudson's Bay Company for its posts in Hudson Bay and vicinity, and the small local vessels are generally used for that purpose.

From 1956 to 1963 inclusive, the annual number of arrivals and departures of ocean-going and coastal ships remained fairly constant, but since 1963 their number has declined. The following table provided by the Dominion Bureau of Statistics shows their annual number during each short season, including their total net registered tonnage, and the average tonnage per ship (Ex. 1471 (g)).

Year	Ocean-going			Coastal (250 N.R.T. and Over)		
	No. of Ships	Total N.R.T.	Average N.R.T.	No. of Ships	Total N.R.T.	Average N.R.T.
1956.....	49	177,127	3,615	12	6,144	512
1957.....	48	189,302	3,944	3	1,682	961
1958.....	58	225,993	4,414	14	21,146	1,510
1959.....	60	254,638	4,244	16	22,600	1,413
1960.....	50	236,024	4,720	7	8,164	1,166
1961.....	53	236,103	4,455	17	22,583	1,328
1962.....	52	271,215	5,216	13	20,531	1,579
1963.....	51	290,887	5,704	8	16,483	2,060
1964.....	43	268,999	6,256	8	13,050	1,631
1965.....	46	289,812	6,300	7	4,576	654
1966.....	41	250,180	6,254	11	18,825	1,717
1967.....	35	240,288	6,865	7	9,947	1,421

Although there were 14 fewer ocean-going vessels in 1967 than in 1956, their average net tonnage had increased in 1967 by 90% as compared with 1956. The average net tonnage of coastal vessels had also increased by 181%. This growing trend to larger vessels illustrates the need for dredging to improve the channel and widen the turning basin off the wharf.

Between the years 1956 and 1967, exports and imports show a progressive increase as shown by figures provided by the Dominion Bureau of Statistics.

Year	Commodity	*Exports (Short tons)	*Imports (Short tons)
1956.....	Wheat	496,200	—
	General Cargo	—	5,524
1967.....	Wheat	619,675	—
	Fuel Oil	—	17,096
	Nickel and Alloys	4,395	—
	Structural Steel	—	2,664
	General Cargo	272	3,257

*Imports of general cargo remain fairly constant but, in addition to the export of grain, etc., several shipments of nickel and copper ores and concentrates are made overseas, as well as sulphur. Coastwise, bulk oil is imported and stored at Churchill and trans-shipped in tankers chartered by the Department of Transport, for delivery to several small ports or stations in the Hudson Bay area. There are also occasional shipments of pulpwood.

The foregoing figures are indicative of the port's economic progress and the pilots' important role in the expeditious and safe transit of ships.

(4) CHURCHILL HARBOUR

The commercial seaport of Churchill and its Pilotage District are the only ones of their kind within the vast expanse of the inland sea which penetrates deeply into the northeastern portion of the North American continent. Hudson Bay is almost completely landlocked and is joined to the Atlantic Ocean on the east by Hudson Strait and to the Arctic Ocean on the north by Foxe Channel and narrow straits. Its greatest length between extreme latitudes is 930 miles and its greatest width 520 miles in latitude 60° North (Ex. 609).

Churchill is so isolated and remote that it is unique among Canadian Pilotage Districts. Ice in its various forms is the greatest navigational hazard and the pilots appreciate the serious consequences of an accident because the nearest repair facilities are 2,000 miles away at St. John's, Newfoundland.

The Government wharf at Churchill has a frontage of 3,065 feet and accommodation for six vessels of which three can be loaded with grain simultaneously. Two berths are for general cargo and one for coastal vessels. (Ex. 609A). In 1963, there was a depth of 30 feet alongside except at the northern and southern ends where the limiting depths were 27 and 24 feet respectively.

The harbour is protected by natural breakwaters consisting of eastern and western rocky peninsulas with cliffs 50 feet high, or more in places, tapering to blunt points at their northern extremities enclosing a harbour six miles in length, and from 1 to 2½ miles in width at low water. The port of Churchill is situated along the eastern peninsula.

The entrance to the harbour is through a narrow gap between the northern headlands with a low water width of 1,000 feet and ranging from 30 to 60 feet or more in depth.

The entrance channel which leads in a southwesterly direction has a least depth of 33 feet in the approaches and a width of over 1,000 feet. This channel with depths of from 30 to 60 feet occupies the middle of the harbour for about three-quarters of a mile, beyond which the depth decreases rapidly (Ex. 609).

In the southern part of the entrance channel an anchorage area is shown on chart No. 5418 (Ex. 605), but a witness stated that it is used by small local vessels only since the area is not large enough to handle large ships 500 feet in length.

From the southeastern side of the entrance channel, a mile long dredged channel with a width of 600 feet at its narrowest and a limiting depth of 22 feet at low water leads to the wharf at Churchill a distance of one and a half miles from the harbour entrance.

The Churchill River freezes to the bottom during the winter and considerable quantities of boulders and mud are carried into the harbour when the ice breaks up. The harbour must be swept every year to maintain the

charted depths. Re-dredging, made necessary by larger and longer vessels using the harbour, is being done to widen the turning basin opposite the wharf from 600 to 800 feet. Also the limiting depth of the approach channel is being dredged to 28 feet.

Eight miles south from the harbour entrance the river is three-quarters of a mile wide. From here the estuary extending northward widens to nearly $3\frac{1}{2}$ miles, contracting to about half a mile at its outlet between the rocky headlands.

Spring tides rise 14 to 17 feet and mean neaps rise $2\frac{1}{2}$ feet. The duration of the rise of tide is 6 hours and 25 minutes and of the fall of tide 6 hours. The ebb stream at the entrance to the harbour attains a normal rate of about 5 knots and the flood stream about 2 knots. Ebb tides create a counter current of about one knot which flows along each shore to the southward of Cape Merry.

Pilot E. S. Wagner stated that the rate of the ebb tide current at the entrance to the harbour varies with the direction and force of the wind. With a southerly wind it reaches a maximum of approximately 5 knots. This current creates difficulties when entering the harbour according to the prevailing conditions. Full speed may have to be used to keep control of the ship and there is always the possibility of engine failure. However, there is no difficulty taking the way off the ship when stemming an ebb tide. But against such a tide a ship with a full speed of only 10 knots presents difficulties when turning to port from the entrance channel to enter the approach dredged channel to the wharf. Near accidents have occurred but no serious ones. There have been occasions when ships struck the wharf but without serious damage (See Shipping Casualties, Accidents and Incidents). Pilot C. H. R. Mundy stated that they are very conscious of the fact that the nearest dry dock or major repair depot is some 2,000 miles away and they cannot afford to take risks.

Large ships entering the harbour to load grain usually do so during ebb tide and secure port side to the wharf. However, as soon as possible, i.e., when the tide slackens, they are turned around with the aid of tugs, and secured starboard side to. This is done to avoid turning these large ships after they have been loaded. As previously mentioned the turning basin off the wharf is in the process of being widened, but in the meantime difficulty would be encountered turning a deeply laden ship in the present confined space, preparatory to her departure.

Smaller ships also usually enter the harbour during ebb tide and secure port side to the wharf, but they invariably stay in that position until they depart.

Departure time for all ships is during flood tide, usually about two hours before high water. Thus, generally, ships when entering or leaving the harbour stem the tide and are thereby more easily controlled, although on occasion ships are brought in on the flood tide.

Due to the strong ebb tide all ships must be very securely tied to the wharf and some use their anchor cable for this purpose.

In the majority of cases it takes the pilot about an hour or an hour and a half to pilot a vessel in from the sea fairway buoy to the wharf but this depends on circumstances, the state of tide, the speed of the ship and the weather.

Sometimes it has taken two and a half hours, and on one occasion only fifteen minutes to pilot in a Department of Transport vessel that was boarded just outside the harbour entrance.

The only gales that affect the harbour are those from the northeast which create choppy seas for a short distance inside the entrance. The prevailing winds are from the northwest and the eastern shore is calm at all times.

There is remarkably little fog at Churchill and Pilot Wagner stated that he remembers only one occasion when he was delayed by dense fog.

(5) AIDS TO NAVIGATION

Each year about the middle of July the Department of Transport opens an Ice Operations Office at Churchill. Here, the Ice Operations Officer provides advice and assistance for the benefit of commercial shipping (Ex. 610(a)).

The Meteorological Branch of the Department of Transport operates ice reconnaissance aircraft from Churchill and Frobisher Bay. From such observations, ice information bulletins, broadcast from the principal marine radio stations, are issued throughout the season of navigation for the guidance of shipping.

In areas where heavy concentrations of ice may retard the progress of shipping, the Canadian Coast Guard's powerful ice-breakers are made available for ready assistance and on occasion lead and escort small convoys of ships through such ice.

Since the almost universal adoption by ships of modern navigational instruments, such as the gyro compass, radar and direction finding instruments, which enable them to establish their position by a chain of wireless stations and some radio-beacons, navigation of the Hudson Bay route is not intricate. The route is wide, remarkably free from shoals and the 900-mile stretch from the eastern entrance of Hudson Strait to a position off Churchill Harbour can be made using four compass courses.

Churchill Harbour is well defined; it is approached from the northward or northeastward. The white, square grain elevator on the eastern shore of the harbour is visible on a clear day for a distance of 20 miles. Other conspicuous objects are the black flat-topped ruins of Fort Prince of Wales on the western side of the harbour, and the radio masts eastward of the grain elevator through which ships send their E.T.A.'s and can verify their position

by direction finder. A beacon on Eskimo Point with an elevation of 62 feet at the northern approach to the harbour is also conspicuous.

The pilot is embarked within the District limits in the vicinity of the fairway buoy—a lighted bell buoy—four miles northeast of the harbour entrance from where leading range lights situated on the western peninsula guide the vessel through the harbour entrance. A lighted bell buoy marks Merry Rock to port, and 1,500 feet westward a lighted buoy marks the turning point to the channel entrance that leads to the wharf. In making this sharp turn to port two sets of lighted range lights situated on the western peninsula give guidance through the centre of the channel marked by four lighted buoys.

At the time of the Commission's hearing at Churchill on August 1, 1963, the chart of Churchill Harbour No. 5418 (Ex. 605) issued by the Canadian Hydrographic Service under date of July 12, 1963, did not indicate the two sets of lighted range lights for channel guidance, or the change in buoyage from spar buoys to lighted buoys, or new dredged areas and wharf extension. These changes were marked on the chart in red by witness Mr. T. A. Lauzon, Resident Engineer.

The distribution by the Hydrographic Service of an uncorrected chart is explained by the fact that the new range lights had only recently been installed and the buoys changed. These new aids were used for the first time when the navigation season opened July 15, 1963. The National Harbours Board at Churchill, acting on behalf of the Aids to Navigation Division of the Department of Transport, installs and maintains all aids in the harbour. Time had not permitted these important changes to be reported to Ottawa, to have the chart corrections made and the necessary Notice to Mariners issued before the Commission's hearing. This delay is also indicative of the isolation and remoteness of Churchill previously referred to. The Dominion Hydrographer, Mr. H. E. Gray, gave immediate instructions for the necessary chart corrections and a Notice to Mariners, No. 645, as well as a chart patch showing all corrections, was issued August 16, 1963, i.e., fifteen days after the Commission's hearing. Mr. Gray also requested the Commission to stress to all concerned the importance of informing the Canadian Hydrographic Service immediately of any changes and thus assisting in the monumental task of maintaining some 850 charts covering over 100,000 miles of coastline (the longest in the world) in addition to inland waterways, and issuing about 25 new charts a year (Ex. 605).

Pilot Wagner stated that the navigational aids in the harbour were generally very good with the exception of the most important buoy that marks the turn into the dredged approach channel. This was the wrong type of buoy, its light was not burning and the buoy became submerged by the force of the current when only a ripple of water indicated its position. However, the Commission received information from the Aids to Navigation

Division of the Department of Transport that later in the season of 1963 this buoy was replaced by a new cylindrical standard buoy, especially constructed for severe current conditions, which was reported to be working satisfactorily.

The establishment of lighted buoys and range leading lights in 1963 introduced night navigation and night pilotage at Churchill for the first time (Ex. 610(a), Annual Report 1963, p. 3(f) para. 7).

2. NATURE OF PILOTAGE SERVICE

(1) NATURE OF THE SERVICE

Pilotage at Churchill is seasonal and operative for approximately three months in the year, i.e., from the last week in July to the last week in October. It is not a full-time occupation and is conducted by the Port Warden and Deputy Port Warden under the unofficial direction of the Port Manager, who acts as Harbour Master and is responsible for all movements of ships within the harbour limits.

The duties of the pilots are confined to the pilotage of ships inwards and outwards, including berthing, unberthing and movages inside the harbour with the assistance of one or two tugs. They perform no coastal pilotage.

Since Churchill is located in latitude 58° 48' North, the summer season is short but twilight is long.

(2) EXEMPTIONS

Exemptions from the compulsory payment of pilotage dues are as defined in sec. 346 of the Canada Shipping Act. However, as subsec. (c) of sec. 346 has not been taken advantage of, all vessels of 250 registered tons and under, not registered in any of Her Majesty's Dominions, are not exempt. This situation will be rectified if the Commission's General Recommendation 22 (Part I, p. 532) is implemented.

Shipping statistics and records indicate that, with the exception of small craft, all ocean-going and coastal vessels employ the services of a pilot, including occasional vessels that are exempt, depending on the Master's knowledge of the harbour and the prevailing weather conditions.

3. ORGANIZATION

(1) PILOTAGE AUTHORITY

The Minister of Transport as the Pilotage Authority for the District of Churchill issues the pilots' licences, and maintains control of the District. The governing legislation P.C. 1416 dated July 13, 1933, does not explain why the Minister of Transport was appointed Pilotage Authority instead of a

local commission, although sec. 327 C.S.A. makes it a condition that such an appointment should appear to the Governor in Council "to be in the interest of navigation". Contemporaneous events as well as Churchill's location indicate that under the circumstances this was the best solution both to achieve efficiency and to effect economy.

Unlike most Pilotage Districts in Canada, Churchill's operative and administrative problems are few (they are reviewed later).

By virtue of the dual occupation of the two pilots which includes the duties of Port and Deputy Port Warden, the operation of the District falls within the ambit of Port Management, for which there are no operational expenses, other than for the use of the pilot vessel service. The pilots work in harmony with the Port Manager, who is also the Harbour Master and as such controls the movement of ships in the harbour.

At the time of the establishment of the District in 1933, the then Resident Engineer, who was also Harbour Master, was appointed Acting Superintendent of Pilots. This officer supervised pilotage and made annual reports to the Authority on its activities. The appointment was continued by his successor but was allowed to lapse when the Port Warden took over pilotage duties. According to the evidence of Pilot Mundy (the Port Warden in 1963) he looks after all the books, logbook, and account book and also submits the annual report to the Authority.

There have been no cases of inebriation affecting the pilots nor has any case arisen that has called for disciplinary action against them.

4. PILOTS

(1) RECRUITING AND QUALIFICATIONS

Since 1957, pilots for Churchill have been obtained by open competition as advertised by the Civil Service Commission on behalf of the Department of Transport for the employment of nautical officers to fulfil the duties of Port Warden or Deputy Port Warden. The basic qualification is possession of a foreign-going Master's certificate (Ex. 1471(k)). These qualifications are superior to those specified in the By-law for pilots of the District. The harbour is provided with adequate aids to navigation and its hazards are not such that long training and special skills are necessary. This is illustrated by the fact that local knowledge is not listed in the By-law as a prerequisite for pilots to obtain a licence at Churchill. Experience has shown that the necessary local knowledge can be readily acquired by a competent, qualified mariner.

The appointment as pilot, in addition to that of Warden, is permissible by authority of Section 608A(4) of the Canada Shipping Act. Appointments are made each year for the season of operation and temporary pilots' licences are issued, without examination, for the season of navigation only.

The evidence reveals that the pilots at Churchill were carefully selected by the Authority. That they are qualified, skilful and reliable is borne out by an unblemished record of no major casualty since the port opened. The service runs smoothly and efficiently.

In his evidence Captain F. S. Slocombe of the Department of Transport stated that they had been fortunate in having Captain Mundy and Captain Wagner¹ for some years, because it is important to have experienced men familiar with the tides and currents that prevail in Churchill Harbour but if such officers were not readily available they could send replacements from Ottawa headquarters. The Pilotage Authority had thought of providing experienced pilots from other Districts, such as Halifax and Saint John, N.B., during the summer months when they are not as busy as during the winter but there would be complications with regard to pension funds and other difficulties and the reaction of the pilots to such a proposal would have to be sought.

Above all other qualifications, pilots for the District must be able to exercise good seamanship and skill in the handling of vessels, large or small, in a confined area. Strong tides accompanied by currents and cross currents created by the outflowing river make the manoeuvring and navigation of vessels both difficult and hazardous for those unacquainted with local conditions.

A serious accident in the narrow approach channel to the wharf might well block traffic. Also any accident, which might be of minor importance in other Districts, could be of serious consequence at Churchill because of its remoteness from repair yards and facilities. The fact that there have been no major casualties merely emphasizes that there might have been if thoroughly competent pilots had not been in charge of navigation because it is known that a number of accidents were narrowly avoided in the past and it is logical to assume that serious accidents might have occurred unless persons thoroughly acquainted with local features and conditions were in charge of navigation. In the public interest it is also essential that maximum use be made of all harbour facilities and aids during the short season of navigation.

(2) STATUS OF PILOTS

The status of the two pilots under the District General By-law is unique. They are compelled to work as free entrepreneurs and are self-employed in a compulsory partnership, but they are not subject to any regulations concerning their attendance to duty, their conduct or behaviour. There is nothing in the By-law to oblige them to offer their services to incoming vessels and once licensed they are not responsible to any authority. This

¹ Captain R. R. Burbridge replaced Captain E. S. Wagner as Deputy Port Warden at the opening of navigation in 1964, and has since served there as well as Captain C. H. R. Mundy, the Port Warden, each season up to the present.

freedom is only apparent because they are, in fact, officials of the Department of Transport and one of their terms of employment as port wardens is that they perform additional duties as pilots in an efficient manner.

Therefore, the legal situation and the factual situation do not correspond. In practice, this does not have an adverse effect on the service. There are only two pilots, the workload is not excessive and, on account of the other circumstances of their employment, they are interested in sharing pilotage assignments equally. Because they are paid on the basis of availability they have an incentive to be ready for duty at all times. However, the existing legal situation is fraught with difficulties and should be rectified.

In view of Churchill's unique situation, its remoteness, the short duration of its navigation season and its limited maritime traffic, it appears financially necessary to employ pilots that are also employed in some additional official capacity in order to provide them with an adequate aggregate remuneration. However, such extraneous occupations should not interfere with the efficiency of pilotage operations, nor should they have the effect of submitting the pilotage service to an authority other than its Pilotage Authority. Vessels should never be kept waiting because the pilots' time is occupied by duties other than pilotage.

As in other Districts where the Minister is the Pilotage authority, the ideal situation would be to have the pilots' time solely devoted to the profession of pilotage. At the present time, two pilots are necessary to provide an efficient service. One could not effectively do so. He would have an average of two assignments every twenty-four hours, staggered unevenly during the day and night throughout the 82 to 85 days of the season of navigation, and without reasonable rest periods. Such an arrangement would cause delays while awaiting the convenience of the pilot and at the expense and inconvenience of shipping. A prolonged absence due to illness or accident can be anticipated, and in order to render the required service, it will be necessary to continue to provide two pilots.

In view of the special conditions that prevail at Churchill, its remoteness and short season of navigation, a pilotage system based on truly self-employed pilots, the only one permissible under the present law, could not provide an equitable or efficient service.

Since the exigencies of pilotage render outside employment at Churchill almost impossible and too uncertain to attract qualified mariners as pilots, it will be impossible to maintain the pilotage service that Churchill needs, unless the necessary aid is provided by the Government or a Crown agency.

This poses the question of the duality of authority over the pilots (unless financial assistance is given in the form of direct subsidies which should be granted only as a last resort). A solution has now been found by making them Port Warden and Deputy Port Warden, i.e., employment that leaves them available for pilotage service as required and provides additional

remuneration. One of the problems that remains is that the Deputy Port Warden is subordinate to the Port Warden. From 1958 to 1960, this resulted in the Port Warden prohibiting his Deputy from taking pilotage assignments, thus obtaining all the pilotage earnings himself. This inequitable treatment was partly corrected by the 1961 By-law which provided for the pooling of pilotage earnings with equal shares for equal availability for pilotage service but this is only a superficial solution. There is still no way of ensuring equitable sharing of the workload.

To promote an efficient service, conditions of work and remuneration should be sufficient to attract from outside qualified mariners (there are none locally) and to retain them. This is beyond the powers of the Pilotage Authority and, under Part VI of the Act, neither the Department of Transport nor the National Harbours Board is obliged (or even supposed) to assist the Pilotage Authority. The conclusion is that Churchill presents a special problem that can not be solved under the Canada Shipping Act. This situation will be effectively remedied if the Commission's General Recommendations (Part I, C. 11) are implemented, whereby the application of pilotage legislation is extended to every possible status of pilots and the Pilotage Authority is authorized to manage and provide the service. The Pilotage Authority, with the assistance of the Central Authority, will then be in a position to provide a legal and adequate solution to the pilots' financial problem.

Pilot C.H.R. Mundy has proposed a retaining fee if it is important to the Pilotage Authority to have the same men return each season. It should also consider salary on a twelve-month basis, in which event they would not seek employment elsewhere during the winter months, but would hope that the Department would find employment for them.

Of the several plans that might be adopted, prevailing circumstances will determine which is most applicable. They include:

- (a) The method now used, i.e., to employ the pilots in an additional official capacity, provided such other occupation leaves them the necessary freedom of action to permit them to attend freely and effectively to their pilotage duties. The right to a pilot's licence should not, however, be made conditional on holding such a position because this would jeopardize the autonomy of the Pilotage Authority. If this can not be achieved, other methods should be considered.
- (b) The pilots might be Government employees in any capacity or field, if qualified mariners, but a condition of employment would be to pilot at Churchill during its short navigation season. In such a case, holding a Churchill pilot's licence would also be a condition of

employment. This method has the advantage of providing the pilots with job security and assuring them an adequate annual remuneration while, at the same time, benefiting the service by ensuring the return from year to year of the same pilots with higher qualifications gained by previous service.

- (c) Another method would be to make use of the services of pilots of Districts whose slack season corresponds with the Churchill season, e.g., pilots from the St. John (N.B.) and Halifax Districts, or of other Districts where the number of available pilots exceeds actual requirements. As stated earlier, pilotage at Churchill does not present any serious difficulties that can not be easily overcome by an experienced pilot of another District after a short period of training in Churchill waters. This would appear to be the most attractive method from the point of view of ensuring the efficiency and quality of pilotage at Churchill because the service will be performed by pilots whose sole, permanent and uninterrupted occupation is pilotage. The practical objections that previously existed could be easily overcome in a pilotage service which is nationally controlled and where financial assistance, when required, is provided by the Central Authority responsible for such control (General Recommendations 16, 17, 19 and 21, Part I, C. 11).

(3) SHIPPING CASUALTIES, ACCIDENTS AND INCIDENTS

As stated by Pilot E. S. Wagner, there have been a small number of minor accidents at Churchill in which pilots were involved. Statistics (Exs. 866, 1457 and 1467) show the following cases from 1959 to 1964 inclusive:

1959	Grounding; cause: engine failure.
1960	Nil
1961	(a) One grounding; cause: light ship unable to manoeuvre against high winds. (b) One collision with a berthed vessel; cause: light ship set down by wind when anchor jammed in hawse pipe.
1962	Nil
1963	Collision, while berthing, with ship moored ahead; cause: wind and failure to get lines ashore in time to stop headway.
1964	One collision, while berthing, vessel striking a moored vessel; cause: stated as current.
1965	Nil
1966	Nil
1967	Nil

5. PILOTAGE OPERATIONS

(1) PILOT VESSELS

The vessels employed to embark and disembark the pilots are two tugboats owned and operated by the National Harbours Board at Churchill.

Their main particulars are:

Name	Built	Length	Tonnage	Horsepower
M.V. <i>W.N. Twolan</i>	Lauzon, Que. 1962	95.3'	299	1,520
M.V. <i>George Kydd</i>	Owen Sound 1960	42.8'	21	600

The larger tugboat, *W. N. Twolan*, is invariably used to embark and disembark pilots to and from ocean-going vessels, while the smaller tug, *George Kydd*, is used for smaller vessels. Both assist in the berthing and unberthing of vessels.

In their evidence, both pilots claim that the *W. N. Twolan* is not suitable for embarking or disembarking pilots. She is described as a deep-sea tugboat built for several purposes, i.e., deep-sea towing, salvaging, icebreaking, harbour towage, fire boat, and air sea rescue. Her lines are fine and she has a flared bow. She has too much upper structure and rides high in the water. She is also very tender and rolls heavily in a moderate swell, which makes it most difficult to manoeuvre alongside a vessel. During fine weather there is no difficulty but when swells prevail (and they are frequent) it is very dangerous to embark or disembark. During such conditions the pilot invariably disembarks from an outbound vessel just before leaving the protection of the inside harbour. But many, and sometimes long, delays are occasioned waiting for suitable weather conditions to board a vessel outside the harbour.

The National Harbours Board was aware of the difficulties mentioned above and during the winter of 1965-66 the *W. N. Twolan* was placed in the Pictou Foundry Shipyards, N.S., to undergo refit, and for extensive modifications to improve her operational performance.

The Pilotage Authority on request from the Commission gave the following information (Ex. 1471 (I)):

"The pilot boats in Churchill have not been licensed by the Pilotage Authority in accordance with the requirements of Section 364 of the Canada Shipping Act. The boats employed for this service are the property of the National Harbours Board. They are approved by our Steamship Inspection Service and they have a valid

Steamship Certificate. This Certificate, which is issued by a branch of the Department of Transport, is considered to be sufficient evidence of their suitability as a pilot boat and the Authority has never issued a pilot boat licence."

Under *Schedule, Pilotage Tariff*, the 1961 By-law subsec. (2) stated that the sum of \$25 was to be paid each time the pilot boat was used to embark or disembark a pilot "outside the harbour". Since the boundaries of the harbour limits and the Pilotage District limits are exactly the same and extend 5 miles into Hudson Bay, it is conceivable that if this By-law had been acted upon as read there would have been very few charges for pilot boat services because the pilots disembark inside the harbour limits and only on rare occasions do they embark outside the limits, i.e., when several ships are at anchor in that area. The National Harbours Board took exception to the words "outside the harbour" and by mutual understanding and in contravention of the letter of the By-law, the \$25 fee was paid on each occasion the pilot boat was used for the purpose defined (Ex. 1471 (1)). This situation was corrected in the 1966 By-law by the deletion of this restrictive expression.

(2) TELECOMMUNICATIONS

According to Captain C. H. R. Mundy's evidence, long delays had been occasioned obtaining the E. T. A. of vessels due to the faulty procedure of the operators of the Churchill Radio Station, and their lack of direct communication between the station and the port officials, especially at night time. Early knowledge of the E.T.A. of a vessel was essential to avoid unnecessary delays in the pilot meeting the ship and the ordering of linesmen and stevedores, etc. On occasion, messages from ships, in reply to requests for their E.T.A., were sent by the Radio Station to Winnipeg, and the port officials and pilots received such messages three or four hours later by C.N.R. telegram. However, since the Commission's hearing at Churchill in 1963, advice has been received that the difficulties complained of have been rectified, and direct communication with ships by radiotelephone greatly improved. As for short range communications, the tugboat *W. N. Twolan* is equipped with a V.H.F. radiotelephone and one has been installed in the Warden's (i.e., the pilots') office. Approximately 75% of ocean-going vessels, as well as most coastal vessels, are now equipped with V.H.F. radiotelephone.

(3) PILOTS' WORKLOAD

Because of the dual employment of the pilots, they arrive at Churchill prior to the arrival of the first ship and remain for a period after the departure of the last one. Captain Mundy in his evidence states that "we only

get 82 to 85 days of piloting up here". The following table, taken from the annual reports, shows the number of piloting days and pilotage assignments during the seasons of 1962-1967 inclusive:

Season	Arrival 1st ship	Departure Last Ship	No. of Piloting Days	Total Assignments
1962.....	July 26	Oct. 11	77	166 = 83 each
1963.....	July 20	Oct. 20	90	158 = 79 each
1964.....	Aug 1	Oct. 12	72	140 = 70 each
1965.....	July 25	Oct. 15	82	152 = 76 each
1966.....	July 26	Oct. 15	81	117 = 58½ each
1967.....	July 29	Oct. 21	84	111 = 55½ each

Captain Mundy states that each pilot performs an equal number of assignments. Relating these assignments to the number of piloting days indicates an average of approximately one assignment per pilot per day. According to the evidence of Captain Wagner, the majority of inward assignments, which include berthing, take about 1½ hours but may take 2½ hours. Other assignments, i.e., outward trips and harbour movages, may take less time but vary in accordance with circumstances and prevailing weather conditions. However, two or more ships may arrive and/or depart on the same day when the pilots may be called upon to perform two or more assignments. Having regard to the pilots' other duties as Wardens and to their night pilotage assignments, it will readily be seen that during the period from the arrival of the first ship to the departure of the last one—an average of eighty odd days—the pilots are busily engaged.

6. PILOTS' REMUNERATION AND TARIFF

At the time of the Commission's hearing at Churchill in 1963, the Port Warden's salary was at the rate of \$500 per month and the Deputy Warden's at \$450 per month. In June, 1965, the salaries of the Port Warden and the Deputy Port Warden were increased by \$50 per month, i.e., from \$500 to \$550 and \$450 to \$500 respectively, and again effective March 1, 1966, to \$585 and \$530 respectively. The Wardens' travelling expenses to and from Churchill are paid by the Department of Transport and their board and lodging, while at Churchill, are provided free, the Department of Transport assuming the cost (Ex. 1471(h)).

From 1933 to 1939 inclusive, pilotage dues were at a flat rate of \$50 both inwards and outwards, but in 1960 the dues were increased, and separate charges made for day and night pilotage as follows:

- (a) When the whole passage was completed between sunrise and sunset—\$65, and
- (b) when the whole passage was completed between sunset and sunrise—\$90.

At the opening of navigation in 1964, pilotage dues were again changed to a single flat rate of \$80, both inwards and outwards, from which a deduction of \$25 was made for payment to the National Harbours Board each time their tugboat was used for embarking and disembarking a pilot (P.C. 1964-958). The 1966 By-law did not alter the total charges but segregated the pilot boat charge by providing a charge of \$55 for a pilotage trip and a charge of \$25 for pilot vessel services. The dues payable for a movage remained at \$40. In 1967, the trip charge was raised to \$60 (P.C. 1967-1819).

Captain C.H.R. Mundy stated in his evidence that as ships become larger they decrease in numbers, and the fewer ships they pilot the less money they make. This is one of the reasons why they asked for a change in the method of assessing pilotage dues, i.e., from the present flat rate to a rate that relates to the tonnage or size of the ship, whereby increased revenue would be achieved.

The following table shows the total remuneration of the Port Warden and Deputy Port Warden, i.e., pilotage earnings plus salary during their seasonal periods at Churchill, 1958 to 1967 inclusive.

For the years 1958, 1959 and 1960 the Port Warden performed all pilotage assignments. In 1958, there was no Deputy Port Warden, but in 1959 a Deputy was appointed and this position has been maintained ever since (Ex. 1471(i)).

Year	Assignments	Pilotage Earnings	Wardens' Salary	Total	Period at Churchill
1958.....	P.W. 136	\$5,440	\$2,349	\$7,789	3 mos. 21 days
1959.....	P.W. 152	6,080	2,333	8,413	4 mos. 20 days
	D.P.W. Nil	—	1,665	1,665	3 mos. 21 days
1960.....	P.W. 135	5,825	2,300	8,125	4 mos. 18 days
	D.P.W. Nil	—	1,590	1,590	3 mos. 16 days

To permit the Deputy Port Warden to share pilotage and its earnings with the Port Warden, an amendment was made in the By-law in 1961 by

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adding subsec. (2) of sec. 5 in P.C. 1961-1799, which provided for equal shares of pilotage earnings on the basis of days available for duty. Therefore, from 1961 to 1967 inclusive, remuneration was as follows:

Year	*Assignments	Pilotage** Earnings	Wardens' Salary	Total	Period at Churchill
1961.....	P.W. 77	\$3,330	\$2,367	\$5,697	4 mos. 22 days
	D.P.W. 72	3,005	1,980	4,985	4 mos. 12 days
	*(145 trips and 4 movages)				
1962.....	P.W. 82	3,505	2,250	5,755	4 mos. 15 days
	D.P.W. 84	3,535	1,710	5,245	3 mos. 24 days
	*(147 trips and 9 movages)				
1963.....	P.W. 79	4,135	2,083	6,218	4 mos. 5 days
	D.P.W. 79	4,085	1,860	5,945	4 mos. 4 days
	*(138 trips and 20 movages)				
1964.....	P.W. 70	3,715	1,933	5,648	3 mos. 26 days
	D.P.W. 70	3,655	1,575	5,230	3 mos. 15 days
	*(118 trips and 22 movages)				
1965.....	P.W. 76	3,940	2,402	6,342	4 mos. 11 days
	D.P.W. 76	3,925	1,750	5,675	3 mos. 15 days
	*(119 trips and 33 movages)				
1966.....	P.W. 58½	3,045	2,333	5,378	4 mos. 2½ days
	D.P.W. 58½	3,045	1,936	4,981	3 mos. 25½ days
	*(94 trips and 23 movages)				
1967.....	P.W. 55½	2,928	2,430	5,358	4 mos. 8½ days
	D.P.W. 55½	2,928	1,875	4,803	3 mos. 19½ days
	*(84 trips and 27 movages)				

*A trip means a pilotage assignment either inward or outward. In comparing this table with the table on page 405, which shows the number of ocean-going and coastal vessels over 250 NRT that arrived at Churchill in the years indicated, it becomes apparent that practically all vessels, including small coastal ones, use the services of the pilots.

**The slight discrepancy between the pilotage earnings of the two pilots was explained by Captain F. S. Slocombe in reply to a query from the Commission (Ex. 1471(o)). During the 1961 season, dues were paid to the pilot who performed the service and, since Captain Rose intentionally took more than his share of assignments, he received more revenue in accordance with P.C. 1960-873 which was in force at the time. The By-law was amended by P.C. 1961-1799 of December 14, 1961. In 1964, Captain Burbridge agreed that Captain Mundy should receive some recognition for instruction and the sum of \$35 was arbitrarily agreed upon. After the Annual Report was written Captain Burbridge received \$25 from D.O.T. In 1965, the final figures were adjusted after the Annual Report was received so that each pilot received \$3,945.

Whereas the Wardens are paid their salary as such each month, their earnings derived from pilotage are paid *in toto* at the close of the season, after all pilotage dues have been assessed.

Leave is neither provided for nor granted at Churchill during the short navigation season. Although the pilots are paid on the basis of availability,

there is no provision in the By-law for absence due to illness or accident. The Pilotage Authority, in reply to a request from the Commission for further information, stated:

"The shares of the pilots in the Churchill Pilotage District fund are divided in accordance with subsection (2) of Section 5 of the By-laws. We have never had any reported days of sickness since this subsection has been in effect, therefore, the matter of dealing with them has never arisen. Should one of the pilots be sick and unable to do his work, he would not be considered available for duty. The purpose of the present wording of this subsection was to prevent one of the pilots from performing more of his share of the work and obtaining more than his share of the revenue. This had occurred prior to the 1961 season, but has not occurred since." (Ex. 1471 (1)).

The foregoing table of earnings shows totals covering a period of approximately four months of temporary employment in each year. During this period, the two pilots concerned are absent from their homes and families, and, although they have few expenses at Churchill, and possibly save much of their earnings, they may well have insufficient money to provide for the remaining eight months of the year. The evidence of the pilots shows that for this reason, and also because they lack assurance of job security from the Department of Transport, they must seek employment elsewhere. Thereby, the Department accepts the risk of losing qualified, experienced pilots, and of having to find replacements at short notice. The pilots proposed that this situation could be overcome if the Department of Transport would make employment available to them or, in lieu, would provide a retaining fee during their months of unemployment.

COMMENTS

The pilots have recommended that the flat rate system be abandoned in favour of the system existing in most Pilotage Districts whereby the dues are computed on both draught and tonnage. The ground for their recommendation are not to avoid a discriminatory flat rate against small vessels, to share pilotage costs equitably among the users or to fix a price proportionate to the value of their services but mainly to ensure stable pilotage earnings when fewer but larger vessels call at Churchill.

It is considered that the principle of the pilots' recommendation should be accepted, but that the reasons they advanced are not valid. The pilots have no direct interest in the distribution of charges for their services because the pilotage earnings are pooled and, hence, they are not concerned whether one vessel contributes more than another to the pool or whether they all contribute equally, provided the aggregate amount of their earnings is adequate. The best way to provide the pilots with an adequate income is either to pay them a fixed salary or, if the relationship between pilotage revenues and pilots' earnings is to be retained, to adopt the target income method. Then the rates, whatever form they take, would be fixed in such amounts that

the aggregate pilotage revenue meets the pilots' expected income, adjustments in rates being made from time to time when the actual earnings fall substantially short of, or substantially exceed, the established target (Part I, C. 6, pp. 143 and ff.).

For the reasons advanced in Part I, C. 6, pp. 157-159, it is considered that the flat rate system should be replaced by a variable rate system which shares equitably among the users the total cost of the pilotage service.

For the reasons advanced on page 350, Section Two, New Westminster District, it is considered that draught should not be made a component of the rates.

The rates for both pilotage voyages and movages should be based on tonnage alone, using the vessel's maximum gross tonnage (p. 350). With regard to a minimum charge, reference is made to the Commission's remark on page 351.

7. FINANCIAL ADMINISTRATION

(1) PILOTAGE FUND

Following pilotage assignments, the pilots complete their Source Forms (Ex. 1471(j)) in triplicate signed by the Master and the pilot. The senior pilot, i.e., the Port Warden, presents the original to the agent of the ship at Churchill and retains one copy for the Pilotage Authority and one for his records. The agent then pays the senior pilot in cash, or by cheque made out to the pilot, which is deposited in the bank at Churchill to the credit of the Pilotage Fund.

The Pilotage Authority is the signing authority for the fund from which no withdrawals are made until after the close of navigation. After the close of navigation, the pilots report to the Pilotage Authority in Ottawa. The pilots' logbooks, which record all assignments, are checked with the Source Forms and assessed by the Authority, then checked with the Pilotage Fund, and the pilots are paid their share of earnings. The pilot boat fees for the season are also checked against the invoices sent by the National Harbours Board and payment made out of the pilotage fund by cheque.

With regard to the collection of the dues and the remuneration of the pilots, there is a substantial discrepancy. Apart from the question of the illegality of the pooling system, the By-law is incomplete because it does not indicate that the dues are payable to the Pilotage Authority. The dues for services rendered are to be considered a debt due to the Pilotage Authority (sec. 343 C.S.A.) only if they have been made payable to the Pilotage Authority in a by-law passed under the last part of subsec. 329(h) C.S.A. Failing this, they are payable to the pilot who performed the service and they belong to him (Part I, pp. 187 and ff.). The Pilotage Authority has no valid claim and can not force the pilot to pay what he has collected into the Pilotage Fund. If legal proceedings to enforce payment become necessary,

they can not be instituted by the Pilotage Authority or even by the Crown, but only by the pilot who rendered the service. But even the pilot may see his claim rejected because he has no title to the dues under subsec. 5(3) of the Churchill By-law.

(2) PILOTS' COMPLAINT

Captain E. S. Wagner in his evidence stated that the pilots considered the pilotage dues as now charged left much to be desired and, since the same rate was charged for all vessels, the small ones were overcharged and the large ones undercharged. The pilots would like to see a scale of dues based on the size of the vessel, such as tonnage or draught. They had worked out such a scale calculated by a fixed charge per foot of draught which, over a season's operation, would provide approximately double their present pilotage revenue. They felt that they should look after their own interests. They were employed as temporary civil servants, but without the benefits enjoyed by permanent civil servants. In this respect, by letter dated May 13, 1963, signed by G. W. R. Graves, Superintendent of Nautical Regulations, (Ex. 614(A)) the Authority stated in part:

"We sent your submission to the Branch Personnel Office and to the Personnel Organization Division in order that we might have their advice. They have gone into it quite thoroughly and have provided us with the following comments:—

The duties in connection with the Port Warden function are similar to those performed at other locations and the salary paid in this regard is only slightly less, whereas the duties must necessarily be regarded as part-time since you are also employed as pilots during the same period. The effect of the two payments is to bring the monthly remuneration to something in the order of \$1400—\$1500 which compares very favourably with the pilots employed in the Port Weller-Sarnia area and to nearly three times the monthly pay of a classified Port Warden. Consideration has been given to the fact that your employment is seasonal and, therefore, although the total of annual income is somewhat less, it is not out of line bearing in mind the extremely short season and the pay of the seasonal personnel employed as Beachmasters etc. in Northern Operations. No change for the pilotage is contemplated at the present time and it is pointed out that the boat fee is collected as an integral part of the pilotage charge and accrues to the pilotage revenue in cases where the pilot boat is not actually used.²

I am sorry that we are unable to be more encouraging in this regard. However I think you will see that the arguments advanced by personnel services would be hard to refute".

Evidence indicates that the arguments advanced in the above letter are based on comparisons of unequal values. They are, therefore, erroneous and reliable conclusions can not be drawn from them. For example, the location, the annual periods of employment, living and working conditions, duties and responsibilities, and, to some extent, the qualifications of those mentioned, are not comparable.

Captain Slocombe in his evidence describes Beachmasters as Master Mariners who superintend the unloading of cargoes (from ships) by means

²This has been corrected in the 1966 General By-law which provides for a separate boat charge payable only when pilot vessel services are used.

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of landing craft on the beaches in the Northern Territories (where there are no harbours or wharves). Their basic qualification is possession of a home-trade Master's certificate. They would, therefore, not be qualified to fulfil the duties of a Port Warden who must possess a foreign-going Master's certificate, although with experience and local knowledge they could act as pilots. Also, only those pilots employed in the Port Weller-Sarnia area who are in possession of foreign-going Master's certificates (if any) would qualify as Port Wardens³ (Ex. 1471 (l)).

The letter from the Superintendent of Nautical Regulations also stated that, since the boat fee is collected as an integral part of the pilotage charge, it accrues to the pilotage revenue in cases when the pilot boat is not used. However, this does not occur. The evidence, supported by the annual financial reports, shows that the pilot boat is used on all pilotage assignments inwards and outwards and the boat fee is deducted.

A comparative statement of the average monthly earnings of those mentioned above for the years 1962 and 1965, taken from the annual reports, is as follows:

Year	SEASONAL PERIODS		
	(about 8 mos.)	(about 3 mos.)	(about 3 mos.)
	Port Weller-Sarnia Pilots	Beachmasters**	Combined Earnings Churchill — Pilots
1962.....	\$1,380	\$632	P.W. \$1,272 D.P.W.*** \$1,377
1965.....	\$1,685*	\$681	P.W. \$1,449 D.P.W.*** \$1,620

*Basic salary \$1,485 per month. However, in 1965 and for the first time a bonus was paid to the pilots in the Port Weller-Sarnia area at the rate of \$200 per month.

**Beachmaster's monthly salary based on \$5,600 per annum in 1962 and \$6,000 in 1965, plus \$100 per month northern allowance, and a flat rate of \$65 per month for overtime in each year.

***Higher average monthly earnings by the Deputy Port Warden is due to his shorter period at Churchill. Whereas, he departed shortly after the close of navigation, the Port Warden remained to complete his books, etc. During this period there would be no pilotage earnings to supplement his salary.

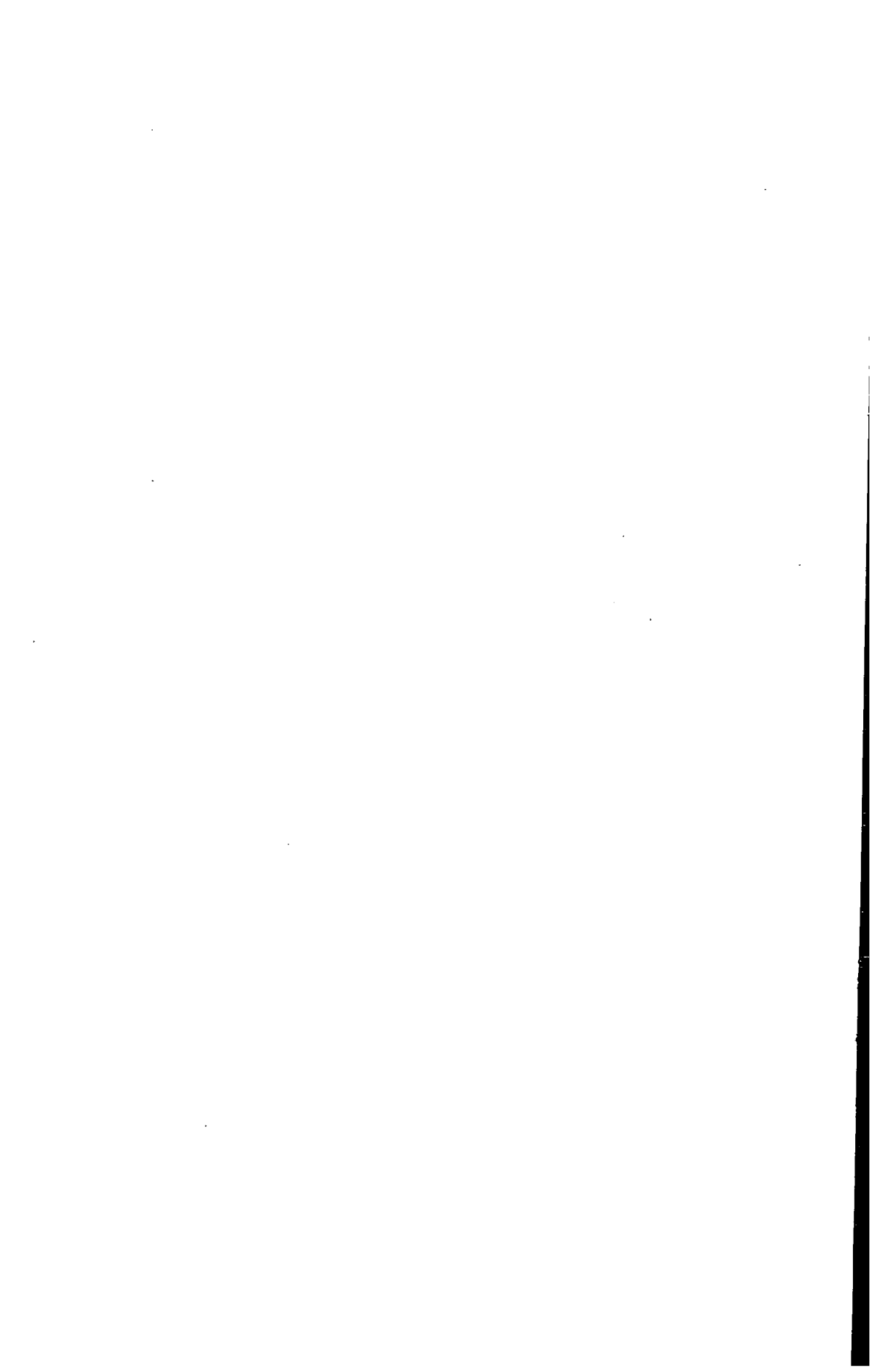
Following the 1963 season of operations, the pilots, Captain Mundy and Captain Wagner, called at the Commission's office and left a copy of a further memorandum dated October 18, 1963, which they had submitted by

³ By a policy decision of the Department of Transport, Port Wardens and other technical officers are classified as Nautical Services Officers, 1-3. Their basic qualification is possession of a foreign-going Master's certificate. However, new entries for this position must pass a pre-entry examination on several nautical subjects as set out in the Classification Guide, approved by the Civil Service Commission, April, 1966 (Ex. 1471(n)).

hand to the Pilotage Authority. This memorandum (Ex. 614(A)) emphasized the fact that due to the installation of lighted buoys and range lights, pilotage was now conducted on a twenty-four hour basis (thus saving the shipowners valuable time) and that their hours of duty had increased to this extent. They described their duties, explained their contentions and proposed remedial measures.

They requested that consideration be given to Churchill's remote location, its great distance from dry dock facilities and major repair yards, and its difficulties as compared with other ports, as well as their own job security, including an absence of superannuation and a lack of incentive to work in Northern Canada. Their main request was for an increase in pilotage tariffs, whereby they would receive an equitable remuneration, more in keeping with that enjoyed by their fellow pilots in other parts of the country. In this respect, they again proposed that pilotage tariffs be changed and based on net or gross tonnage.

Captain Slocombe was asked what steps had been taken by the Department of Transport with respect to the pilots' submissions. In his evidence, he replied that they had been considered and the pilots told that the Department did not think they had anything to complain of.



Chapter D

RECOMMENDATIONS

SPECIFIC RECOMMENDATIONS AFFECTING THE CHURCHILL PILOTAGE DISTRICT

RECOMMENDATION NO. 1

The Pilotage District of Churchill to Remain a Separate Pilotage District

Churchill is one of the few ports where the pilotage service did not exist prior to Crown intervention and would not exist without it. There are no local traders from whom to recruit pilots and the relatively small number of ships calling at Churchill during the short navigation season are unlikely to provide pilotage earnings that in themselves would attract the expert mariners the port requires as pilots.

An efficient, reliable pilotage service must be provided at Churchill for a number of reasons: it is an ocean port with special navigational problems; the consequences of a marine casualty are seriously aggravated by its remoteness from repair facilities; maximum use must be made of its facilities because of its short season of navigation; since it is the only seaport in Hudson Bay that will accommodate ocean-going vessels, it is of particular regional and national importance.

The provision of such a service requires that, in the circumstances, not only do the pilots' qualification have to be controlled by a competent Pilotage Authority (Gen. Rec. 12, Part I, pp. 491 and ff.) but that the direction and management of the whole service must be assumed by the Pilotage Authority (Gen. Rec. 14, Part I, pp. 495 and ff.). The remoteness of Churchill makes it impossible for such functions to be adequately exercised by the Pilotage Authority of any other Pilotage District and necessitates that it continue as a separate Pilotage District with its own Pilotage Authority (Gen. Rec. 8, Part I, p. 476).

The small number of pilots and the limited extent of pilotage operations make it a special case where the appointment of a one-man Pilotage Authority would appear to be indicated (Gen. Rec. 18, Part I, pp. 510 and ff.). It is considered that this function should be entrusted to a local

officer, either of a department of Government or of the National Harbours Board, whose other functions would allow him sufficient time to discharge his pilotage duties and responsibilities efficiently.

RECOMMENDATION No. 2

**Pilotage at Churchill to be Classified as
an Essential Public Service**

The national importance of Churchill and its short navigation season make it of public interest that maximum use be made of its facilities when it is open to ocean-going vessels. Hence, all reasonable steps should be taken to enhance its seasonal activities by facilitating ships' movements as much as possible consonant with safety. This aim can be achieved only through an efficient, reliable pilotage service. (Vide also Comments on p. 412). The Port Warden's Annual Reports (Ex. 3) indicate that vessels often have to wait at anchor for as long as several days because the limited harbour facilities are occupied by other ships. The report also shows that even with the pilots' assistance it is not always possible to bring ships into harbour and berth them under very adverse weather conditions. This situation would be much aggravated and the efficiency of the port would be seriously affected if a fully efficient pilotage service were not provided.

Therefore, it is considered that the pilotage service at Churchill should be classified as an essential public service (Gen. Rec. 17, Part I, p. 509) with the consequences such classification entails, such as compulsory pilotage (Gen. Rec. 22, Part I, pp. 532 and ff.), participation, if necessary, in the Equalization Trust Fund (Gen. Rec. 21, Part I, pp. 524 and ff.) and direction and management of the service by the Pilotage Authority (Gen. Rec. 14, Part I, pp. 495 and ff.).