

II. MONTREAL HARBOUR PILOTS

Appendix A (1)

COMPARATIVE STATISTICAL ANALYSIS OF SHIPPING CASUALTIES, ACCIDENTS AND INCIDENTS WITH A MONTREAL HARBOUR PILOT ON BOARD DURING THE TEN-YEAR PERIOD 1959—1968 INCLUSIVE

DETAILS	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
A. EVENTS WHILE NAVIGATING.....	—	—	—	—	—	—	—	—	—	—
B. EVENTS WHILE BERTHING, UNBERTHING, ANCHORING OR ENTERING SEAWAY	—	—	—	—	—	—	—	—	—	—
I. MAJOR CASUALTIES (with or without loss of life).....	—	—	—	—	—	—	—	—	—	—
II. MINOR CASUALTIES (without loss of life)										
(a) Minor strandings.....	8	2	1	3	1	1	1	—	—	—
(b) Minor damage to ship										
(i) Striking pier or installation.....	16	10	4	8	11	8	10	4	11	7
(ii) Striking vessel berthing or un- berthing.....	5	2	8	3	2	—	4	3	1	1
(iii) Striking vessel at anchorage or lock.....	1	—	1	2	1	1	2	4	1	—
(iv) Striking approach wall or fender	1	—	1	—	—	1	2	—	—	—
(v) Striking lock wall or fender.....	—	1	—	2	—	—	1	—	—	—
(vi) Striking lock gate or gate fender	—	—	—	—	—	1	—	—	—	—
(vii) Striking bridge.....	—	—	—	—	—	—	—	—	1	—
(viii) Other.....	2	1	2	2	—	4	—	1	—	—
	—	33	17	20	15	16	20	12	14	8
III. ACCIDENTS (without damage to ships).....										
(a) Damage to pier or installation.....	2	—	2	—	2	1	—	—	1	—
(b) Damage to buoys.....	1	2	—	—	—	—	—	—	—	1
(c) Damage to lock.....	—	—	—	—	—	—	1	1	—	—
	3	2	2	—	2	1	1	1	1	1

IV. INCIDENTS (without any damage whatsoever)																								
(a) Striking pier or installation	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	
(b) Striking vessel at pier	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(c) Striking vessel at anchorage or lock	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(d) Striking buoys	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(e) Other	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
GRAND TOTAL	37	21	21	2	22	18	19	27	23	20	5	—	—	—	—	—	—	—	—	—	—	—	—	—

SOURCE: Ex. 1467.

Appendix A (2) (a)

DETAILED ANALYSIS FOR THE YEAR 1959
OF SHIPPING CASUALTIES, ACCIDENTS AND INCIDENTS
WITH A MONTREAL HARBOUR PILOT ON BOARD

The year 1959 had the greatest number of events in the past ten years.
The details are as follows:

A. EVENTS WHILE NAVIGATING

—Nil

B. EVENTS WHILE BERTHING, UNBERTHING, ANCHORING OR ENTERING SEAWAY

I. MAJOR CASUALTIES (with or without loss of life)

—Nil

II. MINOR CASUALTIES (without loss of life)

(a) *Minor strandings*

1. May 16—*Korthi*, caused by windlass brake not holding.
2. May 17—*Sweetwater*, caused by wind when avoiding buoys.
3. June 9—*Transbay*, caused by wind and light ship.
4. June 12—*Corcovado*, caused by slow-changing engine movements.
5. July 25—*Martian*, caused by slow manoeuvring, visibility, wind and current.
6. September 18—*Biskopso*, caused by sheer and ship heavily loaded.
7. November 12—*Renvoyle*, cause not mentioned.
8. November 18—*Cedar Hill*, caused by wind and windlass failure.

(b) *Minor damage to ship*

(i) *Striking pier or installation*

1. April 11—*Santa Rosa* hit pier; caused by tug tow line not secure.
2. April 27—*Silver Lake* hit berth wall when reversing.
3. May 7—*Oriente* hit shed and buoy when turning; caused by line released too soon.
4. May 17—*Beaverburn* hit shed; caused by tugmaster ignoring order.
5. June 2—*Prins Casimir* hit pier; caused by engine trouble.
6. June 7—*Westriver* hit pier when ship swung over.
7. June 17—*Hagarty* hit section when anchoring.
8. June 29—*Linda Scarlett* hit pier; caused by tug ignoring signals and current.
9. July 8—*Norma County* hit pier; caused by current and tug ignoring signals.
10. July 14—*Charles L. D.* hit wharf when she swung too slowly.
11. August 22—*Malcolm* hit pier during wind.
12. September 9—*Galila* hit pier (cause not mentioned).
13. October 15—*Flying Spray* hit section when berthing.
14. October 28—*Marie Skou* hit pier when line not slackened.
15. November 28—*Imperial Quebec* hit pier during wind when tug ignored signals.
16. December 9—*Federal Voyager* collided with berth during moveage when Master handled ship.

(ii) *Striking vessel berthing or unberthing*

1. May 8—*Prescott* hit drill scow; caused by drifting.
2. May 16—*Manchester City* touched *Torvanger*; caused by passing too close.
3. November 3—*Marie Skou* touched *Brodvig* and crane during wind.

4. November 11—*Nipigon Bay* collided with *Thornsby* when turning in confined space.
 5. November 25—*Norco* touched ships (not named) when reversing in wind; caused by current.
- (iii) *Striking vessel at anchorage or lock*
1. May 1—*Elfriede* hit *George S. Cleet* at entrance to St. Lambert lock; caused by engine failure and no men to moor; approximate loss \$3,000.
- (iv) *Striking approach wall or fender*
1. June 10—*Exanthia* hit tie-up wall upbound at the lower entrance to St. Lambert lock; caused by manoeuvring in wind.
- (v) *Striking lock wall or fender*—Nil.
- (vi) *Striking lock gate or gate fender*—Nil.
- (vii) *Striking bridge*—Nil.
- (viii) *Other*
1. September 18—*La Maria* suffered windlass failure.
 2. October 28—*Normandiet* lost anchor when shifting position.

III. ACCIDENTS (without damage to ships)

(a) *Damage to pier or installation*

1. April 15—*Cairndhu* damaged office building at Elevator No. 1 when berthing; damage \$1,627.94.
2. November 18—*Bruce Angus* damaged face of wharf at Section 101 when unberthing; damage \$285.18.

IV. INCIDENTS (without any damage whatsoever)

1. November 14—*Waldemar Peter* (neither nature, cause nor damage mentioned).

SOURCE: Ex. 1467.

Appendix A (2) (b)

DETAILED ANALYSIS FOR THE YEAR 1968
OF SHIPPING CASUALTIES, ACCIDENTS AND INCIDENTS
WITH A MONTREAL HARBOUR PILOT ON BOARD

The year 1968 had the least number of events in the past ten years.
The details are as follows:

A. EVENTS WHILE NAVIGATING

—Nil.

B. EVENTS WHILE BERTHING, UNBERTHING, ANCHORING OR ENTERING SEAWAY

I. MAJOR CASUALTIES (with or without loss of life)

—Nil.

II. MINOR CASUALTIES (without loss of life)

(a) *Minor strandings*—Nil.

(b) *Minor damage to ship*

(i) *Striking pier or installation*

1. March 11—*Severodvinsk* struck quay; caused by ice in harbour.
2. April 29—*Alfred Theodore* struck quay; caused by light ship and wind.
3. August 13—*Bregaglia* struck quay at Section 43N when manoeuvring.
4. September 21—*Shelter Bay* struck pier at Section 57; caused by pilot's error.
5. September 30—*J. N. McWatters* struck quay; caused by master's error.
6. November 3—*Marly 11* struck quay when manoeuvring.
7. December 17—*Ponta Spico* struck quay; caused by tugs unable to hold vessel during wind and ice.

(ii) *Striking vessel berthing or unberthing*

1. July 22—*Frampton Dyke* struck *Lemoyne* and pier; caused by wind.

III. ACCIDENTS (without damage to ships)

1. August 10—*Barbara* struck buoy No. 165M in Montreal harbour when manoeuvring.

IV. INCIDENTS (without any damage whatsoever)

(a) *Striking pier or installation*

1. July 20—*Panagia Kounistra* struck quay at Section 57; caused by pilot's error; no damage reported.
2. October 19—*Liquilassie* struck fender in Montreal harbour; caused by pilot's error.

(b) *Striking vessel at pier*—Nil.

(c) *Striking vessel at anchorage or lock*—Nil.

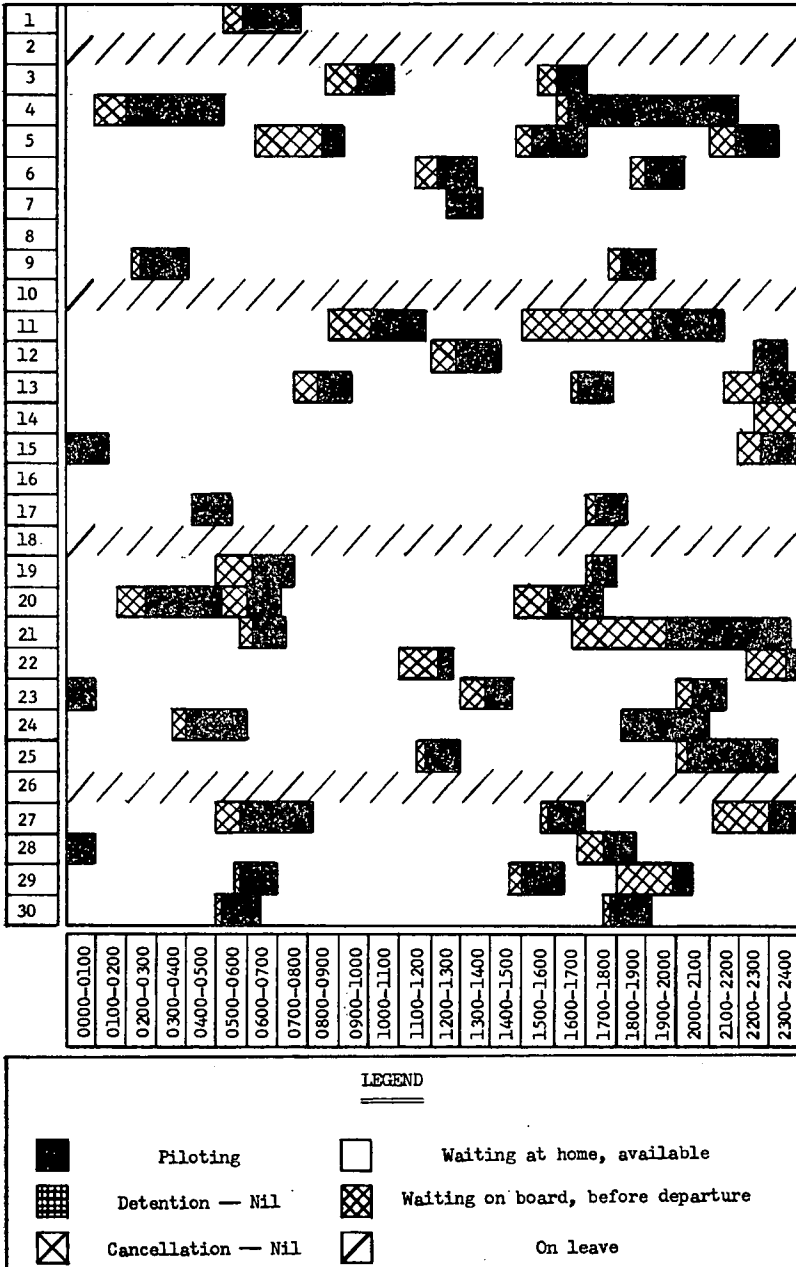
(d) *Striking buoys*—Nil.

(e) *Other*

1. May 5—*Dimitris N.* grounded in Montreal harbour; caused by pilot's error.

SOURCE: Ex. 1451-1968.

Appendix B (1)
 JUNE 1964 WORKLOAD OF MONTREAL HARBOUR PILOT
 J. J. MÉNARD



SOURCE: Appendix B (2).

Appendix B (2) (a)
 ANALYSIS OF JUNE 1964 WORKLOAD
 OF MONTREAL HARBOUR PILOT J. J. MÉNARD

ON LEAVE		AT HOME, AVAILABLE			WAITING ON BOARD			PILOTING		
Dates	days	Dates	days	hrs. mins.	Dates	days	hrs. mins.	Dates	days	hrs. mins.
2	1	1		5 15	1		40	1	1	50
		1&3	1	0 45	3	1	10	3	1	10
		3		4 40	3		30	3	1	00
		3-4		8 00	4	1	00	4	3	15
		4		10 45	4		25	4	5	30
		4-5		8 20	5	2	10	5		50
		5		5 30	5		35	5	1	40
		5		4 00	5		50	5	1	25
		5-6		12 15	6		40	6	1	20
		6		5 00	6		25	6	1	15
10	1	6-7		16 20	7		—	7	1	15
		7-9	1	12 30	9		15	9	1	35
		9		13 40	9		25	9	1	05
		9&11		13 25	11	1	25	11	1	45
		11		3 10	11	4	10	11	2	20
		11-12		14 30	12		50	12	1	30
		12		8 10	12		—	12	1	00
		12-13		8 00	13		50	13	1	05
		13		7 05	13		10	13	1	10
		13		3 40	13	1	10	13	1	20
18	1	14		22 30	14	1	25	14-15	1	35
		15		20 25	15		45	15	1	20
		16-17	1	4 10	17		—	17	1	15
		17		11 35	17		20	17	1	00
		17&19		10 40	19	1	10	19	1	20
		19		9 30	19		10	19		50
		19-20		7 45	20		55	20	2	30
		20		—	20		50	20	1	05
		20		7 35	20	1	10	20	1	40
		20-21		12 15	21		25	21	1	10
26	1	21		9 10	21	3	10	21	3	55
		21-22		11 25	22	1	10	22		30
		22		9 35	22	1	15	22-23	1	30
		23		12 00	23		50	23		45
		23		5 25	23		30	23	1	05
		23-24		5 55	24		30	24	2	00
		24		12 10	24		—	24	2	50
		24-25		14 30	25		20	25	1	10
		25		7 00	25		20	25	2	55
		25&27		5 45	27		45	27	2	25
26	1	27		7 25	27		15	27	1	05
		27		4 10	27	1	55	27-28	2	00
		28		15 40	28		50	28	1	15
		28-29		10 50	29		10	29	1	15
		29		7 30	29		30	29	1	20
		29		1 40	29	1	50	29		35
		29-30		8 35	30		10	30	1	20
		30		11 00	30		10	30	1	30
		30		4 50						
		(4)	4	(48)	21	04 00	(44)	1	15 30	(48)
Average per turn:					54			1 36		

SOURCE: Ex. 1416.

Appendix B (2) (b)

SUMMARY OF JUNE 1964 WORKLOAD
OF MONTREAL HARBOUR PILOT J. J. MÉNARD

Item	No. of Turns	Aggregate Time		Total Turns	Total Time	
		hrs.	mins.		hrs.	mins.
<i>Movages</i>						
Anchorage to lock.....	3	10	00			
Lock to anchorage.....	0		00			
Anchorage to Seaway.....	2	3	40			
Seaway to anchorage.....	2	2	25			
Berth to lock.....	6	14	50			
Lock to berth.....	0		00			
Berth to Seaway.....	6	8	30			
Seaway to berth.....	9	12	45			
Elevator to Seaway.....	2	2	15			
Seaway to elevator.....	4	6	00			
Anchorage to berth.....	3	2	20			
Berth to anchorage.....	1	1	20			
Berth to elevator.....	2	1	50			
Berth to berth.....	6	6	25			
Elevator to elevator.....	1	1	20			
Anchorage to anchorage.....	1	2	50			
Total Piloting.....				48	76	30
<i>Detentions at lock wall</i>				9	(included in movage)	
<i>Cancellation</i>				0		00
Total Workload.....				57	76	30
<i>Waiting</i>						
On board, before departure:						
Anchorage.....	8	5	40			
Lock.....	0		00			
Seaway.....	15	12	40			
Berth.....	19	19	30			
Elevator.....	2	1	40			
Total Waiting on Board.....				44	39	30
At Home, Available.....				48	508	00
<i>On Leave</i>				4	96	00
GRAND TOTAL.....					30 days	

SOURCE: Ex. 1416.

Appendix B (3)

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

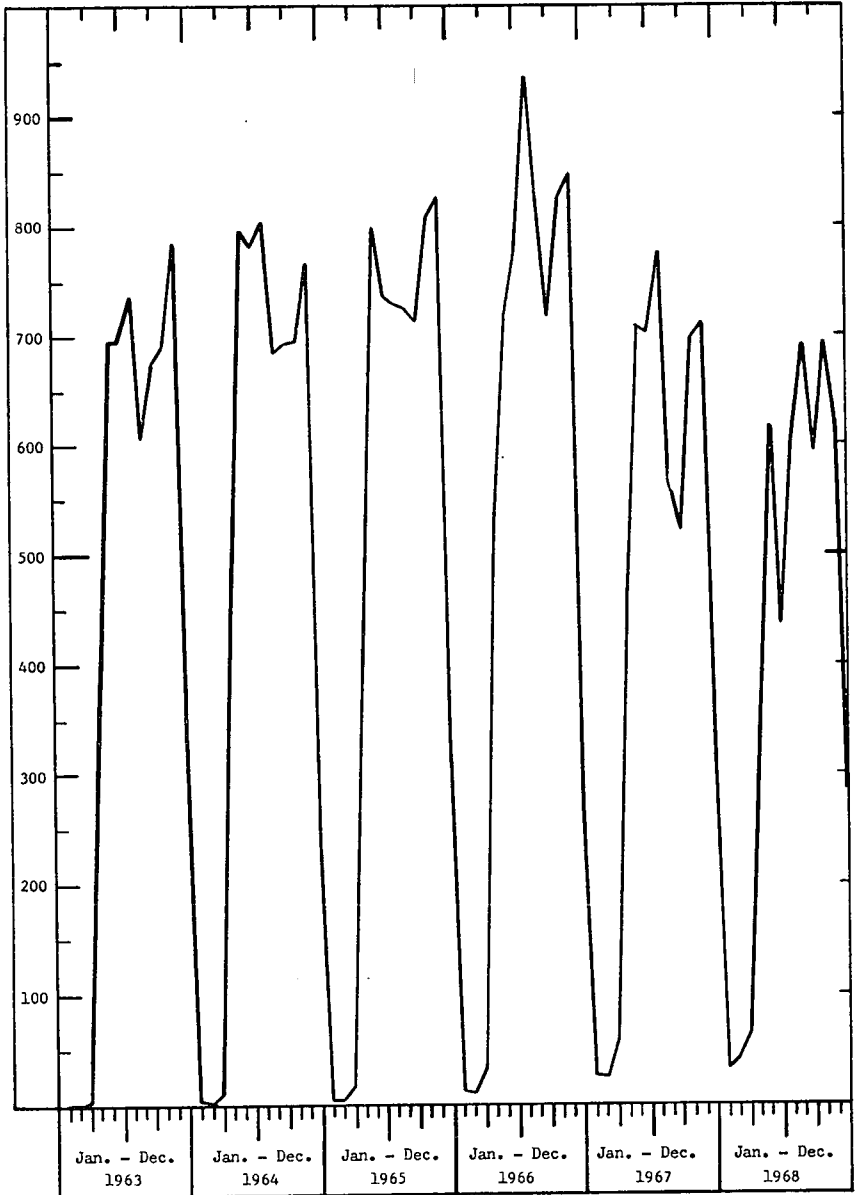
WORKLOAD	BUSIEST MONTH*			LEAST BUSY MONTH†		
	October 1962	November 1963	November 1964	May 1962	August 1963	August 1964
	Turns hrs. mins.	Turns hrs. mins.	Turns hrs. mins.	Turns hrs. mins.	Turns hrs. mins.	Turns hrs. mins.
<i>Movages</i>						
Anchorage to Seaway.....	5 8 45	4 6 45	4 5 20	5 5 35	2 2 20	5 7 20
Seaway to anchorage.....	3 4 35	1 1 05	1 1 50	2 3 40	0 0 00	0 0 00
Berth to Seaway.....	18 28 00	17 20 50	6 8 40	10 13 50	16 21 35	14 15 40
Seaway to berth.....	16 21 30	13 17 15	20 30 35	11 15 00	15 18 55	20 30 15
Anchorage to berth.....	1 1 40	3 2 40	1 1 25	0 0 00	0 0 00	2 3 25
Berth to anchorage.....	1 1 55	3 2 40	1 2 00	0 0 00	2 1 55	3 2 10
Berth to berth.....	8 9 05	9 8 55	12 10 50	13 11 15	5 7 10	6 6 30
Other.....	0 0 00	1 0 50	1 0 45	1 0 25	1 0 50	0 0 00
Total Movages.....	52 73 30	51 61 00	46 60 25	42 49 45	41 52 45	50 65 20
<i>Detentions</i>						
Anchorage.....	4 8 05	2 8 40	1 3 05	2 23 40	0 0 00	1 1 10
Seaway.....	6 10 20	5 7 25	13 22 15	6 7 55	5 8 50	8 13 15
Berth.....	6 15 35	16 49 15	7 27 00	3 8 15	2 2 35	15 35 10
Total Detentions.....	16 34 00	23 65 20	21 52 20	11 39 50	7 11 25	24 49 35

<i>Cancellations</i>										
Anchorage.....	0	00								
Seaway.....	0	00	1	8	50				0	00
Berth.....	0	00	1		05				0	00
			2	5	20				2	2
										35
Total Cancellations.....	0	00	3	9	15				2	2
										35
										30
<i>Waiting on Board before Departure</i>										
Anchorage.....	2	40	5	2	50				2	1
Seaway.....	12	17	8	1	30				8	4
Berth.....	15	10	12	6	40				22	14
Lachine lock.....	0	00	1		30				1	
										20
Total Waiting.....	29	28	26	11	30				33	21
										10
										25
										13
										35
At Home, Available.....	608	30	574	55					656	05
										615
										00
GRAND TOTAL.....	744	00	720	00	00				744	00
										(31 days)
										(31 days)
Name of Pilot.....	C. Borromée Lavoie		Louis-Philippe Boucher						Geoffrey D. Long	
									Thomas Quinn	
										Daniel S. Scott

SOURCES: *Ex. 788 and †Ex. 789—Berth includes: Section, Shed, Jetty, Dry Dock, Elevator, etc.

Appendix C (1)

COMPARISON OF TRIPS EACH MONTH DURING THE YEARS
1963-1968 BY MONTREAL HARBOUR PILOTS



SOURCE: Appendix C (2).

Appendix C (2)

AGGREGATE NUMBER OF TRIPS BY MONTREAL HARBOUR PILOTS
EACH MONTH DURING THE YEARS 1963-1968

Month	1963	1964	1965	1966	1967	1968
January.....	0	2	2	11	25	32
February.....	0	0	3	11	25	42
March.....	2	11	19	34	57	66
April.....	364	490	413	524	455	333
May.....	695	794	797	716	708	618
June.....	693	782	734	772	702	437
July.....	736	804	729	937	776	603
August.....	607	684	726	831	569	691
September.....	674	693	712	718	522	594
October.....	691	696	806	824	698	692
November.....	786	766	825	847	711	620
December.....	325	233	311	268	311	286
TOTAL.....	5,573	5,955	6,077	6,493	5,559	5,014

SOURCE: Ex. 1539(z).

The following table shows the results of the survey conducted in the year 1998. The data is presented in a tabular format, with columns representing different categories and rows representing specific data points. The table is organized into two main sections, each with its own set of sub-headers.

Section 1		Section 2	
Category	Value	Category	Value
Item 1	12.5	Item 1	15.2
Item 2	8.7	Item 2	10.1
Item 3	21.3	Item 3	18.9
Item 4	5.6	Item 4	7.4
Item 5	14.8	Item 5	16.5
Item 6	9.2	Item 6	11.0
Item 7	18.1	Item 7	20.3
Item 8	6.4	Item 8	8.2
Item 9	11.7	Item 9	13.5
Item 10	7.9	Item 10	9.6
Item 11	16.3	Item 11	18.1
Item 12	4.5	Item 12	6.3
Item 13	13.2	Item 13	15.0
Item 14	8.8	Item 14	10.6
Item 15	20.5	Item 15	22.3
Item 16	5.1	Item 16	6.9
Item 17	12.9	Item 17	14.7
Item 18	7.3	Item 18	9.1
Item 19	15.6	Item 19	17.4
Item 20	9.4	Item 20	11.2
Item 21	17.8	Item 21	19.6
Item 22	6.7	Item 22	8.5
Item 23	14.1	Item 23	15.9
Item 24	8.3	Item 24	10.1
Item 25	19.4	Item 25	21.2
Item 26	5.8	Item 26	7.6
Item 27	13.5	Item 27	15.3
Item 28	7.6	Item 28	9.4
Item 29	16.9	Item 29	18.7
Item 30	4.9	Item 30	6.7
Item 31	12.4	Item 31	14.2
Item 32	8.1	Item 32	9.9
Item 33	18.6	Item 33	20.4
Item 34	6.2	Item 34	8.0
Item 35	14.7	Item 35	16.5
Item 36	9.5	Item 36	11.3
Item 37	17.2	Item 37	19.0
Item 38	5.4	Item 38	7.2
Item 39	13.8	Item 39	15.6
Item 40	8.6	Item 40	10.4
Item 41	19.1	Item 41	20.9
Item 42	6.5	Item 42	8.3
Item 43	14.3	Item 43	16.1
Item 44	7.8	Item 44	9.6
Item 45	16.4	Item 45	18.2
Item 46	5.3	Item 46	7.1
Item 47	13.1	Item 47	14.9
Item 48	8.4	Item 48	10.2
Item 49	18.8	Item 49	20.6
Item 50	6.1	Item 50	7.9
Item 51	14.6	Item 51	16.4
Item 52	9.7	Item 52	11.5
Item 53	17.5	Item 53	19.3
Item 54	5.7	Item 54	7.5
Item 55	13.4	Item 55	15.2
Item 56	8.2	Item 56	10.0
Item 57	19.3	Item 57	21.1
Item 58	6.6	Item 58	8.4
Item 59	14.9	Item 59	16.7
Item 60	9.8	Item 60	11.6
Item 61	17.7	Item 61	19.5
Item 62	5.9	Item 62	7.7
Item 63	13.6	Item 63	15.4
Item 64	8.5	Item 64	10.3
Item 65	19.0	Item 65	20.8
Item 66	6.4	Item 66	8.2
Item 67	14.2	Item 67	16.0
Item 68	9.3	Item 68	11.1
Item 69	17.4	Item 69	19.2
Item 70	5.6	Item 70	7.4
Item 71	13.3	Item 71	15.1
Item 72	8.7	Item 72	10.5
Item 73	18.9	Item 73	20.7
Item 74	6.8	Item 74	8.6
Item 75	14.5	Item 75	16.3
Item 76	9.6	Item 76	11.4
Item 77	17.6	Item 77	19.4
Item 78	5.5	Item 78	7.3
Item 79	13.7	Item 79	15.5
Item 80	8.9	Item 80	10.7
Item 81	19.2	Item 81	21.0
Item 82	6.3	Item 82	8.1
Item 83	14.4	Item 83	16.2
Item 84	9.4	Item 84	11.2
Item 85	17.3	Item 85	19.1
Item 86	5.8	Item 86	7.6
Item 87	13.5	Item 87	15.3
Item 88	8.3	Item 88	10.1
Item 89	18.7	Item 89	20.5
Item 90	6.7	Item 90	8.5
Item 91	14.8	Item 91	16.6
Item 92	9.9	Item 92	11.7
Item 93	17.8	Item 93	19.6
Item 94	5.4	Item 94	7.2
Item 95	13.2	Item 95	15.0
Item 96	8.6	Item 96	10.4
Item 97	19.1	Item 97	20.9
Item 98	6.5	Item 98	8.3
Item 99	14.3	Item 99	16.1
Item 100	9.7	Item 100	11.5

Section Four

PILOTAGE DISTRICT OF CORNWALL

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Chapter A

LEGISLATION

1. LAW AND REGULATIONS

PREAMBLE

Apart from the sections of the Canada Shipping Act that apply to pilotage in general, none apply to the Cornwall Pilotage District specifically. Particular legislation relating to this District is contained in the annual estimates of the Department of Transport, and in regulations made pursuant to the Canada Shipping Act. These special provisions are studied in the following pages.

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

(a) *Creation of the District*

The Cornwall Pilotage District was created by an Order of the Governor in Council made pursuant to sec. 324 C.S.A., on November 17, 1960 (P.C. 1960-1570, Ex. 1143) when the former St. Lawrence-Kingston-Ottawa Pilotage District was rescinded (P.C. 1960-1569, Ex. 829) and its territory on the St. Lawrence River divided between two new Districts, the eastern section becoming the Cornwall District and the western section the Kingston District (P.C. 1960-1571, Ex. 829).

(b) *Limits of the District as Stated in Order in Council*

The Governor in Council's Order which created the Cornwall Pilotage District defined the limits; this definition, which has not been amended since, reads:

"... on the east by the eastern end of the Seaway approach or the eastern end of the Lachine Canal in Montreal Harbour and on the west by the boundary line between the United States and Canada where it crosses the navigable channel of the River St. Lawrence near St. Regis in the Province of Quebec, and including the canals and the waters of the River St. Lawrence between the said limits, together with the waters of the Cornwall Canal and its eastern approaches."

(i) *Eastern limit*

The eastern limit of the District is defined in relation to both the former and the present routes to and from the harbour of Montreal and the upper reaches of the St. Lawrence River.

Following the construction of the St. Lawrence Seaway, the 14-foot Lachine Canal was maintained to serve local industries and effective April 1, 1959, was transferred for operation and management (P.C. 1959-204) from the Department of Transport to the Seaway Authority. It remained toll free until its permanent closing in March 1968; its eastern entrance has since been filled in.

It seems clear that the whole of the entrance to the Seaway was meant to be joint pilotage territory of the Cornwall and Montreal Districts but this aim was not achieved in law because the limits of the Pilotage District of Montreal, as defined in sec. 323 C.S.A., were never altered to meet the new situation following the opening of the St. Lawrence Seaway (vide p. 565 and pp. 627-8).

(ii) *Western limit*

The western limit is also defined in relation to both the former and the present routes to and from Cornwall and the upper reaches of the St. Lawrence River.

The 14-foot Cornwall Canal has also since been closed. It had similarly been decided that what remained of this canal following the construction of the international St. Lawrence River power project in the summer of 1958 should be maintained to serve local industries. Like the Lachine Canal, it was transferred to the Seaway Authority by P.C. 1959-204, effective April 1, 1959, and remained toll free until its permanent closing to navigation in March 1968. However, its eastern approach remains as a dead-end, 27-foot channel branching from the Seaway channels north of St. Regis Island, three miles downstream from Cornwall.

The other part of the western limit is accurately defined since the U.S./Canada boundary is a well-known geographical line which crosses the Seaway ship channel south of Cornwall Island, three quarters of a mile upstream from the narrows between the Islands of St. Regis and Cornwall.

COMMENT

In addition to the common fault found in the definition of the limits in all contiguous Districts except between Quebec and Montreal, i.e., no provision for joint territory where ships in transit can change pilots (Part I, pp. 48-51 and Gen. Rec. 9, pp. 480-482), the description of the Cornwall limits has proved the cause of serious legal and pilotage problems. It is obvious that it was adopted for considerations unassociated with the efficient, practical operation of the pilotage service since the common boundary area between the Cornwall and the Kingston Districts should clearly be established six miles upstream at Snell lock. These problems are studied on pp. 899 and ff.

(c) *Pilotage Authority*

The Governor in Council's Order that created the District appointed the Minister of Transport the Pilotage Authority. This part of the Order has not been amended since.

(d) *Compulsory Payment of Pilotage Dues*

The compulsory payment of dues was established by the Order which created the District.

Formerly, the policy had been to impose the compulsory payment of dues automatically whenever a District was created (Part I, p. 212). The former St. Lawrence-Kingston-Ottawa Pilotage District was one of the rare exceptions and this was because the upper end of the District (now the Kingston District) passed through United States waters. When the Cornwall District was established, with its western limit as above described, this objection no longer prevailed and the payment of dues was then made compulsory.

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

(a) *Appointment of Secretary-Treasurer and Authorization for Payment of District Expenses (sec. 328 C.S.A.)*

No use is made of the powers granted by sec. 328 C.S.A. The function of Secretary-Treasurer is discharged by an employee of the Department of Transport who represents the Pilotage Authority and acts as the local Supervisor of Pilots. His remuneration and all District operating expenses are assumed by the Department of Transport.

(b) *Delegation of Pilotage Authority's Powers (subsecs. 327(2) and 329(p) C.S.A.)*

The situation here is the same as in the Districts of Montreal and Quebec (vide p. 20).

(c) *Exemptions and Withdrawal of Exemptions (secs. 326, 347 and 357 C.S.A.)*

By subsec. 346(ee), which was added by an amendment to the Act in 1961 (9-10 Eliz. II c. 32), United States ships whose operations are primarily upon the Great Lakes or between ports on the Great Lakes and on the St. Lawrence River, although they may make an occasional voyage to ports in the "Maritime Provinces of Canada", enjoy an absolute statutory exemption from the compulsory payment of pilotage dues. As noted in Part I, p. 221, this exemption is the result of an amendment to the Act rendered necessary to ensure similarity of treatment to Canadian and United States lakers following the opening of the St. Lawrence Seaway and the introduction of the joint Canada-United States arrangements on the Great Lakes.

The District regulations originally did not contain any modification to the general scheme of exemptions of sec. 346 C.S.A. (vide Part I, pp. 221-223). By a 1965 amendment made pursuant to sec. 347 C.S.A. (although the authority quoted is sec. 329 C.S.A.) the relative exemption of subsec. 346(e), which gave to steamships registered in any of Her Majesty's dominions about the same exemption as was provided to

United States ships under subsec. 346(ee), was withdrawn except for steamships registered in Canada. This relative exemption that is now limited to Canadian steamships is somewhat wider than the absolute statutory exemption enjoyed by United States ships in that the seaward limit of the exempted voyages for Canadian vessels extends beyond the Maritime Provinces to ports in and beyond Hudson Strait and to all United States ports north of New York.

No exemption is provided in the By-law for ships under 250 tons as permitted under subsec. 346(c). Therefore, any small foreign ships of non-dominion registry—even yachts—are subjected to the compulsory payment of dues when navigating within the District (vide Part I, p. 227).

(d) *General By-law Passed under Sec. 329 C.S.A. (Ex.431)*

The General By-law now in force is the first By-law of the new District approved by Order in Council P.C. 1960-1572 dated November 17, 1960, as amended by:

- P.C. 1961-727 of May 18, 1961,
- P.C. 1962-644 of April 26, 1962,
- P.C. 1965-1174 of June 23, 1965,
- P.C. 1965-1918 of October 25, 1965,
- P.C. 1966-778 of April 29, 1966,
- P.C. 1967-998 of May 18, 1967,
- P.C. 1968-815 of April 25, 1968 and
- P.C. 1969-1243 of June 17, 1969.

Many of the features of the internal organization provided by this General By-law do not correspond to the practice being followed. These discrepancies are pointed out in Chapter C when the subject concerned is dealt with. The salient features of the organization as provided by this By-law are as follows (references are to Part I where the subject-matter is dealt with):

- (i) As in the other St. Lawrence River Pilotage Districts, the Pilotage Authority, through his local representative, administers the service, i.e., directs and assigns the pilots and collects and distributes their earnings (pp. 73 and ff.).
- (ii) The pilots are represented by a committee composed of five members appointed annually by the pilots from their number (pp. 82-84).
- (iii) There is no apprenticeship system. New pilots are recruited from qualified mariners experienced in navigating the District waters. They must have had at least two years of service as Master or deck officer in vessels trading regularly through the District (p. 252).
- (iv) The number of pilots is determined by the Authority after consultation with the Pilots' Committee (p. 257).

- (v) There is no grade system but the first licence issued is for one year of probation. If found suitable after that period, the pilot is issued a permanent licence unless the Authority deems it advisable to issue a further temporary licence valid for a period which it will fix or renew at its discretion. There is no provision for emergency temporary licences (pp. 266. and ff.).
- (vi) The pilots' status is that of *de facto* employees. They can not perform any pilotage except as directed by the Supervisor who, as a rule, must despatch them in regular turns. The equalization of trips principle does not apply. Two pilots are assigned together for a winter assignment (Dec. 1 to April 8) or to a composite navigation unit.
- (vii) No system of statutory leave is provided in the regulations. Permission for temporary leave may granted by the Supervisor.
- (viii) For remuneration purposes, the pilots are treated as independent contractors. Officially, a pilot's remuneration consists of the dues earned by his services, or which he would have earned if he were entitled to have his services accepted (pp. 103, 187 and ff.).
- (ix) There is no provision for a Pension Fund (C. 10).
- (x) The tariff structure is based on flat rates and since 1966 increases have taken the form of a general surcharge.
 - The trip rate for a full transit consists of a flat rate (\$160) even if the ship stops *en route* for loading or unloading cargo. In addition, idle time on board at intermediate ports or on account of machinery breakdown is compensated through a detention charge (\$5.00 after the first hour to a maximum of \$25.00 per day), and a transportation allowance of \$3.00 is payable to a pilot for travel to or from St. Lambert lock and land transportation expenses actually incurred at Snell lock.
 - The rate for a partial transit, subject to two exceptions, consists of an amount of the full transit flat rate prorated to the distance piloted with a minimum charge of \$25.75, detention for idle time on board as above and land travelling expenses actually incurred.
 - By way of exception, special flat rates have been provided since 1965 for trips involving stopping at Côte Ste-Catherine wharf: from St. Lambert lock to Côte Ste-Catherine wharf, \$40.00, from Snell lock to Côte Ste-Catherine wharf, \$160.00 and, if a full transit is effected, \$180.00.
 - In 1967, special flat rates were added for a trip from St. Lambert to Port de Valleyfield and vice versa at \$96.00, plus \$25.00 berthing and unberthing charges at that port, plus detention and travelling charges as above.
 - There is a \$100.00 additional charge on winter assignments.

- A moorage within a port calls for a flat charge of \$15.45 or \$30.90 depending whether it involves transiting a lock.
 - The same detention charge is also made for waiting time at the boarding station.
 - The cancellation charge is \$10.30, plus a \$3.09 hourly rate after the first hour up to a maximum of \$25.75 per day.
 - All these rates have been increased since 1965 through a surcharge which increased from 12 per cent in 1965 to 17 per cent in 1966 to 24 per cent in 1967, 34 per cent in 1968 and 40.7 per cent in 1969.
 - There is no special provision for dead ships, trial trips, pilot boat and radio rental charges.
- (xi) The contract pilot system was allowed to continue solely as a temporary measure for the protection of the acquired rights of a pilot who had been "under contract for the navigation season of 1937 with a steamship company which operated and continues to operate, for the benefit of the pilot, a pension and insurance scheme in which the said pilot has an interest, . . ." (p. 304).

The provision concerning *contract pilots* is no longer operative due to the retirement of the last two such pilots, Eucher Desgroseilliers in January 1966 and Léopold Desgroseilliers January 1, 1970 (Ex. 1540(a)). They were both employees of Canada Steamship Lines.

COMMENT

Since the Pilotage Authority is powerless to fix rates for services performed beyond District limits, the tariff provisions which include services between the District's western boundary and Snell lock are obviously ultra vires.

2. HISTORY OF LEGISLATION

The history of pilotage on the St. Lawrence River above Montreal prior to the creation of the Cornwall Pilotage District in 1960 can be divided into three periods: 1805 - 1934, 1934 - 1952 and 1952 - 1960.

(1) FIRST PERIOD (1805-1934)

This first period was characterized by the construction and improvement of a canal system between Montreal and Lake Ontario, a distance of *188 miles*, to overcome a series of rapids and a total river elevation of *226 feet*; the development of pilotage during that period is linked with the growth of this canal system.

Lachine Section

The Lachine section extends from the port of Montreal to Lake St. Louis, a distance of *9 miles*, where there is a river drop of *50 feet*. The first improvement made there dates back to 1804 when short side canals two to

three feet in depth were constructed at the edge of the rapids. Among other craft using them were the huge freight-carrying *canots de maître* of the fur-trading companies travelling between their base at Montreal and the remote posts of the West. The first Lachine Canal proper was not completed until 1825. It was deepened from five to nine feet in 1843-1848 and a second and final enlargement, completed in 1883, provided a 14-foot depth throughout. Thence, normal river navigation resumed through Lake St. Louis for a distance of 22 miles.

Government-controlled pilotage in this section was first instituted in 1805 when Parliament imposed compulsory pilotage on vessels which were not navigated by their owners (1805, 45 Geo. III c. 9), but this legislation was short lived, being abrogated in 1836. Pilotage continued to be performed but by unlicensed pilots and at whatever price was mutually agreed upon by them and the shipowners. Government-controlled pilotage was not re-instituted until 1934 when the St. Lawrence-Kingston-Ottawa District was created (vide pp. 577-80).

Soulanges Section

The Soulanges section extends from Lake St. Louis to Lake St. Francis, a distance of 16 miles, where there is a river drop of some 84 feet. Between 1779 and 1783, four side canals with locks were constructed, giving 2½-foot depth to overcome rapids at four separate locations. The Beauharnois Canal was built on the southern shore between 1842 and 1845 to replace these earlier canals and provide a depth of nine feet. It, in turn, was replaced by the Soulanges Canal on the opposite side of the river, begun in 1892 and completed in 1899. It had five locks and provided 14-foot navigation. Thence, there was uninterrupted navigation through Lake St. Francis to Cornwall, a distance of 29 miles.

International Rapids and Thousand Islands Sections

From Cornwall, at the head of Lake St. Francis, to Chimney Point near Prescott, a distance of 44 miles, there is a total difference in water level of some 92 feet, which was overcome by a series of canals. The first of these was at Cornwall, completed in 1842 to provide a 9-foot depth, subsequently enlarged to 14-foot depth by 1900. Next in order was the Farran's Point canal, first completed in 1847 and enlarged to 14-foot depth by 1901, and the Rapid Plat canal at Morrisburg, also completed in 1847 and enlarged to 14 feet by 1904. The last in the series was the Galop canal at Iroquois, first completed in 1848; the subsequent enlargement to 14 feet was completed in 1908. Thence, ships could navigate in open water through the Thousand Islands section to Kingston, at the entrance to Lake Ontario, a distance of 68 miles.

Pilotage in the Soulanges, International Rapids and Thousand Islands sections remained free of Government control until 1934 when the St. Lawrence-Kingston-Ottawa District was created. However, agitation for the estab-

lishment of Government control started in 1913 when persons piloting in that area wrote to the Department of Marine and Fisheries requesting the establishment of a Pilotage District. Four years later, the Dominion Wreck Commissioner recommended licensing pilots. In 1925, the Trade and Labour Congress asked that a pilotage office be set up. In 1928 and 1932, the Canadian Navigators' Federation made similar requests, supported by several Members of Parliament and steamship companies.

(2) SECOND Period (1934-1952)

(a) *Creation of District*

Following the enactment of the Canada Shipping Act in 1934, the Government decided to assume control of the pilotage service and created a Pilotage District, known as the St. Lawrence-Kingston-Ottawa District, appointing the Minister of Marine as its Pilotage Authority. At the same time, it made the payment of pilotage dues non-compulsory within the District (Order in Council 868 of May 3, 1934).

The reasons for the creation of the District were stated in the preamble to Order in Council 868 as follows:

"That persons engaged in piloting ships on the river St. Lawrence between Kingston and Montreal and on the Ottawa river between Lake St. Louis and the Chaudiere Falls at Ottawa are not subject to any of the provisions of the Canada Shipping Act while so engaged;

That if a Pilotage District is formed and persons acting as pilots are licensed by a Pilotage Authority, a Wreck Commissioner appointed under Part X of the Canada Shipping Act will be in a position to suspend or cancel such licences if it is found the holders thereof are liable for a shipping casualty; . . ."

(b) *General By-law (Ex. 1392)*

The first By-law of the District, adopted by P.C. 1594 dated July 26, 1934, provided that the pilotage service was optional and, when used, the rates were to be mutually agreed upon between the Master, owners or agents of the vessel and the pilot, either for one season or for individual trips. This situation prevailed until April 9, 1936, when an amendment to the By-law (P.C. 900) established pilotage rates. The use of unlicensed pilots was prohibited and the Pilotage Authority was authorized to impose a penalty in case of infraction, but United States vessels properly manned in accordance with United States law could "utilize licensed United States Pilots while navigating in any part of the District other than Canadian Canals."

Between April 1936 and June 1951, there were 13 amendments made to this General By-law and it was revised and consolidated into a new General By-law on June 17, 1952 (P.C. 3305) (p. 881).

With respect to the licensing of pilots, the By-law contained transitional measures and regular provisions. In order to protect acquired rights, it was provided that all persons who had been engaged in piloting in the three preceding years and Masters or mates of vessels doing their own piloting would be granted a pilot's licence if they made application prior to

December 31, 1934, and passed with success an oral examination on local knowledge, the Rules of the Road and an eyesight and hearing test.

The regular provisions concerned the issue of new licences after January 1, 1935: the number of pilots to be licensed were to be determined by the Pilotage Authority from time to time, the qualifications required of applicants were specified and a board responsible for examining candidates was set up.

So many persons who had been acting as pilots applied for, and were granted, a licence that the number of pilots far exceeded the needs of the District. In fact, when the District was created, some 216 licences were issued and the need to issue new licences did not arise until many years later.

In July 1940, following strong and continued representations by the pilots of the District to have the payment of pilotage dues made compulsory, it was considered advisable to have the pilotage situation in the District investigated by the Honourable Mr. Justice Cannon, who had been appointed Commissioner under the Inquiries Act to inquire into the navigation of small vessels below Montreal, and with this in view a suitable reference was made in the Order in Council appointing the said Commissioner (P.C. 214-3404). However, subsequent instructions were issued to limit the inquiry to the navigation of small vessels below Montreal (vide p. 70).

(c) *Slocombe Survey, 1947 (Ex. 1452)*

In 1947, Captain F.S. Slocombe, who conducted a survey of pilotage in the main Pilotage Districts, reported on the situation in the St. Lawrence-Kingston-Ottawa District. The following points are of particular interest:

SPECIAL FEATURES

"Pilotage in this District is essentially River pilotage. An unusual feature is that except in the case of some foreign-flag vessels the actual pilotage is broken at intervals by canals, through which the Master of the vessel takes charge. A special additional rate is charged when a pilot is required to do the canalling."

"... when the district was first formed licences were issued to all persons who had been actively engaged in piloting within the limits of the District within the three years 1931 to 1933 and to masters or mates of vessels doing their own piloting, provided such persons were British subjects resident in Canada, and were under 70 years old, and could pass eyesight and hearing tests and oral examination in local knowledge and Rules of the Road."

"However, there were so many licences issued upon formation of the District that there have been no further entrants. In spite of deaths and retirements, there are still, for the 1947 season, 120 licensed pilots in this District. Only 2 of these are licensed for the Ottawa River. A large number of these licensed pilots are masters and mates of vessels and are not using their licences as pilots. They are keeping their licences in force by passing the eyesight test every year, presumably so that they will be able to use their licences if they should at a later date be without berth on a ship. There are about 50 using their licences as pilots."

CONDITIONS OF SERVICE

"A pilot who is not assigned as a special service pilot must report as soon as he has completed a pilotage and his name is placed on turn in a book. These tour-de-role pilots are called in order of preference in the book.

Study of Cornwall Pilotage District

However, the majority of the licensed pilots who are not masters or mates of ships are special service pilots for particular companies. These men know in advance the approximate date of which they will be required and hold themselves available accordingly.

The Department maintains a pilotage office in Kingston, Ontario, (but no sleeping accommodation) in addition to the office of the Superintendent at Montreal. The By-laws require that travelling expenses shall be paid by the ship to and from the nearest pilotage office. These expenses include transportation by motorboat to or from a ship at Kingston. But if a tour-de-rolé pilot whose home is in Montreal takes a vessel from Montreal to Kingston he must either pay his own expenses back to Montreal or remain in Kingston at his own expense until he again comes on turn for a downbound ship, which may not be for many days."

"Each pilot collects his own fees from the owner or agent of a ship which he has piloted and there are no deductions. There is no pension scheme."

(d) *Audette Committee of 1949 (Ex. 1330)*

The Audette Committee dealt with the St. Lawrence-Kingston-Ottawa District as a completely separate matter since it found that the situation there was totally different from that prevailing in the other Districts under review, noting in particular that there was no compulsory payment of pilotage dues and no Pension Fund for the pilots.

On the establishment of compulsory payment, urged by the pilots but opposed by the shipping Interests, the Committee rejected its introduction on the grounds that it could not be made applicable to the whole of the District. Other recommendations were, *inter alia*,:

- "a) that all earnings of this district should be pooled under the supervision of the Pilotage Authority;
- b) that an actuarially sound pension plan should be placed in operation in this district, so that the St. Lawrence-Kingston-Ottawa pilots may have some security upon retirement;
- c) that the number of pilots on strength in this district should be determined from time to time by the Pilotage Authority in accordance with the needs of the district;"
- "f) that all pilotage dues should be collected by the Pilotage Authority for distribution to the licenced pilots;"

(e) *Changes in Demand for Pilotage*

Prior to 1945, very few ocean-going vessels went up the St. Lawrence above Montreal. Great Lakes - overseas trade began only in 1933 when regular scheduled sailings were pioneered by Norway's Fjell line. Orange of Holland joined the service five years later but trade grew slowly during the 1930's and halted entirely at the outbreak of World War II.

For this reason, pilotage services during this period existed almost exclusively for the benefit of lake vessels. Companies with ships trading regularly in the District had their own special pilots who were bound by contract to serve only their company.

The few pilots whose services were not retained worked on a tour-de-rolé basis and, for this purpose, a list of those available for duty was kept at the pilotage offices in Montreal and Kingston.

Each pilot, whether special or tour-de-rôle, collected his own fees from the owner or agent and retained them without any deductions.

After the war, Great Lakes - overseas trade grew at a remarkable rate and greatly influenced the development of pilotage in the St. Lawrence-Kingston-Ottawa District. By 1955, flags of more than a dozen overseas lines were seen on the Great Lakes and that year 119 foreign ships shuttled back and forth from Europe making over 329 round trips during the season and carrying more than 780,000 tons of cargo. By 1958, the year preceding the opening of the Seaway, the number of foreign vessels engaged in the lake trade had increased to 187 making a total of 534 round trips during the season and carrying slightly over 1,000,000 tons of cargo (Ex. 905).

(3) THIRD PERIOD (1952-1960)

(a) *Changes in 1952*

In 1952, a new General By-law for the St. Lawrence-Kingston-Ottawa Pilotage District (P.C. 3305 of June 17, 1952 (Ex. 1392)) effected a major change in the administration of pilotage. The payment of pilotage dues remained non-compulsory within the District but the Pilotage Authority was given a more important part to play in that he now became responsible for despatching pilots and collecting pilotage dues.

The gradual increase in the number of ocean vessels trading in the District was a cogent reason to warrant a reorganization and, in addition, a despatching system administered by the Pilotage Authority had been requested for some time by both the pilots and the Shipping Federation to stop Sailing Masters from piloting illegally in the District.

Sailing Masters were the persons engaged to assist and advise the Masters of ocean vessels during their voyage through the Lakes. As long as United States or Canadian lake vessels were the only ones trading there, pilotage was unnecessary since the Masters and officers of these ships were expert in local navigation. In the early days, the Sailing Master was generally a retired Great Lakes Master or a ship's officer with substantial Great Lakes experience. He usually joined the ocean vessel at Montreal and stayed on board until she returned to Montreal from the Lakes. The men so engaged were not considered to be pursuing a career but simply holding a part-time job which brought in some additional money. After the St. Lawrence-Kingston-Ottawa District was organized, Sailing Masters were no longer allowed to operate between Montreal and Kingston, but a number of ocean shipping companies found it more convenient to take their Sailing Masters on board at Montreal and dispense with the services of the licensed pilots between Montreal and Kingston. The same process was repeated off Kingston on the return trip, with the result that the licensed pilots of the St. Lawrence-Kingston-Ottawa District were deprived of employment.

After 1952, the majority of the pilotage assignments for ocean-going ships between Montreal and Kingston were performed by licensed pilots. The Sailing Masters continued to function, but only west of Kingston, until 1958 (vide p. 888).

The use of pilots by lake vessels was intermittent. They normally employed pilots only in bad weather, and more as a matter of convenience than necessity or safety. As a consequence, ocean vessels would sometimes lack service and suffer delays because of an unexpected request for a pilot by a lake vessel.

The Shipping Federation, supported by the pilots, made representations to the Pilotage Authority suggesting that lake vessels which arrived unannounced and requested a pilot should be refused. The Pilotage Authority did not agree claiming that vessels should be served in the order of arrival.

(b) 1955: First Work Stoppage by the Pilots

1955 marks the beginning of a long battle by the pilots for the compulsory payment of pilotage dues, at least in that part of the District lying wholly in Canadian territory, i.e., Montreal to Cornwall (vide Pilots' Brief of March 25, 1955 to the Pilotage Authority, Ex. 809).

Construction of a 27-foot waterway between Montreal and Kingston to replace the outmoded 14-foot system had begun in 1954. The pilots looked forward with apprehension to the time when large ocean ships would be using this new waterway, and decided to renew their efforts to obtain the compulsory payment of dues in their District.

The Shipping Federation had supported earlier requests of the pilots, suggesting, in a letter dated Dec. 23, 1953, to the Pilotage Authority (Ex. 809), that the establishment of the compulsory payment system would serve as a means to attract into the pilotage service additional well-qualified mariners to meet the pilotage needs of the District.

At the beginning of 1955, a new Committee of Pilots was appointed with a clear mandate to obtain approval for the compulsory payment of pilotage dues. The Committee retained the services of a lawyer. A brief dated March 23, 1955, was presented to the Minister of Transport.

With a view to defeating in advance the objection based on the international character of the St. Lawrence River above Cornwall, the brief recommended that the compulsory payment of pilotage dues be established only in that part of the District located wholly within Canadian waters, i.e., from Montreal to Cornwall.

The submission of this brief was followed by an exchange of correspondence and meetings were held between representatives of the Committee of Pilots and of the Pilotage Authority, but without result.

As months went by, the pilots became more restless and eventually decided to go on strike to support their demands. A general meeting of all the pilots was convened for Sunday, October 16, and thus the work stoppage began.

The strike put the Shipping Federation in a difficult position. Even though the Federation was fully in agreement with the request of the pilots, its members were hurt by the work stoppage because their ships were deprived of the pilots' services.

In order to find a way to end the work stoppage, the Shipping Federation representatives held a meeting with representatives of the Pilotage Authority and the pilots' legal adviser October 18. The situation became all the more critical because on the day preceding the strike, the Minister of Transport and his Deputy Minister had left Ottawa on a business trip and were not expected back for 10 or 15 days and little could be accomplished before their return.

The meeting concluded with an agreement that the Shipping Federation would try to persuade the Pilotage Authority to send a telegram to the President of the Pilots' Committee to the effect that the Authority would give the matter immediate attention upon return and would be prepared to meet with a joint delegation of the Shipping Federation and the pilots to review the situation.

A few days later, the Minister sent a telegram to the pilots along the lines suggested by the Shipping Federation and the pilots, on the basis of this assurance, decided to return to work.

On October 27, the Pilots' Committee and representatives of the Shipping Federation met with the Pilotage Authority in Ottawa. The records indicate that the pilots were favourably impressed by the interest shown by the Minister toward their demand.

(c) *1956: Formation of the First Corporation of Pilots*

Three and a half months later the pilots became disillusioned when on February 14, 1956, their counsel received a letter from the Pilotage Authority stating that their request had been refused.

This letter arrived during the pilots' annual meeting and, after it had been considered, counsel for the pilots replied February 21, 1956, to express the pilots' deep disappointment in the following terms (Translation):

"After your sympathetic reception of the pilots in your office last October 27th they find it difficult to believe that the Government of their country pays such slight regard to their problems as your letter would suggest. To relate the whole problem of the compulsory payment of pilotage dues merely to their present remuneration is to leave aside the pilots' two fundamental objectives, i.e., to guarantee the future of their profession in the one area where they are authorized to practise it and to ensure their general material security." (Ex. 809).

With respect to the future of the profession, the letter also indicated that the pilots were afraid of being deprived of part of their work by American pilots. Finally, the Pilotage Authority was informed that the pilots had decided at their last annual meeting to form a pilots' corporation whose main object would be to look after their common interests.

All associations of pilots which had been organized thus far were partnerships. Pilot in the other St. Lawrence River Districts were soon to follow suit and form similar professional organizations (vide Part I, p. 87).

Letters patent under the name of Corporation of the St. Lawrence-Kingston-Ottawa Pilots were granted under Part III of the federal Companies Act, on April 19, 1956. The name was changed in 1961 to Corporation of the St. Lawrence River and Seaway Pilots.

For the remainder of the year 1956 no new development occurred respecting the compulsory payment of pilotage dues.

It must be noted that the rates, which already had been raised in 1954 (P.C. 1954-843 of June 3, 1954), were raised again in 1956 (P.C. 1956-807 of May 24, 1956) but for ocean vessels only. However, by P.C. 1957-491 of April 4th, 1957, the rates chargeable to lake vessels was brought to the level of those applicable to ocean vessels.

(d) *1957: Second Work Stoppage by the Pilots*

In 1957, it was anticipated that the Seaway would be opened in 1959 and that there would be increased numbers of foreign ocean-going ships whose personnel would, in most cases, be strangers to the Great Lakes and their navigational practices. Hence, it was necessary to appoint more pilots and arrange for candidates to be chosen and examined. An Examination Board was set up and meetings were held March 4 to 7 inclusive, 1957 in Montreal (Ex. 906). The Board of Examiners was composed of the District Supervisor of Pilots (Mr. J. Melanson), a D.O.T. representative, the Superintendent of Pilotage (Captain D. R. Jones), three members of the Pilots' Committee, one representative of the Dominion Marine Association (Captain A. Ferguson) and Captain A. Barrett of the Shipping Federation.

There were 25 candidates, 6 failed on Rules of the Road, 3 on chart work, leaving 16 for further examination of whom 9 passed as probationary pilots.

Captain Barrett stated in his report to the Shipping Federation that on March 8, 1957, the pilots' situation was that they had 54 *licensed* pilots available for duty and 16 probationary pilots, including those newly qualified, who could be called as found necessary. These figures showed an increase over 1956 when there were 27 pilots under contract and 20 pilots on tour de rôle.

Towards the end of 1957, the question of the compulsory payment of pilotage dues came up again. On October 30, 1957, the pilots submitted a brief to the Pilotage Authority (Ex. 809) in which their request on this matter was renewed. This time, the pilots put forward a slightly different proposition. Instead of asking that the District be divided into two sections, they suggested the abolition of the actual St. Lawrence-Kingston-Ottawa District with its replacement by two new Districts with a division at Cornwall. Nothing would then in their mind prevent the establishment of the compulsory payment of pilotage dues in the new district between Cornwall and Montreal because this section of the River would be located wholly within Canadian territory.

It was recommended that the statutory exemptions granted to ships by sec. 346 C.S.A. especially by paragraph (e), be retained, sec. 347 notwithstanding, so that the compulsory payment feature could be made applicable to ocean-going vessels only.

In conclusion, the brief noted that the proposed reform could be implemented without the intervention of Parliament, the Governor in Council already being empowered by the C.S.A. to take the necessary action.

The brief had been in the hands of the Pilotage Authority for a few days only when the pilots decided to go on a strike which lasted Nov. 9 to Nov. 21 (Ex. 726, p. 32).

Pilot A. Pérusse stated in his evidence that there was another factor apart from the compulsory payment of pilotage dues which contributed to the work stoppage, namely, the pilots' demand for official recognition of the 8-hour rest period between trips (Ex. 810). While such an understanding existed between the Pilotage Authority and the pilots, it had not been incorporated in the By-law because the pilots could rest when ships were in the canals since in those days they did not pilot in canals.

Moreover, the pilots thought it was the right time to go on strike in order to apply pressure on the Pilotage Authority for the compulsory payment of pilotage dues because a considerable number of ocean-going vessels were in the Lakes and would have to come out before winter.

The Shipping Federation was all the more annoyed by this strike since it still supported the pilots' request for the compulsory payment of pilotage dues. The late Captain Matheson, speaking for the Federation, stated in his evidence that on a number of occasions prior to the strike the question of compulsory payment was discussed between the Federation and the Department of Transport. The Shipping Federation put considerable pressure on the Department of Transport who always replied that it was impossible to give effect of these demands on account of the international agreement and treaties between Canada and the United States. Also at the time of the strike the Shipping Federation made representations to the Pilotage Authority, or to the officials of the Department of Transport, on this question.

Indeed, on November 5, Mr. Dudley Page, then President of the Shipping Federation, sent a telegram to the Pilotage Authority to inform him of the work stoppage by the pilots. The telegram stated further:

"Owners of ocean vessels engaged in Great Lakes trade being discriminated against by this demand of pilots as acceptance of compulsory payment pilotage dues already recognized by Federation and confirmed by letter from Federation to your Department under date December 23, 1953. It would appear that pilots' demands directed against your Department for failing to implement their demands for compulsory payment of pilotage dues. . . . Would like to emphasize Federation have over a number of years strongly supported compulsory payment of pilotage dues . . ." (Ex. 726, Appendix 3).

The Pilotage Authority reacted strongly to the pilots' decision to strike. On November 6, the same day the stoppage of work occurred, the Deputy Minister of Transport sent a telegram to pilot J. G. Chartier, Chairman of the St. Lawrence-Kingston Pilots' Committee, to the effect that their refusal to work was unlawful and irresponsible and constituted an infraction for which penalties could be enforced on each pilot. He added that the matter of

compulsory payment of pilotage dues would require a Cabinet decision and it was impossible to give any undertaking except to give the matter full consideration. The telegram concluded with an order to return to work immediately (Ex. 726, Appendix 5).

On November 11, the Deputy Minister of Transport in a further telegram to the President of the Pilots' Association ordered all District pilots to report for pilotage duties at the nearest despatching office before 9:00 a.m. November 13. The Deputy Minister pointed out that failure to do so would result in fines of \$200 per pilot to be imposed in accordance with the District By-law. He further pointed out that continued refusal to perform their duty might result in the cancellation of all licences and the rescinding of the District (Ex. 726, Appendix 6).

It should be noted that, upon hearing of the Pilotage Authority's threat to abolish the St. Lawrence-Kingston-Ottawa District, the Shipping Federation sent a telegram dated November 12, 1957, to the Deputy Minister of Transport strongly opposing this step. Despite the ultimatum contained in the telegram of November 11, the strike continued until November 21.

During the strike, the pilots received the assistance and support of the International Organization of Masters, Mates and Pilots, of which they were members at that time (they severed their connection with this International Organization in 1958). The picket lines were organized by the International Organization at Kingston, and at some ports in the United States, mainly Cleveland and Chicago. However, representatives of the Shipping Federation of Canada, Inc. made arrangements in Cleveland and were successful in preventing picket lines from being effective. Counsel for the Shipping Federation explained the situation to the labour unions in the Cleveland area with the result that when a vessel arrived in port picket lines were disregarded.

The pilots also received the support of the Sailing Masters' organization, called "Association of Great Lakes Pilots" which instructed their despatchers at Kingston to refuse to despatch Sailing Masters to vessels proceeding upbound after transiting the District. The Shipping Federation of Canada tried to no avail to make the Association change its stand pointing out that it was supporting the pilots in their demand and failed to understand why the members of the Federation should be penalized because of a difference of opinion between the Pilotage Authority and the pilots. However, the Association was adamant in its stand and continued to refuse to despatch Sailing Masters to vessels westbound from Kingston.

Capt. Matheson stated that during the strike, there were 70 ships in the system but all were kept moving although with some delays. The majority of Masters of ocean-going vessels had been trading in the Great Lakes for years and were sufficiently familiar with the route to dispense with Sailing Masters. Some of the Shipping Federation Superintendents who had traded on the Great Lakes for years also assisted in piloting ships downriver.

The strike was ended without an agreement being reached on the fundamental issue of the compulsory payment of pilotage dues, but assurance was given to the pilots that the rest period between assignments would be henceforth of 10 hours (instead of eight) and that the number of pilots would be increased by three.

No penalties or other disciplinary measures were taken by the Pilotage Authority against any pilot at any time during or after the strike.

(e) 1958: Third Work Stoppage by the Pilots

In January 1958, an attempt was made by D.O.T. to enroll pilots as civil servants. The proposition to employ the pilots as civil servants was made to the Board of Directors of the Corporation January 8. The pilots were offered a basic salary of \$5,730.00 per annum, plus \$2,140.00 for overtime, which would make a total salary of \$8,798.00.

At a special general meeting of the Corporation the pilots unanimously rejected the proposal and the Superintendent of Pilotage was so informed by letter January 24, 1958. The Department of Transport expressed its surprise that the offer was turned down "in view of the generous provisions of the plan and the many items of protection included in it" (letter of January 30 (Ex. 820)). On Feb. 3, the pilots further notified the Department that the refusal was irrevocable and that they would not agree, under any conditions, to become civil servants (Ex. 820). The plan was rejected because the pilots did not wish to lose their status which allowed them to keep their liberty, receive higher remuneration and remain within the framework of professional associations.

The rejection of the civil service status proposal by the pilots was followed February 12, 1958, by a brief to the Pilotage Authority which stated their requests for the year (Ex. 809). Priority once again was given to establishing the compulsory payment of pilotage dues along the lines of their memorandum of October 30, 1957. The Corporation reiterated the point made verbally following that submission to the effect that it was ready to restrict its demand to ocean ships and to exclude all lake vessels from the compulsory payment of pilotage dues.

Two other recommendations were aimed at improving the pilots' working conditions: all lake vessels using pilot services between Montreal and Kingston should change pilots at Cornwall, on the grounds that it was too tiring for the same pilot to be on duty for the whole distance; ocean vessels should be compelled to employ either two pilots or one pilot and one apprentice in order to reduce the number of consecutive hours of work, which then averaged between 16 and 20 hours a day.

A final recommendation concerned the tariff; it was requested that the rate for River pilotage be increased from \$85 to \$125.

The Corporation also asked for official recognition by requesting:

- "a) That no person be despatched by the Superintendent of Pilotage to pilot a ship in the district unless he is both a licensed pilot and a member of the Corporation of the St. Lawrence-Kingston-Ottawa Pilots;
- b) That all moneys earned by the pilots be collected by the Pilotage Authority (as at present) and be handed over to the Corporation without the requirement of a power of attorney or other authorization by the pilots individually." (Ex. 809)

It appears that all these requests were disregarded except the one covering pilotage rates which was partially accepted: the rates for River pilotage, but only on ocean vessels, were increased from \$85 to \$102.50 (P.C. 1958-1043).

No progress was made in 1958 on the issue of the compulsory payment of pilotage dues. Counsel for the pilots, in a letter dated September 23 to the Pilotage Authority, expressed the dissatisfaction and concern of the Corporation of the St. Lawrence-Kingston-Ottawa Pilots "for the failure of your Department and of the Government to take the necessary steps towards establishing" this system (Ex. 809). Prior to this letter, the Pilotage Authority had informed the pilots that the Canada Shipping Act would first have to be amended before their request could be acted upon and that such an amendment would be proposed to Parliament shortly. Hence, the letter of Sept. 23 expressed the disappointment of the pilots that no amendment had been proposed to Parliament before the session came to an end that year.

Again that year, the pilots declined to work. This occurred in April and May and was in support of a Sailing Masters' strike against the Shipping Federation. As seen earlier, following the establishment of pilot despatching in the District in 1952 (p. 881), Sailing Masters had continued to operate west of Kingston to assist Masters of ocean vessels during their trips into the Great Lakes. Early in 1958, the Shipping Federation decided to establish a new system whereby the services of Sailing Masters would be restricted to the areas of the Great Lakes where they were obviously needed, namely, from Port Weller to Sarnia, including the Welland Canal and the connecting waters between Lake Erie and Lake Superior. The Sailing Masters, however, objected and went on strike when the Shipping Federation tried to implement the new system. Picket lines were set up at Kingston and other places.

Since the St. Lawrence-Kingston-Ottawa pilots and the Sailing Masters were at that time members of the same labour organization (the International Organization of Masters, Mates and Pilots), and because the Sailing Masters had supported the pilots in their strike in the fall of the preceding year, all pilots save one (pilot G. Downey) refused to cross the picket line set up in Kingston to board downbound vessels.

During the course of the strike, Canadian Overseas Shipping Limited requested and obtained a court injunction prohibiting picketing in the vicinity of wharves or premises at Kingston from where pilots would normally pro-

ceed to board vessels. An interim injunction, first granted May 2, 1958, was extended from time to time until May 12, 1958, when an interlocutory injunction was granted until trial. The pilots then decided to resume their duties at Kingston.

As stated, pilot Downey refused to accompany his colleagues in support of this Sailing Masters' strike and, in protest, resigned from the Pilots' Corporation April 21, after withdrawing the power of attorney he had given in favour of the Corporation to claim and receive the pilotage dues earned by him.

In June of that year, pilot Downey was sued by the Pilots' Corporation in the amount of \$3,075 representing the dues earned by him during the stoppage of work in April and May, and which had been paid directly to him by the Pilotage Authority. The Corporation requested the Court to cancel the resignation of the pilot as a member of the Corporation and also the revocation of the power of attorney. In support of its claim, the Corporation expressed the view that the pilot, once having joined the Corporation and given it a power of attorney entitling it to receive the pilotage dues he earned, could not resign from the Corporation and cancel such power of attorney without the consent of the Corporation, in other words, the pilot having once joined the Corporation had to remain a member of it for the rest of his life and the Corporation became entitled to all his pilotage earnings (Superior Court of Quebec, District of Montreal, No. 449862). For the Commission's comments on this point, see Part I, p. 90.

Before the case came up for hearing, the Corporation withdrew its claim and the action was settled out of court. Pilot Downey agreed to stay home until the other pilots had caught up with the number of trips he had done during the work stoppage.

(f) *1959: Problems Created by the Opening of the Seaway and Fourth Work Stoppage by the Pilots*

1959 marked the beginning of a new era for navigation in the St. Lawrence-Great Lakes waterway. The construction of the 27-foot Seaway was completed in April 1959. Vessels measuring 730 feet in length, 75 foot beam and carrying up to 7,500 tons of general cargo and 25,000 tons of bulk cargo (as compared to the 255-foot long 14-foot canal type ships carrying up to 1,500 tons general cargo and 2,500 tons of bulk cargo) could now trade between Montreal and the Great Lakes. In other words, the capacity of the new Seaway for general cargo and bulk cargo had been increased 5 to 1 and 10 to 1 respectively.

Needless to say, new pilotage procedures, regulations and tariffs had to be worked out because of the very different conditions imposed by the Seaway.

Prior to the opening of the navigation season April 25, agreement had been reached between the pilots, the shipping industry and the Pilotage Authority on two important questions: the establishment of a new tariff, and the informal division of the District at the international boundary at St. Regis, with the changeover of pilots at Snell lock, which forms part of the Seaway some 5½ miles upstream on the United States side of the River.

The shipowners were under the impression that the objective of the new tariff was to provide an annual target income of \$10,600.00 per pilot and that all parties had agreed that, if it failed to produce these earnings, the rates would be increased or, if there were an excess, they would be decreased accordingly (Ex. 726). As will be seen later, when the Shipping Federation requested a diminution of the rates in 1960 because the earnings of the pilots exceeded \$10,600.00, the pilots, through their counsel, categorically denied any such agreement. It appears that the new rates applied from the opening of the navigation season and throughout 1959, even though the Order in Council enacting them was not passed until June 22, 1959 (P.C. 1959-790). This delay was one of the causes why on June 11 the pilots threatened to go on strike.

In connection with the informal division of the District at Cornwall as proposed by the pilots in their brief of Feb. 12, 1958 (Ex. 809), it was agreed that beginning with the 1959 navigation season the changeover would take place at Snell lock and that it would apply to all ships employing pilots, and not only to lake vessels as proposed earlier. At the same time, the pilots dropped their earlier request for two pilots aboard ocean-going ships. Implementation of this agreement was to prove very difficult but when it was achieved a significant step had been made towards the formal division of the St. Lawrence-Kingston-Ottawa District into two separate Pilotage Districts as the pilots had requested for many years.

During the meetings held between representatives of the Pilotage Authority and the pilots prior to the opening of the 1959 navigation season, new attempts were made to get the pilots interested in a civil service status but without success. It was noted that at the time of these meetings the opinion prevailed amongst shipowners that the opening of the Seaway would result in a diminution of work for the pilots. It was thought indeed that many lake companies which had been employing pilots until then would henceforth dispense with them. This fear soon proved unfounded; indeed, the lack of pilots to handle the greatly increased number of ships sailing into the Seaway became one of the major problems in 1959.

The navigation season opened April 25. Things did not go well: the President of the Pilots' Corporation in a telegram dated May 14 to the Superintendent of Pilotage complained about the inexperience of helmsmen, difficulty of language and ships not being fitted properly. The telegram stated that until probationary pilots were available pilots would not take ships over

1,500 tons net through the St. Lambert lock between 7 p.m. and 4 a.m. (Ex. 813). It was explained in evidence that the 1500-ton limit had been selected because smaller vessels were used to proceeding above Montreal.

At the beginning of June, the pilots were still awaiting the appointment of probationary pilots and also the implementation of many of the changes which had been agreed upon previously. In order to put pressure upon the Pilotage Authority, the pilots thought of taking advantage of the official opening of the St. Lawrence Seaway set for June 26. On June 11, the Corporation of the St. Lawrence-Kingston-Ottawa pilots and the Corporation of the Montreal Harbour Pilots jointly presented a list of seven demands to the Pilotage Authority. It was stated that, if the pilots did not receive satisfaction by June 19, a general meeting of all pilots would be called to consider the situation and take whatever action might be decided upon (Ex. 812). Five of the seven requests concerned the St. Lawrence-Kingston-Ottawa District (Ex. 812):

- (i) that a trailer with appropriate facilities be installed at St. Lambert lock for pilots in attendance;
- (ii) that the transportation allowance be raised from \$2.00 to \$4.00 when a pilot has to board at St. Lambert lock;
- (iii) that the tariff in force since the beginning of the navigation season receive formal approval by the Governor in Council;
- (iv) that probationary pilots be appointed;
- (v) that the President of the St. Lawrence-Kingston-Ottawa Corporation be chosen to pilot the Royal Yacht for the official opening ceremony of the Seaway.

In a telegram dated June 17 the pilots were informed that most of their demands were granted. It was stated among other things that six probationary pilots would be hired by the Department with the understanding that they could join the pilotage body on the same status as other pilots when and if it was decided to make them full pilots. It was said also that the Pilotage Authority expected to arrange for a change of pilots at Snell lock within a fortnight (Ex. 812).

The six probationary pilots were appointed without delay and the changeover of pilots at Snell lock became effective July 14.

The changeover of pilots at Snell lock had been in operation for only a week when the pilots complained of being overworked. They claimed that 20 additional pilots were needed and, hence, requested that a full licence be issued to five of the six probationary pilots appointed previously as soon as an examination could be held and that 14 additional probationary pilots be appointed without delay.

About two weeks later, the President of the Corporation of St. Lawrence-Kingston-Ottawa pilots informed the District Supervisor in a telegram

dated August 4, that the pilots were physically incapable of piloting under the "so-called Cornwall split" informally arranged by the Department in recent weeks due to the pilot shortage and that, until the inadequacy was corrected, the pilots had decided to adhere strictly to the By-law under which no change of pilot would take place at Cornwall (Ex. 813).

It appears that prior to that telegram, five probationary pilots had received their full licence as requested by the pilots and that the Pilotage Authority had agreed to appoint nine probationary pilots (instead of the 14 requested) but had not yet done so.

The Department of Transport felt that the pilots were justified in discontinuing the change of pilots at Snell lock. A telegram dated August 28 from the Director of Marine Regulations to Mr. Matheson of the Shipping Federation (who had requested immediate resumption of the practice) stated that the changeover would be resumed only when the Department was assured that sufficient pilots were available for this purpose. One month later, the Department of Transport advised the Shipping Federation that sufficient pilots were available and that the changeover could now be resumed.

As soon as the problem of the shortage of pilots was settled, a new issue arose: the taxi service between Cornwall and Snell lock. Although the matter was of a minor nature, it illustrates the general attitude prevailing in the District at that time.

The procedure was that the pilots would claim from the Shipping Federation their taxi expenses to or from Snell lock, pursuant to sec. 7 of the tariff (P.C. 1959-790) which read as follows:

"In addition to pilotage dues, the travelling expenses of a pilot other than those mentioned in sec. 6 reasonably and actually incurred in going

- (a) from any place in the district to the place of boarding; and
- (b) from the place of disembarking to the nearest pilotage office shall, at the direction of the Superintendent, be charged."

Because the amounts claimed for taxi expenses were considerable, varying anywhere from \$4 to \$16 for a one-way trip, the Shipping Federation urged the Pilotage Authority to investigate and endeavour to establish one approved taxi service at set charges. The Pilotage Authority duly advised the Shipping Federation that this was difficult to do since the pilots could not agree amongst themselves on which taxi service to use. The Shipping Federation, therefore, with the full knowledge of the Pilotage Authority, decided to arrange for a service but the pilots refused to make use of it. They were then informed by the Shipping Federation that, if they used any other form of transportation, it would refuse to accept their charges. The pilots retaliated on October 19 by refusing to disembark at Snell lock. The Pilotage Authority, in turn, discontinued its despatching of pilots from Cornwall.

The pilots were of the opinion that the Pilotage Authority had no power to order them to use any specific means of transportation to reach the

place where they were to board a ship and that, consequently, the decision of the Pilotage Authority not to charge shipping with the travelling expenses actually incurred by a pilot who had not used the taxi service set up by the Shipping Federation was illegal and ultra vires. They were further of the opinion that, because of this illegal action, they were not obliged to follow the orders of the District Supervisor directing them to board or disembark at Snell lock.

These views were shared neither by the Shipping Federation nor by the Pilotage Authority, and their representatives met October 29 to study the course of action that should be taken as a result of the pilots' refusal to disembark at Snell lock. The representatives of the Pilotage Authority suggested alternatives ranging from the cancellation of the District to a complete take-over by the Department of Transport of all pilotage operations in the area. The two intermediate solutions called for the abolition of the District and the creation of a new one between Montreal and Cornwall with the sector Cornwall-Kingston either left completely unorganized or set up as a new District where only Government-employed pilots would provide service. The representatives of the Shipping Federation favoured the last alternative and suggested that this course of action should be taken before the beginning of the 1960 navigation season.

In the meantime, the Deputy Minister of Transport had sent each pilot, first, a telegram and, a week later, a letter informing him that, if he did not comply with the orders of the District Supervisor, the Pilotage Authority would be forced to take whatever action it considered necessary. Shortly thereafter, the Deputy Minister met with the pilots' representatives. On November 10, at a meeting of the Directors of the Pilots' Corporation, it was decided to recommend to the pilots that they should resume normal operations at Snell lock and use the taxi service provided by the Shipping Federation (Ex. 813). The pilots agreed, thus settling the last crisis in the St. Lawrence-Kingston-Ottawa District in 1959.

(g) 1960: Abolition of the St. Lawrence-Kingston-Ottawa Pilotage District

In 1960, negotiations with the Department of Transport, instead of being held separately with each group of pilots in the St. Lawrence area, were conducted for them all by the newly formed Federation of the St. Lawrence River Pilots.

Even though at the beginning of 1960, the Shipping Federation was much concerned about the increase in the earnings of the pilots for the year 1959 and was very much opposed to any new increase in the pilotage dues, the Federation of the St. Lawrence River Pilots was successful in obtaining an increase of 3% in the tariff for the St. Lawrence-Kingston-Ottawa pilots, as a result of the negotiations which took place in the early part of 1960 (P.C. 1960-724 of May 26 (Ex. 1392)).

The two Federations were both dissatisfied with the outcome of the negotiations, one because of the requests which had been granted and the other because of those which had not. Re the progress of negotiations in this matter in the Districts of Quebec and Montreal, vide pp. 345 and ff. and 705 and ff.

With respect to the 3% increase in tariff for the St. Lawrence-Kingston-Ottawa District, the Shipping Federation was all the more disappointed in that it was convinced the pilots had agreed upon a decrease in pilotage charges if the earnings per pilot for 1959 exceeded \$10,600.00 (p. 890). According to the statistics supplied by D.O.T. the average earnings for the 1959 season, per effective pilot, were \$14,451.90 compared to \$10,165.00 for the 1958 season (Ex. 726, Vol. II, App. 19). The pilots denied any agreement for a downward revision of the tariff on the basis claimed by the Shipping Federation. Without taking sides on this issue, D.O.T. had decided upon a 3% increase in the tariff to compensate for the increase in the number of pilots at the end of 1959.

In June, the Federation of Pilots submitted a brief to the Pilotage Authority requesting immediate action on six problems, otherwise a general meeting of all the pilots would be called to study the situation (Ex. 754). One of these problems had to do with the United States pilots who were working in the St. Lawrence-Kingston-Ottawa District contrary to subsec. 354(1) C.S.A.

For some time prior to the drafting of this brief, the pilots of the St. Lawrence-Kingston-Ottawa District had been complaining about unlawful pilotage in their District. As early as September 24, 1959, the counsel for the pilots had transmitted to the Director of Marine Regulations a list of numerous instances where unlawful pilotage was alleged to have been performed giving the names of the pilots and the lines or ships involved (Ex. 808).

On February 24, 1960, the Director replied that after exhaustive inquiries it was found that in several cases there were no infractions committed and that in others the lack of evidence made it "most imprudent to proceed".

At the beginning of the navigation season, the policy was adopted to report by telegram to the Regional Superintendent, Capt. J. J. Gendron, every instance of unlawful pilotage by either an American pilot or any unlicensed person. In the month of May, at least five such telegrams were sent (Ex. 808). Throughout June, July and August, pilots who had reason to believe that an unlawful pilotage had been performed sent a telegram giving the name of the unauthorized person and the name of the ship involved. No less than fourteen such telegrams were sent (Ex. 808) during that period.

Finally, following the receipt of one such telegram dated July 22, in which the pilots complained about the grounding of a German ship with a U.S. citizen acting as pilot on board, the Deputy Minister wrote the President

of the Federation of Pilots stating that the "Department is aware of activities of non-licensed pilots in Kingston District. Solution to this difficulty involves division of this District which we hope to discuss with pilots' representatives soon." (Ex. 755).

In fact, the Deputy Minister was propounding the very solution the pilots had been seeking for some time. The brief of the Pilots' Federation dated June 7, 1960, had requested again, as a means of solving the problem posed by the United States pilots working in Canadian waters, the division of the St. Lawrence-Kingston-Ottawa District at St. Regis and the establishment of either compulsory pilotage or compulsory payment of pilotage dues in the Montreal-St. Regis sector.

On September 9, 1960, the Pilotage Authority acknowledged the brief of the Federation of the St. Lawrence River Pilots and stated that the United States authorities were being notified of instances of this nature and that charges were being laid against a Canadian offender. The Pilotage Authority added:

"We agree with you, however, that perhaps the most satisfactory way of putting an end to the practice of American pilots intruding into Canadian waters is by imposing a system of compulsory payment of pilotage dues."

The letter continued that if the Pilots' Federation were to go on record as being agreeable to exemptions from compulsory payment of pilotage dues for Canadian and United States lake vessels, the Authority would give early consideration to the imposition of compulsory payment, even if this were to require an amendment to the Canada Shipping Act.

On the whole (including the other issues), the reply of the Pilotage Authority was judged unsatisfactory and it was so informed by a letter dated September 14, advising that a general assembly of the St. Lawrence River pilots would be called at an early date "for the purpose of deciding whatever steps are required in the circumstances". (Ex. 756)

Representatives of the Federation of Pilots met with D.O.T. officials October 8 and then with the Pilotage Authority on October 12 and 13. Agreement was reached on all the issues raised by the pilots and thus a strike was avoided.

The pilots' request for the creation of two Pilotage Districts in the St. Lawrence-Kingston-Ottawa area with the division at St. Regis on the boundary line between Canada and the United States and for the establishment of the compulsory payment of pilotage dues in the new Montreal-Cornwall District was accepted, provided that both United States and Canadian lake vessels were exempt from such compulsory payment.

The formal enactments giving effect to this agreement on the creation of the new Pilotage Districts are contained in the Orders in Council of November 17, 1960, establishing the Cornwall and Kingston Districts (vide p. 871).

Study of Cornwall Pilotage District

With respect to United States lake vessels and the privilege they would enjoy, a misunderstanding soon occurred between the pilots of the District and the Minister of Transport as the Pilotage Authority for the District. The pilots maintained their only commitment was that they would not insist on the imposition of compulsory payment of pilotage dues on United States lakers until the outcome of the negotiations which were going on at that time between Canada and the United States on the question of pilotage in the Great Lakes. The Minister maintained that the pilots had agreed not to oppose an amendment to the C.S.A. whereby the United States lakers would be exempted from the compulsory payment of pilotage dues if he considered such an exemption warranted.

The question was definitely settled in June 1961, when sec. 346 C.S.A. was amended (subsec.(ee)), exempting United States lake vessels from the compulsory payment of pilotage dues "in any pilotage district on the River St. Lawrence above the pilotage district of Montreal". This amendment was passed despite the opposition of the Federation of the St. Lawrence River Pilots (see House Ctee. Hearing on Bill C.98, May 29-30, 1961).

Chapter B

BRIEFS

Of the thirteen briefs dealing with pilotage on the St. Lawrence River generally, only the brief submitted by the Federation of the St. Lawrence River Pilots on behalf of the Corporation of the St. Lawrence River and Seaway Pilots (pp. 79-80), contained specific recommendations concerning pilotage in the District of Cornwall. A supplemental brief submitted by the St. Lawrence Seaway Authority also contained a recommendation affecting pilotage in that District. These recommendations are as follows (the cross references indicate where the subject matters of these recommendations are dealt with in the Report):

(1) THE FEDERATION OF THE ST. LAWRENCE RIVER PILOTS ON BEHALF OF
THE CORPORATION OF THE ST. LAWRENCE RIVER AND SEAWAY PILOTS
(B.28, Ex. 671)

1. *Linesmen*. "That the St. Lawrence Seaway furnish linesmen along the approach walls." (pp. 915-16.)

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

3. *Apprenticeship*. "That an appropriate system of apprenticeship be adopted without delay in the district." (pp. 935-38.)

4. *Exemptions*. "That the only ships exempted from compulsory pilotage in the Cornwall district be the ships presently exempt from the compulsory payment of pilotage dues in the district of Montreal." (Rec. No. 4.)

5. *First voyage of a ship*. "That any ship exempt from compulsory pilotage be required to take a pilot during its first few trips in the district." (Rec. No. 4.)

6. *St. Regis—Snell Lock Section*. "That the juridical situation of the pilots between St. Regis and the Snell Lock be clarified." (Rec. No. 3.)

Study of Cornwall Pilotage District

7. *Bridges across the Seaway.* "That the signal system be coupled with a radio-telephone service to the Caughnawaga, St. Louis and Valleyfield bridges." (pp. 919-21.)

8. *Pilot accommodation at St. Lambert.* "That an appropriate building with a telephone service be furnished to the pilots at the St. Lambert Lock." (pp. 742-43 and 954-6.)

9. *Cooperation with representatives of the Seaway.* "That a greater co-operation exists with the representatives of the Seaway with a view to obtaining the necessary information concerning the arrivals of ships in the locks." (p. 639.)

10. *Radio-Telephone.* "That the Cardinal radio-telephone station be transferred to Cornwall or the surrounding district." (pp. 909-10.)

11. *St. Lambert and Snell Locks.* "That an equitable division of the work must be made between the pilots of the districts concerned in the St. Lambert and Snell Locks." (Rec. No. 3.)

(2) ST. LAWRENCE SEAWAY AUTHORITY

(B.61—Ex. 1469)

That, in the interest of the efficient and safe operation of the Seaway, the employment and control of pilots in the Seaway area (which includes the Pilotage District of Cornwall) be the responsibility of the St. Lawrence Seaway Authority (pp. 932-33).

Chapter C

EVIDENCE

1. GENERAL DESCRIPTION

(1) DISTRICT LIMITS

The Cornwall District is contiguous on the east to the Montreal Pilotage District and on the west to the Kingston Pilotage District; practical and legal problems have arisen with respect to both limits.

The Cornwall District is only indirectly concerned with the eastern limit problem, which exists simply because the upstream limit of the Montreal Pilotage District is undefined and there is no legal zone where the pilots can change over. The Cornwall District Pilotage Authority allows pilots unlicensed for its District to pilot in part of the District, i.e., between the entrance to the Seaway and St. Lambert lock, disregards sec. 361 C.S.A. by not requiring its pilots on upbound trips to pilot from the entrance to the Seaway, and on downbound trips to the downstream limit. The multiple problems that have resulted from this situation are studied on pp. 565-7, 626-9 and 713-721.

The solution lies in implementing General Recommendation 9 (Part I, p. 480), i.e., establishing the upstream boundary of the Montreal District to overlap the Cornwall District and form a joint area where the pilots of both Districts would have legal competency and could change over most economically and efficiently. This joint area should be limited to St. Lambert lock and its wait walls. The eastern limit of the Cornwall District would have to be amended accordingly so that the rest of the Seaway channel between Montreal and the wait wall would be exclusively in the Montreal District.

There is a problem at the Cornwall District western limit because it was established for reasons unconnected with pilotage. Since a pilot is entitled to disembark at the legal limit of his District (sec. 361 C.S.A.) and is without legal competency beyond such limit (subsec. 333(3) C.S.A.), this limit must be established where boarding and disembarking can be safely undertaken with the least inconvenience to shipping. Snell lock, including its approach walls, is the obvious joint territory of the adjacent Districts of Cornwall and Kingston, with the upstream boundary of the

former at the western end of the upstream wait wall and the eastern boundary of the latter at the eastern end of the downstream wait wall.

An international problem was created by the fact that the Snell lock area and five and a half miles of the downstream channel are in United States waters. The legal and logical solution would have been an international agreement by which the United States granted jurisdiction to Canada over this stretch of water for the purpose of maintaining and operating a pilotage service. For unknown reasons, this was not done at the time and when the St. Lawrence-Kingston-Ottawa District was divided in 1960 its upstream limit was perforce established where Canada's jurisdiction ended, i.e., at the boundary line (p. 871). A similar problem exists in British Columbia in Haro Strait, vide Part II, pp. 31-33, 53-56, 101 and Rec. 2, p. 199.

With the western limit so fixed, the Cornwall Pilotage Authority was faced with the dilemma of either abiding by the legal definition and inconveniencing—even endangering—shipping, or taking a practical view and providing pilotage services as far as Snell lock. It adopted the practical solution but many legal problems have resulted.

To remain within the law the Cornwall Pilotage Authority had two possible courses of action:

- (a) To establish a boarding area with the necessary pilot vessel service at the western boundary of the District at St. Regis on the Canadian side of the boundary line as joint territory for the Cornwall and Great Lakes District No. 1 pilots of both countries. This solution would have required the latter to provide service between St. Regis and Snell lock and would also have meant a substantial increase in rates to meet the substantial expenditures needed for pilot vessel service. Furthermore, apart from the inconvenience and delays imposed on vessels by obliging them to slow down to embark or disembark pilots, the restricted width of the channel and the cross-currents in the area made such manœuvres risky, *a fortiori* in adverse weather.
- (b) The other alternative would have been to adopt the procedure devised by the B.C. and American pilots for ships proceeding between Puget Sound and the Gulf of Georgia, i.e., the pilots of both Districts would have been required to board and disembark at the most convenient point in the other District and refrain from piloting outside the limit of the District for which they are licensed or registered. This would have meant little inconvenience for the Cornwall pilots because they would have been required to board and disembark as they now do in the Snell lock area. The Kingston pilots, however, would have been required to board

or disembark at the first convenient place in the Cornwall District, i.e., Beauharnois lock. This procedure would have meant a serious wastage of their time plus an increase in their number and additional travelling expenses, all of which would have resulted in a substantial rise in pilotage rates.

Instead, the Cornwall Pilotage Authority adopted an economical, logical solution with the tacit agreement of the Great Lakes No. 1 District authorities (Kingston District) whereby the latter refrained from providing service in that part of the designated waters downstream from Snell lock and only the Cornwall pilots operated there.

The situation, however, was hopelessly illegal. The Cornwall Pilotage Authority could neither fix rates covering pilotage in the sector which was beyond the limits of its District (subsec. 329(h)) nor could it force its pilots to pilot there. Not only were the pilots entitled to stop piloting when reaching the legal limit of their district (sec. 361), but they violated both sec. 375c of Part VIA C.S.A. and sec. 7 of the United States Great Lakes Pilotage Act, 1960 if they piloted west of St. Regis a vessel falling under the Great Lakes legislation, since they were not pilots registered under Part VIA C.S.A.

Furthermore, because the practical solution adopted was not based on legal grounds, the Cornwall Pilotage Authority was placed under the obligation to yield to the pilots' pressure whenever they threatened to stop piloting upstream of the District boundary if their demands (unrelated to that question) were not granted (e.g. the St. Lambert lock dispute, pp. 713 and ff.).

It also placed the Department of Transport in the dubious position of ordering Masters and shipowners of British lakers to violate the compulsory pilotage requirement stipulated for the Great Lakes system in Part VIA C.S.A. and in the United States Great Lakes Pilotage Act 1960. The problem arose because the British lakers which are subject to compulsory pilotage in the Great Lakes system but were then exempted from the compulsory payment of dues in the Cornwall Pilotage District did not employ a pilot as they should have to comply with the Great Lakes compulsory pilotage requirement in that 5½-mile sector. The Department of Transport wrote to the companies concerned reminding them of the statutory requirement. Although the shipowners did not comply with the Department's notification, no action was taken against them, obviously because the Department was, in fact, inviting them to commit the offence created by sec. 375c C.S.A. and by the corresponding provision in the United States legislation, i.e., while subject to compulsory pilotage, employing to pilot their vessels persons who were not registered pilots for the waters concerned. From the practical point of view, but still not legally, this problem connected with British lakers was resolved when, except for steamships of Canadian registry, the relative exemption of subsec. 346(e) C.S.A. from the compulsory payment of dues in

the waters of the Cornwall Pilotage District was withdrawn by regulations made by the Cornwall Pilotage Authority under sec. 347.

A legal solution was attempted in 1966 during the up-dating of the 1961 Memorandum of Arrangements between Canada and the United States concerning pilotage west of the boundary line near St. Regis (Ex. 433). This international agreement¹ contained the following relevant provisions:

"Participation in Pilotage Service"

- Subsec. 3(c) states "Pilotage between Snell Lock and the Eastern boundary of District No. 1 shall be performed exclusively by Canadian pilots who shall be registered, in such number as the Minister may determine, for service in only those waters; . . ."

"Dispatching"

- Subsecs. 4(a) and (c) give responsibility to the Minister of Transport for "organizations and facilities for the dispatching of pilots and related services, including pilot boats," for the sector from St. Regis to Snell lock, the facilities to be located at Montreal, which, however, could be changed at the discretion of the Minister.

"Other Charges"

- The agreement does not provide pilotage rates between St. Regis and Snell lock but, according to subsec. 11(b), such rates could be established with the Minister's approval.

The intention of the Department of Transport in obtaining this concurrence by the United States was not to have the pilotage service in the St. Regis/Snell lock sector performed by Canadian registered pilots of Great Lakes District No. 1, nor was it to create a new pilotage organization with registered pilots specially appointed for this sector, which would have meant a changeover of pilots at St. Regis. The intention was to extend the Cornwall licensed pilots' legal competency up to Snell lock by issuing them registration certificates for the sector under Part VIA C.S.A., which in fact was done on August 22, 1965 (Ex. 1540(k)).

COMMENTS

Apart from the question of the validity of the registration certificates so granted, which appear to have been issued without the appraisal and the registration requirements of sec. 5 of the Great Lakes Pilotage Regulations being complied with, (the exemption contained in subsec. 5(2) of these regulations applies only to the Kingston District licensed pilots), only a

¹ These provisions in the 1966 memorandum were not reproduced in the 1969 and 1970 revisions of the Memorandum of Arrangements which now merely states the principle of parity in the number of United States and Canadian registered pilots within the Great Lakes system as a whole.

partial solution was achieved. While it solved some aspects of the problem, it confused the legal situation by subjecting the Cornwall pilots to direction by two distinct legal authorities, i.e., the Cornwall Pilotage District and the administration responsible for pilotage in the designated waters of the Great Lakes Basin (sec. 375A C.S.A.). Furthermore, there is no way of forcing a Cornwall licensed pilot to accept such registration certificate or to retain it when issued as a condition to holding his licence for the Cornwall Pilotage District.

The solution was also partial from another point of view since the legal problem of the pilotage rates involved was not legally settled, an argument that the Cornwall pilots have invoked (p. 972). Despite the fact that when the Cornwall Pilotage Authority fixed the amount of the rates in its By-law it took into consideration the part of the services rendered in the St. Regis/Snell lock sector, such rates can not have any legal effect with regard to services rendered beyond the District limits, since the regulation-making power of the Pilotage Authority is limited to the confines of the District. To resolve this legal problem, it would have been necessary, first, to reduce the Cornwall rates to cover only these services rendered up to the St. Regis limit of the District and, second, for the Governor in Council to fix appropriate rates under subsec. 375c (e) C.S.A. for the transit of the St. Regis/Snell lock sector, but this was not done.

As stated earlier, it is considered that the appropriate solution is to have this sector of the St. Lawrence Seaway covered by an international agreement as a case of exception, and to grant exclusive jurisdiction over it for pilotage purposes to Canada to be dealt with as if these waters were Canadian waters (and not designated waters under the terms, conditions and organization set out in the Memorandum of Arrangements). The western limit of the Cornwall District could then be moved westward to Snell lock and the changeover zone could be specified as the Snell lock area.

(2) PHYSICAL FEATURES

The Cornwall Pilotage District comprises that stretch of the St. Lawrence River from the entrance to the St. Lawrence Seaway near Montreal to the international boundary in the vicinity of St. Regis Island, a distance of approximately 77 statutory miles. It consists essentially of a series of four new Seaway locks 766' x 80' x 30' with connecting canals and river channels which may be described briefly as follows:

(a) *Seaway Approach and St. Lambert Lock*

The channel, with its protecting dyke which gives access to the Seaway from the harbour of Montreal and marks the eastern limit of the Pilotage District, begins just east of the Jacques Cartier Bridge, passes beneath the bridge and extends for 3 miles before reaching the first lock

of the Seaway, St. Lambert lock, at the southern end of Victoria Bridge where there are lift spans and rail and road traffic diversions.

St. Lambert lock raises ships some 15 feet from the level of Montreal harbour to Laprairie Basin through which the ship channel, called the South Shore Canal, sweeps in a great $8\frac{1}{2}$ -mile arc between its protecting embankments to the second lock.

(b) *Laprairie Basin and Côte Ste-Catherine Lock*

This lock raises ships from Laprairie Basin 30 feet to the level of Lake St. Louis, thus by-passing the Lachine Rapids. Beyond it, the South Shore Canal continues for another $7\frac{1}{2}$ miles before reaching Lake St. Louis. Over this canal tower the piers which give Honoré Mercier highway bridge 120 feet clearance. Further upstream, the Canadian Pacific Railway bridge has had two lift spans installed to allow ships to pass.

(c) *Lake St. Louis and Lower and Upper Beauharnois Locks*

Entering Lake St. Louis, ships proceed some 12 miles by dredged channels before reaching Lower Beauharnois lock at the west end. This lock, by-passing the Beauharnois Power house, raises ships 41 feet to a short canal leading to Upper Beauharnois lock, where they are again lifted 41 feet to the level of Lake St. Francis. After some 13 miles in the Beauharnois Canal, ships enter Lake St. Francis and proceed westward some 30 miles by dredged channels to the head of the lake and the international boundary near St. Regis which marks the western limit of the District.

(3) THE ST. LAWRENCE SEAWAY

(a) *General Description*

The St. Lawrence Seaway in its broadest sense is a deep waterway extending some 2,300 miles from the Atlantic to the head of the Great Lakes. The St. Lawrence River system from the level of Lake Superior to the Atlantic drops in all 602 feet: 30 feet from Lake Superior to Lake Erie, 326 feet through the Welland Canal, 226 feet from the level of Lake Ontario to Montreal and 20 feet from Montreal to the Atlantic.

Strictly speaking, however, and within the meaning of the St. Lawrence Seaway Authority Act, the St. Lawrence Seaway extends from Montreal harbour to Lake Erie and includes the Welland Canal. In this reach of the River, some 365 miles long, the Governments of Canada and the United States, through their respective agencies, built in 1954-1959 seven locks for 27-ft. navigation to replace the old 22-lock 14-ft. system. They also built the connecting canals and dredged many miles of river channels to required specifications.

The Canadian agency, the St. Lawrence Seaway Authority, constructed (and now operates) four of these locks and accompanying canals between

Montreal and Cornwall, namely, the St. Lambert, Côte Ste-Catherine, Lower and Upper Beauharnois locks, all within the Cornwall Pilotage District. The Seaway Authority also built a fifth lock and canal at Iroquois, Ontario. The American agency, the Saint Lawrence Seaway Development Corporation, built (and now operates) the remaining two locks and canal in the International Rapids section between Ogdensburg, N.Y., and St. Regis, namely, Snell and Eisenhower locks.

The minimum width of the Seaway channels is 200 feet when provided with two embankments, 300 feet when there is only one embankment and 450 feet in the open reaches. All channels have a minimum depth of 27 feet.

(b) *Administration*

The administration of that part of the Seaway under Canada's control is entrusted to the St. Lawrence Seaway Authority under the St. Lawrence Seaway Authority Act passed by Parliament in 1951 (R.S.C., c. 242).

By an Act of Congress passed in 1954, the Saint Lawrence Seaway Development Corporation was entrusted with that part of the Seaway under the control of the United States (33 U.S.C. 981).

The St. Lawrence Seaway Authority is a Crown Corporation classified in the Financial Administration Act (R.S.C., c. 116) as a proprietary corporation. It is administered by a president and two other members while the management of the United States corporation is vested in a single administrator.

Both the Canadian Authority and the United States corporation have administrative and financial obligations quite similar in principle. In both cases, for example, the navigation works are to be self-liquidating. In both, too, the legislation requires that navigational rules be prescribed and that operating organizations be established.

The area under the jurisdiction of the St. Lawrence Seaway Authority is divided into two Regions:

- The Eastern Region, with headquarters at St. Lambert, P.Q., extends from the Seaway entrance at Montreal to Lake Ontario and includes all the new 27-ft. Seaway facilities built by Canada during 1954-1959, namely, the St. Lambert and Côte Ste-Catherine locks and South Shore Canal; the Upper and Lower Beauharnois locks; the Iroquois lock; the dredged channels in Lake St. Louis, in the Beauharnois Canal, in Lake St. Francis and on the Canadian side of the boundary waters between Cornwall and Kingston.
- The Western Region, with headquarters at St. Catharines, Ont., is chiefly concerned with the Welland Canal. It also includes the Canadian lock and canal at Sault Ste Marie, Ont.

(c) *Regulations*

Section 19 of the St. Lawrence Seaway Authority Act provides that:

- “(1) The Authority may, with the approval of the Governor in Council on the recommendation of the Minister, make regulations for the administration, management and control of the works and property under its jurisdiction including
- (a) the regulation and control of vessels navigating a canal or pertinent works;
 - (b) the regulation of plant, machinery or appliances for loading or unloading vessels in a canal; and
 - (c) the seizure, detention or sale of vessels, goods or cargo in respect of which any sum is due for tolls and is unpaid or in respect of which any provision of this Act or any regulation has been violated.
- (2) A person who violates a regulation is guilty of an offence and is liable on summary conviction to a fine not exceeding one thousand dollars.”

Pursuant to this section, the St. Lawrence Seaway Authority has enacted the Seaway Regulations which were approved effective April 1, 1962, by Order in Council P.C. 1962-390. The Regulations, which have since been amended from time to time, are contained in the Seaway Handbook described later.

In order that these Regulations may be uniform throughout the Seaway, they were issued jointly by the St. Lawrence Seaway Authority and the Saint Lawrence Seaway Development Corporation. In so far as the Regulations are applicable in the United States, they were made by the Saint Lawrence Seaway Development Corporation pursuant to the Act of May 13, 1954, as amended, 33 U.S.C. 981-990.

Many sections of the Seaway Regulations provide that a ship must comply with “the directions given by the Authority” or act in “the manner prescribed by the Authority.”

Pursuant to these sections, the Seaway Authority has issued jointly with the Development Corporation seven circulars to define its directions. These circulars are given effect to by section 22 of the Seaway Regulations which provides:

“Where a vessel is required by these Regulations to comply with any direction of the Authority or to do anything in a manner prescribed by the Authority, the vessel shall be deemed to comply with the direction or prescription if it complies with the relevant directions and prescriptions set out by the Authority in any current Seaway Circular, unless an officer or a station requires the vessel to do otherwise.”

The current Seaway Circulars are:

- Circular No. 1: Pre-Clearance and Security for Payment of Tolls
- Circular No. 2: Condition of Vessels
- Circular No. 3: Radio Communications
- Circular No. 4: Transit Instructions
- Circular No. 5: Dangerous Cargo
- Circular No. 6: Toll Assessment and Collection
- Circular No. 7: Pleasure Craft (Seaway Handbook, as amended April 1, 1970, Ex. 470).

(d) *The Seaway Handbook* (Ex. 470)

The Seaway Regulations, Circulars and certain other information respecting the transit of vessels in the St. Lawrence Seaway are contained in a joint publication of the St. Lawrence Seaway Authority and the Saint Lawrence Seaway Development Corporation, called the Seaway Handbook, published in loose leaf form for the benefit of Masters.

According to sec. 19 of the Seaway Regulations, a copy of the Regulations and of each current Seaway Circular shall be kept on board every vessel in transit on the Seaway.

(e) *Condition of Vessels for Transit*

Section 5 of the Seaway Regulations provides:

"(1) No vessel shall transit unless

- (a) it is properly trimmed and in a condition determined by the Authority or an officer to be safe and satisfactory to it or him; and
- (b) it is equipped with such apparatus, equipment or machinery as the Authority deems necessary for safe transit.

(2) An officer may refuse to allow a vessel to transit when, in his opinion,

- (a) the vessel, its cargo, equipment or machinery are in such a condition as to prevent safe or expeditious transit by that vessel; or
- (b) the vessel is manned with a crew that is incompetent or insufficient in numbers.

(3) Where an officer refuses to allow a vessel to transit, that vessel shall not transit until an officer grants it specific permission to do so."

Seaway Circular No. 2, as amended April 1, 1969, deals also with the condition of vessels, namely, dimensions, draught, draught markings, masts, protruding bridges, fenders, discharge pipes, landing booms, radiotelephone equipment, mooring lines, fairleads, hand lines, anchor marking buoys, ballast, stern anchors, propeller direction alarms, sewage disposal systems, oily water separators, rudder angle indicators, gyro compasses and radar equipment.

With respect to the dimension of the vessels, Circular No. 2 only reaffirms the provision of paragraph (2) of Section 3 of the Seaway Regulations. This paragraph reads as follows:

"Subject to these Regulations, every vessel that does not exceed seven hundred and thirty feet in overall length and seventy-five feet six inches in extreme breadth, including permanent fenders, may transit during the navigation season."

Respecting draught, Section 3, paragraph (4) provides that:

"No vessel shall transit unless the maximum draught of the vessel does not exceed the draught currently prescribed by the Authority for the part of the Seaway in which the vessel is travelling."

The maximum draught was increased in 1963 from 25' to 25'6", and to 25'9" in 1968. The Seaway Authority sees that this maximum draught limit

is not exceeded. Ships with excessive draught are required to discharge water ballast, or trim ship, or even in extreme cases discharge cargo until they are within the draught limits of 25 feet 9 inches.

There are no regulations requiring ships to have minimum ballast. Circular No. 2 states only that vessels not adequately ballasted may be refused transit or delayed. The possibility of setting some limiting minimum draught was explored but it was found impossible to define it in such a manner that it would fit various possible situations.

(f) *Inspection of Vessels*

Every ship before transiting for the first time must be inspected by Seaway personnel but there are no further obligatory inspections. This inspection had a double purpose: to ensure, first, that the equipment complies with the requirements and, second, that the Master is acquainted with the canalling procedure, the proper method of coming to a wall without tug assistance, landing a man with the landing boom, getting lines out and handling lines in the lock. When the ship returns into the Seaway no new inspection is conducted although this time a different Master may be on board, in which case there will be no one, except the pilot, to brief the Master on Seaway procedure.

Inspection takes place at the Longue-Pointe anchorage while the ship is having her customs and health inspection.

In 1963, there were two inspectors, both Master Mariners. One had many years at sea as well as years of experience as a pilot before the Seaway opened. The other had a certain amount of experience in Great Lakes navigation, and considerable deep sea time.

Although there is no inspection system after the first Seaway trip, pursuant to section 20 of the Seaway Regulations, an officer may board any vessel and examine equipment or cargo and inspect the crew, and may refuse to allow a transit if he is not satisfied (subsec. 5(2)). Ships have occasionally been stopped for an examination of their steering, engine or other equipment.

Mr. R. J. Burnside, who represented the Seaway Authority at the Commission's hearings, said that the Authority was relying on pilots to help prevent vessels unsafe for any reason from entering the Seaway by trying to convince the Master to remain in harbour and to consult the Seaway Authority if he insists on proceeding.

One of the reasons why a vessel may be refused entry or delayed is insufficient crew (Regs., subsec. 5(2)). Mr. Burnside testified that ocean ships particularly have a tendency to be short staffed, both officers and men, so that they find it difficult to maintain 24-hour progress through the system since they must use all their crew practically all the time. He said that he

had received complaints from officers to the effect that they had to remain on the bridge much longer than they were accustomed to. This deficiency is most noticeable in the Welland Canal where ships spend many hours continuously tying and untying at the approach walls and the lack of crewmen causes many difficulties. The Seaway Authority did not consider itself responsible for taking steps to correct the situation but hoped the trade would take the necessary measures.

(g) *Transit Regulations*

(i) *Traffic control system*

There are six Seaway stations between Montreal and Lake Erie which are used for vessel traffic control purposes only:

Upper Beauharnois Lock	— Traffic Control Sector #1
Eisenhower Lock	— Traffic Control Sector #2
Iroquois Lock	— Traffic Control Sector #3
Clayton, N.Y.	— Traffic Control Sector #4
Picton-Oshawa, Ont.	— Traffic Control Sector #5
Welland Canal Headquarters	— Traffic Control Sector #6

These stations operate on assigned VHF frequencies for working, safety and calling, and for emergency. Vessels intending to enter, or in transit, must report on the assigned frequency to the designated station when opposite one of the ten Calling-In Points giving the name of the vessel, position, destination, draught and cargo; they must also maintain a listening watch on the assigned frequency while within a Seaway Traffic Control Sector.

Vessels navigating in the Cornwall Pilotage District are under the control of the Seaway station at Upper Beauharnois lock.

Modern electronic equipment, such as closed circuit television and visual display boards, was introduced into the Welland Canal to assist in the control of traffic. Plans now call for implementing a fully integrated computer-assisted traffic control procedure on the entire Seaway by 1971. Traffic control centres will be located at St. Lambert, Que., Massena, N.Y., and St. Catharines, Ont., and will have small computers connected to a central computer facility at Cornwall, Ont., which will act as a data bank and will be used to do strategic planning for the whole of the Seaway system.

(ii) *Proceeding in and out of the Seaway*

Traffic control in and out of the Seaway used to be effected through liaison between the Seaway despatchers stationed at Upper Beauharnois lock and the Montreal Harbour Master. Since April 1968, the DOT Marine Traffic Control System has superseded the Harbour Master in that function.

When a ship in Montreal harbour, either at a berth or at an anchorage position, is ready to proceed into the Seaway, she requires a Marine Traffic Control clearance from the Montreal Control Centre of the St. Lawrence Marine Traffic Control System. The Montreal Traffic Controller in turn seeks permission from the Seaway Traffic Control System for the ship to enter the Seaway. The Seaway Traffic Controller, after ascertaining the traffic situation at St. Lambert lock grants permission to proceed if there is no traffic congestion or as soon as the way is clear. When these instructions are received, they are transmitted to the ship by the Montreal Centre Traffic Controller who fixes the departure time after considering the state of the traffic in the harbour at the moment. A clearance expires 15 minutes after it has been granted and a fresh clearance must be obtained if the ship has been unable to proceed.

The same procedure is followed for ships in transit through the harbour for the Seaway. These ships must seek the same clearance instructions before entering the jurisdiction of the Montreal Control Centre at Tracy, just above Sorel. If permission to proceed into the Seaway is to be delayed, the ship is then ordered to anchor at Longue-Pointe or Lanoraie as instructed by the Marine Traffic Controller and to wait until clearance is granted.

For ships downbound from the Seaway, the reverse procedure is followed with the difference that ships may not be delayed in the Seaway. If a ship does not stop in the harbour, clearance is automatic. If a ship is destined to a harbour berth, the information is relayed by the Seaway Traffic Controller to the Montreal Centre Traffic Controller who, in turn, seeks berthing instructions from the Harbour Master. If the requested berth is available, instructions to proceed are given; otherwise, the ship is required to tie up at the wait wall after she has cleared the lock; if there is no position that could be made available at the wait wall, the ship is required to proceed to an anchorage position until berthing instructions are received and transmitted to her by the Montreal Centre Traffic Controller.

(iii) *Proceeding through the Seaway*

As ships proceed up or down the Seaway there are various calling-in points where they must contact the designated Seaway station to report their position. On the basis of the time a ship arrives at a given location and her ETA at the next lock, she is ordered to proceed or anchor.

There is always a safe anchorage between the lock a ship is approaching and each calling point. For this reason, the Seaway Authority's control over traffic extends beyond the locks and canals proper and into the dredged navigation channels in Lake St. Louis and Lake St. Francis; and in the Canadian section of the River above Cornwall (vide Regulations, p. 906).

Since all the locks in the Eastern Region of the Seaway are single, a downbound ship normally enters as soon as an upbound ship leaves. When

a ship reports, the despatcher must judge the progress of ships already in, or at the wait wall to which the reporting ship is heading, before ordering her to proceed or anchor.

(iv) *Speed regulations*

The Seaway Authority controls the speed of vessels in the areas under its jurisdiction in order to coordinate upbound and downbound movements of vessels and to achieve the maximum efficiency of lockage operations. This control also serves as a measure of protection for canal banks which can be heavily eroded if ships speed in confined waters. Experience has also shown that orderly, consistent speed "is conducive to the greatest output of the system".

Mr. Burnside stated that efficiency and safety were the two guiding principles when the present rules on speed were adopted (Circular No. 4, Transit Instructions). The maximum speed in the Beauharnois Canal is nine MPH over the bottom and seven MPH elsewhere in the system. On account of the current, a downbound ship in the Beauharnois Canal could not maintain proper controlling speed at seven MPH under normal conditions (Ex. 470).

The speed limit does not apply in the lake areas. Pilot Pintal said, however, that ships must proceed slowly (perhaps 5-6 knots) in Lake St. Louis because there are many summer residences from Shadow Bay to Pointe Claire, as well as boating and yachting activities.

Pilot Pérusse testified that a ship may overtake between the check points fixed by the Seaway Authority for the purpose of establishing the order in which ships will lock through. He has raced other ships in such areas and thinks the procedure is not dangerous if the pilots of both ships know how to meet. The slower ship will usually give way if the pilot knows the overtaking ship is faster.

The Seaway Authority has set no minimum speed. Circular No. 4 states only that every vessel in transit and under way shall proceed at a reasonable speed and not delay other vessels unduly. Mr. Burnside informed the Commission that slow vessels were very troublesome. Masters delayed their ships for various reasons: some had given an ETA, others were over cautious. It is a rather delicate matter to advise a Master that he must speed up because he can always claim that he is proceeding at the maximum safest speed. Mr. Burnside thought that as traffic increased in the future despatchers would have to direct Masters more than before.

The speed of a vessel is checked by reference to time of departure and arrival at all structures, including bridges. If a certain ship has the reputation of either speeding or dawdling, she receives special attention. Various spot checks of the speed of ships in the canal are also conducted occasionally.

A ship which exceeds the speed limit or impedes traffic by going too slowly is guilty of an offence and, pursuant to sec. 16 of the Seaway Regulations, is liable on summary conviction to a fine not exceeding one thousand dollars.

(h) *Lockage Procedure*

When an upbound ship approaches a lock, she is guided by the signal light at the downstream end. If the light is solid red, she must not approach within a certain distance and must be prepared to tie up at the wait wall; if the red light is flashing, the structure is being prepared. When the lock is ready, the light turns to green. The Master must adjust according to these signals.

Each lock is manned by a lockmaster and four linesmen and two operators, one at each end—a minimum total of seven.

The four linesmen throw hand lines from the lock wall to the deck, the crew make them fast to the hawsers and the linesmen draw them up with the aid of car haulers. They normally accompany the ship at slow walking speed and secure the hawsers on the appropriate bollards.

If the lockmaster calls for a "check" because the ship is moving too fast, the Seaway linesmen must secure the lines on the bollards immediately. At the same time, the Master or the pilot, as the case may be, must order engines astern. But the lines must be in a checking position to take way off the ship. The time factor is quite important in such cases because there is little interval for action when a ship enters a lock too fast.

When the ship is secured on her lines, the fender boom is closed to protect the gates in case the engine room is given a wrong order and the ship goes astern instead of ahead, as happens once or twice a year.

Water is then pumped into the lock and the ship rises. During that period the ship's crew must attend the winches and keep the lines taut, because there is always a possibility of a forward or astern motion being applied to the ship by the entrance of the water.

A fairly shallow lock fills in about six minutes; some of the deeper locks take eight.

At St. Lambert lock, automobile and train traffic must be diverted from the upper to the lower bridge or vice versa before the gates are opened. This has to be arranged through the C.N. despatcher in St. Lambert who controls the locking switch.

When the gates open, the fender booms are raised and the ship's lines are cast off. The signal there is a red light on the fender boom which turns to white; normally the Master or the pilot signals within a few seconds to cast off and the ship is free to proceed on her wheel.

It was stated that the procedure is essentially the same at all locks but there are individual differences due to bridges and varying lifts.

The Seaway Authority considers that the Master is always responsible for controlling his ship throughout locking operations, even though a pilot is on board to con the ship into the lock, govern its speed and direction and give engine orders.

(i) *Navigational Problems*

(i) *Currents and weather*

Currents—There is no tide in the District. Outside the canals, the current generally runs along the centre of the channel. In places, strong currents render ships' movements hazardous, especially near Lower Beauharnois lock and Snell lock where the current varies with activities at nearby dams. In the spring, the current in the District varies only in velocity and not in direction.

Weather—Little evidence was given on prevailing atmospheric conditions but it appears that this region is subject to frequent spring and autumn fogs (ships often encounter varying winds, especially along the approach walls).

The entrance to St. Lambert lock is difficult because it runs nearly straight north and south and the prevailing winds are toward the west. Even with a moderate wind, the pilot has to be careful to maintain sufficient steerage-way to make the lock.

Because lake vessels have a lower silhouette they are easier to handle than ocean vessels at walls or locks.

(ii) *Squat*

The St. Lawrence Seaway has a controlling channel depth of 27 feet. The pilots claimed that, when a ship has a draught of 25½ feet, squat sometimes occurs and makes her more difficult to control (Ex. 671, para. 111).

Pilot Pintal observed that the Seaway charts indicate only the 27-foot controlling channel depth and suggested that it would be more advantageous to pilots if the actual depth were shown, so that ships could travel at full speed at greater depths and could avoid squat by slowing down before reaching minimum depths.

When squat occurs, a ship vibrates as if she were rubbing the bottom slightly.

In the Welland Canal, for instance, ships have operated without difficulty for many years with an under keel clearance of 18 inches and, while the Seaway has been in operation, there have been no instances of a ship grounding in the channel due to squat and no difficulty has been experienced with ships loading to the limit. The Seaway representatives added that their

only difficulty was that operators were anxious to take advantage of the new limit and consequently overload.

(iii) *Interference with visibility by derricks*

The Pilots' Federation requested in one of their general recommendations that steps be taken to ensure that the pilot's visibility from the bridge is not obstructed by derricks and samson posts. If derricks are not stowed so as to permit a clear view, they create a serious safety hazard, especially when navigating in narrow channels and manoeuvring at close quarters in locks or while berthing. This is particularly true of bridge-aft ships where there may be as many as 8 to 12 sets of masts forward of the bridge. When samson booms are raised, they add a further obstruction to the view ahead. When this occurs, it is the pilot's duty as a safety measure to request the Master to have the derricks lowered. It was reported that most Masters are very cooperative in this regard and even ask the pilot's permission to raise or lower booms, but occasionally such cooperation is not extended despite the pilot's request. For this reason the pilots request that they should have formal authority to require Masters to abide by their instructions.

This problem does not come within the scope of pilotage regulations but of general safety regulations. The Department of Transport has dealt with it through Notices to Mariners. For instance, Notice to Mariners No. 41 of 1961 (Ex. 897) reads as follows:

"The attention of masters of vessels navigating in narrow channels, locks, canals or other restricted waters is directed to the serious visibility hazard to pilots and others caused by vessels steaming with derricks in a hoisted position.

In the interests of safe navigation, Masters concerned are therefore urged to ensure that derricks forward of the bridge or conning position are stowed in such a manner as to allow an unobstructed view ahead."

However, because this matter (like the question of obliging lightly loaded vessels to carry sufficient ballast (p. 319)) affects safety, a pilot should refuse to take charge of the navigation of a ship if the Master refuses his request. In such a case, the pilot should immediately report the incident to the pilotage office by radiotelephone and then assist the Master to the best of his ability.

(iv) *Pleasure craft and ships not sharing the channel*

As in the other St. Lawrence Pilotage Districts, the pilots in the Cornwall District have complained about pleasure craft approaching too close to ships in the Channel, thereby causing alarm and increasing the difficulty of ship handling. When such an incident occurs, it is very difficult for the pilot to take down the licence number of the craft being operated dangerously so the legal action can be taken.

Pilot Pérusse stated that upper lakers do not generally share channels properly because they line up with the range lights and refuse to deviate.

Pilot Desgrosseilliers also said that on a number of occasions he encountered a ship in the centre of the channel and was not accorded the right of way, but he added that these ships are not only lake vessels but sometimes ocean-going vessels employing a pilot. Pilots Pérusse and Desgrosseilliers acknowledged that they had never lodged a complaint about any of these occurrences.

(v) *Linesmen at the approach walls*

Since there are no Seaway linesmen available to take the mooring lines of a vessel which is obliged to tie up at a wait wall, the lines are taken ashore by a member of the crew on a boom swinging out from the bow. This operation must be carried out quickly and the lines taken up rapidly because the vessel is moving through the water and may be affected adversely by the wind.

Difficulties are encountered particularly with ocean-going vessels but it is to be noted that they and lakers differ greatly in shape. A laker can move closer to the wall with no concern for overhanging superstructure whereas an ocean-going ship is held off by the flare of her bow. Furthermore, foreign-going seamen are not trained to land from a boom and they appear to be very nervous.

The Corporations of the St. Lawrence and Seaway Pilots of the Upper St. Lawrence Pilots have both recommended "that linesmen be provided on the approach walls, by the Seaway Authority" (Ex. 671E, paras. 643 and 672.) The pilots' brief points out that linesmen are provided at the Kiel Canal, at Manchester and in the canal which leads from Ijmuiden to Amsterdam (Ex. 671E, para. 644).

The main reason for the proposed change is to lessen the chances of injuries to seamen and damage to ships.

Pilots Pintal and Pérusse concurred that it was dangerous to land a man at the approach wall in adverse weather. When there is a wind, a ship must maintain a certain speed to reach an approach wall, more than one attempt may be necessary and in the process a man on a landing boom might be killed or injured (as has actually occurred). They felt that, if Seaway linesmen were available, ships could be secured at the first attempt and avoid damage.

According to the Seaway Regulations, every ship must be fitted with a landing boom, but there is no provision stating that it must be of a specific character. It is the general policy of the Seaway Authority to interfere as little as possible with ships' fittings. Mr. Burnside said, however, that the accident which took the life of one of the sailors aboard M.V. *Salah Eldin* drew the attention of the Seaway Authority to the fact that many ocean ships still tended to fit their booms somewhat differently than inland experience had proven satisfactory and generally safe over the years. A Seaway Notice was issued advising them to adopt the recommended fittings (Ex. 476).

(vi) *Cost of linesmen for approach walls*

Re the cost of linesmen, Mr. Burnside reported July 6, 1963, that an estimate had been made of the annual cost to provide three shifts of linesmen at thirty tie-up walls from Montreal to Lake Erie: it amounted to \$1,270,000.00. This covers percentages, paid vacation, paid statutory holidays, furlough leave, pension, health and welfare, unemployment insurance, workmen's compensation, other equipment, clothing, free over-time meals, etc. There is also some provision for shelters, inter-communication, toilet facilities and lockers. He pointed out that present practice in the locks indicated four shifts would be required to ensure three shifts on the wall.

He said that around 1960 the Seaway Authority had considered the possibility of providing linesmen service at the approach walls but the project met strong opposition from the inland traders, especially the Dominion Marine Association and the Lake Carriers Association of the United States, because of the cost involved. The ocean-going traders were canvassed very thoroughly through the Shipping Federation and, while it was practically unanimous that they would favour the use of linesmen, they changed their minds when they were informed they would have to pay for the service.

Commenting on the estimated cost indicated by Mr. Burnside, Capt. Matheson of the Shipping Federation said that it reflected a very poor administrative approach to the whole problem. In his opinion, it would be sufficient for the Seaway Authority to provide linesmen at the approach walls on the same basis as at the American Snell and Eisenhower locks. In that part of the Seaway which is administered by the Saint Lawrence Seaway Development Corporation, when a pilot feels that he will have difficulty approaching a wall, he advises the lockmaster who sends a man to take the lines.

For Capt. Matheson, it would be a waste of man power to have separate linesmen service at the approach walls because 75% or 80% of the time they would have nothing to do.

However, the Seaway Authority reported (Ex. 1292):

"Assistance is given at Canadian locks in tying up ships experiencing difficulty due to adverse wind but apparently not as frequently as at the American locks."

The Nautical Adviser to the Commission, the late Capt. J. S. Scott, made the following remarks about the use of landing booms:

"These involve, primarily:

- (1) Safety of the vessel when docking;
- (2) Safety of the person being landed.

The first can be much improved upon by the simple use of the heaving line. As regards (2), I venture to say that any industrial Safety Engineer would be horrified at seeing a live load being swung out on a creaking contraption from a moving platform over water on to an open dock.

...

Personally, I simply cannot, in this day and age, concur with the system of landing crew members and there is no alternative but to recommend the employment of dock-line handlers."

(vii) *Wheelsmen in ocean vessels*

The St. Lawrence River and Seaway Pilots and the Upper St. Lawrence River Pilots have recommended:

"That special wheelsmen be provided for all ocean vessels of more than 3,000 net tons for their passage in the Seaway; in other cases, these wheelsmen can be utilized with the consent of the captain." (Ex. 671E, paras. 645 and 674).

To justify this recommendation, the following reason is given:

"There have often been difficulties of communication between the pilot, the captain and the wheelsman aboard certain vessels. A large number of wheelsmen have had a great deal of experience in navigation on the high seas, but very little experience on the narrow inland canals and locks of the St. Lawrence Seaway. Navigation on the interior of the Seaway frequently requires rapid manoeuvres. It is thus necessary to attempt to eliminate any possibility of misunderstanding between the manoeuvres which are indicated by the pilot and those which are understood by the wheelsman.

This practice is moreover followed in several regions similar to the Seaway. A system of compulsory wheelsmen exists in the Kiel Canal, as well as in the canal which leads from Ijmuiden to Amsterdam. A system of optional wheelsmen exists in the Manchester Canal and the Port of Antwerp. In practice, all ships employ these wheelsmen." (Ex. 671E, paras. 647-648).

Pilot Pérusse was questioned at length on this recommendation. He said that compulsory wheelsmen are needed (translation) "for the very good reason there are many helmsmen on vessels whom we ask to go entirely to the right or entirely to the left and they are going to turn only five or ten degrees and most of the time we are on the bridge at the other end of the vessel and we don't see what goes on at the wheelhouse."

He related many incidents in which he was personally involved. In 1962, aboard the *Malmanger*, he had an accident because the wheelsman, when asked to put the wheel hard-a-port, put only 10 degrees. This accident occurred below Côte Ste-Catherine lock. The hull of the ship was dented around hatch No. 1, but the ship was still seaworthy and was able to continue. Again in 1962, aboard the *Ternefjell*, the wheelsman gave the wrong wheel and the ship turned around. In 1963, aboard the *San Benito*, a Liberty ship, he ordered the wheelsman to hold the wheel hard over to starboard, but the wheelsman gave only five degrees.

There seem to be many causes for the errors committed by wheelsmen in ocean vessels. Their lack of experience in canal navigation is one. Sometimes the wheelsman does not hear orders because he is talking with someone standing beside him. It appears that in large ocean vessels it is difficult for the helmsman to hear an order when the pilot is standing in the wing. Pilot Pérusse said that when he wants to give an order in these vessels he comes

up to the helmsman and then returns to the wing. There is no voice pipe to the helmsman's position.

Pilot Pérusse was also questioned how pilots give their orders to helmsmen. He replied that he follows the naval procedure by telling the wheelsman the number of degrees he should apply, e.g., "port 10 degrees" or "port 15 degrees" or "hard-a-port". Normally he repeats his orders to ensure that the wheelsman has heard him. He did not know whether other pilots used the same method.

The Seaway Authority stated that the situation would improve if wheelmen were familiar with confined inland navigation. They added that "consideration might be given to insisting upon the employment of special wheelmen for all ocean ships who do not have wheelmen aboard who are able to converse competently in English and who have had experience as wheelmen during Seaway voyages".

Pilot Bédard gave some information about the practice followed in similar circumstances abroad. In the Manchester Canal, the wheelmen receive remuneration amounting to two-thirds a pilot's earnings. Their services are pooled and some wheelmen are also apprentice pilots.

In the canal from IJmuiden to Amsterdam, which is about 10 miles long, there is wheelsman service and the number of wheelmen increases with the size of the ship up to a maximum of four. They are employed in accordance with an agreement with the local Chamber of Navigation. No wheelsman boards vessels of less than 1,000 tons gross; one is employed in vessels between 1,000 and 2,000 tons gross; two are employed in vessels between 2,000 and 5,000 tons gross; a vessel of 5,000 tons gross requires three wheelmen.

The Nautical Adviser to this Commission, the late Capt. Scott, made the following observations in regard to this problem (vide also his remarks on the same subject, p. 417):

"Despite keen appreciation of the heavy expense involved, there is, for my part, no alternative but to give the viewpoint that professional wheelmen would introduce a large measure of safety into a dismal situation. If the chain of communication is weak and vague, then the only way to strengthen it is to provide an "anchor man" who knows what is expected in any case.

While the expense of professional wheelmen would, at first glance, be borne by the ship, it must nevertheless be realized that the pilot himself is, in large measure, to blame for the lackadaisical manner of giving bridge orders.

Supplementary to the above is the increasing trend of carrying out ship-handling work in the bridge wings, with the pilot muttering his orders to the four winds and without the slightest idea of whether they have been heard or acted upon. It would be a great, but expensive, help to have helm indicators in each wing; also copper voice pipes direct to the wheel station."

COMMENTS

This recommendation goes to the very nature of lock and canal piloting where the major problems arise from navigating and passing in canals and

shiphandling within the confines of locks and their approaches, while in other types of pilotage shiphandling skill is secondary in importance to *expertise* in navigating local waters. Canal pilots must be highly qualified in handling all types of ships and must have full knowledge and experience of the hydraulic effects produced by ships meeting and passing in narrow channels and the effect of bank suction. Similar problems are met during lockages which in the Seaway (contrary to the procedure in the Panama Canal) must be effected by ships under their own power. Since space is so restricted, engine movements and rudder angle must be exact with practically no margin for error. Therefore, the pilot's orders must be carried out immediately and correctly, and any delay or failure may result in a casualty closing the Seaway for a long period. While manoeuvring in lock approaches and securing at the wait wall and during lockages, the pilots find it necessary to stand at the outer end of the wing of the bridge in order to appraise the situation and follow progress. It is from that position that they must give the necessary engine and wheel orders but, unless a rudder angle repeater is installed there, they can not be certain whether wheel orders have been applied properly.

It follows that the first and most essential requirements for the pilots are effective bridge procedure and discipline. There should be standard terms always used by all pilots; strict rules for transmitting orders; a precise method of verifying that orders are understood and carried out. The pilots must insist that each order is repeated and that, if there is no wing repeater, the ship's Master instructs an officer to stand by the wheelsman to ensure that the helm orders are applied immediately and correctly. These rules of bridge discipline and procedure should be included in pilotage regulations and, since safety is involved, any contravention by a pilot should result in a penal sanction, even extending to suspension or cancellation of his licence. It is to be expected that Masters will readily comply with the pilots' requests, but any failure to do so should be immediately reported by the pilot to the pilotage office by VHF radiotelephone and the complaint should be recorded there. However, the pilot should continue to provide his services to the best of his ability, unless the safety of the ship is directly involved.

If the pilots' recommendation that a wheelsman should accompany the pilot on board to assist in conning is implemented, the safety of navigation would be further enhanced but it is doubtful whether this is an essential requirement and whether it would retain the same importance if the necessary bridge discipline and procedure were established. This could only be determined by detailed investigations, *inter alia*, of all casualties or near casualties, information which the Commission does not possess.

(viii) *Communication between ships and Seaway bridge operators*

The pilots complained about their inability to communicate by radiotelephone between ships and Seaway bridge operators. They felt that the

present signal system is inadequate because ships do not receive sufficient advance notice when to proceed or reduce speed. When a bridge does not open, the practice is to contact the Beauharnois despatcher by radio.

The Cornwall pilots specifically recommended:

"That the signal system be coupled with a radiotelephone service to the Caughnawaga, St. Louis and Valleyfield bridges." (Ex. 671E, para. 663).

Pilot Pérusse commented that, if direct communication by radiotelephone were possible between ships and bridge operators, vessels would have 10 to 15 minutes advance notice, sufficient to make any necessary adjustment.

Mr. Burnside, however, was opposed to the installation of a radio-telephone system on the lift bridges because, whenever an emergency arises, the bridgemaster is too busy attempting to rectify the fault to use a set and it would only delay matters if he had to communicate with ships to explain.

In response to a written question (Ex. 1291) put to the St. Lawrence Seaway Authority, a similar but more detailed view was expressed thus (Ex. 1292):

"All movable bridges on the Seaway are provided with signal lights. When an approaching vessel reaches the Whistle Sign the Bridgemaster flashes the red light informing the vessel Master that he is aware of his approach and is preparing to raise the bridge. When the bridge is fully open the flashing red light is changed to steady green, signalling that the vessel, which is continuing to approach may pass.

The bridges are carefully inspected and maintained and are normally operated at least every hour and, therefore, incipient troubles can be detected and corrected. Failures occur very rarely.

If, for any reason, the bridge is known to be disabled, all vessels in the area are immediately warned by the Despatcher over the radio-telephone and no further vessels are sent forward.

If, in spite of every precaution, an electrical or mechanical failure occurs after the vessel reaches the Whistle Point, the Bridgemaster warns the vessel Master by displaying a red flare, indicating that the Master must take emergent measures to stop his ship. The Bridgemaster also telephones the Despatcher who immediately alerts all vessels in the area by radio-telephone. While the Despatcher is warning the vessels, the Bridgemaster takes immediate steps to discover, and if possible, correct the trouble so that the bridge can be raised as quickly as possible.

Since the approaching vessels are immediately warned by radio-telephone of any known disability at a bridge structure, it would serve no useful purpose for the Bridgemaster to constantly repeat to an approaching ship Master that the bridge will be raised for passage because this cannot be determined for certain until the structure is actually open.

If trouble develops after the ship approaches closely to the bridge, the Bridgemaster must quickly but calmly carry out repair procedures as rapidly as possible without uselessly attempting to engage in conversation with the vessel Master.

As soon as the trouble is corrected the solid red light is turned to flashing red advising the ship Master that the bridge is again operative. Until the trouble is corrected the Bridgemaster has no way of actually knowing how long the bridge will be disabled and it would be dangerous to entice captains to go forward lest the trouble be more severe than thought at first.

The emergent signals are given only under extreme conditions and are not used without good reason and must be fully respected by shipping.

Radio-telephones on movable bridges would serve no useful purpose and they do not exist on the Welland Canal bridges."

(ix) *Language problems*

While Seaway despatchers have had some difficulties communicating with the crews of foreign ships, they are not great since all vessels not registered in Canada must have aboard a radiotelephone operator who is proficient in the English language, as required by subsecs. 57(4) and (5) of the Ship Station Radio Regulations, Part II, of June 1966 (Ex. 492).

The St. Lawrence Seaway Authority considers that the presence of a pilot on board a foreign vessel is a great advantage because translation difficulties are avoided.

Mr. Burnside added that it would facilitate Seaway operations if all communications there were carried out in English, necessitating French-speaking pilots to communicate in English with Seaway despatchers, only some of whom are bilingual. Most Masters and officers aboard foreign vessels trading in the Seaway do not understand French, but all understand English. The native tongue of most of the ships' officers in the Canadian fleet is English. Foreign operators appeared to outfit their vessels with Masters who are familiar with English so that they may trade in American as well as Canadian waters. Moreover, according to Mr. Burnside, it is important for Masters to understand what Seaway despatchers actually tell pilots so that they may be fully aware of conditions which may affect their vessels, particularly when there is a conflict of interests. In addition, Masters should be able to understand the instructions given by despatchers to other vessels nearby and thus be prepared to take whatever action appears necessary.

The pilots were opposed to the change advocated by Mr. Burnside. They testified that officers in foreign vessels could speak in either English or French in most cases and did not believe that Masters of foreign ships needed to know what the despatchers were saying, since these Masters were not usually on the bridge. They expressed the view that, wherever Seaway despatchers could speak both French and English, the use of both languages should be allowed as an additional safety factor in the control of Seaway traffic.

(j) *Maintenance of the Seaway*

The St. Lawrence Seaway Authority is responsible for the maintenance of locks and canals under its jurisdiction. As noted earlier (pp. 904-5), most of these navigational facilities are located in the Pilotage District of Cornwall between Montreal and Cornwall. Maintenance of the non-canal reaches in the Canadian section of the River above Montreal, namely, the navigation channels in Lake St. Louis and Lake St. Francis up to boundary line south of Cornwall Island and in the upper reaches of the River from

Morrisburg (Canada Island) to a point located about 5 miles past Brockville, is the responsibility of the St. Lawrence Ship Canal Division of the Department of Transport. From this point on to Lake Ontario, the navigation channel is on the United States side of the boundary waters, maintenance of which is the responsibility of the United States Coast Guard, who are also responsible for the channel south of Cornwall Island in United States waters (Ex. 489). The method used for maintenance sweeping and dredging, and the periods of the navigation season during which those operations are carried out, are explained in the sections of the Report dealing with the St. Lawrence River ship channel (pp. 155 and ff. and pp. 648 and ff.).

Vessels transiting the Seaway must have anchor buoys attached to their anchors. Sometimes an anchor is dislodged and in the comparatively shallow channels might foul another vessel navigating directly over it.

To facilitate quick recovery of lost anchors, a small wooden buoy is tied to each anchor and made fast to the ship's rail, outside the normal chain area, so that when the anchor is dropped the light attachment to the rail is torn off, and the buoy goes into the water with the anchor marking its location. If there were no anchor buoys, lost anchors would be very difficult to find, especially when they are dropped in an emergency. Recovery will be made either by the Seaway Authority or the St. Lawrence Ship Channel Division, depending on the place where the mishap occurred. There is a working arrangement, however, whereby in an emergency the closest equipment to the site will proceed to do whatever is necessary for recovery. The cost of recovery is charged to the owner.

(k) *Seaway Notices and Notices to Shipping*

There are two types of written communications to ships trading in the Seaway. The first, called Seaway Notices to distinguish them from the Department of Transport Notices to Mariners, is intended to cover changes of a more permanent nature and may contain explanations considered necessary for changing procedures that would not be fully detailed in the Seaway Handbook (vide Ex. 476 for an example of such a Notice). Seaway Notices are sent to every person making an application for pre-clearance.

The other type of communications is the Notices to Shipping which are issued by the District Marine Agencies to cover items of an emergency nature. Normally, when an emergency arises, the information is given by radiotelephone from some specific vessel that has either observed or experienced something unusual which must be immediately communicated to the nearest Seaway station. Upon receipt of that information, the Seaway dispatcher immediately contacts by R/T the ships in his Traffic Control Sector so that they may be aware of the situation. This is followed by a report to the District Marine Agent at Prescott or Sorel, as the case may be.

If it is felt desirable to disseminate the information more widely, arrangements are made with the St. Lawrence River Marine Traffic Control for the necessary broadcasting.

(4) AIDS TO NAVIGATION

Practically all the aids to navigation in the Canadian waters of the Seaway between Montreal and Lake Erie, including the aids in the enclosed channels such as the Beauharnois Canal near Montreal, are the responsibility of the Department of Transport. The Seaway Authority may have marker buoys installed temporarily when there is some obstruction in a channel, but the regular aids to navigation are installed and maintained by the Department of Transport, the work being divided between two District Marine Agencies of the Department, the Sorel Agency for the River between Montreal and Beauharnois, and the Prescott Agency for the Upper St. Lawrence area.

There are hundreds of these aids, most of which are light-buoys electrically operated and fitted with radar reflectors. These light-buoys are removed after the end of each navigation season and are re-installed before the beginning of the next navigation season. Whenever possible, the centre of the channel is indicated by land-based range lights or steering lights.

(5) MARITIME AND PILOTAGE TRAFFIC

Maritime traffic in the Cornwall District is substantially different from that on the St. Lawrence River below Montreal because it is predominantly composed of Canadian and American lakers which are exempt from the payment of pilotage dues in the District.

Since the lock dimensions impose a maximum limit on ships of 730 feet overall, 75 feet 6 inches extreme breadth and 25 feet 9 inches draught, the larger, deeper ocean vessels now being built in increasing numbers are barred from the Seaway and the District by their size. Moreover, even if they can be accommodated to the physical limitations, it is often at the expense of draught and they will have to top up downriver. Economics have forced owners to acquire vessels which can make maximum use of the Seaway and in the process small cargo vessels have virtually disappeared, as the following table illustrates. It shows each year since the opening of the Seaway the transit statistics compiled by the Seaway Authority of the commercial traffic which transits either upbound or downbound the first part of the Seaway in which the Cornwall District is situated, i.e., from Montreal to Lake Ontario, segregated so as to be most meaningful in relation to pilotage, i.e., domestic and overseas transits. *Overseas transits* mean "transits to or from Foreign Ports beyond the Coast of Canada and the United States." To arrive at the *domestic* figures, inland and coastal transits were added. *Coastal transits* are "to and from the Maritimes and U.S. Atlantic

Study of Cornwall Pilotage District

Ports." The average tonnage per ship in each instance was calculated in order to show the trend to larger vessels and the levelling effect of the limitation on maximum size and draught. The pilotage statistics available do not permit similar segregation.

SEAWAY, MONTREAL/LAKE ONTARIO SECTION—NUMBER OF TRANSITS AND AVERAGE TONNAGE PER SHIP; AND CORNWALL PILOTS—NUMBER OF TRIPS AND AVERAGE TONNAGE PILOTED

Year	Seaway (Upbound-Downbound Combined)				Pilotage		
	Domestic		Foreign		Trips	Average Gross Tonnage	Average Net Tonnage
	Transits	Average Gross Tonnage	Transits	Average Gross Tonnage			
1960.....	4,672	2,889.7	2,197	5,293.9	2,861	n/av.	n/av.
1961.....	4,741	3,681.6	2,151	6,325.0	2,601	5,304	3,154
1962.....	4,049	4,388.0	2,302	6,753.5	2,748	n/av.	n/av.
1963.....	4,232	5,452.7	2,053	6,823.0	2,326	5,728	3,372
1964.....	4,287	5,863.6	2,492	7,200.3	2,730	6,163	3,634
1965.....	4,579	5,796.5	2,751	7,516.4	3,022	n/av.	n/av.
1966.....	4,602	6,715.7	2,739	7,977.7	3,108	6,839	3,999
1967.....	4,375	6,510.6	2,546	7,950.0	2,978	6,745	3,896
1968.....	4,198	7,159.0	2,378	8,552.1	2,768	6,899	40,45
1969.....	3,975	5,028.4	2,417	8,879.3	2,812	7,405	4,324

SOURCES: *Seaway*: Ex. 475—traffic report of the St. Lawrence Seaway.

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

The limitation on size and draught and the trend to ships with the maximum permissible dimensions the locks and the canals can accommodate were no doubt the governing factors which led to the adoption in 1961 of the flat rate method for computing pilotage dues, rather than the former rates which varied according to draught and tonnage.

Only a few trips are partial transits. There is no port or landing place *en route* of importance to foreign-going ships and, if one has to stop, it is generally because she is delayed for some reason at an anchorage either in the Seaway or Lake St. Louis or Lake St. Francis. This is no doubt why despatching is effected on the basis of full transits and the trip rates contain a provision to compensate pilots for such idle time (vide p. 875).

The port of Cornwall is situated at the western end of the District and, therefore, ships calling there are involved in a full transit, except for the few from the Kingston District. The approach to the port is through

a channel dredged to Seaway depth and width branching from the main channel off St. Regis Island. The depth alongside the 400-foot DOT wharf is 22 feet.

The Port of Valleyfield is situated on the north side of the Beauharnois section of the St. Lawrence Seaway about 30 miles above Montreal. There is a small amount of traffic, mainly for local industries. The depth alongside the two wharves is 25 feet 9 inches. The tariff provides special rates for trips ending or beginning there (vide p. 875). Traffic increased in 1967 and this no doubt prompted the addition of the special rate that year.

The following table based on DBS arrival statistics of vessels of 250 NRT and over shows the relative importance of these two ports both in the number of arrivals (one arrival for a ship taking a pilot means two pilotage trips) and in the size of vessels.

COMPARATIVE STATISTICS FOR ARRIVALS OF VESSELS 250 NRT AND OVER

Year	Cornwall		Valleyfield	
	Arrivals	Average NRT	Arrivals	Average NRT
1959.....	91	1,246	n/av.	n/av.
1960.....	89	1,215	n/av.	n/av.
1961.....	71	1,271	n/av.	n/av.
1962.....	68	1,292	n/av.	n/av.
1963.....	64	1,374	12	1,019
1964.....	39	1,173	5	460
1965.....	59	1,188	n/av.	n/av.
1966.....	48	1,384	13	3,089
1967.....	44	1,387	53	3,871

SOURCES: Exs. 15 and 1483 (Dominion Bureau of Statistics).

The Cornwall District, although part of the Seaway, does not come under the application of Part VIA. C.S.A. Hence, the only permissible form of compulsory pilotage under Part VI is applied, i.e., the compulsory payment of dues. The compulsory system is applied realistically enough in that most of the truly regular traders—Canadian and American lakers engaged in domestic trade—enjoy complete exemption. However, the other lakers of foreign registry, including British Commonwealth lakers, no matter how regularly and frequently they trade through the system, are subject to the compulsory payment of dues.

This requirement is realistic for ocean-going vessels, even though they follow a regular schedule, since their actual experience in the system is limited due to the infrequency of their transits. Statistics formerly compiled by the Canadian Maritime Commission and contained in its annual reports

(Ex. 475(b)) show that the average number of round trips by foreign registered vessels engaged in direct trade between the Great Lakes and overseas ports between 1959 and 1966 never exceeded 2.3 per vessel.

DIRECT TRADE BETWEEN GREAT LAKES AND
OVERSEAS PORTS IN FOREIGN REGISTERED VESSELS

Year	Number of Vessels	Number of Round Trips	Average Number of Round Trips per Vessel Each Year
1959.....	506	1,146	2.3
1960.....	540	1,245	2.3
1961.....	494	1,112	2.3
1962.....	537	1,151	2.1
1963.....	456	1,032	2.3
1964.....	542	1,239	2.3
1965.....	632	1,405	2.2
1966.....	623	1,354	2.1

It is clearly apparent from the table on p. 924 that a number of exempt vessels use pilotage service for reasons of safety and convenience as well. On the other hand, very few non-exempt vessels dispense with pilots. It can be logically surmised that a greater number would do so if it were not for the compulsory system and the limited exemptions for domestic traders, e.g., lakers of foreign registry would probably dispense with pilots because they do not need their services. They have nothing to gain by not employing a pilot for whom they must pay unless they would be delayed because none was available. The following table shows for the years 1961-1968 the number of trips without pilots by ships which paid dues, the amount involved and the incidence of this revenue on the gross pilotage revenue of the District.

Year	Number of Trips	Amount of Dues	Incidence on Gross Pilotage Revenues
1961.....	4	\$ 580.00	0.14%
1962.....	nil	nil	nil
1963.....	1	160.00	0.04%
1964.....	9	1,071.50	0.23%
1965.....	6	801.64	0.13%
1966.....	10	929.58	0.15%
1967.....	10	1,148.20	0.18%
1968.....	12	816.98	0.14%

In the Cornwall District there is no maritime traffic during the winter months as such; navigation ceases when the Seaway (lower sector) is forced to close by the formation of ice in the locks and canals, the date of which varies from year to year, e.g., in 1962, Dec. 7 and in 1965, Dec. 17, and remains closed until the Seaway reopens when the ice clears, e.g., 1966, April 1 and in 1962, April 23. According to the District By-law, the winter season is from December 1 to April 8 when two pilots are to be assigned on each trip. However, there is no pilotage during the winter and *winter pilotage*, therefore, means pilotage between December 1 and the closing of the Seaway and between the opening of the Seaway and April 8.

COMMENTS

It is obvious that the scheme of exemptions for this District was not dictated by considerations of safety of navigation but merely as a method of increasing pilotage revenue. It is to be expected that the withdrawal of exemptions would have been more extensive (as in the Montreal and Quebec Districts) if it had not been for the resultant discrimination against Canadian vessels on account of the absolute exemption (subsec. 345(ee) C.S.A.) granted to American lakers. As was to be expected, the relative exemption which British Commonwealth lakers (other than Canadian) had enjoyed under subsec. 346(e) C.S.A. was withdrawn in 1965.

This situation would be rectified if the Commission's General Recommendations 22 and 23 were implemented (Part I, pp. 532 to 545).

(6) RULES OF THE ROAD FOR THE GREAT LAKES

Section 645 C.S.A. authorizes the Governor in Council to make rules for enhancing the safety of navigation both at sea and on the inland waters of Canada. As is to be expected, special rules have to be devised to meet the special conditions encountered in confined waters.

It is under this provision of the Act that the basic rules called "Collision Regulations" were adopted (P.C. 1965-1552) and gave legal effect within the territorial waters of Canada, and also to vessels of Canadian registry in other waters, to the rules adopted through international agreement. These rules are known as the "International Rules of the Road". They apply in all navigable waters within Canada except on the Great Lakes and St. Lawrence waterway west of Montreal (Ex. 1472).

However, even east of Montreal the International Rules of the Road have also been modified to meet local situations in confined waters by the St. Lawrence River Navigation Safety Regulations (P.C. 1967-700) which, *inter alia*, provide for such situations as the presence of vessels engaged in such work as dredging, or ships meeting where navigation is particularly

difficult, and precedence is to be given by the ship stemming the current or the tidal stream, or a ship overtaking is to exchange certain signals (Ex. 1461(j)). In addition, a Harbour Authority may have to change the International Rules to meet local conditions, as was done in Montreal (vide p. 634).

For the special navigational conditions west of Montreal, special rules of the road have also been devised which are known as "Rules of the Road for the Great Lakes". The latest version was approved December 8, 1954 (P.C. 1927) as amended March 2, 1967 (P.C. 414). These rules vary sharply with the International Rules and even the St. Lawrence Regulations on a number of essential points which affect the safety of navigation (Ex. 1112).

These rules were drawn up to apply to upper lake vessels long before the Seaway opened but any conflict with the International Rules was unimportant then because only small vessels—lake or ocean-going—could transit the existing locks and canals. The Seaway, however, permitted much larger vessels to leave and enter all the Great Lakes and made it a matter of urgency that the navigators of these vessels should be thoroughly familiar with the navigational procedure in the Lakes and the St. Lawrence River and Gulf. This is undoubtedly one of the reasons why Part VIA C.S.A. imposes on all ocean-going vessels compulsory pilotage by a registered pilot in the designated waters of the Great Lakes Basin west of St. Regis, the presence on board of a registered pilot or an officer with prescribed qualifications in the undesignated waters of the same area and the compulsory payment of pilotage dues in the Cornwall District.

Many of these rules that conflict with the International Rules were not dictated by local peculiarities but merely reflect local practices which developed over the years. In the interest of safety, efforts have been made for a number of years to amend these regulations to conform as much as possible with international practice, but without success to date.

The main differences concern:

(a) *Fog Signals for Vessels Underway and at Anchor*

Under International Rules, a vessel sounds a prolonged blast at intervals of not more than two minutes but, under Great Lakes Rules, three distinct blasts at intervals of not more than one minute. Under the International Rules, vessels may exchange passing signals only when in sight of each other; under the Great Lakes Rules, signals for meeting and passing may be exchanged whenever the vessels are within sound of each other. As a result, a fog signal which is readily distinguishable from a passing signal became necessary.

(b) *Lights*

There are numerous differences in the two sets of rules governing lights, the most important relating to lights of vessels at anchor.

(c) *Right of Way in Rivers and Channels and Signals for Meeting and Passing*

In all narrow channels where there is a current, the descending vessel has the right of way and is required to indicate by appropriate signals the side selected for passing. These signals do not correspond to those provided in the St. Lawrence River Navigation Safety Regulations.

(d) *Danger Signal*

This is another requirement for which there is no comparable provision in the International Rules, i.e., the right to disagree with a proposed passing vessel when the vessel to which such signal has been made deems it unsafe to assent. The danger signal consists of not less than five short blasts; both vessels then should reduce speed to bare steerageway and stop or reverse if necessary.

A number of shipping casualties have occurred because navigators were not familiar with these signals and procedure and acted under the International Rules of the Road rather than the Great Lakes Rules (Exs. 1112, 1103 and 1078).

2. NATURE OF PILOTAGE SERVICE

Pilotage in the Cornwall District consists of canal and river navigation in restricted waters governed by special regulations and practices, and shiphandling through locks.

Between Montreal and Cornwall, the four locks and their associated canals (the South Shore and Beauharnois Canals) cover about half the distance, the remainder consisting essentially of narrow channels dredged to required Seaway specifications.

Safe, expeditious navigation of this section of the Seaway requires not only local knowledge and experience of the physical features of the channel, currents and cross-currents, but also familiarity with the special navigational regulations which apply west of Montreal, i.e., the St. Lawrence Seaway Regulations and the Rules of the Road for the Great Lakes, as well as a high degree of skill in navigating through congested narrow canals and channels and in shiphandling and manoeuvring at the locks.

There are strong currents in certain places, such as at the Lower Beauharnois lock where a southeast current, varying according to the operations of a nearby control dam, pushes vessels towards the approach wall. In addition, ocean vessels, particularly, face difficult conditions in

these confined waters due to their different construction and sometimes inadequate equipment for canalling (engine controls, rudders, winches). They are much more susceptible to wind effects and generally are more difficult to manoeuvre in these waters than lake vessels.

Moving vessels towards approach walls, proceeding through locks, meeting vessels in canals, navigating in narrow channels and sometimes in close proximity to private shoreline properties are all difficult operations which are fraught with unusual hazards in adverse wind and visibility. Experienced judgment and direction are essential throughout.

The four locks and the existence of four bridges crossing the South Shore Canal (Jacques Cartier, Victoria, Honoré Mercier and C.P.R.), some of which have to be opened for ships' passage, require intimate knowledge of Seaway regulations and procedure. As noted earlier, the Rules of the Road and navigational practices differ basically from those applicable on the rest of the St. Lawrence River from Montreal harbour to the sea. Unfamiliarity with these differences has been the cause of many shipping casualties involving ocean-going vessels west of Montreal harbour. For further comments on the nature of the *expertise* required of canal and lock pilots, vide comments pp. 918-19.

Any mishap or faulty manoeuvring in this section of the Seaway would not only damage the ship or ships involved but would also interrupt navigation for extended periods of time and completely paralyze shipping in this vital artery of commerce. This situation is similar to that prevailing in the other sections of the Seaway where, by Canadian and United States law (Part VIA C.S.A. and 46 U.S.C. 216), compulsory pilotage is imposed on all vessels except those which trade regularly and frequently through these waters, i.e., Canadian and American lakers which, on the average, make about 30 Seaway transits or 15 round trips a season (Ex. 1214).

That local knowledge and experience are essential is recognized by the owners of lake vessels and they ensure that their ships are navigated by a pilot or by an officer with similar *expertise*. Prior to the creation of the first Pilotage District, the shipping companies operating on the Great Lakes and the St. Lawrence canals had their own company pilots. When the St. Lawrence-Kingston-Ottawa District was created in 1934, these companies were allowed to retain these pilots as a transitional measure until they reached retirement age. They were issued a pilot's licence but remained in the employ of the company and were engaged to pilot company vessels between Kingston and Montreal, despite the fact that all these lakers enjoyed complete exemption in those waters and could legally have been navigated by their regular Masters and officers. There are no longer any such licensed contract pilots (vide p. 876).

Knowing the definite requirements for local *expertise*, the companies operating lake vessels stipulate that the Masters and mates they sign on must be prepared to navigate in these waters without a pilot. This is reflected in the Collective Agreement between certain upper lake companies and the Canadian Merchant Service Guild which provides a bonus for officers "engaged in pilotage duties" in these waters (Ex. 1142(a)), thus enabling ships to dispense with pilots and benefit from the exemption.

It has been suggested that hiring a crew through a time agreement under secs. 172 or 173 C.S.A. (an owner can hire a crew to serve in one or more ships belonging to him) provides a way of avoiding the necessity of taking a pilot, even though the officers do not possess the necessary pilotage *expertise*, the stratagem formerly adopted in Quebec when so-called Sailing Masters were hired (vide p. 205). It would appear that a mariner with the necessary *expertise* could thus be signed on, purportedly to serve as an extra Master or mate on board a number of company lakers for a specific period but actually to provide disguised pilotage services.

COMMENTS

The most serious problem, however, is not that these vessels are navigated by qualified persons whose only fault is that they are not licensed pilots but that they may be navigated by persons who do not possess the necessary local knowledge and experience and, hence, pose a threat to the safety of navigation which is harmful to public interest in this section of Canadian waters. At present, there is nothing to prevent this happening since the exemption is granted indiscriminately to a category of vessels.

This safety problem would be solved, and the practice of hiring company pilots through the device of time agreements would become pointless if, as recommended by the Commission (vide Gen. Rec. 23, Part I, pp. 539 and ff), exemptions from compulsory pilotage were granted on the basis of safety, not to a category of ships but to the Masters and officers of those ships, the criterion being *expertise* in navigating the waters concerned and exemptions being valid only for the ship named on the personal exemption certificate.

3. ORGANIZATION

The pilotage organization in the Cornwall District is on the same lines as in the Quebec and Montreal Districts. The Minister of Transport is the Authority but, as noted earlier (p. 660), administration is from Montreal by the Montreal District Supervisor of Pilots who also performs the functions of Supervisor for the Cornwall District.

The situation with regard to the Regional Superintendent of Pilots and to the Cornwall Pilots' Committee is the same as in the Quebec District ex-

cept that the Cornwall General By-law provides for a Pilots' Committee of five members instead of six, to correspond to the Board of Directors of the Pilots' Corporation. For further details concerning the Regional Superintendent of Pilots and the Pilots' Committee, vide pp. 221 and 214 respectively.

(1) RECOMMENDATION RECEIVED

In a supplemental brief submitted to the Commission dated March 15, 1966 (Ex. 1469) the St. Lawrence Seaway Authority recommended that it be entrusted with the responsibility for "the employment and control of pilots" in the Seaway area including the section between Montreal and Cornwall.

Referring to its Consultants' Study (Oct. 1964) on Pilotage in the Welland Canal (Ex. 1473), the Authority stated that the main conclusions contained in it, namely, that the present division of responsibility between pilotage administration and canal operation was not in the best interest of safety and efficiency and that canal pilotage should become an integral part of canal operation with pilots responsible to the Authority, were conclusions equally applicable to the lower portion of the Seaway. Noting the advantages to be derived from the selection and training of pilots and their assignment in harmony with canal operations, the Authority concluded that it should have the responsibility of controlling the pilotage service in all areas under its jurisdiction.

The Federation of the St. Lawrence River Pilots registered its opposition to this recommendation, expressing the view in a supplemental brief to the Commission dated September 1966 (Ex. 1494) that the Authority had not established that it would be in a better position to bring about the suggested improvements if it were made responsible for pilotage and that, moreover, the consultants' study to which the Authority referred dealt with the occurrence, cause and effect of pilot shortages only in the Welland Canal and during a specific period when congestion was particularly acute. It pointed out also that the Authority's recommendation could not be implemented under the present bilateral arrangements between Canada and the United States concerning pilotage in the Great Lakes Basin, which provide for joint participation by Canadian and United States registered pilots in the operation of the service.

In its brief to the Commission (Ex. 1134), the Dominion Marine Association also expressed its opposition to the transfer to the Seaway Authority of responsibility in matters of pilotage because it feels that pilotage would then become only part of a larger operation resulting in a probable deterioration of the service.

The views of the Commission on the extent to which existing Crown agencies could be entrusted with the responsibility of pilotage control are expressed in Part I, General Recommendation 18.

4. PILOTS

(1) NUMBER OF PILOTS

When the St. Lawrence-Kingston-Ottawa District was abrogated November 17, 1960, and its territory divided into the two new Districts of Cornwall and Kingston, there were 56 pilots, 42 of whom held a permanent licence. They were given an opportunity to express their individual preference as to which of the new Districts they wished to belong in the future and 32 chose the Cornwall District.

The By-law leaves the determination of the required number of pilots to the administrative decision of the Pilotage Authority after consultation with the Pilots' Committee concerned (re the legality of this provision, vide Part I, pp. 255 and ff.). There is no criterion established, with the result that the question is studied afresh each time a vacancy occurs or the pilots request an increase in their number. For a more complete study of the subject and the Commission's comments and recommendations, vide pp. 225-231.

The pilots' strength remained at 32 up to 1963; in 1964, it rose to 36 and to 37 in 1966. At times, the apparent strength appeared to be greater, e.g., at the end of the 1965 season, 38 pilots held a licence, although the approved strength was only 36, because two temporary licences were issued to two apprentices as reliefs for two pilots who were on prolonged leave of absence on account of illness.

The following table shows the number of pilots calculated from different statistical points of view.

CORNWALL PILOTS—NUMBER OF PILOTS*

Year	Establishment as of December 31	Total Pilots Holding Licence during Any Part of Year	Year Pilots	D.O.T. Effective Pilots**	Paid from Pool†
1960.....	32	35	33.5	n/av.	35
1961.....	32	33	32.7	30.6	32
1962.....	32	34	31.8	30.4	33
1963.....	32	32	32.0	30.7	32
1964.....	36	36	33.0	29.86	36
1965.....	39	40	38.7	33.60	38
1966.....	38	42	39.2	34.92	39
1967.....	38	38	38.0	36.13	37
1968.....	37	39	37.0	36	37
1969.....	37	37	37.0	n/av.	37

SOURCES: *Ex. 1540 (j); ** Ex. 534 (b); † Ex. 823.

(2) RECRUITING AND TRAINING

There was no apprenticeship system in the former St. Lawrence-Kingston-Ottawa District. Pilots were recruited from experienced seamen in the inland trade holding at least a Certificate of Competency as Master, Tugboat, in the minor waters of Canada. Selection was made by a Board of Examiners after a period of training which lasted a few months. The successful applicant was first issued a probationary licence which was followed by a permanent one if his services proved satisfactory.

This system was logical in view of the existence of a large pool of qualified mariners with extensive experience in the navigation of these waters.

Pilot A. Pérusse and Pilot G. Pintal, who received their pilot licence for the St. Lawrence-Kingston-Ottawa District in 1956 after extensive experience in local waters serving in lake vessels as ship's officers and company pilots, felt that they were competent to perform pilotage but were not immediately prepared to take charge of the navigation of ocean-going vessels because these vessels are much less manoeuvrable at close quarters. The difficulty was compounded by the much larger ocean-going vessels which began to operate in the District following the opening of the Seaway.

The system was maintained with minor modifications when the Cornwall District was created. The governing provisions of sec. 11 of the By-law, which was approved in 1960 and has not been amended since in this respect, merely state that pilots must be recruited from experienced seamen of the inland trade with actual extensive experience in navigating District waters. The candidate must hold a Certificate of Competency not lower than Master, Steamship (unlimited), in the inland waters of Canada and must have served at least as a deck officer in vessels trading regularly through the District for two to five years immediately preceding the date of the examination for a pilot's licence. However, two other prerequisites not listed in the By-law are required of candidates as is shown by the January 31, 1967, newspaper advertisement for candidates (Ex. 1540(m)): the candidate must have "successfully passed the Department of Transport Radar Observers Course", and is required "to demonstrate a sufficient knowledge of French and English to perform the duties" of pilot in the Cornwall District. Both are definitely warranted as safety measures and should be required of all candidates, but under the governing legislation this can not be done legally except through appropriate provisions in the regulations. To date, this step has not been taken, once again showing lack of understanding of the rôle of, and necessity for, legislation in the scheme of organization under Part VI C.S.A. The appraisal of the candidate's qualifications is the responsibility of a Board of Examiners whose composition since the 1965 amendment has been two officers of the Department of Transport, one of whom is Chairman and three members of the Pilots' Committee. The first licence is one-year

probationary, without limitation, however, as to type or size of vessel, which after satisfactory service is normally followed by a permanent one unless the Pilotage Authority in its administrative discretion prefers to issue a temporary licence for a stated period.

In the first years after the creation of the District vacancies were filled by transferring pilots who had had experience in the District when it formed part of the larger District. In 1961, there was one such transfer from the Kingston pilots and a second in 1962. In 1964, when the pilots' strength was increased from 32 to 36, it became apparent that this transitional method had reached its limit: two pilots were transferred from the Kingston District but the other two had to be recruited from the group piloting in the open waters of Lake Ontario.

The pilots realized from the beginning that the reserve of experienced pilots would soon be exhausted and that some type of training would be necessary before a pilot's licence could be issued, despite the fact that candidates could be recruited from qualified mariners who met the By-law requirements. These candidates had to become familiar in detail with all the physical features of the District waters, but mainly they had to become expert in handling new types of ships whose characteristics were quite different from those of the inland vessels they had previously navigated. Because of the different contours, ocean-going vessels require extra precautions when manoeuvring in the locks and their approaches.

In 1961, the Cornwall pilots began pressing for the establishment of an apprenticeship system and included it in their demands during the April 1962 strike of the St. Lawrence River pilots. A compromise solution was arrived at in 1965 when the problem became pressing, since it was no longer possible to recruit directly from Kingston pilots with experience in Cornwall waters. The compromise solution was that candidates accepted under the existing By-law provisions would be required to follow a training programme and would not be assigned alone to a vessel until after a full season of training. This realistic solution, which has been in effect ever since, has not, however, been reflected in the By-law.

The apprenticeship system requested by the pilots in 1961 was along the lines of the existing system in the Quebec and Montreal Districts, i.e., a long term training programme in which pilots are recruited from young candidates whose only prerequisites are a basic education and an interest in pilotage.

The Shipping Federation of Canada registered its opposition advocating the other extreme position that no training at all was indicated, on the ground that pilotage in Cornwall waters differed substantially from pilotage in the Districts of Quebec and Montreal in that it mainly involved canal navigation which requires expert shiphandling. Because a substantial pool of mariners

with local experience already existed, the Shipping Federation saw no need for an apprenticeship period of any kind.

Up to April 1962, the position of the Department of Transport was identical to that of the Shipping Federation. When the pilots had first made the suggestion, they were informed by the Department that there were a large number of qualified Masters and officers with detailed knowledge of these waters and there was no compelling reason to introduce an apprenticeship scheme.

The pilots raised the question again the following year and made it an item for negotiations during the 1962 winter meetings which on April 8, 1962, deteriorated into the strike by the pilots of the St. Lawrence River Districts of Quebec, Montreal and Cornwall.

In the agreement which put an end to this strike, the Minister of Transport promised that his Department would develop a plan of apprenticeship for new pilots and that this plan would be in force in 1963 (Ex. 761) (vide p. 713). However, this promise was not fulfilled. It appeared that the Minister of Transport had made the commitment without consulting his departmental advisers.

Because of the Minister's commitment, a meeting was held November 15, 1962, and the Pilotage Authority submitted a proposal under which apprenticeship was to be restricted to applicants of not less than 25 years of age, holding a Certificate of Competency not lower than Master, Inland Waters Steamship, and with two years' actual experience navigating in the District as Master or deck officer in a regular trader. The accepted candidates would have been required to undergo a two-year apprenticeship of practical training and make 100 trips each year through the District accompanying licensed pilots.

No agreement was reached at the meeting. On January 30, 1963, the Minister of Transport informed the pilots that, since a Royal Commission had been appointed to study all aspects of pilotage and would likely consider the problem of apprenticeship, he preferred to defer his decision because he did not wish to adopt any solution that would be contrary to the recommendations of the Commission. However, the pilots kept insisting on the implementation of the 1962 agreement (Exs. 807 and 1481).

Prior to the beginning of the 1965 season, a compromise solution, as noted earlier, was finally reached between the Shipping Federation and the pilots and concurred in by the Pilotage Authority. It consisted of a short term training system:

- (a) The By-law prerequisites would remain unchanged except that the selected candidates would become apprentices.
- (b) Apprenticeship would consist of a full season of practical training.

- (c) Trainees would be remunerated and a 3 per cent surcharge would be levied to finance this expenditure.
- (d) The pilots would handle the required financial administration and pay the remuneration of the trainees; they agreed to keep a separate accounting of the trainees' cost for the Department's inspection, if required (Ex. 1484(a)).

Although the amended apprenticeship scheme was implemented immediately, none of its features was incorporated in the By-law which remained unchanged as if the system had not been basically modified. It is reported that the 3 per cent surcharge was included in the 12 per cent surcharge that was introduced by the By-law amendment of June 23, 1965, but no mention was made of the fact that one-quarter of the money so raised was to serve exclusively to pay for the remuneration of the apprentices and subsec. 9(1), which provided that each pilot is entitled to receive all the dues earned by his services, was not even amended.

As a result of these arrangements, competitions were held and a number of candidates meeting the By-law requirement as to fitness, competency and experience were placed on the eligible list for apprentice appointment as required. In March 1965, five were successful in passing the examination. Three were appointed apprentice pilots immediately and the two others on August 27, 1965, and March 1, 1966, respectively. Another competition was held in March 1966: of nine applicants, four were successful. As of the end of the 1968 season, they all had become apprentices and only one had not yet been licensed as a pilot.

The apprentices were paid by the pilots a remuneration which in 1965 was set at \$4,928.50 annually, with an aggregate expenditure of \$14,413.00 for the four apprentices taken that year (Exs. 823 and 1540(n)).

COMMENTS

The problem of training pilots for pilotage in the Quebec and Montreal Districts bears no comparison with Cornwall. In the first two, the main navigational difficulties are caused by the physical features of the ship channel, stream and tidal currents and cross-currents, all compounded in adverse weather. Hence, extensive knowledge of local features and navigational conditions and wide experience of local navigation in these waters are essential for the safe, expeditious flow of maritime traffic. The absence of a sizeable group of qualified mariners possessing the required degree of local knowledge and experience made it necessary to introduce a comprehensive training system for selected young candidates.

In the Cornwall District, the difficulties caused by the special physical features of the ship channel are small by comparison; what is most important is a high degree of skill and experience in navigating narrow canals and

manœuvring in the locks. Fortunately, a large pool of qualified mariners possessing such experience exists, i.e., the Masters and mates of the laker fleet. However, they are not immediately prepared to navigate ships other than those of the type to which they are accustomed, and must become familiar with handling ocean-going vessels. Therefore, a period of practical training is indicated but merely to familiarize themselves with new types of ships, which should be a relatively brief period for qualified mariners. Whether they are called "trainees" or "learners", they are, in fact, apprentices.

As far as its recruiting and training programme is concerned, the Cornwall District has a marked advantage over the Quebec and Montreal Districts because there is a greater guarantee that candidates with higher qualifications will be available. In Quebec and Montreal, the absence of a sizeable pool of qualified mariners with actual experience in the District made it necessary to adopt the long term training programme where the first selection is made from young persons who have no other marine record and qualifications than their expressed desire to become pilots. Once they are chosen, the Pilotage Authority is committed to accept them as apprentices and eventually as pilots if they meet the prescribed minimum requirements.

It is inconceivable, however, that the Pilotage Authority never saw fit to give legislative effect to the sensible solution which had been arrived at after years of contention.

The Cornwall By-law does not provide for grading pilots' licences, except through granting a probationary licence to newly appointed pilots, and there appears to be no need for further grading. The one-year probationary period, which may be extended when indicated, should suffice to allow an accurate appraisal of a candidate's practical knowledge, navigational *expertise* and skill in manoeuvring ocean-going vessels. The regulations are deficient in that the probationary licence is unlimited as to competency. They should follow the procedure adopted in the grade system for Grade C pilots, since the probationary period is part of the practical training, and should provide for limiting competency to small vessels at first and then increasing it at the expiration of fixed terms, subject to satisfactory service. On the other hand, in view of the limitation on the size of vessels that can proceed through the locks and the trend to larger vessels, most of the present traffic consists of vessels of the maximum permissible size and there is no need for a small group of pilots selected to handle the larger ships. The occasional assignments of exceptional difficulty should be dealt with as cases of exception and the By-law should assert the right and duty of the despatching authority to depart from the *tour de rôle* in such cases and to designate for such assignments pilots with the greatest *expertise*.

(3) PILOTS' ORGANIZATION

Apart from their Pilots' Committee provided for in the District By-law, there is only one professional organization grouping the Cornwall pilots as such, i.e., the Corporation of St. Lawrence and Seaway Pilots (Ex. 806). As is the practice in other Districts, the Board of Directors of the Corporation becomes the Pilots' Committee, thereby achieving the desirable unity of professional organization (Part I, p. 549). Although there is no compulsion to join the Corporation and members may be expelled, the membership has always included all District licensed pilots.

This Corporation, created by letters patent granted April 19, 1956, under Part II of the Federal Companies Act, was the first professional pilots' corporation of that type and served as a model for the others (Part I, p. 87).

It was originally called the "Corporation of the St. Lawrence-Kingston-Ottawa Pilots"; since at that time it grouped the pilots of the former St. Lawrence-Kingston-Ottawa District. The name was changed by supplementary letters patent on May 23, 1961 (Ex. 806) following the abrogation of the former District and the division of its territory between the two Pilotage Districts of Cornwall and Kingston, the Canadian pilots of the Kingston District leaving the Corporation to form one of their own. However, the amendments to the charter did not go beyond changing the name with the result that the purposes and extent of potential membership no longer correspond to reality because they refer to the pilots of a Pilotage District that no longer exists. The purposes stated in the letters patent are reproduced *in extenso* in Part I, p. 87.

The Corporation's charter, by-laws and structure are in substance the same as those of other similar Corporations (*vide pp. 275 and ff.*); and like them it is purported to have full control over the pilots' earnings remunerating them through shares of the common fund after payment of Corporation and group expenses. A pilot, once a member, is supposed not to be able to withdraw from the Corporation of his own volition as long as he remains a licensed pilot, unless expelled by decision of the Board of Directors.

In 1958, pilot George Downey tried to withdraw but the Board of Directors refused him permission. At the same time, the Corporation instituted court action against him claiming the pilotage dues he had earned by his services and which had been paid directly to him by the Pilotage Authority. The case was settled out of court; pilot Downey voluntarily reimbursed the Corporation and the Corporation abandoned its suit. Pilot Downey, furthermore, abided by the Corporation's decision with regard to his membership and thereafter acted as a regular member of the Corporation.

To become a member, a pilot must sign an application form and also a power of attorney. (Ex. 815) which authorizes the Corporation to receive,

collect and claim all sums of money owing to the member in connection with his services as a pilot.

One main difference with the other Corporations is By-law No. 7, filed with the Secretary of State February 4, 1961, which, following the example set the previous year by the Corporation of the Montreal Harbour Pilots, established an initiation fee. Effective April 1, 1959, all new members are required to pay an entrance fee of \$1,500 in three equal yearly instalments into a special fund which, according to the By-law, can not be spent except as authorized by a resolution at a general meeting of the members. In fact, since 1962, revenue from this source has been fully expended each year toward administrative expenses.

(a) *Finance*

The financial operations and financing procedure of this Corporation are the same as those of the Montreal and Quebec Pilots' Corporations.

This Corporation was the first of its type. The pilots' aim was merely to adopt the pooling partnership and the professional organization of their *confrères* of the Quebec and Montreal Districts, but in a corporation rather than an association. At this stage the two legal entities, partnership and corporation under Part II of the Federal Companies Act, were confused, setting a pattern which was followed in the other Districts. The comments on p. 283, and in Part I, pp. 90 and ff., apply.

The method of financing the Corporation's administrative costs, the pooling system and the accounting procedure (including the format of the annual reports) are the same as for the Montreal Harbour Pilots' Corporation described on pp. 695 and ff. Sec. 37 of Corporation By-law No. 1 empowers the Corporation to raise dues from its members but, except for entrance fees provided for by By-law No. 7 of 1961, no use is made of this method of financing. Instead, as is the practice in other similar Corporations, the pilots' revenues are deemed to be Corporation revenues (By-law No. 2, secs. 1 and 6), out of which the Corporation's administrative expenses are paid, thereby avoiding the necessity to impose Corporation dues.

According to the Corporation By-laws, entrance fees are supposed to form a separate fund which can not be expended except as authorized by a special resolution of the Corporation's general meeting. Such a special fund was kept up to the end of the 1961/62 financial period when the Corporation ceased to represent the Kingston pilots, and was fully expended to meet the Corporation's operating expenses in equal shares for the Cornwall and Kingston pilots. Expenditures from that fund amounted to \$12,500 in 1962, \$9,680 of which was used to set up and organize the Corporation of the Kingston pilots. Since then, money collected from that source has been regu-

larly paid into the pool. For accounting purposes, it is shown as having been applied towards the payment of part of the Corporation's administrative expenses which are thereby indirectly shared among all the pilots.

The pooling procedure is the same as adopted by the Montreal harbour pilots. Pooling is based on dues earned. That portion of shares which remains outstanding at the end of the pooling period is remitted to the pilots as the unpaid dues earned during that period are collected.

In 1964, the financial year was made to coincide with the calendar year; until then it had ended February 28. Hence, the financial statement for the year 1964 covers only 10 months, March-December. This did not affect the revenues since there is no pilotage in January and February. The only difference is that the expenditures are slightly lower than they would normally have been since the limited administrative expenses for those two months were covered by the previous financial period.

The financial statement reflects the main differences in the operation of the pool. There are two pooling periods per financial year, each with its own pooling rules—the regular pool which extends from the beginning of the navigation season to Nov. 30, and the winter pool which extends from Dec. 1 to the close of navigation. Most of the administrative costs and group expenses are met from the regular pool. The only deductions for operating expenses from the winter pooling are the apprentice pilots' remuneration and the Secretary-Treasurer's percentage on earnings.

The small amount of administration connected with pooling and Corporation operations is not extensive enough to justify a full time staff. Substantial savings are effected by sharing the services of a part time Secretary-Treasurer with the Montreal Harbour Pilots' Corporation and the Kingston Pilots' Corporation. His personal insurance broker's office serves also as the office of these Corporations.

The annual financial report (Ex. 823) consists of three statements:

- (i) a balance sheet at the end of the financial year;
- (ii) a statement of receipts and disbursements for the financial year together with a supporting table giving details of the payments made to each pilot on his share from the current pooling and outstanding balances from previous distributions;
- (iii) a complete financial statement explaining the pooling operations with supporting documents.

The description of, and the information given with regard to, these three statements on pp. 697 and ff. apply here *mutatis mutandis*. The financial statement of 1968 (Ex. 823) is used on p. 942 to illustrate the process.

Study of Cornwall Pilotage District

The balance sheet as of December 31, 1968, showed the following assets and liabilities:

BALANCE SHEET

ASSETS:		
Money on hand and in the bank.....		\$ 21,284.52
Receivable accounts:		
From insurances.....	\$ 924.49	
From D.O.T.:		
1966 season.....	935.06	
1967 season.....	714.73	
1968 season.....	117,339.64	119,913.92
Total assets.....		<u>141,198.44</u>
LIABILITIES:		
Accounts payable for administrative costs (Secretary-Treasurer).....		5,498.98
Accounts payable to the pilots:		
Non-pooled money 1967 season.....	249.88	
Non-pooled money 1968 season.....	16,845.57	
Pooled money 1966 (reg. pool.).....	1,385.34	
Pooled money 1967 (reg. pool.).....	788.75	
Pooled money 1968 (reg. pool.).....	76,864.96	
Pooled money 1968 (winter pool.).....	39,564.96	135,699.46
Total liabilities.....		<u>141,198.44</u>

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

STATEMENT OF RECEIPTS AND DISBURSEMENTS

CASH ON HAND AND IN BANK, JANUARY 1, 1968.....		\$ 81,627.67
RECEIPTS:		
Receipts 1964 season.....	163.00	
Receipts 1966 season.....	896.64	
Receipts 1967 season.....	69,896.30	
Receipts 1968 season.....	505,517.36	
Free turns paid by Federation.....	198.40	
Other receipts.....	70.25	576,741.95
Total receipts.....		<u>658,369.62</u>

DISBURSEMENTS:

Administrative expenses:

Payment of outstanding accounts from the previous year including apprentice pilots' remuneration.....		5,825.26
Current costs including apprentice pilots' remuneration.....		26,327.88

Group expenses:

Federation fees.....	8,281.25	
Group insurance.....	24,365.25	32,646.50

Payments to the pilots:

Non-pooled money 1964.....	24.70	
Non-pooled money 1966.....	146.90	
Non-pooled money 1967.....	9,245.09	
Non-pooled money 1968.....	33,010.42	42,427.11
Regular pooling 1964.....	320.08	
Winter pooling 1964.....	260.00	
Regular pooling 1966.....	309.65	
Regular pooling 1967.....	105,569.68	
Winter pooling 1967.....	30,938.94	
Regular pooling 1968.....	392,460.00	529,858.35

Total disbursements.....		637,085.10
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Cash on hand and in the bank December 31, 1968.....		21,284.52
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The supporting tables give details of payments to each pilot or on his behalf during the year on what was owed him for the current pooling period and was outstanding from previous pooling periods.

The third document, the accounting statement of pooling operations, shows the pilotage revenues earned during the year (not collected), the amount paid to the Corporation by the Federation for free turns, the amounts paid by newly licensed pilots as initiation fees and the net amounts of the regular and winter poolings. It shows also the computation of the net value of the sharing turn in the regular pooling, and of the pilot day in winter pooling.

In 1968, the regular pooling net income amounted to \$76,864.96 entitling each pilot with constant availability to a share of \$13,796.80. The winter pooling net income amounted to \$39,564.96 entitling each pilot with constant availability to an additional share of \$1,084.96, making an aggregate revenue (or aggregate share) of \$14,881.76. The calculation of the net pooling income for both the regular pooling and the winter pooling was as follows:

Study of Cornwall Pilotage District

EARNINGS:		
1968 earnings.....		\$ 622,857.00
Free turns paid by Federation.....		198.40
Initiation fees.....		2,500.00
		<u>625,555.40</u>
<i>Main pooling:</i>		
<i>Non-pooled items</i>		
Detentions and cancellations.....	\$ 31,951.49	
Transportation expenses.....	14,820.36	
Expenses for administration (including apprentice pilots' remuneration).....	34,370.82	
	<u>81,142.67</u>	
<i>Net pooling</i>		503,676.73
<i>Winter pooling:</i>		
<i>Non-pooled items</i>		
Administration including (apprentice pilots' remuneration).....	1,171.04	
<i>Net pooling</i>	<u>39,564.96</u>	
		625,555.40

The net value of the turn (\$198.28) and of the pilot day (\$72.38) was arrived at by dividing the net pooling amount by the number of sharing turns (2540.14) for regular pooling and by the number of pilot days (547) for winter pooling.

A supporting table shows how much of the net pooling income was paid to, or on behalf of, the pilots and how much was outstanding on Dec. 31. A breakdown per pilot is given in addition to aggregate amounts. For 1968, this was shown as follows:

REGULAR POOLING NET:		\$ 503,676.73
<i>Payments made</i>		
On behalf of the pilots		
Insurance.....	23,570.52	
Federation fees.....	8,281.25	
Initiation fees.....	2,500.00	
	<u>34,351.77</u>	
To pilots.....		392,460.00
Balance of net pooling outstanding as payable accounts to the pilots.....	<u>76,864.96</u>	
		<u>503,676.73</u>
WINTER POOLING NET:		39,564.96
<i>Payments made</i>		
On behalf of pilots.....		nil
To pilots.....		nil
Balance of net pooling outstanding as payable accounts to the pilots.....	<u>39,564.96</u>	
		39,564.96

For comparative purposes and also to establish the real cost of administration, the following table computed on the basis of liabilities (not expenditures) shows for the years 1961 to 1969 the pool liabilities for group expenses and administrative expenses, and the total administrative costs, which figure is arrived at by adding to administrative liabilities the value of free turns granted the Directors.

CORNWALL PILOTS—POOL LIABILITIES AND ADMINISTRATIVE COSTS

Year	Pool Liabilities		Administrative Costs		
	Total Prior to Distribution	Other than Administrative Liabilities	Liabilities	Value of Free Turns to Directors	Total
1961.....	\$23,807.86	\$17,392.42	\$ 6,415.44	\$ n/av.	\$ n/av.
1962.....	25,515.30	17,084.92	8,430.38	n/av.	n/av.
1963.....	38,734.78	26,972.54	11,762.24	n/av.	n/av.
1964.....	37,633.06	24,054.32	13,578.74	n/av.	n/av.
1965.....	55,528.98	40,018.36	15,510.62	3,202.26	18,712.88
1966.....	60,758.00	41,325.12	19,432.88	2,025.73	21,458.61
1967.....	64,970.65	42,504.21	22,466.44	3,861.69	26,328.13
1968.....	67,393.63	44,266.77	23,126.86	3,965.60	27,092.46
1969.....	57,942.99	39,517.30	18,425.69	2,087.20	20,512.89

SOURCE: Ex. 823.

The administrative liabilities as well as the other deductions from the pool prior to sharing have increased considerably over the years. In order to ascertain the cause of such an increase, the Corporation's administrative and group liabilities for the years 1962 and 1968 broken down by items are compared in the following table. The year 1962 was chosen because 1961 was a year of transition when the Kingston pilots left the Corporation to form their own and, hence, was not sufficiently representative.

	1962	1968
ADMINISTRATIVE LIABILITIES		
Secretary-Treasurer's remuneration..	\$ 3,200.00	8,998.98
Legal fees.....	1,450.00	8,757.50
Meeting expenses.....	489.01	118.95
Convention expenses.....	529.03	548.36
Stationery.....	348.70	220.75
Telephone and telegraph.....	—	23.95
Postage.....	—	89.31
Bank charges.....	—	72.29
Christmas gifts and flowers.....	559.74	793.52

Study of Cornwall Pilotage District

	1962	1968
Audit.....	387.50	710.00
Miscellaneous.....	51.40	5.00
Directors' indemnity for detention losses.....	—	450.00
Directors' expenses.....	1,415.00	2,338.25
	8,430.38	23,126.82
POOL LIABILITIES OTHER THAN ADMINISTRATIVE		
Insurance premiums.....	10,684.92	23,570.52
Federation and Guild fees.....	6,400.00	8,281.25
Apprentice pilots' remuneration.....	nil	12,415.00
	17,084.92	44,266.77
Total disbursements from the two pools prior to distribution to pilots.....	\$25,515.30	\$67,393.63

The 159 per cent increase in "pool liabilities other than administrative" in 1968 over 1962 is mainly accounted for by an item added in 1965, i.e., the apprentices' remuneration which the pilots had undertaken to pay from their own earnings and in consideration of which a 3 per cent general increase in rates had been embodied in the tariff (vide p. 937). This item of expenditure, which was \$14,413 in 1965, has been decreasing slightly since and was only \$10,359.50 in 1969. Federation and Guild fees have remained relatively constant throughout the years with a peak in 1963, probably on account of the extra cost resulting from the considerable participation of the Guild and the Federation in the hearings of this Commission. In 1969, this item was \$6,562.50, almost back to the 1962 level despite the fact that there was a slight increase in the number of pilots. On the other hand, the group insurance premiums have more than doubled because of increased coverage and additional benefits. The compulsory group insurances provide for medical and hospitalization coverage; life indemnity of \$10,000 with double indemnity in case of accidental death; indemnity for loss of earnings; \$300 per month up to 65 years of age in case of illness and for life in case of accident, the benefits to continue whether the pilot has lost his licence due to illness, injury or physical incapacitation, provided the cause of the cancellation of the licence is neither misconduct nor abuse of alcohol.

In the "administrative liabilities", which had increased by 174% in 1968 over 1962, the most significant increases occurred in the Secretary-Treasurer's remuneration and legal fees. The Secretary-Treasurer is remunerated by a percentage of dues collected. The percentage, which was originally fixed at 1 per cent, was raised to 1½ per cent in 1966 and 1¾ per cent in 1968 with

a maximum of \$9,000. In addition to his services, the Secretary-Treasurer provides the use of his personal office and office equipment rent free. Legal fees now reflect the considerable negotiations that the pilots have to carry out every year with the shipping interests and the Pilotage Authority in order to promote their interests in the present labour-oriented pilotage organization where they have the ambiguous status of quasi-employees. This item is not likely to decrease unless the field of negotiation is limited to salary or target income and working conditions. It will be further decreased if the Commission's General Recommendation 19 is implemented.

During their full season of practical training the apprentices are paid the remuneration which the pilots as a group have undertaken to pay. This liability was taken into consideration when the pilotage rates were fixed (vide pp. 936-7).

The Corporation's bookkeeping is audited and the annual financial statements are certified by a firm of chartered accountants. Since the Corporations of the Montreal harbour pilots and the Cornwall pilots both employ this firm and have the same Secretary-Treasurer, the bookkeeping practice and reporting procedure are similar.

The comments on pp. 289 and 290 apply *mutatis mutandis*. For the study of the pooling procedure and the Commission's comments, vide pp. 977 and ff.

(4) LEAVE OF ABSENCE

The applicable legislation treats the pilot for absence and leave purposes as if he were a private entrepreneur with no regular periodical holidays or annual vacations. Leave is automatic when the reason for absence is physical incapacitation due to illness or injury, the only requirements being that the District Supervisor be informed as soon as the pilot becomes unavailable and a medical certificate be furnished by the pilot's own physician if the absence lasts more than six consecutive days. The Supervisor may require the medical certificate to be verified by a medical officer appointed by the Authority. The pilot may absent himself at any time for any reason, the only requirement being the Supervisor's authorization. Although the By-law does not establish a criterion for the exercise of this power, it is apparent from the context that the only considerations are the existing and expected requirements for service. If a sufficient number of rested pilots are available to handle the expected demand, the Supervisor must grant permission. The sections dealing with the assignment of pilots do not provide an equalization procedure but merely state that the pilots are to be assigned in regular turns as their names appear on the assignment list. Since the pilots' remuneration consists of the dues they have earned by their services, all absences mean the loss of the revenue they would have earned if they had not been absent.

The actual situation is, however, basically different in that through private arrangements between the pilots and the Pilotage Authority their remuneration is in effect a share of the common earnings, the tour de rôle is governed by the equalization of turns principle (which, however, is realistically limited to availability) and the pilots enjoy a compulsory summer holiday.

The equalization principle is not applied to turns missed during the period of absence, whatever its cause, with three exceptions (By-law No. 2, subsec. 13(b) as amended by By-law No. 14 in 1965):

- If the absence was rendered necessary by the death of a member of the pilot's family, he is granted four days' absence; if the deceased was of the pilot's immediate family, this absence is counted as time available and he is granted two turns on the despatching list, thus freeing him from the necessity of catching up lost turns which carry full sharing privileges; if the deceased was an in-law, the absence is also considered time available but no turns are granted and the pilot must make up his lost turns to avoid losing their value.
- Between April 1 and Nov. 15, a pilot is entitled to three days' absence which he may take together or separately as he wishes, provided the Supervisor's permission is obtained previously; the days count as duty time; no turns are granted and equalization applies.
- Free turns are granted for attending to Corporation business (see pp. 978-80).

In all other cases, equalization does not apply and absence means a pecuniary loss, unless an indemnity is provided in the various insurance coverages to which the pilots subscribe. The pilot is credited for the first three days of such absence for despatching list purposes only (so as to prevent equalization from applying) one half turn per day, and for the remaining days of absence the average number of turns completed by pilots with constant availability.

This rule, which is necessary to prevent the abuses of the unlimited application of the equalization of turns principle, was adopted for the first time in 1957 by the pilots of the former St. Lawrence-Kingston-Ottawa District. It was only in 1961 that a similar rule was adopted by the Corporation of the Mid-St. Lawrence pilots (vide p. 722) and it has not, as yet, been adopted by the Quebec District pilots (vide pp. 308 and ff. re the unsatisfactory situation that has developed on account of the absence of this realistic rule).

(a) *Absence due to Illness or Injury*

Leave of absence due to illness or injury is automatically granted but the Supervisor verifies whether the cause is legitimate. It is the practice to require a medical statement whenever absence is expected to last more than a day. If the statement does not indicate the probable duration, the Supervisor ascertains this information from the physician.

Turns lost due to illness or injury can not be recovered and the pilots' own pooling arrangements do not provide for indemnity turns. However, the Corporation has arranged that its pilots receive adequate protection against loss of earnings through compulsory group insurance protection which provides a fixed benefit per day of absence from pilotage duty, in addition to medical, hospitalization and life indemnity coverage (By-law No. 9 of 1963). Premiums are a group expense and not an administrative expense. Since hospital and medical coverage varies depending whether a pilot is married and has children, the premiums vary. They are deducted at source from each pilot's share in the pool.

(b) *Periodic Holidays*

The Cornwall pilots have not adopted the system of recurring holidays during the navigation season. Since there is no navigation in the winter months when the Seaway is closed, this period serves as an extended annual holiday and, in addition, each pilot takes a 10-day (originally one week) holiday during the summer months according to a pre-arranged schedule drawn up by the Corporation's Board of Directors (Ex. 721). The schedule is so arranged that no more than three pilots are on leave at the same time during that period. For despatching purposes, four turns are granted to prevent the equalization of work; these turns, however, are deducted at the end of the year for pooling purposes.

(c) *Absence to Attend Board Meetings and Transact Other Corporation Business*

By exception, the Cornwall pilots not only do not suffer any pecuniary loss for turns missed to attend Board meetings or transact other Corporation business but they are given a monetary return in addition to the allocation of free turns. Section 12 of Part I of the Corporation By-laws provides that, in addition to the reimbursement of their travelling expenses and other expenses incurred to attend Board meetings, they are to be paid a fixed monetary indemnity which the Board determines by mere resolution. At the time of the Commission's hearings, the monetary return amounted to \$20 attendance fee for the Chairman and Vice-chairman and \$15 attendance fee for the other Directors. The 1968 annual statement indicates that, for that year, the Directors were paid instead \$90 each for a total of \$450 as an indemnity for their loss of non-pooled revenues, i.e., detention dues (vide

Table, pp. 945-6). In 1969, however, it appears that the Directors received no pecuniary indemnity except the usual reimbursement of their expenses which amounted to \$1,872.80 as compared to \$2,338.25 in 1968. They are also granted one half free turn (between 1961 and 1964, one free turn) for each day or fraction of a day of absence for such a meeting (By-law No. 2, sec. 13 as amended in 1965), while the actual number of turns missed on those occasions is never more than a fraction of a turn per day. Although free turns carry pooling rights, they do not net the pilot concerned a greater share of the pool on account of the equalization system but he will enjoy a longer period of rest between assignments.

The table on page 980 shows the number of free turns credited since 1960.

(5) DISCIPLINE

The pilots in the Cornwall District may incur disciplinary action for infractions of either the pilotage regulations or the Seaway Regulations.

The legal situation respecting pilotage offences is the same as in other Districts, i.e., the Pilotage Authority purports to have judicial power and exercises it following the same procedure (vide Part I, C. 9).

The District Supervisor testified that he had no difficulties with discipline and had never received any report about any District pilot being under the influence of liquor when reporting for duty. Fines are occasionally awarded.

The Seaway Authority has no disciplinary jurisdiction over the pilots—nor over Masters and ships' officers—for violations of the Seaway Regulations. To prosecute a pilot for such a violation the procedure would be the same as when the prosecution is directed against the Master or an officer of a ship, i.e., by laying a charge before a regular penal tribunal. The Seaway Authority's policy, however, has always been to take proceedings against the ship or the Master (even when a pilot might have been to blame) acting on the premise that there is a *prima facie* case against the Master and the onus rests on him to show that the pilot was to blame. This defence has never been raised. In the opinion of the legal counsel of the Seaway Authority, sec. 16(2) of the Seaway Regulations is wide enough to authorize the direct prosecution of a pilot offender. This section provides that a person is guilty of a violation "who handles any vessel contrary to the provision of these Regulations or any directions of the Authority or of an officer given under these Regulations", who is a party to any such violation (Ex. 1335).

(6) SHIPPING CASUALTIES

(a) *Reports and Investigations of Shipping Casualties*

Shipping casualties occurring in the Cornwall District as *de facto* extended to the Snell lock and involving a pilot may concern not only the

Pilotage Authority, the Minister of Transport, the American Coast Guard and the Canadian or American Seaway Authorities, depending where the casualty occurred. The investigatory and remedial powers of each of these authorities are limited because their restricted territorial jurisdiction has not been extended (as it should have been) by an international agreement between the United States and Canada to cover the common waterway. The result is the present unsatisfactory situation where none of these authorities can carry out a complete and proper investigation and, in any event, would be powerless to take the proper remedial action.

When an incident occurs in the area under the authority of the Seaway, the Seaway Authority carries out its own investigation. Such an investigation is effected immediately, first, by the seaway employee in charge of the bridge or lock involved and, second, if the accident is serious, by the Canal Superintendent of the area. This is merely an administrative investigation to determine the cause and what immediate measures are required. The Canal Superintendent takes steps to have the other Seaway traffic in the vicinity warned immediately of the situation, and then advises his head office to permit them, *inter alia*, to arrange for immediate repairs to the Seaway facilities if needed. In the case of an accident involving Seaway property, if the accident is of a minor nature, the ship will be allowed to proceed; otherwise, the ship is delayed and a full investigation held. The Seaway Authority's purpose is not to find whether or not the pilot may have been to blame, but to gather the necessary proof to enable recovery from the ship of the damage she has caused.

The same casualty may or may not be investigated by the Pilotage Authority and/or by a Court convened by the Minister of Transport under Part VIII of the Canada Shipping Act. At the time of the Commission's hearings, the representative of the Seaway Authority, Mr. R. J. Burnside, stated that to his knowledge the Seaway Authority had never been requested to participate in any such investigation or Court of Inquiry. The practice has been for the Pilotage Authority merely to carry out an informal administrative investigation, during which the Seaway Authority may be asked to make available the information it has obtained in the course of its administrative investigation.

As in the case of port authorities in other Districts, the Seaway Authority felt that there would be an advantage if better liaison could be developed without interfering with the respective fields of administrative jurisdiction.

Shipping casualties in U.S.A. waters involving a Cornwall pilot reveal a disturbing situation. The area involved lies between St. Regis and Snell lock where only the United States Coast Guard has the power to undertake a full investigation. This may be followed by a sanction against the ship involved, but the Coast Guard has no power to take any disciplinary or

remedial measure against a Canadian pilot for an act committed in U.S. waters. The procedure has been for the U.S.C.G. to conduct an investigation and invite a representative of the Pilotage Authority if the case involves a Canadian pilot. Following the investigation, the U.S. authorities formulate an opinion as to the cause of the accident and communicate their findings to the Canadian authorities for any action they may wish to take.

At the time of the Commission's hearings, the Department of Transport had a record of only two such casualties involving Cornwall pilots in U.S. waters and in neither case was the pilot to blame. The first occurred on May 8, 1962, and involved S.S. *Polyktor* while upbound. It appeared from the investigation that the pilot had recommended the ship be ballasted but the Master thought this could not be done in time. As the ship approached Snell lock a gust of wind caused the ship to sheer, with the result that she sustained a dent in her bow on contact with the lock. The second instance occurred October 29, 1962, and involved the U.S. ship *Captain Nicholas Sitilas*, also upbound. On her approach to Snell lock, she was caught in a gust of wind and, despite the pilot's efforts, went ashore on a mud bank. No inquiry was held by the Canadian authorities into these casualties other than the normal questioning of the pilots.

On August 28, 1967, M.V. *Solny* grounded in fog near St. Regis in U.S. waters without suffering any apparent damage. This incident was investigated by the U.S. Coast Guard. Apparently, no blame could be attached to the pilot since nothing was heard from the U.S. authorities (Ex. 1539(q)).

(b) *Remarks on Shipping Casualties*

The types and causes of the various shipping casualties in which Cornwall pilots are involved clearly reveal the different nature of their pilotage service and where the difficulties mainly lie. Any problems created by the physical features of the channel or by currents are relatively easy to overcome and, therefore, there are very few shipping casualties while under way in the channel. Those that do occur are usually caused by loss of control due to bank suction, touching bottom or collision or grounding resulting from lack of visibility in fog. The greatest hazard occurs while handling ocean-going vessels approaching the locks at slow speed when they have almost no steerage-way and must manoeuvre under their own power without tugs. The risk is increased in adverse winds, especially if a ship is in ballast.

Appendix A is a table of casualties, accidents and incidents involving Cornwall pilots which are reported as shipping casualties as the term is defined by sec. 551 C.S.A. for the period 1959-1968. It also contains a detailed analysis of the cases, their nature and the causes for the years 1964 and 1967. Reference is made to Part II, pp. 88-90 for the definition of the method of classification of so-called shipping casualties used in this Report.

Since the creation of the Cornwall District Nov. 17, 1960, there has been no Formal Investigation or Inquiry under sec. 579 C.S.A. into a shipping casualty involving a Cornwall pilot.

There was only one Preliminary Inquiry. It concerned the collision between the motor vessels *François L.D.* and *Mantadoc* at approximately 0606, November 10, 1968, in the Beauharnois Canal about $6\frac{1}{2}$ cables east of Valleyfield Bridge. Both vessels sustained extensive damage but there was neither loss of life nor injuries. *François L.D.*, a 617-ft. ocean-going bulk carrier with bridge aft, was downbound with a pilot on board and *Mantadoc*, a 608-ft. lake vessel with bridge forward, was upbound without a pilot. The two vessels had known long in advance that the other was in the vicinity and where and when they would meet because they had been informed by the Seaway Traffic Controller, had located each other on radar and had established contact by radiotelephone. A few minutes before they were to meet, visibility deteriorated rapidly but each vessel was seen clearly by the other on radar. Both vessels began fog signals, reduced speed and maintained radiotelephone contact. When they made visual contact they were on a collision course which could not be corrected by last-minute manoeuvres. The collision completely closed the St. Lawrence Seaway to shipping for fifteen hours, and for another $18\frac{1}{2}$ hours traffic was restricted to vessels drawing no more than 18 feet.

At the time of the collision, visibility was reduced to between 100 and 200 feet and it appeared that *Mantadoc* was on the wrong side of the channel, slightly south of the centre line. The Preliminary Inquiry Report (Ex. 1539(q)) states that the principal cause of the accident was the unexpected presence of a bank of fog across the Canal. This, however, was not the cause of the accident but an accompanying circumstance: the cause was obviously failure on the part of one of the vessels, presumably *Mantadoc*, to keep to the proper side of the channel. The fact that fog prevailed is completely unacceptable as an excuse. The sudden appearance of a small patch is always a possibility with which experienced mariners should be able to contend, especially in a straight canal well marked by buoys which show up on radar and with neither cross-currents nor contrary winds to affect steering. If this is not a statement of fact, vessels should be prohibited from meeting in canals during fog unless they can be guided by instruments. It would appear, however, that it is normal practice to pass in fog. In this case, both the pilot in *François L.D.* and the two Masters were quite confident of their ability to meet without danger despite the visibility, which probably explains why they did not reduce speed further. The evidence indicates that the real cause of the accident was apparently human error on the part of the Master of the *Mantadoc*, which seems to have been the conclusion that was reached since the matter was not pursued further as affecting the safety of navigation (Ex. 1539(q)).

5. PILOTAGE OPERATIONS

(1) BOARDING AREAS, PILOT STATIONS AND PILOTAGE OFFICES

Almost all maritime traffic is transit traffic: the Cornwall pilots embark at one end of the District and disembark at the other. Hence, a boarding area has been established at each end near the District limits where it is most convenient and economical for both pilots and vessels. The obvious location was the nearest lock where ships can be boarded either at the wait wall or in the lock. This procedure eliminated the need to establish and maintain pilot vessel service at the western end of the District which, in addition to the high cost involved, would have created a serious danger for ships because they would have been obliged to reduce speed for the pilot vessel at the expense of manoeuvrability in a narrow channel.

The two boarding areas are the St. Lambert lock site (vide pp. 903-4) and the Snell lock site which is well outside the western limit (pp. 899-900). As stated earlier, this situation should be corrected by extending the Cornwall District to include Snell lock. Furthermore, each boarding area should be made joint territory with its respective adjacent District (Part I, p. 480, Gen. Rec. No. 9; also Part IV, Rec. No. 1).

In addition, pilots may board and disembark at any port or landing place within the District, mainly Valleyfield, Côte Ste-Catherine wharf and Cornwall.

In both boarding areas the pilots are provided with a pilot station which, however, merely serves as a waiting room until ships arrive. The stations are provided with a direct telephone line to the pilotage office to enable the pilots to report and obtain the latest information on traffic, weather and other matters affecting safety. The Cornwall pilots share these facilities with the pilots of the adjacent Districts.

The pilots' accommodation at Snell lock consists of the former office of the Secretary of the United States Seaway Authority near the lock which became vacant when the U.S. offices of the Seaway administration were transferred to Massena. The whole building was transformed into a waiting room for the pilots; chairs and settees were provided so that the pilots could rest while waiting for their ships.

The pilots' accommodation at St. Lambert lock consists of a building erected for the purpose by the Department of Transport in 1964 on the St. Lambert side. A long and unnecessary dispute ensued between the pilots and the Department of Transport before this facility was provided. It was the subject of a specific recommendation by the pilots in their brief to this Commission because proper facilities had not yet been provided.

The necessity for such facilities had been overlooked in the reorganization of the pilotage service to meet the new requirements resulting from the

opening of the Seaway. St. Lambert lock, was considered merely another boarding place within the harbour of Montreal to which the pilots could be despatched from their residence but, the situation was basically different because the distance to be travelled was greater and the chances of delay were increased. Furthermore, while the occasional case of a pilot reporting late anywhere else in the harbour meant only delaying a ship, at St. Lambert lock it meant stopping the lock operations. Hence, it was necessary for the required pilots to be on hand when the ships to which they were assigned arrived and no chances could be taken that they would arrive late. Under these circumstances, it was obvious that they must have adequate shelter while waiting. In addition, St. Lambert lock was a unique boarding place since the Montreal and Cornwall pilots changed over there.

Shortly after the opening of the Seaway in 1959, the pilots realized the situation and requested appropriate facilities in the immediate vicinity of the lock. This was one of seven demands contained in a memorandum addressed to the Pilotage Authority and jointly presented by the Corporation of the St. Lawrence-Kingston-Ottawa Pilots and the Corporation of the Montreal Harbour Pilots (vide p. 981). They threatened to resort to strike action, i.e., to hold a general meeting to consider the situation, if a solution to this problem had not been reached and their other demands met by June 19. By June 17, the pilots were given the assurance that a trailer would be provided as a temporary measure and this was done shortly afterwards.

No further action was taken until the pilots complained in 1963 that this temporary accommodation was not suitable and, furthermore, was poorly located since it was on the Montreal side of the canal while they were boarding on the St. Lambert side which they could not reach when the lock was open. The pilots urged that proper facilities be erected on Seaway property near St. Lambert lock. The Seaway Authority favoured this recommendation, its only condition being that the construction be in conformity with the buildings already there.

The consultant firm, G.T.R. Campbell and Co., which had been commissioned in 1963 to study the problem of changing pilots at St. Lambert lock, made a recommendation along the same lines, i.e., that a regular "pilot station house" be erected there providing living quarters for a pool of Cornwall pilots who would man the station on a round-the-clock basis to ensure their constant availability, or alternatively, if the pilots continued to be despatched from their residence, that the existing trailer accommodation be replaced in the lock area by a more suitable permanent structure with proper facilities. In both cases, direct communication with the despatching office was to be provided (Ex. 917, p. 77).

From the beginning, the Department of Transport had been agreeable to the construction of a new building and had included the necessary funds

in their estimates each year but did not obtain approval until 1964. The pilots were then informed that the building would be constructed and finished by the end of the year. However, they were not satisfied and in a letter dated May 25, 1964, asked that the trailer be moved to the St. Lambert side of the lock until the completion of the building. At first, the Department did not concur because the cost involved was deemed unjustifiable in the circumstances. On September 10, 1964, in a letter to the Minister, the President of the Pilots' Federation stated that, in the circumstances, after October 1, 1964, in case of bad weather, if the pilots were not provided with an adequate temporary shelter as requested, they would wait at their residence and would report only when vessels were ready to receive them on board. A compromise was reached when the pilots agreed that the trailer would be moved to the St. Lambert side but without new lines for public services. The trailer was accordingly transferred on September 24. The new building has been erected since. The pilots now have proper waiting facilities and a telephone line to the despatching office. However, the despatching system has not been changed and, as a result, the problem of ensuring the availability of assigned pilots at the right time has not yet been completely resolved (vide pp. 755 and ff.).

In addition, both at Montreal and Cornwall, the pilots are provided with waiting facilities at the pilotage offices. In practice, the Cornwall pilots who reside in Montreal do not normally use the Montreal pilotage office facilities but proceed to assignments from their residence. However, when they are in Cornwall awaiting a return assignment, they generally call at the pilotage office.

(2) PILOT VESSEL SERVICE AND LAND TRANSPORTATION

Under the present arrangements, there is no pilot vessel service (and none is necessary) in the Cornwall District as *de facto* extended to Snell lock. The pilots board and disembark in the lock or at an approach wall. There is no necessity for a pilot to do so in mid-stream, except on the rare occasions where a ship has remained at anchor for a considerable period of time, because he is normally required to remain on board and the tariff provides a detention charge for such idle time. If a pilot has to be transported to or from a ship at anchor, the necessary arrangements are made by the ship.

Both St. Lambert lock and Snell lock are so located that they are not serviced by regular public carriers and, therefore, the pilots have to use taxis or private cars. At Cornwall, the Pilotage Authority has arranged for taxi service at a fixed price. Similar arrangements have not been made for transportation to or from St. Lambert lock, probably because, in contrast with the situation at Cornwall, the difference between the distance to be travelled

by the pilots varies so widely in Montreal on account of the size of the city. There, the pilots make their own arrangements and are reimbursed a uniform travelling allowance fixed in the District By-law.

The necessity for resorting to compulsory taxi service at Cornwall arose because trip rates had not been legally established in the tariff and abuses resulted. To ensure uniform charges for the same service, pilotage rates must be fully established by legislation and no item can be determined unilaterally by a party to the contract (Part I, p. 134 and pp. 149 and ff.). The tariff provided (and still provides, p. 976) that, in addition to the trip charge, the ship should be charged the pilot's actual travelling expenses, irrespective whether boarding or disembarking occurred at a regular pilot station or at an intermediate boarding location. Hence, the claims for the same one-way trip to or from Snell lock differed substantially. An equitable solution was reached by awarding a contract to a taxi firm which undertook to provide the necessary transportation on a 24-hour basis for prices fixed in the contract and these in turn were to be charged to the ship as pilotage dues. In this way, a reasonable price is obtained and the pilots are never out of pocket, contrary to the allowance system that had to be adopted for transportation to and from St. Lambert lock. The St. Lawrence-Kingston-Ottawa pilots, however, reacted irresponsibly to this equitable solution by refusing to disembark at Snell lock. A three-week stoppage of work ensued but the pilots finally decided to accept the new system and returned to work (for details, vide pp. 891-2).

The taxi service between Snell lock and Cornwall has functioned ever since, and during the Commission's hearings the pilots stated that it was very satisfactory. The service is also available to the Canadian pilots of the Kingston District. The taxi which brings a pilot to the lock generally waits for the pilot being relieved for the return trip to Cornwall. The 22-mile trip takes about 40 minutes. The American pilots working in the Kingston District proceed instead from or to Massena and have their own arrangements.

The contract for this taxi service is awarded for a fixed term. Tenders are called through newspaper advertisements (for an example of such a contract, vide Ex. 845, *Contract Between Her Majesty The Queen and Veteran's Modern Cab Company* for the navigation seasons 1963 and 1964). The current charges are \$4.70 for each one-way trip with a pilot, \$2.50 for each additional pilot and \$2.30 for each trip when no pilot is carried. Thus, if a Cornwall pilot is ordered for a downbound ship and relieves a U.S. pilot at Snell lock, the ship pays \$7.00 for transportation. If the Cornwall pilot relieves, or is relieved by, a Canadian pilot, the charge is \$4.70; the other \$4.70 is not charged to the ship because travelling costs are not part of the Kingston District pilotage dues. Taxi fares for both Cornwall and Kingston pilots are paid to the company by the D.O.T. representative in Cornwall.

Those on behalf of the Kingston pilots are entered as operating expenses of Great Lakes District No. I, i.e., are paid from the Canadian share of the net operating income of that District. Pilotage dues for the travelling expenses of Cornwall pilots between Snell lock and Cornwall are paid when collected to the Receiver General of Canada to compensate for their taxi fares. Neither the Cornwall pilots nor their Corporation has any hand in the transaction (vide pp. 976-7 for comments from the tariff point of view).

(3) TUG ASSISTANCE

The transit of the Seaway is effected without tug assistance. When such assistance is needed due to special circumstances, the necessary arrangements are made in advance by the Master or the ship's agent with a commercial firm. The Seaway Authority will take the initiative in ordering tugs if it is considered necessary for the safety of Seaway installations or to prevent operations being unduly impeded. The Seaway has small tugs for moving their equipment in connection with repairs and maintenance but they are not of sufficient capacity to assist large vessels.

(4) DESPATCHING PROCEDURE

As in other Districts, the section of the By-law governing assignment to duty deprives the Cornwall pilots of freedom to enter into pilotage contracts and makes them *de facto* employees of their Pilotage Authority by providing that they shall not undertake to perform any pilotage service except as directed by the Pilotage Authority's local representative, the District Supervisor. It is a pilotage offence for a pilot to take an assignment that has not been assigned to him by the Supervisor or to refuse one given to him by the Supervisor if he is, or ought to be, available.

The By-law provides that despatching is to be effected according to a regular tour de rôle, i.e., in regular turns as names appears on the assignment list, and not, by contrast with the corresponding regulations for the Districts of Quebec and Montreal, following the equalization of trips procedure. Pilots are to be despatched one at a time, except for a tug and tow composite navigation unit, or during the so-called winter season, in which cases two pilots are to be assigned together. A pilot is to report to the pilotage office his time of departure for the vessel to be piloted and the time when the assignment is completed. It is the pilot's responsibility prior to proceeding on an assignment to obtain from the pilotage office up-to-the-minute information regarding matters affecting the safety of navigation. In other words, the legal position is exactly the same as provided for in the By-laws of other Districts except for the operation of the tour de rôle.

However, although there are no particular reasons to do so except to follow the procedure adopted by the pilots in the other St. Lawrence Districts,

the Cornwall pilots succeeded in having their tour de rôle operated according to the equalization of trips system. There are no pilot grades except the limitations of probationary licences. The great majority of trip assignments are full transit trips, all calling for exactly the same pilotage charge. The only consequence for the Cornwall pilots of applying this system (apart from the complicated despatching procedure which ensues) is that the pilot who happens to have a number of assignments which last longer than the average because of adverse weather conditions, delays at the locks or delays *en route* is required to spend a larger aggregate number of hours on duty than his more fortunate colleagues who happen to have fast trips but, as a result of their private pooling arrangements, receives exactly the same share of the pool for similar availability.

As in the other St. Lawrence Districts, the assignment of pilots was detailed in written rules drawn up by the pilots and validated by the Supervisor. These standing orders are amended from time to time as required (Ex. 744).

(a) *Assignment List*

The pilots are despatched on one-way trips and must remain on board, even if the ship stops *en route*, unless she berths and remains for over eight hours, in which case they are entitled to disembark. Upon completion of a transit, a pilot becomes the despatching responsibility of the station where he arrives and his name is placed at the bottom of the list.

Probably because all the pilots reside in Montreal, the equalization procedure does not apply to the assignment list at the Cornwall station, with the result that pilots high in turns are never kept idle there while those who are low in turns catch up. The equalization system applies only at their base where they can spend the resultant waiting time at home. The assignment list at Cornwall is operated on a strict tour de rôle basis.

At the Montreal station, the equalization of turns is effected daily at 9 a.m. for the pilots who arrive between noon and midnight, and at 9 p.m. for those who arrive between midnight and noon. Since the equalization procedure applies only to periods of availability, the list is prepared by granting the average number of turns performed during periods of absence, or one half turn per day or fraction of a day if the absence was on Corporation business.

A period of absence is counted from the moment a pilot was first taken off the list at his own request until he returns and performs an assignment; intermediate periods of availability do not count if no assignment is performed. The ten-hour rest period is compulsory unless the Supervisor directs otherwise. The purpose of this rule is doubtless to avoid the situation that occurs at times at Les Escoumins, i.e., when there is a shortage, a pilot who

has just arrived may decide to proceed without the proper rest and is permitted to do so because the rest period is not compulsory in the Quebec District (vide p. 435).

(b) *Transfer of Pilots*

As in the other St. Lawrence River Districts, when there is a shortage of pilots at one station, the necessary number will be transferred by land from another station.

When a request for a transfer of pilots is received, they are chosen in the order they appear on the assignment list, beginning with the second.

Except at the beginning and end of the season, it is only occasionally that a pilot is called to report by land either to Montreal or Cornwall. However, during spring and fall when the traffic is mainly in one direction, the pilots have to travel by land to meet the demand.

A pilot may, at his own request, be transferred from one station to another provided he is not among the first five on the assignment list and makes his request during his ten hours of rest. This pilot, however, will be the first to return by land to the station he left if this station requests a transfer of pilots within 24 hours.

At the Cornwall station, the pilots who arrive from an assignment after their ten-hour rest period will be given precedence on the list over those who have transferred there voluntarily by land.

(c) *Change of Turns, Cancellations and Missed Turns*

A pilot who misses a turn is taken off the list and his case is referred to the Supervisor for investigation.

The liberty to change turns is very limited. It must be between pilots who have had their ten hours' rest, with a difference in turns of not more than one, or among pilots with equal turns after November 15. A pilot who has exchanged turns may not exchange turns again before he has performed an assignment.

A pilot may not delete his name from the list at his own volition but deletion is automatic when he is ill or fails to report. His request, however, may be granted by the Supervisor for cause. The minimum period off the list is 24 hours.

In the case of a cancellation, the pilot is replaced first on the list unless the cancellation occurred more than six hours after ordered time. In the latter case, he is entitled to ten hours' rest and on his return is placed second on the list.

(d) *Movages*

Movages do not pose a problem because the Cornwall and Lachine Canals where such services were occasionally rendered have now been closed.

The occasional moveage that may occur at an intermediate port is considered a trip assignment for despatching purposes.

(e) *Complaints about the Despatching System*

The main complaint came from the Seaway Authority in relation to the occasional non-availability of pilots at St. Lambert lock resulting in the interruption of lock operations. For details and comments, vide pp. 755 and ff.

(5) WORKLOAD

The opening of the Seaway changed the working conditions and work pattern of the pilots so completely that it soon became necessary to divide the Montreal/Kingston transit into two pilotage trips with the changeover at Snell lock.

Prior to 1959, the Montreal/Kingston run was restricted to lake and ocean-going ships small enough to negotiate the canals and locks *en route*. As recently as 1958, it took two to two and a half days to complete the trip between Montreal and Kingston. There was daylight navigation only—during the dark hours' ships anchored. The opening of the Seaway with its larger canals and locks not only permitted larger ships to come into the system but enabled them to navigate at night as well. One disadvantage was that the pilots were deprived of the opportunity to take proper rest *en route*. Although speed limits imposed either by regulations or by the physical characteristics of the channel prevent full advantage being taken of the speed potential of modern ships, they travel much faster than the former small vessels and must maintain their maximum safe speed for business reasons.

Pilot Desgroseilliers, one of the two former contract pilots employed by the Canada Steamship Lines, stated that in 1963 he made 75 trips between Montreal and Cape Vincent, half upbound and half downbound. Downbound trips averaged 18 hours and upbound trips 22-24 hours. In addition, the pilot's task is increased by modern ships which were either designed or chosen to take maximum advantage of lock dimensions.

All these factors—plus the fact that ocean-going vessels are not primarily designed to navigate and manoeuvre at close quarters—made it necessary to cut the length of pilotage assignments in half. However, navigational difficulties in the Cornwall District are less demanding and less strenuous than in the Montreal District. The nature of the Seaway imposes certain size and speed limitations on ships and, hence, pilotage does not tend to become more difficult and more exacting as is the case in the Quebec District (and to a lesser extent in the Montreal District) where ever larger and faster ships are coming into service. In fact, under the impact of modern technology, the new ships using the Seaway are becoming easier to manoeuvre and safer to navigate.

A comprehensive picture is shown in the following table of pilotage statistics of the aggregate number of trips (vide note on table p. 924), the average share per year pilot, the aggregate pooling turns credited each year, the average per year pilot and the maximum average, i.e., the average of the actual workload expressed in pooling turns for the pilots who were constantly available.

CORNWALL PILOTS—AVERAGE TRIPS AND TURNS PER YEAR PILOT

Year	Number of Year Pilots	Trips		Pooling Turns		
		Aggregate Number*	Average per Year Pilot	Aggregate Number†	Average per Year Pilot	Maximum Average†
1960.....	33.5	2,861	85.4	2,930.0	87.5	97.2
1961.....	32.7	2,601	79.5	2,648.6	81.0	87.3
1962.....	31.8	2,748	86.4	2,654.1	83.5	86.4
1963.....	32.0	2,326	72.7	2,417.4	75.5	79.2
1964.....	33.0	2,730	82.7	2,705.9	82.0	89.71
1965.....	38.7	3,022	78.1	2,941.8	76.0	86.8
1966.....	39.2	3,108	79.3	2,982.72	76.1	84.86
1967.....	38.0	2,978	78.4	2,808	73.9	77.2
1968.....	37.0	2,768	74.8	2,540.14	68.7	69.58
1969.....	37.0	2,812	76.0	2,603.8	70.4	72.65

SOURCES: *Table p. 924 and † Ex. 823.

This table leads to the following conclusions:

- (a) The aggregate workload has remained substantially constant. No doubt the peak reached in 1966 would have been maintained if it had not been for the various strikes which have affected maritime traffic in recent years.
- (b) The trip statistics and the pooling turns figures vary slightly because they are not made up of exactly the same components. With regard to workload, sharing turns are more significant in that they are related directly to the involvement of pilots in providing service and, therefore, take into account, for instance, cancellations after an extensive detention and time spent by pilots on Corporation and group duties. However, these differences are of very small importance (e.g., the incidence of free turns, table p. 980). Full transits, which have the same value for trip and sharing turn statistics, account for the majority of trips and sharing turns.
- (c) The maximum average is most representative of the pilots' workload—at least the number of assignments—because the equalization procedure is not extended to periods of absence, except free turns whose incidence is minimal. The difference between the maximum

average and the average per year pilot is accounted for by the aggregate non-availability of pilots. In 1964 and 1965, the number of year pilots was artificially high since it became necessary to license new pilots merely as a replacement for pilots still on strength but not available over an extended period of time on account of illness.

The graph in Appendix C shows the fluctuation of pilotage traffic on a monthly basis for the years 1963-1969 (data not available for 1965). This graph prompts the following remarks:

- (i) No pilotage is performed during the winter season proper, i.e., when the Seaway is closed, except for icebreakers opening the channel in the period immediately preceding the opening of the Seaway.
- (ii) Pilotage traffic is uniformly spread out throughout the entire season. The sharp increases and decreases in the first and last month are mostly in appearance only because the graph is plotted on a monthly basis and there is traffic only during part of these months. The other marked fluctuations are all due to complete or partial interruptions of maritime traffic caused by labour disputes which affect the shipping industry directly or indirectly. The all time low in mid-1968 is due to the closing of the Seaway between June 21 and July 13 by the Seaway employees' strike; the decrease in July 1966 is due to the grain elevator employees' strike from June 16 to August 9; the low in 1967 is due to the Seaway International Union strike which lasted from August 17 to September 25; etc.

The duration of a full transit does not depend so much upon the speed of the ship (since most ships now can exceed the maximum permissible speed) but to outside factors, such as weather conditions, and mainly congestion in the locks. Downbound trips are always somewhat faster on account of the current.

During the 1962 navigation season, pilot G. B. Pinal kept a record of his own time and found that the average trip from the time he sailed—both upbound and downbound—was 14 hours. In 1963, his average was still between 14 and 15 hours but a few trips lasted up to 22 hours because of the traffic. When a trip lasts so long, it means that the ship has to anchor until her turn comes to proceed to the wait wall. He stated that a pilot may have some rest while the ship is at anchor in such circumstances but, even if sleeping accommodation is available either in the chart room or the wheelhouse, he added that he would still remain awake in order to be ready to proceed without delay when the necessary instructions arrive from the Seaway dispatcher.

In pilot Pintal's opinion, the best time for an upbound ship would be 10 hours, for a small ship downbound, 8½ hours and for a large ship, 10 hours.

The average duration of trips for the years 1961, 1963 and 1964, as quoted in a table compiled by the Department of Transport showing the earnings and workload of the Cornwall pilots for the years 1962, 1963 and 1964, is stated as being respectively 12.1 hours, 14.4 hours and 14.8 hours. Statistics were not available to make similar calculations for the year 1962, but in a letter dated July 12, 1962, addressed to the pilots' counsel by the Deputy Minister, the average time for a pilotage assignment during the month of May 1962 is quoted at 14.03 hours (Ex. 1331).

The records kept by pilot W. Watier (Ex. 1417) (vide pp. 966-7) show the duration of the trips (assignment) being performed between April and September inclusive, 1964. The figures in brackets denote the number of trips interrupted *en route*.

Hours	Upbound	Downbound
18-19.....	nil	1 ⁽¹⁾
17-18.....	nil	nil
16-17.....	nil	nil
15-16.....	nil	nil
14-15.....	3	nil
13-14.....	2 ⁽¹⁾	8 ⁽¹⁾
12-13.....	11 ⁽¹⁾	6 ⁽¹⁾
11-12.....	6 ⁽³⁾	7 ⁽²⁾
10-11.....	9 ⁽¹⁾	4
9-10.....	5	1
8-9.....	1	2
Total.....	37	29

In the survey made by the Pilots' Corporation to support their brief to this Commission, they obtained the following statistics on prevailing conditions during the 1962 navigation season:

Night assignments	61.4 %
Rain	14.7 %
Fog	7.9 %
Ice and snow	1.08%
Wind	21.2 %

By comparison with the results of similar surveys in the Districts of Quebec and Montreal, the weather conditions are less severe but the apparently favourable incidence of ice and snow is deceptive because there is

no winter navigation as such. However, assignments which involve night navigation are more frequent and these are generally upbound trips. Pilot Pintal explained that in Montreal ships load and unload during the day and sail at night.

The same survey established that a Cornwall pilot's weekly time on duty was spent on the average as follows:

- (i) aggregate advance warning time, i.e., time elapsed between receiving an assignment and being ordered to report on board (ordered time): 6 hrs. 43 min.;
- (ii) aggregate waiting time after ordered time before departure (sailing time): 3 hrs. 33 min.;
- (iii) aggregate time aboard piloting, including detention *en route*: 34 hrs. 1 min.;
- (iv) aggregate travel time between vessel and pilot station: 2 hrs. 3 min.

Thus, the total time between ordered time and arrival time at the station was 39 hrs. 37 min.

As seen from the graph, Appendix C, and from evidence received, except for disturbances created in the normal pattern by strikes, the pilotage demand is spread out quite evenly throughout the season. There is a slight peak at the beginning and end of the season when the traffic is predominantly in one direction, thus disrupting the normal despatching procedure and requiring that pilots be transferred from one station to the other to meet shortages. The following table shows for the years 1962, 1963 and 1964 the busiest month and the least busy month, i.e., the months when the aggregate number of hours spent by all pilots actually piloting was the largest and the smallest, disregarding incomplete months, i.e., April and December and the winter months of January, February and March when there is no navigation. Since the pilotage demand has remained substantially the same, these statistics are still indicative of the present general situation (Exs. 828 and 1300):

Year	Busiest Month				Least Busy Month			
	Month	Aggregate pilots' time on assignments	Busiest Pilot		Month	Aggregate pilots' time on assignments	Busiest Pilot	
			No. of assignments	Total time on duty including detention			No. of assignments	Total time on duty including detention
		(hrs.)		(hrs.)		(hrs.)		(hrs.)
1962.....	Oct.	5780.2	13	205.5	July	4210.1	14	172.5
1963.....	Nov.	5265.1	11	208.9	Aug.	3734.2	12	160.6
1964.....	Nov.	5909.8	10	240.0	Sept.	4728.2	14	192.5

The unidirectional trend is apparent when the busiest month is closer to one end of the season. The busiest pilot was required to travel by land only once in October 1962 to meet a shortage at St. Lambert lock. The pattern is very apparent in November 1963 and 1964, when the busiest pilot was required each year to transfer by land three times to meet a shortage at Snell lock. Surprisingly enough, in the least busy month in 1962, the busiest pilot changed station four times to meet a shortage at Snell lock. On the other hand, there was no transfer by land in August 1963, and only one in September 1964. The unusual number in July 1962 must have been caused by special circumstances which altered the traffic pattern and also possibly by the number of pilots on leave, since the annual holiday is taken during the summer months.

The influence of Seaway congestion and ensuing delays is apparent from this table. The busiest pilot did a smaller number of assignments in the busiest month than in the least busy month, but his aggregate time on duty was always greater in the busiest month, since each trip took much longer. By contrast with the pattern in other Districts, vessels not taking pilots influence the duration of pilotage trips directly on account of congestion at the locks when overall traffic increases.

To provide a clearer picture of the employment of a pilot's time, pilot Willie Watier, residing in Montreal, kept a detailed analysis of his time for the 1964 navigation season April to September inclusive. A graphic representation of the distribution of his time on a 24-hour basis for the busiest and least busy month of the period covered by his records, i.e., May (the third busiest month (5177.1 hrs.) after November (5908.8 hrs) and October (5432.6 hrs.)) and September, appears as Appendix B(1). The table on p. 967 shows on a per month basis the analysis of his records.

This table and the graphs, Appendix B, prompt the following remarks:

- (i) Except for April, the month when the navigation season opened, pilot Watier's workload is comparable from month to month; there is no marked variation.
- (ii) Most of the detention time occurs at the boarding stations at St. Lambert lock and Snell lock where ships are delayed through circumstances beyond their control, i.e., lock operations and traffic congestion.
- (iii) The effect of the different methods of operating the tour de rôle at Cornwall and Montreal (the latter in order to enable the pilots to spend most of their idle time at home in Montreal) is clearly apparent.
- (iv) In May, on 6 out of 11 assignments, pilot Watier was piloting at noon and on 5 at midnight; in September, out of 12 assignments, on 3 at noon and on 8 at midnight.

CORNWALL PILOT WILLIE WATIER
 COMPARATIVE DISTRIBUTION OF TOTAL AGGREGATE TIME ON A 24-HOUR BASIS DURING APRIL-SEPTEMBER 1964

Distribution of Total Aggregate Time	April		May		June		July		August		September	
	turns	hrs. mins.	turns	hrs. mins.	turns	hrs. mins.	turns	hrs. mins.	turns	hrs. mins.	turns	hrs. mins.
Trips.....	6	65 58	11	137 45	12	145 45	14	166 30	11	117 00	12	141 35
Movages.....	0	00 00	0	00 00	1	3 5	1	1 20	0	00 00	0	00 00
Cancellations.....	2	50 00	0	00 00	0	00 00	0	00 00	0	00 00	0	00 00
Detentions: <i>En route</i>	4	13 33	3	6 05	1	1 00	3	11 05	0	00 00	1	3 05
At boarding stations after ordered time	6	12 34	11	31 35	13	27 40	14	16 25	11	14 15	12	5 25
Land travel (between stations, and between station and out- port).....	4	9 47	1	2 28	2	4 56	4	10 14	3	7 12	4	9 18
Waiting at outports for assign- ment.....	5	53 55	6	121 45	7	156 57	9	169 32	7	102 05	8	142 30
At home (Montreal) between as- signments, including rest per- iods, if any.....	8	563 23	7	444 22	9	380 37	11	368 54	10	503 28	9	418 07
Total Aggregate Time.....		720 hrs.		744 hrs.		720 hrs.		744 hrs.		744 hrs.		720 hrs.

SOURCE: Exhibit 1417.

- (v) In May, he had no pilotage assignment and was at home on 14 calendar days; in September, 8 days.

6. PILOTAGE REVENUE AND TARIFF

In the Cornwall District, the pilotage rates also have a direct impact on the pilots' remuneration because they are paid the dues they earn through their individual services, less their prorated share of Corporation and group expenses.

The tariff items reflect clearly the characteristics of the pilotage services rendered, i.e., mostly transit voyages. Since 1965, the same method has been adopted as in the other St. Lawrence Districts to increase pilotage dues without changing the tariff structure, namely a surcharge. The 12% surcharge which was introduced in 1965 has been gradually increased each year to 17%, 24%, 34% and finally, in 1969, 40.7% applicable to all pilotage dues including the transportation allowance to and from St. Lambert lock (item 5). It does not apply to item 6 of the tariff which provides for the reimbursement of actual travelling expenses (Ex. 1540(f)).

The table p. 969 analyses pilotage earnings for the years 1962, 1964, 1966 and 1968, and also shows in percentage the relative importance of each item of dues accruing to the pilots as revenue and not as reimbursement of travelling costs.

(1) PILOTAGE VOYAGE CHARGES (TRIP CHARGES)

Trip charges account for nearly the whole of the pilots' revenue: 95% in 1962 and 93.3% in 1968, the decrease being accounted for by the enlarged field of application of detention charges since 1965.

There are only two types of charge that apply in the computation of dues for pilotage performed during a trip: basic rates and winter tariff.

The tariff does not contain any provision for piloting dead ships, although the interpretation section of the By-law contains a definition of dead ship. Subsec. 15(6) authorizes a double assignment to a composite navigation unit consisting of a tug and tow.

(a) *Basic Rates*

The basic rate now consists of a flat charge for the whole transit irrespective of the size or type of the navigation unit.

When the Cornwall District was created in 1960 the former rate structure was retained. It was similar to the system in force in the Quebec and Montreal Districts, i.e., a trip charge based on two components, a draught charge (\$5 per foot draught) and a tonnage charge ($\frac{1}{2}$ ¢ per NRT) with a minimum aggregate charge (\$87.50). Partial transits called for charges computed on a pro rata basis of the distance run, subject to a minimum charge of \$25.

CORNWALL PILOTS—COMPARATIVE ANALYSIS OF EARNINGS AND DISTRIBUTION OF PILOTAGE DUES

Pilotage Dues	1962	1964	1966	1968
A PILOTAGE DUES EARNED				
I Pilotage Dues Representing Revenues for Pilots				
Trips.....	\$414,912.00	\$435,994.50	\$564,234.42	\$554,069.45
Second pilot (winter tariff).....	2,000.00	7,500.00	11,080.06	14,667.16
Movages.....	1,452.30	2,008.50	2,269.02	2,806.72
Detentions.....	8,366.71	9,298.67	29,796.25	21,812.93
Cancellations.....	859.60	690.10	1,609.76	178.31
Expenses				
Paid to pilots.....	11,609.85	11,540.80	15,708.14	15,903.98
Total Dues Accruing to Pilots	439,200.46	467,032.57	624,697.65	609,438.55
Paid to Receiver General of Canada (Cornwall taxi service).....	9,512.60			
Total Pilotage Dues Earned ..	\$448,713.06	\$478,592.97	\$647,681.55	\$628,631.55
B DISTRIBUTION OF PILOTAGE DUES EARNED				
I Paid to Pilots' Corporation.....				
Paid to Receiver General of Canada....	\$439,200.46	\$467,032.57	\$624,697.65	\$609,438.55
II Paid to Receiver General of Canada....				
Total Distribution of Pilotage Dues Earned	\$448,713.06	\$478,592.97	\$647,681.55	\$628,631.55

SOURCE: Ex. 534(c).

In 1961, the trip rate structure was changed to a practical system: a single flat rate charge for the full transit and the dues for partial transits computed pro rata to the distance run with a \$25.75 minimum. This system discriminates against small vessels but the question is more or less theoretical.

However, a specific tariff provision would be required to authorize a higher charge when two pilots are jointly assigned, since the tariff is based on the type of service rendered and not the number of pilots assigned. Despite the tariff deficiency in this respect, the dues are assessed as follows in the case of a tug and tow (Ex. 1540(e)):

- Two pilots assigned—2 tariff charges;
- One pilot ordered for the tug and tow, the latter being exempt from the compulsory payment of dues—1 tariff charge;
- One pilot ordered for both, neither tug nor tow being exempt—2 tariff charges;
- One pilot ordered for both, the tug being exempt—1 tariff charge.

The foregoing shows the illogical situation which develops in the case of a composite navigation unit when the case is not provided for in the tariff. Here, the Pilotage Authority applies contradictory principles to the advantage of the pilots. Although the tariff is based on the type of assignment and not the number of pilots assigned (e.g. the winter charge will be added after Dec. 1 even if only one pilot is assigned), two tariff charges are made if two pilots are assigned. However, if the Pilotage Authority decides to assign only one pilot, two charges will nevertheless be made if neither of the two vessels happens to be exempt from the compulsory payment of the dues, despite the fact that compulsory payment does not apply since use is being made of the pilotage service.

The tariff should be amended to cover composite navigation units (vide Part I, p. 176). In the absence of specific tariff provisions, charging a higher rate in such a case—whether or not one of the two vessels is exempt, whether or not it is a joint assignment—is illegal.

The size of a ship is no longer a significant factor since small ships have, for all practical purposes, disappeared and been replaced by larger ships, all approximately the same size to meet the ceiling imposed by lock dimensions. The important factor is the duration of an assignment and speed has little bearing because the maximum permissible speed is well below the potential of most, if not all, vessels trading in these waters. The duration of an assignment is determined by factors beyond a ship's control, such as adverse weather but mainly traffic congestion at locks, which make the difference between a fast or slow transit. Therefore, a flat, uniform rate was an equitable solution.

The flat rate for the full transit was first established in 1961 at \$145 and was raised to \$160 in 1962 following the strike of the pilots in the St. Lawrence River Districts. Prior to the beginning of the 1962 navigation

season, the pilots had demanded that the trip charge be raised to \$175. The main argument in support of the proposal was to achieve parity with the trip rate in effect in the Kingston District (Ex. 1540(h)). Since no agreement was reached in the winter negotiations, this item became one of the demands of the Cornwall pilots for which they went on strike. In the compromise settlement an increase to \$160 was conceded by the Pilotage Authority in return for the pilots' undertaking not to ask for any further increase during the next three years. The tariff was amended accordingly.

The amount of the rate has remained unchanged but, like other rate items, it has been increased through the device of general surcharges since 1965.

Rates for partial transits did not at first present any practical problem for the pilots until they became more frequent, although they are still rare. The rule was, and still is, that the dues for a partial transit consist of a fraction of the flat rate corresponding to the distance run. The pilots succeeded in having this rule modified in two specific cases so that a partial trip, despite the distance run, would call for a higher charge. In 1965, such special rates were established for partial trips up to Côte Ste-Catherine wharf, i.e., \$40 from or to St. Lambert lock, and \$160 from or to Snell lock, with the proviso that the ensuing charge would be \$180 if the full transit was completed after stopping at Côte Ste-Catherine wharf. In 1967, another exception was created for trips between St. Lambert lock and Port de Valleyfield: \$96 plus a \$25 berthing and unberthing charge at the latter.

During the winter negotiations of 1966, the pilots requested an increase in the basic rates of \$50 as remuneration for that part of a pilotage trip outside the District limits, e.i., between St. Regis and Snell lock, and the adoption for partial trips of the method in force in the Quebec District, with three zones between St. Lambert lock and the western District limit at St. Regis, the dividing lines being the foot of Beauharnois lock and Valleyfield bridge, and the tariff for each zone being one-third the full rate. In effect, it was suggested that the full transit be divided into four zones—St. Regis to Snell lock being the fourth—with a substantial increase in the basic rate which would have risen from \$160 to \$210, not counting the applicable surcharge.

The proposal was opposed by the Shipping Federation mainly because of the substantial rate increase involved. Furthermore, following the policy that had been adopted the year before, the Pilotage Authority refused to change the tariff structure and to deal with specific items in the tariff. The 12% surcharge that had been granted in 1965 was raised to 17% applicable to all pilotage charges. As seen earlier, this surcharge has been increased considerably from year to year since.

COMMENTS

Although the pilots' proposal did not provide for higher rates per zone for partial transits (vide comments on Montreal system pp. 780-81), it is considered that the zone system is only a partial solution which should not be resorted to if substantial injustice is to result, e.g., in the case of a port or landing place situated near a zone limit. It is considered more equitable to base rates on distance run to the nearest mile or a fixed number of miles with an adequate minimum charge. In this way, there will also be less risk of making pilots unavailable without due compensation.

The pilots were wrong *de facto* but right *de jure* in stating that they were not remunerated for that part of the pilotage trip between St. Regis and Snell lock, i.e., outside the limits of their Pilotage District. The trip rate of the Cornwall District tariff was, and still is, considered to cover the full transit between St. Lambert and Snell locks but the Pilotage Authority is powerless to fix rates for pilotage services performed outside its District. Rates as well as other regulations made by a Pilotage Authority apply only within the limits of its own District (sec. 329 C.S.A.). The Pilotage Authority was well aware of this problem and in the tariff avoided referring to Snell lock but mentions instead "the pilot boarding station near St. Regis, Quebec" and resorted to a gentlemen's agreement with the pilots in lieu of settling the legal problem involved. Such arrangement can be only a shortlived solution and the same argument with its full legal impact is liable to be raised by the Cornwall pilots as a means of pressure whenever the occasion arises (as occurred during the winter negotiations in 1970).

Since the Cornwall pilots have now been issued Great Lakes Basin registration certificates for pilotage between St. Regis and Snell lock, a temporary solution would be to have a rate for that part of the transit trip fixed by the regulation-making authority for the Great Lakes Basin under subsec. 375c(1)(e). The Cornwall Pilotage Authority in turn would have to reduce its trip rate so that the aggregate rate for the full transit between St. Lambert and Snell locks would remain reasonable and equitable. Doubtless in anticipation of such a move, the Cornwall pilots threatened in the winter of 1970 to resign their Great Lakes Basin pilotage registration. Such a solution, however, involves many administrative complexities, e.g., the pilots coming under two separate authorities during the same trip.

The simplest and only effective solution is to include the sector St. Regis-Snell lock in the Pilotage District of Cornwall (vide Rec. No. 3).

(b) *Winter Tariff*

Apart from special cases of detention, winter tariff takes the form of two extra rates: winter surcharge, and a charge for lengthy trips.

As in the other St. Lawrence Districts, the remuneration of the second pilot on trips when ice conditions prevail became a new tariff item in 1961 when the practice was officially recognized. It took the form of the usual surcharge applicable to all trips between December 1 and April 8, whether or not two pilots are assigned. Because of the uniform flat rate system the winter charge was also fixed at \$100.

The winter charge forms part of the trip charge and, therefore, is prorated in the case of a partial trip. The revenue derived from that source varies greatly from one year to another depending upon the length of the so-called winter season. For instance, in 1962, it accounted for only 0.5% of the pilotage revenues accruing to the pilots, but 2.4% in 1968.

In a memorandum dated January 5, 1966, the Pilots' Corporation recommended that the winter tariff structure be modified so that:

- (i) two full trip charges be made since two pilots are assigned;
- (ii) the time factor be added to take into account the longer duration of assignments due to winter conditions, i.e., an hourly charge paid in addition to the basic rate and the winter rate for each hour exceeding 14 hours.

The proposal was opposed by the Shipping Federation and the double rate was not granted. However, the hourly charge for lengthy trips has been applied from December 1, 1965, although it was neither incorporated in the tariff nor ratified by regulation. Between Dec. 1, 1965, and the end of the navigation season that year, it brought in additional revenue amounting to \$3,005. The agreement had been reached between the pilots and the Pilotage Authority in October 1965; it reads as follows (Ex. 1540(g)):

"That when the passage of a vessel is slowed on account of ice or traffic beyond 14 hours, which is considered the normal duration of a passage in the District, a detention of \$5 for each hour or part thereof to apply; the aggregate amount payable shall not exceed \$25 for each calendar day that the pilot is detained."

COMMENTS

It is unnecessary to demonstrate that the hourly impost has been illegally applied since 1965. This is a further example of the failure of those in charge to realize the necessity for, and the rôle of, legislation in the pilotage organization as provided under Part VI of the Canada Shipping Act. In addition, it is considered that, while the hourly charge may have merit, it is being given a scope of application which is too wide in the circumstances of the District.

In making their requests, the Cornwall pilots merely followed the pilots of the Districts of Quebec and Montreal but the situation was not comparable since, first, there is no true winter navigation in the Cornwall District and,

second, the proposal fails to differentiate between winter factors and those that exist all year long in the Cornwall District but are not met in the other Districts.

The proposal that the time factor should be considered when establishing the tariff is valid, provided it is limited to increased duration of transits directly due to winter conditions alone and not to conditions that occur any time during the normal season, e.g., congestion at the locks. Therefore, the rule that was unofficially adopted in October 1965 is faulty in that it does not take into account this fundamental difference in circumstances which determines the nature and conditions of service in the District. When no winter conditions prevail, it is basically wrong to impose the hourly rate on trips which last longer than 14 hours because of congestion at any lock in the District, simply because the trip happens to occur after December 1 or before April 8.

If a time factor is to be retained—as would be justified when it is actually related to winter navigation, the tariff should be drafted to exclude from its application time spent in locks or at wait walls waiting to proceed, or slowdowns due to a decrease in speed *en route* ordered to enable timely arrival at a lock.

(2) OTHER SERVICES

(a) *Movages*

The tariff provides two flat rates for movages: \$15.45 and \$30.90, the higher rate applying when the movage involves passing through one or more locks.

The term “movage” is defined in the By-law (subsec. 2(g)) as “the moving of a vessel within a harbour from one anchored or moored position to another”. Therefore, the higher movage rate has no longer any application since none of the Seaway locks forms part of any harbour. This applied to the Lachine Canal and the Cornwall Canal which have now been enclosed.

Since there is no port of importance in the Cornwall District, a movage is a rare occurrence. The revenue derived from this source accounts for less than 1% of the total pilotage revenues (vide table, p. 969).

(3) INDEMNITY CHARGES

(a) *Detention*

The detention charge is the second source of revenue in importance. It increased almost three-fold in 1965 (from \$9,298.67 in 1964 to \$26,701.17) because free detention time was reduced from 2 hours to 1 hour. The main cause of detention was waiting to board either at Snell lock or mostly at St. Lambert lock when ships were delayed by traffic. The situation has been

improved since, principally because of better despatching procedure (vide complaints about double detention at St. Lambert lock; pp. 755 and ff.).

There are three types of detention:

- (i) at a boarding station awaiting a ship's arrival;
- (ii) idle time in port or at a landing place *en route* while loading or unloading cargo;
- (iii) idle time *en route* due to a ship's machinery breakdown.

Except for the first case, the detention provision conforms to the nature and purpose of the detention charge (Part II, pp. 157 and ff.) and applies only to delays for which the ship is responsible, not to delays beyond the ship's control, e.g., adverse weather conditions or a shipping casualty due to causes other than mechanical breakdown.

It is wrong, however, to impose a penalty for the time the pilot has to wait at a boarding station for the arrival of a ship *en route*, especially when the cause of the delay is beyond the ship's control.

It is one of the basic requirements for pilots that they be available at boarding areas awaiting for ships to arrive, and the pilotage contract in the case of a ship *en route* commences only when the pilot boards. ETA's at a boarding station are merely notifications to facilitate assigning pilots and improving their working conditions. A lockage should not be confused with a departure from a harbour berth. In the latter case, the decision when to leave is made by the Master—therefore, when he requires a pilot to report at a certain time, it is reasonable to require him to pay detention if the departure is delayed substantially. The situation at a lock, however, is totally different in that a ship's arrival time in the lock area where the pilot is to board is governed by factors beyond the Master's control and which he is unable to appraise, i.e., the speed of Seaway operations, the density of traffic, the *expertise* of those conning other ships during lockage operations and, occasionally, even a break in operations due to a shipping casualty or a faulty manoeuvre by another ship.

There would be no problem if a reserve of pilots were maintained both at St. Lambert lock and Snell lock since the pilotage contract begins only when the pilot actually embarks. Ships should not be penalized because the pilots are allowed to remain at their place of residence as long as possible in order to improve their working conditions. The pilotage despatcher is responsible for setting ordered time based on his experience and the latest traffic information, and for advancing it sufficiently to enable him to assign another pilot if the first one is delayed *en route* or fails to report. Therefore, this provision should be deleted (vide similar recommendation regarding the Montreal District tariff, pp. 784-5 and further comments, pp. 741-3 and 759-60).

(b) *Cancellation*

The tariff contains the usual provision regarding cancellation. The rate is \$10.30 (plus general surcharge) combined with a detention charge if the cancellation occurs more than one hour after ordered time, provided the pilot has actually reported for duty (for comments, vide p. 474).

The revenue yielded from this source is always small (vide table, p. 969).

(c) *Transportation Allowance and Travelling Costs*

The tariff provides that actual expenses incurred by the pilots to reach boarding stations or any other boarding place within the District are chargeable to ships as pilotage dues, with transportation costs to and from St. Lambert lock a uniform \$3.00 charge (plus the general surcharge). As seen earlier, transportation between Cornwall and Snell lock is provided by a taxi firm under a contract with the Department of Transport. Hence, dues collected from ships on this account are paid to the Receiver General of Canada to reimburse the payments made by the Department (vide pp. 956-8). For travelling expenses to and from Valleyfield or Côte Ste-Catherine lock, the Pilotage Authority charges ships a flat \$7 instead of the actual expenses incurred. The surcharge is not applied (Ex. 1540(f)).

Dues from this source are substantial but, as seen earlier, they accrue only partially to the pilots and do not increase their net revenue. For the incidence of these charges, vide table p. 969.

COMMENTS

It is wrong in principle to make the actual cost of the pilots' land transportation to and from an assignment an element of pilotage dues. The pecuniary consideration of the pilotage contract must be fully covered by rates contained in the Regulations and it is illegal to leave any part of them to be determined either administratively or by circumstances which will cause the amount to vary from one case to another and according to such factors as the type of transportation taken, or whether one or more pilots are transported at the same time or per round trip, or the distance from the pilot's place of residence to the boarding area. The rates should be such that the pilotage dues a non-exempt ship will be called upon to pay are exactly the same whether or not a pilot has been employed (Part I, pp. 150-153).

Reimbursing pilots for travelling costs is a matter of internal service organization. In Districts like Quebec and Montreal (except for St. Lambert lock, vide comments pp. 784-5), pilots bear their own transportation costs; in Districts such as B.C., they are reimbursed from the gross District revenues the travelling expenses they have actually incurred, without the actual amount being made part of pilotage dues. These transportation costs are regarded as

part of the outlay required to provide service and, therefore, are taken into consideration when the rates are fixed. Hence, these tariff provisions should be abrogated and inclusive pilotage rates adopted at a level sufficient to provide the pilots with adequate net remuneration after travelling expenses have been met (Part I, p. 153 and pp. 186-187).

(4) COST OF THE SERVICE TO THE CROWN

As in the other Pilotage Districts where the Minister is the Pilotage Authority, the direction and administration of the District and the service are effected by employees of the Department of Transport which supplies the necessary funds.

In the Cornwall District, these are limited to those required to maintain and operate the pilotage offices and provide the pilot station at St. Lambert lock. There is no pilot vessel service and the pilots need not be provided with portable radiotelephone sets since VHF is mandatory equipment for ships transiting the Seaway.

These facilities and their administrative staffs are shared with the pilots of the adjacent Districts. For details of the share of the Cornwall District for expenses incurred by the Department of Transport in connection with pilotage, reference is made to Part I, Appendix IX, pp. 634 and ff.

7. PILOTS' REMUNERATION AND POOLING SYSTEM

(1) METHOD OF REMUNERATION AND POOLING SYSTEM

Subsection 9(1) of the District By-law provides that each pilot is entitled to the pilotage dues received for the pilotage services he has personally performed. Therefore, this means that a pooling system does not exist officially and that dues collected on account of the compulsory payment system ought to be paid to the Receiver General of Canada because, in view of the despatching system, no pilot can have any claim on them under subsec. 351(1)(b) C.S.A., and there is no Pilot Fund (subsec. 351(2)) nor a Pilotage Authority's expense fund (vide Part I, pp. 99 and ff.).

The factual situation, however, is different: the pilots are paid through a pooling system they have devised and operate themselves.

By contrast with the situation in the Quebec and Montreal Districts, there is no real need for a pooling arrangement since the monetary value of trip assignments is always the same flat rate and is already averaged. The great majority of pilotage assignments are full transit trips and each pilot with full availability is assured of substantially the same as his colleagues'

aggregate earnings because the despatching system guarantees equal sharing of assignments. No doubt the pilots adopted this method of remuneration because either a straight salary or pooling is a necessary consequence of a system of controlled pilotage in which they have the status of employees or quasi-employees. It also allows the pilots to benefit, in fact if not in law, from the dues which accrue as a result of the compulsory payment system. The most obvious reason, however, is that it is the easiest way (although totally illegal in the case of a corporation formed under Part II of the Federal Corporations Act) to finance the operations of the Pilots' Corporation and prorate expenditures incurred for their general benefit.

They have adopted the same pooling procedure as the Montreal harbour pilots and have avoided the problem of financing the pilots' shares by making distributions only as dues are collected.

The only substantial variation from the Montreal harbour pilots' pooling system is that the financial year is divided into two distinct pooling periods governed by different rules: the *regular pool* and the *winter pool*.

The regulations governing pooling are contained in Corporation By-law No. 2 (Ex. 806) as amended, By-law No. 14 dated August 25, 1965, being the most recent amendment (re legality of such by-laws, vide Part I, pp. 89 and ff.). The original provisions of this By-law were based on the Montreal river pilots' pooling procedure under which each distribution is final. However, in practice, this is not followed. Sharing extends over the whole pooling period and advance distributions are made from time to time.

The common fund comprises all pilotage dues paid by ships, except bonuses additional to the dues set out in the tariff and dues payable for detention, cancellation and compass adjustment. According to the text of the By-law, detention dues which do not form part of the pool are supposed to be limited to those paid for idle time on board; in fact, no detention earnings form part of the common fund or pool.

Corporation liabilities and group expenses are paid out of the pool as they become due, but pilotage dues separate from the common fund are paid in full to the pilots to whom they belong during the first distribution after collection.

Advance distributions are made when, and in the amount, decided by the Board of Directors. The practice has been to make an advance distribution regularly every fortnight during the navigation season, normally \$500. If there is a surplus on hand, the advance is increased to \$1,000, usually in August and at the end of November.

(a) *Regular Pool*

The regular pooling period extends from the beginning of the season to the end of October.

Sharing is calculated on the aggregate dues in the pool which were earned or became owing during the pooling period, after deducting Corporation operating expenses and group expenditures other than those paid on behalf of pilots individually.

As in the other St. Lawrence Corporations, sharing rights are computed through a composite formula based on number of assignments performed and availability for duty. All pilots with maximum availability receive a full share. Any slight difference in the number of assignments resulting from the tour de rôle is adjusted by granting a full share, even though the aggregate number of turns may be two less than the maximum average, i.e., the average number of turns completed by those who were constantly available. This number is not rounded off to the next digit, with the result that most pilots have a fraction in the number of sharing turns to their credit. A partial share is established by deducting from a full share the value of missed turns in excess of two above the average.

At the end of the pooling period, the average number of turns which entitles a pilot to a full share is computed and the actual share of each one is established as indicated above, together with the balance owing after deducting advance distributions and amounts paid on his behalf, i.e., fees for the Federation, the Guild and initiation, and insurance premiums.

Trip assignments normally count for one turn each. The By-law foresees granting only one-half turn in case of trips of very short duration as determined by the Board of Directors. Movages and the special type of trip assignment consisting of a tug and tow are to be granted the number of turns or fraction of turns determined by the Board of Directors. The practice followed (which is not enunciated in the By-law) is to grant the number of turns or fractions of turns corresponding to the amount of dues earned by such assignments compared to normal trip assignments.

As a rule, a pilot does not have the benefit of equalization of turns for turns missed during periods of absence. There are two exceptions: in the case of the death of a member of the pilot's immediate family, he is entitled to four days' absence for which two turns are to be granted for both despatching and pooling purposes; free turns to Directors also count for pooling purposes. One-half turn is now granted for each day or fraction of a day spent by a Director on Corporation affairs. In 1961, the number of turns so granted was increased to one free turn per day, but a 1965 amendment re-established the previous rule.

Study of Cornwall Pilotage District

The following table gives the details and monetary value of free turns granted 1960-1969:

ADMINISTRATIVE FREE TURNS

Year	Aggregate Number of Free Turns	Pilots Sharing	Net Value of the Sharing Turn	Monetary Value of Aggregate Free Turns	Amount Paid by Federation for Free Turns
1960.....	1	1	\$111.50	\$ 111.50	\$ 80.00
1961.....	n/av.	n/av.	139.38	n/av.	1,957.50
1962.....	n/av.	n/av.	154.08	n/av.	nil
1963.....	n/av.	n/av.	150.86	n/av.	nil
1964.....	n/av.	n/av.	153.14	n/av.	nil
1965.....	19	5	168.54	3,202.26	nil
1966.....	11.5	5	176.15	2,025.73	nil
1967.....	21	5	183.89	3,861.69	nil
1968.....	20	5	198.28	3,965.60	198.40
1969.....	10	5	208.72	2,087.20	nil

SOURCE: Ex. 823.

(b) *Winter Pool*

The winter pool does not correspond to the so-called winter season (p. 973) but comprises only the last part of the navigation season from November 1.

The Cornwall pilots decided to adopt this special pooling system because other methods encouraged absenteeism at the end of the season when the services of every pilot were most needed. For example, under a system based on the equalization of trips a pilot whose aggregate number of turns was above average had no incentive to continue piloting.

The winter pool was introduced by a By-law amendment dated October 9, 1964. Those with constant availability shared equally, irrespective of the number of turns to their credit. The value of one-half turn was deducted from the full share for each day of absence during the period in question.

After the experience gained in the fall of 1964, the basis of the winter pool was modified by a By-law amendment dated December 15, 1964, which, for pooling purposes, replaced turns by availability. At present, a pilot who is constantly available receives a full share; one who has been absent receives a share prorated to the number of days he was available during the winter pooling period. The value of each day of availability is established by divid-

ing the aggregate amount of dues forming part of the pool which became owing during the winter pooling period by the aggregate number of "pilot days".

(2) PILOTAGE INCOME

The remuneration of the Cornwall pilots may be defined as revenue received from the pool (their share of the regular and the winter pool plus payments made from the regular pool on their behalf), their share of group expenses and any non-pooled dues (excluding reimbursement of personal expenses) they have earned. There are no deductions for Pilot Fund or Pension Fund.

The Cornwall pilots are fully reimbursed (or at least compensated) for any land transportation expenses they incur travelling to and from assignments of any type (p. 976). This must be taken into consideration when comparing these earnings with those of pilots in other Districts where there is no such reimbursement, e.g., the Quebec and Montreal pilots.

The following table shows for the years 1960-1969 the number of pilots sharing in the regular pool and the winter pool, the number who obtained a full share and the amount of such full share and, finally, the maximum amount a pilot who was available during the whole navigation season obtained from both pools:

POOLED EARNINGS

Year	REGULAR POOL			WINTER POOL			TOTAL
	Total Pilots Sharing	Pilots with Full Shares	Amount of Full Share	Total Pilots Sharing	Pilots with Full Shares	Amount of Full Share	Full Share in Both Pools
1960.....	35	15	\$10,837.80	nil	nil	\$ nil	\$10,837.80
1961.....	32	22	12,167.87	"	"	"	12,167.87
1962.....	33	19	13,319.02	"	"	"	13,319.02
1963.....	32	22	11,948.47	"	"	"	11,948.47
1964.....	36	21	13,738.34	31	30	513.71	14,252.05
1965.....	38	26	14,629.38	34	33	676.24	15,305.62
1966.....	39	27	14,948.20	35	35	557.04	15,505.24
1967.....	37	33	14,200.59	36	36	859.41	15,060.00
1968.....	37	33	13,796.80	37	36	1,084.97	14,881.77
1969.....	37	32	15,163.31	35	32	1,230.94	16,394.25

SOURCE: Ex. 823.

Study of Cornwall Pilotage District

Non-pooled revenue consists of detention and cancellation charges, extra remuneration for assisting icebreakers, travelling allowances and travelling expenses reimbursed. This last item is not complete because it does not include the pilots' travelling expenses between Cornwall and Snell lock which are paid by the Department of Transport.

The aggregate non-pooled revenue 1960-1969 (of which each pilot received a different percentage) was as follows:

NON-POOLED EARNINGS

Year	Detention	Personal Expenses
1960.....	\$48,190.23	\$15,885.92
1961.....	9,665.87	10,110.10
1962.....	10,708.61	11,592.10
1963.....	10,495.60	9,737.25
1964.....	11,992.37	11,543.90
1965.....	33,099.61	13,672.82
1966.....	34,994.21	15,118.27
1967.....	30,689.49*	15,348.10
1968.....	31,951.49*	14,820.36
1969.....	25,691.70	15,295.89

*Including icebreaker charges.

SOURCE: Ex. 823.

Because there are no grades, there is little difference from year to year in the aggregate amount each pilot received from the pool and from non-pooled sources (travelling expenses excluded) as is clear from the following table which shows for 1963-1969 the number of pilots whose remuneration fell in the various thousand dollar brackets. Each indicates the thousand dollar bracket in which the average net remuneration per year pilot falls.

COMPARATIVE ANALYSIS OF INCOME BRACKETS

"Take Home" Net Income Bracket*	Number of Sharing Pilots								
	1961†	1962†	1963	1964‡	1965	1966	1967	1968	1969
\$16-17,000.....					1	4			31
15-16,000.....					26	26	19	12	2
14-15,000.....				3	4	3	16	22	1
13-14,000.....		5		24				1	1
12-13,000.....		22		1	1		1	1	1
11-12,000.....	26	1	27			1		1	
10-11,000.....	3	3	3		1	1			

"Take Home" Net Income Bracket*	Number of Sharing Pilots								
	1961†	1962†	1963	1964‡	1965	1966	1967	1968	1969
9-10,000.....		1	1	1	1		1		
8- 9,000.....	1				1				
7- 8,000.....				1					
6- 7,000.....						1			
5- 6,000.....									
4- 5,000.....				1					1
3- 4,000.....				1	1				
2- 3,000.....				1		2			
1- 2,000.....	1			3	2	1			
0- 1,000.....		1	1						
TOTAL NUMBER OF SHARING PILOTS.....	31	33	32	36	38	39	37	37	37

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

†Detention and Federation dues (including CMSG fees) prorated.

‡Detention prorated.

SOURCE: EX. 823.

The following table shows the average remuneration of the pilots according to the principal meanings given to the term (p. 491) calculated on the aggregate amount of pilotage earnings accruing directly or indirectly to them, on the basis of year pilot. As for the Montreal harbour pilots, the resultant average figures correspond very closely to the actual remuneration

AVERAGE REMUNERATION PER YEAR PILOT

Year	Share of Total Revenues Accruing to Pilots*		Share less Contribution to Pension Fund	Share less Corporation Administrative Costs†		Share of Administra- tive Cost Per Year Pilot in %
	Amount	% Increase since 1961		Amount	% Increase since 1961	
1961.....	\$11,781.79	0.0%	Nil	\$11,585.60	0.0%	3.1%
1962.....	13,462.17	14.3	"	13,197.07	13.9	3.1
1963.....	12,092.43	2.6	"	11,724.86	1.2	3.1
1964.....	13,803.07	17.2	"	13,391.59	15.6	3.0
1965.....	14,751.34	25.2	"	14,267.81	23.2	2.6
1966.....	15,289.12	29.8	"	14,741.70	27.2	2.6
1967.....	15,456.78	31.2	"	14,763.93	27.4	2.6
1968.....	16,170.81	37.3	"	15,438.58	33.3	2.7
1969.....	17,011.61	44.4	"	16,457.21	42.0	2.7

*Including initiation fees but excluding revenue paid to apprentices and transportation dues.

†Including value of free turns except during 1961-1964 (figures not available); vide table p.980.

SOURCE: EX. 823.

most pilots draw since their share in the pool is based on the full amount of dues earned, and also because most of them received a full, equal share.

COMMENTS

It has been emphasized before in the Report that the figures quoted as the pilots' remuneration in various Districts should not be compared without first reducing them to a common denominator. The Cornwall District is no exception. For instance, the travelling expenses paid to the Cornwall pilots do not include the cost of their transportation between Cornwall and Snell lock which is assumed by the Department of Transport and passed on to the ships concerned. On the other hand, since there is no Pension Fund, comparison with Districts where such a Fund exists would have to be prior to the Fund deduction.

As when comparing the actual remuneration received by pilots from their professional Corporation, great caution must be shown because of the substantial differences in pooling rules and accounting practice. For instance, the Cornwall pilots establish each pilot's share before deducting his compulsory contributions to the Guild, the Federation and group insurance. This procedure was doubtless adopted because the premiums for their medical and hospital coverage vary with marital status and number of dependents. In other pooling systems where these deductions are the same for all pilots, the aggregate amount is considered a group expense which is deducted from the pool prior to sharing, a system which is obviously not logical but may have some advantages for income tax purposes.

The Cornwall pilots' main complaint is that they receive less income than the Kingston pilots whose work is very similar (vide pp. 966-8). Their argument would be sound if it were not a fact that, as a result of the special organization of pilotage services in the Great Lakes Basin, the tendency is for the Kingston pilots' remuneration to be too high by Canadian standards because of increases granted following demands by their American colleagues. Therefore, in effect, the parity that is sought is with American pilots in Great Lakes District No. 1. This problem will remain unless the pilotage organization on the Great Lakes is basically altered.

8. FINANCIAL ADMINISTRATION

The Cornwall and Montreal Districts follow a similar procedure for financial administration and both Districts are administered by the same D.O.T. personnel and from the same pilotage offices situated in Montreal (the Montreal District Supervisor is also the Cornwall District Supervisor). Therefore, the description of the financial administration in the Montreal District (pp. 811 and ff.) applies *mutatis mutandis*, except for a few small variations which will be described.

The District Supervisor sends out bills, collects dues and remits them *in toto* (except for pilotage dues charged for the pilots' transportation between Cornwall and Snell lock) to the Cornwall Pilots' Corporation, although the By-law provides for payment to each pilot by the District Supervisor of the dues he has personally earned, and although the dues collected as a result of the compulsory payment system should be paid to the Receiver General of Canada (there is no Pension Fund and District operating expenses are assumed by the Department of Transport). There is no deduction of any sort since there is neither Pilot Fund nor Pension Fund created under Part VI of the Act, no pilot vessel service and no radiotelephone charge. The only pilotage dues not remitted to the Pilots' Corporation are those paid by ships to compensate for transporting pilots between Cornwall and Snell lock. Since this service is provided by D.O.T. through a local taxi firm, they are paid when collected to the Receiver General of Canada (pp. 956-8).

For the cost of the service to the Crown and the maintenance and operation of pilotage offices and pilot stations, vide p. 977.

The District Supervisor renders only one annual report for the two Districts under his authority. This report, in addition to a general section dealing with the joint headquarters organization, contains a separate section for each group of pilots giving, *inter alia*, statistics of their earnings. It contains no information about the cost to the Government of operating the District (these figures are found in the financial reports of the Department of Transport).

The following table shows for the period 1961-1968 the total dues payable for pilotage services rendered by the pilots or on account of the compulsory payment system for each navigation season, including dues charged for transportation between Cornwall and Snell lock.

GROSS PILOTAGE EARNINGS

Year	GROSS PILOTAGE DUES EARNED		TRANSPORTATION DUES PAYABLE TO:		GROSS PILOTAGE DUES EARNED LESS TRANS- PORTATION DUES
	Aggregate Amount	% Increase since 1961	Pilots	Receiver General of Canada	
1961.....	\$401,321.74	0%		\$19,279.43	\$382,042.31
1962.....	448,713.06	11.8	\$11,609.85	\$ 9,512.60	427,590.61
1963.....	406,525.14	1.3	9,646.65	9,907.63	387,070.86
1964.....	478,592.97	19.3	11,540.80	11,560.40	455,491.77
1965.....	607,451.39	51.4	14,064.22	11,976.00	581,411.17
1966.....	647,681.55	61.4	15,708.14	22,983.90	608,989.51
1967.....	647,681.21	61.4	16,340.58	22,144.20	609,176.43
1968.....	628,631.55	56.6	15,903.98	19,193.00	593,534.57

SOURCE: Ex. 534(b).

Chapter D

For Recommendations affecting this District, see Section Five.

Chapter E

APPENDICES

APPENDIX A

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

- (1) Table—Comparative statistical analysis during the ten-year period, 1959-1968 inclusive.
- (2) Summary—Detailed analysis for the years 1964 and 1967.

APPENDIX B

- (1) Graphs a. May 1964 workload of Cornwall pilot Willie Watier.
b. September 1964 workload of Cornwall pilot Willie Watier.
- (2) Tables a. Comparative detailed analysis of workload of pilot Willie Watier for the months of May 1964 and September 1964.
b. Comparative summary of workload of pilot Willie Watier and busiest pilot during busiest and least busy months—1962, 1963 and 1964.

APPENDIX C

Monthly Trip Assignments by Cornwall Pilots:

- (1) Graphs a. During 1963, 1964 and 1966.
b. During 1967, 1968 and 1969.
- (2) Table—Aggregate number—1963-1969.

COMPARATIVE STATISTICAL ANALYSIS OF SHIPPING CASUALTIES,
DURING THE TEN-

Details	1959	1960	1961
A. EVENTS WHILE NAVIGATING			
I. MAJOR CASUALTIES (with or without loss of life)	0	1	0
II. MINOR CASUALTIES (without loss of life).....			
(a) Minor strandings.....	1	0	3
(b) Minor damage to ship.....	0	1	0
	1	1	3
III. ACCIDENTS (without damage to ships).....	0	0	0
IV. INCIDENTS (without any damage whatsoever).....	0	1	0
	1	3	3
B. EVENTS WHILE BERTHING, UNBERTHING, AT ANCHORAGE OR LOCK			
I. MAJOR CASUALTIES (with or without loss of life)	0	0	0
II. MINOR CASUALTIES (without loss of life):			
(a) Minor strandings.....	0	0	0
(b) Minor damage to ship:			
(i) Striking pier or installation.....	0	1	3
(ii) Striking vessel berthing or unberthing..	0	0	0
(iii) Striking vessel at anchorage or lock.....	3	1	0
(iv) Striking approach wall or fender.....	0	4	6
(v) Striking lock wall or fender.....	0	2	9
(vi) Striking lock gate or gate fender.....	0	1	0
(vii) Striking bridge.....	0	0	0
(viii) Other.....	0	0	0
	3	9	18
III. ACCIDENTS (without damage to ships):			
(a) Damage to pier or installation.....	0	0	0
(b) Damage to buoys.....	0	0	0
(c) Damage to lock:			
(i) Striking approach wall or fender.....	3	1	5
(ii) Striking lock wall or fender.....	7	1	1
(iii) Striking lock gate or gate fender.....	7	3	1
(d) Damage to bridge.....	1	0	0
	18	5	7
IV. INCIDENTS (without any damage whatsoever).....	0	0	0
	21	14	25
GRAND TOTAL.....	22	17	28

SOURCES: Exs. 1451 and 1467.

A (1)

ACCIDENTS AND INCIDENTS WITH A CORNWALL PILOT ON BOARD
YEAR PERIOD 1959-1968

1962	1963	1964	1965	1966	1967	1968
0	0	0	0	0	0	1
0	2	0	1	0	2	0
0	1	0	0	1	0	0
0	3	0	1	1	2	0
0	0	1	0	0	0	0
3	4	8	6	2	1	0
3	7	9	7	3	3	1
0	0	0	0	0	1	2
0	1	2	0	1	0	4
1	0	0	0	0	1	0
0	0	0	0	0	0	0
1	0	0	2	0	0	0
2	4	8	4	7	4	4
13	1	11	9	11	4	6
0	0	0	0	0	0	0
0	1	0	0	0	0	0
0	1	0	0	1	0	0
17	8	21	15	20	9	14
0	0	0	0	0	0	0
0	0	1	0	0	0	0
0	3	0	1	3	1	0
2	0	1	0	3	2	2
4	5	1	0	0	1	0
1	0	0	0	0	0	0
7	8	3	1	6	4	2
1	0	0	1	2	0	4
25	16	24	17	28	14	22
28	23	33	24	31	17	23

Appendix A(2)(a)

SHIPPING CASUALTIES, ACCIDENTS AND INCIDENTS
WITH A CORNWALL PILOT ON BOARD DURING 1964

Nineteen sixty-four had the greatest number of events in the past ten-year period (vide Appendix A(1) p. 989), details as follows:

A. EVENTS WHILE NAVIGATING

I. MAJOR CASUALTIES (with or without loss of life):
— nil

II. MINOR CASUALTIES (without loss of life):
— nil

III. ACCIDENTS (without damage to ships):

1. June 10—*Beaverelm* struck buoy in Lake St. Louis during high wind.

IV. INCIDENTS (without any damage whatsoever):

1. January 15—*Middlesex Trader* grounded in Seaway while navigating.

2. April 23—*Hadar* touched bottom in Gray's Reef Passage while navigating; U.S. authorities informed.

3. May 9—*Antiope* grounded below Côte Ste-Catherine lock during wind.

4. May 30—*Irish Pine* grounded in the Seaway while manoeuvring.

5. July 17—*Tautra* struck canal bank near buoy 12B approaching Upper Beauharnois lock downbound; caused by steering gear failure.

6. September 14—*Prins Casimir* grounded in Lake St. Francis due to PILOT ERROR.

7. October 1—*Halifax City* struck bank of Seaway when vessel took a sheer while navigating.

8. October 15—*Middlesex Trader* touched bottom in Lake St. Louis while navigating.

B. EVENTS WHILE BERTHING OR UNBERTHING AT ANCHORAGE OR LOCK

I. MAJOR CASUALTIES (with or without loss of life):
— nil

II. MINOR CASUALTIES (without loss of life):

(a) *Minor strandings*

1. May 3—*Irish Pine* grounded on sand bank when downbound in Lake St. Louis after bow port anchor was weighed.

2. November 1—*World Felicia* grounded on south side of channel when upbound above Côte Ste-Catherine lock; caused by a mechanical failure in a circuit breaker with subsequent loss of power.

(b) *Minor damage to ship*

(i) *Striking pier or installation*—Nil.

(ii) *Striking vessel berthing or unberthing*—Nil.

(iii) *Striking vessel at anchorage or lock*—Nil.

(iv) *Striking approach wall or fender:*

1. June 5—*Scottish Trader* struck Beauharnois lock quay due to PILOT ERROR.

2. June 23—*Egle* struck Beauharnois lock quay due to PILOT ERROR.

3. July 10—*Martin Thorf* struck Beauharnois lock quay with stern when leaving.

4. July 14—*Carrigan Head* struck Beauharnois lock quay when manoeuvring.
5. October 21—*Valmas* struck tie-up wall when approaching Côte Ste-Catherine lock upbound, due to crew slow with moorings.
6. October 26—*Rotte* struck Côte Ste-Catherine approach wall when vessel took a sheer while manoeuvring.
7. November 16—*Bolivia Maru* struck quay in Seaway when manoeuvring during wind.
8. November 19—*Grand Haven* struck small tie-up wall in Seaway when manoeuvring; caused by current.

(v) *Striking lock wall or fender:*

1. June 17—*Glynafon* struck Beauharnois lock with propeller when manoeuvring during wind.
2. July 30—*Polydora* struck Beauharnois lock wall when manoeuvring during wind.
3. August 9—*Continental Pioneer* struck Seaway lock wall when manoeuvring during wind.
4. August 19—*Exiria* landed heavily on Lower Beauharnois lock wall after being pushed off wall while being raised in lock.
5. August 26—*Vaxholm* struck Upper Beauharnois lock wall; caused by engine failure and mooring lines parting.
6. September 9—*Angeliki L.* struck Lower Beauharnois lock wall during filling period while upbound.
7. September 22—*Waldemar Peter* struck Upper Beauharnois lock wall while upbound during filling; caused by slack winch line.
8. October 1—*Agios Nicolaos* upbound being raised in lower Beauharnois lock struck wall; caused by insufficient fendering to protect protruding accommodation ladder platform and life-boat davit's wheel.
9. October 28—*Holmside* struck Lower Beauharnois lock wall during filling; caused by water turbulence.
10. October 31—*Baltic Sea* upbound struck Lower Beauharnois lock wall during filling.
11. November 19—*Orient Merchant* upbound struck St. Lambert lock fender which was fully raised; caused by wind.

III. ACCIDENTS (without damage to ships):

(a) *Damage to pier or installation*—Nil(b) *Damage to buoys*

1. May 9—*Evvia* drifted and struck buoy in Seaway; caused by engine trouble during wind.

(c) *Damage to lock*(i) *Striking approach wall or fender*—Nil.(ii) *Striking lock wall or fender:*

1. June 10—*Alejandro Zubizarreta* downbound in Upper Beauharnois lock ripped off two rubber fenders.

(iii) *Striking lock gate or gate fender:*

1. August 14—*Alcoa Marketer* struck No. 3 guard railing fender boom metal post on south side when leaving St. Lambert lock upbound.

IV. INCIDENTS (without any damage whatsoever):

— nil

Appendix A(2)(b)

SHIPPING CASUALTIES, ACCIDENTS AND INCIDENTS
WITH A CORNWALL PILOT ON BOARD DURING 1967

Nineteen sixty-seven had the least number of events in the past ten-year period (vide Appendix A(1) p. 989), details as follows:

A. EVENTS WHILE NAVIGATING

I. MAJOR CASUALTIES (with or without loss of life):

—nil.

II. MINOR CASUALTIES (without loss of life):

1. June 23—*Irene* grounded at Pointe Citrouille during fog.
2. August 28—*Solny* grounded near St. Regis during fog; investigated by USCG.

III. ACCIDENTS (without damage to ships):

—nil.

IV. INCIDENTS (without any damage whatsoever):

1. July 2—*Penquer* grounded at St. Regis Ranges during rain squall and high wind with light ship.

B. EVENTS WHILE BERTHING OR UNBERTHING AT ANCHORAGE OR LOCK

I. MAJOR CASUALTIES (with or without loss of life):

1. November 12—*Thorscarrier's* propeller struck tug *Flo Mac* which sank; cause: moorings slack and poor seamanship by those on board *Thorscarrier* (pilot on board *Thorscarrier* but not on board *Flo Mac*).

II. MINOR CASUALTIES (without loss of life):

—nil.

(a) *Minor strandings*—Nil.

(b) *Minor damage to ship*

(i) *Striking pier or installation:*

1. July 12—*Thorscarrier* struck quay while unberthing at Cornwall harbour (Master handling ship).

(ii) *Striking vessel berthing or unberthing*—Nil.

(iii) *Striking vessel at anchorage or lock*—Nil.

(iv) *Striking approach wall or fender:*

1. April 17—*Beaverash* struck upper tie-up wall above Beauharnois lock; caused by steering gear breakdown.
2. April 29—*Arrow* struck tie-up wall at Snel lock when vessel took a sheer.
3. June 20—*Arrow* struck approach wall at Upper Beauharnois lock when manoeuvring.
4. November 26—*Nopal Lake* struck lay-by wall at Beauharnois lock when manoeuvring.

(v) *Striking lock wall or fender:*

1. May 17—*Yildun* struck lock wall at Lower Beauharnois lock when manoeuvring.
2. July 3—*South American* struck lock wall at St. Lambert during heavy wind squall.

3. September 1—*Beatrice Victory* struck lock wall leaving Lower Beauharnois lock during wind; caused by human error (sic).
4. November 4—*Stanvislavskiy* struck lock wall at Beauharnois lock during wind.

III. ACCIDENTS (without damage to ships):

(a) *Damage to pier or installation*—Nil.

(b) *Damage to buoys*—Nil.

(c) *Damage to lock*

(i) *Striking approach wall or fender:*

1. June 13—*Paul Lorenz-Russ* struck tie-up wall at Lower Beauharnois lock when manoeuvring.

(ii) *Striking lock wall or fender:*

1. April 17—*Finnberg* struck wall of Lower Beauharnois lock; caused by slow engine movement.
2. July 22—*Texaco Brasil* struck wall of Snell lock; caused by current.

(iii) *Striking lock gate or gate fender:*

1. June 4—*Avenir* struck Snell lock gates; caused by engine failure.

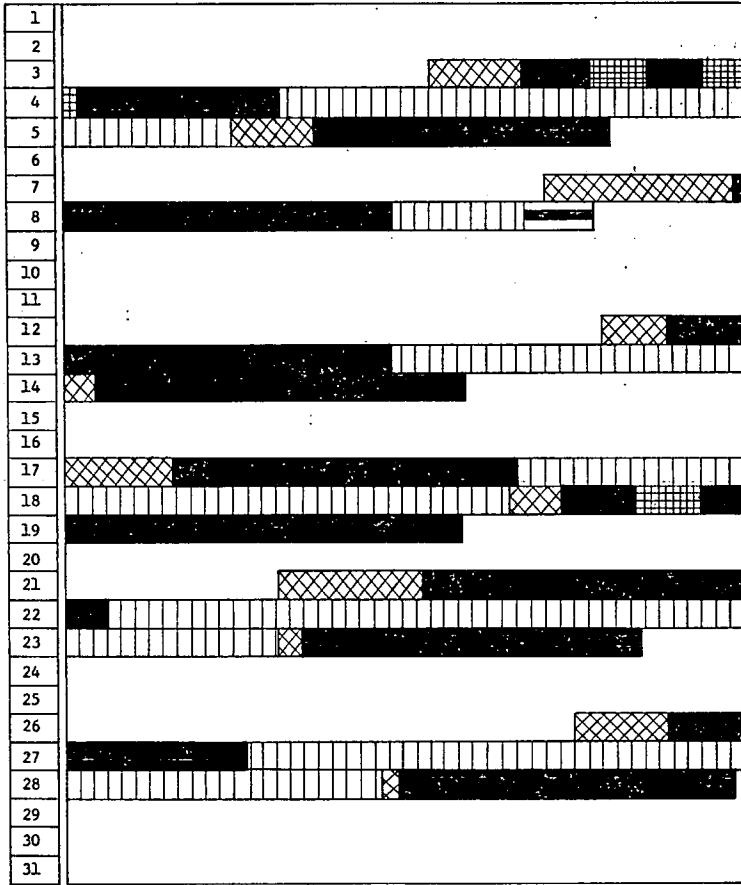
IV. INCIDENTS (without any damage whatsoever):

—nil

SOURCES: Exs. 1451 and 1467.











Appendix B(1)(a)

MAY 1964 WORKLOAD OF PILOT WILLIE WATIER



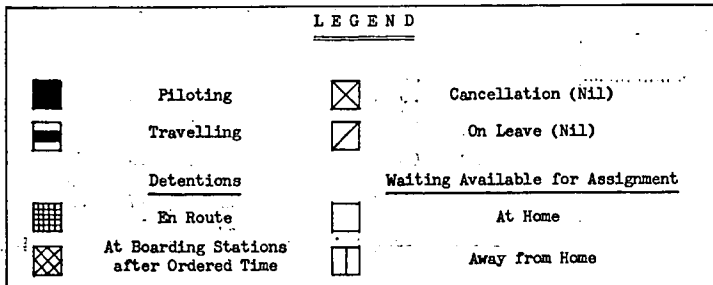
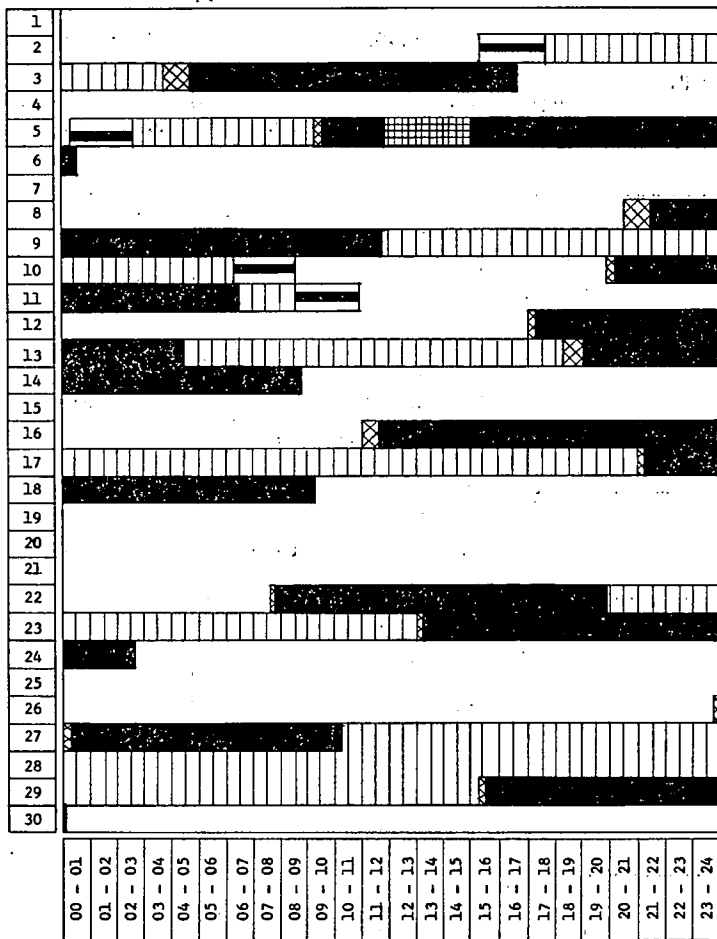
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20 - 21
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22 - 23
23 - 24

LEGEND

	Piloting		Cancellation (Nil)
	Travelling		On Leave (Nil)
	Detentions		Waiting Available for Assignment
	En Route		At Home
	At Boarding Stations after Ordered Time		Away from Home

Appendix B(1)(b)

SEPTEMBER 1964 WORKLOAD OF PILOT WILLIE WATIER



Appendix B(2)(a)

COMPARATIVE WORKLOAD ANALYSIS OF CORNWALL PILOT
WILLIE WATIER

Details	May 1964				September 1964					
	Dates	Aggregate		Total		Dates	Aggregate		Total	
		hrs.	mins.	hrs.	mins.		hrs.	mins.	hrs.	mins.
<i>Trips</i>	3-4	11	40			3	11	55		
	5	10	25			5-6	11	50		
	7-8	12	00			8-9	14	20		
	12-13	14	20			10-11	10	15		
	14	13	10			12-13	11	10		
	17	12	05			13-14	13	45		
	18-19	18	20			16	12	15		
	21-22	12	50			17-18	12	00		
	23	12	00			22	12	10		
	26-27	9	10			23-24	13	20		
	28	11	45			27	9	55		
				137	45	29-30	8	40	141	35
<i>Detentions</i>										
En route.....	3	2	00			5	3	05		
	3-4	1	50							
	18	2	15							
				6	05				3	05
At boarding stations after ordered time.....	3	3	10			3	1	00		
	5	2	55			5		20		
	7	6	40			8		55		
	12	2	15			10		15		
	14	1	05			12		15		
	17	3	55			13		45		
	18	1	45			16		40		
	21	5	10			17		15		
	23		50			22		05		
	26	3	15			23		15		
	28		35			26-27		30		
				31	35	29		10		
<i>Land Travel</i>	8	2	28			2	2	18	5	25
						5	2	16		
						10	2	16		
						11	2	28		
				2	28				9	18
<i>Waiting for Assign- ment</i>										
At outports.....	4-5	22	20			2-3	10	07		
	8	4	35			5	6	44		
	13	12	25			9-10	18	29		
	17-18	23	45			11	2	05		
	22-23	30	00			13	13	50		
	27-28	28	50			16-17	21	05		
						22-23	17	05		
				121	55	27-29	53	05	142	30

Details	May 1964				September 1964					
	Dates	Aggregate		Total		Dates	Aggregate		Total	
		hrs.	mins.	hrs.	mins.		hrs.	mins.	hrs.	mins.
At home.....	1-3	61	00			1-2	39	20		
	5-7	45	40			3-5	31	35		
	8-12	96	17			6-8	68	00		
	14-16	57	45			10	11	25		
	19-21	41	25			11-12	30	02		
	23-26	69	40			14-16	50	15		
	28-31	72	25			18-22	94	25		
				444	12	24-26	69	10		
						30	23	55		
									418	07
Grand Total.....				744	00				720	00

SOURCE: Ex. 1417.

Appendix B(2)(b)

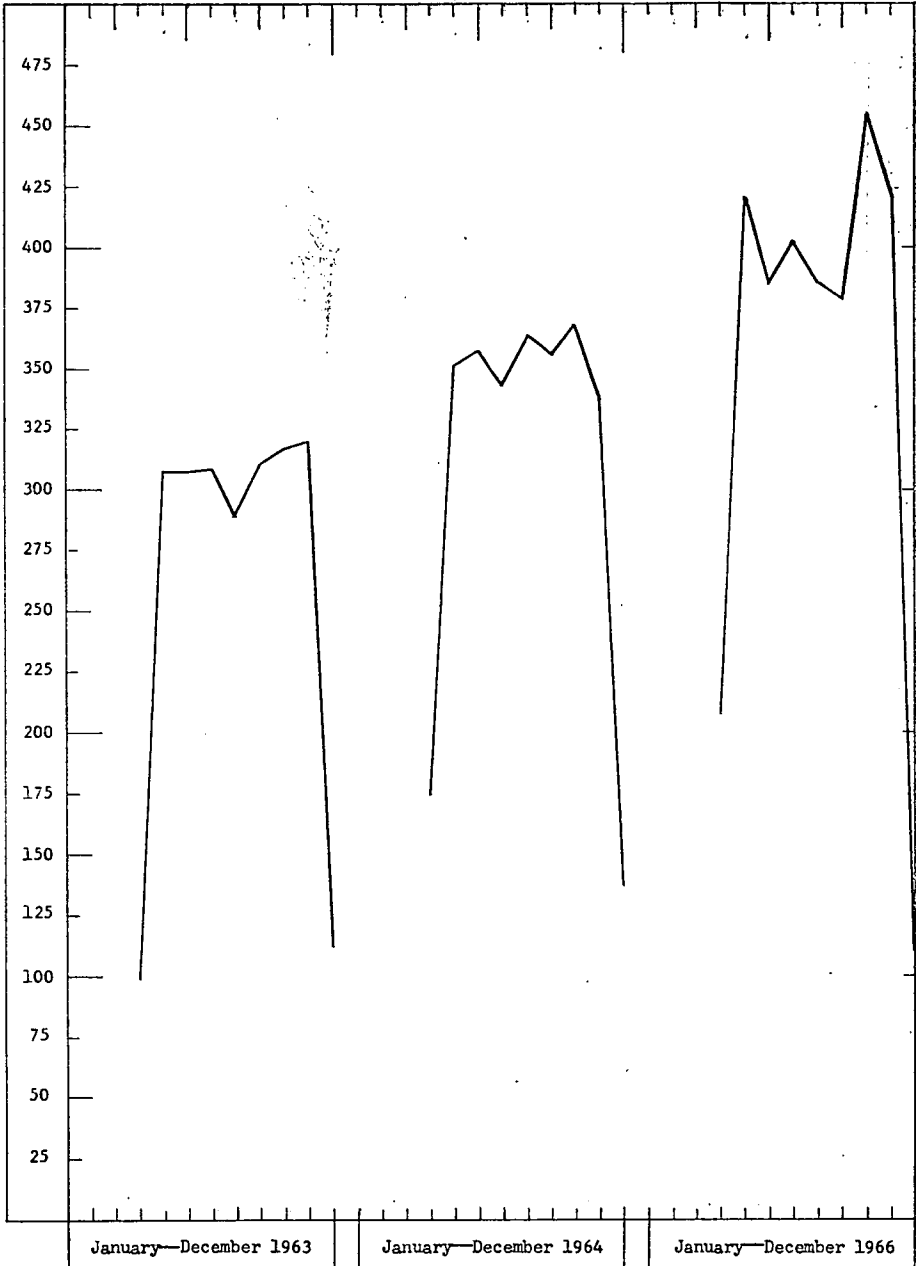
COMPARATIVE WORKLOAD SUMMARY OF CORNWALL PILOT
WILLIE WATIER AND BUSIEST CORNWALL PILOT DURING
BUSIEST AND LEAST BUSY MONTHS

Details	Busiest Pilot—Busiest Month			Willie Watier May 1964 turns hrs. mins.	Busiest Pilot—Least Busy Month			Willie Watier September 1964 turns hrs. mins.
	Wilbrod Marion October 1962 turns hrs. mins.	Paul Pelletier November 1963 turns hrs. mins.	Lucien Arcand November 1964 turns hrs. mins.		Leopold Bernier July 1962 turns hrs. mins.	Gaston Carignan August 1963 turns hrs. mins.	Wilbrod Marion September 1964 turns hrs. mins.	
<i>Trips</i>								
Upbound.....	8 109 12*	4 45 54	3 43 06	6 72 05	5 65 12	6 73 36	6 82 54	6 70 05
Downbound.....	5 64 54	7 97 30	7 106 06	5 65 40	8 84 06	6 63 54	8 90 54	6 71 30
Total trips.....	13 174 06	11 143 24	10 149 12	11 137 45	13 149 18	12 137 30	14 173 48	12 141 35
<i>Movages.</i>	1 n/av.†	0 —	0 —	0 —	1 2 24	0 —	0 —	0 —
<i>Cancellations.</i>	0 —	0 —	0 —	0 —	0 —	0 —	0 —	0 —
<i>Detentions</i>								
En route.....	1 6 00	0 —	0 —	3 6 05	0 —	0 —	0 —	1 3 05
At boarding stations								
Upbound.....	4 12 06	1 6 18	1 10 06	6 24 25	0 —	1 7 30	0 —	6 2 40
Downbound.....	1 3 06	2 18 12	0 —	5 7 10	0 —	1 2 42	0 —	6 2 45
Total detentions.....	6 21 12	3 24 30	1 10 06	14 37 40	0 —	2 10 12	0 —	13 8 30
<i>Land Travel</i>	3 n/av.†	3 n/av.†	3 n/av.†	1 2 28	4 n/av.†	0 —	1 n/av.†	4 9 18
<i>Waiting, available for assignment</i>								
Upbound.....	9 387 36§	8 327 48§	7 369 30§	7 444 12	10 472 42§	6 438 12	7 394 00§	9 418 07
Downbound.....	5 161 06	5 224 18	7 191 12	6 121 55	8 119 36	7 158 06	8 152 12	8 142 30
Total waiting.....	14 548 42	13 552 06	14 560 42	13 566 07	18 592 18	13 596 18	15 546 12	17 560 37
Grand Total.....	744	720	720	744	744	744	720	720

*Including movage; †included in trips upbound; ‡included in waiting upbound; § including land travel between boarding stations.
SOURCES: Exs. 828 and 1417.

Appendix C(1)(a)

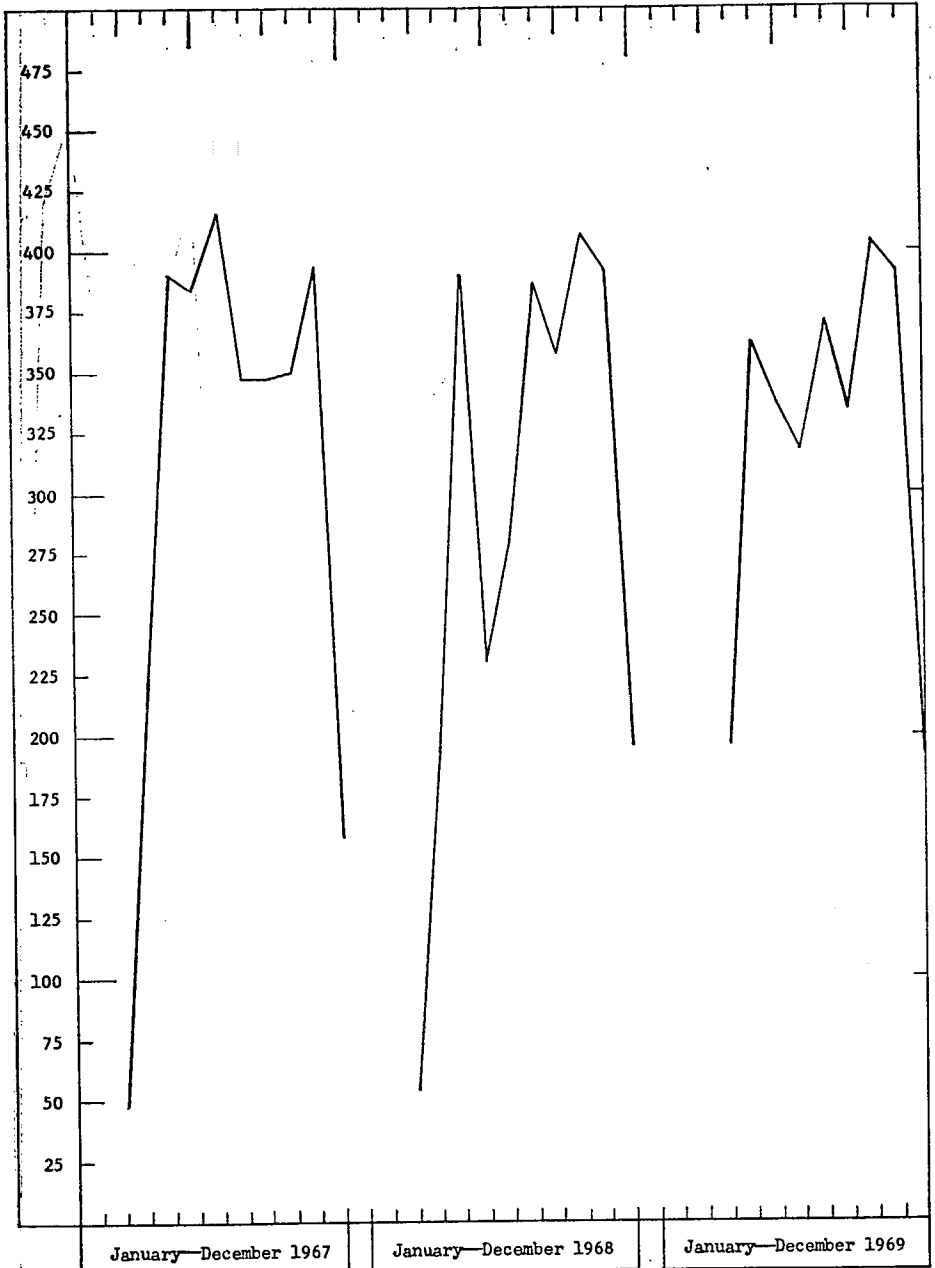
MONTHLY TRIP ASSIGNMENTS BY CORNWALL PILOTS DURING:
1963, 1964 AND 1966*



SOURCE: Appendix C(2)—*1965 not available.

Appendix C(1)(b)

MONTHLY TRIP ASSIGNMENTS BY CORNWALL PILOTS DURING
1967, 1968 AND 1969

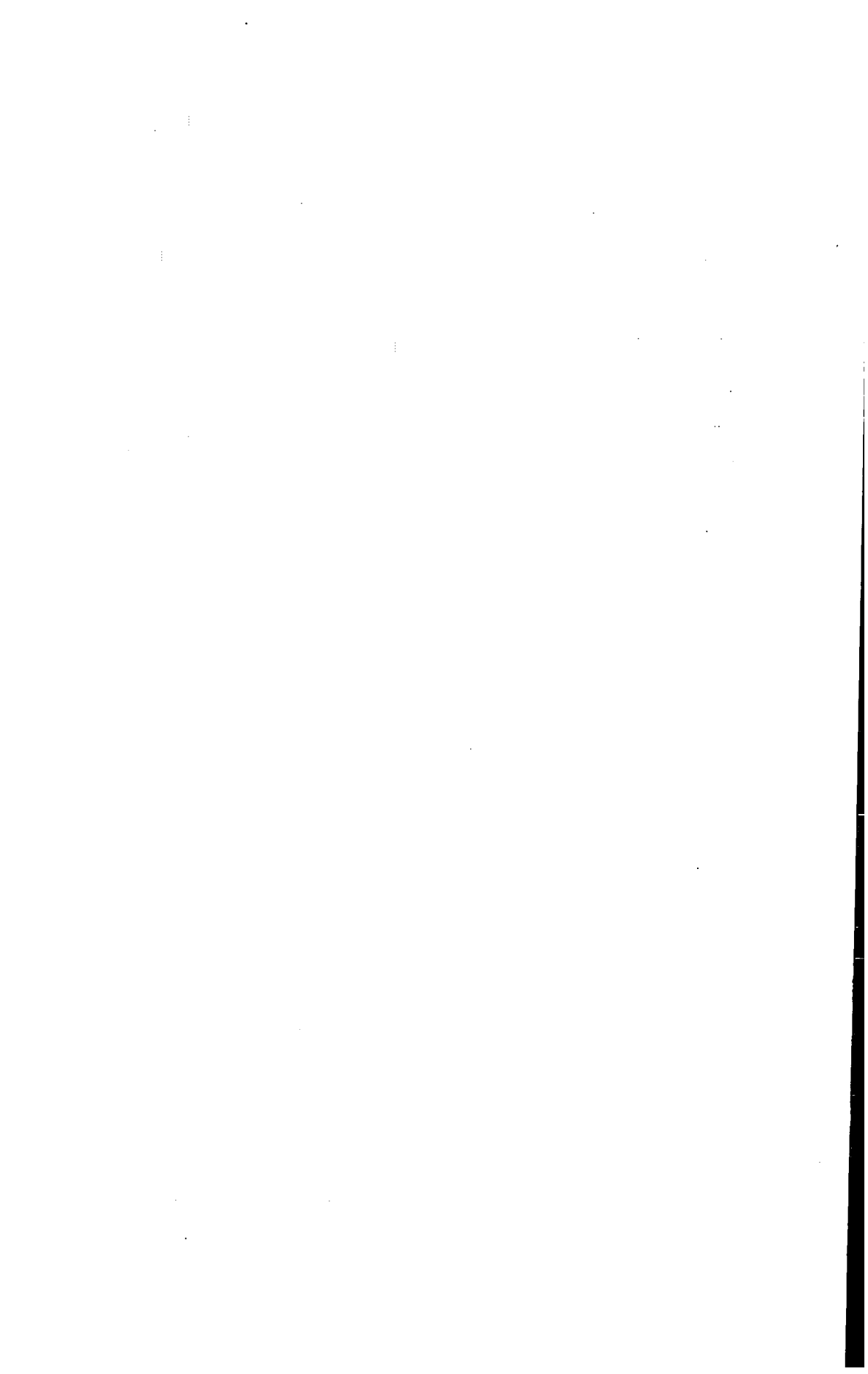


SOURCE: Appendix C(2).

Appendix C(2)
 CORNWALL PILOTS—AGGREGATE MONTHLY TRIP
 ASSIGNMENTS

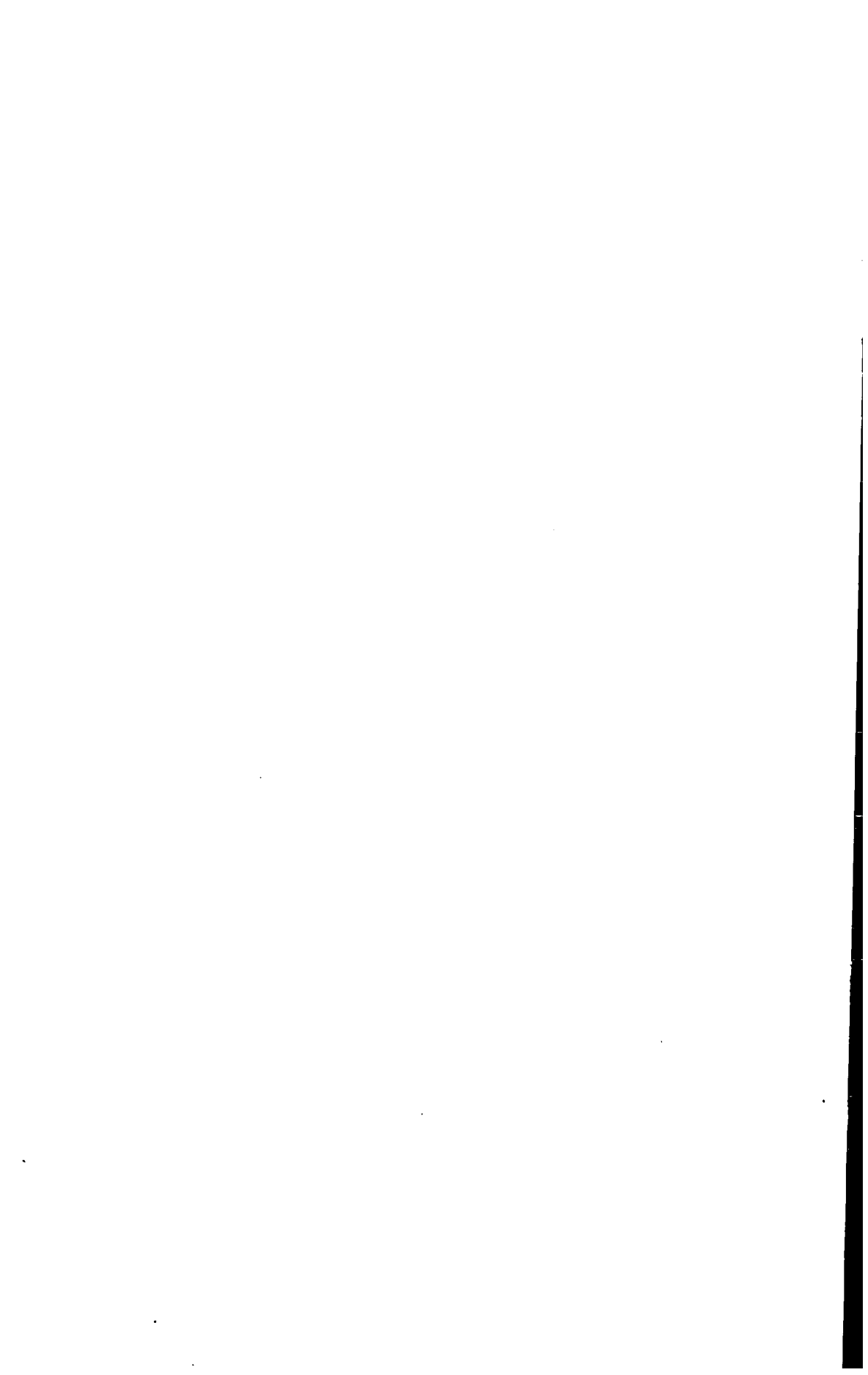
Month	1963	1964	1965	1966	1967	1968	1969
January.....	—	—	n/av.	—	—	—	—
February.....	—	—	"	—	—	—	—
March.....	—	—	"	—	48	54	—
April.....	99	174	"	207	220	193	195
May.....	308	351	"	420	390	390	362
June.....	308	357	"	385	384	230	337
July.....	309	343	"	402	416	280	318
August.....	289	364	"	385	348	386	370
September.....	311	356	"	379	348	357	334
October.....	317	368	"	454	350	406	403
November.....	320	337	"	420	393	391	391
December.....	111	136	"	110	157	195	192
	2,372	2,786	"	3,162	3,054	2,882	2,902

SOURCE: Ex. 1540(i).



Section Five

RECOMMENDATIONS



RECOMMENDATIONS

RECOMMENDATIONS AFFECTING THE PILOTAGE DISTRICTS OF QUEBEC, MONTREAL AND CORNWALL, AND LOWER ST. LAWRENCE RIVER PORTS

PREAMBLE

This section contains the Commission's recommendations on subject-matters of basic importance regarding one or more Districts or regions covered in Part IV of this Report. Following the practice adopted in the other Parts, many other proposals in the form of comments, remarks and conclusions are contained in the text but have not been listed here to avoid repetition and also because they should be read in their context for better comprehension. *Inter alia*, careful attention should be paid to the remarks and comments on pp. 413 and ff. suggesting solutions for the problems of safety resulting from the lack of essential information regarding a ship and her position when a pilot boards in transit, and the absence of facilities to obtain such information before he embarks.

RECOMMENDATION No. 1

The Present Pilotage Districts of Quebec, Montreal and Cornwall to Be Reduced to Two Districts with a Common Boundary at Trois-Rivières and Headquarters in Quebec and Montreal Respectively; Pilotage Services between Les Escoumins and Cornwall (Snell Lock) to Continue to Be Provided on a Sector Basis by the Existing Groups of Pilots

The limits of a Pilotage District or the territorial competency of a group of pilots should not be related to the boundaries of other formations established for reasons unconnected with pilotage, but should be defined solely to ensure the maximum efficiency and reliability of the service.

The basic determining factor is the need for uninterrupted service from Les Escoumins to Cornwall (Snell lock) and from there up to Lake Ontario. The very length of the waterway and its many navigational difficulties which necessitate a high standard of *expertise* make it physically impossible for the whole trip to be completed by one pilot. Hence, the legal territorial competency of the pilots must be limited to only part of the transit (Part I, p. 477).

Since the present distribution of pilotage services on the St. Lawrence between four groups of river pilots has proved necessary and efficient, this feature should be retained.

Although for reasons already discussed it was necessary to divide the area between Les Escoumins and Cornwall (Snell lock) into four sectors, each with its own group of pilots, it should not be forgotten that pilotage must be continuous and uninterrupted. It follows that liaison problems can be effectively solved only by proper organization. The primary requirement is administrative direction and control of pilotage throughout the area as well as unity of authority if feasible, or, if not, a minimum number of separate Pilotage Authorities which would be required to work together to achieve the required continuity between Districts.

Normally, each distinct group of pilots should be provided with their own Pilotage Authority *in situ* which is thoroughly conversant with local problems—standards of pilots' qualifications, operational requirements and the nature, extent and characteristics of the demand for pilotage—in order to discharge its numerous and demanding responsibilities promptly and effectively. On the other hand, over-organization must be avoided, especially when a favourable geographical location permits an Authority to take responsibility for more than one group of pilots, e.g., in contiguous sectors, thus, *inter alia*, facilitating the provision of uninterrupted service.

The foregoing can be achieved by dividing the River from Les Escoumins to Cornwall (Snell lock) into two Pilotage Districts, with the harbour of Trois-Rivières as common territory. The headquarters of the Pilotage Authority of each District should be in Quebec and Montreal respectively to give all groups of pilots direct access to their Authority.

Except for including the Quebec/Trois-Rivières sector in the Quebec District, this proposal corresponds to the existing practice which experience has proved satisfactory.

The Cornwall and Montreal Pilotage Districts have been separate Districts in name only. The complete administration of both Districts has not only been carried out in Montreal, but from the same headquarters and with the same staff. The Montreal District Supervisor has also fulfilled the function of Cornwall District Supervisor and the pilots of both Districts have (realistically) been despatched from the same office. An obvious benefit has been the continuity of service at such vital points as St. Lambert lock—the *de facto* division of the present Montreal and Cornwall Districts.

Moreover, following the administrative division of the Montreal District, the pilots of the Trois-Rivières/Quebec sector were placed in the unwarranted position of being physically separated from their Pilotage Authority and its local administration. Conversely, the District Supervisor found himself incapable of effecting any control and surveillance over this group of

pilots except by delegation, mainly to the Quebec District Supervisor with whom the Trois-Rivières/Quebec pilots are in direct contact but who lacks legal authority to act in this capacity. Therefore, it is logical and necessary in the interest of efficiency that the Trois-Rivières/Quebec sector be detached from the Montreal District and made part of the proposed Quebec Pilotage District.

The Pilotage Authority of the proposed Montreal Pilotage District would be required to exercise its demanding functions only over pilots with whom it has direct contact, i.e., the river pilots of the Montreal upper sector, the Montreal harbour pilots and the Cornwall pilots.

Continuity of service should be assured through appropriate legislation which would, *inter alia*, establish joint areas between sectors for purposes of boarding and changing pilots as follows:

- (a) the whole of the harbour of Quebec to remain within the pilot limits of both groups of Quebec pilots, to be used by the pilots of the upper sector (Quebec/Trois-Rivières) solely for the purpose of commencing or terminating a river trip either at a berth or by a pilot vessel in the stream;
- (b) the harbour of Trois-Rivières also to remain in the joint territory of the pilots of the Quebec/Trois-Rivières sector and the Trois-Rivières/Montreal sector, the latter to use the joint area only for the purpose of commencing or terminating a river trip, either at a wharf or through the pilot vessel service at Pointe-des-Ormes;
- (c) St. Lambert lock and its downstream wait wall to be made the joint territory of the Trois-Rivières/Montreal river pilots, the harbour pilots and the Cornwall pilots, with the Montreal river pilots and the harbour pilots boarding in the lock but disembarking there only if the ship is not obliged to tie up at the downstream wait wall; manoeuvring ships along the wait wall to be the exclusive responsibility of the Cornwall pilots since this is part of their *expertise*;
- (d) Snell lock and its downstream wait wall to be the joint territory of the pilots of the Montreal District upper sector (Cornwall pilots) and the Great Lakes Basin pilotage organization, the Cornwall pilots bringing ships into the lock only if they do not have to tie up at the downstream wait wall, but in all cases boarding within the lock; moving vessels along the downstream wait wall into the lock to be the responsibility of the Great Lakes Basin pilots serving in the Cornwall/Kingston sector (vide Rec. No. 3).

The existence of a separate group of pilots to effect movages in the harbour of Montreal is justified by service requirements and should be retained.

RECOMMENDATION NO. 2

Appropriate Steps to Be Taken to Validate the Present Seaward Limit (Les Escoumins) of the Pilotage District of Quebec, and Also, as an Interim Measure, the Present Western Limit (St. Lambert Lock) of the Pilotage District of Montreal

The exact definition of the limits of a Pilotage District is an essential requirement in pilotage legislation because the limits indicate where rights, obligations and jurisdiction begin, exist or terminate. Sec. 361 C.S.A. requires a pilot to remain with a ship until she passes the District limit or reaches her destination within the District. There can be no District limits except those legally defined. Therefore, under the present organization, the pilots violate the law by embarking and disembarking at Les Escoumins, and by demanding and receiving full tariff for incomplete service. The Pilotage Authority acts illegally when it tries to prevent pilots from, or punish them for, piloting beyond Les Escoumins, although not past Father Point, without its permission (pp. 119 and ff.).

The Pilotage Authority is remiss in the discharge of its duties when it condones the Quebec pilots' failure to provide pilotage services in the area from Les Escoumins to Father Point, and port pilotage as unofficially provided in the ports situated in that area, e.g., Rimouski and Forestville, by unlicensed pilots (Section Two, p. 528).

If pilots are unavailable, thus preventing the Authority from providing them at the seaward limit, this would, under the present statutory legislation, authorize the employment of unlicensed pilots (sec. 354 C.S.A. and Part I, pp. 207 and ff.) and render the compulsory payment system (assuming that it is legally in force) inapplicable (sec. 345 C.S.A. and Part I, pp. 230 and ff.)

The move of the boarding area from Father Point to Les Escoumins was warranted from the service point of view, but the *de facto* situation thus created should be regularized without delay.

Such a situation will not be likely to re-occur if, as recommended by the Commission, the proposed new Pilotage Act provides that fixing and amending District limits is to be effected by the Central Authority through Pilotage Orders (Part I, Gen. Rec. No. 17, p. 506). However, the question should not be left in abeyance until a new Act is passed—immediate steps should be taken to amend existing legislation to regularize the practice, even if this means amending sec. 322 C.S.A. as an interim measure. Nevertheless, as demonstrated on p. 9, it is considered that this amendment could be legally effected by the simple device of an order of the Governor in Council issued pursuant to the last part of sec. 324.

The similar situation that exists with regard to the western limit of the present Montreal District (p. 627) should also be corrected immediately by the same process pending the adoption of a new Pilotage Act and the recommended reorganization of the Districts.

RECOMMENDATION NO. 3

**Appropriate Steps to Be Taken to Extend Westward to
Snell Lock the Present Limit of the Pilotage District of
Cornwall (or of the Proposed District of Montreal)**

Unless in practice it is impossible to do otherwise, the limits of a Pilotage District should coincide with the natural boundaries of the area where pilotage services are provided, i.e., those warranted solely by consideration of the provision of adequate, efficient services. Artificial limits will not meet service requirements and may well prove a continuing source of legal problems.

The Great Lakes/St. Lawrence waterway is a continuous water route wherein, pursuant to ancient international treaties and customs, ships of all nations have the right or privilege to navigate unhampered, even if the channel west of St. Regis runs through Canadian and United States waters. Since pilotage is a service to shipping, its organization should not be governed by considerations of territorial waters, and any control problems arising because of their existence should be resolved first.

Because these basic requirements were not given full legal recognition, the Cornwall Pilotage Authority has for years found itself powerless to impose the necessary organization and procedure, and for lack of legal power has been subjected to undue pressure and forced into a series of decisions, reversals and compromises in order to have its pilots provide services which, in practice if not in law, met the requirements (vide p. 621 and p. 899).

The administrative arrangements in force since 1966, following a provision that was added to the Memorandum of Arrangements between Canada and the United States regarding pilotage in the Great Lakes (vide p. 902), constitute only a makeshift solution which still fails to give proper recognition to the basic requirements, and the ensuing position still leaves much to be desired on account of the duality of authorities over the Cornwall pilots and the continuing inability of the Cornwall Pilotage Authority to exercise full legislative and administrative controls over pilotage that must be performed by its pilots between St. Regis and Snell lock.

It is considered that the Cornwall pilots should come under a single Pilotage Authority with full jurisdiction over the complete length of the pilotage territory between St. Lambert and Snell locks, and with limited jurisdiction over the joint boarding areas that have to be established at each end.

This should be achieved by an agreement between Canada and the United States of America which recognizes the exclusive jurisdiction of Canada over all matters concerning pilotage, including the right and power to investigate shipping casualties involving pilots in that sector of the St. Lawrence River between the Canadian-United States boundary near St. Regis and Snell lock, as if these waters were Canadian waters for pilotage purposes (and not "designated waters" as at present under Canadian and United States Great Lakes pilotage legislation). The western limit of the Cornwall Pilotage District (or of the new Montreal Pilotage District as proposed) could then be extended westward to Snell lock and a joint area formally established where Great Lakes District One or Cornwall and Montreal pilots could board and change over.

RECOMMENDATION NO. 4

Pilotage in the Sector between Les Escoumins and Quebec, Including the Saguenay, to Be Classified a Public Service; Pilotage in the Other Sectors between Quebec and Cornwall (Snell Lock) to Be Classified an Essential Public Service

Les Escoumins-Quebec Sector

Pilotage in the confined waters of the St. Lawrence River between Red Islet and Quebec should be made available to shipping in the public interest but should not be made compulsory except in very unusual cases. Hence, it should be classified a public service. The same applies to the Saguenay River.

The navigational hazards are not such that they can not be effectively met by Masters unfamiliar with the area, provided they wait for favourable tides and weather conditions, and any degree of familiarization will reduce delays. The pilots themselves helped to establish this point during their eight-day strike in early April 1962 when most vessels proceeded without pilots, despite the fact that the buoys were not yet in place, and made fast, safe transits. Most vessels were delayed only when they met adverse weather conditions (pp. 207-208). Navigation is now further facilitated by modern navigational instruments, electronic communications and the improved manoeuvrability of newer ships.

Despite the availability of detailed publications (e.g., the St. Lawrence Pilot and Notices to Mariners), nautical charts and a complete, modern network of aids and information services on all waters involving safety, the natural hazards and difficulties created by tides, currents and adverse weather conditions necessitate the availability of competent pilots to ensure safe, speedy transits. Many factors must be considered and the risk of error is

very great. Except when tide and weather are favourable, only a thoroughly experienced mariner can proceed safely past the entrance to the Saguenay River, through Coudres Passage, around Lauzon Bend and berth in the eastern sector of Québec harbour. The advantage of having a pilot is that he has expert knowledge of all these factors, perfected and maintained with constant practice based on frequent pilotage assignments and the combined experience of his colleagues.

For the efficient operation of the National Harbours Board ports of Quebec and Chicoutimi and the D.O.T. port of Ha Ha Bay, and because the Les Escoumins-Quebec sector contains the first stretch of confined, difficult waters of the St. Lawrence-Great Lakes waterway, it is in the national interest that an efficient pilotage service be made available. However, the requirement is not such that pilotage should be made compulsory except in very special cases, e.g., highly dangerous cargoes or ships of exceptional dimensions, which could well be covered by special Pilotage Orders if the system proposed in Gen. Rec. No. 22 (Part I, pp. 532 and 533) is implemented.

According to the criteria established in General Recommendations Nos. 17 and 22, pilotage in this sector should not be classified an essential public service, since a maritime casualty is not likely to disrupt navigation seriously to the marked disadvantage of the national interest, nor does the Canadian economy require that vessels be forced to make speedy transits and movements. In recent years, many serious marine casualties have occurred—ironically most of them with a pilot on board because very few ships dispense with the services of a pilot—but on no occasion so far has any District channel been completely blocked as a result. The most vulnerable area is the St. Fulgence Channel but the chance of serious casualty is quite remote because navigation there encounters few serious difficulties. This view is borne out by the records. On the St. Lawrence River, the only two vulnerable areas are near Cape Gribane and in the North Traverse. Here again and for the same reason, the chance of the channel being blocked is quite remote but, even if it were completely blocked, this would mean the disruption of only part of the traffic since vessels with a draught of up to 30 feet can be accommodated at high water through the South Channel, and even through the Middle Channel.

*Quebec-Trois-Rivières, and Trois-Rivières-
St. Lambert Lock Sectors*

Navigational difficulties in these two sectors (pp. 629-32) and the constant possibility of the dredged channel which extends over most of their length being completely blocked for a considerable period of time, even by a mere stranding, require that pilotage be classified an essential public service.

Despite the availability of detailed information about the physical features of the channel and the action of currents, counter-currents and tides, local knowledge and actual experience in the navigation of these waters are required to assure a safe transit, even if time is taken and favourable weather conditions are awaited. Under these circumstances, navigation in the relatively narrow dredged channel with its numerous curves and frequent traffic requires navigators to pay constant attention and take immediate decisions which permit no time for consultation or study.

By contrast with the situation in the sector below Quebec, there is no alternative route if the channel were blocked following a shipping casualty—by no means a remote possibility in view of the length and size of modern ships and the width of the channel—and, if this occurred at any time during the regular navigation season, there would be very serious consequences for the national economy because all traffic coming from, or bound to, the Seaway would be halted.

St. Lambert Lock-Snell Lock Sector

Although the navigational difficulties are less in this sector than between Quebec and Montreal, a high degree of skill is required of navigators to meet or overtake other vessels in the confined waters of canals and to manoeuvre without outside assistance in the close quarters of locks and their approaches (pp. 903 and ff.) The Seaway is extremely vulnerable in that the locks are single, not twinned, and the channels are narrow. A shipping casualty in a channel is most likely to interrupt traffic and any false manoeuvre while negotiating a lock may result in its closure for an extended period. In the interest of the national economy every possible step must be taken to avoid such a disaster.

Furthermore, it is essential for the efficiency of Seaway operations that ships lock through speedily and safely. This demands of pilots and ships' officers a high standard of experience and skill. When the Seaway operates at peak capacity, as is often the case, a delay in the locks by one ship results in a similar delay for all ships waiting their turn and, hence, the aggregate time lost by shipping is considerable.

RECOMMENDATION NO. 5

Pilotage in the Lower St. Lawrence and Gulf Ports to Be Classified a Private Service; Persons Performing Pilotage or Willing to Pilot in This Area Who Meet the Qualifications to Be Entitled to a Certificate of Approval from the Duly Designated Pilotage Authority

At present, the imposition of any form of administrative public control is not warranted at any of the ports and harbours in the area. At the main

ports, a pilotage service is required neither in the public interest nor to enhance safety of navigation.

The so-called pilotage services now being provided at some of these ports should not be confused with port pilotage because they are not basically concerned with navigation in and out of, or within, harbours but with berthing, unberthing and movages. Therefore, such services do not compare with those normally provided at such ports as Saint John (N.B.), Halifax, Sydney and St. John's (Nfld.), where the main consideration is safe navigation in and out of harbour and berthing is merely accessory. Hence, although technically speaking those providing these services are pilots because they meet the statutory definition (Part I, pp. 22 and ff.), it was found advisable to call them *docking Masters* or, preferably, *berthing Masters*.

The pilotage services provided are only indirectly services to shipping. Their main purpose is to ensure maximum efficiency and productivity in the operations of certain companies which own berths and loading equipment. Companies which do not have this problem because their berthing and loading facilities are adequate to meet their particular export needs without having to worry about idle time due to ships' movements, e.g., Gulf Paper Company, Canadian British Aluminum Company and Quebec Titanium Corporation, have not made the employment of a pilot mandatory nor have they organized a pilotage service.

At the main ports in the area—Port Cartier included—port pilotage is unnecessary because navigational conditions are ideal and no local experience is required. What little information is needed is clearly indicated on the charts and in the sailing directions, and Masters can enter any of these ports and berth at any wharf with ease and safety.

There is no need to change a system which works well, unless public interest is involved, but this is not the case here. Highly qualified, experienced docking Masters are provided by responsible companies at reasonable cost to manoeuvre ships, and the present procedure could not be improved by the creation of a Pilotage District. Hence, until the situation in these ports changes materially, the *status quo* should be retained.

Despite the waiver clauses in the contract the companies concerned make with the vessels which use their berthing facilities, they always retain full responsibility for the professional, moral and even physical fitness of the pilots whose services they provide. It is an implied warranty of the contract that the pilot they supply or impose possesses the necessary qualifications.

If the Commission's General Recommendation No. 10 (Part I, pp. 483-4) is implemented, these companies would be wise to offset part of this responsibility by having the duly designated Pilotage Authority appraise the qualifications of the persons selected for pilotage duty and issue them a

certificate of approval. The same privilege should be extended to any one who may wish to act as pilot in these ports.

If the situation in any port in the area changes and it becomes necessary for the safety of navigation, or at least advantageous for shipping, that some form of public control be exercised over the local pilotage service, the only solution in the case of an isolated port would be to appoint the Port Authority as Pilotage Authority. This area is too large and the possible need to organize a pilotage service too slight to establish a Pilotage District of the merger type. Furthermore, these ports, except possibly those that lie just eastward of Les Escoumins, such as Forestville and Rimouski, are too remote for attachment for licensing purposes to the District of Quebec because the Quebec Pilotage Authority would not be in a position to discharge its surveillance responsibilities effectively.

Re the Commission's view on the Federation of the St. Lawrence River Pilots' proposal that all pilots be licensed and, hence, that all Canada's navigable waters be included in Pilotage Districts, reference is made to the Commission's General Recommendations Nos. 9 and 10 (Part I, pp. 480 and ff.).

RECOMMENDATION No. 6

Berthing and Unberthing Vessels in the Harbour of Quebec to Remain Part of the Pilotage Trip but the Rate Structure to Be Amended to Provide a Separate Berthing and Unberthing Charge

The principle that berthing and unberthing a vessel is part of a pilotage trip should not be departed from except as a matter of safety, or to improve the pilots' working conditions, provided neither shipping nor the public is unduly inconvenienced thereby. Insistence on the employment of a berthing pilot requires basic organizational modifications which entail serious disadvantages. These are acceptable only if they are offset by substantial advantages which, under the present circumstances, do not exist in the harbour of Quebec. The berthing pilots proposed for Quebec should not be confused with the Montreal harbour pilots whose function is limited to movages and who never relieve river pilots to berth or unberth.

The proposal is not permissible under the present statutory legislation, i.e., C.S.A. sec. 361 and subsec. 329(f)(vii). Sec. 361 establishes the contractual obligation of a licensed pilot who has undertaken to pilot a ship inward or outward obliging him to remain on board until the voyage is concluded inside the District, either when the ship reaches the District limit, or is finally anchored or safely moored at her intended destination or as near as possible thereto if there are circumstances beyond the pilot's control.

The Pilotage Authority does not have the power to vary the terms of sec. 361 by regulations. Therefore, that part of the provision generally found in District By-laws, e.g., subsec. 17(1) of the Quebec General By-law reading "... or until he has been relieved by another pilot" is ultra vires and of null effect. One method of achieving this proposal would be to make the harbour of Quebec a separate Pilotage District whose waters would be the joint territory of the pilots of the contiguous Districts for the purpose of changing river pilots for ships in transit, or interchanging harbour and river pilots in the case of ships departing from a berth or destined to a berth in the harbour. This step, however, would require altering the eastern and western limits of the Pilotage Districts of Quebec and Montreal. To achieve this, an amendment to secs. 322 and 323 C.S.A. would be required since it entails more than a mere modification of limits and would represent a substantial departure from the basic purpose of these sections.

Apart from the legal question, it is worth appraising the practicability of the proposal since the legal objection could easily be overcome by an appropriate amendment to either sec. 361 or secs. 322 and 323, or by providing for the new situation in the proposed new Pilotage Act.

To implement the proposal, two boarding stations would be required in the vicinity of the eastern and western limits of the harbour, each with its own pilot vessel service. The present boarding station was conceived to serve ships in transit. The changeover of pilots is effected in mid-harbour at almost the only place where this can be safely done, i.e., in the area where a ship can steer a straight course inside the harbour limits. It would be unsafe to require a ship to detour to this boarding area to embark or disembark a berthing pilot and then turn in the stream. Harbour pilots for ships upbound whose destination is a wharf in the eastern part of the harbour would have to board outside the harbour, i.e., off Orleans Island, since it would be most dangerous to do so anywhere within the Lauzon bend. Ships downbound proceeding to a berth situated on the west side of the harbour would have to be boarded well west of the Quebec bridge since it would be unsafe to do so in the narrow part of the harbour between the bridge and Sillery Point where the channel curves and the fastest currents and cross-currents are met.

It is true that the recommendation received from the Federation of the St. Lawrence River Pilots (vide p. 88 and p. 340) was limited to upbound vessels with a Quebec pilot on board. Their proposal, however, takes into account only part of the problem and, from the evidence received, the less important part. No doubt the lack of support of the Montreal pilots was prompted by the fact that since the division of their District at Trois-Rivières they could not seriously contend that a trip from Trois-Rivières to Quebec would be so unduly long as to render them unable to berth on arrival; they must have rightly feared that, if other pilots performed all

berthing and unberthing in Quebec, the rates would be readjusted to their disadvantage.

For efficient service, it would be necessary to station a pilot vessel in the vicinity of both boarding areas and abolish the mid-harbour boarding area for ships in transit to avoid the necessity of keeping a third pilot vessel base for that purpose. If a single pilot vessel service were retained in mid-harbour, pilot vessels would have to travel much longer distances to the boarding areas and this would inevitably result in a substantial upward revision of the tariff.

The argument that berthing pilots would save vessels time and money is not convincing when the situation is considered in its entirety and not limited to specific exceptional instances (for detailed study, vide pp. 322 to 345).

A changeover of pilots is always a time-consuming operation and the imposition of berthing pilots would mean unnecessary delays for the great majority of vessels that are regularly berthed upon arrival. Furthermore, one of the reasons for delay, i.e., lack of up-to-the-minute information about conditions in the harbour, is not likely to occur now that the sophisticated radiotelephone network through which the pilots may obtain necessary information about weather, traffic and berths has been established.

The creation of a separate group of berthing pilots would prove very expensive without a very much larger demand for their services than now exists. It is a proven fact that the subdivision of a District with a compulsory changeover of pilots results in an increase in their number and the overall cost of the service which has to be met through higher rates. This was the experience when the Montreal District was divided at Trois-Rivières and also when it was decided to relieve pilots at lock 7 when transiting the Welland Canal. An immediate increase in strength is required in order to compensate for the ensuing increase in the pilots' idle time on duty, i.e., travelling, waiting and rest periods.

Allowing for absence on account of illness, leave or rest periods, the minimum number of berthing pilots would be four, since vessels should not be kept waiting. As shown on pp. 337 and 338, in order to remunerate these pilots on a comparable basis with other District pilots, it would be necessary to fix a substantial berthing charge, thereby adding another increase in the cost to shipping.

In addition, the service would also be more costly to ships in that a pilot boat would be added, whereas this service was not needed before.

It is apparent that the main purpose of the Quebec pilots' proposal is to improve their working conditions by shortening their trips. This, however, is only one way of achieving this aim and it is the most expensive at

the present time. This argument loses much of its force when recent changes are considered. The duration of the trip has been shortened since the move of the boarding area from Father Point to Les Escoumins. Ships are now much faster, thereby substantially reducing time under way. Aids to navigation have been improved and ships are now equipped with modern aids to navigation which enable them to make good time despite adverse conditions. No evidence has been adduced to establish that the eight to ten-hour average duration of the present trip from Les Escoumins to Quebec is more tiring and demanding than the 18 to 20 hours a trip from Father Point to Quebec used to take with a slower ship. In those days, the pilots were never relieved for the purpose of berthing. As stated by the Commission in its General Recommendation No. 8, the length of a District should be calculated to coincide with the longest normal pilotage assignment a pilot may be required to perform (Part I, pp. 476 and ff.). The evidence adduced and the pilots' safety record clearly indicate that the turns of duty the Quebec pilots are now required to make, even for trips from Quebec to Port Alfred or vice versa, are not so abnormally strenuous as to endanger the safety of the ship. However, in cases of abnormal duration, berthing at Quebec should be handled by a rested pilot, if and when the trip pilot requests to be relieved for that purpose. This procedure has been long resorted to in special circumstances by the Quebec District Supervisor.

A study of the statistics that were furnished and also an analysis of the 1964 traffic in the harbour of Quebec indicate that the extent of the problem has been exaggerated. In those cases where delays occurred, the availability of harbour pilots would have helped in only a few; in most cases, the causes of delay were beyond the control of the pilots no matter how skilled they were. The very few occasions when vessels would have definitely benefited by the availability of berthing pilots are small and do not warrant disturbing a system which has worked well up to now.

It is obvious that there is room for improvement in the skill and qualifications of some of the Quebec and Montreal pilots with regard to ship-handling while berthing and manoeuvring in the harbour, as is borne out by the number of minor casualties occurring in the process and delays caused by pilots who feel unqualified to berth at certain wharves or piers at any time or under certain circumstances, although other pilots are prepared to do so. It is considered that a pilot's performance in berthing upon arrival and his skill in shiphandling should be factors to be considered in grading. In other words, the constant refusal of a pilot to berth vessels in circumstances where other pilots would act should be interpreted as meaning that he is less qualified than the others and this should be reflected in his grading. Such an attitude would serve as an incentive for all the pilots to increase their local knowledge of the harbour and their skill in shiphandling

—an incentive which is entirely lacking now because they gain nothing financially by not waiting for the most favourable conditions.

The problem would be partially solved, and at the same time a defect in the present tariff structure would be remedied, if a berthing and unberthing charge were added as a component of the voyage charge. The present tariff structure is not realistic because it does not take into consideration that most of the traffic consists of vessels in transit and, hence, few pilotage assignments involve the exacting operation of berthing. In all fairness, it is considered that a voyage charge should be greater when berthing or unberthing is involved (vide Part I, p. 183).

The amount of the berthing charge should be sufficient to serve as an inducement for a pilot to berth upon arrival and, on the other hand, should mean a saving on the other charges that would be payable by a vessel if a berthing pilot had to be employed.

It is further considered that this problem should be closely studied by the Pilotage Authority. Changing conditions, such as a larger number of ships making Quebec a port of call, may render harbour pilotage service at reasonable rates economically feasible, although this is not expected to happen in the near future. The Pilotage Authority should deal actively with the problem, keep complete and detailed statistics, investigate the causes of problems as they arise and bring about improvements where possible.

It is agreed that a pilot should never be compelled to berth a ship when he does not feel competent under the prevailing circumstances. Such occurrences, however, should be investigated by the Pilotage Authority to ascertain whether the competency and skill of the pilot concerned appear to be in question. This does not amount to interfering with the pilot's decision but is merely an appraisal of his qualifications based on his record. It is the Pilotage Authority's duty to ensure that its pilots are fully qualified and the best possible service is being provided; a Pilotage Authority would show ignorance of its responsibilities if it adopted a negative attitude.

RECOMMENDATION No. 7

The Grade System to Be Extended to All Groups of Pilots; the Exclusive Competency of Grade A Pilots to Be Established at a Very High Level to Comprise Only the Most Difficult and Extraordinary Cases; Permanent Licences to Be Issued Only when a Pilot Reaches Grade B; Grade C Pilots to Receive a Temporary (Probationary) Licence

The grade system answers a genuine need, especially when the nature of the service demands a high degree of *expertise* and skill before a pilot can be indiscriminately entrusted with any type of assignment which may occur

in his District (Part I, pp. 263-4 and Part IV, pp. 673 and 750-51). This is the case for all the St. Lawrence River Districts, although to a lesser extent for the Montreal harbour pilots (p. 681) and the Cornwall pilots (p. 938).

While Grade C is a temporary grade of relatively short duration because it is merely the continuation of a pilot's training, Grade A is not the regular grade of a fully qualified pilot but a grade of exception which should be dealt with as such.

Grade A is merely a way of selecting from fully qualified pilots a limited group who possess the greatest experience and skill in handling the most difficult and unusual assignments.

The District regulations should not only define the exclusive competency of Grade A pilots but also their number and the rules governing eligibility and downgrading. These regulations should conform to the following criteria:

- (a) The special exclusive competency of Grade A pilots should be limited to cases of exception and its definition should be revised as required to exclude those cases which become regular occurrences and, hence, should be within the competence of all Grade A and Grade B pilots.
- (b) Grade A should not be permanent but temporary, although of unlimited duration. A Grade A pilot should revert to Grade B whenever it appears to the Pilotage Authority that due to age or any other reason he no longer possesses the required exceptional qualifications and skill. Whenever there is any doubt, a Grade A pilot should be preventively reverted to Grade B pending investigation and reappraisal (Part I, pp. 556-581).
- (c) The number of Grade A pilots should be determined by service needs and, at the same time, care should be taken that each Grade A pilot has the greatest possible number of special assignments in order to maintain his *expertise* at the highest possible level.

The purpose of Grade A is defeated if it is regarded as a way of providing higher remuneration for senior pilots. While it is considered that Grade A pilots should receive higher remuneration, this consideration must remain secondary. To avoid the temptation to keep the Grade B competency ceiling low in order to ensure higher revenue for the Grade A pilots (vide p. 674), it is considered that the number of Grade A assignments performed should have no bearing on the remuneration of Grade A pilots. In a pool system, the percentage system applied to Grade C pilots should be extended to Grade A pilots; they should receive a larger share on a percentage basis, the extent being related to their added responsibility. This is the method that, after thorough experience with the system, was adopted in 1969 by the Montreal river pilots (vide p. 799).

If there is a change in the pattern of shipping or if—as in the Cornwall District—the physical features of the channel have fixed the maximum size of ships, the number of Grade A pilots may have to be reduced. If so, a further selection to the required number should be made, not on the ground of alleged acquired rights but of higher qualifications and *expertise* and longer expected service. For instance, if two pilots have equal *expertise* and qualifications, the younger should be retained in preference to the one who is about to reach the age limit for the grade.

It is considered that the grade system should also be further improved by providing that Grade C must be accompanied by a probationary licence (vide p. 673 and Part I, p. 269). Grade C is, in fact, the continuation of apprenticeship: it is the practical stage of that training and should be dealt with as such. It is unwise and dangerous to issue a permanent licence to a candidate without full opportunity to appraise not only his knowledge but also his skill and *expertise* as a navigator in the confined waters of the sector for which a permanent licence is to be issued. It is through gradual, practical training in Grade C that such skill and *expertise* can be appraised. Grade C is essentially a temporary grade and a candidate who fails in due course to meet the standards required to be promoted to Grade B should be struck off the list—a procedure which is no longer possible once a permanent licence has been issued. The training of pilots should be devised to ensure that permanent licences are granted only to persons who have proved they possess all the required qualifications.

RECOMMENDATION NO. 8

The Direction of the Service in the St. Lawrence River Districts to Remain in Law, and Become in Fact, the Sole Responsibility of the Pilotage Authority of Each District; the Equalization of Trips System to Be Abandoned; Assignments to Be Made According to a Regular Tour de Rôle Based on Availability for Duty with Due Regard for Pilots' Grades and Safety of Navigation

History and experience provide unmistakable proof that pilotage in the St. Lawrence River Districts is not only a service that must be made available to shipping as a public convenience and necessity but must also be planned, coordinated and controlled in the public interest (Part I, p. 77). Pilotage as a free enterprise system with an unlimited number of licensed pilots was totally abolished a hundred years ago in the Districts of Quebec and Montreal for reasons of economy as well as the safety and efficiency of the service (p. 39 and p. 592). The pitfalls inherent in such a system (as was clearly established at the time) still exist, notwithstanding great techno-

logical advances in the fields of navigation and communications (Part I, pp. 41 and 42). A return to this system as a solution to the existing pilotage problems on the St. Lawrence would be, in the Commission's view, a serious mistake.

Moreover, the Commission believes that, if pilotage in the St. Lawrence River Districts must continue to be a fully regulated public service, its direction must remain a basic government obligation. To transfer to, and vest in, pilots or ship owners' associations the responsibility for this function would be unwise because of the constant conflict between their private interests and the interests of the public (Gen. Rec. 14, pp. 495 and ff.). Disregard of this basic principle was the main reason why the 1860 Quebec Pilots' Corporation collapsed for all practical purposes in 1914.

The distribution of pilotage assignments should be governed by considerations of the safety of navigation, the efficiency of the service and, as far as possible, the equitable distribution of the workload (vide Part I, Gen. Rec. 26, p. 556; Gen. Rec. 29, p. 563). Although rules should exist, they should not be hard and fast but leave complete freedom of action whenever it appears to the local officer charged by the Pilotage Authority with despatching that a special case calls for special consideration. These rules should be untrammelled by considerations solely affecting pooling or the pilots' remuneration.

It is considered that the only equitable despatching system is a *tour de rôle* based on the order of availability for duty, as practised in all Pilotage Districts except those on the St. Lawrence River. In addition to the great advantage of simplicity, it has worked exceptionally well and has made possible an equitable sharing of duty time among the pilots. A pilot's name is placed at the bottom of the list at the pilot station the moment he terminates an assignment or his leave of absence expires; the pilots are then assigned in regular turn as their name appears on the list for any type of assignment—trip, movage, compass adjustment, etc.—provided they have had an adequate period of rest whose duration should be established by regulations and should vary according to the type and length of duty performed and the aggregate piloting time in any given day. In the case of a pilot being ordered by the Pilotage Authority to be transferred from one station to the other, or in the case of a pilot disembarking at an outport, his name should be placed on the list at the time he should have reported to the station to which he was transferred or which is nearest to the outport where he disembarked. All pilots with equal availability should also be granted regular, periodic holidays but the Pilotage Authority should be empowered to vary the dates to meet unexpected demands for pilotage.

As recommended, official recognition of each pilot group should be given by providing for their incorporation (Gen. Rec. 25, Part I, p. 549)

and pilots should be excused from pilotage duty for the time necessary to attend Directors' meetings or undertake other business of the Corporation or the pilots as a group.

The only exceptions would be special and emergency situations and the requirements of the grade system. The local officer responsible for despatching should have not only the power to take off the list any pilot whose fitness he considers questionable but also full liberty to depart from the tour de rôle to assign in special cases the pilot who, in his judgment, is most suitable or whom it is more convenient to assign in the circumstances, e.g., lack of an appropriate pilot at St. Lambert lock (vide pp. 755 and ff.).

The limitation on the professional competency of Grade C pilots should not affect the tour de rôle unduly because their number is bound to be small. Since the period spent by the pilots in this grade is the practical stage of their training, they should be given as many Grade C assignments as possible, irrespective of their place on the tour de rôle, provided they have had sufficient rest after each previous assignment.

If the competency of Grade A pilots is limited to extraordinary cases (vide Rec. 7), the occasional Grade A assignment should not disturb the regular flow of the tour de rôle. Although Grade A pilots are liable to be assigned ahead of time, care must be taken that they also have a regular rest period after a previous assignment. The chances of a greater workload for Grade A pilots should be decreased by providing in the regulations that Grade A pilots at the top of the list are to be reserved for Grade A assignments scheduled for the near future. However, no unusual steps should be taken to ensure that the aggregate workload of Grade A pilots does not exceed that of Grade B pilots because this possibility should be one of the factors taken into consideration when the percentage difference between the remuneration of Grade A and Grade B pilots is established.

When the despatching system is based on the number of trip assignments performed, it is incomplete, does not achieve an equitable division of the pilotage workload, causes a maze of ever changing rules and, in addition, has proved inadequate.

The complicated system of despatching now in force in the St. Lawrence River Districts is not due to special circumstances, the peculiarities of these Districts or the type of services being performed but results from the legal restrictions imposed on the pilots of Quebec and Montreal (and nowhere else in Canada). These led to makeshift arrangements instead of the normal system. The two principal difficulties were caused by the extensive special pilot system, whose existence was incompatible with the operation of a tour de rôle (p. 480 and p. 793), and the unrealistic attitude of the Pilotage Authority toward pooling (pp. 429 and 495 and ff.). The main obstacle—the special pilot system—has been removed since 1959 and 1960, and the

other is now merely nominal. It is obvious that, if the pilots had so requested, the Pilotage Authority would have established pooling legally as their mode of remuneration and would have operated it without charge to them. If they did not make such a request, it was because of other considerations that have no bearing on the question (vide Rec. 9). This is shown by the official attitude adopted by the Montreal Pilotage Authority when it created the harbour pilot group (pp. 573 and 803). Since no obstacle now exists to prevent a true tour de rôle system, there is no reason why the procedure normally followed elsewhere with satisfactory results should not be followed in Montreal.

The equalization of trips system presupposes that all assignments are of the same type and of the same duration, but this is not so. It is because of considerations foreign to despatching that the system does not recognize duty time spent on other types of assignment or resulting from a cancellation. This was necessary to permit the incomplete pooling the pilots were forced to adopt because of circumstances that no longer exist. It results in an unequal distribution of the aggregate workload and, if movages are handled on a voluntary basis, deprives certain pilots of necessary experience. The system is basically unjust when some pilots (pp. 430-431 and 958-959), who have had the good fortune to serve on trips of short duration because good weather prevailed or they had a fast ship, are forced into idleness, while other less fortunate pilots with equal availability, because their assignments had been extended, are required to work longer hours in order to register the same number of assignments. To correct the most flagrant cases of resulting discrimination it has been necessary to amend the despatching rules to provide for extra turns for trips of extraordinary duration.

The system is basically unjust when a pilot who has been constantly available is deprived of the opportunity at the end of the year of making up turns lost through circumstances beyond his control, thus leaving him no time to retrieve his position and avoid loss of remuneration (p. 435). In an effort to correct this injustice in their pooling system the pilots have resorted to the "maximum average" device (p. 435), and lately the Montreal river pilots have extended the equalization privilege beyond the end of the year by providing through a further amendment to the despatching rules that the first list at the beginning of the pooling year does not start at zero but reflects the difference in turns on the previous list (vide pp. 798-99).

The indiscriminate application of the equalization rule has resulted in extensive absenteeism to the detriment of the efficiency of the service (pp. 431-432) which has forced the pilots of all groups, except those in the Quebec District, to restrict the application of the principle to periods of availability for duty. Furthermore, in order to prevent the absenteeism of pilots high in turns at the end of the season when all pilots must be

available, the Cornwall pilots have been obliged to resort to a financial penalty by modifying their pooling arrangements to provide for their so-called winter pooling where the shares are based on the number of days of availability in that period pp. 980-81). In fact, through a never ending series of amendments to the despatching rules, the system is being modified gradually into one based on availability for duty. The ensuing long list of despatching rules (nevertheless incomplete, pp. 436-7) and the repeated amendments to which they have been subjected (making them more and more complicated) indicate the basic inadequacy of the system and the necessity for its replacement as recommended.

RECOMMENDATION No. 9

In the Proposed Districts of Quebec and Montreal, the Remuneration of Pilots (unless They are Salaried Employees) to Be a Share of a Pool, Administered by the Pilotage Authority, of All Pilotage Revenues Based on the Pilots' Earnings, Availability and Grades; Pilots' Corporation Expenses to Be Financed through Membership Dues Deducted at Source from the Pilots' Shares in the Pool

Since pilotage between Quebec and Cornwall should be classified a necessary public service and pilotage between Les Escoumins and Quebec a public service (Rec. 4), the status of the pilots concerned must be employees directly or indirectly (Gen. Rec. 24, Part I, p. 545). If the pilots in the sectors between Quebec and Cornwall refuse to become public servants, their status would be *de facto* employees of their Pilotage Authority, as is now the case. This would also be the case if the offer to become public servants is not made to the pilots in the Les Escoumins/Quebec sector, or if it is made and rejected. Reference is made to Part III, pp. 293-4, for the Commission's opinion of the Prevailing Rates system, and to Part III, pp. 210-213, for the Commission's concept of, and recommendation concerning, the status of public servants as far as pilots are concerned.

To pool pilotage earnings is the only equitable alternative to a salary as the method of remunerating such pilots. When the provision of services is fully controlled by the Pilotage Authority, full and complete pooling is a necessary feature to correct the unwarranted differences in income that would otherwise result (Part I, pp. 192 and ff.). The pilots' prime duty is to make themselves available and perform services as directed by the Pilotage Authority. Hence, pilots of the same grade should receive equal remuneration for equal availability.

It is the responsibility of the Pilotage Authority, as employer of the pilots, to ensure that they are equitably remunerated and, when the form of

remuneration is not a straight salary, to operate the pool. The pooling system and its operating rules should be fully laid down in District regulations.

There is no reason why pooling should not be officially recognized in the present Districts of Quebec and Montreal as a necessary element for the efficient operation of pilotage, as is done in all other parts of the country. The unrealistic and discriminatory attitude of the Pilotage Authority not only causes the pilots extensive and unnecessary administrative expenses (p. 491) but has also brought about a very unsatisfactory alternative, i.e., voluntary pooling operated by the Pilots' Association or Corporation, which has been a cause of contention among the pilots and may give rise to much abuse. The mere possibility that some pilots may be unable to participate in the pool (as has been the case with the dissident Montreal river pilots since the end of 1968) is a basic deficiency in the present system and remains a dangerous potential cause of disputes. This situation is not in the best interests of the service (p. 793).

If the pilots' remuneration is to be a share of pilotage earnings, it is their right to ensure that the money is not used except as provided by legislation and that there is equitable sharing with full accounting. This is far from being the case at present. The Pilots' Corporation treats pilotage earnings as Corporation revenues (which is illegal (p. 977) and makes large expenditures, such as insurance premiums, from the pool by majority decision, at times without some pilot's consent. The pooling procedure is unnecessarily complicated and occasionally deficient as, for instance, the system followed by the Montreal river pilots (p. 800). It suffices to examine the rules governing the present pooling systems and observe how they are operated (vide pp. 478 and ff., 793 and ff. and pp. 977 and ff.) to realize that the present situation is most unsatisfactory and must be corrected.

There are no local conditions in the Districts which alter the basic principles of pooling and, therefore, nothing to prevent uniformity of procedure. The most equitable pooling system is based on availability for duty and divides all pilotage revenues on the basis of earnings and not dues collected. A method of financing advance and final distributions should be established and the outlay involved should be included in the operating expenses of the pool. It is an unnecessary bookkeeping complication to keep the final distribution open until the dues forming part of a given pooling operation are fully collected (p. 806). The only advantages of such a procedure are that there are no financing expenses and bad debts are automatically prorated on the shares of the pooling period in which they were incurred. These advantages are minimal in practice and are offset by the resulting complications in bookkeeping and accounting, especially when the number of participating pilots is large. Ways could be found to reduce the

cost of financing the final distribution, e.g., requiring prompter payment from shipping and setting up a fund as in the B.C. District (vide Part II, p. 185). Experience has proved that the incidence of bad debts is very small and, therefore, no injustice is created if they are entered as a charge against the current pooling operation at the time they are written off, especially since most of the sharing pilots will be the same.

In a system where the provision of services is fully controlled, it is availability for duty that counts and should be remunerated. The number of assignments and hours piloting are matters over which the pilots have no legal control but which depend upon instructions issued by the Pilotage Authority. Hence, pooling ought to be based on availability for duty, including, as defined by regulation, rest periods between assignments, periodical and annual holidays, authorized time spent attending to the affairs of the Corporation or the pilots as a group, special cases when a pilot is prevented from piloting by circumstances beyond his control, such as a preventive suspension or a summons to appear as a witness, a court expert or an assessor. The regulations should also provide for indirect illness benefits as is done for salaried employees. If there is a judicial finding of professional or moral unfitness, neither a previous preventive suspension nor a suspension imposed by a court should count as time available. The same principle should apply in cases of physical unfitness due to a pilot's wilful act or his use of alcohol or drugs.

The amount of the full share should vary according to pilots' grades on a percentage basis as has been the practice so far for remunerating Grade C pilots, and as is now the case for all Montreal river pilots (p. 799). For other rules, vide Part I, p. 194.

The Corporations should meet their operating expenses and other expenditures in the only legal and permissible way, i.e., through dues and special assessments legally established and imposed, thereby giving the members legal control over Corporation expenditures. These Corporation dues and special assessments should be deducted at source from each pilot's share by the Pilotage Authority (Gen. Rec. 25, Part I, p. 549).

RECOMMENDATION NO. 10

For Purposes of Winter Tariff and Double Pilotage Assignments, the Winter Season to Coincide with the Period when Winter Conditions Actually Prevail

When the By-law defines the winter season by reference to fixed arbitrary dates, it neither corresponds to reality nor satisfies the conditions which justify the joint assignment of two pilots and the special compensation they receive.

Safety of navigation requires that two pilots be assigned together at the end of the normal navigation season as soon as navigational risks are materially increased by the onset of winter, i.e., when ice commences to form and the regular aids to navigation are being removed, and the same principle applies in reverse at the beginning of the season. Since the time of the month when this situation occurs and the number of days it lasts vary substantially from year to year, it is unrealistic, inequitable and contrary to the requirements for safe navigation to establish by fixed dates the beginning and end of the period during which two pilots are to be jointly assigned.

If winter arrives late, it is irresponsible and wasteful to assign two pilots simply to meet a December 1 date for, as experience has shown, this may result in an actual shortage of pilots because the end of the season is generally a peak period, and the fact that the traffic is mostly outbound further affects the availability of pilots who have to be transferred by land to the upstream station.

On the other hand, in any early winter which requires the removal of buoys before December 1 it would be irresponsible not to assign two pilots just because the date set in the regulations has not yet arrived, and equally, if two pilots are assigned in the interest of safety, it would be inequitable not to apply the winter surcharge and other tariff provisions when the conditions which warranted their adoption are actually met.

The same observations apply in reverse to the end of the winter season.

The situation in the Cornwall District is a case in point. The winter provisions of the regulations apply to the period between December 1 and April 8, although there is no winter navigation as such since there is no maritime traffic when the Seaway is closed. Occasionally, because of the severity of the winter, the Seaway does not open until after April 8. In this event, no winter rates will be chargeable and it will be illegal according to the By-law to assign two pilots jointly, despite the fact that hazardous conditions may prevail after the opening of the Seaway, whether this occurs before or after April 8 (vide p. 927).

Therefore, it is considered that the District regulations should be amended to empower the local operational authority to make the winter provisions applicable whenever extraordinary navigational conditions prevail at the beginning and end of the normal navigation season.

RECOMMENDATION NO. 11

The 1850 Act Incorporating the Montreal Pilots and the 1860 Act Incorporating the Quebec Pilots to Be Formally Repealed

The 1850 Act incorporating the Montreal pilots into a professional corporation (Corporation of the Pilots for and above the Harbour of Quebec,

13-14 Vic. c. 123 as amended by 16 Vic. c. 258) was never given effect because it did not grant the pilots the type of incorporation they had petitioned for, and they refused to hold the first meeting which would have activated the Corporation (vide pp. 589 and ff.) This Act apparently was never repealed. It is doubtful that it could serve any useful purpose now and there will be no need for it if the Commission's General Recommendation No. 25 (Part I, p. 549) is implemented. Therefore, even if only to clarify the legislation governing pilotage, it is considered that this Act should now be formally abrogated.

The same recommendation applies to the 1860 Act incorporating the Quebec pilots (Corporation of Pilots for and below the Harbour of Quebec, 23 Vic. c. 123), although it is still partly in force and effect. In 1914, by 4-5 Geo. V c. 48, the Pilots' Corporation was deprived of all its powers except those it had inherited from Trinity House in 1875 (38 Vic. c. 55) over the Decayed Pilot Fund. However, the 1914 Act did not repeal specifically any of the sections of the 1860 Act, leaving in doubt the applicability of some sections which were not directly affected, e.g., the right of Masters down-bound to choose anyone whose name appeared on the tour de rôle list at Quebec and upbound anyone on board the pilot vessel, and also the obligation for a pilot to serve when so chosen no matter how many times he had previously served (pp. 40-41). It is possible that these provisions were abrogated by implication but the process was far from satisfactory (Part I, p. 18).

The only purpose the 1860 Quebec Pilots' Corporation now serves is to administer the Quebec pilot's Pension Fund. In doing so, it is governed by the Trinity House legislation which does not apply because it refers to a situation that no longer exists (pp. 264-266, and 499 and ff.).

If the Quebec Pilot Fund is to be retained (which is not considered advisable (vide Gen. Rec. No. 39, Part I, p. 581)), it is considered that the governing legislation should be replaced by adequate legislation. There would be no need to keep in activity for that sole purpose the 1860 Corporation and, therefore, 23 Vic. c. 123, as amended by 32-33 Vic. c. 43, 25 Vic. c. 70 and 38 Vic. c. 55, should be abrogated.