

PART III



CANADA

report of the
royal commission
on PILOTAGE

*Study of Canadian pilotage
Atlantic Provinces*

report of the royal commission on PILOTAGE



*report of the
royal commission
on PILOTAGE*

PART III

Study of Canadian pilotage

Atlantic Provinces

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CANADA

ROYAL COMMISSION ON PILOTAGE

To His Excellency

THE GOVERNOR GENERAL OF CANADA

May It Please Your Excellency

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

Jus Permin
CHAIRMAN

Robert K. Smith

H. J. Zemanick

J. W. Macdonald

SECRETARY

June 1, 1969

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INTRODUCTION

Part I of the Report is a study of the present state of pilotage legislation in Canada and contains the Commission's Recommendations of a general character. Parts II, III, IV and V of the Report are complementary to Part I and should be read in conjunction with it. The plan of the full Report is outlined in the General Introduction, Part I, p. xxv.

Part III reports on the pilotage situation on the East Coast of Canada, excluding the St. Lawrence River, and appraises the requirement for pilotage and the adequacy of the existing organization. The plan of reporting is basically the same as in Part II, i.e., one section for each main Pilotage District. However, it seemed logical to group the small Districts and unorganized pilotage areas geographically. In addition, various remarks, comments and recommendations suggest how needs can be met in consonance with the Commission's General Recommendations.

The reader's attention is drawn to the following subject-matters which are of general importance and to which an appropriate cross-reference should be made in Part I:

- (a) The meaning of the term *Crown employee* with reference to the status of pilot which the Commission recommended in certain cases is studied and defined on pp. 212-213. A cross-reference to this study should be made at the beginning of General Recommendation No. 24, Part I, p. 545.
- (b) The functions and responsibilities of the Pilotage Authority of a merger type District are studied on p. 24 and the terms *potential jurisdiction* and *actual jurisdiction* with reference to the Pilotage Authority of such a merger type District are defined on p. 514 (Sec. Five, Subsec. XIII, Recommendation No. 1). Appropriate cross-references should be made in Part I, pp. 478 and 510.

Shipping casualties and incidents have been grouped according to the method described in Part II, pp. 89 and 90.

Districts vary so greatly in accounting procedure, financial organization and method of keeping statistics that the data contained in their official reports are not readily comparable without due allowance being made for the differences, which is not possible in all cases. This situation is made clear by the studies made of this information in the annual reports of the various Districts covered in this Part. The proposed Central Authority will be required to issue clear instructions on these matters in order to fulfill its rôle (General Recommendation No. 17, Part I, p. 508, items 14 and 15).

This Commission has proposed a comprehensive Pilotage Act containing, *inter alia*, provisions for legislation through District regulations governing the supporting services such as the administrative staff, and the pilot vessel

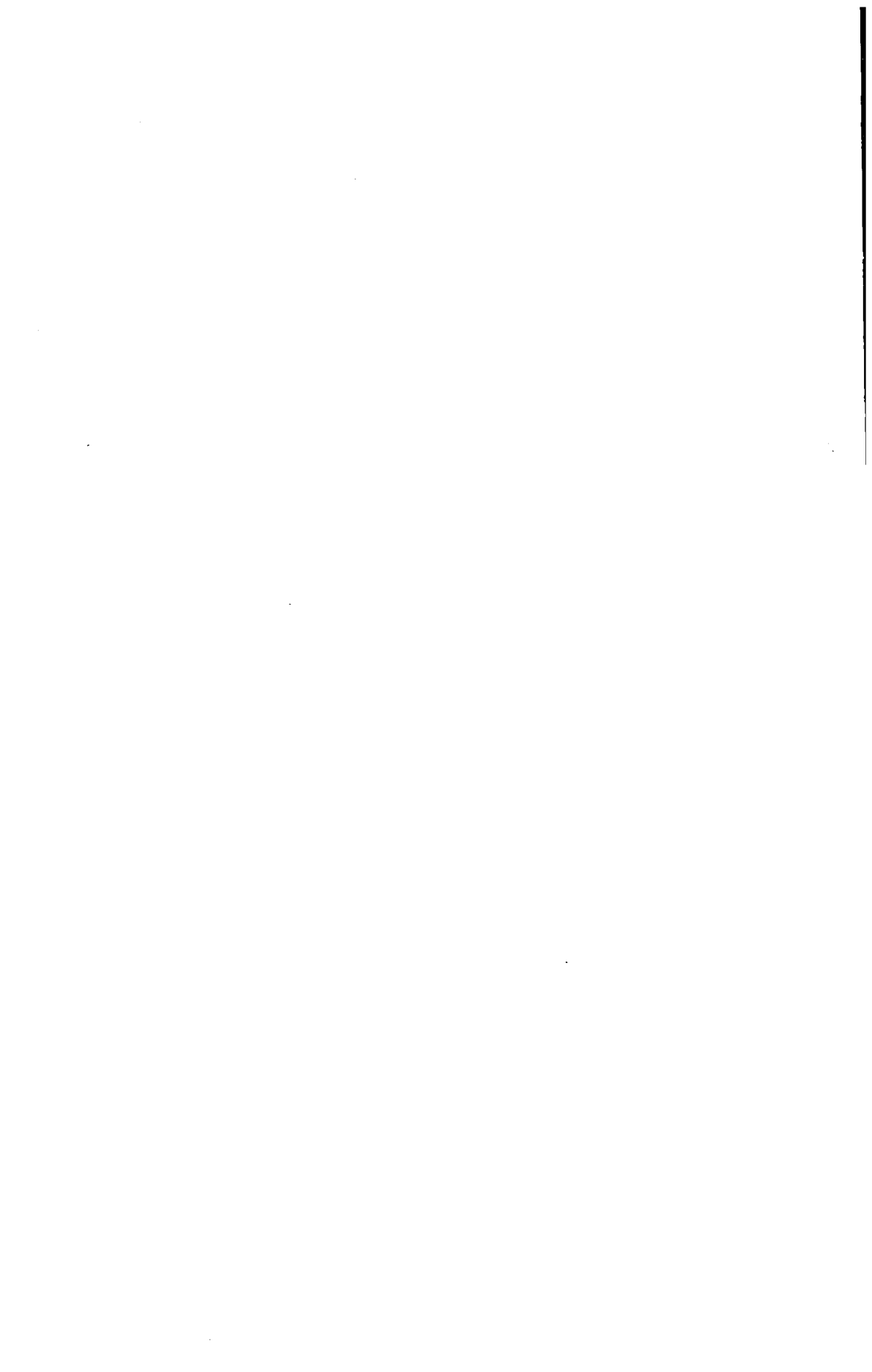
Study of Canadian Pilotage

service, including the definition of duties and functions, the terms and conditions of the employment of administrative staff and pilot vessel crew (vide pp. 290-291 and 626). Appropriate cross-references should be made in Part I, General Recommendation No. 6, p. 470, General Recommendation No. 14, p. 495, General Recommendation No. 18, pp. 513 and 514.

With reference to the Pilotage District of Saint John, N.B., and the search for an alternative deep water site to the port of Saint John (vide p. 68), the most recent information available to the Commission is to the effect that the Mispic Point area is also being considered. This location would not affect the reasoning on pp. 96 and 138.

Part III

STUDY OF CANADIAN PILOTAGE
ATLANTIC PROVINCES



Section One

PILOTAGE DISTRICT OF PRINCE EDWARD ISLAND

Chapter A

LEGISLATION

1. LAW AND REGULATIONS

PREAMBLE

The only legislation that applies to the Pilotage District of Prince Edward Island is contained in the Regulations made by the Governor in Council and the Pilotage Authority under the Canada Shipping Act.

(1) CREATION OF THE DISTRICT (secs. 324-326 C.S.A.)

The present Pilotage District of Prince Edward Island was established by Order in Council P.C. 2417, dated September 30, 1931 (Ex. 1143) which:

- (a) Revoked all previous Orders in Council and By-laws.
- (b) Amalgamated into one District the former five Districts.
- (c) Made the seaward limit of the District a line situated one mile seaward from the coastline of the Island. Therefore, the District waters comprise a one-mile zone adjacent to the entire coastline and all the navigable waters inland from that coastline, i.e.,
«To include all the coastal waters of the Province of Prince Edward Island and the waters of the Gulf of St. Lawrence and the Northumberland Strait for a distance of one mile seaward from the shores of said province.»
- (d) Made the payment of pilotage dues non-compulsory.
- (e) Directed that the powers of the function of "Pilotage Authority" be entrusted to a local commission.

(2) PILOTAGE AUTHORITY (sec. 325 C.S.A.)

As provided for by the Order in Council creating the District, the powers of the Pilotage Authority are vested in a local commission. The present members of the Commission were appointed by the Governor in Council individually as follows:

Ian K. Leslie,
Chairman, P.C. 1965-1530 dated August 18,
1965 (Ex. 1459(c));

J. R. St. John,
Member, P.C. 1961-68 dated January 19, 1961
(Ex. 1459(a));

F. G. Osborne,
Member, P.C. 1959-134 dated February 5, 1959
(Ex. 1459(b)).

Mr. Leslie replaced Mr. E. K. MacNutt, who was the Pilotage Authority's Chairman when the Commission held its hearings at Charlottetown, in February, 1963. Mr. MacNutt had been appointed by Order in Council P.C. 3905 dated September 19, 1946 (Ex. 1459(c)).

(3) SECRETARY-TREASURER OF PILOTAGE AUTHORITY
(sec. 328 C.S.A.)

On April 2, 1959, by P.C. 1959-395 (Ex. 1459(d)) the appointment made by the Pilotage Authority of Mr. F. G. Osborne, one of the Commission members, as Secretary and Treasurer was sanctioned by the Governor in Council. No provisions were made for any remuneration. This regulation is supplemented by subsec. 3(3) of the General By-law which provides that the function of Secretary shall be without remuneration.

(4) PAYMENT OF DISTRICT OPERATING EXPENSES
(sec. 328 C.S.A.)

There is no by-law, sanctioned by the Governor in Council, authorizing the Pilotage Authority to make payments out of pilotage revenues.

(5) GENERAL BY-LAW

The Prince Edward Island Pilotage District General By-law was confirmed by Order in Council P.C. 1962-852 dated June 12, 1962 (Ex. 2), revoking P.C. 5760, dated November 10, 1949, and has not since been amended.

Its main provisions are:

- (a) The immediate supervision of the pilotage service is the responsibility of the Secretary.
- (b) Pilots:
 - (i) their number is as determined by the Authority;

- (ii) their licences are valid for such periods, and for the whole or such portions of the District, as specified by the Authority;
 - (iii) to obtain a licence a candidate must be a Canadian citizen, resident in Prince Edward Island and at least twenty-one years of age, who has satisfied a local Board of Examiners as to his knowledge of seamanship and practical knowledge of the interpretation of radar, of the pertinent regulations and of the area where he is to pilot;
 - (iv) since the pilots are self-employed, they may absent themselves at will, provided they notify the Harbour Master of the port concerned of any absence exceeding twenty-four hours and the Secretary if their absence is to exceed forty-eight hours.
- (c) Pilotage dues:¹
- (i) dues are computed on the basis of draught and tonnage with special charges for movages and pilot boat service;
 - (ii) dues are payable directly to the pilots for retention. The Secretary does not handle pilotage money. There is no pilotage fund and no pension fund. The cost of providing pilotage service in the District is borne by the pilots.

There is no provision for, *inter alia*:

- (a) apprenticeship;
- (b) Pilots' Committee;
- (c) despatching, other than the general provision of sec. 3 of the By-law which gives the Secretary direction of the pilots and subsec. 17(3) which refers to an assignment list;
- (d) pilot vessels, except for the charge provided for such service in the tariff. Since the pilots are obliged to meet ships at the time requested, they must supply their own transport.

The By-law contains a number of illegal provisions similar to those found in the By-laws of most Districts. These have been studied in Part I of the Report, *inter alia*: discretionary power to limit the number of licences (Part I, p. 255), discrimination against non-residents of the province who are not eligible to become pilots (Part I, pp. 251 and ff.), determination of the duration of licences by administrative decision (Part I, pp. 264 and ff.), preventive suspension (Part I, pp. 343 and ff.) and disciplinary measures (Part I, C.9).

¹The reference in sec. 5 of the General By-law to sec. 346(e) Canada Shipping Act is meaningless in a District where the payment of pilotage dues is not compulsory.

2. HISTORY OF LEGISLATION

The first pilotage legislation was passed in 1825: "An Act to regulate the Duties and Charges of Pilots within this Island" (2 Geo. IV c. 1). It authorized the Lieutenant-Governor to appoint pilots for any particular harbour; the pilot had to provide his own pilot vessel; coastal vessels were exempted from the payment of pilotage dues.

In 1832, the Charlottetown pilots were required to co-operate in the application of quarantine legislation (11 Vic. c. 12).

In 1837, an Act fixed the limits of Charlottetown Harbour and made payment of pilotage fees compulsory, except for local vessels and those not exceeding 50 tons belonging to the Colonies of British North America. It also imposed a penalty for any breach of duty by a pilot.

In 1848, the exemption for local vessels was reviewed and each pilot was required to own a suitable, safe pilot boat of not less than 16-foot keel (14 Vic. c. 11).

Prince Edward Island joined the Dominion of Canada on July 1, 1873.

In 1877 and 1878, four Pilotage Districts, Summerside, Alberton, Cra-paud and New London, were created under the 1873 Pilotage Act, and the payment of pilotage dues was made compulsory. A fifth District, Richmond Bay, was created in 1898 (vide Part I, App. II, p. 591).

In 1931, three federal members of Parliament wrote a joint letter to the Minister of Marine urging a re-organization of the pilotage service in the island because the existing five Districts were "for all intents and purposes defunct" and there remained no body of Commissioners to look after pilots. They recommended amalgamation into a single District under the authority of a supervisory Commission of three whose duties and powers would be limited to the appointment, dismissal and discipline of pilots. They also recommended that the payment of pilotage dues be not made compulsory and that the rates be arranged by the pilots individually.

As a result, on September 30, 1931, by Order in Council P.C. 2417 (Ex. 1143) the pilotage service was re-organized as it is now, and the five previous Pilotage Districts were abolished. The pilotage organization of Charlottetown—the only one still functioning at the time—was also implicitly abrogated. It would appear that a Pilotage District was not created for Charlottetown under the 1873 Pilotage Act; hence, no abrogation was necessary. Under the survival rule, the pre-Confederation organization would have been retained until the complete re-organization of 1931.

However, despite the recommendation, fixing the tariff remained the responsibility of the Pilotage Authority. Since this is a statutory power, an amendment to the Act would have been necessary to deprive the Authority of such power. The By-law passed in 1949 (Order in Council P.C. 5760, Ex. 2) set different rates for each port. For Charlottetown the dues were \$1 per

Study of Prince Edward Island Pilotage District

foot draught plus $\frac{1}{2}$ cent per net registered ton with a minimum charge of \$25; for Souris and Summerside the charge was a fixed amount—\$20 or \$25 depending on the size of the vessel; for Georgetown the rate was \$25 in all cases; for other ports and for small vessels the rates were to be arranged by agreement. There were also charges for movages but none for pilot vessels.

In 1954 (Order in Council P.C. 1954-756, Ex. 2), the rates for Charlottetown, Summerside, Georgetown and Souris were increased to a flat \$1.50 per foot draught plus one cent per net registered ton and the remaining charges were unchanged.

In 1962 (Order in Council P.C. 1962-852, Ex. 2), the General By-law was rewritten in its present form (p. 5).

The Pilotage Authority was no doubt relatively inactive during the Second World War because the vacancy created by the death by drowning of Captain J. Watson Fyfe, one of the Commissioners, was not filled. However, when Captain William S. Gordon, Commissioner, tendered his resignation in 1946, it was decided to re-organize the Pilotage Authority. Order in Council P.C. 3905 dated September 19, 1946 (Ex. 1459(c)) cancelled the appointment of the remaining member, Captain C. Fitzgerald, and appointed a new Pilotage Authority consisting of three members.

Chapter B

BRIEFS

No briefs were submitted.

Chapter C

EVIDENCE

1. GENERAL DESCRIPTION

(1) DISTRICT LIMITS

According to the Order in Council which created the District (p. 4), pilotage waters were to comprise all navigable waters inside a line situated one nautical mile seaward from the 652-mile coastline of the Island. In practice, they are limited to the waters of the ports for which a pilot is licensed, and their approaches (vide Part I, p. 47).

(2) PHYSICAL FEATURES

The Pilotage District comprises the whole coast of Prince Edward Island. It is some 120 miles long, averages 20 miles in width and lies in an east-west direction 10 to 20 miles off the mainland north of Nova Scotia and east of New Brunswick with Northumberland Strait in between. The highest point of the Island is 450 feet above sea-level. There are few navigational hazards, and fog is infrequent.

(3) PRINCIPAL HARBOURS AND PILOTAGE AREAS

There are only six ports of sufficient size and importance to commercial shipping to warrant pilotage service.

(a) *Charlottetown*

The capital city of the Province is located on the west bank of the Hillsborough River on the south coast of the Island and about 2½ miles from its entrance in Hillsborough Bay. It exports potatoes, butter, oats, cheese, livestock, petroleum products and imports coal, steel, cement and general merchandise. The population in 1966 was 18,000. The season of navigation extends usually from April to December inclusive, depending on the severity of the winter. It is a Port of Entry. There are several wharves, the principal ones being:

- (i) Railway wharf, west side berthing length 730 feet with depths of 24 feet at its outer end, and east side berthing length 700 feet with 24

feet at its outer end; wharf equipped with railway tracks, water, oil and gasoline pipelines;

- (ii) two Department of Transport wharves, one 300 feet long with a depth of 33 feet alongside, one with a berthing length of 500 feet with a depth of 19 feet alongside;
- (iii) Buntain, Bell & Co. wharf, length 440 feet with a depth of 12 to 21 feet alongside;
- (iv) Texaco Canada Ltd. wharf, 365 feet long with four large oil storage tanks, depth of 28 feet alongside;
- (v) Irving Oil Co. wharf, used exclusively for Irving Oil tankers.

The controlling depth at low water is 32 feet and tides rise from 8 to 9½ feet. The anchorage area provides 7 to 10 fathoms of water.

Canadian National Railways connect with mainland lines by car ferry across Northumberland Strait. Frequent steamship services connect with Newfoundland ports, Magdalen Islands, Nova Scotia and New Brunswick ports. There are no tugboats because they are considered unnecessary for power vessels.

(b) *Summerside*

Is located on Bedeque Bay, south coast of the Island, entrance to which is made from Northumberland Strait. In addition to being a summer resort, Summerside is an important shipping port for the agricultural products of the surrounding district and is a Port of Entry. It exports potatoes, oats, hay, pulpwood and imports fertilizer, coal, molasses. The population in 1966 was 10,000. The average season of navigation is from May 1 to December 5.

There are two wharves:

- (i) Department of Transport wharf, built of concrete and steel piling, with a berthing length of 600 feet on its west side and a depth of 19 feet at low water; on its east side, a berthing length of 600 feet and 19 feet alongside and a further 300 feet with 17 feet at low water. Railway tracks lead on to the wharf;
- (ii) Holman wharf, a timber structure with a berthing length of 300 feet and a depth of 8 feet alongside.

The largest vessel to enter and leave was 405 feet in length. There are no towing facilities.

Controlling depth in approach channel is 22 feet at low water. Spring tides rise 6¾ feet, and neaps 5¾ feet.

(c) *Souris*

On the east side of Colville Bay on the east coast of the Island, is a farming and fishing centre. It exports potatoes, farm products, fish and lumber and imports coal, salt, oil and general merchandise. The population

in 1966 was 1,464. The season of navigation is April 1 to January 10, but may be longer or shorter depending on the severity of the winter. Souris is a convenient harbour of refuge and is protected by a breakwater nearly 1,700 feet long. The entrance channel has a depth of 22 feet at low water. Spring tides rise 5 feet and neap tides 3 feet. Anchorage off the end of the breakwater. No towing facilities.

There are two wharves.

- (i) The Government railway wharf, close inside the breakwater, with a length of 1,000 feet and a width of 140 feet, has a shipping berth of 600 feet with 22 feet of water along its north side and on its south side 600 feet with 18 feet of water. The approach channel, 900 feet long, has a minimum width of 300 feet and is dredged to 22 feet.
- (ii) About 150 feet north of the Government wharf lies the Eastern Packers Ltd. wharf about 500 feet long and 90 feet wide, with a berthing space of 270 feet with at least depth of 13 feet alongside. It provides a good berth for small vessels and is generally used by fishing vessels.

(d) *Georgetown*

Is located on Cardigan Point, Cardigan Bay, east coast of the Island, a few miles north of Montague. It exports potatoes, turnips and farm produce and imports fertilizer. The population in 1968 was 754. The season of navigation is April 15 to January 1. The harbour entrance has a depth of 9 fathoms and the channel approach a depth of 36 feet at low water. The harbour can accommodate vessels of 32 feet draught and 450 feet in length. Spring tides rise $5\frac{1}{2}$ feet and neaps $3\frac{1}{2}$ feet. The harbour basin—about $\frac{1}{2}$ mile each way—provides good anchorage. There are no towing facilities.

There are two wharves:

- (i) Government railway wharf, 810 feet long and 99 feet wide with berthing space on its west and east side of 400 feet with 23 feet alongside and gradually shoaling;
- (ii) Queen's wharf, 295 feet long with a depth of 14 feet alongside.

(e) *Montague*

Is located at the mouth of the Montague River south side of Cardigan Bay. It exports farm produce, pulpwood, caskets and monuments and imports coal and flour. The population in 1968 was 1,522. The season of navigation is May 1 to December 15. The channel depth is 14 feet at low water in the approach channel from Georgetown Harbour. Spring tides rise $5\frac{1}{2}$ feet and neaps $3\frac{1}{2}$ feet.

There is one wharf: the Government wharf, 237 feet long with a depth of 14 feet alongside.

(f) *Alberton Harbour*

Alberton Harbour is situated in the northern part of Cascumpeque Bay at the western end of the Island, facing the Gulf of St. Lawrence. It has good depths and is well sheltered, but its approach is obstructed by an outlying shifting sand bar; it is much used as a harbour of refuge by coasters and fishing vessels. The outer bar, $1\frac{1}{4}$ mile seaward of the entrance, is of sand and has a depth of 10 feet and a very narrow channel. The channel from the outer to inner bar is one cable wide between sandbanks. The inner bar at the entrance to the harbour has also a depth of 10 feet. Since the channel over the bar constantly shifts, no attempt should be made to enter without local knowledge.

The maximum rate of the tidal stream in the entrance of the harbour is usually $1\frac{1}{2}$ knots, but sometimes exceeds 4 knots.

The small town of Alberton is situated at the northern side of the harbour and had a population of 885 in 1961. It is a station on the Canadian National Railway line. The surrounding district is well populated and very fertile.

There are three wharves:

- (i) Queen's wharf, 430 feet long with a T-shaped head 126 feet long with a depth of 8 to 10 feet alongside the head;
- (ii) the railway wharf, 425 feet long with a depth of 5 feet at the outer end;
- (iii) a small Government wharf with a depth of 4 feet alongside.

The harbour freezes over by about January 3 and is clear of ice about April 6.

COMMENTS

With the exception of Alberton Harbour, which has a controlling depth of only 10 feet, there are no unusual hazards attending the navigation of the ports and harbours of Prince Edward Island where pilotage services are performed. Alberton Harbour is used generally by local coastal vessels where Masters have local knowledge of its navigational hazards.

Navigation is comparatively easy and dense fog is seldom experienced. Pilot J. R. MacDonald of Charlottetown recalled only one occasion when fog prevented him from piloting a vessel inwards. Should fog prevail, he would not attempt to pilot a vessel to Charlottetown.

(4) MARITIME TRAFFIC AND PILOTAGE TRAFFIC

The vessels that call at Prince Edward Island ports are generally medium or small in size because large vessels are not required to handle local imports and exports. Progressively there are fewer small ships. These are being

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replaced by ships of medium size which generally employ pilots, with the result that the proportion of ships taking pilots has increased more rapidly than the proportionate increase in total ships.

The peak season is the late fall when there are a number of ships, mostly foreign, loading potatoes for export to South America. During spring and summer, the principal traffic consists of tankers which are the largest ships that call at P.E.I. ports. In 1966, the largest was M.V. *Irving Stream*, 10,144 N.R.T., which called at Charlottetown.

The following shipping statistics (Ex. 1483) provided by the Dominion Bureau of Statistics show the number of vessels of 250 N.R.T. and over that arrived at the five principal pilotage areas in each of the years 1962 to 1967, together with the total foreign and coastwise cargo handled. Ports are listed in their order of cargo tonnage handled.

Year	No. of Arrivals	Tonnage (NRT)		Cargo Handled (Tons)		
		Aggregate	Average	Foreign	Coastwise	Total
CHARLOTTETOWN						
1962.....	248	321,689	1297	33,126	437,175	470,301
1963.....	196	271,912	1387	15,912	316,257	332,169
1964.....	212	306,646	1446	37,236	416,608	453,844
1965.....	187	334,354	1788	119,633	367,645	487,278
1966.....	239	416,465	1743	139,763	441,141	580,904
1967.....	218	447,853	2054	172,682	491,337	664,019
SUMMERSIDE						
1962.....	27	54,034	2001	44,342	28,396	72,738
1963.....	25	39,995	1600	33,225	23,726	56,951
1964.....	34	59,236	1742	36,750	20,428	57,178
1965.....	24	46,259	1928	44,942	27,000	71,942
1966.....	29	64,813	2235	38,684	36,616	75,300
1967.....	36	51,110	1420	34,288	33,988	68,276
SOURIS						
1962.....	54	43,853	812	19,600	9,013	28,613
1963.....	63	44,495	706	11,288	7,371	18,659
1964.....	48	36,011	750	14,542	6,009	20,551
1965.....	49	29,773	608	8,987	4,768	13,755
1966.....	116	75,431	650	31,938	8,389	40,327
1967.....	74	57,578	778	28,936	10,037	38,973
GEORGETOWN						
1962.....	9	2,340	260	—	638	638
1963.....	3	4,973	1658	1,305	656	1,961
1964.....	2	3,286	1643	6,136	640	6,776
1965.....	4	6,276	1569	2,097	4,171	6,268
1966.....	10	15,899	1590	10,461	5,354	15,815
1967.....	—	—	—	—	—	—

Year	No. of Arrivals	Tonnage (NRT)		Cargo Handled (Tons)		
		Aggregate	Average	Foreign	Coastwise	Total
MONTAGUE						
1962.....	6	9,827	1638	11,498	4,077	15,575
1963.....	4	5,562	1391	2,661	612	3,273
1964.....	5	7,669	1534	8,435	2,001	10,436
1965.....	4	5,745	1436	6,043	792	6,835
1966.....	5	7,060	1412	6,720	710	7,430
1967.....	—	—	—	—	—	—
TOTAL ALL PORTS FOR 1962 AND 1967						
1962.....	344	431,743	1255*	108,566	479,299	587,865
1967.....	328	556,541	1697*	235,906	535,362	771,268
INCREASE (OR DECREASE)	(16)	124,798	442	127,340	56,063	183,403

SOURCE OF INFORMATION: Exhibit 1483.

* Average (total aggregate tonnage over number of arrivals).

The following table based on information contained in the Pilotage Authority's Annual Reports shows for the period 1956/57 to 1967 inclusive the total number of vessels employing pilots at all ports, their aggregate net tonnage and the average net tonnage per ship piloted. In this summary the yearly number of vessels should be doubled to obtain the number of times pilots were used since each vessel (arrival) normally accounted for two pilotage trips (inward and outward).

Year	Number of Vessels	Net Tonnage	
		Aggregate	Average
1956/57.....	65	137,263	2,111.7
1957/58.....	81	164,171	2,026.8
1958/59.....	52	84,116	1,617.6
1959/60.....	47	98,409	2,093.8
1960.....	73	175,376	2,402.4
1961.....	66	194,171	2,942.0
1962.....	64	177,747	2,777.3
1963.....	71	155,925	2,196.1
1964.....	109	243,470	2,233.7
1965.....	101	267,185	2,645.4
1966.....	149	327,517	2,198.1
1967.....	161	350,681	2,178.1

This table shows that:—

- (a) Maritime traffic in Prince Edward Island is not extensive and consequently there is not a great demand for pilotage services. The number of vessels using pilots increased considerably, relatively speaking, during 1964-1967. However, the increase was confined to Charlottetown.
- (b) Contrary to the general trend, the vessels piloted do not show an increase in size. While the average tonnage of the total number of vessels as well as those using pilots indicate that, as a rule, only the larger ones take pilots, these average figures also indicate that vessels calling at Prince Edward Island ports are comparatively small. For 1966, the average size of vessel piloted in the B.C. District was 5,482 NRT and in Halifax 3,799 NRT compared with 2,198 NRT in Prince Edward Island. This is not the result of lack of proper port facilities or of navigational hazards, but the fact that larger vessels are not required to meet the present commercial demands of the Island.

The busiest port is Charlottetown. In 1963, the average pilotage assignments were two trips a week except during the peak season when the average was four. The workload, however, has more than tripled since. In 1962, the number of vessels piloted was 28. This had increased to 103 in 1966.

The next busiest port is Summerside. Its pilotage traffic has somewhat increased but not to the same extent as Charlottetown. In order of importance follow Georgetown and Montague, which are serviced by the same pilots, and finally Souris. In Alberton, the pilot who was licensed in 1961 has not performed any pilotage since 1962.

2. NATURE OF PILOTAGE SERVICE

(1) DESCRIPTION OF PILOTAGE SERVICES

Coastal pilotage is not performed but a pilotage service is available for the six ports or harbours previously described.

The licence of each pilot is restricted to the waters of the harbour and port he serves. In addition, the Pilotage Authority endeavours to make available one relief pilot with a licence valid for the whole District.

The reasons for this policy are:

- (a) the limited competence of the pilots, which makes it necessary to confine them to the waters with which they are familiar;

- (b) the vessels which require pilotage services in the District are few in number and comparatively small in size with the result that the remuneration available to the pilots is small. Most of the pilotage revenue in Charlottetown is derived from services rendered to tankers.

There is not sufficient traffic at any of the ports (except recently at Charlottetown) to provide full time occupation or an adequate income for even one pilot. The pilots of the District must, therefore, be allowed to do other work as long as they are generally available for pilotage duties. There has never been a complaint that a ship was delayed because a pilot was not available.

As a rule, small vessels do not take a pilot except on their first trip but large tankers always do. Small vessels, which are often owned by the Master and manned by his family, can not afford normal pilotage dues. The charges are then fixed by agreement (although in contravention of the law); otherwise, the pilot would lose this income.

The longest pilotage assignment is at Charlottetown where the pilot may have to go out 11 miles to embark. The normal time one way for such an assignment is three and a half hours, not counting waiting time.

(2) PAYMENT OF PILOTAGE DUES NOT COMPULSORY

Prince Edward Island is the only District in Canada where there is completely voluntary pilotage.

The compulsory payment of dues was abolished at the time of the re-organization in 1931 because three federal Members of Parliament so recommended.

Voluntary pilotage solves the question common to coastal Pilotage Districts whether a ship in transit must pay pilotage dues whenever it enters coastal waters (vide Part I, p. 47).

From the evidence it appears that navigation in the District is safe and that there are very few accidents to ships whether or not they employ a pilot. The Chairman of the Pilotage Authority in 1963 did not feel that the payment of pilotage dues should be made compulsory for safety reasons. He added that the pilots would be in favour of the idea in order to increase their income, but there has been no such request from the shipping interests and he expressed the opinion that there seems to be no reason to change the existing arrangements.

3. ORGANIZATION

(1) PILOTAGE AUTHORITY

The function of Pilotage Authority is exercised by a three-man board, the members of which are all federal employees working in the same building in Charlottetown.

The Pilotage Authority's duties are limited to licensing, rate-fixing, general surveillance and the regulation-making required for the discharge of these duties. None of the Pilotage Authorities that have existed in what is now the Prince Edward Island Pilotage District has ever controlled the provision of its pilotage services. A step was taken in that direction when the new General By-law of 1962 purported to give to the Secretary the "direction of pilots". The factual situation, however, remained as before. The pilots are truly self-employed, independent contractors. Although free enterprise prevails, there are very few occasions for pilots to compete because normally, there is not more than one pilot licensed for any given port and there is no reason for a second pilot except as a relief on the rare occasions when the licensee is not available.

The Pilotage Authority does not collect pilotage dues; there would be no advantage for it to do so because no levy of any kind is made on the pilots' earnings. Therefore, the Pilotage Authority has no financial responsibility and there is no Pilotage Fund to supervise.

The Authority has no daily record of the work done by each pilot and despite sec. 6 of the General By-law, the pilots' source form, does not appear to be in use. In order to file his annual return, the Secretary has to rely on the annual report made by each pilot. He has no system of control over pilotage and has no way of verifying whether any particular ship employed a pilot or whether the correct amount was charged. In fact, he does not need such information except for statistical purposes.

(2) PILOTS' COMMITTEE AND ADVISORY COMMITTEE

There is no Pilots' Committee, Association or Corporation or an Advisory Committee; the pilots work independently in their own locality.

(3) ROLE OF THE DEPARTMENT OF TRANSPORT

Pilotage in Prince Edward Island is considered a matter for local jurisdiction and the Department will not interfere unless its attention is directed to some complaint or problem. There have been no serious maritime accidents and the Department has received no complaints.

(4) RECOMMENDATIONS FOR DISTRICT ORGANIZATION

No recommendations to change the existing organization were received.

At the Commission's hearing in Ottawa, the Department of Transport representative stated that there is no reason to believe that the existing organization of the pilotage service is unsatisfactory or inadequate for the needs of Prince Edward Island.

4. PILOTS

(1) RECRUITING AND QUALIFICATIONS OF PILOTS

Since the pilotage service in Prince Edward Island offers insufficient income to attract skilled candidates, it is difficult to recruit pilots. It has been impossible to attract any one with a marine certificate of competency. Therefore, the Authority is obliged to employ as pilots local mariners with practical experience in the navigation of these waters, mostly fishermen, and the prerequisites have been drawn up accordingly.

There is no system of apprenticeship or training: each pilot must acquire the necessary knowledge through his own efforts. However, since 1967, this practice has been departed from. Although apprenticeship is not foreseen in the By-law, with the approval of the Authority, the Charlottetown pilot has taken an apprentice. It was explained that this was done because of the increasing traffic in Charlottetown Harbour (Ex. 1459(e)).

Despite the By-law requirements (secs. 9 and 10), no Board of Examiners is appointed and there are no formal examinations. The Authority arranges for a practical examination during which the candidate is required to spend some time on board a Department of Transport vessel so that the Master may test the candidate's local knowledge, ability as a ship handler and seamanship. Before the Pilotage Authority issues a licence, it makes its own appraisal of the candidate and studies the Master's report.

Therefore, the pilots in this District are limited in their qualifications, especially their ability to handle ships. After a minor accident about 1957, the Commission made a ruling that when a pilot embarks he must warn the Master of his limited ability to berth and unberth the ship (vide Commission's Remarks and Recommendations, Part I, pp. 251 to 253, General Recommendation 13, pp. 494 and 495, and General Recommendation 12 re licensing of "Pilotage Advisers", pp. 491 to 493).

Pilot J. R. MacDonald of Charlottetown explained that he acquired his experience first by going on board ships for two years with his father, then alone for an additional year with a letter of introduction from the Department of Transport. He never had any difficulty handling vessels, not even berthing, which he does occasionally with the Master's assistance. He does all manoeuvring and berthing, as well as conning, through the Master. Apart from his occupation as pilot, he is "boss stevedore".

He considers that bridge aft ships are more difficult to handle, but only when berthing because it is difficult to judge the distance. When coming alongside, he needs the help of a ship's officer who stands at the bow and informs him the distance from the wharf.

He is satisfied with the amount of money he makes out of pilotage. Up to 1963, the largest ship he had ever brought into Charlottetown was the tanker *Irving Glen* (7,949 NRT) drawing 34 feet. In 1965, he had three ships of over 10,000 NRT. Most of his pilotage is done at night. He never served in a sea-going ship and has no knowledge how to use radar or an echo sounding machine.

Pilot E. R. Clow, one of the two pilots in Georgetown, who also serves Montague and the Cardigan River, had only four assignments in 1962. He works in his own boat for the federal Department of Fisheries as a Fishery Officer. To become a pilot, he applied to the Authority, and passed a practical test in one of the Department of Transport's ships, (*Sir Charles Tupper*), by taking the ship from Panmure Island to the entrance to Georgetown Harbour. The average time required to cover the four or five miles from the point of embarkation to the harbour is half an hour. There is not much current except at the mouth of the Cardigan River. The channel is some 200 feet wide but there is one sharp seventy-degree turn where the channel is marked by range lights. When berthing he gives his orders through the Master to the wheelsman. Since most of his pilotage work is done at night, it does not interfere with his main occupation.

(2) DISCIPLINE

Since 1946, the Pilotage Authority has had to exercise its disciplinary powers on only three occasions.

The licence of a Charlottetown pilot was suspended after two adverse reports, that he had reported for duty while under the influence of liquor (this must have occurred before 1952 because it is not reported in the annual returns available to the Commission). In 1965, a pilot had his licence cancelled for violation of the By-law provision (sec. 17) regarding the use of liquor (Ex. 1459(e)). In 1957, a ship navigated by a pilot collided with a wharf at Summerside. He was told to be more careful.

(3) SHIPPING CASUALTIES AND INQUIRIES

For the period 1957 to 1967, a total of 16 shipping casualties were reported; the three in which a pilot was involved were of a minor character. No preliminary inquiry or other investigation under Part VIII C.S.A. was held.

5. PILOTAGE OPERATIONS

(1) PILOT STATIONS

Pilotage services are available in five ports as follows:

(a) *Charlottetown*

Charlottetown, the main port of the Province, handles the bulk of the maritime traffic. It is served by Pilot John R. MacDonald. In 1958, he took over from his father who, in turn, had been the pilot since 1931.

(b) *Georgetown-Montague*

In 1958, the former pilot, T. Gotell, retired and was replaced by F. J. Gotell. The latter left the Province in 1961 and was succeeded by E. R. Clow, who was joined in the fall of 1962 by a second pilot, J. L. Llewellyn. Mr. Llewellyn has not been listed as a pilot since 1965. There is little traffic.

(c) *Souris*

Souris is served by Pilot J. G. Gillam who was licensed in 1946.

(d) *Summerside*

Summerside is the Province's second port. It was served by Pilot J. W. Gallant from the time he was licensed in 1947 until he died in 1967. He was replaced by Joseph Ira Arsenault.

(e) *Alberton*

There is one pilot—E. L. Hutt—who was appointed in 1961. He piloted three ships that year but has performed no pilotage since.

(f) *Relief Pilot*

For at least seven years prior to 1960 there was a relief pilot, J. A. Lund, domiciled in Charlottetown. He retired in 1960 at the age of 70 and had not yet been replaced when the Commission sat in Charlottetown because the Pilotage Authority had been unable to find a replacement. The only qualified candidate could not accept because of his other employment. It is extremely difficult to find a pilot qualified for the whole District whose main occupation would allow him to undertake occasional pilotage assignments.

On July 11, 1968, the Pilotage Authority informed the Commission that the substantial increase in pilotage work in Charlottetown has provided a solution for the problem. The Pilotage Authority intends to license a second pilot for Charlottetown and to make the senior pilot available elsewhere in the District to act as relief pilot when required (Ex. 1459(e)).

(2) PILOT BOARDING STATIONS

There are no official Pilot Boarding Stations in the District. The pilots come out in a boat to meet incoming vessels and embark at or near the entrance to the port or harbour.

(3) PILOT VESSELS

In this District it is the responsibility of the pilots to provide pilot vessel service.

Prior to the 1962 By-law, there was no pilot boat charge. The 1962 By-law fixed the rates at \$10 for ships not over 200 tons and \$15 for ships over 200 tons. This was, in effect, an increase in pilotage charges because this auxiliary service was previously considered part of the pilots' expenses. In fact, the pilot boat charge was granted as a means of increasing pilots' earnings following a complaint by the pilots that their rates were too low. The Pilotage Authority investigated the practice in other Districts, particularly along the New Brunswick coast, and discussed the matter with the shipping interests.

All the pilots, except one, regularly hire someone to transport them.

Only Pilot MacDonald of Charlottetown uses his own boat—48 feet long, 11 foot beam, powered by two diesels. It is manned and maintained by his brother with whom he divides his pilotage income as he previously did with his father. With the boat he provides a line service which is included in his pilotage charges. When there are no pilotage duties to perform the boat is used for whatever jobs may be available. Pilot MacDonald states that the revenue derived from pilot boat charges barely meet maintenance expenses.

Pilot Clow of Georgetown has his own boat for his work as Fishery Officer of the federal Department of Fisheries but he seldom uses it for pilotage because he has to find someone to operate it. Normally he hires a boat for the set fee of \$15. In 1962, he used his own boat once, hired one twice and needed no boat for two small schooners he piloted.

(4) DESPATCHING

There is no despatching problem since each pilot is responsible for the port where he resides.

All requests for pilotage are made direct to the pilot by shipping agents or are relayed to him by the Harbour Master or by the Pilotage Authority.

No evidence was received about the arrangements made by Pilots Llewellyn and Clow for sharing pilotage in Georgetown-Montague. Since they did not pool their fees and there appeared to be no complaints, it is assumed they had agreed on some procedure.

No details were given to show how the relief pilot is despatched (when one is available), but it is assumed, after referring to the By-law, that this is done by the Authority after the port pilot reports he is not available.

(5) PILOTS' REMUNERATION AND TARIFF

As seen earlier, the pilots in the various ports are self-employed and the extent of their pilotage income is the aggregate amount of the pilotage dues they have personally earned through the services they render. There is no Pilot Fund. The few expenses incurred by the Pilotage Authority in the discharge of its responsibilities have been so far absorbed by the various departments of the Federal Government to which the members individually belong. This practice has permitted the Authority not to levy any contribution on the pilots' earnings and to avoid the disproportionately involved accounting procedure that would be required to ensure the cost is equitably shared among the pilots.

The pilotage dues thus collected by the pilots are their gross earnings in that they have to pay from them all the expenses involved in providing their services, i.e., transportation by land and by water, collecting their dues and making their reports to the Authority. The main expenses are connected with the pilot vessel service. They can not be ascertained exactly for all pilots because some provide their own vessel and others use hired boats.

The table hereunder indicates for the period from 1956/57 to 1967 the total gross earnings of the District and the gross earnings of the pilot or pilots in each separate port.

GROSS EARNINGS

Year	District	Charlotte- town	Georgetown	Summerside	Souris	Alberton
	\$	\$	\$	\$	\$	\$
1956/57....	4,805.11	2,120.89	1,125.96	1,118.26	440.00	—
1957/58....	5,796.32	2,392.00	920.05	1,579.55	904.00	—
1958/59....	3,149.65	844.63	486.15	1,372.94	598.00	—
1959/60....	3,534.30	1,574.36	440.00	977.94	542.00	—
1960.....	6,318.82	3,628.99	570.00	1,266.83	853.00	—
1961.....	6,729.73	4,585.54	nil	1,448.99	448.00	247.20
1962.....	7,768.95	4,242.51	554.64	1,829.80	1,142.00	nil
1963.....	7,469.11	4,433.40	635.84	1,629.87	770.00	nil
1964.....	12,067.84	8,308.14	872.56	2,157.14	730.00	nil
1965.....	13,032.59	9,803.74	910.50	1,489.35	829.00	nil
1966.....	18,270.79	14,088.66	1,326.00	1,777.13	1,079.00	nil
1967.....	19,780.38	15,676.36	1,407.23	2,308.79	388.00	nil

The increased pilotage workload in the last four years is reflected in the District aggregate gross earnings. It is apparent also that the increase occurred mainly in Charlottetown.

RECOMMENDATIONS

SPECIFIC RECOMMENDATIONS AFFECTING THE PRINCE EDWARD ISLAND DISTRICT

RECOMMENDATION NO. 1

The Prince Edward Island Pilotage District to Remain a Merger Type District

The limited pilotage operations at any of the Island ports, including Charlottetown, do not warrant the creation of a separate Pilotage District for each or any port.

The need for Government control over the qualifications of those offering their services to pilot is necessary for the protection of vessels unfamiliar with the local waters, but the control system provided under the Canada Shipping Act, i.e., the creation of a District for each port would amount to excessive organization which has proved unworkable in practice. The answer to the problem lies in the merger type of District adopted in 1933 in which the Pilotage Authority's responsibilities are limited to the strict minimum, i.e., licensing, rate-fixing and making the limited number of regulations required for the purpose of discharging the first two responsibilities. The pilots operate as free entrepreneurs without any control being exercised over their activities except to ensure that they live up to the obligations their licence implies.

This system has worked well and is the answer to the limited demand for public control over a group of small scale, distinct pilotage services within the same geographical area.

This merger type of organization should be foreseen in the new legislation as recommended by the Commission (General Recommendation 8, Part I, p. 478) and the details of the District organization should be adapted to that situation.

RECOMMENDATION NO. 2

The District Limits to Be Defined from Time to Time as Required by the Central Authority through Pilotage Orders and to Comprise Only the Restricted Waters of the Ports of Prince Edward Island and their Approaches where Pilotage Service Is Available

When the limits of the District are defined, they should reflect the factual situation, i.e., the existence of a number of separate, unconnected

pilotage services under one single Pilotage Authority. Therefore, no attempt should be made to connect the pilotage waters of each service artificially (as is now done) with areas of open water where no pilotage service is ever performed and where there is no need for any. Each port where pilotage service is provided should be treated separately for the purpose of fixing the limits of its pilotage waters. Therefore, the pilotage territory of Prince Edward Island District should comprise only the restricted waters of the six ports where pilotage services are now available, together with their approaches. If a demand for pilotage develops in another port and a person qualified to become a pilot is available, the restricted waters of that port and its approaches should be made pilotage waters through an appropriate Pilotage Order made by the Central Authority on the recommendation of the Pilotage Authority. Conversely, when pilotage service is no longer available in a port, it should be deleted from the pilotage territory through a similar procedure.

The Pilotage Authority's jurisdiction should be confined to a geographical area, the limits of which should be those beyond which the Authority is not in a position to exercise efficient control. In the case of the Authority of the Prince Edward Island District, potential jurisdiction should extend to all the navigable waters of the Island but not to those of N.S. and N.B., and the actual jurisdiction should include only those areas that have been made pilotage waters through Pilotage Orders. As for the remaining Island waters, it will be the responsibility of the Pilotage Authority to appraise their pilotage requirements and assess the possibility of providing pilotage service so that new services can be created where and if warranted.

As recommended, "as far as regulations, licensing and rate-fixing are concerned, ports should be treated as separate service areas" (General Recommendation 8, Part I, p. 478). Therefore, where necessary, the District regulations should contain local legislation applicable to each port to meet its own pilotage requirements.

RECOMMENDATION NO. 3

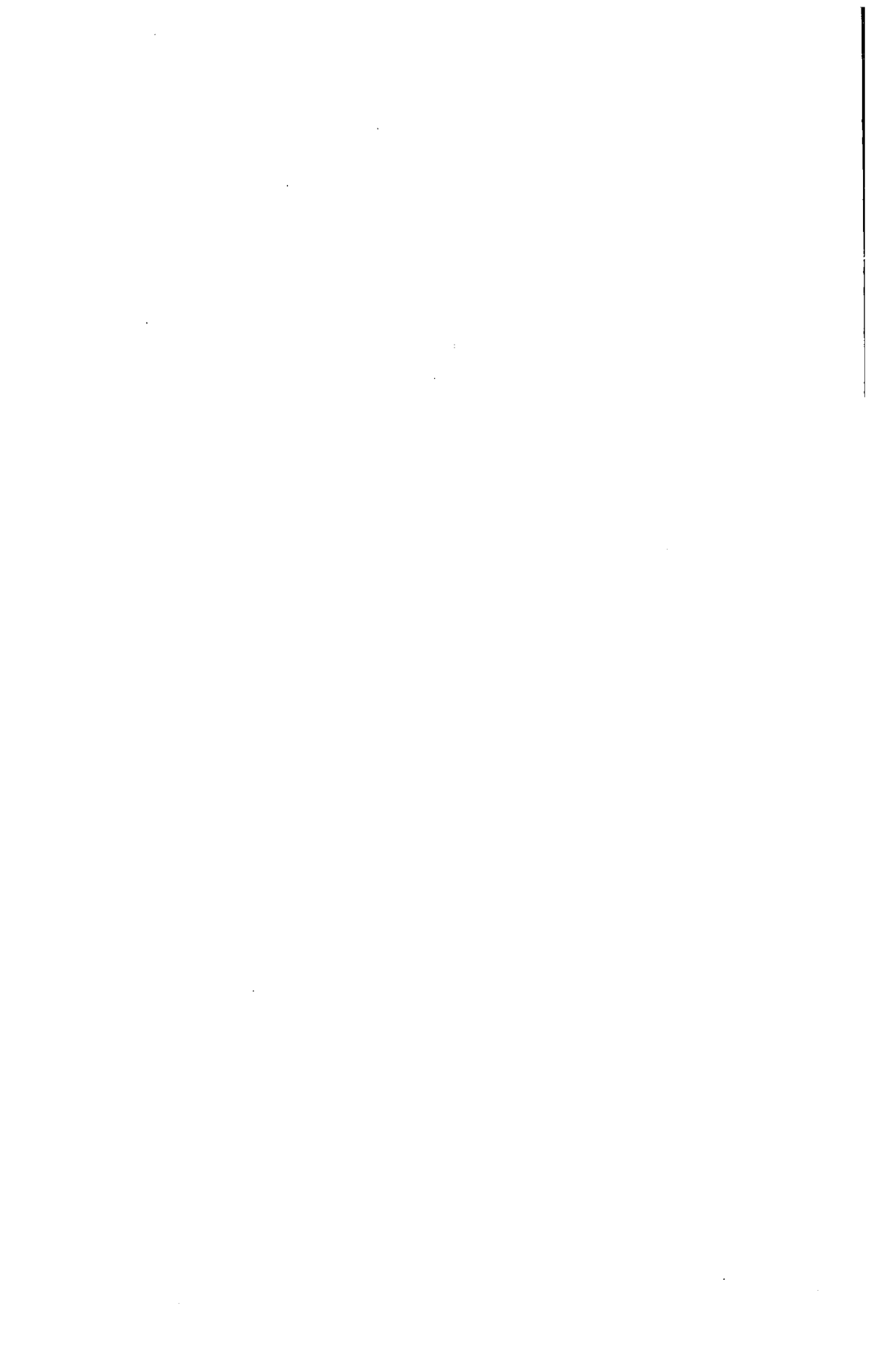
The Service to Be Classified as a Private Service

According to the criteria enunciated in General Recommendation 17 (Part I, p. 509), the various pilotage services in the Prince Edward Island District should be classified as "private services".

RECOMMENDATION NO. 4

The Pilotage Authority to Be Empowered to Issue Pilotage Adviser's Licences

On account of the non-availability of qualified mariners to become pilots and the limited navigational problems encountered in the restricted waters of the District, the Pilotage Authority should be authorized to issue "Pilotage Adviser's Licences" (vide General Recommendation 12, pp. 492 and 493).



Section Two

PILOTAGE DISTRICT OF SAINT JOHN, N.B.

Chapter A

LEGISLATION

1. LAW AND REGULATIONS

PREAMBLE

There are no longer any statutory provisions of exception for the Pilotage District of Saint John, New Brunswick. It is wholly governed by the provisions of the Canada Shipping Act which are generally applicable to the pilotage service and its organization. There are, however, a number of Orders in Council, by-laws and regulations that specifically concern this District.

(1) CREATION OF THE DISTRICT

There is no legislation now in effect which provides a legal basis for the existence of the District. The District of Saint John, N.B., was created by specific statutory provisions which have not been carried in the governing statute since the 1934 C.S.A. came into force; the legislation by delegation, i.e., the order of the Governor in Council which would have been necessary to maintain or to reactivate it, has never been made.

It was established as a federal Pilotage District by statutory provisions contained in the 1873 Pilotage Act (secs. 12-16). It became effective as a federal Pilotage District on June 16, 1874, when the Governor in Council, by Order in Council P.C. 789 (Ex. 1460(c)) as required by secs. 12 and 13 of the 1873 Pilotage Act, fixed the limits of the new District and nominated the Government representatives on the statutory corporation created by the Act to be the District Pilotage Authority, "The St. John Pilot Commissioners".

The following provision purporting to create the District was contained in the 1874 order of the Governor in Council:

"... His Excellency, by and with the advice of the Queen's Privy Council of Canada, has been pleased to order, And it is hereby Ordered, that a Pilotage District be and the same is hereby formed for St. John, in the Province of New Brunswick, the limits of which District shall embrace ...".

This part of the Order in Council was null and of null effect because the Governor in Council had no power over its existence since it was created by statute. Parliament had dealt, by specific provisions of the Act, with most

matters that are generally left to the regulation-making power of the Governor in Council. It had provided for the existence of the District, for its name, for the creation of an *ad hoc* corporation to act as its Pilotage Authority and for the compulsory payment of pilotage dues. It had limited the legislative powers of the Governor in Council, the exercise of which it made mandatory, to the fixing of the District limits and to the appointment of two Government representatives on its corporate Pilotage Authority.

These governing statutory provisions were retained in the subsequent statutes up to the 1927 C.S.A. inclusive. However, the 1934 C.S.A. abrogated them all without exception (sec. 717 and Schedule 13, 1934 C.S.A.). The survival-notwithstanding-repeal provision of the 1934 C.S.A. (sec. 718) did not apply to statutory provisions.

The repeal of these statutory provisions resulted in extending to the Saint John District the full extent of the legislative competency which the Governor in Council possessed with regard to Districts he could create. The repeal of the statutory provisions governing the existence of the Saint John District would automatically cause the demise of the District unless its continued existence were provided for by appropriate legislation, i.e., a specific order made by the Governor in Council. However, none was ever made.

It can not be maintained that the Governor in Council reactivated the District when, in 1959, for the first time since 1874, he dealt with the District limits, or when, in 1956, he issued an order appointing the Minister of Transport as the Pilotage Authority for a number of Districts, including the Saint John District.

The creation of a Pilotage District is the imposition of Government control over the free exercise of the pilotage profession in the territory concerned and, therefore, a District can not exist by implication. It must be established not only in clear and unequivocal language but also by strictly adhering to the procedure imposed by the governing legislation. It is obvious from the language employed by the Governor in Council in his orders altering the District limits or appointing the Minister as Pilotage Authority that he acted under the assumption that the District legally existed, but such an assumption on his part can not have the effect of creating a District where none existed. It is merely an error which can have no legal effect.

The consequences of the foregoing finding are that, since August 1, 1936, the Saint John Pilotage District has ceased to exist, that the accessory orders the Governor in Council purported to make were invalid, that there has been no Pilotage Authority nor any valid by-laws, nor is there any pilot now holding a valid licence.

However, in order to pursue the present study, it will be assumed for this purpose only that the District never ceased to exist and that its Pilotage Authority exists in law.

(2) DISTRICT LIMITS

The limits of the District were last defined by the Governor in Council by Order in Council P.C. 1964-19, dated January 10, 1964 (Ex. 1460(dd)), as follows:

"The Pilotage District of Saint John, New Brunswick, comprises the waters of Saint John Harbour from a line joining Green Head and Bear Head on the Saint John River and the waters to seaward bounded by Musquash Point Light bearing 294° True and Cape Spencer Light bearing 057° True".

This Order in Council replaced P.C. 1959-272 of March 5, 1959 (Ex. 1460(ee)), which had made the seaward limit of the District a line joining Split Rock (Musquash Head) and Cape Spencer, i.e., some four nautical miles seaward from Partridge Island. In fact, the new Order in Council has extended the limit seaward to the apex of the two bearings, i.e., some eight nautical miles seaward from Partridge Island.

The 1959 Order in Council had revoked the original limits of the District as established in 1874 (P.C. 789) as amended by P.C. 182 of March 1, 1875, which had defined the limits of the District as the Harbours of Saint John and Musquash with their approaches extending to a line joining Mount Desert Island (Frenchman's Bay, Maine, U.S.A.) and the southwest tip of Nova Scotia at Cape Sable, Seal Islands (Exs. 1460(c) and (d)), both points approximately 130 miles from Saint John Harbour.

(3) PILOTAGE AUTHORITY

The Minister of Transport is the Pilotage Authority. The last appointment to this office was effected by a regulation emanating from the Governor in Council on August 15, 1956, Order in Council P.C. 1956-1264 (Ex. 1143).

(4) COMPULSORY PAYMENT OF PILOTAGE DUES

There is no legal foundation at the present time for enforcing the compulsory payment system in the Saint John District.

From the first Pilotage Act in 1873 to the present legislation contained in Part VI of the Canada Shipping Act, the imposition of the compulsory payment of dues has been, with certain exceptions, within the competence of the Governor in Council. From 1873 to 1934, the Act excepted from this competence the four Districts of Quebec, Montreal, Halifax and Saint John by a specific enactment that in those four Districts the payment of dues was compulsory. This exception was not retained in the 1934 C.S.A., with the result that this matter was placed within the competence of the Governor in Council in so far as the Districts of Saint John and Halifax were concerned because, from that time on, these Districts could be created and abrogated by the Governor in Council (sec. 57, 1873 Pilotage Act; sec. 58,

1886 Pilotage Act; sec. 475, 1906 C.S.A.; sec. 455, 1927 C.S.A.; sec. 337, 1934 C.S.A.; sec. 345, 1952 C.S.A.). Since the 1934 C.S.A. came into effect, the Governor General in Council has not made any order on the subject.

The 1874 Governor in Council Order (P.C. 789, Ex. 1460(c)) contained a provision to that effect which reads as follows:

“His Excellency has also been further pleased to order that the payment of Pilotage dues be made compulsory within the limits of the District above defined”.

This part of the order of the Governor in Council was of null legal effect as if it had never been made because, as far as the Saint John District was concerned, this matter was beyond his competence. The fact that some sixty years later he was given this power can not have covered this nullity—a new order was necessary.

Sec. 6 of the District General By-law stipulates that the payment of dues shall be compulsory in the Saint John District. This By-law provision is *ultra vires* because the subject-matter does not come under the delegated regulation-making power of the Pilotage Authority which enacted the provision. The fact that on account of a procedural requirement the Governor in Council confirmed this provision with the rest of the General By-law does not make it an order of the Governor in Council.

The compulsory payment of dues could not have survived after the abrogation of the 1927 Canada Shipping Act because it was an obligation and an infringement of freedom that was imposed by a repealed statutory provision. According to the rules of interpretation, it must be inferred that the intention of the legislature was that in the four Districts concerned the payment of dues should no longer be imposed by statute and that the question whether payment should be reinstated in the Districts of Halifax and Saint John should be considered and decided by the Governor General in Council. A positive order was necessary to reinstate the compulsory system. Since none was made, the result is that since the coming into force of the 1934 C.S.A. the compulsory payment of dues does not apply in the District of Saint John.

(5) ORDERS IN COUNCIL NOT PASSED UNDER CANADA SHIPPING ACT
AND AFFECTING THE ORGANIZATION OF THE PILOTAGE DISTRICT

By Order in Council P.C. 1959-19/1093, dated August 27, 1959 (Ex. 52), the Department of Transport was granted authority with respect to, *inter alia*, the Saint John District, to assume the cost of pilot stations and pilot vessel services whether owned or hired.

It is under this authority that the Department of Transport absorbs all the operating costs of the District and the operational deficit of the auxiliary services.

(6) PILOTAGE AUTHORITY'S ENACTMENTS
CONFIRMED BY GOVERNOR IN COUNCIL

(a) *Delegations of Power under Subsec. 327(2) C.S.A.*

There is no by-law passed by the Minister as Pilotage Authority quoting subsec. 327(2) as authority but powers are delegated in the General By-law enacted under sec. 329 through which, on account of subsec. (p), the same purpose may be achieved (vide Part 1, pp. 289 and ff.);

(b) *Appointment of a Secretary-Treasurer and Authorization for Payment of District Expenses*

There is no order by the Governor in Council now in force which authorizes the Pilotage Authority of Saint John to pay any of the operating expenses of the District out of pilotage revenue and there is no need for any since all these expenses are now assumed, as stated above, by the Department of Transport. The function of Secretary and Treasurer is discharged by the Supervisor of Pilots who is appointed in the By-law as the local representative of the Pilotage Authority. Such an appointment is a permissible delegation of powers under subsec. 327(2) or subsec. 329(p) C.S.A. In either case, authority under sec. 328 is necessary only if his salary is to be paid out of pilotage revenue, but this is not the case here.

(c) *Exemptions for Small Ships (subsec. 346(c) C.S.A.) and Withdrawal of Exemptions (sec. 347 C.S.A.)*

The only regulation made by the Pilotage Authority concerning exemptions is contained in subsec. 6(2) of the General By-law which exempts pleasure yachts not over 250 net registered tons. The fact that the proper authority is not quoted does not, however, make the provision invalid (Part I, p. 248).

(d) *1961 General By-law*

All the by-laws and regulations enacted by the Pilotage Authority that are still in effect are contained in a General By-law confirmed by Order in Council P.C. 1961-1739, dated November 30, 1961 and its two amendments as of August, 1968: Order in Council P.C. 1965-1267 of July 9, 1965, and Order in Council P.C. 1966-2092 of November 3, 1966 (Ex. 17). It replaced the 1957 General By-law as amended (Order in Council P.C. 1957-874, Ex. 1460(bb)).

Its main features are the following (the cross reference to Part I of the Report at the end of a paragraph indicates where the validity of the matter is dealt with in Part I):

- (i) The provision of pilotage services is made the responsibility of the Pilotage Authority which exercises full control through the Supervisor of Pilots, its local representative (Part I, C. 4, pp. 73 and ff.).

- (ii) The pilots' status is that of *de facto* employees who perform pilotage only when and as directed by the Supervisor. They are not entitled to retain the dues earned by their services but all earnings, including the statutory indemnities of secs. 359 and 360 C.S.A., are pooled and the pilots are paid a salary in the form of a share of the pool based on their availability for duty. They are granted leave of absence with pay, half pay and without pay (Part I, C. 4, and C. 8, p. 249).
- (iii) Apprenticeship is abolished. The main prerequisites for applicants are to be between 25 and 45 years of age, to hold a certificate of competency as Master of a home-trade steamship unlimited as to tonnage, and to have had practical experience in the District by having served at least two years as Master or deck officer of a vessel trading regularly into the District. In addition to possessing physical and moral fitness, the candidate must pass successfully an examination which includes local knowledge. There is no examination as to his skill—this is assessed during one year of probation after he is licensed (re legality of probation, vide Part I, pp. 268-269).
- (iv) The dues for pilotage voyages are based on draught only at \$4 per foot. Different movage rates are provided depending on the location where they take place and the rates take the form of a scale based on tonnage. The By-law provides rates for various items and in 1966 (P.C. 1966-2092) a 7½ per cent surcharge was imposed on all pilotage dues.
- (v) A Pension Fund is operated by the Authority. The compulsory contribution is 8 per cent of gross earnings, unless another amount is fixed by the Authority after consultation with the Pilots' Committee. The By-law lists the benefits. For retired pilots these are \$80 per year of service prior to April, 1957, \$615 for service between March 31, 1957 and December 31, 1960, and thereafter the pension credited to each pilot is determined by the amount purchased by his contributions during that period (Part I, C. 10).

2. HISTORY OF LEGISLATION

PREAMBLE

The first part of this historical study covers all the pilotage legislation passed in New Brunswick up to the federal Pilotage Act of 1873. This date was selected to avoid repetition later when the small Pilotage Districts in New Brunswick are studied and also because the legislation itself does not make clear what did or did not apply to Saint John (a question that need not be established definitively for the purpose of this inquiry).

(1) 1784-1867

Pilotage in Saint John and the other ports of what is now the Province of New Brunswick developed with settlement. There, as elsewhere in early colonial days, the principal means of transportation was by water and local knowledge was a prerequisite, particularly in the Bay of Fundy area.

One of the pressing tasks of Col. Thomas Carleton, the first Governor of the Province of New Brunswick when it was detached from the colony of Nova Scotia in 1784, was to improve the safety of navigation and regulate pilotage.

The royal charter granted to the City of Saint John on May 18, 1785, (confirmed by the New Brunswick legislature in 1786, 26 George III c. 46) gave the city jurisdiction over the harbour of Saint John through a harbour authority called a common council composed of the Mayor and other officials of the city who were to ". . . be conservators of the water of the river, harbour and bay of the said city, and shall have sole power of amending and improving the said river, bay and harbour, for the more convenient, safe and easy navigating, anchoring, riding and fastening the shipping resorting to the said city and for the better regulating and ordering the same; . . ." (for extracts from the charter vide appendices to Smith Report, Ex. 1324 pp. 317-324).

The charter, as it read in 1785, contained no specific mention of pilotage but it would appear that the various powers granted in it to the city authorities included the power to license pilots, to fix pilotage rates and to make the regulations required to ensure an efficient, adequate service which would *ipso facto* enhance safety and ease of navigation. This right of the city of Saint John was officially recognized in subsequent legislation and such powers were, in effect, exercised by the common council (Ex. 1460(ff)).

The pilotage legislation applicable to the harbour of Saint John at that time consisted of the city charter, the regulations made thereunder and general pilotage legislation to the extent it did not conflict with the rights and powers granted by the charter and the regulations legally made under its authority.

The following year, Governor Carleton issued an ordinance entitled "An Act for regulating Pilots" (26 George III c. 52, Ex. 1460(a)). The preamble of the Act sums up the situation that was to be corrected ". . . as many accidents have happened and much damage been sustained through the ignorance or neglect of pilots from other ports, and not living in this province".

Pilotage was organized on the basis of the electoral divisions of the province, i.e., one distinct and independent pilotage organization per county, the Pilotage Authority being the Justices of the Common Pleas in each county together with three or more wardens per port appointed by them. These wardens were to establish the number of pilots required in each port

and examine the candidates. The licensing function was discharged by the Justices of the Common Pleas acting upon the recommendation of the wardens. The Justices acting together with the wardens were given powers to make the necessary regulations and to fix the pilotage rates on the basis of draught. The payment of dues was made compulsory provided a pilot could prove he had offered his services. Ships belonging to the port, coasters and all ships drawing less than six feet of water were exempt.

The Act recognized the right and power of the common council of the city of Saint John to license pilots for the port of Saint John by providing that nothing in the said Act was to "be construed to extend to abridge, diminish or interfere with the powers given to the common council of the city of Saint John, in and by the charter of the said city". On the other hand, it provided that the provisions of the Act would apply to the Saint John pilots by providing "that the pilots which shall be appointed by the said common council shall be entitled to the same fees, perquisites and privileges, that any pilots appointed by virtue of this Act are entitled to".

The 1786 Act was first amended in 1788 to remedy the non-applicability of the Act in the County of Northumberland due to the fact that this county was not provided with Justices of the Common Pleas (50 George III, An Act to continue and amend an Act intituled "An Act for regulating Pilots"). The Act was further amended in 1817 to authorize the Justices to cancel the licence of a pilot reported to them by the wardens and who was proven guilty of improper conduct (57 George III, An Act in addition to an amendment of an Act intituled "An Act for regulating Pilots").

Under the impact of the increased trade of the province, the pilotage legislation was found to be inadequate and in 1821 a new Act was passed entitled "An Act to make more effectual regulations relating to Pilots within this Province" (2 George IV c. 6) (Ex. 1460(b)) revoking the 1786 Act and its two amendments. The new Act maintained the same basic organization but the higher authority became the Justices of the Inferior Courts of Common Pleas in each county. It restricted the profession of pilot to residents of the province. The main features were the official recognition of apprenticeship, piloting by apprentices, and making solvency a prerequisite to piloting. Every pilot owning a pilot boat of not less than eight tons burden was entitled to have three apprentices. After three years of apprenticeship, an apprentice (who was indentured for five years) was entitled to pilot any ship at the request and for the benefit of his master and could not be superseded when so doing by any branch pilot, provided he was then at least 18 years of age, had been found qualified by the Port Wardens and his master had met the solvency requirements on his behalf. The Act also innovated by requiring a pilot to establish his solvency. Before receiving his licence, a pilot was to "enter into recognizance to His Majesty, before one or more of the said Justices, in the sum of one hundred pounds, with two sufficient sureties in

the sum of fifty pounds each, well and faithfully to discharge the duties of his office as Branch Pilot, in such County, and to obey all such regulations as shall be made as aforesaid, under and by virtue of this Act". The Justices, together with the wardens, were given powers to make regulations "for the better government of the said Pilots", that is, concerning the manner in which the pilots should govern themselves in the exercise of their free profession. The term "government" in the same meaning is still found in sec. 329 C.S.A. (vide Part I, p. 273).

The Act made a further distinction between penal jurisdiction and re-appraisal jurisdiction. While the penalties for any breach of regulation were to be recovered before two Justices of the Peace who had no power whatsoever over the licence of offending pilots, the Pilotage Authority, i.e., the Justices of the Inferior Courts of Common Pleas acting in their pilotage capacity, independently of any penal action, had the power, upon a complaint being laid and proof made under oath, to convict a pilot of refusal, neglect or other improper conduct and, as a result of such conviction, to suspend or cancel his licence. However, they had no power to impose either pecuniary punishment or imprisonment.

Furthermore, with regard to the pilots of Saint John, the Act contained a proviso to the effect that nothing contained therein was to interfere with the regulations governing pilots in the city of Saint John. It would appear, however, although the subject is not covered in the Act, that these pilots would continue to benefit from the various advantages granted to pilots.

In 1836, "An Act to explain, amend and in addition to an Act, intituled: "An Act to make more effectual regulations relating to Pilots within this province" was enacted (6 William IV c. 20). This Act confirmed the right of the Justices of the Inferior Court of Common Pleas to suspend or cancel the licence of a pilot in the circumstances mentioned in the Act of 1821 and made it an offence to be tried before two Justices of the Peace for a pilot to act as such while so deprived of his licence, under pain of a fine not exceeding ten pounds (Ex. 1324, p. 326).

In 1837-38, the 1821 Statute was amended to provide for some specific legislation regarding pilotage in the County of Charlotte (1 Victoria c. 29). The pilotage legislation regarding the County of Charlotte was to be revised in 1863 (26 Victoria c. 26) and in 1872 by a federal Act of Parliament (35 Victoria c. 43). This special legislation was abrogated by the 1873 federal Pilotage Act following which the pilotage organization in the Charlotte County was established as a Pilotage District by Order in Council passed on April 2, 1874. It was abrogated on February 25, 1960, after being dormant and inoperative for many years.

The 1821 Act was further amended in 1844 (7 Victoria c. 39) to provide for the removal of port wardens and to clarify the procedure of appointment of pilots (Ex. 1324, p. 327).

In 1854, general pilotage legislation was incorporated in the revised statute where it became volume I, title VIII, chapter 64, section 1, subsection 14, entitled "For the Government of Pilots and for Fixing the Rates of Pilotage". The main change was that pilotage jurisdiction was transferred to the County Court of General or Quarter Sessions of the Peace.

In 1861, 24 Victoria c. 16 provided for the relief of any pilot carried away against his will by fixing his remuneration at two dollars per day plus cost of living and passage back home (Ex. 1324, p. 327).

During that time, the charter of the city was amended once on the subject of pilotage. In 1840, the powers of the Corporation of the city of Saint John over pilotage were increased. The Act entitled "An Act to extend the jurisdiction of the Corporation of the City of Saint John, for the regulation of the rates of Pilotage beyond the limits now prescribed by charter" (3 Victoria c. 70) provided that the common council formed under the city charter would have the power "to make laws and ordinances for the regulation of branch pilots of the port of Saint John in respect to rates of pilotage to be taken by them as distance money, extending to such parts of the Bay of Fundy in connection with the Harbour of Saint John as they shall deem expedient, . . .". This Act was to be in force for only three years but in 1862, by 25 Victoria c. 7 it was revived and made perpetual.

Because the charter does not contain actual pilotage legislation but merely empowers the municipal authorities to make the necessary legislation by regulations, that part of the city by-laws dealing with pilotage is, therefore, the equivalent of provincial legislation for Saint John Harbour. It is very similar to the provincial legislation, but also contains special provisions to meet local requirements as appears in the 1850 Pilotage By-law of the city of Saint John (Ex. 1324, pp. 319-323) whose main features were as follows:

- (a) The main prerequisites to become a pilot were a five year uninterrupted apprenticeship followed by two foreign voyages to Europe in a square-rigged vessel, to be and remain a resident of the city, to have successfully passed an examination as to competency before a pilotage Board of Examiners and to be "the owner of a good and sufficient boat". There was no solvency requirement.
- (b) The payment of dues was compulsory for voyages inward and outward (but not movages) provided the ship was spoken to before reaching Partridge Island; ships belonging to the port were exempted; the same applied to outward voyages provided service was offered after the ship had obtained its clearance from the Customs and before being under weigh.
- (c) For tariff purposes, the approaches to the port were divided into five large sectors called "first distance, second distance etc."
- (d) Coasting vessels, unless square-rigged, steamboats and vessels drawing under six feet of water were also exempted.

- (e) During his first year, a pilot was limited to ships drawing less than 12 feet of water.
- (f) To encourage pilots to own larger boats, those having a boat of not less than 15 tons were allowed to have two apprentices who could pilot for their master ships drawing eight feet after three years of apprenticeship, and ten feet after four years, provided the apprentice had successfully passed an examination on competency.

(2) 1867-1968

When the Province of New Brunswick joined Confederation in 1867, jurisdiction over pilotage passed to the Federal Government. The first Pilotage Act, which was passed in 1873, abrogated all provincial legislation in this matter, i.e., that part of the New Brunswick revised statutes dealing with pilotage and also that part of the Saint John city charter as amended that gave the city of Saint John powers and jurisdiction in pilotage matters in and beyond the port of Saint John. It also abrogated the federal Act of Parliament that had been passed the year before regarding pilotage in the County of Charlotte.

(3) ST. JOHN PILOT COMMISSIONERS (1873-1918)

In the 1873 Pilotage Act, pilotage in the port of Saint John was dealt with as a case of exception together with Halifax, Quebec and Montreal. The provisions of general application of the Act applied to the pilotage organization of Saint John except when otherwise provided. These specific provisions were gradually withdrawn and the last remnants were abrogated by the 1934 C.S.A.

- (a) The Pilotage District of Saint John became a statutory district, i.e., it was created by the Act itself and, therefore, could not be abrogated except by an Act of Parliament. However, the Governor in Council was made responsible for fixing its limits and the District could not become effective until this was done.
- (b) Pilotage jurisdiction was withdrawn from the city of Saint John and entrusted to an *ad hoc* Corporation created by the Act for that purpose and composed of representatives of local interests and government appointees called "The St. John Pilot Commissioners" (secs. 12 to 15). The Corporation was composed of seven members, two to be appointed by the municipal authorities, two by the Saint John Board of Trade and three by the Governor in Council. The city and the Board of Trade had to elect their representatives within 14 days after the coming into effect of the Act, i.e., before January 15, 1874; the Federal Government had to make its three

appointments before January 31, 1874. The same organization was given to the Halifax District. The municipal authorities of the city of Saint John and the Board of Trade appointed their representatives in the prescribed time (as did the city of Halifax and the Board of Trade of Halifax) but the Government failed to appoint its representatives in time, and, therefore, on account of the provision of the Act which left no alternative, this failure could not be remedied except by an amendment to the Act. This was the reason for the first amendment to the Pilotage Act which occurred in 1874 (37 Victoria c. 26) to delete the time limit for the Government to appoint its representatives. The amendment was assented to May 26, 1874, and on June 16, 1874, the Government, in the same Order in Council, P.C. 789, which fixed the limits of the new District (Ex. 1460(c)), made the necessary appointments, thereby rendering the new pilotage organization operative. These provisions of the Act were further amended in 1882 (45 Victoria c. 32, sec. 1) to cause the post of any member to become automatically vacant after an uninterrupted twelve-month absence of its incumbent. The Corporation of "The St. John Pilot Commissioners" became dormant and inoperative when it was superseded in 1918 by the Minister of Marine and Fisheries as Pilotage Authority (Order in Council P.C. 3135 dated December 21, 1918) (Ex. 1460(u)) a move which had been made possible by a 1904 amendment to the Act (4 Edward VII c. 29, sec. 1). However, despite the factual situation, the statutory provisions dealing with the Corporation were reproduced in the 1927 Revised Statutes. They were abrogated when not reproduced in the 1934 Canada Shipping Act.

- (c) The Act (sec. 16) provided for the appointment of a Secretary and Treasurer who was to be paid an annual salary of not more than \$800 payable out of the Consolidated Revenue Fund of Canada. There was also a similar provision for the District of Halifax (sec. 11). It was soon realized that this was a dangerous precedent and these provisions were abrogated in 1875 (38 Victoria c. 28, sec. 3) and replaced by what is now sec. 328 C.S.A. giving the Pilotage Authority of each District (except Quebec) the right to appoint a Secretary and Treasurer and to pay his salary and other District operating expenses out of pilotage revenues, provided such expenditures are authorized by the Governor in Council (vide Part I, pp. 110 and ff.).
- (d) The Saint John District Pilotage Authority (also Quebec, Montreal and Halifax) was deprived of the power to grant pilotage certificates to Masters and mates (subsec. 18(4)). The 1934 C.S.A. dropped

this restriction thereby granting the Saint John Pilotage Authority the right to issue pilotage certificates, provided it made the necessary regulation, a right which it never used.

- (e) The Act made the payment of dues compulsory in the Saint John District (as well as in Quebec, Montreal and Halifax) (sec. 57). (For the subsequent history of the provision vide pp. 28 and 29.)
- (f) At first, the 1873 Pilotage Act contained no relative statutory exemption (Part I, p. 222) except in the case of the Saint John District. With regard to the provision dealing with "ships registered in the Dominion of Canada" (subsec. 57(5)) which were exempted only if of not more than 250 tons registered tonnage, the Saint John Pilotage Authority was the only one authorized to modify this statutory exemption by regulation. However, in 1875 (38 Victoria c. 28) subsec. 5 was deleted together with the proviso regarding the Saint John District and instead all Pilotage Authorities were empowered to exempt, by regulation, ships of any nationality over the 80 N.R.T. absolute statutory exemption up to a maximum of 125 N.R.T. In addition, in 1922 (12-13 George V sec. 2) the Saint John Pilotage Authority was authorized to vary the statutory unlimited exemption to steamships engaged in coastal trade, a power which was extended to all Districts except Montreal in the 1934 C.S.A.

As stated above, the Governor in Council's P.C. 789 dated June 16, 1874 (Ex. 1460(c)) contained all that was required to make the District operative.

- (a) It purported to create the District. This part of the P.C. was never repealed nor was the creation of the District ever treated thereafter in any other Order in Council. This raises the question whether the Saint John District legally exists since the coming into effect of the 1934 C.S.A. (vide p. 28).
- (b) It fixed the District limits some 130 miles seawards as follows:

"The limits of which district shall embrace the Harbour of Saint John and shall extend to a bound ranging with Mount Desert and Cape Sable Seal Islands, bearing northwest and southeast".

This part of the Order was first amended the following year to extend the limits to include the Harbour of Musquash (Order in Council P.C. 182 dated March 1, 1875 (Ex. 1460(d))). It was to be further amended twice in 1959 and in 1964. The provision of the 1920 By-law, reproduced in the 1934 By-law, which purported to alter the District limits was illegal, being beyond the regulation-making power of the Pilotage Authority.

- (c) It completed and approved the membership of the corporate Pilotage Authority by confirming the appointment of the four members designated by the city of Saint John and by the Board of Trade of Saint John and by naming the three Government appointees. This part of the Order in Council was modified from time to time as it became necessary to fill vacancies until the Corporation became *functus officio* when it was replaced in 1918 by the Minister of Marine and Fisheries as Pilotage Authority (Order in Council P.C. 3135 dated December 21, 1918, Ex. 1460(u)).
- (d) It appointed the Secretary and Treasurer of the Corporation and fixed his salary at \$800 per annum to be paid out of federal funds. This part of the Order in Council became inoperative when the Act was amended in 1875 to make the appointment and remuneration of Secretary and Treasurer a District responsibility (38 Victoria c. 28).
- (e) It also purported to make the payment of dues compulsory, a matter which was already covered in the Act and over which the Governor in Council had no jurisdiction. This part of the Order in Council was therefore null and of null effect (vide p. 28).

The pilotage Authority's regulations may be divided into two periods:

- (a) the regulations of the St. John Pilot Commissioners from 1875 to 1920, the period of the free enterprise system;
- (b) the regulations of the Minister as Pilotage Authority from 1920 to date, the period of fully controlled pilotage.

The new Pilotage Authority immediately prepared District By-laws which were approved by Order in Council 1333 on November 4, 1875 (Ex. 1460(e)). This set of By-laws was to remain in force until abrogated in 1920 by a new General By-law made by the new Pilotage Authority. However, it was amended many times in the interval. These regulations retained most of the provisions of local character in the superseded city of Saint John regulations. The main features of the pilotage organization provided in these regulations are as follows:

- (a) The principle of free enterprise was retained but it was limited to partnerships of pilots through the co-ownership of pilot vessels which became the basis of the pilotage organization. These partnerships were provided for in the Act where they were called (as they still are, subsec. 329(c) C.S.A.) "companies for the support of pilot vessels" (vide Part I, p. 287). The By-law provided that as a prerequisite to piloting a pilot must be the co-owner of not less than four tons of a duly licensed pilot vessel of not less than thirty registered tons, i.e., the type of pilot vessel considered necessary to

provide adequate pilotage service in the extensive approaches to the Harbour of Saint John under the prevailing conditions. Since the cost involved was beyond the financial means of any individual pilot, the company system was the only adequate solution short of fully controlled pilotage. These pilot vessels were required to cruise through the pilotage approaches to the harbour vying for pilotage *clientèle*, the first pilot vessel to approach an incoming ship being entitled to place a pilot on board. One of these pilot vessels was the schooner *David Lynch*. The Register Book shows that the vessel was registered at Saint John April 12, 1894, in the name of five branch pilots who were listed as joint owners. During the next ten years there were forty transactions affecting ownership and between 1904 and 1920 seventy-five more transactions transferring shares or arranging mortgages. On June 4, 1920, when the Minister of Marine as Pilotage Authority acquired title to the schooner, the vessel was owned by three pilots.

- (b) Ships inward bound had to be boarded from one of such licensed pilot vessels except on special occasions at the request of the Master or owner of the ship and with a specific written permission from the Secretary of the Pilotage Authority to board in another way. This document had to be carried by the pilot and turned over to the Pilotage Authority for filing upon completion of the pilotage task.
- (c) On board the pilot vessel, pilotage tasks for ships inward bound were shared according to a tour de rôle system, the first in turn being obliged to take the first ship spoken to unless he exchanged turn with another pilot.
- (d) The dues earned by the members of the company were not pooled, each pilot being entitled to what he had personally earned less a deduction of 2½ per cent retained by the Authority for the Pilot Fund.
- (e) The By-law did not make any other mention of the Pilot Fund except to say that it was to be expended as provided in the Act. It was a true Pilot Fund (vide Part I, C. 10).
- (f) To become a pilot, the applicant had to be a resident of the city or the county of Saint John, to have made two return voyages to Europe as a seaman, to have served an apprenticeship on board a licensed pilot vessel for at least five years and to have passed successfully an examination on his skill and knowledge before a Board of Examiners appointed by the Pilotage Authority. Apprentices could no longer be used as pilots. Licences were permanent.
- (g) Pilot vessels were to be licensed from year to year and the licensing prerequisites were laid down in the By-law: seaworthiness, carrying

the number of boats needed for the conveyance of pilots from pilot vessels to ships and also for safety purposes, carrying other necessary life-saving equipment, and appointment by the pilots from their number of a Master for the vessel. The licence was withdrawn when the vessel no longer met the requirements, thus bringing the whole operation to a standstill until the situation was corrected.

- (h) For the purpose of fixing the rates the division of approaches to the harbour into five "distances", now called "districts", was retained. The farther out boarding took place, the higher the rates. The first district extended to a line from Partridge Island to Musquash, while the fifth district extended to a line running from Mount Desert to Cape Sable Seal Islands, i.e., the outside limit of the Pilotage District.
- (i) The voyage rate was based, as it had always been, on draught. It varied from \$1 per foot of draught in the first district to \$2.25 in the fifth district for the inward voyage. There was only one rate of \$1 per foot draught for the outward voyage from the Harbour to beyond Partridge Island. The By-law provided a rate for pilotage down the Bay of Fundy at \$2 per foot over and above the \$1 harbour pilotage outward.
- (j) The By-law also provided rates for movages, later to be referred to in the By-law as "rates for transporting vessels in and about the Harbour of Saint John", through a scale based on tonnage. For instance, a vessel over 400 tons paid \$4 for a movage plus 25¢ for every 50 tons over 400.
- (k) The statutory exemption for Canadian ships was lowered from 200 to 150 tons. All vessels outward bound were also exempted beyond the first boarding District. Movages did not come under the compulsory system.

Until this By-law was repealed in 1920, it was amended at least 16 times (Exs. 1460(f) to (t)); a number of the amendments varying the rates and the exemptions. The main features of the various amendments were as follows:

- (a) On May 20, 1875, following the abrogation of Sec. 16 of the Act, the Pilotage Authority by resolutions approved by the Governor in Council on July 9, 1875, reappointed the same person as its Secretary and Treasurer and fixed his salary at \$800 per year, to be paid out of pilotage dues and fees for licences. Similar authorization was obtained from time to time, e.g., Order in Council P.C. 1560 of 1917 when his salary was raised from \$1,000 to \$1,200 (Ex. 1460(t)).

- (b) The 2½ per cent compulsory deduction for the Pilot Fund was cancelled and instead the outward pilotage rate was raised from \$1 to \$1.25, the additional \$25¢ being retained by the Authority to pay the salary of its Secretary and Treasurer and its other operating expenses, and any surplus at the end of the year becoming part of the Pilot Fund (Order in Council P.C. 625 dated July 9th, 1875, Ex. 1460(f)).
- (c) Pilot's licences were limited to one year and were renewable annually for a licence fee of \$5 (Order in Council P.C. 625, dated July 9, 1875, Ex. 1460(f)). This, no doubt, was merely a device to raise money to pay District expenses since licence fees were to be used for that purpose according to the 1875 amendment of the Act, but it was illegal because, at that time, the Act did not authorize the Pilotage Authority to limit the duration of licences. Such power was not introduced into the Act until 1882 when an amendment (45 Victoria c. 32) stipulated that the term could not be less than 2 years. Furthermore, it was specifically laid down that this power did not extend to the Pilotage Authority of Saint John and it was only in 1927 (sec. 434) that it was made applicable to all Districts.
- (d) On April 23, 1878 (P.C. 314, Ex. 1460(g)), a form of grading in pilots' licences was introduced. The amendment provided that at the option of the Pilotage Authority a first licence could be granted limited to vessels not exceeding 500 tons registered nor 12 feet draught of water.
- (e) On March 28, 1894 (P.C. 840, Ex. 1460(l)), the Governor in Council approved the Pilotage Authority's regulations providing for repayment to the members of the Authority of expenses necessarily incurred in the discharge of their duties to a maximum of \$100 per member and \$200 for the Chairman for their expenses in any one year. The legality of this blanket authority was questioned by the Saint John Board of Trade in the Brief they presented to the Smith Commission of Inquiry. (Ex. 1324, pp. 302 and 303). This provision was enacted to conform with the general order issued in 1889 by the Governor General (vide p. 173).
- (f) On May 1, 1901 (P.C. 895), the pilots were required to provide the Master of the vessel they were piloting inward with a copy of the quarantine regulations, to see that the quarantine flag was displayed if *pratique* was required, and, to hold the vessel in the quarantine district until the inspection was carried out, under pain of paying the vessel the expenses it would be put to by a pilot's failure in these respects and this to the extent of the pilotage dues payable (Ex. 1460(m)).

- (g) On November 28, 1914 (P.C. 2968), the Chairman and the Secretary of the Pilotage Authority were empowered to order "the captain or the Pilot in charge of any pilot boat in commission" to "cruise the districts in the Bay of Fundy for vessels", under pain of seeing the licence of their pilot vessel withdrawn or suspended. The amendment also provided for the suspension by the Pilotage Authority on complaint of the captain or a majority of the pilots of a pilot vessel of any pilot who refused to contribute and pay his share according to his ownership in the licensed pilot vessel for the upkeep, provisions, supplies, wages, etc., necessary for cruising (Ex. 1460(s)).

During the period 1873-1920 the pilotage organization of Saint John was subject to a number of public investigations. In general, the shipping interests and the Board of Trade mainly opposed the compulsory system while at the same time arguing that the costs of pilotage were too high.

(4) DEPUTY MINISTER WILLIAM SMITH'S INVESTIGATION 1891
(Ex. 1530(b))

Following complaints made by local interests, in January, 1891, the Deputy Minister of Marine held an investigation at Saint John to determine whether vessels up to 250 N.R.T. should be exempt in that District. It was stated that the payment of dues was an improper and unwarranted imposition on coasters regularly trading these waters, that the then existing exemption up to 125 N.R.T. had caused schooners to be built "small broad and shallow" at the expense of safety in order to come under the 125 N.R.T. exemption provided in the By-law and to escape compulsory payment. In the name of the Pilot Commissioners who did not attend the inquiry, the Secretary of the Pilotage Authority stated that the choice pilot system was built up on tips and rebates and had to be done away with. The pilots, who were then 31 in number, opposed the extension of exemptions on the ground that it would result in a substantial loss of their revenue which would oblige them to quit the service.

The case against compulsory payment must have been unconvincing since no change was made either in the Act or in the By-law, except in 1892 (55-56 Victoria c. 20) by raising the absolute statutory exemption for small ships of any nationality from 80 N.R.T. to 125 N.R.T., thereby depriving the Pilotage Authority of the powers to lower the existing exemptions as had been done by regulation.

(5) SMITH REPORT 1895 (EX. 1324)

In 1895, Captain William H. Smith, R.N.R., assisted by Captain Bloomfield Douglas, R.N.R., carried out an investigation into the pilotage system at Saint John after the city Board of Trade had formally requested the Government to abolish compulsory pilotage dues in the District. After holding public hearings, their main recommendations were that the compulsory system be abolished, that the number of pilots be reduced from 28 to 20 in order to reduce costs and that a tonnage tax be levied to alleviate the temporary financial burden of the pilots thus displaced.

A form of controlled pilotage was also recommended through a suggestion that the boarding districts be replaced by a few well situated boarding stations where ships would be certain to find pilots and that the number of pilot vessels be reduced to three to which all the pilots would belong.

The Report showed how ineffectual and inequitable the compulsory payment system was with exemptions granted for many reasons unrelated to the safety of navigation. It pointed out that the system of boarding areas (districts) extending over a great expanse of water was both inefficient and detrimental to the safety of navigation. A ship navigating through these waters when visibility was low was obliged to proceed slowly for fear of colliding with pilot vessels and yet when a Master needed a pilot he could not know exactly where to find one in that vast area.

With regard to marine insurance and the possibility of insurance on shipping being affected by abolishing compulsory pilotage or by the extension of the principles of exemption, the investigation had revealed that the underwriters were content to leave the employment of pilots entirely to the option of the owners or Masters of ships. The Commission was of the opinion that the partial or complete abolition of compulsory pilotage dues would not affect insurance rates on shipping, especially because it was known that duly qualified pilots were available to assist Masters as required.

The Report proposed that there be direct Government control over the activities of the Pilot Commissioners by requiring that all their decisions be subject to the approval of the Minister of Marine and Fisheries. It further suggested that their number be reduced from 7 to 5.

The Commission recommended that pilotage dues be levied on registered tonnage instead of draught, pointing out that local interests and some of the pilots had so recommended.

There were also a number of conclusions regarding qualifications of pilots, exemptions and tariff.

It would appear that the inquiry served little purpose at the time. In view of the nature of the pilotage organization permitted under the Act, the special status of the Pilotage Authority of Saint John and the special statutory provisions governing its organization, an amendment to the Act would have been required to implement most of the recommendations. This was not done nor was there even any change in the By-law.

(6) ROBB REPORT 1918

In 1918, the pilotage service in Saint John was studied by a Royal Commission, under the chairmanship of Mr. Thomas Robb, whose mandate also included the Pilotage Districts of Miramichi, Sydney, Louisburg, Halifax, Montreal and Quebec. Its Report (Ex. 1328) contained three main recommendations for Saint John:

- (i) the Minister of Transport to replace the local Commission as Pilotage Authority;
- (ii) the system of boarding districts to be abolished and instead the limit of pilotage waters to be set some 8 miles seaward of Partridge Island;
- (iii) fully controlled pilotage to be established by replacing the two pilot boats then in operation with a steam pilot tender provided by the Authority.

At that time, the principal causes of difficulty were disputes between Masters and pilots and quarrels among the pilots themselves. The Report considered the new system "would also put an end to the disputes which have arisen in connection with the competitive arrangement which now exists, whereby a ship may be called upon to pay two pilotages, owing to not taking a pilot who claims to have offered his services first, and not being seen by the ship".

The two pilot vessels were the schooners *David Lynch* and *Howard D. Troop*, the latter 105 feet overall, beam 23 feet, 69 tons net. They were owned by two groups of pilots who competed for pilotage clients. It is reported that one pilot lost his licence because the Pilotage Authority was unwilling to grant him "a flag share" when the mortgage on his shares in one of the pilot vessels was foreclosed. A "flag share" was a licence permitting him to use a small boat for boarding vessels which was not allowed under the existing By-law.

When the Report was made there were 14 branch pilots and four apprentices whose main occupation was to man the pilot vessels during their five-year apprenticeship. It had been the practice for the pilots on board each pilot vessel to pool their pilotage earnings, sharing being based on availability for duty. However, this was not provided for in the By-law.

The Robb Commission's recommendations were all implemented.

(7) MINISTER AS PILOTAGE AUTHORITY (1918 TO DATE)

In 1904, the Act had been amended to permit the Minister to become Pilotage Authority for any District, provided the Governor in Council considered the appointment was in the interest of navigation and it was recommended by local interests. On December 21, 1918, Order in Council P.C.

3135 appointed the Minister of Marine and Fisheries Pilotage Authority in lieu of the St. John Pilot Commissioners. The Order in Council states that such a move had been recommended by the Board of Trade of Saint John and by the Robb Royal Commission (Ex. 1460(u)).

The other recommendations of the Robb Commission were implemented by the Minister as Pilotage Authority when a new set of By-laws was approved in 1920.

When the Minister became Pilotage Authority, basic changes were made in the pilotage organization at Saint John. As recommended by the Robb Commission, this Pilotage Authority exercised full control over the organization of pilotage and the provision of services under the local management of its representative, the Superintendent of Pilots, but with actual direction from Ottawa. Pilots became *de facto* employees assigned to a tour de rôle system and paid a share of the net District earnings. A superannuation plan was instituted. Operating the pilot vessels became a responsibility of the Pilotage Authority until it was taken over by the Government in 1959.

During that period, there were four General By-laws in 1920, 1934, 1957 and 1960.

On August 25, 1920, by Order in Council P.C. 2013 approval was given to a new General By-law abrogating the previous one. Its main features were as follows:

- (a) It purported to modify the District limits in implementing the Robb Commission's recommendation regarding boarding areas. This was obviously the wrong procedure and, therefore, illegal as *ultra vires* of the Pilotage Authority's regulation-making power.
- (b) The system of boarding districts was abolished and a single rate was provided for voyages based on draught of water which differentiated between sailing ships and steamships, the latter paying a higher rate. In addition to movages, new items were added: a detention charge of \$5 per day after three hours, and rates for compass adjusting and trial trips.
- (c) Pilots were recruited in two ways:
 - (i) as formerly, through apprenticeship with practically the same prerequisites including the requirement to serve on board the Pilotage Authority's pilot vessels;
 - (ii) from qualified, experienced mariners between 30 and 50 years of age holding certificates of competency as Master foreign-going or Master coasting passenger trade in Canada who had served as such and had also passed a prescribed examination.
- (d) The first licence was probationary for six months; it was replaced by a permanent one after satisfactory service.

- (e) Temporary licences could be issued in case of emergency, the pilot so appointed being paid for his services a stated amount per day out of the Pilotage Fund as determined by the Minister.
- (f) The pilots were treated as *de facto* employees. Apart from being assigned to duty by the Superintendent, they were paid through a pool system and a ceiling was imposed on their salary. Seventy per cent of the pool money was shared among the pilots on the basis of availability for duty provided that the share, including the part deducted for the superannuation fund, did not exceed \$300 per month. The other 30 per cent was used to meet District expenses which consisted mainly of the cost of operating the pilot vessels. Any unexpended balance at the end of the year was shared among the pilots on the same basis, provided the aggregate total did not give any pilot a salary higher than \$300 per month.
- (g) The pilots were granted 21 days annual leave with pay and also sick leave with full pay, half pay and without pay.
- (h) A Pilots' Committee was established.
- (i) A superannuation scheme was created. The monthly compulsory contributions were to be fixed by the Minister after consultation with the Pilots' Committee.

This By-law was amended only once. The amendment consisted of imposing a 5 per cent reduction for a period of one year on all pilotage earnings except on movages and detention (P.C. 906 dated May 10, 1933) (Ex. 1460(w)).

This By-law was not only a departure from the practice that had been followed up to that time but was also in conflict with the only permissible type of organization that was then, and still is, lawful under the governing statute. Most of its new provisions were illegal.

On August 22, 1927 (P.C. 1698) the Governor in Council authorized the Minister of Marine and Fisheries to make a \$20,000 loan, interest free and to be repaid within 20 years, to finance the building of a "large and speedy auxiliary pilot vessel" that was needed "to maintain the Pilotage Service at Saint John, New Brunswick, consistent with the ever growing traffic and the best interests of the port and shipping". The funds were to be provided from the Parliamentary Appropriation "Administration of Pilotage"; the Government loan and the cost of keeping the vessel insured were to be guaranteed by the pilots' earnings against which they were to be a first charge (Ex. 1460 (w)(1)).

The 1934 General By-law (P.C. 3067 dated December 12, 1934, Ex. 1460 (x)) did not differ substantially. The main changes were:

- (a) the maximum permissible annual salary per pilot was increased to \$4,000;

- (b) any surplus at the end of the year which could not distributed should either be employed for the improvement of the service or be paid over to the Receiver General of Canada;
- (c) the pilot vessel was to be purchased by the Authority out of District revenues and owned by it;
- (d) a certificate of competency not lower than mate coasting was added to the prerequisites for apprentices;
- (e) the probationary period was extended to one year;
- (f) the provision regarding emergency licences was deleted;
- (g) the superannuation benefits were raised to \$35 per year of service;
- (h) various provisions were added to ensure the physical fitness of pilots.

This By-law was amended fourteen times before it was replaced in 1957.

The main amendment came in 1941. It abrogated the provision imposing a ceiling on the pilots' annual earnings (P.C. 3251 dated May 7, 1941, Ex. 1460(x4)). Many amendments concerned superannuation and contained provisions aimed at re-establishing the actuarial solvency of the Superannuation Fund.

In 1944, it was realized that seven of the licensed pilots of Saint John, who were authorized by their pilot licence to take charge of any ship for the purpose of pilotage, could not take command of the District pilot vessels because they did not hold a Master's certificate of competency as required by the Canada Shipping Act. The Government resorted to the War Measures Act to correct this anomaly by enacting that on account of their training, experience and local knowledge these seven pilots were authorized to take command of the pilot vessels in the same manner as other licensed pilots who held a certificate of competency (P.C. 6673 dated Aug. 25, 1944, Ex. 1460(x5)).

During the depression years in the thirties it became necessary to reduce pilotage rates in order to assist shipping but in 1948-1951 the Government took steps to encourage the pilots in Saint John, Halifax and Sydney by guaranteeing them a minimum annual remuneration through provision in the Department of Transport estimates for subsidies if required. It was considered that it was in the public interest to maintain the pilotage service in these harbours. In the event, these subsidies were never used because the pilots' remuneration did not fall below the stipulated minimum but they did provide a source of reassurance. (Vide Part I, p. 120.)

(8) SLOCOMBE REPORT

Captain F. S. Slocombe's Report, dated March 4, 1947, includes the following information regarding the Saint John Pilotage District:

Special Features of the District

"In addition to the difficulty occasioned by fogs in summer and vapour in winter in the Bay of Fundy, Saint John Harbour itself can be said to be a dangerous harbour in which to navigate. The tidal currents, in alternate conjunction with and opposition to the Saint John River current, present an extreme hazard, necessitating a high degree of skill and local knowledge on the part of the pilots. The current is always across the end of the wharves, and has been logged by port engineers at seven knots. The rise and fall is from twenty-four to twenty-eight feet. On flood tides the current at three fathoms depth is running in, while the surface current is running out. The well known reversing falls are a feature of the harbour, and these were navigated frequently during the war years, although not so frequently now.

An example of the disastrous results which may almost instantaneously follow and error in judgment or a failure of equipment was the stranding and subsequent total loss of the S.S. *Beaverhill* in 1944." (p. 52).

Conditions of Service

"There are ten active pilots... considered the normal complement for peacetime.

In wintertime, (the busy season) five pilots take the incoming ships and five the outgoing, changing over every Monday morning. The five inward pilots remain on the pilot boat for the week, while the outward pilots live at home, on call for outgoing ships and for movages in the harbour. After they have taken a ship out the boat returns them to the harbour.

The pilot boat lies at Reed's Point Wharf, within the harbour, where there is a room maintained by the pilots, with telephone connections. The next pilot on turn is in charge of the boat until approaching an incoming ship, when he hands over to his successor on turn, who lays the boat alongside the ship for him to board."

"In a normal winter it is expected that each pilot will on an average do at least one job every day. It usually takes about four hours to meet a ship and dock her." (p. 53).

Representations of Pilots

The pilots complained that their income was low and proposed one of three remedies:

- (i) increase the rates from \$3 to \$4 per foot draught;
- (ii) the Government take over the operating expenses of the pilotage service;
- (iii) grant a subsidy of \$12,000 per year.

Shipowners and agents were opposed to any increase in pilotage dues because they were not optimistic about the future of the port and because they felt the Government should do more to assist the pilots.

Appendix 4 to the Saint John Report is a history of pilotage rates since 1934 with references to the relevant Orders in Council.

(9) AUDETTE REPORT

A Committee under the Chairmanship of Mr. L. C. Audette reported in November, 1949, on pilotage matters in various Districts. The recommendations for Saint John were:

- (i) That the Department of Transport should be responsible for the pilot vessels. Since this service was provided in some Pilotage Districts, all Districts should be treated equally.
- (ii) By a majority decision the Committee recommended against a guaranteed minimum income.
- (iii) That the requirement for apprentice pilots to serve four years in a pilot vessel should be abolished on the ground that such service does not constitute adequate training. In lieu, it was recommended that the apprentices perform certain pilotage operations with licensed pilots. It was considered that the existing requirements for sea experience and class of certificate should be retained.
- (iv) With reference to the Canada Shipping Act, sec. 338 (present sec. 346), the majority of the Committee agreed with the Saint John pilots that "Government ships engaging in commercial enterprises should not be exempt from the compulsory payment of pilotage dues".

Following the Audette Report, the Department of Transport was authorized by Order in Council P.C. 120/422 of January 25, 1951, to assume the cost of operating the Districts of Sydney, Saint John, Halifax and British Columbia and of operating the pilot vessel service in them (Ex. 52).

In 1950, by an amendment to sec. 338, 1934 C.S.A., the absolute exemption enjoyed by Government ships was withdrawn for ships operated and managed by a Crown agency (vide p. 270).

On June 20, 1957, a new General By-law (P.C. 1957-874) was approved. It remained in force until replaced in 1961 by the current By-law. This General By-law did not reproduce the description of the limits of the District as allegedly fixed by the General By-law of 1920. On this occasion, the situation was legalized by enacting a Governor General's Order dated March 5, 1959 (Order in Council P.C. 1959-272, Ex. 1460(ee)) which made the seaward limit of the District a straight line joining two geographical points. It abrogated the description contained in the previous Order in Council (P.C. 182 of March 1, 1875). The new description reads as follows:

"The Pilotage District of Saint John, New Brunswick, comprises the waters of Saint John Harbour from a line joining Green Head and Bear Head on the Saint John River and the waters to seaward as far as a line joining Split Rock (Musquash Head) and Cape Spencer".

The new General By-law caused the following basic changes:

- (a) apprenticeship became the sole source of pilot candidates;
- (b) the minimum requirement became a certificate of competency as first mate of a steamship in the home trade or as second mate of a foreign-going steamship;
- (c) apprenticeship was to be served in the company of licensed pilots on pilotage assignments.

This By-law was amended once in 1959 (P.C. 1959-1603, Ex. 1460(cc)). To meet the requirement of the Treasury Board contained in P.C. 1959-19/1093 (Ex. 52), a pilot boat charge of \$10 was added. It was to be paid over when collected to the Receiver General.

The 1961 General By-law (Ex. 17) abrogated and replaced the 1957 General By-law. It is analyzed on pp. 32-33. The main change was the abolition of the apprenticeship system and a return to the practice of recruiting pilots from experienced mariners with actual experience of navigation in the District.

In 1964, the District limits were again altered as indicated on p. 30 in response to a complaint made by the pilots before this Commission (Ex. 1460(dd)).

Chapter B

BRIEFS

Three briefs concerning the Saint John District were filed by:

- (1) The Pilots of the Pilotage District of Saint John (B-1 and B-57, Ex. 39 and Ex. 1438).
- (2) Kent Line Limited, Irving Oil Company, Limited, and Irving Refining Limited (B-21, Ex. 412).
- (3) Saint John Steamship Committee of the Shipping Federation of Canada (B-2, Ex. 60A).

The reference after each Recommendation shows where the question raised is dealt with in the Report.

(1) SAINT JOHN PILOTS' BRIEF

The brief was presented by the Pilots' Committee on behalf of the nine pilots in the District. They are not grouped in any association or corporation.

Recommendations

The pilots' recommendations, as per their brief and its schedule "D", are as follows:

- (a) pilotage service in Saint John harbour is a necessity (p. 138);
- (b) the pilot boat now in service is suited to local conditions and any future boats should be of a similar type; it should be equipped with a recording depth sounder (p. 78);
- (c) draught should remain the basis for calculating tariff with a surcharge for "supertankers" of one cent per ton over 8,000 tons (p. 123);
- (d) there should be no change in the method of handling the pilotage fund (pp. 128 and ff.);
- (e) the pilots' strength should be increased by one, from nine to ten (pp. 74 and ff.);
- (f) the pension scheme should remain as at present (pp. 135 and 136);
- (g) the District limits should be extended (p. 57 and pp. 137 and 138);
- (h) the system of aids to navigation should be improved.

(2) KENT LINE LIMITED, IRVING OIL COMPANY, LIMITED
AND IRVING REFINING LIMITED'S BRIEF

These are three companies in Saint John owned by Mr. K. C. Irving. They have a considerable interest in navigation and pilotage.

Kent Line Limited is the local agent of the California Shipping Company which owns or charters "supertankers", *inter alia*, *Hydroussa* (12,907 NRT), *George A. Davidson* (15,743 NRT) and *Petro Sea* (20,035 NRT), and also of the Irving Oil Company Limited which is the owner of the following tankers: *Irvingdale* (6,000 NRT), *Irvingglen* (8,000 NRT) and *Irvingstream* (10,000 NRT).

Irving Refining Limited operates a crude oil refinery situated in Courtenay Bay. The crude oil is brought in by the tankers of California Shipping Limited and most of the finished products are shipped in Irving Oil Company Limited tankers. This company is totally dependent upon water transportation.

Irving Oil Company Limited is the transport company for the finished products of the refinery.

The Irving interests also control many other corporations in Saint John, *inter alia*, "J. D. Irving, Limited" which owns tugboats for harbour and river work; "Saint John Shipbuilding and Dry Dock Company", situated in Courtenay Bay near the refinery and which has one of the biggest dry docks in Canada; and "Atlantic Sugar Refinery Co. Limited", situated on the main harbour.

Recommendations

- (a) that the proposed surcharge on "supertankers" should not be approved (pp. 121-123);
- (b) that pilots have no authority to select, engage or choose the tugboats to be used in handling ships (pp. 101 and ff.);
- (c) that the selection of a pilot for a particular ship or its movement should be the user's privilege (pp. 94 and ff.).

(3) SAINT JOHN STEAMSHIP COMMITTEE
OF THE SHIPPING FEDERATION OF CANADA'S BRIEF

The Shipping Federation of Canada, with its Head Office in Montreal, is composed mostly of shipowners and agents of ocean-going vessels on the east coast. The Saint John Steamship Committee is one of the regional committees and its Chairman in 1963, Mr. H. E. Kane, directed an agency in Saint John, New Brunswick, named H. E. Kane Agencies, Ltd., Steamship Agents and Chartering Brokers. The Committee represents the main shipping interests in Saint John.

Recommendations

The Committee's recommendations are in the form of a letter addressed to the Commission dated February 6, 1963, which advocates:

- (a) the establishment of a uniform system of pilotage routine, particularly in regard to designating the hours for berthing, departing and shifting from berth to berth (pp. 86-88);
- (b) the appointment of a qualified person to furnish information about the movements of vessels in the harbour (pp. 86-88);
- (c) the organization of a Central Agency to control harbour traffic and to determine where pilotage and tug service will be most efficiently employed (pp. 86-88).

Chapter C

EVIDENCE

1. GENERAL DESCRIPTION

(1) DISTRICT LIMITS

The Saint John Pilotage District as defined in P.C. 1964-19, dated January 10, 1964, comprises the waters of Saint John harbour and approaches as well as a portion of the Saint John River which empties into the harbour, including the Reversing Falls. The 1964 amendment to the limits came as a result of a recommendation made by the pilots before this Commission in order to make the legal limits agree with the factual situation. The seaward limit at that time was a straight line joining the same points, whereas the present limit extends further down the Bay to the apex of two bearings (vide p. 30). In schedule "C" of their brief the pilots stated that it was frequently necessary for the pilot vessel to go beyond the seaward limit in order to board incoming ships in heavy weather (Ex. 39).

(2) PHYSICAL FEATURES

The city of Saint John is situated on the north shore of the Bay of Fundy. Its harbour is formed by the mouth of the Saint John River which flows for some 450 miles through Maine and New Brunswick. The harbour is remarkable for extremely high tides which are reputed to have the widest range in the world; significant currents caused by the outflow from the Saint John River through the harbour and its approach channels, especially during the spring freshet; the Reversing Falls; exposed approaches, particularly when the wind is from the south; limited and varying depths of water both in the harbour and in the approach channels; and fog during the summer months.

The Nova Scotia (S.E. Coast) and Bay of Fundy Pilot (Fourth Edition—1966) (Ex. 38), contains the following observations:

"It is recommended that vessels should embark a pilot before entering Saint John Bay; during thick weather, the rapid tidal streams, particularly during freshets, render the navigation of the bay unsafe for vessels without local knowledge. Spring tides reach a range of over 30 feet..."

"No vessel, without local knowledge, should proceed northward of Partridge Island."

"Thick weather.—Anchorage.—Fogs occur somewhat frequently in the vicinity of Saint John, particularly in the early part of the day, from the middle of June till the end of August."¹

"Tidal streams.—During the thaw in April and May, the great volume of water discharging from Saint John River causes, in the harbour, a constant out-going surface stream to a considerable depth which at times attains a rate of 5 knots. With normal conditions, after the freshet, the surface currents, with rising tide, may be misleading. After half tide, rising, an outward surface flow may still be very evident, while underneath but coming nearer the surface as the tide continues to rise, a strong inward current may exist."

"Caution.—Depths.—Due to continuous silting, the dredged depth in Saint John Harbour are subject to change. Mariners should exercise due caution."

The main harbour channel requires little dredging: some was done in 1961 at the junction with the Courtenay Bay channel, some in 1960 at the Partridge Island shoal, and some in 1957 at the northern end of the main channel.

Silting is a more serious problem in Courtenay Bay. Maintenance dredging is done annually, both in the channel and inside the Bay, to a depth of 20 feet. The average siltation is 1.3 or 1.4 feet per year but it does not spread evenly throughout the Bay: the worst areas are at the southeast-southwest end of the breakwater and in the turning basin.

Silting of one foot per year of which the pilots were unaware, especially at the end of the breakwater in the Courtenay Bay channel, would be very dangerous to shipping. The pilots reported that in 1963 during a storm the end of the breakwater in Courtenay Bay silted up to three feet in 24 hours. Soundings are taken by the Department of Public Works in the Courtenay Bay channel every four to six weeks with a sounding machine. The data chart is sent periodically to the Port Manager and the Marine Agent, but is not forwarded officially to the pilots although it is available to them.

Year	Cubic Yards	Cost
1960.....	106,166	\$152,879
1961.....	119,103	113,028
1962.....	113,601	102,794
1963.....	59,452	74,909
1964.....	102,062	65,115
1965.....	76,473	75,708
1966.....	61,171	51,873
1967.....	50,708	44,014

The necessary dredging is carried out by the National Harbours Board at berths 1 to 13, and occasionally at berth 14. The extent of this dredging and the cost to the National Harbours Board from 1960-1967 were as above (Ex. 1534).

¹One year there was fog for 27 days in June. Fog is experienced 50% of the time during a normal summer.

Dredging in the channels and turning basin is the responsibility of the Department of Public Works. During the same period, the Department of Public Works did the following dredging at the quoted cost (Ex. 1534):

Years	Description	Cubic Yards	Payments Made to Contractors
1960-61.....	Channel in Courtenay Bay to 20 ft.	83,257	\$ 97,210.60
1960-61.....	Channel in Courtenay Bay to 20 ft.	43,369	61,503.39
1960-61.....	Channel & turning basin to 20 ft.	361,231	417,629.97
1961-62.....	Channel & turning basin to 20 ft. shoal in Main Channel to 28 ft.	840,125	542,117.75
1962-63.....	Three areas in channel to 20 ft.	688,205	632,857.32
1963-64.....	Channel to 20 feet; berth at Broad Street wharf for N.H.B. to 22 ft.	706,186	611,062.52
1964-65.....	Channel to 20 feet; berth at Broad Street wharf for N.H.B. to 22 ft.	678,935	319,099.45
1965-66.....	Channel to 20 feet; berth at Broad Street wharf for N.H.B. to 22 ft.	656,236	418,678.57
1966-67.....	Channel and turning basin to 20 ft.	600,051	526,244.73
1967-68.....	Channel and turning basin to 20 ft.	600,015	418,243.57

Surveys and inspection costs would add approximately 10% to the above figures.

The *water density* factor must be considered with deep draught vessels when there is little under keel clearance because salt and fresh water may make a difference of as much as nine inches in draught. The density varies with the state of the tide. During the spring freshet the water in the main harbour is practically all fresh.

The *hydraulic suction or squat* factor must also be considered with any type of ship when there is little under keel clearance. Squat increases with speed and varies with the shape of a vessel, e.g., tankers, which are built like a box, are more affected by hydraulic suction. Squat may cause a vessel to settle in shallow channel so that flotation practically ceases. When a ship "smells the bottom" there is danger of sheering because she will not answer the rudder. Although this is one of the difficulties encountered when piloting tankers into Courtenay Bay, no accidents due to squat had been reported up to the time of the Commission's hearings.

(3) DESCRIPTION OF SAINT JOHN HARBOUR

The Saint John Harbour is divided into three main areas—the main harbour, Courtenay Bay and the Saint John River above the Reversing Falls. Harbour facilities are limited by the depth available in the channels and alongside the wharves, and by tides and river currents.

(a) *Main Harbour*

The main harbour is at the mouth of the Saint John River. There is constant conflict between the high tides and the outflow from the river: when the river is high the down current is stronger and lasts longer even against a flood tide. The river rises twenty-four hours after rain and is at its highest during the spring freshet when it may reach twenty feet above normal. Easterly winds reduce the effect of ebb tides and increase the amount of salt water entering the harbour during flood tides.

The seaward entrance is a straight channel 600 feet wide with a controlling depth of 25 feet (dredged to 28 feet).

All berths in the main harbour are tidal and the approaches to several berths are seriously affected by the tides and the river currents. Hence, vessels must wait for a safe navigation period, which is limited to some two hours before and after high water depending on the size of the ship and the prevailing weather. Ships usually berth with the aid of hawsers and always require the assistance of tugs.

The pilots pointed out that in Canadian Hydrographic Service chart 4319 berths 6 and 7 have been incorrectly identified.

The harbour is open throughout the year and is an important winter terminus of ocean shipping. It is a Port of Entry. Ships of very large size can be accommodated.

Saint John Harbour is a safe port for a qualified seaman with local knowledge but "is no place for an amateur". Captain Arthur R. Conley, Master since 1946 of the S.S. *Princess Helene*, stated that it is not safe for a Master who is not well acquainted with the harbour to come in without a pilot and that he would take a pilot whenever he had to go elsewhere than his regular berth, e.g., Courtenay Bay dry dock or the west side of the main harbour as he was forced to do twice because of hurricane threats. The *Princess Helene* of 4,000 gross registered tonnage was 343 feet in length and 52 feet beam, drew 17.6 feet fully loaded and had a cruising speed of 16.5 knots. She was equipped with radar, echo sounder and D/F. However, in Captain Conley's opinion the harbour is safe for an experienced Master. Since 1928, there have been only five groundings of importance: three were due to current, one to the propeller being fouled and one through lack of knowledge. This last case concerned a destroyer whose Captain thought he had sufficient local knowledge and did not take a pilot. On one occasion a vessel belonging to the Manchester Line drifted out of control and in 1944 the *Beaverhill* loaded with ammunition foundered in the harbour.

(b) *Courtenay Bay*².

Courtenay Bay is entered by a channel branching off the main channel at an angle of approximately thirty degrees. The width of the entrance decreases from some 800 feet at the fork to some 400 feet at the breakwater. The controlling depth is 16 feet (dredged to 20 feet).

The main navigational hazard is the Saint John River current which flows out of the main harbour across the Courtenay Bay channel. The cross currents and the depth of the channel up to the period of high water slack restrict inward traffic. Crude oil tankers over 8,000 net registered tons (locally called supertankers) which draw up to 35 feet are particularly affected. Navigational conditions south of the breakwater also impose limitations. The pilots try to reach the end of the breakwater approximately one hour before high water but never later than one hour after high water on an ebb tide.

These tankers can be brought in during daylight only, and at times during the freshet the cross current makes it impossible for them to enter the Courtenay Bay channel. If they are taken into Courtenay Bay in the freshet season, they are usually lightened first.

Mr. James M. Fraser, Naval Architect and former Superintendent of the Saint John Dry Dock, informed the Commission that these crude oil tankers are very large vessels to manoeuvre in such a confined area. Under such conditions, ships of this type can not be driven at speed because it requires a long distance to lose way. Full power is seldom used in the confined and confused waters of Saint John Harbour. Because of the tankers' weight the tugs sometimes lose control and if they are caught in the currents "the ship takes charge". Once committed to a course, there is no room to turn around: the tanker must be taken directly in to Courtenay Bay or to the main harbour.

When the Commission was sitting at Saint John, N.B., on February 14, 1963, (it was not the freshet season) two large tankers had arrived the day before and were at anchor off Partridge Island: the *T.L. Lenzen* (draught 34 feet 11 inches) and the *Chevron Transporter* (estimated draught 32/33 feet). The *T.L. Lenzen* was to be berthed at 2:45 p.m. February 14. However, it was decided in the morning that due to the ground swell in the main channel and the Courtenay Bay channel it would be dangerous to bring the ship in. The limited depth of the Courtenay Bay channel plus the moderate tide of the day gave a maximum depth of approximately 38 feet. If the *T.L. Lenzen* drawing 34 feet 11 inches had happened to roll unduly, she would have caught her bilge because the depth of the channel was further limited by the ground swell and also because the ship would sheer when approaching the Courtenay Bay channel, since the swell would have forced

² Vide also the controversy over piloting large tankers into Courtenay Bay during the freshet, pp. 88 and ff.

her to port. The Master and the Company representative were satisfied that it was dangerous for the ship to come in under such conditions. The wind was southwest, about 25 to 30 miles per hour and, since the Courtenay Bay channel is oriented in an easterly direction, the ship would ride with the ground swell from the Bay of Fundy on her quarter, thus causing her to roll.

During freshet periods it is sometimes impossible to bring such tankers in even when they have been lightened. Their length—650 to 700 feet—has to be considered. The most dangerous time is when approaching the end of the Courtenay Bay breakwater. As the ship passes the end of the breakwater the bow moves into slack water, while her stern is still in the strong down current. This causes the ship's bow to sheer to port across the channel.

These tankers pose a very difficult problem in fog; if one grounded in the channel there would not be time to lighten her before an ebb tide left her high and dry.

Pilot A Vallis, licensed in October, 1961, stated that he had had no occasion to bring a "supertanker" into Courtenay Bay during the freshet season, because such an assignment had never coincided with his turn of duty, and his first experience with the freshet was when he piloted the *Irvingdale*, which had just lightened the tanker *Venture*. The *Irvingdale* was drawing 27 feet 6 inches and it was high water. As he approached the foul ground buoy he tried to swing to starboard in order to counteract the current, but, although the rudder was hard to starboard and the engines at full ahead, the ship did not respond but went straight ahead and passed over spar buoy 63-J. Then the ship started to respond and brushed by the other buoys. There was such a strong current on the port quarter that the rudder had no effect on the ship whatsoever, despite the fact that the *Irvingdale* which is not a large ship, is equipped with motor engines and manoeuvres very well—much better than a large tanker which, under the circumstances, would have gone aground.

It was pointed out that Canadian Hydrographic Chart 4319 (Ex. 25) shows the light at the end of the Courtenay Bay breakwater in the wrong position.

Navigational difficulties in Courtenay Bay increase because larger ships are now calling. The *Otto N. Miller* arrived at the end of May, 1964—a new crude oil tanker belonging to Standard Oil, 760 feet in length, 103-105 foot beam, with a maximum draught of 38 feet 6 inches. She was drawing 38 feet at the time. She came in without difficulty because, fortunately, there was a 28-foot tide, but with a 24-foot tide, on which the shipping interests expect these ships to come in, there would be only 2 feet under keel clearance. This, the pilots claim, is insufficient for safe navigation.

(c) *Reversing Falls*³

The Saint John River narrows where it enters the harbour and thus impedes the free flow of both the downstream current and the flood tide. A difference in levels above and below the Falls is caused when the tide changes with the result that there is a downstream current at low tide and a reversed upstream flow at high tide.

Navigation through the Reversing Falls has no counterpart elsewhere. In these confined waters there are always currents setting in one or more directions, and only local knowledge and sound judgment can determine the safest time for navigation. According to the pilots, the Falls are safely navigable for some twenty minutes each tide (not for one hour and ten minutes at slack water as stated in the "Bay of Fundy Pilot"). There is no appreciable slack since tidal flow and river current are always present. The ideal time to transit the Falls is as near indicated slack water as possible.

Above the Reversing Falls the Saint John River is navigable for some distance: during the war, naval vessels used the upper reaches to a considerable extent but traffic has dwindled to the occasional pleasure craft and to the Irving vessels which call at the Pulp and Paper Mill on Union Point just above the Falls. There is very little traffic for the pilots, especially since the Irving interests stopped using licensed pilots and began providing their ships (which are normally exempt) with their own pilots. Licensed pilots are employed only on the rare occasions when other pilots are not available.

(4) AIDS TO NAVIGATION

The pilots were generally satisfied with the network of land-based and floating aids to navigation with which the harbour and its approaches are provided. They stated that they have obtained most of the aids they have recommended to the Department of Transport through their Pilots' Committee. However, they have made a number of suggestions.

There are two radio aids to navigation: the radio direction-finding beacon on Partridge Island which gives a continuous signal and the radio station near Red Head which is available to give a signal upon request in an emergency.

The Partridge Island beacon is accurate up to 15 miles from seaward after which it develops a 12 to 15° error, as Captain Conley, the Master of S.S. *Princess Helene*, discovered when he used it as a stern bearing while entering Digby. However, it is accurate inside 15 miles and when entering Saint John Harbour. The pilots have suggested that the beacon be lighted at night to permit calibration.

The Red Head signals are more accurate but since the installation of the Partridge Island beacon the Red Head radio service as an aid to Navigation

³ Vide also pp. 96 and ff. re controversy regarding piloting through the Reversing Falls.

has been discontinued. The pilots, as well as Captain Conley, recommended that the Red Head station be again placed in full operation as before.

The other improvements they recommended are as follows:

(a) *Courtenay Bay*

- (i) two sets of range lights to be provided, one for the first leg into Courtenay Bay, and the second, if at all possible, from the breakwater to the dry dock;
- (ii) further dredging to be effected at two places in the channel:
 - (A) the northwest end of the channel at the entrance of the turning basin to be enlarged in order to facilitate turning toward the shipyard;
 - (B) the southeast section of the channel to be greatly enlarged where it intercepts the main channel in order to give more sea room while encountering the cross-river current. "When you get ahead of the breakwater, you have to go full speed with the ship, and it is absolutely impossible to maintain full speed and then come down on the helm". With the proposed dredged area, the ship would have a little room to drift.

(b) *Approach Channel*

- (i) all buoys to be fitted with radar reflectors;
- (ii) Split Rock whistle buoy (B19.J) to be lighted. The pilots had numerous complaints from shipmasters entering the harbour that they could hear the buoy but were unable to see it, which is important because it is a departure buoy for the buoy off Black Point.

(c) *Main Harbour*

- (i) buoy 62.J at the head of the main harbour to be lighted, this being necessitated by the construction of the new long wharf which is subject to heavy current at all times, since it runs in a east-west direction instead of north-south as before; it is not a safe berth, tugs have no room to work alongside and the current ranges from 5 to 9 knots;
- (ii) pier No. 1 to be lengthened by adding to the end of No. 1 berth a crib or a solid pier to keep ships off the foul ground; modern ships overhang the berth and with a heavy southerly wind are "pushed around the corner".

On July 8, 1968, the Department of Transport informed the Commission that four of these recommendations have since been implemented: the northwest section of the Courtenay Bay channel has been partially enlarged (a) (ii) (A); all buoys in the main channel have been fitted with radar reflec-

tors (b) (i); Split Rock whistle buoy (B19.J) has been lighted (b) (ii); and pier No. 1 has been lengthened (Ex. 1460(ii)).

After a lengthy study of the navigational problems in Saint John, the Commission's Nautical Adviser, the late Captain J. S. Scott, made the following recommendations:

- "(1) An active dredging program, which will maintain the Courtenay Bay channel at a minimum depth of 20 feet, ordinary low water, at all times;
- (2) A dredging program, which will in a reasonable period, extend the northern limit of the Turning Basin by 400 feet;
- (3) A dredging program, which will in a reasonable period, widen the Courtenay Bay approach channel along a line forming the hypotenuse of an angle, starting at buoy 64 and ending at buoy 43. This will widen the channel by approximately 200 feet at the place where the greatest cross-tide effect is felt. This, I am convinced, will be a very vital improvement;
- (4) Under reasonable conditions, tankers up to 600 feet in length, can be handled at the Broad Street dock, day or night;
- (5) Tankers up to 600 feet in length, at light or loaded draught, can be docked or undocked at the Crude or Gasoline dock during daylight or darkness, in reasonable conditions;
- (6) Tankers over 600 feet in length, in ballast condition, can be undocked at the Crude or Gasoline docks at night, provided there is no more than a 12-knot wind, from any direction, and four tugs are available;
- (7) Tankers over 600 feet in length, in loaded condition, should not be docked at the Crude or Gasoline dock during the night hours;
- (8) On completion of the dredging improvements described in (3) and (2), it is considered that the entire Courtenay Bay area would be safe for both day and night movements;
- (9) The freshet phenomena poses its own problem, especially regarding its variable strength and duration. But it is considered that the dredging program shown in (3) will greatly lessen the hazard of getting loaded tankers into Courtenay Bay during the freshets. In the meantime, I concur with the pilots' reluctance to enter super-tankers at full freshet flow".

The pilots did not place a great deal of reliance on shipborne aids to navigation. They consider that neither radar nor echo sounders are of much use to them.

Radar. Pilot Ronald V. Cobham stated that he relied very little on navigational electronic devices. To him, the availability of radar was immaterial because he had piloted ships in and out of Saint John Harbour for

years before its invention. He used it, however, when visibility was zero and he had never had a collision while using radar but, as far as he was concerned, it could be dispensed with.

He found it very unreliable on account of its failure to pick up some targets, such as wooden fishing boats and, at times, even the wooden pilot vessels, although they were equipped with radar reflectors. For instance, in January, 1963, when inbound with a "supertanker", he did not locate an outbound ship which had, on the other hand, picked him up on its own radar. When the pilot vessel *Pilot Boat No. 1* was sunk on January 14, 1957 (p. 80), by a vessel coming into the harbour and all hands were lost, there was a question of radar failure. On another occasion, the Master of a Union Castle ship is reported to have stated that he had not located the pilot vessel by radar and did not know the vessel was in the vicinity until it appeared alongside.

A report on pilotage in Saint John by the Commission's nautical adviser (Ex. 1460(kk)) contains the following pertinent information:

"August 31st [1963]—0930

I accompanied Pilot Ronald Cobham aboard Norwegian conventional-type general cargo vessel *Jane Stove*, arriving off St. John. This trip was of interest in that dense fog prevailed. The incoming vessel was 'found' by the Pilot boat radar and, after boarding, she was navigated by radar up the channel to abeam of Partridge Island, after which time the fog cleared. Vessel was berthed at the Pugsley berth without incident".

Echo sounder. It was felt by all concerned that the echo sounder is not a very valuable aid for pilotage purposes because, while it gives the depth of water under a ship, it does not indicate what depth the ship is approaching. The reports are sometimes false, due to side echoes or soft bottom and even water turbulence.

The bottom of Saint John Harbour is rock and mud: rock on the port side until the foul ground at buoy 54-J and to pier 14, and rock on the starboard side up to the Atlantic Sugar Refinery. It was claimed that the Department of Public Works' recordings taken with echo sounders are not accurate. In one instance, at berths 3 and 4, according to these soundings, there was supposed to be at least 29 feet of water but a ship piloted by Pilot Cobham drawing 20-22 feet went aground "in the middle of the slip".

(5) MARITIME TRAFFIC

Saint John and Halifax are the two main Canadian railway terminals on the Atlantic. Therefore, as far as exports and imports are concerned, Saint John not only serves the surrounding area but is also a transit port for passengers and merchandise bound to or from the United States and the rest of Canada. Its importance for international trade reaches a peak during the winter months when the St. Lawrence Seaway is closed and many

St. Lawrence River ports are also closed by ice to most ocean-going traffic and even to coastwise traffic. During the other eight months of the year, the port's chief activities are with local traders and deep-sea traffic falls off drastically. Hardly any foreign ships used to call outside the winter months before modern industries were established in the vicinity; *inter alia*, the Atlantic Sugar Refinery Co. Ltd. situated in the main harbour and the oil refinery, built in 1959, the dry dock and shipyard in Courtenay Bay. The pilots reported that when the oil refinery was completed not only were there more tankers bringing in crude oil but also more ships of other kinds, including those taking out oil products, as well as increased activity in the dry dock. The result was a greater demand for pilotage during the twelve months of the year.

The foregoing is borne out by the monthly analysis of cargo ships and tankers for the years 1959 to 1967 (Appendix B to this Section). It indicates clearly the striking increase in the number of vessels as soon as ice begins to appear on the St. Lawrence River, a date which varies from year to year from mid-October to mid-December. A peak is reached in January and maintained until March, a period when maritime traffic on the St. Lawrence River is reduced to a minimum. There is a sudden decline as soon as the St. Lawrence opens for general traffic, a date which varies from year to year from mid-March to mid-April. It is during this winter period that the major demand for pilotage occurs at Saint John.

It is also apparent from the graph in Appendix B that tanker traffic not only represents a considerable part of the overall traffic employing pilots but also, in contrast, is evenly distributed throughout the year.

The following table is drawn from information shown in graphic form in Appendix B. It shows the percentage of the total winter traffic (January, February, March and December) of the total arrivals for each year, and the percentage of the yearly tanker traffic of the total yearly arrivals.

Year	% of Total Winter Months' Arrivals*	% of Yearly Tanker Arrivals**
1959.....	61.9	22.0
1960.....	54.9	30.9
1961.....	53.0	36.1
1962.....	56.5	31.8
1963.....	53.3	32.1
1964.....	54.3	32.6
1965.....	53.1	31.9
1966.....	52.6	27.1
1967.....	48.9	27.9
Average.....	54.3	30.3

*Includes both ocean and coastal tanker, passenger, and cargo ships, as well as naval, Government and other non commercial vessels.

**Both ocean and coastal tankers.

The following figures provided by the Dominion Bureau of Statistics concerning cargo handled in the Port of Saint John (2,000 lbs. to the ton) are also informative regarding its comparative importance as a national port. Similar information is quoted for the most important Canadian ports, e.g., Halifax, p. 192.

Year	Foreign Cargo Handled (Tons)	Coastwise Cargo Handled (Tons)
1959.....	1,877,218	549,994
1960.....	3,345,549	1,108,359
1961.....	3,826,890	1,391,022
1962.....	3,336,280	1,271,218
1963.....	3,955,535	1,299,012
1964.....	4,206,562	1,626,569
1965.....	4,220,155	1,597,706
1966.....	4,517,427	1,462,365
1967.....	4,155,915	1,433,826

SOURCE OF INFORMATION: EX. 1483.

Saint John has experienced the trend to larger ships but has not benefited appreciably from the general increase in maritime activities in contrast to most ports of national importance. During the period 1959-1967 the total number of ships over 250 NRT has steadily decreased (-13.79%) but the aggregate tonnage has substantially increased (43.1%).

The physical restrictions of Saint John Harbour, especially in Courtenay Bay, and its approach channel and the added difficulties created by the tides, cross-currents and the freshet are gradually making it inaccessible to large modern ocean-going vessels unless extensive, costly improvements are made (vide yearly cost of dredging, p. 59, and the suggestions of the Commission's Nautical Adviser p. 65). These factors have prompted the Government of New Brunswick and the Irving interests to look for an alternative site to accommodate larger vessels. Both have recently announced their choice for such a site as Lorneville which lies inside the Pilotage District limits eight miles west of Saint John. It is reported that the site of the proposed "superport" has a depth of 100 feet of water, an unobstructed sea approach, sufficient manoeuvring room for the largest ships and a low current velocity. It is also ice free.

2. NATURE OF PILOTAGE SERVICE

The numerous difficulties and hazards encountered in these confined waters as well as the changing conditions caused by tides and cross-currents make local knowledge and experience a prerequisite to navigation in the District. Except for the Saint John-Digby C.P.R. ferry, almost all ships

that are not small regular traders employ pilots, whether or not they enjoy an exemption from compulsory payment, and only the occasional small exempt ship does not use their services.

Figures supplied by the Dominion Bureau of Statistics on arrivals in Saint John Harbour of vessels of 250 NRT and over, and the Pilotage Authority's annual reports (Ex. 45) are the basis of the following comparative table which indicates the extent of the use made of the pilotage service in the District. The D.B.S. figures include the arrival of the ferry vessel which plies on a daily schedule between Digby and Saint John. The ferry service was provided up to 1963 by the *Princess Helene* (2022 NRT) and is now provided by the *Princess of Acadia* (3409 NRT).

Year	Total Number of Vessels over 250 NRT*	Number of Vessels Employing Pilots**	% of Vessels Piloted	Total Tonnage of Vessels over 250 NRT*	NRT Piloted**	% of NRT Piloted
1959.....	2,466	1,377	55.8	5,557,822	4,087,580	73.6
1960.....	2,430	1,562	64.3	7,232,250	5,701,155	78.8
1961.....	2,256	1,576	69.9	7,005,766	6,134,417	87.6
1962.....	2,520	1,499	59.5	7,031,788	5,759,618	81.9
1963.....	2,306	1,411	61.2	7,559,672	5,955,316	78.8
1964.....	2,408	1,417	58.8	8,379,052	5,925,320	70.7
1965.....	2,290	1,447	63.2	8,044,736	5,975,187	74.3
1966.....	2,336	1,456†	62.3	8,620,184	6,279,218‡	72.8
1967.....	2,126	1,286†	60.5	7,955,326	5,615,121‡	70.6

*Ex. 1483 (D.B.S. Statistics—*Arrivals and Net Registered Tons* multiplied by 2 for total vessels in and out).

**Ex. 45 (Annual Report, *inward and outward* totalled).

†Includes two trips from Saint John to Dorchester Cape.

‡Includes tonnage of pilotage at Dorchester Cape

This table indicates, *inter alia*:

- (a) Except for the ferry and some small ships, all others take pilots.
- (b) The trend is to larger vessels. While in 1967 the number piloted is below the 1959 total by 6.6 per cent, the aggregate tonnage piloted increased by 37.4 per cent; the average NRT per ship piloted rose from 2,968 NRT in 1959 to 4,366 NRT in 1967, an increase of 47.1 per cent.
- (c) However, the port does not benefit from the general increase in the number of ships; in fact, their number is slowly decreasing.

Non-exempt ships very rarely dispense with the services of a pilot—the highest number in any year was four ships in 1963 and 1966. The earnings from this source are negligible, e.g., 0.3% of the District gross earnings in 1965. In 1966 and 1967, 4 and 3 non-exempt ships dispensed with the

services of pilots. Although all were ocean cargo vessels or ocean tankers and not regular callers, they were all of small size and the aggregate amount they paid for those respective years was \$264 and \$341.85 (Ex. 1308).

3. ORGANIZATION

Because the federal Minister of Transport is the Pilotage Authority, administrative direction comes from Ottawa through his local representative.⁴

As in other Districts, an Advisory Committee composed of representatives of the pilots and the shipping interests was set up under the chairmanship of the Supervisor of Pilots but is no longer functioning.

In accordance with the By-law, a Pilots' Committee of three is appointed annually. The need for this Committee is not as great as in some other Districts because there are only a small number of pilots but it serves a useful purpose by enabling the official spokesmen of the pilots to be appointed.

According to the General By-law, the Supervisor has the same responsibilities as the Supervisors and Superintendents of Pilots in the other Districts where the Minister is the Pilotage Authority but in reality his responsibilities are limited merely to clerical work. He purportedly has the direction of the pilots whom he is supposed to despatch normally following a tour de rôle procedure, but in practice he does not perform this function (p. 81). The direction of the service is in the hands of the pilots themselves while the Supervisor is restricted to clerical work, attends to the financial administration of the District, collects the dues, keeps the Pilotage Fund, effects the necessary expenditures and shares the remainder of the pooled revenue among the pilots (p. 128). The By-law does not give him any personal power of discipline but when a "penalty" is imposed on a pilot, he is authorized to pay it from the money accruing to the pilot concerned or to suspend the pilot's licence until the penalty is paid. (As to legality of the Pilotage Authority's disciplinary powers, vide Part I, pp. 373 and ff.)

Although this is not indicated in the General By-law, it is his responsibility as the local representative of the Authority to co-ordinate the pilotage service. He is also expected to keep in touch with the local shipping interests with a view to settling any local problems and, if this can not be done, to report, in due course, to his superiors in Ottawa before an *impasse* is reached. For instance, the argument between shipping interests and pilots

⁴ Until Oct. 1, 1967, this was the Supervisor of Pilots who from 1964 also carried out the D.O.T. function of Shipping Master. When the District Supervisor's position was abolished, a Regional Supervisor of Pilots was appointed for the Maritime Provinces and a Pilotage Administrative Officer was put in charge at Saint John to carry out the functions of the Supervisor.

about tugs should not have been allowed to become as heated as it was when the Commission sat in Saint John in 1963. At the June, 1964, hearing in Ottawa, Captain F. S. Slocombe stated that the pilotage officials in Ottawa were not aware of this problem until it was revealed to them at the Commission's hearings. He regretted that the situation had been allowed to reach such a stage, adding that if they had known the true situation they would have long since tried to bring the interested parties together.

Relations between the Supervisor and the pilots are quite informal; there are few written orders, most instructions are given verbally and decisions are taken after problems have been discussed and decided among themselves. These arrangements work satisfactorily and efficiently except when there is a conflict between the shipping interests and the pilots.

4. PILOTS

(1) RECRUITING AND QUALIFICATIONS OF PILOTS

Secs. 11 to 14 inclusive of the By-law, provide the prerequisites for candidates and the examination procedure, and stipulate that the first licence issued is probationary for one year (vide Part I, pp. 269-270). Sec. 4 provides that the number of pilots is to be determined by the Authority after consultation with the Pilots' Committee.

The By-law, however, does not specify how applications are to be invited. The local practice has been to place an advertisement in the local papers whenever a vacancy occurs or is expected to occur provided there are no accepted candidates on the eligible list. Such an advertisement in October, 1962, brought forward six candidates of whom only one, Captain B. G. Bouthillier, was successful. Since the complement of pilots was not being increased, Captain Bouthillier was not licensed until a vacancy was created by a retirement in 1964. In 1965, a similar advertisement produced eight applicants. Two were found qualified and their names were placed on the eligible list. However, up to July 1968 they had not been licensed because no vacancies occurred. When a pilot retired on December 31, 1965, the Pilotage Authority decided not to replace him, thereby reducing the establishment to eight (vide p. 75). On August 14, 1968, the Pilotage Authority informed the Commission that the eligible list has since been cancelled (Ex. 1530(d)). Therefore, each time it is decided to appoint a new pilot, a new examination will have to be held.

Since there is no longer an apprenticeship system in the District, a candidate must acquire local knowledge on his own initiative. This knowledge is guaranteed by subsec. 11(d) of the By-law which requires at least two

years of service as Master or deck officer in vessels trading regularly into the District in the five years immediately preceding the date of the examination. Each candidate's local knowledge is assessed during his examination and his skill in local navigation and shiphandling is appraised during his probationary year.

The examination procedure is not set out in the By-law and, in practice, part of the function of the Board of Examiners is performed by Ottawa headquarters officials and the Supervisor. When an examination is to be held, the Supervisor of Pilots convenes the Board of Examiners, composed as stipulated in sec. 12 of the By-law. The examination is both written and oral; only the oral examination is held by the Board of Examiners. The Board has nothing to do with the preparation of the questions for the written test; half of them are prepared by pilotage officials in Ottawa and half by the Supervisor in co-operation with the Pilots' Committee. If the candidate is successful in the written examination, he then appears before the Board for oral questions about his background and his local and general knowledge. A medical examination is conducted by a medical officer of the Department of National Health and Welfare who also tests him for eyesight and hearing as prescribed in the "Master and Mates of Home-Trade, Inland and Minor Waters Vessels Examination Regulations".

The first pilot's licence is a probationary one issued to the successful candidate who is first on the eligible list when a vacancy occurs. Sec. 14 limits its duration to one year but also entitles the holder to a permanent licence on proof of satisfactory service. Subsec. 14(4) provides for limiting the earning capacity of a probationary pilot by administrative order by stipulating that he "shall receive compensation in an amount to be fixed by the Authority after consultation with the Pilots' Committee". It is the custom in Saint John to pay a probationary pilot two thirds of the remuneration of a licensed pilot for the first six months and three quarters for the second six months.

Although not provided for in the By-law, a probationary licence is in practice also limited as to capacity by administrative order of the Supervisor under the general provision of subsec. 17(1) which purports to give the Supervisor despatching authority which he may exercise at his discretion. The practice at Saint John is to limit a probationary pilot for the first six months to vessels of less than 3,000 NRT, and he is made to perform as many assignments as he can possibly undertake in order to gain experience. Hence, compared to the full-fledged pilots his workload is far greater (vide p. 112) but he gains much experience in his first few months and the Supervisor and the pilots have ample opportunity to assess his skill and practical knowledge.

These administrative decisions, which are all illegal under the present legislation (Part I, pp. 255, 262, 263 and 269) are contained in a general "Memorandum to Pilots". The one issued when a probationary licence was granted to Pilot A. C. Vallis on October 16, 1961, reads as follows (Ex. 56).

"MEMORANDUM TO PILOTS

October 16/61

Mr. A. C. Vallis has been granted a licence as Probationary Pilot in this District and will commence his duties on October 16th, 1961.

For the first six (6) months he is limited to piloting vessels of less than 3,000 N.R.T. and will be paid at the rate of two-thirds that of a regular pilot.

He is assigned to Watch No. 2 with Pilots Abrams and Merriam, but will also be available to pilot smaller vessels which may arrive, depart or move during duty periods of other watches.

The co-operation of all pilots in assisting Mr. Vallis in attaining the skill they all presently have is earnestly requested and expected.

J. A. MacKinnon,
District Supervisor of Pilots."

The apprenticeship system was abolished when the General By-law now in force was confirmed on November 30, 1961. Up to that time, apprenticeship was only one way to become a pilot, because from time to time pilots were recruited from qualified and experienced mariners. The apprenticeship system was abolished because the Ottawa pilotage officials feel that the best system is still to recruit pilots from experienced Masters who have been trading regularly into the District and it is only when mariners of this type are no longer available in sufficient numbers to make a satisfactory selection that apprenticeship should be resorted to (Part 1, p. 252). As far as the Saint John District is concerned, the Pilotage Authority is of the opinion that the potential recruiting field may be narrowing but this has not yet posed a problem. However, the source of supply was almost exhausted in 1963 since the only large home-trade vessels calling frequently at Saint John were the ferry and the Imperial Oil tankers whose Masters were all over the age limit prescribed for pilots. There were no coastal vessels over 150 gross tons with a certificated Master operating regularly in and out of Saint John and ocean-going vessels seldom called more frequently than two or three times a year. Although the Authority was able to recruit two eligible candidates in 1964, it may become necessary to revert to apprenticeship in the near future if this trend continues.

COMMENT

The degree of difficulty of navigation in Saint John varies according to the section of the harbour involved, the state of the tide, the extent of the discharge of the Saint John River, the prevailing weather conditions and the size of ships. At times, one or a combination of these factors may

become an absolute restriction for a given ship, but, in most cases, the difficulties of navigation and manoeuvring are merely increased. Whether a proposed movement can be made without undue delay depends upon the degree of competence of the pilot to whom the assignment has been given in accordance with the prevailing despatching system. This system, which is based on the false assumption that all pilots, including probationers after their first six months, are equally competent, was bound to have a serious effect on the efficiency of the service and the situation becomes more critical as the size of vessels constantly increases. The Commission's comments regarding the adequacy of the training system will appear later when the complaints of the shipping interests about despatching and the efficiency of the service are studied (p. 85).

(2) PILOTS' ESTABLISHMENT

The By-law provides that the number of pilots is to be determined by the Pilotage Authority after consultation with the Pilots' Committee (re legality, vide Part I, pp. 255 and ff.). Here, as in the other Districts, the pilots' establishment is always a source of contention on account of the direct bearing of the number of pilots upon working conditions, workload and the individual pilot's remuneration. The pilots' strength, which was ten in 1958, had been reduced to eight in 1959 as the result of the cancellation of a licence by the Pilotage Authority and a voluntary resignation. The efforts of the Pilots' Committee to have the number brought up to ten were not successful in 1960 and only partly in 1961 when the number was raised to nine. It remained at nine up to the end of 1965, but fell again to eight in 1966 and 1967 when a pilot retired December 31, 1965, and against the pilots' protest (Ex. 1460(gg)) the Pilotage Authority decided not to replace him.

At the time of the Commission's hearings in 1963, the pilots were pressing the Pilotage Authority to appoint a tenth pilot. As they had had no success with the Pilotage Authority, they raised the question before this Commission. Their argument was not based on an attempt to improve their working conditions but to anticipate future developments. Two vacancies were expected in the near future, although neither of the pilots concerned was near the age limit. Their forecast proved correct, both pilots retired prematurely, one in 1964 at the age of 68 and the other in 1965 at the age of 65. The pilots were of the opinion that on account of the scarcity of qualified candidates, no risk should be run of losing Captain B. G. Bouthillier, the successful candidate in the 1962 examination, who was on the eligible list pending a vacancy and was still available. They added that, despite his

qualifications, Captain Bouthillier would not be able to handle large crude oil tankers and would need a great deal of experience even after completing the probationary year. If he were taken on immediately, his training would be completed when a vacancy occurred. Moreover, they agreed not to ask for a general increase in pilotage dues for three years if their request was granted.

On the other hand, they felt that there was no logic in the Pilotage Authority's decision to refuse the appointment, observing that in 1946 and 1947 they had 13 pilots performing as few as 122 and 134 assignments each compared with 8.25 pilots doing 233.3 assignments each in 1961 and nine pilots doing 189.6 assignments each in 1962. They also felt that the Department of Transport had made an incorrect appraisal of their workload because, although some allowance was given for travelling time, no allowance was made for time spent in the pilot office on traffic control duties. (Workload is studied later.)

This request had first been presented informally to the Authority in Ottawa in September, 1962, by Pilot R. V. Cobham during a visit to Ottawa on other business. The Authority instructed its Supervisor to sound out the local shipping agents on the matter. They voiced no objection, provided there was no increase in tariff.

The Authority then informed the Shipping Federation of Canada who strongly protested because they felt that the low average workload of the existing staff of pilots did not warrant the increase. On account of its reliance on average statistical figures, the Department felt bound to agree with this view. Captain F. S. Slocombe went to Saint John to investigate and found that the reasons put forward by the pilots were not very convincing. On December 28, 1962, the Minister, as Pilotage Authority, wrote to the Chairman of the Pilots' Committee (Ex. 1153), refusing their request on the ground that the actual volume of work did not warrant the increase of one pilot and the workload could easily be distributed in case one pilot retired and a replacement was not immediately available. He pointed out that the record of that year showed that the Chairman of the Pilots' Committee had been far from overworked in that he had performed no pilotage service during 15 days in January, 8 in February, 10 in March, 22 in April, 25 in May, 22 in June, 21 in July, 22 in August, 22 in September, 21 in October and 20 in November and that, for all the pilots, the daily average for the busiest month, i.e., February, was 4.4 hours in which was included "a generous average allowance of one hour for every job to cover time spent in the pilot boat proceeding to or from a ship".

COMMENTS

The events of the following years proved that what the pilots feared did not occur and that the Pilotage Authority's decision was right, so much so that the establishment has been reduced to eight since 1966.

The opportunity to obtain the services of Captain Bouthillier was not lost; he was still available in 1964 when there was a vacancy. Neither was the source of recruiting pilots exhausted as was shown by the 1965 examination which produced two suitable, qualified candidates who were on the eligible list until it was cancelled.

It is true that the Department of Transport's statistics do not cover specifically time spent on assignments that are cancelled due to stress of weather, nor the time spent at the pilot station on traffic control or arranging movements, nor is the average workload, particularly in Saint John, the proper criterion for appraising the actual working conditions of pilots. But even if these statistics had included these factors, such average figures would not be pertinent to the solution of this problem (Part I, p. 148). The number of pilots on strength is essentially a local matter and there are no two Pilotage Districts where all the governing factors are the same. Pilotage is a service and, therefore, there must be sufficient pilots to provide an efficient service in the local circumstances. In Saint John, the real criterion is ability to meet the demand at expected peak periods of a certain duration, taking into consideration the restrictions placed on navigation by the tidal conditions and other features and peculiarities of the harbour. However, the aim should not be to create an ideal situation which guarantees that no ship will ever be delayed for lack of a pilot, even during an unexpected brief peak. In a predominantly seasonal harbour like Saint John, this would lead to overstaffing with consequent adverse effects on the cost of the service and the pilots' level of remuneration as well as reduced competence as a result of less experience (Part I, p. 258).

The request did not meet that criterion. Furthermore, in view of the effect of a strength increase on the pilots' share in the pool, the Pilotage Authority ought not to allow an increase unless it is reasonably satisfied that the level reached in the pilots' workload in the current year will at least be maintained. In the years that followed, pilotage never again reached the peak of the years 1960 and 1961 and for no special reason decreased markedly in 1967. The refusal to appoint a tenth pilot has helped maintain the pilots' "take-home pay" at a satisfactory level, despite the decrease in pilotage, a fact that the pilots have since recognized (vide Saint John Pilots' Supplementary Brief in 1965, Ex. 39). Again, the decision not to fill the vacancy in 1966 was the main factor which accounted for the 14.9 per cent increase in the pilots' "take-home pay" that year, and caused the individual pilot's remuneration to remain at a satisfactory level despite the substantial decrease in pilotage earnings in 1967 (vide graph Appendix B).

(3) SHIPPING CASUALTIES, INVESTIGATIONS REAPPRAISAL AND DISCIPLINE

Despite the many adverse navigational conditions which frequently prevail, the safety record of the Saint John pilots is highly commendable.

For the period 1958-1967 there was a total of 19 so-called shipping casualties in which a pilot was involved, all of a minor character. None was found by the Minister of Transport serious enough to warrant the holding of a Preliminary Inquiry or of any other investigation under Part VIII of the Act, although in one case the pilot was reprimanded by the Pilotage Authority.

Appendix C is a comprehensive table and brief summary of these 19 shipping casualties and incidents. They are grouped following the method described in Part II of the Report, pp. 89 and 90.

As is to be expected in the prevailing current and tidal conditions, most cases occurred while berthing or unberthing.

There have been very few cases of disciplinary action against pilots. Captain J. A. MacKinnon stated that since June 1, 1949, when he was appointed District Supervisor of Pilots there had been only three cases of disciplinary action:

- (a) Early in his appointment, a chronic alcoholic had to be discharged after numerous fines and suspensions.
- (b) In 1959, a pilot was dismissed for neglect of duty and unsuitability.
- (c) In 1962, a pilot was suspended for two weeks for intoxication.

Casualty Report (Ex. 60) shows that a pilot was reprimanded following the grounding of the *Irvinglake* on Navy Island on January 25, 1961. Since 1962 there has been no case of disciplinary action (Ex. 1530(j)).

5. PILOTAGE OPERATIONS

(1) PILOT STATION

The Department of Transport has provided the pilots with accommodation on the second floor of the National Harbours Board Building, Reed's Point, consisting of a waiting room and an office equipped with a radiotelephone, a despatching board and a land telephone. The Supervisor's office with its own telephone is located across the hall.

When the Department assumed responsibility for the pilot vessel in 1959, it also became responsible for the pilot station and since that time has paid the rent, the upkeep of the accommodation and the cost of equipment including the telephone. Only a verbal gentleman's agreement covers the pilot station and its equipment.

(2) BOARDING AREA

Incoming vessels are met by the pilot vessel about a mile beyond the Fairway buoy, i.e., approximately a mile and a half south of Partridge Island. The pilots pointed out that the "Nova Scotia (S.E. Coast) and Bay of Fundy Pilot, Third Edition, 1960" is incorrect in its statement on page 274 that "the pilot vessel will meet ships between the Fairway buoy and the harbour limits". The Fourth Edition, 1966 page 272 now states, "The pilot vessel will meet ships between the Fairway buoy and the pilotage district limits, south of Partridge Island".

At times, the pilots embark much farther to seaward when more sea room is needed because of wind and weather or the type of vessel concerned, e.g., when a ship enters light with a following wind; when large heavily laden ships, particularly tankers, are involved; and when the Master is not acquainted with Saint John and, hence, wishes time to be briefed on local conditions before entering the harbour.

(3) PILOT VESSEL SERVICE

Pilot vessel service is provided by *Canada Pilot No. 8*, owned by the Department of Transport. This vessel, originally *Pilot Boat No. 6*, was specially built for service at Saint John. It went into operation in 1959 replacing *M. V. Mauvais* which was operated under charter pending delivery of the new vessel. It is a sturdy single screw diesel vessel, 90 feet in length with a beam of 22 feet, 106 tons gross, 41 tons net.

The pilots consider that the present pilot vessel is satisfactory because it is heavy enough and has sufficient length and beam to operate effectively in the heavy seas that can prevail off Partridge Island. This vessel is similar to the former craft which the pilots had provided themselves. The Department of Transport had suggested a vessel like those in use at Les Escoumains but when one was tried in Saint John both the pilots and the Supervisor found it unsuitable.

The pilot vessel is equipped with radio telephone, AM and FM radio and radar. The pilots' request for an echo sounding device was at first refused by the Department but later granted. In 1963, she was equipped with an echo sounder (a Raytheon Model DE 718A) whose performance is reported to be satisfactory (Ex. 1460 (jj)). Despite the poor opinion they had of the usefulness of the echo sounder, due to the nature of the bottom of the harbour (p. 66) the pilots wanted one available to enable them to carry out their own soundings in case of emergency, or when otherwise required. The pilots' experience with radar in the pilot vessel has been unsatisfactory, e.g., it was stated that Partridge Island did not show up well on the screen and that everything appeared on the wrong side. However, these errors were due to faulty maintenance because performance improved when a competent technician adjusted the set.

During periods of refit or repair, service is provided either by a pilot vessel from another District or a vessel on local loan from another government agency.

In 1920, the Minister of Marine and Fisheries became the Pilotage Authority and acquired title of the pilot vessels from the pilots. The vessels were maintained out of District funds, the pilots operated them and took command in turn, which was considered to be part of their duties as pilots (vide p. 48).

In 1950, the Department of Transport assumed all pilot vessel expenses and met them out of a special parliamentary appropriation. At first, these expenses continued to be paid out of the Pilotage Fund and were reimbursed monthly by the Department. Since the existing By-law required that the Pilotage Fund had to be closed at the end of each year, provision could not be made for depreciation. The Department solved the problem by granting to the Saint John District Pilotage Fund interest free loans for new purchases. When manning the pilot vessels the pilots were not employees of the Government, although they were in charge of Government property. The situation was that the pilot vessels were loaned to them without charge for them to use and operate.

In 1959, it was thought that the pilots' status was anomalous, although the system worked well. Authority was obtained for the Department of Transport to pay the costs directly and arrange to have the vessels manned by Government employees.

Since then, the pilots use the pilot vessel only as passengers, having no food or quarters on board. This change of policy increased the cost to the Government considerably because, under the Ships Officers' Regulations and Ships Crews' Regulations, the Department had to provide three separate crews to comply with the limitation of working hours, and thus make the pilot vessel available at any time during the day and night.

Apart from looking after the pilot boat and transporting the pilots, these crews have little to do during most of the year, except for the peak winter periods when traffic increases and adverse weather prevails. The crews' wages plus the maintenance and operating costs of the pilot vessel are the main reasons why Saint John pilotage service is so costly to operate. The cost to the Government of operating the pilot vessel and station increased from \$38,201.14 in 1958 and \$37,746.11 in 1959, to \$77,819.34 in 1962. In 1967, the pilot vessel maintenance and operating costs (not counting depreciation) had risen to \$100,008.93 of which \$81,807.39 was for crews' wages alone (Ex. 45). It is pertinent to note here that it cost almost as much in wages for the pilot vessel operation as to remunerate the Saint John pilots: the aggregate crews' wages amounted that year to 79.3% of the aggregate pilots' "take home pay".

The pilot boat charge, which is currently \$10, returned \$12,810 in 1967, leaving an operational deficit (not counting depreciation on the pilot vessel and its equipment) for the pilot vessel service alone of \$87,198.93 which is absorbed by the Government. This indirect subsidy has been provided so far in order to ensure the pilots adequate remuneration without increasing pilotage dues. (For total cost to the Government for the years 1961 to 1965, vide Part I, pp. 639 to 641.)

PILOT VESSEL DISASTERS

The pilotage service organization which existed prior to 1920 forced the pilots to spend most of their time on board the pilot vessels of which, as required by the By-law, they were co-owners. The pilot vessels had to keep cruising in the extensive open waters of the boarding "districts", a practice that was fraught with danger in periods of stormy weather and low visibility. This situation was greatly improved with the creation of a precise, restricted boarding area as recommended by the Robb Commission but there still remained the danger of a collision or accident with grave consequences, because a number of pilots were always on board.

During the course of the Commission's hearings, mention was made of the loss of three pilot vessels in the District and in two of them the death by drowning of a number of pilots.

The pilot vessel *John Mullin* was owned jointly by a number of pilots as required by the By-law in force at the time. The casualty occurred around 1891. The vessel had left Saint John on her maiden voyage to cruise throughout the boarding districts and ran into a heavy storm. No one knows exactly what happened but it was believed that she ran aground off Brier Island, Nova Scotia, and was lost there. At least six pilots who were on board were drowned (Ex. 1530(c)).

About 1918, the pilot schooner *Howard D. Troop* was lost in a collision with the steamship *Canadian Voyager*. The pilot schooner, which was on the lee side of the steamship while disembarking the pilot, collided with her and sank, but there was no loss of life or personal injury (Ex. 1530(a)).

On January 14, 1957, *Pilot Boat No. 1* was lost following a collision with the S.S. *Fort Avalon*. Three pilots, one of whom was acting as Master, and four crew members were on board. There were no survivors. The pilot vessel was on station waiting to transfer a pilot when the collision occurred. The weather was very cold at the time with zero visibility caused by dense vapour rising from the surface of the sea. Since there were no survivors, the Commission charged with the subsequent investigation was unable to establish exactly what happened on board the pilot vessel or the cause of the collision but the Court of Investigation held that the Master of the *Fort Avalon* was at fault for not reducing speed under the circumstances. Both vessels were

equipped with radar but apparently the *Fort Avalon's* radar was defective (Ex. 1530(a)).

(4) DESPATCHING

According to sec. 10 of the By-law "Notices of Requirement of Pilots" must be addressed to the Supervisor who then arranges despatching according to a tour de rôle except when he decides otherwise because of special circumstances (sec. 17). The practice, however, does not correspond to these regulations which are stereotyped provisions that appear almost verbatim in the General By-laws of all Districts where services are made available under the direct control of the Authority. In Saint John, these provisions are not implemented and it does not appear that it was ever intended to apply them, with the result that the practice being followed is without legal foundation. This is a further example of regulations being drafted by officials who are not on location and are not fully conversant with local customs and requirements. This situation should be corrected. The regulations should be made to agree with the practice being followed either by altering the regulations, if the practice must be retained, or conversely, by changing the procedure. The system in force is partly a relic from the past and partly required by local exigencies. What is based merely on custom might well be changed to effect improvements, but whatever meets local requirements should be retained and ratified by regulation.

Neither the District Supervisor nor his clerical staff performs any despatching duties; the pilots themselves make all assignments. The Supervisor divides the pilots into two watches: if the establishment of pilots is an odd number, the odd man changes watch monthly. One watch takes inward assignments one week and outward assignments the following week. In 1963, with a pilot strength of nine, the watches consisted of four and five pilots, but now they are four pilots each. During the summer when there is less traffic the pilots are divided into three watches: inward, outward and stand by.

One pilot is put in charge of the inward watch each day of the week for 24 hours commencing at 9 a.m. As duty pilot, he is responsible for coordinating pilotage assignments for that day and all pertinent calls are referred to him. It is his responsibility to perform inward assignments as they occur and it is only when assignments overlap that he may call on another pilot of the inward watch for assistance. Even if there were as many as five inward assignments during the period, the duty pilot would take them all, provided they were well spread out.

The outward watch, however, operates on the roster system because sailing times are known in advance. The duty pilot is responsible for keeping the other pilots informed about pilotage requirements. When other pilots are not performing pilotage they are on call and they must keep the duty pilot informed of their whereabouts.

In accordance with long established custom, requests for pilotage service are made directly by agents to the pilots, with the exception of the Saint John Dry Dock representatives who always place their requests through the Supervisor as required in the By-law.

PLANNING AND CO-ORDINATION

The movements of ships in the harbour must be planned and co-ordinated because the times when navigation is best undertaken vary from day to day with the tides, winds, weather conditions and river levels. Each assignment has to be appraised individually; some assignments can be carried out safely at any time while some, because of the size of the ship, the berth or various other reasons, are limited to certain brief periods generally during daylight hours.

This planning and co-ordination of ships' movements is not traffic control in the ordinary sense of the term but is an aspect of pilotage activities. It occurs in harbours where the movements of ships are limited by changing navigational conditions: some are well known in advance but others must be evaluated as they occur. Such planning requires extensive local knowledge of all the factors involved, knowledge which is part of the pilots' *expertise* and a responsibility which they have always accepted.

Large crude oil tankers are not handled at night but only during daylight and at high tide. Serious operating delays are caused by this restriction, especially during the winter. This explains why in their planning the pilots give priority to these vessels when conditions are suitable and delay other assignments if necessary. The pilots maintain that they take such decisions with the approval of the shipping agents.

The agents and others connected with shipping are accustomed to having the pilots co-ordinate ships' movements and, hence, they consider it normal to speak directly to them on the subject. By following this practice many unnecessary delays are saved by direct action. It was argued that a traffic controller would have to be an experienced pilot: otherwise, he would be forced to seek expert advice from the pilots because the determining factors for the movement of ships are the pilotage conditions which only the pilots can assess. The Commission was told that, apart from the pilots, no other person with the necessary training and experience in Saint John is available for this position.

Since only the pilots know exactly in which order and at what time pilotage assignments will be carried out, the agents have to call them to make detailed arrangements and, as a matter of convenience, the practice has now developed of asking the pilots to arrange for tugs, boatmen and line handling, although their decisions have occasionally been a source of contention. A number of tugs of specified horse power, together with boatmen to take lines ashore and linesmen to secure them, are usually required to berth a ship,

depending on her type and the prevailing conditions. Careful planning and co-ordination are required to ensure that the best use is made of the tugs and labour available.

The practice has also developed that the pilots provide information about expected ships' movements to all enquirers, such as laundrymen, doctors, agents and linesmen. The pilots consider this is an indirect service to the shipping industry because it avoids delays, especially during the winter. An incomplete log kept by the pilots for the 29 days from January 14 to February 11, 1963, shows 13 days with fewer than ten calls, 10 days with ten to twenty calls, and six days when over twenty calls were received, mostly during the day time (Ex. 40).

In Saint John, the Harbour Master's principal duty is to allocate berths. He decides which berth will be more suitable for a given ship after he has been notified of her arrival by the agent and has considered the circumstances. He leaves to the pilots the decision as to the time a ship should enter the harbour, and he would not allocate a priority except in an emergency. While the Harbour Master is concerned that time should not be lost, he considers that, because of the tides and other local conditions, the timing and co-ordination of pilotage assignments are responsibilities of the pilots and, hence, outside his duties.

Occasionally a shipping agent complains that a tide has been missed or that there has been discrimination but the Harbour Master considers that it is beyond his jurisdiction to say which ship should enter the harbour at a given stage of the tide.

The pilots stated that there is no overlapping and that they and the Harbour Master work together and correlate their operations.

This planning under the present system is the joint effort of all the pilots who at any given moment are responsible for each ship's movements taking place, or about to take place, in the District. It is the responsibility of the duty pilot to receive all pilotage requests and queries, and to attend to the land telephone and radiotelephone at the pilot station. If requests and queries deal with assignments for which he is not responsible, such as outward assignments and movages, it is his duty to refer them to the assigned pilot who has the responsibility for planning the movement of the ship(s) concerned and making the necessary decisions.

Because the duty pilot also performs assignments, i.e., all the inward movements he can handle, the pilot station is often left unmanned with the result that the radiotelephone is left unattended and the land telephone calls are taken by the telephone answering service and dealt with by the duty pilot on his return. Although the seven pilots are never all on duty at the same time, there is no official arrangement for relief for the duty pilot during the period(s) he is absent from the pilot station. If another pilot happens to be in the vicinity, or the Supervisor (whose office is across the hall) hears the

telephone ring, one of them answers and replies to the best of his knowledge or arranges to convey the information or the request to the pilot concerned.

Furthermore, the duty pilot does not make a decision on the movement of a ship unless she has become his responsibility. The final decision always remains with the pilot to whom the assignment is given. This practice sometimes leads to a conflict of opinions and procedure.

PILOTS' VIEWS ON DESPATCHING PROCEDURE

Pilot F.M. Quinn stated his opinion that all the Saint John pilots, except those newly licensed, are competent to undertake all local assignments and a difference of opinion arises only during the freshet or adverse weather conditions. Acknowledging the fact that a newly licensed pilot is not as capable as one with long experience, he added that the pilots see to it that a new pilot does not get an assignment which he can not handle, and that, if an assignment appears too difficult, an older pilot will take it for him. He added that, if a pilot is willing to handle a ship in difficult circumstances, the Supervisor has authority to assign him but he does not think this should be the practice because it would cause friction among the pilots. He agreed there have been such assignments but only by arrangement among themselves.

However, the newly licensed pilot, A.C. Vallis, stated that the reason why he had never piloted a crude oil tanker into Courtenay Bay during the freshet period was because such an assignment had never coincided with his tour of duty.

Pilot Ronald V. Cobham went even further by saying that, on account of his long experience in handling ships in this port, he sometimes "deviates clear of the rest of the pilots" in regard to movements; he may go earlier or later with a ship because he has known some of the ships for years and is acquainted with their peculiarities. Weather conditions permitting, he will not go by the local rule of two hours before and after high tide. Whether it is considered safe to pilot a ship in or out depends on the experience of the pilot: "There are no two who have the same opinion as regards to handling a ship. I am sure, when I was a young pilot, I did the same as the young pilots are doing today . . . I may go later, I may go earlier than other pilots. I think it shows the experience here".

He stated that with regard to movement control duties, he goes to the pilot station practically every day; it is second nature for him to see if somebody is attending the telephone and, if not, he answers it himself.

SUPERVISOR OF PILOTS' OPINION ABOUT DESPATCHING

The Supervisor stated that the movement control system is working satisfactorily, and what little adverse comment exists is related to the absence of pilots when calls are taken by the telephone answering service. Over a period of time all the pilots call at the pilot station, some to a much greater

extent than others. When no pilot is in the office, he himself usually answers the telephone or radiotelephone. In most cases, he can inform the agents the time ships will berth or move, since he has a fairly reasonable idea of just when the pilots will act. In extreme cases, he does not commit himself but consults a pilot. However, 75 to 80 per cent of the time the calls are so-called "nuisance calls".

SHIPPING COMPLAINTS ABOUT DESPATCHING

The main problem of the shipping interests in Saint John is obtaining advance information about the time an assignment will be carried out. This was one reason for the special pilot system (vide pp. 85 and 86). Because the pilots have different opinions about handling ships, the agents complain that only the pilot who has been given an assignment can inform them when and how it will be performed. He is not always available at the pilot station when the call is made and the opinion held by another pilot, or by the Supervisor, may prove not to be shared by the pilot who will perform the assignment.

Mr. H. E. Kane, speaking for the shipping interests, added that, while it is conceded that a proposed movage might be delayed on account of some unforeseen change in the weather, the shipping interests should not be inconvenienced by a difference of opinion among the pilots as to when an assignment should be handled.

This situation has caused both inconvenience and additional expense because stevedores must be allocated in advance, e.g., the stevedores' day is divided into three periods commencing at 8 a.m., 1 p.m., and 7 p.m. and they have to be ordered by 4.30 a.m., 11.00 a.m. and 4.00 p.m. respectively. An instance was cited of the pilot station providing information that a ship would be moved at 5.00 p.m. and the assigned pilot decided to perform the movage at 7.30 p.m., i.e., during a different stevedoring period.

An arrangement to carry out all movages within the period of two hours before and two hours after high water would not be a complete solution to the problem. Some wharves are accessible at all stages of the tide depending on the draught of the ship but tugboats are not always readily available.

It was suggested that a possible remedy would be greater collaboration between the Saint John Pilotage Authority and the National Harbours Board acting together as a central control agency.

Mr. Kane further suggested that someone should be on duty at the pilot station at all times to deal with emergencies.

SPECIAL PILOTS

The system of assigning special pilots to a company was introduced at the request of the passenger lines which needed to know as far and precisely in advance as possible the time of berthing in order to arrange trains for the passengers.

In all Districts where this system was operative the Pilotage Authority experienced difficulties. The Saint John pilots also found it unsatisfactory mainly for three reasons:

- (i) duty watches could not be set nor could assignments be equalized;
- (ii) professional jealousy was created;
- (iii) the employing companies could influence the selected pilots, thus limiting their freedom to give their considered opinion without fear of compulsion or undue pressure.

The special pilot system was abolished by a letter dated April 22, 1960, from the Minister of Transport to the Chairman of the Saint John Pilots' Committee (Ex. 424). The change was made at the request of the pilots and was effected on the same date in Montreal and Quebec, except that the three separate classes of pilots created for Montreal and Quebec were not adopted at Saint John.

COMMENTS

While it is uncontested that ships' movements must be planned and co-ordinated to ensure efficient operations in Saint John Harbour and that the pilots must perform these functions directly or indirectly, it is considered that the present system could profitably be reorganized to achieve better results.

The present system requires the duty pilot to perform two incompatible functions at the same time: his planning and co-ordination duties require his constant availability at the pilot station but he is also obliged to leave the station during his period of duty to perform all the inward pilotage assignments possible. Such a system is bound to be unsatisfactory unless traffic is so light that no serious inconvenience can be caused. However, the record and the evidence received prove this is not the case, particularly during the winter months.

The watch system no longer serves a useful purpose and should be abandoned. It is a feature inherited from the past when every pilot belonged to a "company" and cruised on station as one of a group in a pilot vessel jointly owned, except when engaged in piloting.

Today there is no reason why the pilots should continue on a watch system or why a general flexible assignment system based on grades, types of assignment and tour de rôle should not be more effective. Furthermore, with the availability of radiotelephone communications there is no reason why inward assignments can not also be known in advance. The practice of one pilot being on continuous duty at the pilot station for 24 hours and also performing all possible inward assignments during the same period is illogical, impairs public relations and is a source of danger because every pilot should be well rested before performing pilotage.

It is considered that planning and co-ordinating pilotage assignments should be the responsibility of an official who is readily available or represented at the pilotage office (re arrangements for constant attendance at the pilotage office, reference is made to the study of this problem in the Halifax District where by contrast the pilotage office appears to be overstaffed, vide pp. 246-248). This official need not be a pilot nor is it necessary for him to be an expert in pilotage. His primary rôle is to co-ordinate the work of the pilots, i.e, to receive requests for pilotage services and to assign each task in advance to the next pilot on roster, provided he is fully qualified to attend to it. From then on, he leaves each pilot to decide when and how the assignment he was given can be safely performed. It would be this official's responsibility to ascertain whether berths are free and that the tugs requested by the pilots are available. When it appears that because of pilots' conflicting requirements some movements can not be performed as individually planned, it would be his responsibility to inform the pilots accordingly and obtain new decisions from them. In case of disagreement on priorities he as co-ordinator should be empowered to decide. In view of the Crown liability in controlled pilotage (Part I, General Recommendation 29) despatching should be performed by a Crown officer. In the discharge of this duty he should be untrammelled by rigid rules or by the pilots' personal interests and susceptibilities but be guided by the superior interests of the service and the state.

The functions of planning and co-ordinating form part of despatching and should be undertaken by the Supervisor of Pilots.

The pilots' main argument in favour of retaining the watch system is their advance knowledge of which pilot will be the duty pilot on a particular day of the week. In a letter dated Nov. 22, 1965, addressed to their Supervisor, the Pilots' Committee stated (Ex. 1460(gg)):

"Under the two-watch system under which a pilot is designated in advance to be primarily responsible for all ships navigating inward or outward on a specified day, shipowners are able to contact the responsible pilot several days in advance and obtain a commitment from the responsible pilot as to the hours within which he will be willing to navigate the vessel. You realize that this is of primary importance in a tidal port where the final decision as to the safe hours of navigation must be made by the responsible pilot and not by someone else. Under the tour-de-role system no one will know in advance what pilot is to be responsible for a given assignment and it will not be possible for these advance commitments to be made."

This statement exaggerates the consequences of the tidal conditions of the port. A difference of opinion among pilots about how and when to perform an assignment should only occur in a particularly difficult case but not regularly. It is also based on too strict a concept of the tour de rôle by which pilots must be assigned automatically with no consideration for the type of assignment and the prevailing conditions. A system of that nature is bound to fail as the trend to larger vessels continues and creates severe adverse effects on both the port and the pilots themselves. As was stated

earlier and will be developed later, the normal procedure should be to plan assignments as far ahead as possible and allocate each one in turn to the next pilot who is qualified for it. If on account of a change in the prevailing conditions an assignment becomes too difficult for the pilot to whom it was first assigned, the despatcher should have the power and the obligation to reassign the ship to a better qualified pilot. Such a system improves on the watch system because it is possible to contact the assigned pilot for a known difficult assignment. The advance choice of the designated pilot is not left to mere chance, as in the watch system or an automatic tour de rôle, but consideration is first given whether he is fully qualified to undertake the assignment.

The proposed flexible assignment system has the marked advantage of not being based on the delusion and fallacy that all pilots are equally skilled for all pilotage tasks that may occur. Therefore, it is bound to enhance both safety and efficiency.

CONTENTIOUS POINTS

In addition to Mr. H. E. Kane's request for better planning or traffic control (B-2, Ex. 60A) there are three points of contention concerning pilotage operations, all between the pilots and the Irving interests:

- (i) the Courtenay Bay problem, i.e., during the freshet or in adverse conditions, the delays incurred piloting large tankers in and, at times, the refusal of the pilots to bring them in;
- (ii) the Reversing Falls navigational problem;
- (iii) the alleged discrimination on the part of the pilots against tugs owned and operated by the Irving interests.

(a) *The Courtenay Bay Problem*

The Irving interests complained that they did not have the full co-operation of the pilots in the piloting of ships destined for their oil wharf at Courtenay Bay.

The bulk oil plant was established in Courtenay Bay in 1930, and the oil refinery came into operation in March, 1960, after arrangements were made by Mr. K. C. Irving with California Standard Oil. Another Irving interest in Courtenay Bay is the shipyard where one of the largest dry docks in Canada is located.

It was stated that the only reason for the choice of Saint John as the site for the refinery was that Mr. K. C. Irving lived there. British Petroleum were willing to build it on a site of their choice, but Standard Oil of California, after a survey of the facilities and an appraisal of the operational costs, agreed to the Saint John location, provided certain improvements were made in the approach channels. They had first thought of building in the main harbour near the sugar refinery, but Courtenay Bay was found to be more suitable for their purposes.

Mr. Irving stated that the pilots were consulted and their advice was followed prior to deciding on the location. Pilot R. V. Cobham was said to have indicated the main harbour as the safest place with Courtenay Bay as a second choice, provided improvements were made by deepening the channel and widening its entrance. Pilot Cobham recalled some discussions, but none regarding the feasibility of bringing tankers into Courtenay Bay during the freshet season.

Pilot F. M. Quinn corroborated Pilot Cobham's statement and added that the first time the pilots gave thought to the possibility of piloting tankers into Courtenay Bay during the freshet season was when they saw dredging in the channel and wondered how the dredges could hold their position against the current. They saw how this was accomplished and with this experience in mind considered how larger ships could be piloted in. For some years prior to 1960 they had had experience with tankers belonging to the Imperial Oil Company which had instructed its Masters to enter Courtenay Bay only during the period between two hours before and two hours after high water. The pilots restricted all their movements to that period until the Irving interests, said Mr. Quinn, "started crowding one way or the other". However, no detailed evidence in this respect was adduced.

When the pilots first learned that it was planned to send "supertankers" into Courtenay Bay they stated their opinion this would be impossible during the freshet period. Only one large tanker had been piloted in successfully under these conditions and she was considered fortunate to have arrived safely, even when partly lightened. This situation, however, was well known to all concerned. The California Shipping Company had commissioned surveys and studies of the currents prior to deciding on the location of the refinery, and knew about its limitations, especially during the freshet period. This was shown by their letter, dated May 8, 1961, to Irving Oil Company Limited, stressing the need for powerful tugs and acknowledging the fact that during the freshet period "at times, it was impossible to bring in large tankers regardless of tugboat availability". All these factors had been taken into consideration and were included in the calculated risk.

Mr. K. C. Irving added that, in order to comply with the requirements of the California Shipping Company, the Courtenay Bay channel was deepened from 16 to 20 feet, and the seaward entrance was widened first to 600 feet, and in 1961 to 800 feet, the company sharing the dredging costs with the Department of Public Works. They also required additional tugboats because the California Shipping Company had found that those available were insufficient, both in number and in power, for large tanker assignments.

Mr. William R. Forsythe, President and General Manager of Irving Refining Limited, stated that crude oil is brought in by modern tankers from the Middle East at a rate of approximately one per week. An unloading period of twenty-four hours is planned for, i.e., from one daylight high tide to the next, but this is not always possible on account of weather conditions

or because the ship does not discharge rapidly enough. Most of the refined products are shipped out in tankers from wharves adjacent to the crude oil wharf in Courtenay Bay.

His only concern was that crude oil was brought in regularly to keep the refinery operating at full capacity. Apparently it is not possible to store crude oil far in advance. A lack of crude oil disrupts refinery operations which not only reduces profits from petroleum products but also makes the whole operation more costly.

Furthermore, when ships are delayed there is demurrage and the extra expense of hiring lighters and tugs (\$150,000 in 1963).

The problem of delays caused a serious disagreement between the oil refinery and the California Shipping Company which was claiming demurrage. It was very difficult to establish who was responsible for the delays: the blame was placed either on the pilot or the Master, depending on who made the report. Mr. Irving expressed the opinion that a pilot should not interfere with a Master's decision by warning him unduly.

Mr. Irving stated that his problem is planning. He noted that, although the freshet season can be foreseen, it can not be avoided and, furthermore, conditions are not always the same. For instance, in 1962, the freshet was not very strong and there were no delays. His complaint was that he could not be given a reasonable berthing forecast of more than a few hours. To this the pilots replied that it was very difficult to give a definite forecast unless conditions were so adverse that even a considerable improvement would not permit them to enter the harbour. They generally delayed their decision until the last minute in the hope that some change for the better would reduce the risk to an acceptable level.

The pilots added that their attitude has always been that a hard and fast rule in a tidal port like Saint John would cause the port to lose business and that it is preferable to consider assignments individually. It was their opinion that they had "bent over backwards" to accommodate ships on the basis of their handling qualities and of the prevailing tidal and weather conditions. Because of their interest in the port they felt that they made every effort to avoid delays and that very few ships were actually held up. In the New Westminster District where a similar problem exists, experience has been that while hard and fast safety rules reduced to writing have the advantage of giving shipping the advance information needed for planning, they have adversely affected the harbour by reducing traffic (vide Part II, pp. 281 and ff.).

Unfortunately, the tankers proceed into an area which the pilots consider relatively more dangerous than any other part of the harbour and the danger is compounded because these tankers are turbine propelled and slow to manoeuvre. Rather than have accidents they advise Masters about the adverse conditions. An accident, especially one involving a large tanker, would block the channel providing access to the bay and the dry dock.

While Mr. W. R. Forsythe conceded that a major accident to a crude oil tanker in Courtenay Bay would have an adverse effect on the refinery and would cause a tremendous loss of earnings, Mr. K. C. Irving, on the other hand, said this was not necessarily so since there is a month's supply of crude oil on hand and the effect on the refinery would vary with the location of the accident.

Pilot R. V. Cobham added that the pilots do whatever they can to co-operate but when it is unsafe they do not carry out an assignment. He had only one experience of piloting a crude oil tanker into Courtenay Bay during the freshet and he claimed that he was very fortunate to have escaped without an accident. The vessel in question was the *A. M. Kemp*, 664 feet long and 85 feet beam. Since he was not worried about the depth of the channel but about negotiating between the currents, he passed the end of the breakwater at full speed (17 knots) to clear the channel. One tug was secured aft but the second tug could not keep up. Pilot Cobham said that it was more by good luck than good management that he managed to stop the tanker in time, and from this experience he considers it is not safe to pilot large tankers, even when lightened, into Courtenay Bay during the freshet.

It was pointed out that crude oil tankers are not as manoeuvrable as tankers such as the *Irvingdale* and the *Irvingglen*; that they have slow stern power, and must not be driven at full power in confined waters because they are slow to stop. The motor engines of the *Irvingglen* quickly produce more revolutions per minute than the turbine engines with which the crude oil tankers are equipped, and also develop the same power astern as ahead, while turbine engines are slow in providing stern power.

To meet a request by the shipping agents for a ruling on the safe draught for ships, the pilots considered the matter and recommended that a safe maximum draught for tankers entering Courtenay Bay during the freshet season would be 26 to 27 feet. Their advice was not followed and the lighter-tankers continued to load many inches in excess of the recommended limit. In one instance, two days after their recommendation was made, the lighter-tanker *Irvingdale* was loaded to 29 feet. The Master apparently had not been informed of the pilots' recommendation.

The pilots stated that some operators occasionally overloaded their tankers to a draught that made it impossible to navigate them in the depth of water available. Since delays due to this factor could be avoided by consulting either the pilots or the tide tables, the pilots should not be held at fault.

When pilotage operations are being planned, crude oil tankers are given priority because their entry is severely limited by the current, the tide and the depth of water in the Courtenay Bay channel. By mutual agreement with the agents, other assignments are delayed, if necessary, in order to give service to these tankers when the tide is favourable. Crude oil tankers are not piloted at night and the limited working periods of daylight high tide often cause serious delays.

Pilot Francis Quinn gave an example of the pilots' co-operation. On May 21, 1963, he was assigned to pilot the *Robert Watt Miller* into Courtenay Bay to the crude oil wharf, which was then occupied by the *Irvingdale* discharging and due to leave at 9.00 a.m. The weather was foggy but clearing. He moved the ship from her anchorage to the sea buoy in order to be closer to her berth but he then realized that the *Irvingdale* was still at the wharf. He was unable to find out when she would leave. It was 10.50, and high water was at 10.52. The pilots prefer to reach the end of the breakwater one hour before high water under normal conditions, but they extend this period up to, but not after, high water. At 10.50 they were still two miles off. In view of the circumstances, the Master urged the pilot to return to the anchorage (where the ship had been for several days) but the pilot considered he could bring her in and in order to gain time, he manoeuvred to a more favourable position. When he learned that the *Irvingdale* was leaving he proceeded in and was inside the breakwater when the *Irvingdale* began to move out. The Master on this occasion mentioned to Mr. Nadon of the refinery that the credit for berthing the ship and thus saving valuable time and money might go to the pilot.

The pilots realize that delays in berthing "super-tankers" result in financial loss to the company.

The Commission's Nautical Adviser observed the pilots piloting these large oil tankers from their anchorage to their berths. (Ex. 1460(kk)). On September 4, 1963, he boarded the *Petro Sea* (17,698 NRT, 712 feet long, draught 35 feet and propelled by turbine engines). He reported:

"Pilot Alexander handled this marine giant with great caution and was particularly careful to keep manoeuvring speed down to the bare minimum. The effect of brute weight was very noticeable and the problem of taking the way off these ships easily understood."

On September 5 he boarded the large tanker *Martita*, also propelled by turbines. His report stated:

"The pilot again made a very slow and cautious entrance and again it was demonstrated that turbine astern power is slow to take effect when great weight is involved".

1963 was a difficult year for tankers because powerful currents lasted longer than usual during the freshet. Out of five which arrived between April 27 and May 24, two, the *Chevron Transporter* and the *Venture*, had to be completely discharged by lighters while at anchor. Two were brought in, partly lightened after many days at anchor, and the fifth, which arrived on May 17, was brought in five days later with its full cargo, but only after the freshet had subsided.

The delays the Irving interests complain about are not restricted to the freshet period but also to those that occur during other adverse conditions, such as wind and fog. They charged that, according to their experience, the decision whether a ship will be brought in or not depends greatly on who is going to be the pilot.

Exhibit 414 shows that in 1960 two ships were brought in to Courtenay Bay after two days' delay and after they had been partially lightened. In 1961, however, all ships were berthed fully loaded. Mr. Forsythe felt that this proved there were differences of opinion among the pilots and it was also his view that the *Venture* could have been brought in partially lightened in 1963. The same exhibit shows that the three ships that entered in 1963 were taken in four to seven days after the *Venture's* departure, and that the *Davidson* and the *Miller* were lightened at the same time as the *Venture*. The *Davidson*, which arrived two days prior to the *Venture*, remained at anchor for sixteen days prior to being moved, seven days after the departure of the *Venture*.

The Irving interests understood that under certain adverse conditions it would be almost impossible to bring a crude oil tanker into Courtenay Bay. Their main problem is to plan ahead and obtain a reasonably accurate forecast. Two or three days' notice—the longer the better—that a crude oil tanker could arrive or not would improve the situation considerably for them. They expect interference from unpredictable factors such as wind and fog but, bearing this in mind, extensive delays and considerable expense could be avoided and timely arrangements could be made for lighter-tankers, if a reasonable forecast, based on predictable factors, could be provided. Three solutions were suggested in 1963:

- (i) control the river currents;
- (ii) study the causes of the freshet with a view to predicting the ensuing currents;
- (iii) allow the user to choose his pilot when conditions are adverse.

In 1968, a fourth solution, i.e., to select a new site especially suitable for berthing crude oil tankers and other large vessels, was being considered.

(i) *Controlling the Currents*

During the freshet, currents created by the strong outflow of the Saint John River are the principal hazard; if these could be controlled or prevented, the navigational situation would be vastly improved. It was suggested that the river could be diverted by a dam or that the freshet could be reduced by breaking the ice during the winter to release the water earlier. The latter was tried in 1962. The Department of Transport reported on the experiment that:

"the attempt made in 1962 to use ice breakers to break the ice in the Saint John River with a view to reducing the effect of the freshet was a failure and no suggestion to repeat the attempt was later made." (Ex. 1460(mm)).

(ii) *A Study of the Freshet*

Mr. W. R. Forsythe proposed that some research be undertaken on the causes of the freshet and stated that his Company would be willing to co-operate financially. The Commission was informed that this was the first occasion such a proposal had been made. The pilots, through their counsel, stated their willingness to co-operate.

Knowing that the main adverse factor was the outflowing river current at the junction of the main channel and the Courtenay Bay channel, and that its strength was in direct relation to the river level, i.e., the amount of water in the river, he made a table (Ex. 413) of the freshet seasons of 1960, 1961 and 1963, showing the level of the river at Oak Point some 15 to 20 miles up river from Saint John, and the high tide level.

Considering that one or two days may elapse before the effect of the water level at Oak Point is noticeable in Courtenay Bay channel, the graph (filed as Ex. 414) indicates that all cases of delay occurred during peak high water periods, the worst being in 1963, between April 22 and May 16, when some tankers were not piloted in and others delayed until the peak subsided.

The level of the river has a direct effect on the strength of the current; furthermore, high water level upriver takes a few days to reach the harbour and affect the current. From this reasoning Mr. Forsythe concluded that a study of the water level upriver (at Oak Point for instance) might provide rules to help forecast the strength of the current in the harbour.

(iii) *Selection of Pilots*

Mr. K. C. Irving argued that, taking into consideration the various factors involved in pilotage especially for Courtenay Bay, there might be room for some difference of professional opinion, but only to a certain degree, and that much depended on the ability of the individual pilot. He felt that only reasonable allowances should be made for such differences of opinion and that the Supervisor should see to it that they were controlled. He suggested that the easiest way to remedy the situation would be to allow the owner, or the agent, to select the pilot for any assignment; unless there was a correcting factor or unless something happened you could "drift and drift" until the situation in Courtenay Bay became almost impossible. This suggestion was never discussed with the pilots by the Irving interests, but they took the matter up with the Pilotage Authority through the local Supervisor by letter after accidents had occurred in the Reversing Falls. However, their suggestion received an absolute refusal (vide p. 99) and no opportunity for further discussion was afforded.

Mr. Irving agreed that if a pilot does not feel that conditions are safe he should not bring a ship in, but if a pilot is prepared to undertake an assignment he should be permitted to do so. In such a case, the Company should have the right to engage the pilot who, they believe, has sufficient

ability to bring a tanker in under what he may consider reasonable conditions for him. Although one should not go beyond what is reasonable, there is always a calculated risk involved in any ship movement.

COMMENTS

It must be recognized that navigation into Courtenay Bay for large vessels, especially if propelled by turbine engines, is an extreme situation similar to transiting the draw of the railway bridge in the New Westminster District. Hence, it should be considered an exceptional situation and treated accordingly.

The effectiveness of a pilotage service should not be limited to the level of its least competent members, nor subjected to the hazards of a strict tour de rôle which determines blindly whether a ship's movements will be made immediately, after some delay, or not at all, depending upon the degree of competence of the pilot who happens to be next on the roster.

As urged by Mr. Irving and illustrated by Pilot Cobham, pilots, like men in other fields, are not all equally skilled; some lack experience, either because they are newly licensed, or have not performed a specific type of assignment regularly enough, and there are those who will never improve, whatever experience they acquire. A service should take full advantage of the higher standard of competence of some of its members while, on the other hand, no one should be requested to undertake tasks for which he is not competent.

The pilots are well aware of this fact and, as stated by Pilot Frederick Quinn, they will not allow a newly appointed pilot to handle the more difficult assignments. If it is a new pilot's turn on the tour de rôle when a particularly difficult assignment arises, the pilots arrange among themselves to have it handled by a senior pilot.

Despite the fact that the Supervisor has the authority to give any assignment to any pilot of his choice, pilot Quinn added that the pilots would resent the Supervisor doing so. This attitude indicates that merely giving discretionary powers to the Supervisor does not go far enough because generally he will not use them, if by so doing he runs the risk of displeasing some of the pilots. Hence, appropriate rules should be enacted in the regulations.

It is generally agreed that the practice of permitting shipping companies to select and retain special pilots for their vessels should not be allowed. The main argument in favour of this system is that it enables pilots to gain detailed knowledge of the ships they pilot but the inherent weakness is that the employer-employee relationship which inevitably develops places the pilots in a dilemma whenever there is a conflict between safety and the company's interests

On the other hand, the service should be organized to ensure that assignments are not given to pilots who are not fully qualified to handle them.

It is considered that the most efficient procedure would be to adopt the grade system and, at the same time, give selected pilots special training for certain types of assignments.

The number of pilots on establishment has no bearing on the implementation of a grade system which merely classifies them in accordance with their competence. Since such a system is not based on seniority but on the skill, experience and record of each pilot, competence is the criterion for promotion to a higher grade.

In view of the navigational problems encountered in Saint John, it is considered that such difficult operations as navigating large crude oil tankers during the freshet period, or navigating the Reversing Falls, should always be assigned to the same Grade A pilots who thereby enhance their *expertise* to the highest possible degree. Other pilots selected for their skill should receive special training to prepare them for these difficult assignments by being required to accompany the assigned pilots as learners as often as possible.

Pilotage is a service to shipping and no effort should be spared to enhance its efficiency.

(iv) *New Suitable Site for Berthing Large Vessels*

The fourth solution to the Courtenay Bay problem is now receiving serious consideration, i.e., to abandon Courtenay Bay for larger vessels and use newly created, unobstructed deep water berths at a new site (vide p. 68). Even with the most expert and competent pilots, the physical restrictions of Courtenay Bay and its approaches already make it inaccessible for modern crude oil tankers, and with the continued trend to larger vessels, even costly improvements would soon prove insufficient.

(b) *Reversing Falls Problem*

Up to January, 1962, the Irving Oil Company Limited employed licensed pilots to navigate its ships through the Reversing Falls to the pulp and paper mill at Union Point. The principal carrier was the *Irvinglake*, first a self-propelled ship but later used as a barge. During the period 1958-1962 inclusive, the pilots made 119 trips through the Reversing Falls in Irving vessels (Ex. 425). After an accident, which occurred on January 10, 1962, and the events that followed, Mr. K. C. Irving decided to dispense with licensed pilots and organize his own system of pilotage with two or three of his tug Masters. However, as noted hereunder, the Company still employs licensed pilots, but only in special circumstances.

The records of Irving Steamships Limited show six accidents to its vessels in Saint John with a licensed pilot on board:

- (i) October 30, 1951, S.S. *Otterhound* passed under the bridge and while rounding Split Rock struck on the port side forward. There was a tugboat assisting. The Supervisor's records indicate that the pilot was not considered responsible.
- (ii) February, 1952, S.S. *Otterhound* with a tug assisting struck while passing under the bridge. The Supervisor has no record of this incident.
- (iii) May 20, 1957, M.V. *Seekonk* struck Split Rock. The Supervisor's records indicate that the cause of the accident was a strong current setting the ship. No blame was attached to the pilot.
- (iv) January 25, 1961, M.V. *Irvinglake* grounded on Navy Island, while proceeding toward the bridge. Two tugs were assisting. The cause of the accident was indicated in the Supervisor's report as striking an uncharted object in the channel.
- (v) January 10, 1962, a tugboat was jammed between Split Rock and the barge *Irvinglake*. Three tugs were assisting. After this accident Irving Steamships Limited discontinued regular employment of licensed pilots.
- (vi) July 30, 1962, a licensed pilot was employed due to the absence of Irving Steamships Limited's unlicensed pilot. The barge *Irvinglake* grounded on a rock near Irving Pulp and Paper Limited. Three tugs were assisting.

The evidence regarding the *January 25, 1961, accident to the Irvinglake* is contradictory:

- A. The vessel's Master, Captain Chisholm, stated that the *Irvinglake*, a live ship at the time, assisted by the tug *Irving Teak*, secured on her port side, and by another small tug, was proceeding through the harbour towards the Reversing Falls. He was assisted by a licensed pilot. As they were proceeding close to the west side of the harbour, he noticed that they were passing so close to the black spar buoy No. 62:5J that he mentioned the fact to the pilot who was watching the manoeuvre closely but did not answer. He did not take over from the pilot because he felt that the pilot knew more than he did about the features of the harbour and, furthermore, he himself had often passed close to the buoy, but never so close and never with a ship drawing 17 feet. The current at that stage of the tide was setting towards the buoy. Then he saw the buoy pass between the tug and the ship and go under the stern. When about halfway past the buoy the ship struck the bottom causing a leak in the dry cargo hold. While trying to push her off,

the tug *Irving Teak* broke its propeller, became disabled and had to be taken to Market Slip by the small tugs. One of the Saint John Tugboat Company's tugs was sent to assist and took the *Irvinglake* to pier No. 4, where two ten-inch pumps were used to keep her afloat.

- B. The pilot stated that he had frequently navigated ships in that area and had occasionally passed much closer to the buoy. He contradicted Captain Chisholm's statement by saying that the spar buoy did not pass under the ship and that when they struck the ledge the buoy was 60 feet abeam. He added that the Captain had told him that the draught was 17 feet but after the accident he measured and found 19 feet. At that time, however, there was water in number 1 cargo hold.
- C. Captain MacKinnon, the Supervisor of Pilots, stated that, according to the investigation, the vessel had apparently struck some obstruction in the channel opposite black spar buoy No. 62.5J and that Captain Chisholm, the Master of the vessel, corroborated the pilot's report to the effect that there was obviously some obstruction in the channel that nobody had known about before. The only action he took with regard to the alleged submerged object was to make his report to Ottawa. He did nothing to have the alleged object removed from the channel or located and he had not "the faintest idea" whether it was removed or not.

The Casualty Report (Ex. 60) indicates that the pilot was reprimanded: the Authority considered that the pilot had committed an error of judgment in allowing the vessel to approach too close to the far side of the channel and noted that the buoy existed to mark an obstruction. The pilot should have known that the chart showed the ground extended past the buoy and that there is only three feet at low tide outside the buoy.

Reporting on the *January 10, 1962, accident* to the barge *Irvinglake* the Supervisor stated that the accident was caused by the current under the bridge catching the barge, which was being assisted at the time by the tugs *Irving Teak* and *Irving Pine*, and that no blame was attached to the pilot.

The notarial protest made at the time by Captain Walter Patterson, Master of the steam tug *Irving Walnut* (Ex. 416), is to the effect that when the *Irvinglake*, under the direction of a licensed pilot and with three assisting tugs—*Irving Oak*, *Irving Teak* and *Irving Walnut*—was approaching Split Rock at the entrance to the Reversing Falls, the pilot ordered "stop engines" and "full astern", but before the tugs could be put "full astern" the tug *Irving Walnut* was pushed aground on Split Rock by the *Irvinglake* and the tow lines broke. The engines of the *Irving Walnut* were stopped immediately and the backwash from the *Irving Oak* floated the *Irving Walnut* off the rock and the *Irving Walnut* returned to pier No. 5 under her own power.

After this accident, J. D. Irving Limited wrote the same day to the Supervisor of Pilots requesting that, because of the frequency of accidents, an investigation should be held. On January 12, the Supervisor answered, without first seeking advice from his superiors, that the responsibility for the safe navigation of any vessel always rests with the Master, whether or not a pilot is aboard; that the accident arose because the tugs supplied were unable to control the ship when it took a sudden sheer and that the pilot's confidential report was being sent to the Department of Transport where further correspondence should be addressed. The least that can be said is that this letter from the local Supervisor was untimely and unwarranted and was unlikely to improve the already tense relations between the Company and the pilots.

On February 26, J. D. Irving Limited wrote again saying that, having had no assistance from the Supervisor in ascertaining whose fault it was, they would request that Pilot _____ be forbidden to pilot any of their vessels through the Falls in future. On February 27, the Supervisor replied that it was no fault of the pilot, that if the Company did not want Pilot _____ to pilot their ships they would have to delay movages when it was his turn, and that in any event with the *Irvinglake* there was no obligation to take a pilot (Ex. 420). Upon receipt of this letter, Mr. K. C. Irving decided that the services of licensed pilots should be dispensed with, in view of the lack of interest on the part of the District Supervisor and also because to delay the movement of their ships whenever it was Pilot _____'s turn would be a costly proposition.

In his covering letter to Ottawa forwarding the pilot's casualty report, the local Supervisor blamed the tugs for the accident and praised the pilot:

"The tugs are underpowered and have very poor manoeuvring qualities as well as being very poorly manned. The fact that this vessel has been moved so many times with so little damage speaks very well for the skill of the pilots..."

The word of the local Supervisor was taken for granted and his report was not investigated further. However, the Authority in Ottawa was not informed by the Supervisor that the shipping interests had requested an investigation.

Mr. Irving considered that two accidents in one year in the Reversing Falls with licensed pilots aboard were "very bad from the standpoint of costs and disruption of service". He stated that the experience of the Irving companies had been good since they dispensed with the services of licensed pilots: whenever one of their vessels is to transit the Reversing Falls they use one of their employees—Captain W. C. Chisholm or Captain A. W. Cobham (Ex. 416).

He added that this decision was taken, not because the licensed pilots were not capable, but because the Companies were dissatisfied with their performance. They could not afford to pay the bills for the accidents and they thought they could do better themselves. The Reversing Falls, in Mr.

Irving's opinion, are not dangerous to navigate if one knows how to handle them. They have had tugs coming down there for years and, while there are difficulties, negotiating the Falls is an everyday matter and they are easily passed with local experience. The important point is to time the transit when "the water is right". Since the water conditions are favourable for a very short period daily, the timing is most important.

Mr. Irving added that after the accident of January 10, 1962, they could have insisted on an inquiry but, rather than get involved in a lengthy court inquiry with all its trouble and expense, they took what they considered a more practical attitude.

Pilot Francis Quinn stated that the Irving ships have continued to have accidents when transiting the Reversing Falls. The pilots do not have any record of them but he himself witnessed one accident when the *Irvinglake* grounded off Navy Island for twenty-five minutes. On that occasion there was no licensed pilot aboard.

The Irving Oil Company Limited still occasionally employs licensed pilots when, as the pilots say, the weather conditions are not favourable or when the Company's unlicensed pilots are not available. On such an occasion the *Irvinglake* (the same vessel mentioned by Pilot Quinn above) grounded above the Falls on July 30, 1962. The notarial protest (Ex. 416) by Captain A. W. Cobham, Master of the steam tugboat *Irving Teak*, states in effect that his tug with the assistance of the tugboat *Irving Oak* took the *Irvinglake* in tow at Pier 5 at the Port of Saint John and proceeded from there to the Irving Pulp and Paper Company's wharf above the Reversing Falls, under the direction of a licensed pilot on board the *Irvinglake*. The *Irving Teak* was towing ahead and the *Irving Oak* was secured to her port quarter. Just above Navy Island, another tugboat, the *Irving Pine*, was positioned on her star-board bow.

"... as we neared the Bridge my tug dropped back to take up position on the port bow of the *Irving Lake* ... and about opposite the wharf we commenced to swing to port. As we neared the wharf the pilot ordered the *Irving Pine* to let go and proceed around to the port quarter then the back eddy caused by the incoming tide caught the port bow of the *Irving Lake* and carried the *Lake* up river, the pilot ordered us to go full astern, but the *Irving Lake* continued to be carried up river and struck the ledge or pitch at the Reversing Falls and went hard aground,..."

COMMENTS

In this case, the Supervisor of Pilots failed to appreciate, first, that pilotage is a service, second, that especially difficult cases should be treated as cases of exception, thirdly, that from a security point of view a shipping casualty to a vessel creates a presumption of incompetence, if not of fault, on the part of the pilot.

Because negotiating the Reversing Falls is a difficult assignment requiring detailed local knowledge and practice, the Supervisor should have made use of the powers granted him by subsec. 17(1) of the By-law to select the

best qualified pilot(s) for the small number of assignments in this area. By restricting his choice to the same pilot(s) he would enable them to increase their *expertise* and thus ensure a more efficient and reliable service.

This is a clear example of the weakness of a central administration: The Supervisor had become merely a local manager with no real power who had identified himself as a servant of the pilots instead of maintaining the unbiased attitude expected of the local representative of the Authority of a public service.

The solution adopted by the Irving interests to have their ships piloted by an unlicensed pilot is illegal. It is not because of the compulsory payment system, but because of the statutory obligation to use the services of a licensed pilot if such services are desired (vide Part I, pp. 205 to 210).

Therefore, as long as the Reversing Falls remain part of the Saint John District, measures should be taken to ensure that only licensed pilots are employed in that area and that these difficult assignments are performed by the District's most competent pilots.

(c) *Tugboat Problem*

Tugboats are obtained in Saint John Harbour from two sources: the Saint John Tugboat Company, which up to 1959 was the only company providing this service; and the Irving interests, i.e., J. D. Irving Limited and Atlantic Towing Limited, which own and charter tugboats.

Before the refinery opened (1959), the Saint John Tugboat Company owned six tugs which handled all the traffic. The two most powerful, *Ocean Osprey* and *Ocean Rockswift*, both 1,000 horsepower, were laid up during the summer because tugs of their size were required only during the winter to handle large vessels. The remaining four tugs were kept in service throughout the year: *Ocean Hawk II* of 900 horsepower and three smaller vessels averaging 400 horsepower, *Ocean Hawk I*, *Spruce Lake* and *Ocean Weka*.

After the refinery became operational and the competing tugboat company was formed, Mr. K. C. Irving charged that the pilots discriminated against his tugs and preferred to use the Saint John Tugboat Company tugs. He noted that the California Shipping Company followed the pilots' recommendations claiming that it could not force them to use Irving tugs if they were inefficient. Hence, he found himself in a dilemma. On one hand, he was required by contract to supply the necessary tugs (which the pilots prevented him from doing) and, on the other, the tugs he had purchased to meet his obligations were not being used and were losing money.

Mr. K. C. Irving stated that the California Shipping Company was not carrying out its contract made with him in 1957, and was trying to justify itself on the basis that the pilots were unwilling to use Irving tugs.

He charged that the pilots are unreasonable, and claimed his tugs are suitable for Saint John Harbour. They are regularly employed by Irving Oil

Company Limited for all their towing operations in the harbour, they are used to berth the *Irvingglen*, the *Irvingstream* and any other vessels that come to the upper wharves and they assist ships to enter and leave the dry dock.

He added that the pilots had been ordering Saint John Tugboat Company tugs to berth and unberth the crude oil ships instead of using the Irving tugs that were placed at their disposal.

He continued that it is not a question of two tugboat companies competing because the Irving interests are not trying to secure the harbour tug business. His tugs were purchased to meet a contractual obligation connected with the supply of crude oil in Saint John. When the California Shipping Company requested tugs of approximately 1,000 horsepower, he complied by purchasing tugs previously used to berth naval vessels in England. He also had them converted to meet local requirements after consultation with marine architects.

Specific complaints received from the pilots were considered and changes made, e.g., the gear ratio of one tug was reduced. But the pilots' complaint that the *Irving Teak*, being an oil-burner, was dangerous near a crude oil ship, was not acted upon because some of the tugs used and ordered by the pilots were also oil-burners.

Mr. W. Walsh, Office Manager for Kent Line Limited (agent for the California Shipping Company) makes the necessary arrangements for tugs, pilots, etc. for crude oil tankers destined for Courtenay Bay. He corroborated Mr. Irving's charges and gave two examples of the pilots' attitude:

- (i) On February 28, 1962, one of his men called the pilot station about a crude oil tanker belonging to the California Shipping Company and, in the absence of Pilot Abrams who was to pilot the ship in, spoke to the Supervisor of Pilots. He was told that two Saint John Tugboat Company tugs and two Irving tugs would be needed. Later, Pilot Abrams called to change the order to three Saint John Tugboat Company tugs and one large Irving tug, adding that otherwise the ship would stay at anchor.
- (ii) In another instance, when a ship was due to sail on a Saturday morning, he contacted Pilot Quinn (the assigned pilot) who told him that two Saint John Tugboat Company tugs and one Irving tug were necessary. When he asked whether two Irving tugs and one Saint John Tugboat Company tug could not be used, Pilot Quinn told him that unless he obtained the tugs he wanted the ship would stay there. Later, it developed that it was Pilot Alexander's turn and he agreed to use two Irving tugs and one Saint John Tugboat Company tug. However, later in the morning Pilot Alexander requested two Saint John Tugboat Company tugs and one Irving tug.

Prior to the beginning of 1960, the pilots asked for three Saint John Tugboat Company tugs and one Irving tug for berthing; in 1963, they asked for two of each, unless the weather was unfavourable. On rare occasions they asked for three Irving tugs. To assist a ship out of the harbour they always asked for two Saint John Tugboat Company tugs and one Irving tug.

Mr. Walsh stated that he, as agent, never told the pilots what tugs to use but that he had asked them whether they could not use more Irving tugs and had received a negative reply.

Kent Line Limited received a letter from the California Shipping Company, for whom they are agents, dated January 11, 1962 (Ex. 422) on the tugboat situation. It stated that tugboat charges would not be paid unless the tug had been ordered by the pilot or by the Master of their vessel, and quoted part of a letter received from the Saint John Pilots commenting on the Irving tugs as follows:

"The *Irving Teak* is a steam tug of little power and very poor manoeuvrability, in addition it is noted that there is generally a constant stream of sparks emerging from her funnel along with a constant cloud of black smoke which is hardly considered desirable when secured to an oil tanker.

The *Irving Oak* is a diesel tug of good power but poor manoeuvrability, it is apparently impossible to run her engine at slow speed and while at times of some use for pushing purposes is of no use on the end of a line.

The smaller tugs proposed are of very little use what so ever and generally of more nuisance than they are worth".

The letter requested corrective action on the *Irving Teak* before it was used in the Company's service again, and stated that the California Shipping Company was in agreement with the wishes and views of the local pilots.

One of the conditions which the California Shipping Company agreed upon when choosing Courtenay Bay as the site for the refinery was the provision for powerful tugs which were not then available in sufficient numbers to service their large tankers. The Irving companies, which already had small river towboats, acquired five large new tugboats between 1958 and 1962 inclusive: *Irving Oak* and *Irving Beech* (both 1,200 h.p.) *Irving Teak* (900 h.p.), *Irving Birch* (450 h.p.), which was not being used in 1963, and *Irving Walnut* (750 h.p.) which was laid up during the summer months.

Two of the newly acquired tugs were converted to diesel, their power was increased and changes were made in their steering apparatus. A test of suitability for service in Saint John indicated they were very manoeuvrable.

At the beginning of 1961 when the *Irving Oak* and the *Irving Beech* had not yet been acquired, Irving Refining Limited, acting as agent for the California Shipping Company, had to ascertain that the necessary tugs would be available throughout the year. On March 24, 1961, the Saint John Tugboat Company wrote that unless special arrangements were made after April there would be only two tugboats available in the harbour when the winter season closed (Ex. 622). Another letter, dated March 27 (Ex. 623) indicated that the available tugs would be the *Ocean Hawk II* (900 h.p. diesel)

and the *Ocean Weka* (400 h.p. steam) at a cost of \$450 per day, for every day of the month including Sundays and holidays, whether used or not. The normal charge by the Saint John Tugboat Company for berthing and unberthing a ship is \$125 per tug per ship.

The California Shipping Company refused to assume this obligation, relying on Irving Refining Limited's obligation to provide tugs when needed at the normal charge of \$125 per tug when used. Irving Refining Limited had to pay the difference between the standby charge and the ordinary fee. The agreement with the Saint John Tugboat Company had to be carried out and the result was a legal suit against Irving Refining Limited for some \$80,000. By judgment rendered on March 22, 1963, the Irving Refining Limited had to pay \$79,639 to the Saint John Tugboat Company Limited.

With regard to the situation in 1963, the California Shipping Company's letters dated June 13, 1963, and June 27, 1963, instructed Kent Line Limited to order five tugs for all vessels both inbound and outbound that were owned and chartered by the California Transport Corporation. The tugs to be employed were specifically two Saint John Tugboat Limited tugs, *Ocean Osprey* and *Ocean Hawk*, and three Irving Tugs, *Irving Beech*, *Irving Oak* and *Irving Teak*. This arrangement was apparently the result of negotiations between Mr. Irving and the California Shipping Company. Since other crude oil ships did not come under these instructions, tugboats were provided for them as requested by the pilots.

The Irving tugboat charges are the same as the Saint John Tugboat Company's, i.e., \$125 per tug per assist. However, the pilots never suggested the use of five tugs under normal navigational conditions, and as a consequence of the new instructions it costs \$250 more for tugs per tanker than before, i.e., one extra tug both inward and outward.

The Supervisor's letter dated December 28, 1961, to the California Shipping Company (Ex. 422) referred to a recent conversation he had had with their Captain Ingraham and stated that the views of the pilots on the tugboat requirements for the handling of crude oil tankers remained the same: "... the desired minimum of tugs under normal conditions is at least four (4) well designed and manoeuvrable tugs of over 1,000 H.P. during berthing of loaded vessels and at least three (3) of the above during unberthing of ballasted vessels." The letter continued that the situation had been met to some degree by the use of *Ocean Osprey*, *Ocean Rockswift* and *Ocean Hawk* of the Saint John Tugboat Company and one Irving tug, usually the *Irving Teak*. The Supervisor added that pressure was being put on the pilots to use the *Irving Teak* and the *Irving Oak* and some small river tugs but he disagreed for the reasons above quoted and requested permission for the pilots to continue to use the Saint John Tugboat Company tugs "at least until equivalent ones are supplied and properly manned by J. D. Irving Company Limited".

The Supervisor stated in his testimony that the pilots do not order tugs, but recommend to the agent which tugs they prefer. The only ground for recommending which tugs should be used is the safety of the vessel concerned. The Saint John Tugboat Company vessels are not really much superior in power or better built, but they are better handled. It is strictly a personnel problem—their Masters have long experience and remain in the employ of their Company, whereas the Irving vessels have a continuous turnover of personnel. "No man is a born, experienced tugboat master; he has to learn his job".

When the Supervisor of Pilots wrote to the California Shipping Company, he did not know that the *Irving Teak*, to which he referred as a "steam tug of little power", had 900 h.p.; he understood it had around 600 h.p. as stated in Lloyd's Register. He obtained his information about its manoeuvrability from the pilots, (this was prior to the modifications made in 1962) and it had been reported to him that the Irving tugs had considerably smaller rudders. At the time of his letter, there were only two Irving tugboats employed towing tankers.

The Supervisor did not consult his superior officers in Ottawa before he wrote this letter because it was a local matter. He did not know that the California Shipping Company had a contract with the Irving Company to supply tugboats and he never thought that his letter might induce a breach of contract.

The pilots emphasized that the Saint John Tugboat Company tugs are superior in manoeuvrability to the Irving tugs and also have more experienced Masters, but they are not numerous enough, especially for servicing large crude oil tankers.

In many instances, the Irving tugs were reported to have shown lack of experience by doing the exact opposite to what the pilots asked them to do.

All the pilots were unanimous in their complaints that the Irving tugs lacked manoeuvrability, that their Masters lacked competence and that there was an absence of teamwork in their crews. The pilots cited numerous occasions when these tugs performed badly and risked serious damage or even disaster.

Often when an Irving tug was approaching a ship to make fast it collided with another tug. On one occasion a tug stove in a plate of one of the tankers and on another an Irving tug trying to get alongside a Saint John Harbour Company tug, which had already secured to the ship, came too fast and collided with it damaging its bulwark.

Pilot R. V. Cobham stated that as far as he is concerned he never orders tugs, but will give advice to the agent or to the Master. Under ordinary conditions, it makes no difference to him which company sends tugboats. In adverse conditions, however, he would rather have an experienced tugboat Master than someone whose experience is very limited.

In his opinion, the Saint John Tugboat Company Masters are more experienced. When alongside a ship, the Irving tugs are quite as good as the Saint John Tugboat Company tugs, but they are not as manoeuvrable and can not be trusted when towing with a hawser. It was explained that when a tug is alongside all it has to do is push or go astern, and it is not necessary to keep in position. But when on a line, the position of a tug has to be controlled in relation to the ship. Towing with a hawser requires manoeuvrability and experience.

While it was shown by the evidence and by Exhibit 428 that the Saint John Tugboat Company Masters had held their commands for over five years (and even much longer), Exhibit 427 indicated that in three years the Irving tugs changed Masters many times: e.g., the *Irving Teak* had ten changes in two years involving six different Masters, and in 1962 and 1963 the Master of the *Irving Beech* changed five times.

Referring to signals to tugs when manoeuvring ships, Pilot F. L. Quinn stated that at first glance they seem to be confusing, but they have been in use in Saint John Harbour for a very long time. The Irving tugs appear to be the only ones with which the pilots have difficulty. Captain H. M. Haines, Master of the *Ocean Hawk*, stated that he is well acquainted with the signals and has no difficulty understanding them. If by chance he does not hear a signal, he makes no acknowledgement with the tug's whistle and in this event the pilot generally comes out to the wing of the bridge to tell the tug Master what he wants. There had never been an occasion when he was unable to get the pilot's message by some means. When handling a ship with his tug he watches the bridge of the ship where the pilot is usually stationed.

The pilots have had some difficulty communicating with the Irving tugs because of the noise they make. Pilot F. L. Quinn stated that he had tried to call them on Frequency Modulation (F.M.), but found that the radiotelephone of the *Irving Beech* was in the wheelhouse down below while the Master was stationed on deck. Thus, communication depended on a man to relay messages, and five times out of ten, he was not available. Pilot Quinn had also tried a loud hailer or "bull horn".

For a time, small walkie-talkies were provided by the Saint John Dry Dock Company for use when berthing and moving ships in and out of the dry dock. They worked very satisfactorily but suddenly, for reasons unknown, they were withdrawn. The pilots were provided with this equipment on account of the difficulties they had with the Irving tugs. At one time, the Superintendent of the dry dock had even instructed the pilots not to use Irving tugs to move ships in and out, but these orders have since been rescinded.

Of the five Irving tugs, two have been laid up, the *Irving Birch* since March 22, 1963, and the *Irving Walnut* since the summer of 1963, because of lack of employment.

Captain Chisholm, one of the Irving tug Masters, stated that the Irving tugs are very manoeuvrable, as good as the Saint John Tugboat Company tugs (he was a relief Master for a month in the *Ocean Hawk*, and for thirty-five years he has seen the other tugs manoeuvring in the harbour). The Irving tugs were given manoeuvrability tests in 1962 by Mr. A. M. Kerr, General Manager of the Saint John Shipbuilding & Dry Dock Company Ltd., after some improvements had been made at the suggestion of the pilots, *inter alia*, enlarging the rudder. The tests were made "to determine the efficiency of each tug in handling vessels of all types and sizes in berthing alongside wharves and docks, and in assisting from berths and docks into the stream and in the Port of Saint John".

When the tests were carried out, Captain Chisholm was on board together with Mr. A. R. Davis, the Yard Foreman of the Saint John Shipbuilding & Dry Dock Co. Ltd., who holds a Master's certificate and whose duties include the carrying out of such tests. Mr. Davis stated that they carried out such manoeuvres as speed trials, moving to port and starboard, crash stop, full astern, full ahead. As far as manoeuvrability was concerned there was nothing wrong with the tugboats. He agreed with Mr. Kerr's report, which was most favourable (Ex. 417).

Mr. James M. Fraser, Naval Architect and former Supervisor of the Saint John Shipbuilding & Dry Dock Co. Ltd., who, at the time of the Commission's hearing, was in a consultative capacity with the Saint John Tugboat Company, conceded that the *Irving Beech* and the *Irving Oak* have more horsepower than the Saint John tugboats, *Ocean Osprey* and *Ocean Rockswift* (both 1,000 h.p.) and *Ocean Hawk* (900 h.p.). These were the only tugs owned by the Saint John Tugboat Company that were in use at that date.

In a general way, the characteristics of the Saint John Tugboat Company tugs and Irving tugs were comparable. The pilots conceded that the manoeuvrability of the Irving tugs had improved since changes were made.

The letter of December 28, 1961, from the Supervisor of Pilots to the California Shipping Company was written after consultation with the pilots just when the Irving tug Master had commenced their operations. At that time they had little experience and their equipment was not handled to the best advantage. At first, the pilots blamed the tugs because they did not want to hurt the tugboat Masters while they were learning. However, their opinion in 1963 was that these Masters had not yet gained the necessary experience. The pilots obtained their first adverse impression of the tugs by observing them operate in the harbour and later when they worked with them. The problems raised in this letter were discussed by the officers of the California Shipping Company and all the pilots.

The Commission's Nautical Adviser had many opportunities to see the Irving tugs *Irving Oak* and *Irving Beech* in action and reported that "they were quite efficient and showed power and good manoeuvrability". But on one occasion, on September 3, 1963, as they were assisting the tanker *Irving-glen*, the tug *Irving Oak* "began belching huge clouds of sparks and had to be dismissed as soon as possible" because of the risk of fire. This left the tanker in a difficult situation at a time when power was needed. On Sept. 4, 1963, he witnessed the *Petro Sea*, a 17,689 N.R.T. crude oil tanker, draught 35 feet, being piloted in Courtenay Bay. He was very impressed by the pilot's skill. He added that "before entering the channel, two harbour tugs and two Irving tugs made fast alongside and these four tugs, acting in concert, provided a very potent aid to docking. The tugs worked quite harmoniously." He also reported that "the Irving tugs are gaining experience daily and I could not see any short-comings in them". (Ex. 1460 (kk.)).

Accident records (Exs. 60 and 426) indicate three accidents attributed to tugs which are not Irving tugs:

- A. In April, 1958, the accident to the S.S. *Rubens* was caused by the tug *Ocean Hawk* getting the vessel across the current. It was listed as "Tugboat captain acting on his own".
- B. On December 22, 1959, the ship *Rathlin Head* had an accident due to the faulty manoeuvres of the tug *Ocean Rockswift*. In Exhibit 60, the cause is listed as "Captain of tug-boat did not understand order".
- C. On January 1, 1960, when the tug *Ocean Rockswift* commenced towing the *Cape Araxos* without orders from the ship the dolphin was pulled out.

COMMENTS

The Irving interests' formal recommendation that the pilots should have no authority to select and engage the tugboats to be used is concurred in.

It is agreed that the present situation is very unsatisfactory and could have been easily avoided through co-operation, understanding and consultation, as suggested by the pilots' counsel in his pleadings.

The pilots should not be involved in selecting tugboats operated by competing owners. Tugboat assistance, like pilotage, is another service to shipping, and it is the responsibility of those providing it to make the necessary arrangements with the ship owners or agents. The pilots should only be concerned with the type of tugs required for a given assignment, and should make their recommendations known before tugs are ordered.

It is true that at one time the Irving tugs were not as manoeuvrable as those owned by the Saint John Tugboat Company, but they were modified and their power increased. It appears from the evidence that they are now comparable in power and manoeuvrability. It is also true that in the three years the Irving tugs had been in operation prior to 1963 their Masters had

been frequently changed, while the Masters of the other company had remained with their tugs for several years. However, the Irving tugs are regularly employed berthing and unberthing large ships for the Irving interests, thus implying that they can function and that their crews are gaining experience.

Nevertheless, in their evidence the pilots were unanimous on the unsatisfactory performance of the Irving Masters, and they recounted various incidents involving the Irving tugs. On the other hand, they voiced their entire satisfaction with the Saint John Tugboat Company's tugs. However, Exhibit 60, which contains accident statistics, discloses three cases (referred to earlier) where the responsibility for a shipping casualty was placed on the Master of a tug which did not belong to the Irving interests. It is also fair to assume that there must have been other incidents which did not result in shipping casualties. "Tugboat captain acting on his own", "tug started without a signal from a ship", "captain of tugboat did not understand order", are the reasons given for those three accidents; they are strikingly similar to the charges levelled by the pilots against the Irving tug Masters. Even now, the pilots' orders are not always understood by the Saint John Tugboat Company Masters, e.g., Captain Haines stated that at times a pilot is obliged to come out to the wing of the bridge and tell them what he wants. The problem of communicating orders is one that the Pilotage Authority and the pilots should try to solve because it has a direct effect on safety.

The attitude of the pilots towards the Irving tugs is too inflexible. This is an unhappy situation because more tugs are needed than the Saint John Tugboat Company can supply and the Irving tugs can not be dispensed with and must be used for special tasks. The decision of some of the pilots never to use Irving tugs except to service an Irving ship is unwarranted and biased: this is no longer a question of safety but amounts to discrimination. It is granted that some Masters, like some pilots, may never increase their skill by experience, but these are unusual cases and, while it is possible that some Irving tug Masters were unable to gain wider experience during the period 1960-1963, this can not be true of them all.

It would be preferable if the pilots tried to co-operate with the tugboat Masters and develop efficient teamwork. Any weaknesses should be reported to the proper authorities in order to have corrective action taken.

It is believed that much of the fault stems from the surrender of responsibility by the Pilotage Authority which results in the non-selective assignment of the pilots by roster. It is considered that the contention between the pilots and the Irving tug Masters would have been resolved long since if, as recommended earlier, the District Supervisor had taken an authoritative and constructive attitude and ensured that only the most

competent pilots were given the more difficult assignments. Under these conditions, pilots and tug Masters would have developed efficient techniques to the great advantage of the pilotage service and the safety of navigation.

(5) WORKLOAD

Pilots' workload is not, and can not normally be, a problem in the Saint John District. Neither in their brief nor during the public hearings did the pilots suggest that they were overworked at any time and no delays were reported due to the lack of a pilot.

However, the method of determining the pilots' workload for statistical purposes and the use of such statistics have been points of contention.

It is often overlooked that pilotage at the operational level is essentially local in character and criteria that are applicable in one District may be totally inapplicable in others. Since pilotage is a local service to shipping, it must be organized to meet variable local requirements. Workload in a District where tasks are fairly evenly spread can not be measured by the same criteria as where pilotage is essentially seasonal or is limited to a few hours a day because of tidal and other restrictions.

As stated earlier, the general criterion is the capacity of the service to meet the demand adequately during foreseeable peak periods of long duration without overworking the pilots. Occasional extra work during unexpected peaks is one of the inherent obligations of the pilots' profession. It is also normal for ships to be delayed occasionally for lack of available pilots at such times. This situation is more likely to occur in a tidal port like Saint John where most ship movements are limited to the height of the tide. At low tide the pilots have few assignments; the occasional smaller vessels of light draught that can enter or leave the harbour at any state of the tide are declining in numbers.

Therefore, in Saint John the present criterion for determining the number of pilots is not their workload but their capacity to meet the demand at high tide. In other words, vessels that arrive in good time should not miss the tide due to lack of available pilots. An isolated case of this nature would serve as a warning to reassess the situation in order to determine whether the margin of efficiency has been reached; recurrences over a period of time would definitely show that the number of pilots is inadequate.

But there is also the other side of the question: are the pilots unduly underworked as was the case in Halifax (vide pp. 246-248)? If this proves to be so, their strength should be reduced accordingly. The present trend in Saint John is to fewer ships of larger size which leads to fewer but more difficult pilotage assignments. This trend should be reflected in the service by

employing a smaller number of pilots who possess the highest qualifications and are remunerated accordingly.

The pilots emphasized that on account of tidal and other conditions their work also consists of planning and co-ordinating ships' movements (vide pp. 82-84).

However, as discussed earlier, the present rigid system would be greatly improved and the service made more efficient by the appointment of a co-ordinator, thus relieving the pilots of their duties in the pilotage office and reducing their shore functions to advising the co-ordinator of their requirements.

A reasonable allowance should be made for unavoidable absence due to illness. Annual holidays should be taken during the slack season and arrangements made to provide other rest periods of short duration during the peak months.

In order to solve these problems, the Pilotage Authority should not only compile adequate data to ascertain the pattern and extent of the demand for pilotage at any given period of the year but also should make a detailed analysis of the pilots' time spent directly or indirectly on pilotage. This analysis should be accompanied by data on the restricting factors that prevailed for each assignment so that the pilots' workload for any given day may be fully appraised. The Commission does not possess such details and it was not deemed necessary to obtain them for the purpose of this Report. However, from the information available it is possible to obtain a fairly accurate picture of the pilots' workload.

The pilots have rightly objected to the use of average figures to establish their workload but do not hesitate to make use of them to support their own proposals. Nevertheless, the proof they seek from them is not at all conclusive. For instance, in support of their request for a tenth pilot they use the average figures of the number of assignments per pilot per year in order to show that the present stand of the Pilotage Authority for refusing their request is illogical because, according to these average figures, the pilots are now overworked in comparison with the years 1946 and 1947. This is a fair example of the danger of using statistical figures without ascertaining whether they are truly comparable. As indicated on pp. 66-68, the traffic pattern has changed substantially since then. The marked increase in year round traffic now enables the pilots to perform a greater total number of assignments under normal conditions. The following table shows the total number of assignments for the 10 years 1958/59-1967, including movages and Reversing Falls transits, the average number of pilots on establishment per year and the average number of assignments per establishment pilot. For comparison with other statistical data, vide graph and table in Appendix A.

Study of Saint John, N.B., Pilotage District

Year*	Total Number of Assignments	Establishment of Pilots	Average Number of Assignments Per Establishment Pilot
1958/59.....	1,460	10	146.0
1959/60.....	1,700	9.18	185.2
1960.....	1,896	8	237.0
1961.....	1,963	8.2	239.4
1962.....	1,747	9	194.1
1963.....	1,626	9	180.7
1964.....	1,701	9	189.0
1965.....	1,768	9	196.4
1966.....	1,725	8	215.6
1967.....	1,521	8	190.1

*Up to 1960, annual reports were for the fiscal year.

SOURCE OF INFORMATION: EX. 45.

However, the following self-explanatory table is more informative. It also shows that the despatching system now in force shares the workload unevenly because the duty pilot must combine office responsibilities with inward pilotage (vide p. 83).

Year	Busiest Month	Total Assignments	Busiest Pilot	Average per Establishment Pilot	Least Busy Month	Total Assignments	Busiest Pilot	Average per Establishment Pilot
1961	March	295	43	36.0	June	89	19	10.9
1962	March	275	46	30.6	August	73	15	8.1
1963	March	268	39	29.8	June	62	12	6.9
1964	January	247	30	27.4	September	80	13	8.9
1965	March	312	67	34.7	July	78	18	8.7
1966	March	214	30	26.7	September	62	12	7.8
1967	March	205	29	25.6	September	80	13	10.0

SOURCE OF INFORMATION: EX. 1306.

But even these statistics must be viewed with great caution. For instance, the busiest month in 1962 was March with 275 assignments, i.e., 118 inward, 126 outward and 31 movages. The busiest pilot was probationary pilot A. C. Vallis who was given additional assignments for experience. He performed 20 inward, 22 outward and 4 movages—a total of 46, while the busiest regular pilot was L. O. Abrams with 15 inward, 17 outward and

5 movages—a total of 37. A similar situation prevailed in March, 1965, when the probationary pilot spent only three days without an assignment compared with an average of ten days free for the other eight pilots. The probationary pilot also performed six assignments in one day while the others were not required to perform more than three in any one day. Under the present system, the duty pilot has most to do during his day on duty while the others may be, and often are, unemployed, e.g., Pilot Merriam stated that on February 14, 1963, when he was on duty during the peak season he performed three of the 10 assignments which occurred during that time (one early in the morning of the 15th, prior to the expiration of his turn of duty) leaving 7 assignments for the other 8 pilots.

The Department of Transport has also kept statistics of the pilots' time on duty from which averages based on periods of 12 months have been calculated. The pilots charged that these statistics did not give an accurate picture of their time on duty because they did not take into account the time taken to travel from the pilot station to embark, nor the time spent in the pilot office co-ordinating and planning pilotage movements. The statistics indicate, however, that travelling time is arbitrarily set at 2 hrs. per assignment in addition to time spent on board. For the year 1962, these statistics give the following information:

Basis of Workload	Total Workload in Hours	Average Workload per Establishment Pilot		
		Yearly Hours	Monthly Hours	Daily Hours
Total for year — 1962*	3,360.3	373.4	31.1	1.0
Busiest Month — March**	477.3	636.4	53.0	1.7
Least Busy Month — August**	139.8	186.4	15.5	0.5

*Exhibit 1298.

**Exhibit 1306.

For the reasons mentioned earlier, while these average figures are more significant on a monthly rather than a yearly basis, they still are of little value in computing the time on duty of an individual pilot on a given day. For the year 1962, the D.O.T. statistics indicate that the length of assignment for trips varied between 10.7 hrs. maximum to 0.5 hrs. minimum with most trips averaging 1.8 hrs., while movages varied from a maximum of 6 hrs. to a minimum of 0.5 hrs. with most averaging 2 hrs.

The evidence brought before this Commission re time on duty while on board, i.e., from "heave up" to "lines out", showed about two hours per trip and a total distance of some six miles. If a crude oil tanker is being piloted, the pilot must be aboard at half-flood tide to ensure that the ship is under weigh two hours before high water at the latest. It takes about an hour to

cover the four or four and a half miles to the Courtenay Bay breakwater, half an hour from the breakwater to the wharf and three quarters of an hour to secure. This is a slow operation but in most circumstances it can not be performed more quickly.

Mr. Tracy Cleary, Kent Line's accountant, using a record he kept from information obtained from Masters of crude oil tankers (Ex. 415), established that for a crude oil tanker:

- (a) time "pilot boarded" to "all fast" varies from 2.35 to 4.10 hrs. with an average of 3.17 hrs.;
- (b) time "anchor aweigh" to "all fast" ranges from 1.46 to 3.33 hrs. with an average of 2.34 hrs., plus an additional 10 to 15 minutes to weigh anchor.

Pilot W.B. Alexander gave an example of the time required to berth a crude oil tanker. On July 15, 1962, the *British Victory* took him from 8.30 a.m., when he reported to the pilot office, to 1.30 p.m., when he returned to the pilot office, i.e., five hours to complete the assignment. It was about 9.15 a.m. when he embarked and he disembarked at 12:30 p.m. to report back to the pilot office. It was his turn and he knew of the assignment about 8 or 9 o'clock the night before.

A cargo vessel takes one hour to one and three quarter hours to cover the five or six miles from anchorage to berth in the main harbour but a little less if she is boarded when under weigh. For these ships, the pilots plan to be on station about one hour before E.T.A. In good weather, it takes 25 minutes for the pilot vessel to reach the boarding area off the fairway buoy, but in adverse weather it may take an hour and a half.

COMMENTS

The Saint John Pilotage District is not generally comparable to other Districts because of the following factors:—

- (a) The seasonal traffic pattern is such that three fifths of the annual traffic occurs during the four-month winter period, for which there must be sufficient pilots to provide adequate service.
- (b) The high tides restrict navigation for most deep-sea ships and confine their pilotage assignments to a period two hours before and two hours after high tide during daylight.
- (c) The pilots' land travel is negligible.
- (d) No leave is granted or taken during the four-month peak traffic period.

From the point of view of the pilots' workload the duty pilot system is considered wrong and should be abolished. For both the efficiency of the service and safety of navigation pilotage must be performed by rested pilots. Fatigue is synonymous with unfitness. It is not normal, nor should it be required, for a pilot to undertake all the assignments he can handle during a

24 hour period and, at the same time, be held responsible for the functions of the pilot station. On many occasions there may not be enough activity to keep the duty pilot fully occupied, thus allowing him time for rest, but this may not be the case during peak traffic periods. There is no valid reason for requiring a tired pilot to undertake an assignment when other well rested pilots are available. This problem would be partially solved if, as recommended, despatching together with planning and co-ordination were actually exercised by a representative of the Pilotage Authority.

6. PILOTS' REMUNERATION AND TARIFF

(1) PILOTS' REMUNERATION

At the time of the Commission's hearings in 1963 there was no contention regarding the pilots' remuneration. The pilots appeared satisfied with their income for they made no reference to it in their brief and voiced no complaint at the hearings. They stated that the sole purpose of their request for a surcharge on "supertankers" was to correct an obvious weakness in their time-honoured method of calculating pilotage dues and not to produce additional revenue. This point will be studied later.

For the purpose of this Report the remuneration of the Saint John pilots must be ascertained. (For the different interpretations of the term "pilots' remuneration" see Part II of the Report, pp. 132 and ff.)

Except for the dues payable to the Department of Transport for the provision of pilot vessel service, all pilotage dues, including those collected pursuant to the compulsory system, are paid to or on behalf of the pilots.

The Department of Transport assumes all operating expenses, except the pilots' land transportation to and from wharves. The cost to each pilot of the pilot vessel service operated by the Department of Transport is what he himself has charged the ship he has served, i.e., the pilot boat charge. For this reason, no pilot is ever out of pocket on this account. However, each pilot pays his own land travelling expenses. Contrary to the practice in the B.C. District, these do not form part of the general operating expenses of the service paid out of the Pilotage Fund in order to prorate them among all the pilots. The consequence of this system, which is a survival from the days of free enterprise, is that the amount referred to as the "take home pay" of the pilots is not, in fact, their exact net earnings. Since no record is being kept of the actual expenditures of the pilots on land transportation, it is not possible to calculate net figures. Land transportation expenses incurred by the Saint John pilots must be very small because the distance between the pilot station and the various harbour wharves is generally short and they usually have free transportation of one kind or another. This factor must, therefore, be taken into account when the remuneration of the Saint John District pilots is compared with the remuneration of the pilots in other Districts.

Taking the year 1962 as an example, the average remuneration per establishment pilot according to the various meanings given to the term is shown below (vide 1962 Financial Statement on p. 117). These average figures are somewhat smaller than the corresponding amount received by those pilots who are entitled to a full share from the pool. Generally speaking, all the pilots, except probationary pilots, receive exactly the same amount.

(a) *Pilot's share from the pool ("take home pay")—\$11,788.28*

In 1962, the amount remaining for distribution to pilots amounted to \$106,094.55 which, if shared equally between the nine pilots, would have made their share \$11,788.28. In fact, the seven pilots who were constantly available received \$12,245. One who was absent for some time received \$11,927.52, and one \$8,452.03 because he had a probationary licence for nine of the 12 months. As stated earlier, this amount includes whatever land transportation expenses each pilot incurred.

(b) *Pilot's share of the District net pilotage revenue less Pension Fund contribution—\$11,843.83*

In 1962, there was only one item of pilot group expenses paid out of the Pilotage Fund: "National Convention \$500". Whatever the pilots as a group decide to pay out of the pool for their own benefit and advantage is part of their remuneration.

(c) *Pilot's share of the pilotage dues (less pilot boat charges)—\$13,777.25*

The only item added here is the compulsory contribution to the Pension Fund which was then, and still is, 14 per cent of the District pilotage earnings, pilot boat charges excluded.

(d) *Pilot's share of the cost of the service—\$27,163.89*

If the pilots were considered private entrepreneurs, as they are supposed to be under the scheme of organization of Part VI C.S.A., the cost of operating the District should be borne by them in accordance with sec. 328 C.S.A. and, therefore, the cost of the District to the Government should be added to their gross income. Saint John is one of the Districts which receives the largest amount of direct and indirect Government assistance. In 1962, this amounted to \$104,000, i.e., 43 per cent of the total cost of pilotage for that District, making the total cost \$244,475 (vide Part I, p. 640). If the pilots were considered independent contractors, their gross earnings received from shipping and the Government would amount to \$27,163.89 each.

A table prepared by the Department of Transport showing the pilots' earnings for the year 1962, in the various Districts where the Minister is the Pilotage Authority, quotes the "Earnings per pilot on strength" as \$13,983.89. This figure conveys the same information as in (c) above on the basis of dues earned.

The table hereunder shows the actual "take home pay" of the pilots, and the amounts of the average remuneration of each pilot according to the main different meanings given to the term for the year 1958/9-1967. The discrepancy in 1960 and 1961 figures between the actual and average "take home pay" is caused by the fact that an amount of \$10,166.08 from the 1961 earnings was shared among the pilots in their 1960 "take home pay". This was no doubt occasioned by the recent change for accounting purposes from the fiscal year to the calendar year.

Year	Number of Pilots	Actual "Take Home Pay" ^b	Share per Establishment Pilot ^a			
			Establishment of Pilots	Average "Take Home Pay" ^c	District Pilotage Earnings on Collected Basis ^d	Total District Pilotage Cost ^e
1958/59	9	\$ 8,423.23	10	\$ 8,341.00	\$ 9,903.50	—
	1	7,600.90				
1959/60	8	11,124.34				
	1	2,610.98 ^f				
	1	997.72 ^g	9.18	10,087.52	11,958.88	—
1960	8	15,270.76	8	14,000.00	16,648.29	—
1961	8	12,979.24				
	1 ^h	1,550.00	8.2	14,091.46	16,576.46	\$31,108.17
1962	7	12,245.00				
	1	11,927.52				
	1 ^h	8,452.03	9	11,788.28	13,777.25	27,163.89
1963	9	11,395.00	9	11,395.00	13,493.63	29,246.22
1964	8	11,815.00				
	1	11,949.00 ⁱ				
	1 ^h	690.00	9	11,801.08	14,002.26	28,406.33
1965	8	12,425.00				
	1	474.79 ^j				
	1 ^h	8,253.89	9	11,961.54	14,110.49	28,517.33
1966	8	13,090.00				
	1	2,491.11 ⁱ	8	13,207.25	15,674.83 ^k	—
1967	8	12,900.00	8	12,900.00	15,048.06	—

^a *Establishment of Pilots* means the number of pilots on a yearly basis, taking into consideration any increase (i.e., probationary pilots) and any decrease (i.e., retirements, deaths, etc.) that occurred during the year.

^b Sources of information: 1958/59-1959/60—Exhibit 45; 1960-1967—Exhibit 1530(i).

^c Does not include gratuity.

^d Does not include pilot boat charges.

^e The consultant's study on which these figures are based covers only the five-year period 1961-1965 (vide PART I, *Appendix IX*, pp. 639-641).

^f Pilot retired September 27, 1959.

^g Pilot's licence cancelled by Minister of Transport June 3, 1959.

^h Probationary pilots.

ⁱ Including gratuity.

^j Gratuity.

^k Pilotage dues were raised 7½% on November 3, 1966.

COMMENTS

The foregoing table prompts the following remarks:

- (a) The Saint John pilotage service must be heavily subsidized if a high degree of efficiency is to be maintained and the pilots given adequate remuneration.
- (b) Care should be taken that the District is not overstaffed with pilots; first, because public money should not be spent to meet an operational deficit partly caused by an unnecessary number of pilots; secondly, if the present system of remunerating pilots is to be retained, the increase or decrease of one pilot has a substantial effect on the actual earnings of each pilot as a result of the small number who share in the pool. The reduction in strength by one at the end of 1965 was the main reason for the substantial increase in the pilots' remuneration in 1966. It could not have been affected by the increase in pilotage dues effective November 3 since sharing is based on dues collected. Furthermore, the number of ships piloted and the number of assignments were substantially the same and the increase in tonnage that occurred had no effect on earnings because voyage dues are based on draught alone.
- (c) Saint John is already in a vulnerable position on account of the trend to larger vessels which strain the physical capabilities of the port and care should be taken not to worsen the situation through excessive rates which would make the port financially unattractive as well. However, ways and means should be found to assure the pilots an adequate income commensurate with the increasing standard of qualifications they have to acquire and maintain.

Advantage should be taken of the facts that the Saint John pilotage service is seasonal and the pilot staff is over strength for eight months of the year.

It should be possible to make some of the Saint John pilots available for pilotage duties in areas where the pilotage season corresponds with the slack period in Saint John, e.g., Churchill and Goose Bay. The high degree of skill possessed by the Saint John pilots makes them ideal for waters where the required local knowledge can easily be acquired after a short period of training on location. If the pilots retain the present status of *de facto* employees, it would appear that the best solution would be for the pilots appointed to such small Districts to receive, either through direct salaries or through pilotage dues, a net remuneration substantially higher than the remuneration they would have received from the pool in their District during that period. These pilots would be detached from their District for the period in question and, therefore, would not be entitled to participate in the Saint

John District pool, the earnings of which would be shared between the remaining pilots thereby substantially increasing their remuneration for the summer months. To make the operation of the pool equitable it will be necessary to operate it as in the B.C. District on an earned basis and not as now on a collected basis (vide p. 128). If the pilots become employees of their Pilotage authority, there should be no problem as long as sufficient pecuniary incentive is provided in view of the financial control exercisable by the Central Authority (vide Part I, General Recommendation 21).

In 1965, a new deep-water berth called Dorchester Cape was built at Cole Head at the eastern entrance of the Memramcook River in Shepody Bay, 82 miles east of Saint John. In a letter dated December 3, 1965, the Saint John pilots protested that the first ship to call there had been piloted by the local D.O.T. light inspector at the request of the Department. They urged that no new Pilotage District be created but that pilotage services at Dorchester Cape be made their responsibility. Their request was agreed to but there was little traffic (one pilotage inward and outward a year). The wharf is now inaccessible for deep-sea vessels and its future is in doubt on account of extremely rapid silting. The chemical tanker *Joseph P. Grace* was piloted in May 29, 1967, at high tide by the Saint John pilot R. V. Cobham but was forced to return to sea without discharging after soundings carried out at the pilot's suggestion revealed that when the 35-foot tide ebbed there would be insufficient water for the ship to remain afloat at the berth (Ex. 1530(k)).

This is not the type of pilotage that should be reserved exclusively for the Saint John pilots because service is likely to be requested at any time of year, thus affecting the pilots' availability in Saint John Harbour during the winter months. The attitude to be taken in such cases depends upon the extent of service required, whether a local pilot is available and whether a Saint John pilot can be spared. This subject is dealt with in the Commission's General Recommendation 8 (vide Part I, p. 478, last para., and p. 479, first para.) and also General Recommendation 10 (pp. 482 and ff.). If the traffic consists of isolated voyages (as has been the case so far) and no local pilot is available, there is no objection if the Saint John pilots undertake these assignments provided the Pilotage Authority is satisfied that the efficiency of the pilotage service in Saint John will not be adversely affected. Such assignments should always be given to the same pilots and they should be required to acquire the necessary local, up-to-date knowledge on their own initiative. The rates for such services should either be fixed by regulation or be treated as cases of exception to be arranged between the ship concerned and the Pilotage Authority. While the latter alternative is not permissible at the present time, it will become so if the Commission's General Recommendations are implemented.

(2) TARIFF

The tariff structure has never been changed since it was established by the regulations of the City of Saint John before Confederation. The rates for pilotage trips inward and outward have always been based on draught alone and movages always on a scale based on tonnage alone. Both tariff and financial details were altered from time to time to meet changing situations. A special draught rate was added when steamships came into service and the rate for sailing ships was deleted later when they passed out of service. Other items were gradually added to meet new requirements, such as compass adjustments and trial trips, and to follow the practice in other Districts, detention and cancellation. Also in recent years, a pilot boat charge was added at the request of Treasury Board. Rates were often increased to provide more revenue either by providing specifically for new ones or by the device of imposing a surcharge, e.g., the most recent adjustment, P.C. 1966-2092 dated Nov. 3, 1966, imposed a 7½% increase on all pilotage charges. In the depression years the reverse process was used as an incentive to shipping.

As in all other Districts, a provision of the By-law (subsec. 6 (1)) makes the tariff applicable to all vessels. As pointed out in Part I, pp. 213 and ff., such a provision is at present ultra vires in so far as it purports to apply to vessels that are not ships and, hence, do not come under Part VI of the Act.

The table on p. 121 shows the various items of tariff grouped as for the B.C. District (vide Part II, p. 146) on an earned basis for the years 1962 and 1967, and the relative importance of each is shown as a percentage of the total earnings derived from the tariff (not counting the pilot boat charges). For complete financial statement for the years 1962 and 1967 see pp. 130 and 131.

(A) *Pilotage Voyage Charges*

(a) *Basic Rates*

Voyage (also called trip) charges account for practically all the pilots' gross earnings (95.3% in 1962 and 96.4% in 1967). The voyage charge rate is a uniform \$4 per foot of draught. Since the abolition of the boarding district system in 1920, the rate has not differentiated between inward and outward voyages (except for sailing ships) and the price unit has not varied substantially. The 1920 rate of \$3 per foot draught was raised to \$3.30 in 1948 and \$4 in 1957. This rate has been affected from time to time by a percentage surcharge or percentage reduction. Since 1966, the present \$4 per foot draught has been subject to a 7½ per cent surcharge like other pilotage dues.

Pilotage Dues	1962		1967	
	\$	%	\$	%
(A) VOYAGES				
Basic Rates.....	119,725.00	95.33	114,566.80	96.40
Additional Charges				
dead ship.....	*	—	*	—
quarantine.....	nil	—	nil	—
	<u>119,725.00</u>	<u>95.33</u>	<u>114,566.80</u>	<u>96.40</u>
(B) OTHER SERVICES				
Movages.....	5,364.00	4.27	3,595.69	3.03
Compass Adjustment.....	84.00	0.07	150.50	0.13
Trial Trips.....	244.00	0.20	305.02	0.25
	<u>5,692.00</u>	<u>4.54</u>	<u>4,051.21</u>	<u>3.41</u>
(C) INDEMNITY CHARGES				
Detention.....	93.00	0.07	131.15	0.11
Cancellation.....	75.00	0.06	96.84	0.08
Overcarriage (sec. 359 C.S.A.).....	nil	—	nil	—
Quarantine (sec. 360 C.S.A.).....	nil	—	nil	—
	<u>168.00</u>	<u>0.13</u>	<u>227.99</u>	<u>0.19</u>
(D) SURCHARGE.....	nil	—	(vide p. 127)	
TOTAL DUES BELONGING TO PILOTS.....	<u>125,585.00</u>	<u>100.00</u>	<u>118,846.00</u>	<u>100.00</u>
ACCESSORY SERVICES				
Pilot Boat.....	14,890.00		12,810.00	
GRAND TOTAL.....	<u>140,475.00</u>		<u>131,656.00</u>	

*The 50% surcharge on dead ships is not segregated.

SOURCE OF INFORMATION: Exhibit 45.

For the past 50 years, Saint John has differed from other Districts by using draught alone to compute the voyage charge. There has been no complaint by the shipping interests nor by the pilots who are satisfied except for one recent exception regarding crude oil tankers (supertankers).

In the summary of conclusions in their brief, the pilots state that "the calculation of inward and outward pilotage dues on the basis of draught is satisfactory and particularly suited to the conditions of the Port of Saint John". Some years ago the Department of Transport offered to work out a new tariff based on both draught and tonnage, anticipating developments in the construction of larger ships without a commensurate increase in draught. The pilots declined the offer, preferring to leave the tariff based on draught alone. They argue that, since tides and currents are the principal hazards in Saint John Harbour, draught has long been considered a better criterion than

tonnage for computing pilotage dues in that it compensates more adequately for the difficulties encountered. However, while still unwilling to depart from the system to which they have long been accustomed, the pilots could not avoid noting that the rate structure was far from equitable from the point of view of value for services rendered in all cases. The matter was brought home to them with the arrival of the so-called supertankers, for which they have requested a surcharge on the basis that these tankers are in a class by themselves since they are much more difficult to handle than large cargo vessels.

Oddly enough, the surcharge they have suggested is based on tonnage and not on draught which would be more consistent with the prevailing system. They have proposed a surcharge on crude oil tankers of 1¢ per ton for every net ton in excess of 8,000. They point out that even with the suggested surcharge the dues would still be lower than those payable in Halifax where the difficulties of pilotage are not comparable. The Saint John pilots claim that pilotage is far easier in Halifax where there is a straight course, abundant water, deep-water berths and ample space to manoeuvre. In addition, the currents can not compare with the very strong currents that prevail in Saint John Harbour.

On the other hand, the Irving interests argue that the mere fact that the dues would still be lower than those charged in Halifax does not give a true picture of the situation. The sole party affected would be the oil refinery and, in order to keep their costs competitive with those in Halifax, the extra expenses for transportation of finished products have to be considered since Saint John is at a disadvantage with Halifax in this regard. Even if this has nothing to do with pilotage, it is part of costing where everything has to be taken into account. They further argue that an increase in rates would be unfair to the industry that has done so much to help balance traffic throughout the year, and has also contributed to a substantial increase in pilots' earnings. The pilots agree that the establishment of the refinery has brought more work in the summer months when normally they had little to do and that it has increased their earnings. It is established that the Irving Oil Company Limited paid \$23,823 in pilotage dues and boat charges from October 1, 1961, to March 31, 1963, and the Kent Line Limited paid \$29,577.50, including boat charges, during the same period.

COMMENTS

The pilots' argument, based on their status as free *entrepreneurs*, has no validity for they are employees to all intents and purposes. The pilots' main concern is that a given tariff produces sufficient pilotage dues to provide them with an adequate annual income (vide Part I, C.6). Since 1920, the Saint John pilots have ceased to be private contractors.

Their tariff structure, primarily based on draught, is a relic of the past and there appears to be no valid reason why it should be retained. Before generally uniform tonnage rules were adopted by international agreements, a ship's draught was the only measurement factor common to all ships that was readily ascertainable and even when a tariff with variable items was adopted it was generally based on draught alone. This is clearly shown in the pre-Confederation legislation that governed the pilotage services in Canada at that time. It was not until 1854 that the United Kingdom established tonnage measurement rules which were gradually adopted in subsequent years by most leading maritime countries (vide Part I, pp. 165 and ff.). Tonnage measurement was adopted as a criterion mainly to provide a common denominator to assess equitably the various port charges levied on vessels. As it acquired international acceptance it was also adopted as a basis for assessing pilotage dues and applied either in combination with draught or, in many Pilotage Districts, in place of draught.

The Commission has expressed the opinion that draught as a general and abstract means of assessing dues is no longer acceptable (Part I, pp. 161 and ff.). It might still be used as one of the components in the computation of dues for exceptional cases where, on account of the limited depth of water, the draught of a ship substantially increases the difficulty of navigation. In Saint John Harbour this is a common occurrence and will become more so with the trend to larger ships.

However, the main purpose of a sound pilotage tariff is to pro-rate as equitably as possible among the users of the service that part of the cost paid by shipping. In the Commission's view this objective is achieved by using maximum gross tonnage alone (vide Part I, C.6).

The pilots' recommendation for a surcharge on crude oil tankers exceeding 8,000 N.R.T. will lose its purpose in the near future, since the larger tankers will be unable to enter Courtenay Bay and, according to the latest information, will be destined for a new site especially constructed for them at Lorneville, N.B., situated on the south shore near Saint John.

(b) *Additional Charges*

The only additional charge in the tariff is "for the pilotage or movage of a dead ship". As in most Districts, it calls for one and a half times the charges prescribed in the main tariff. Only on very rare occasions are dead ships piloted inward or outward but they are moved within the harbour some 20 to 30 times a year. It has not been the practice in Saint John to segregate the charges for dead ships, with the result that the dues so collected are incorporated in the aggregate amount of voyage charges or movages as the case may be (Ex. 1530 (f)).

Curiously enough, negotiating the Reversing Falls does not call for a special charge. Normally, an additional charge should be provided to cover this exceptional service in the same way as a special charge is provided for

proceeding through the Second Narrows in Vancouver Harbour and transiting the Westminster railway bridge in the New Westminster District.

The tariff provides for such a service only when it occurs during a movage and, as will be seen later, does not cover all cases. Because of the restricted meaning given to the term "movage" by the By-law (subsec. 2(g)), no tariff is provided to cover such a service when performed during a ship's movement that does not fall within the regulation definition of movage. Therefore,

- (a) the same voyage charge applies whether or not the voyage's point of origin or destination in the harbour is above or below the Falls;
- (b) no specific tariff is provided for transiting the Falls if it is the only service requested from the pilot, as may occur in the case of an exempt ship that enters the port and proceeds to a point above the Falls or when leaving the port from a point above the Falls. The fact that the pilot boarded and disembarked within the harbour, or that the ship was required to anchor in the harbour, or to go to a berth for the sole purpose of embarking or disembarking the pilot would not make that part of the ship's voyage a movage. Also, the fact that in such a case the pilot boarded or disembarked in the District boarding area does not make the ship liable to pay a voyage charge if the pilot's services were only retained for the Falls transit and no other use was made of his services.

(B) *Other Services*

In addition to pilotage voyages, the tariff prescribes rates for other pilotage services, i.e.,

- (a) movages;
- (b) compass adjustments;
- (c) trial trips.

(a) *Movages*. Although revenue from this source is small compared with pilotage voyages, the sum derived is second in importance. It accounted for 4.3 per cent of total earnings in 1962 and 3.0 per cent in 1967. Dues from pilotage voyages and movages account for nearly 100 per cent of pilotage earnings (excluding pilot boat charges).

The tariff provides various movage rates in which distance and ship's size are governing factors. The structure of the movage charge is based on the three geographical divisions of the District (pp. 59-63) i.e., Courtenay Bay, the main harbour, and the Falls and above.

- (i) A movage restricted to either the main harbour or Courtenay Bay calls for the smaller charge in accordance with a scale based on tonnage; with rates varying from \$12 to \$20.

- (ii) A movage from the main harbour to any place above the Falls calls for a uniform flat charge of \$30.
- (iii) A movage other than as described in (i) or (ii) calls for a charge also based on a tonnage scale varying from \$15 to \$35.

The basic structure of the movage charges dates from 1953 (P.C. 1953-1667, Ex. 1460 (x12)), prior to which a single scale based on tonnage applied to all movages. The present rates, fixed in 1957, have not been increased since except by the general surcharge in 1966.

Here again, there are uncertainties due to the wording of the section regarding the charge to be made for movages involving a transit of the Falls. If the place of origin or destination is the main harbour, it is \$30 irrespective of the vessel's tonnage but, if the place of origin or destination is Courtenay Bay, it falls into the third category as a movage "other than as described in paragraph (i) or (ii)" with the result that, if the vessel is under 1,000 tons, the charge is only \$15 for a longer movage. According to the rules of interpretation of statutes, this is the only possible interpretation since it follows strictly the letter of the By-law provision as it reads now and, furthermore, is the only inference that can be drawn from the amendment made in 1965 (P.C. 1965-1267). Prior to the change, the third category applied to movages "from the main harbour to Courtenay Bay or vice versa", with the result that a movage between Courtenay Bay and a point above the Falls was not covered in the tariff. This was rectified by replacing the governing sentence quoted above with a provision covering all cases not already taken care of, of which the main one was obviously a movage between Courtenay Bay and a point above the Falls. The result is that it would cost less for a small ship to depart from Courtenay Bay for a movage above the Falls than from the main harbour. This inconsistency should be corrected.

(b) *Compass adjustments and trial trips* call for special rates. The activities of the drydock and shipyard located at Courtenay Bay occasionally call for these special services. In 1962, there were three compass adjustments and ten trial trips; in 1967, ten compass adjustments and nine trial trips. The revenue derived from the source is very small, amounting to 0.27% of the pilots' earnings in 1962, and 0.43% in 1967.

The tariff distinguishes between these services according to whether they are performed within or beyond the limits of the District. If they are carried out within the District, there is an invariable flat charge for each service, i.e., \$14 for compass adjustments and \$20 for trial trips, or a combined charge of \$25 if both are effected at the same time.

The text of the governing subsection is difficult to understand because its construction is defective. It reads as follows:

- “5. The dues payable for compass adjusting and trial trips are as follows:
- (a) within the District
 - (i) during compass adjustment \$14.00
 - (ii) during trial trips \$20.00
 - (iii) during combined compass adjustment and trial trips \$25.00”

It would appear from the wording that these charges are to be made in addition to a moorage charge for piloting the ship, since the ship’s movement is within the District limits.

The origin of this phraseology can be found in the 1934 General By-law where the governing paragraph in sec. 3 read as follows:

“The charges for the services of a pilot shall be \$10.00 while compasses are being adjusted, \$15.00 for trial trips and \$20 for trial trips if compasses are being adjusted at the same time; these charges to be in addition to the charge for moorage ...”

When the present text was adopted in 1957, the same wording was kept but the last part of the provision regarding the moorage charge was dropped. It must, therefore, be concluded that the legislating authority had decided by making the amendment that the moorage charge should not be made in addition. The result is an ambiguous text which should be given the interpretation most favourable to the debtor. This interpretation is also supported by the fact that in the next subsection the applicability of the voyage charge is specifically mentioned as well. However, the defective wording has not caused any difficulty since, in practice, these services are never associated with a moorage but always are performed when vessels are proceeding to or coming from sea (Ex. 1530(g)). If this section is retained, the text should be corrected but if it plays no useful rôle it should be deleted.

The tariff also provides in subsec. 5 (b) for a rate when compass adjusting or trial trips are performed “beyond the limits of the District”. The charge is based on the time factor. This is quite logical because time is the real criterion here. This charge is in addition to the regular outward and inward pilotage charges.

The objection to this subsection is that it is ultra vires, since the Pilotage Authority has no power to fix rates for services performed outside the District. A Pilotage Authority’s rate-fixing power extends only “within its district” (vide preamble to sec. 329 and subsec. 329 (h) C.S.A.) and a pilot ceases to be a licensed pilot when piloting “beyond the limits for which he is qualified by his licence” (subsec. 333(3)).

However, it is considered that this is an anomaly of the present legislation and that a Pilotage Authority should have the power to fix the rates for

services rendered by its pilots beyond the District when these are related to a pilotage trip originating from or terminating within its limits (vide Part I, Rec. 11, p. 491).

(c) *Indemnity Charges*

The By-law provides for three types of indemnity charges:

- (a) detention;
- (b) cancellation;
- (c) quarantine.

The *detention* clause of the tariff (Schedule, sec. 7) is both legal and realistic. It applies only when a pilot's availability is retained for a ship's convenience and not due to causes beyond the ship's control, e.g., stress of weather, or by order of the port or quarantine authorities. Because of the tidal conditions in Saint John, this provision is seldom used. Departure time is set by the assigned pilot and, if there is a delay and the tide is lost, departure is postponed until the next tide. For definition of the legal situation with respect to detention charges, vide Part II, pp. 157 and 158.

The same principle and comment apply to *cancellation*.

Quarantine charges pose only a theoretical problem since none have been levied in the past several years (Ex. 1530(f)). This charge is illegal because the question is already dealt with in sec. 360 C.S.A. The fact that a pilot may be detained in quarantine a few hours only and not a number of days does not change the situation. Furthermore, as pointed out when this question was studied in the B.C. District (Part II, pp. 152-155), quarantine inspection is a matter over which vessels have no control and, therefore, it should be considered one of the hazards of pilotage for which there should be no extra pilotage charge.

(D) *Surcharge*

In 1966 (P.C. 1966-2092 dated November 3, 1966) a general surcharge of 7½ per cent was imposed "on all pilotage charges".

The term "pilotage charges" is not defined and there is no reason to believe that it is not synonymous with "pilotage dues". Therefore, the surcharge should be applied to all items of the tariff. However, it is apparent from the analysis of the 1967 revenues that it was not applied to the pilot boat charges. The accrued revenue yielded by the surcharge has been added to the yield of each tariff item and not segregated. This method of accounting, which gives a better picture of the yield of each tariff item, explains the uneven amount of all the various items of revenue for 1967, except pilot boat charges.

7. FINANCIAL ADMINISTRATION

(1) SAINT JOHN PILOTAGE FUND

The Saint John Pilotage District is by regulation a financially independent, self-accounting unit and is treated as such (re legality of the system, vide Part I, C.5). The Supervisor of Pilots is responsible for financial administration, including handling all money received by or on behalf of the Authority which, according to the By-law, forms the Saint John Pilotage Fund.

He makes out pilotage invoices from information contained in the pilots' source forms and collects pilotage dues. He has had no difficulty collecting dues and since 1951 there has been only one unpaid account, amounting to \$18.15, which was written off as a bad debt on the annual report of 1960.

Pilotage earnings are pooled and, after pension contributions and certain expenses are paid at the request of the pilots as a group, the balance of the pilotage earnings is divided equally among the pilots according to their availability for duty, probationary pilots receiving only a partial share (p. 72). The pool is shared according to a simplified procedure, i.e., on the basis of cash on hand and not on an "as earned basis" as is the practice in the B.C. District (vide Part II, pp. 185 and 186). Since the pilots' sharing rights are based on the extent of their availability during the month when the dues were collected and not during the month when they were earned, a retiring pilot ceases to retain any right to share revenue collected after the expiration of the month his retirement takes place, and his right to share in the full month's collection is limited to the number of days he was available for duty during that month prior to his retirement.

According to the By-law, pilots may be on sick leave with full pay, half pay, and without pay but, in practice, when a pilot is ill he is normally kept on full pay.

According to the By-law requirements, the Supervisor of Pilots disposes of all the pilotage money that has accumulated in the Pilotage Fund at the end of each month. Monthly statements are made and sent to the pilots and the Pilotage Authority in Ottawa with two copies to the Chief Treasury Officer.

In addition, at the end of each calendar year, an annual financial statement is prepared on the basis of cash assets and liabilities. The Pilotage Authority does not possess any physical assets since all its equipment is provided free of charge by the Department of Transport. Therefore, the annual statement shows the items of cash on hand at the beginning and end of the year, i.e., the amounts not distributed, as well as any outstanding pilotage bills. It does not contain an "accounts payable" item because the undistributed amount can not be shared until all liabilities have been met.

It becomes obvious that the annual financial statement does not provide a complete accounting of the Pilotage Fund but is merely a financial state-

ment of that part of it which directly concerns the pilots, i.e., from which the pool is derived. Except for pilotage dues collected as pilot boat charges, it contains no items of revenue that do not form part of the pool. Although, as in other Districts, there must be other incidental receipts and expenditures, such as monies that may be collected for and on behalf of other Districts, and fees for examinations and licences which are generally made payable to the Receiver General, no such items appear in any of the past 12 annual financial statements analysed by the Commission. In fact, examination and licence fees have been collected, but these sums were paid directly to the Receiver General of Canada without any entry being made in the books of the Pilotage Authority. Therefore, the financial report is specifically limited to the financial transactions which concern pooling. This is considered an erroneous practice by the Ottawa Headquarters and instructions have now been issued that all transactions relating to pilotage are to be recorded (vide D.O.T. letter dated August 14, 1968, Ex. 1530(e)). The pilot boat charges also appear in the report (no doubt because the cost of pilot boat service was previously paid out of pilotage earnings), but, since they do not form part of the pool, they are accounted for in a separate statement and are not included in the gross earnings of the District. Therefore, in Saint John the term "Pilotage Fund" refers only to the gross earnings of the pool.

A comparative annual financial statement for the two years 1962 and 1967 is shown on pp. 130 and 131.

(A) *Assets and Items of Revenue*

In this field, the situation in Saint John is the same as in other Districts where the Minister is the Pilotage Authority (vide British Columbia, Part II, p. 174). As stated earlier, the Department of Transport assumes all operating costs as well as the deficit of the pilot vessel service. Therefore, in order to obtain a true financial picture of the cost of the pilotage service in Saint John, the cost to the Government should be added to the cost to shipping. At the request of this Commission, this complete financial statement was prepared, *inter alia*, for Saint John, by the Commission's accountant consultants (vide Part I, Appendix IX, pp. 611 and ff.), for the years 1961 to 1965. This study is made on the basis of pilotage dues earned, which accounts for the slight difference in the figures quoted. The \$125,585 earnings shown in the District financial statement for 1962 (p. 130) account for only 57 per cent of the total cost of pilotage; the other 43 per cent, i.e., \$104,000, being the share of the direct and indirect subsidies received by the District from the Government, composed of \$11,825 (5% of the cost of administration) administrative expenses and \$92,175 (38% of the cost of administration) the deficit on the pilot vessel service. The total cost of the pilotage service for that year was \$244,475.

That part of the Pilotage Fund which is covered in the annual financial statement consists of the following items:

- (a) Pilotage dues, i.e., all items listed and defined in the tariff which were studied earlier (pp. 120 and ff.) including dues paid on account of the compulsory payment system and charges for accessory services. In 1962 and 1967, they accounted for all pilotage receipts.
- (b) Miscellaneous revenues comprising:
 - (i) overcarriage and quarantine indemnities (secs. 359 and 360 C.S.A.). Pursuant to subsec. 9(7) of the Saint John By-law, these are to be collected by the Supervisor and form part of the pilots' pool. This provision is illegal because it is ultra vires on the part of the Pilotage Authority to deal by regulation with the cases contemplated in secs. 359 and 360 C.S.A., either to alter the indemnity or to modify the personal rights of a pilot to these indemnities (Part I, pp. 201 to 203). To provide for these situations would require an amendment to the Act (vide Part I, Recommendation 11, pp. 490 and 491 re *overcarriage indemnity*). This is a new provision which was added when the 1961 By-law was sanctioned. To date, it has not yet been applied;
 - (ii) monies collected for the pilots as a personal service to them without any legislative obligation. In the 1966 report, there is such an item which was kept segregated as a separate financial statement, i.e., \$26 representing the pilots' expenses for providing pilotage services to Dorchester Cape;
 - (iii) items which are not true receipts but are entered as such for bookkeeping purposes only. No such entries appear on any of the Saint John financial statements. However, because the statement is based on cash assets and liabilities the balance of the pool money from the preceding year that remained undivided after final sharing is entered under this heading. In 1962, it amounted to \$7.25 and in 1967 to \$48.04. These are very small amounts but, according to the rules for sharing the pool contained in the By-law, only that part of the fund which can not be mathematically divided should remain and be carried over into the next year. This amount should never be more than a few cents.

(B) *Liabilities and Items of Expenditure*

Since the Saint John financial statement shows only money belonging to the pool, expenditures on behalf of third parties are not included.

Because all liabilities must be settled before the pool is shared there is no mention of "outstanding accounts", either at the beginning or end of the

year. All liabilities are actual expenditures and are shown as such. However, such a system could not be followed when the pilot boat service was provided and operated by the Pilotage Authority. Although the practice was neither authorized nor foreseen in the C.S.A. or covered in the District By-law, capital expenditures were pro-rated for a number of years with the assistance of the Department of Transport which periodically granted the Authority special interest-free loans to finance them. The Authority reimbursed these loans over a period of years in accordance with an agreement. This procedure became necessary to meet a situation unforeseen in the Act resulting from the Pilotage Authority assuming control of the pilotage service in 1920.

The items of expenditures may be grouped as follows:

- (a) District and service operating expenses;
- (b) money paid to or on behalf of the pilots;
- (c) miscellaneous, i.e., bookkeeping entries showing unshared balance of the pool at the end of the year.

(a) *District and Service Operating Expenses*

District and service operating expenses are now restricted to pilotage dues collected in the form of "pilot boat charges", which subsec. 9(2)(c) of the By-law makes payable to the Receiver General of Canada. This, in fact, is the cost to the pilots of the pilot vessel service, provided them by the Government which absorbs the operating deficit, if any.

There is no other item of expenditure under this heading, because all other District and service operating expenses are assumed by the Crown.

Subsec. 9(2)(b) of the By-law makes accounts rendered by pilots for expenses incurred in the course of their duties payable from the Pilotage Fund, provided they are approved by the Pilots' Committee and the Supervisor. This appears to be a stereotyped provision included in most By-laws drafted in Ottawa for Districts where the Minister is the Pilotage Authority. However, the practice in this District does not follow the By-law. No pilot is reimbursed for expenses incurred locally and no accounting is made of out-of-pocket expenses incurred proceeding to or from an assignment. Generally, the pilots reach ships in the harbour in the pilot vessel or tugs and travel to wharves in private cars or taxis. These out-of-pocket expenses are disregarded by the pilots as unimportant.

(b) *Monies Paid to or on behalf of the Pilots*

These disbursements can be grouped in three categories:

- (i) pilots' group expenses;
- (ii) pension contributions;
- (iii) monies paid directly to the pilots, i.e., their share of the pool.

The pilots' Pension Fund contribution is now set by the mutual consent of the Pilots' Committee and the Authority at 14 per cent of the pilots' gross earnings (not counting pilot boat charges) (vide p. 136). It is made a first charge against the pool and is strictly applied.

If the By-law provisions governing the disposal of the pool were strictly observed, any money left in the pool would not be disposed of by the Supervisor in any other way than by actually sharing it among the pilots. However, Saint John is like most Districts where the pool is administered by the Pilotage Authority in that the local representative accommodates the pilots by pro-rating their group expenses by the simple procedure of payment from the pool. A Secretary or Supervisor who does so engages his personal liability because such action should not be taken without the unanimous consent of all the pilots. Under the present legislation, not even the Pilots' Committee has the power to take a decision affecting a pilot's earnings without his consent. The Saint John pilots are comparatively small in number and are not grouped in any organization except through their Pilots' Committee which generally decides expenses of this nature—presumably with the pilots' knowledge and consent. Up to 1959, this procedure was frequently used but very seldom since then because the Pilotage Authority expressed disapproval. By letter dated May 22, 1959, the Superintendent of Pilotage, Captain D. R. Jones, pointed out that the books of the Pilotage Authority were not to be used to record private transactions and gave instructions to discontinue the practice.

The Pilots' Committee has since resorted to a special fund consisting of donations from the pilots to cover group expenses for such items as floral tributes, Christmas cards and catering which up to that time had been entered as an aggregate amount under "expenses not refundable".

Items of this nature in recent annual reports are:

- (i) "National Convention". This item, which was formerly called "Pilots' expenses", defrays the expenses of the pilots' representative who attends the Annual General Meeting of the Canadian Merchant Service Guild to which all the Saint John pilots now belong on an individual basis. It does not appear in the 1967 statement because no General Meeting was held that year. In 1958/59, one pilot, who was not a member of the Guild, objected to this item with the result that it was shared among the other pilots.
- (ii) Gratuities to retiring pilots. In 1964 and 1965, the sums of \$949.58 and \$74.79 were paid to ex-pilot G.W. Miller and, in 1966, the sum of \$1,553.10 was paid to ex-pilot W.B. Alexander as a gratuity on retirement. This item was explained as follows by D.O.T. in a letter dated August 15, 1968:

"While there is no provision in the Saint John District General By-law supporting these payments the action was taken following requests, supported by the unanimous agreement of the remaining Saint John pilots, to do so. The amounts so paid were computed on the

basis of 50% of the average monthly amount paid during the preceding calendar year for a period of three months commencing on the date of retirement. It could be asserted that these payments should have been made by a private contribution from each of the pilots rather than through the books of the Authority, having in mind the fact that there was no provision in the by-law for such a payment. On the other hand, it was felt that an amendment to provide for it would have resulted in delay and as it was simpler and clearly to the pilots' personal advantage to put it through the pilotage books this course of action was decided upon.

As you remark, these gratuities are in addition to the pension to which retired pilots are entitled." (Ex. 1530(m).)

- (iii) Legal fees. This item used to be included in the general item "Expenses not refundable". It re-appeared in the financial statements covering the three year period from 1963 to 1965 when this Commission held its hearings to cover the pilots' expenses for legal advice, and their representation by legal counsel.

Contrary to the practice followed in the British Columbia District, no premiums for group insurance are paid in this way. It does not appear that the Saint John Pilots carry any such group insurance and, if so, it seems that they pay the premiums on an individual basis as they do for their Guild dues. (Vide remarks regarding the practice followed in the B.C. District, Part II, pp. 181 to 183.)

COMMENTS

Although the Minister is the Pilotage Authority in both the Saint John and the British Columbia Districts, there are substantial differences in their accounting procedure, disbursement rules and basis for sharing which can not be supported on the ground of any particular local requirement. The differences are even greater when compared to other Districts where the Minister is not the Pilotage Authority and whose financial statements give a true account of the Pilotage Fund but still not necessarily of the total cost of the service, depending whether such Districts receive direct or indirect financial help from the Government. These facts clearly indicate the necessity for a uniform accounting procedure. Because of all the basic differences in content and interpretation it could be very misleading to compare the financial statements of different Districts. (Vide General Recommendation 17, p. 508, item 15, and General Recommendation 20, pp. 522 and 523).

8. PENSION FUND

The Saint John Pension Fund was instituted in 1920 by the first By-law the Minister enacted after his appointment as Pilotage Authority, thus implementing one of the recommendations of the Robb Commission.

As in the other Districts where the Minister is the Pilotage Authority, this fund first provided for a fixed amount of pension per year of service

increasing periodically and continued until actuarial surveys showed it was heavily in deficit. From then on, repeated requests by the pilots for increased benefits were refused by the Pilotage Authority. After numerous discussions between the Pilots' Committee and the Pilotage Authority, a new plan was inaugurated in 1957. It is still in effect and is considered satisfactory by the pilots. Since 1957, the compulsory contribution has been fixed at 14 per cent of their gross earnings, 7 per cent to liquidate the actuarial deficit and 7 per cent to purchase annuities for each pilot on an individual basis in order to balance contributions with annual pensions credited. This new method was designed to avoid any deficit resulting from an imbalance between income and payments. As the pilots rightly pointed out in their brief, "in this manner, although each pilot's contribution in any given year is equal to all other pilots, the total contribution by a given pilot over his full years of service will not necessarily be the same as any other pilot, but his pension bears a direct relationship to the amounts which he has contributed, without any maximum".

The 1957 reorganization produced the expected result: the actuarial deficit has been wiped out. This was proved by the actuarial evaluation conducted by the Department of Insurance as of December 31, 1963, which, on the basis of $3\frac{1}{2}$ per cent interest, showed an actuarial surplus of \$898. The evaluation carried out at this Commission's request (based on a yield of 4 per cent because the Commission's consultant found that the actual yield of the fund was slightly superior to 4 per cent) raised the actuarial surplus to \$50,733. He found that the book value of assets on December 31, 1963, not including accrued interest, amounted to \$282,783 against the then value of the total accrued actuarial liabilities of \$232,050.

In 1967, at the request of the Pilotage Authority and pursuant to sec. 40 of the District By-law, the Department of Insurance made a new valuation of the Fund as of December 31, 1966 (Ex. 1460 (nn)). It showed an excess of assets over liabilities of \$28,775. They pointed out, however, that bonds held were taken at par value although the market value at the time was substantially lower (some \$59,000).

COMMENTS

The legality of a pension fund under the present legislation and the Commission's opinion regarding the advisability of a Pilotage Authority creating and administering a pension fund are dealt with in Part I of the Report, C. 10, and in Recommendation 39. However, apart from these questions, if the existing pension scheme is to be retained, it should be modified since the actuarial deficit has been made good. Hence, either the compulsory contribution should be reduced by 7 per cent or the full 14 per cent contribution used to purchase annuities.

RECOMMENDATIONS

SPECIFIC RECOMMENDATIONS AFFECTING THE SAINT JOHN PILOTAGE DISTRICT

RECOMMENDATION NO. 1

An Order to Be Made without Delay by the Governor in Council to Give Legal Existence to the Saint John Pilotage District

As demonstrated (pp. 28 and 29), the Saint John Pilotage District ceased to exist legally when the 1934 Canada Shipping Act came into force. Since an efficient pilotage service for the Harbour of Saint John is believed essential in the public interest, it is considered that immediate action should be taken to remedy the situation without waiting for the enactment of the recommended new pilotage statute.

Therefore, it is recommended that as a necessary interim measure the Governor in Council acting under sec. 324 C.S.A. make an order restoring legal existence to the Saint John Pilotage District.

RECOMMENDATION NO. 2

The Northern Limit of the District to Be Relocated to Ex- clude the Reversing Falls and Their Immediate Approaches from the District; the Seaward Limit to Remain for the Time Being as Established in 1964

It has been established that for a number of years the only vessels navigating the Reversing Falls have belonged to a single private concern. It has also been established that, although these waters are part of the Saint John District, for a number of years the Saint John pilots have had very few opportunities to effect such transits and, thus, have been unable to maintain and improve their required *expertise* in effecting such difficult assignments. Therefore it would be presumptuous on the part of the Pilotage Authority to continue to assign the pilots on turn as occasion demands. Instead it should alternate such assignments between two selected pilots who, in

order to maintain their *expertise*, are required to find ways and means of performing a minimum number of transits each year.

It is considered such reorganization is unwarranted in the present circumstances since that part of the service has become private. Consequently, the northern boundary of the District on the Saint John River should be relocated downstream from the Falls in order to exclude them and their immediate approaches.

If the Falls were no longer within the District, it would be the responsibility of those using this part of the river to find qualified persons to navigate their vessels; the choice would be theirs alone. Without violating the law they would be entitled to have their employees act as pilots. Alternately, there would be no objection if they employed a District pilot of their choice who, during such employment, would be considered an unlicensed pilot since the Falls would be outside the District. However, he could be an "approved pilot" if General Recommendation No. 10 is implemented, Part I, p. 482 (subsec. 333(3) C.S.A.). All that would be required of the Pilotage Authority would be permission for the selected pilot to perform such duties outside the District. This permission should be granted except on the rare occasions when the selected pilot could not be made available for such extraneous employment on account of other exigencies of the service. It would follow that the Pilotage Authority would bear no responsibility whatsoever for the performance of this pilot or for his competence in navigating the Falls.

Because the status of District pilots will be either employees of the Authority or *de facto* employees, the Pilotage Authority will be obliged to obtain a waiver for its vicarious liability as employer if the dues for the pilot's services are to be paid either to the Crown or to the pool.

It appears that the seaward limit of the District is now satisfactory as a result of the 1964 modification (vide p. 30). However, this question must be reviewed by the Central Authority in the light of new requirements when the proposed Lorneville site is about to become operative, or the nature of the commercial operations above the Falls changes substantially.

RECOMMENDATION No. 3

Pilotage within the Main Harbour and Courtenay Bay to Be Classified as an Essential Public Service

Saint John Harbour is considered one of the most difficult harbours in Canada to navigate but it is a safe harbour when navigated by persons with the necessary local knowledge, as evidenced by its good accident record.

The Commission's Nautical Adviser, the late Captain J. S. Scott, commented in his report to the Commission:

"For my part, I consider Saint John the most challenging of all the Canadian major ports, requiring exceptional pilotage skill and no small order of personal fortitude".

A first class pilotage service is required to enhance both safety of navigation and the efficient operation of the port.

Access to the harbour is limited by channel depth, tidal currents and cross currents and by such variable factors as wind, fog and freshet. Larger vessels must be navigated by persons with an intimate knowledge of all these governing factors. Furthermore, the ever increasing size of most of the ships calling at Saint John is taxing its approaches to the limit and without highly qualified pilots the port would be physically inaccessible to most of the present ocean-going traffic.

In the interest of port efficiency during the peak season full advantage must be taken of the few hours before and after high tide during which the navigation of large vessels is safe. This requirement, together with the limited availability of tugs, makes the planning and co-ordination of ship movements essential, a task which demands the advice of the pilots who have an intimate knowledge of all the governing factors. Without such assistance, confusion and unnecessary, costly delays would reflect adversely on the harbour.

The efficiency of the port of Saint John is a matter of national importance, and public interest would be prejudiced if a major shipping casualty in one of the approach channels blocked access for a prolonged period. Therefore, it is considered that the pilotage service in the main harbour and in Courtenay Bay should be classified an essential public service.

In addition to the limitations discussed above, it should be noted that modern vessels are designed so that loading and unloading can be effected very quickly. Saint John may become too expensive for container vessels and crude oil tankers if the proper facilities are not available or if they are delayed in the harbour for many hours because they miss the daylight high tide.

Large crude oil tankers were a new problem in Saint John in 1963 and the pilots needed to gain experience. On this the Commission's Nautical Adviser remarked:

"Without undue optimism, I believe that the shock impact of having to handle supertankers in Courtenay Bay is wearing off and such transits will be considered as a day-to-day job in the near future".

However, there are limits to the expert's skill and ability. For instance, Courtenay Bay is being used to the full extent of its capacity and capability and longer and larger ships can hardly be handled without risk in its present state. When such a point is reached, limitations are to be expected, first, during adverse conditions and then, as ship dimensions increase, when it becomes hazardous and even impossible to bring such vessels in except under the

most favourable conditions. The end result is that, for all practical purposes, such an area is closed to larger vessels unless improvements are effected.

It would appear that the necessary capital and maintenance works required to make the harbour easily accessible to large modern ships are too costly and, therefore, such a solution is impracticable. The best hope lies in the creation of a new site, such as is being planned at Lorneville. Failing this, it may be expected that Saint John will gradually diminish in importance as a national port.

If Recommendation No. 2 is not implemented and the Reversing Falls and their approaches remain in the District, it is considered that, for the reasons mentioned in the previous Recommendations, pilotage in this area should be classified merely as a private service. The public in general will suffer no loss or inconvenience if pilots qualified for this assignment are unavailable or this part of the waterway is temporarily obstructed following a shipping casualty.

For the time being, no classification is required for the seaward approaches because they serve only as a boarding area. This question will have to be reviewed by the Central Authority in the light of new conditions and circumstances and the extent to which public interest is involved if the Lorneville site becomes operative.