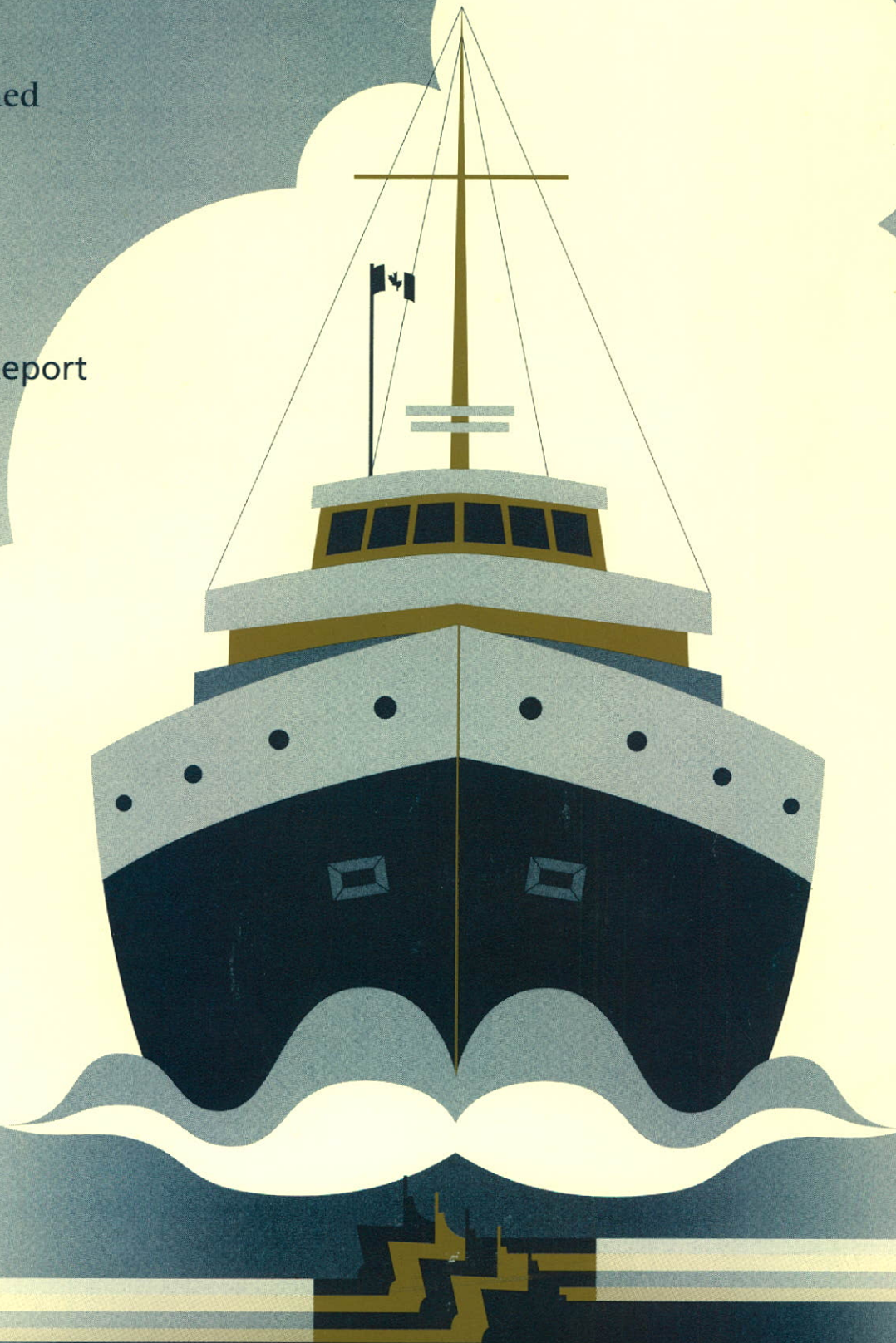


**Canadian  
Shipowners  
Association**

Established  
1903

1992  
Annual Report

New Day





## Table of Contents

<b>Objective</b> .....	<b>2</b>	Oil Pollution Response .....	<b>9</b>
<b>President's Report to Members</b> .....	<b>3</b>	Substance Abuse .....	<b>10</b>
<b>Part I</b> .....	<b>5</b>	Precise Navigation .....	<b>10</b>
<b>Membership</b> .....	<b>5</b>	Atlantic Pilotage Authority (A.P.A.) .....	<b>11</b>
<b>Meetings</b> .....	<b>5</b>	Great Lakes Pilotage Authority (GLPA) .....	<b>11</b>
<b>Board of the CSA</b> .....	<b>5</b>	Residual Cargo Disposal .....	<b>11</b>
<b>International Joint Conference</b> .....	<b>6</b>	Regulations Review .....	<b>11</b>
<b>Maritime Operations Committee</b> .....	<b>6</b>	Transportation Accident Investigation and Safety Board Act .....	<b>12</b>
<b>St.Lawrence Seaway Operations</b> .....	<b>6</b>	Tanker Issues .....	<b>12</b>
<b>Navigation Season</b> .....	<b>6</b>	<b>Part II</b>	
<b>Seaway Issues</b> .....	<b>6</b>	<b>Statistical Report of 1992 operations</b> .....	<b>14</b>
<b>Commons Standing Committee     on Transport (SCOT)</b> .....	<b>6</b>	<b>Summary of Tonnage</b> .....	<b>14</b>
<b>Seaway Summit</b> .....	<b>6</b>	<b>Introduction</b> .....	<b>14</b>
<b>Seaway Roundtable</b> .....	<b>7</b>	<b>Summary by commodity</b> .....	<b>14</b>
<b>Seaway Draft</b> .....	<b>7</b>	<b>Analysis of Traffic By Commodity</b> .....	<b>16</b>
<b>National Transportation Act (1987) -     Quadrennial Review</b> .....	<b>7</b>	<b>Coal</b> .....	<b>16</b>
<b>Pilotage Issues</b> .....	<b>7</b>	<b>Grain</b> .....	<b>18</b>
<b>Laurentian Pilotage Authority (LPA)</b> .....	<b>7</b>	<b>Iron Ore</b> .....	<b>20</b>
<b>Tariffs</b> .....	<b>7</b>	<b>Tanker Products</b> .....	<b>22</b>
<b>CSA Action</b> .....	<b>7</b>	<b>Limestone</b> .....	<b>24</b>
<b>LPA Board Appointment</b> .....	<b>8</b>	<b>Salt</b> .....	<b>26</b>
<b>Ports Canada Corporation</b> .....	<b>8</b>	<b>Gypsum</b> .....	<b>28</b>
<b>Grain Issues</b> .....	<b>8</b>	<b>Potash</b> .....	<b>29</b>
<b>Canadian Wheat Board - Biannual</b> .....	<b>8</b>	<b>Cement</b> .....	<b>30</b>
<b>Thunder Bay Grain Trimmers</b> .....	<b>8</b>	<b>Coke</b> .....	<b>31</b>
<b>Coasting Trade</b> .....	<b>8</b>	<b>General Cargo</b> .....	<b>32</b>
<b>Bi-National Industry - Government Meetings</b> .....	<b>9</b>	<b>Miscellaneous Bulk</b> .....	<b>34</b>
<b>Modal Shifts &amp; Environmental Impacts</b> .....	<b>9</b>		
<b>Economic Impact Study</b> .....	<b>9</b>		
<b>Port Cartier Port Fees</b> .....	<b>9</b>		

## Objective



The Canadian Shipowners Association monitors Canadian and U.S. government legislative/regulatory actions, and initiatives by various international marine organizations, political trends, and public policy relating to navigation, safety, and the Canadian shipping environment, in addition to executing strategic communications and public relations campaigns to effectively represent the interests of member companies.

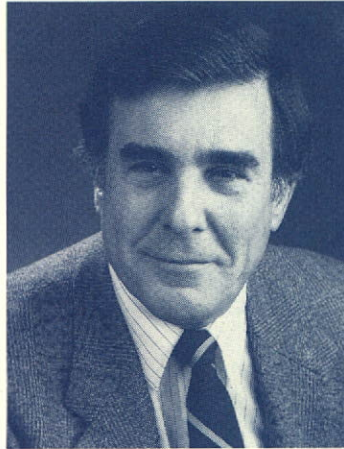
**T**he general objective of the Canadian Shipowners Association is to promote an economic and competitive Canadian marine transportation industry.

In keeping with the general objective, the Association will support a national policy conducive to the development and maintenance of the Canadian flag merchant fleet in the inland, coastal and Arctic waters of Canada and foster the growth of a Canadian-flag deep sea merchant fleet.

### Methodological Notes:

Statistics are collected shortly after the annual close of navigation from each member company on a commodity basis with tonnage by port of origin and destination. Data is then aggregated in such a way as to best protect the proprietary nature of the records. Tonnage figures are multiplied for each origin-destination pair (by commodity) by the distance between the ports to generate the tonne-kilometre figures. The composite output figures contained herein may act as a useful measure to similar data generated over previous navigation seasons. Admittedly, traditional shipping output is measured in "ship-days" as these are considered more accurate than tonne-kilometres (ie. a vessel can travel fewer kilometres when it is canalling or in a lock system than when transiting open waters). It was decided to employ tonne-kilometres in this report to enable the reader to make useful direct comparisons with other modes.

## President's Report to Members



**T**he Canadian Shipowners Association – then the Dominion Marine Association – held its first Annual General Meeting of Members on April 7, 1903 in Ottawa. So as we enter our 90th year of activity, one pauses to reflect on what the Association has accomplished over the years. If one were to judge achievement solely on the agenda for that first meeting compared to this year's agenda, the conclusion would be that we have not been all that successful. Witness the following items:

- Steamboat Inspection Service – unfair burden on Canadian Shipowners.
- Resolution that all canals should be free of tolls.
- Enlargement of the Welland Canal.
- Compulsory pilotage dues in Quebec section of the St. Lawrence.

Well at least no one can suggest that we have lost our focus. Certainly much has been achieved over the years

such as the design and size of ships and the infrastructure itself from the St. Lawrence Seaway to the modern ports facilities we see today. The greatest achievement in my view is that given the diversity of members, public versus family owned companies, differing interests, large bulkers, tankers, coastal vessels, it is a wonder we managed to stay united at all over nine decades.

The year 1992 was also a memorable one for Canadians. Two events occurred in late October that made history. For the first time ever a Canadian team, the Toronto Blue Jays, won the World Series. At the same time the Canadian government as well as the governments of all ten provinces lost a referendum on proposals for the Canadian Constitution. The Canadian voters rejected the proposals thus ending months of acrimony and consequently a perceived lack of focus on other serious problems facing the Canadian economy.

To the south, President George Bush who earlier in the year was considered invincible was soundly beaten by President-elect Bill Clinton. Americans clearly voted for economic change.

In the area of international trade once again there was a lot of rhetoric and posturing but the GATT talks remain deadlocked. The North American Free Trade Agreement was signed but is yet to be ratified.

On the domestic front endless rounds of talks and

negotiations took place with respect to reform of the Western Grain Transportation Act. Through the efforts of the CSA, the FACTS Coalition and other groups we were pleased that the Hon. Shirley Martin, Minister of State – Transport agreed to chair a roundtable on the Seaway during these Government – Industry discussions. At year end despite some signs of progress and indications that the various levels of government and other interest groups might be closer to an agreement nothing of substance was apparent.

It is again my unpleasant task to report yet another poor year for members of the Association. Total volume decreased by 4 M.T. from 74 M.T. in 1991 to 70 M.T. in 1992, our lowest volume in over ten years. The major causes for this decline was a 5 M.T. reduction in the movement of Canadian grain which was partially affected by a 1.5 M.T. increase in the movement of U.S. grain. The tanker fleet suffered badly as tanker products movement declined by 36% – 10.3 M.T. versus 6.6 M.T.

This industry is certainly prone to the unexpected and this year was no exception. This time it turned out to be credit problems with the Seaway's largest grain customer, Russia. Twice over the 1992 season grain shipments to that country were halted because Russia fell behind in making payments to Canada under the terms of its line of credit. The impact on the grain fleet was severe.

Between one third and one half of the 40 ships grain fleet did not operate for a good portion of the Seaway season. Russia is going through some very difficult times as it changes to a market driven economy and the success of this reform is vital to global trade as well as our own trade with Russia. On the other hand clearly we would expect our government to exercise fiscal responsibility. Part of the equation however, must include the impact on the Canadian economy as every link in the transportation chain was adversely affected thus affecting countless jobs.

The year 1992 also marked the first time, at least to my knowledge, that the Association resorted to civil disobedience. After years of inaction on the part of government on promised reform with respect to pilotage on the St. Lawrence River and therefore years of pent up frustration fuelled by hard times, the Association announced that it would withhold payment of compulsory pilotage fees until an agreement was reached on reform. This action commenced in April 1992 and terminated with the signing of a Memorandum of Understanding between the Association and the Laurentian Pilotage Authority on September 30, 1992. It is regrettable that industry must resort to such tactics to seek justice, but when that industry is struggling to remain competitive in an ever increasing deregulated transportation system, it is not left with many options.

This will help to ensure fairness and equity during difficult times was further demonstrated when the Association took strong exception to proposed grossly onerous increases in port fees at a privately owned port facility. What really

aggravated members was that this increase was nothing more than a pressure tactic by the owner of the port to force a major tenant to meet their demand for increased rental and/or throughput fees. The Association advised the party that these increases were entirely unacceptable and members would only pay basis 1991 rates. As of year-end the matter was still unresolved.

During the year, the Association started examining possible options for discussion with government on the state of the industry as well as the general malaise affecting the whole Seaway system. Following the Seaway Roundtable a paper was presented to Ministers clearly stating that the time had come for government to give some substance to statements that the Seaway was vital to the economy. Further details are enclosed in our Annual Report.

Shortly following the release of the above mentioned document, the House of Commons Standing Committee on Transport released their report on "The Future of the Great Lakes / St. Lawrence Seaway System". This was a very encouraging report with some very positive recommendations. While this report did not accept all of the Associations proposals it is a good step forward and can form the basis for government action.

At year end, and following on the Standing Committee's report the Association was in the process of refining its earlier paper for presentation to Ministers.

Much progress has been made over the year on industry-government understandings on environmental issues. Agreement in principal was reached on the phasing in of double hulls on tankers.

Discussions continue on pollution prevention and the development of practical oil spill response arrangements. We remain mindful of our obligations to the public to ensure the protection of our marine environment and I commend our members for their safe and professional performance over the past year.

The year 1992 produced another plethora of studies and reviews, many dealing directly with Seaway issues. The message is clear, the Seaway system is in direct need of more focus from its major shareholder, the Government of Canada. A number of constructive suggestions have been and continue to be past forward, most in the form of bridging mechanisms to help the system in the short term. Some breathing room is required until such time as WGTA changes and international trade agreements are in place. Then we can all plan for the longer range. If not the whole system will gradually diminish to the point where the pendulum swings back and Canada needs a viable Seaway system the cost of rehabilitating the infra-structure could be prohibitive.

There is no need for further studies or reviews, the facts are on the table. What is needed is Government action not words.

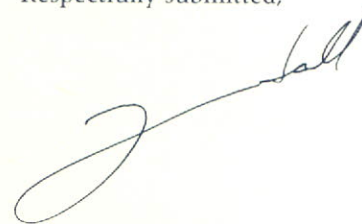
I thank the many people in government both at the political and departmental level, the many agencies and associations who have worked with us, for their cooperation and advice as we continue to pursue our goals.

In particular I thank our Executive Committee and members who despite very difficult times have been so supportive and united in addressing some tough issues. I thank as well our very

competent staff who put in many long hours tackling the many items on our plate this year.

It would be nice if next year I could report that the issues that have been on our agenda for ninety years have been resolved. I sincerely trust that 1993 will occasion more "Red Skies at night, a sailors delight".

Respectfully submitted,



**T. Norman Hall**  
President

## Part I

### Membership

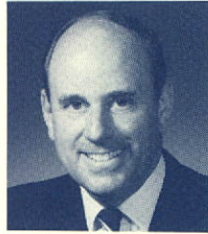
**T**he Association is made up of thirteen member companies operating a domestic fleet of 111 vessels. In addition to the domestic fleet, members operate 7 vessels under foreign registry.

During the course of the year the Association lost one member when Incan Superior Ltd. decided to cease its rail-car ferry operation on Lake Superior and move the vessel to the west coast. However, we were pleased to welcome Oceanex Inc. as a new member. Oceanex operates three coastal container vessels in eastern Canada.

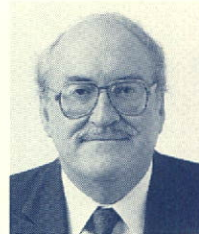
### Meetings

**T**he Annual General Meeting was held in Ottawa on May 14, 1992. In addition, two full Board meetings were held, one in January in Toronto and the other in September in Montreal. As well there were three Executive Committee Meetings. In the spring of 1992, Mr. Duncan Maxwell, President & CEO, ULS Corporation announced his retirement from ULS and resigned as Chairman of the CSA Executive Committee. Mr. Maxwell's career in the marine industry spans many years commencing with the shipbuilding sector and eventually the management of the ULS fleet. Mr. Maxwell was honoured by fellow Directors at a retirement dinner coinciding with the CSA's Annual General Meeting.

### At December 1992, the following comprised the Board of the CSA.



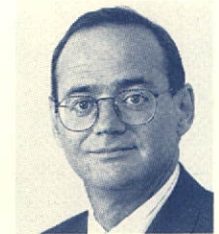
Mr. Peter R. Cresswell,  
President & CEO,  
**Algoma Central Corporation**



Mr. Tony Chesterman,  
Chairman of the Board,  
**The CSL Group**



Mr. David Watson,  
Marine Manager,  
**Imperial Oil Ltd**



Mr. Louis-Marie Beaulieu,  
President,  
**Groupe Desgagnés (1981) Inc.**



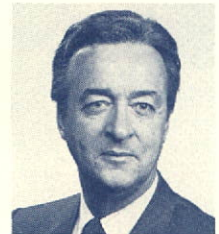
Ms. Suzanne Paquin,  
Vice President,  
**Logistec Corporation**



Mr. David K. Gardiner,\*  
President & C.O.O.,  
**GLBC Inc.**



Mr. Robert J. Paterson,\*  
Executive Vice President and Director,  
**N.M. Paterson & Sons Limited**



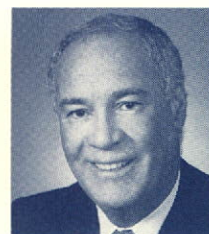
Mr. Gilles Champagne,  
President and CEO,  
**Oceanex Inc.**



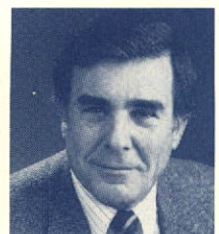
Mr. George D. Clarke,  
General Manager,  
**P&H Shipping**



Mr. Guy Bazinet,\*\*  
Executive Vice President and Chief Operating Officer,  
**Socnav Inc.**



Mr. Al Donaldson,  
President,  
**ULS Corporation**



Mr. T. Norman Hall,\*  
President,  
**Canadian Shipowners Association**

Capt. George Iskandar,  
Executive Vice President,  
Commercial Operations,  
**Enerchem Transport Inc.**

Mr. William McIlveen,  
Senior Chartering Representative,  
**Shell Canadian Tankers Limited**

Mr. J.D. Leitch,  
Chairman,  
**ULS Corporation**  
(Honourary Director)

Bill Scott,  
**Incan Superior**

\* Denotes Members of Executive Committee  
\*\* Denotes Chairman of Executive Committee

## International Joint Conference

**T**he 55th Annual International Joint Conference of the Canadian Shipowners Association and the Lake Carriers' Association of Cleveland, Ohio, was held in Florida, February 23rd-26th, 1992.

## Maritime Operations Committee

**T**he Annual Meeting of Masters, Chief Engineers and Superintendent took place January 8-9, 1992 in Ottawa. The meeting was attended by 22 Masters and 15 Engineers.

In addition some 59 invited persons attended the technical sessions. These included representatives of Transport Canada, Canadian and U.S. Coast Guard, the Great Lakes and Laurentian Pilotage Authorities, the Shipping Federation of Canada and the U.S. and Canadian Seaway agencies.

## St. Lawrence Seaway Operations

### Navigation Season

**O**fficial navigation on both the Montreal-Lake Ontario section and the Welland Canal commenced on March 30, 1992 and closed on December 23rd and December 24th respectively.

## Seaway Issues

### Commons Standing Committee on Transport (SCOT)

**T**he Committee agreed to strike a sub-committee on Seaway issues in March of 1992.

Hearings were to be held over the summer and fall with a view to tabling its findings and recommendations before the end of the year.

The CSA appeared before the sub-committee on May 20th. Issues discussed in our brief and during questioning included the general state of the industry, changing traffic patterns, the poor financial state of the industry, and the aging of the fleet. Other areas discussed included changes to the WGTA, the Russian or CIS grain trade problems, pilotage and coasting trade amendments to mention a few.

On December 10th, SCOT tabled its report which recommended various actions to improve the viability and competitiveness of the

Seaway system. Among its recommendations was the call for a freeze on Seaway tolls and pilotage fees, a feasibility study on increasing Seaway draft by one foot, and the need to include the Seaway system in any decisions made in the course of amending the WGTA. The report also called for binational cooperation between Canada and the United States to promote and encourage the longer term viability of the system.

### Seaway Summit

The Summit Group was formed by the Canadian and US Seaway entities to examine ways to make the system more efficient and more competitive.

The Summit group consists of twelve members representing all the stakeholders in the system both U.S. and Canadian, these include



labour, pilots, port authorities, stevedores, towboat operators and shipowners.

The group, meets two to three times a year to examine, among other things port productivity cargo handling charges, incentive tolls and seaway draft.

## Seaway Roundtable

As a result of the federal-provincial Agriculture Ministers desire to reform the Western Grain Transportation Act (WGTA) eight working groups were established for the purpose of specific examination of various elements of Canada's grain export regime.

Hosted by the Hon. Shirley Martin, Minister of State for Transport, this body of 32 was comprised of representatives from grain companies, shipowners, labour, ports, railways, and other groups with an interest in the Seaway.

The full group met once in August and once in September and although the conclusions reached were not unanimous, the consensus was that for specific growing markets the Seaway was the lowest cost routing for Canadian grain.

Feeding into the full WGTA reform process, the Seaway Roundtable urged federal-provincial Agriculture Ministers to be cognoscente of the importance of the Seaway when making decision effecting the future of Canada's grain export integrity.

## Seaway Draft

Following discussions at Summit meetings the St. Lawrence Seaway Authority announced a one inch draft increase in the Montreal-Lake Ontario section and three inches in the Welland. The former has a seasonal limit

and both are subject to any changes in water level.

The Seaway Authority had indicated that a permanent three inch increase in draft could cost between \$6 and \$8 million and take up to two years to complete. A six inch increase was estimated to cost \$25 million.

In its "Prescription for Survival" paper issued in October 1992, the CSA called for an increase of one foot. This would increase cargo carrying capacity for a standard laker by 1200 to 1500 tonnes and afford a reduced rate on cargoes transiting the system.

## National Transportation Act (1987) — Quadrennial Review

Early in 1992, the Minister of Transport announced the appointment of a commission to review the NTA (1987) as required by the Act itself. Submissions were to be forwarded no later than June 30, 1992 and the commission was to report back to the Minister by the end of January 1993.

While the Act does not have a direct impact on the bulk of our trade, it does on our main competitors - the railways. The review process would include for example "confidential contracts" for rail freight and the "necessity of having a compensatory rate for railway transportation". There has been some concern on the part of members of a possible link between the WGTA rail subsidy and compensatory rates to move certain grains east of Thunder Bay to the St. Lawrence.

The CSA presented a brief before the commission on May 20th, 1992 outlining several concerns among them the high cost of government imposed charges.

## Pilotage Issues

### Laurentian Pilotage Authority (LPA)

#### Tariffs

In November 1991, the NTA handed down its decision with respect to our appeal on a proposed 7.1% tariff increase. The NTA ruled in favour of the LPA. On reviewing the decision the CSA successfully sought leave to appeal as it was felt the decision was flawed and had not properly addressed all the issues. This action was turned down in March 1992 as the court felt that our appeal was after the fact in that the increase had been approved by Order in Council and was therefore law.

In July 1992, the LPA again applied for a tariff increase, 3% effective immediately and 7% effective January 1, 1993. The CSA filed an appeal, objecting to the increases on the grounds they were inflationary and unjustified in light of current economic conditions in our industry. A decision will be rendered by the NTA some time in the first half of 1993.

As government policy requires all crown agencies to be self-sufficient and the LPA is operating at a deficit, the LPA feels it has no option but to seek increases that will help reduce its deficit regardless of the level of traffic or the Consumer Price Index (CPI) and the potential compounding negative aspect of such increases.

#### CSA Action

As has been reported in previous Annual Reports, the CSA was becoming extremely frustrated with the lack of reform with respect to certain LPA

regulations and constant increases in tariffs. Various proposals had been forwarded to government but not acted upon. The views were discussed on numerous occasions with government officials and Ministers.

As a result, in April 1992, CSA took the unprecedented step of exercising civil disobedience.

At a press conference held on April 15, 1992, the CSA announced it would withhold payment on all LPA invoices until such time as meaningful discussions took place and an agreement consummated. Due to lack of serious progress, a second press conference was held on July 16, 1993 at which time the CSA requested that the LPA be placed under trusteeship.

Meaningful discussions followed and an agreement in principle was reached in mid-September. A memorandum of understanding (M.O.U.) was signed on September 30, 1992 following approval of the Boards of the LPA and CSA as well as the Minister of Transport and monies owing the LPA which had been held in a trust fund were immediately released.

The M.O.U. called for changes in the examination process for pilotage certificates, a review of the whole question of double pilotage, the development of a mechanism to ensure no disruption of services by the pilots in the event of any dispute with the LPA and lastly an agreement to review means of determining the proper level of future tariff adjustments.

Subsequent to the signing of the MOU, the Minister appointed Mr. Guy Dancosse Q.C., to look into the double pilotage question and present his report and recommendations to the Minister early in 1993.

Also in accordance with the terms of the MOU the Chairman of the LPA appointed Mr. Marc Lapointe, former Chairman of the Canada Labour Relations Board, to review the question of disruption of service and propose wording that would satisfy this question.

With respect to the examination process for pilotage certificates the CSA pilotage committee is working with LPA officials on a proper syllabus with a view to having it in place for the next examination date, scheduled for late March 1993. Other features respecting the examination process are the right of the CSA to have an observer present during the oral examination and confirmation that such examinations will be electronically recorded.

## **LPA Board Appointment**

In April 1992 Mr. Raymond Boissonneault resigned from the Board for personal reasons and subsequently the Minister appointed Mr. Jacques Regnaud.

Mr. Regnaud had previously served on the Board in the mid-1980's and recently retired from Canada Steamship Lines and is currently President of SODES.

## **Ports Canada Corporation**

This year marked a change in the leadership of Ports Canada. Arnold Masters, former head of the Maritime Employers Association (MEA) and (FETCO), was appointed

Chairman of the Crown Corporation.

Mr. Masters is well recognized in the marine community and very familiar to and with Ports Canada having, just prior to his appointment, completed a comprehensive study on container traffic for the Corporation.

Shipowners welcome Arnie Masters to his new position and undertake to work cooperatively with him and the initiatives that his tenure will bring.

## **Grain Issues**

1993 saw many new chapters added to the ongoing saga of the Western Grain Transportation Act (WGTA) reform debate. Early in the year the federal Minister of Agriculture, the Hon. Bill McKnight, initiated a cross country series of town hall style meetings known as the "Transportation Talks". These consultations were intended to collect the views of participants at the grass root level and the final report offered no recommendations, simply data.

In July the federal Minister met with his provincial counterparts in Halifax to further the debate. This meeting generated a series of eight working groups each with a specific focus (for example the Seaway Roundtable which has been reported on in another section of this report). Input from this process culminated in the presentation of broad principles by an independent consultant to Ministers, federal and provincial, in Toronto in early November.

With a deal in the formation the federal government unveiled its economic statement in the House of Commons (December 4) cutting the Crow benefit by 10%

and scuttling an agreement on change in method of payment.

Throughout this process the CSA was very active with the Fair Access to Canada's Transportation System (F.A.C.T.S.) coalition. This body, comprised of Seaway users, ports, and marine suppliers lobbied vigorously throughout the year in an effort to effect and accelerate the WGTA reform process.

## **Canadian Wheat Board - Biannual**

As covered elsewhere in this report, the Russian or Former Soviet Union (F.S.U.) credit problems caused unexpected severe financial hardships to our grain carrying members. There developed a perception that the Canadian Wheat Board could have done a better job in giving members advance notice of the cessation of board grain shipments to Russia. As a result of glowing reports of a heavy program for the opening three months of the 1992 Seaway Season, members had gone to the expense of fitting out the entire bulk fleet. By late April or early May, just one month after the Seaway opened, grain shipments came to a grinding halt.

Following discussions with Canadian Wheat Board Commissioners it was agreed that a "summit" meeting between Commissioners and CSA Directors was in order. The meeting took place in early June with focus on communications. Following open and frank discussion it was agreed that future biannual summit meetings would be useful to discuss short and long term outlooks and other items of mutual interest or concern.

A second meeting was held in early October 1992.

## **Thunder Bay Grain Trimmers**

Following various discussions the CSA signed a two year contract with the grain trimmers which called for an increase of 3% in 1992 and 2% in 1993. Agreement was also reached on eliminating the need for such services, unless requested, all bulk terminals in Thunder Bay.

## **Coasting Trade**

The original bill known as Bill C-52 died on the Order Paper during the last Parliament and resurfaced as Bill C-33. The Bill amends certain provisions currently found in the Canada Shipping Act and creates a new legislative framework that is intended to protect the coasting trade for Canadian flag vessels.

The Bill encountered strong opposition from the Seafarers International Union (SIU) who were concerned about the lack of a fourteen day waiting period prior to the granting of a waiver and other potential abuses.

The CSA following a review of the Bill and discussion with Transport Canada felt that there were sufficient safeguards to prevent abuses if administered as intended.

Following vigorous debate, the House passed the Bill on June 23, 1992 and it was proclaimed on December 1, 1992.

In the fall of 1992, two CSA members brought to our attention situations where it appeared that the NTA may have acted unfairly in reviewing waiver applications. The CSA raised the issue with the NTA and Transport Canada. Following a review it was determined that in one case the communications between the NTA and the member were unclear and that in fact the member could not provide a vessel as required. In the other case the waiver

applicant worked out a contract with our member.

A meeting was held with a senior official at the Agency in December as well as Transport Canada officials where the CSA expressed concern about the criteria and research carried out in the NTA's determination process. Further discussions are to be held in early 1993.

### **Bi-National Industry - Government Meetings**

In 1991, various US and Canadian Great Lakes - Seaway stakeholders convened to determine what could be done to encourage greater interface between government and industry to ensure the viability of the system and increase its competitiveness. The result was a document entitled the Declaration of Indiana.

Included in that document was an Action Agenda which signatories agreed to pursue.

The first meeting under this new agenda took place in Washington on April 1, 1992. There were 36 attendees from US and Canadian business interests as well as U.S. and Canadian government representatives.

The Great Lakes - St. Lawrence Seaway was characterized as a system in trouble and in need of greater bi-lateral government attention. Action areas targeted were:

- increased draft
- pilotage rationalization and harmonization
- review of user fees to ensure medal competitiveness
- thorough review of government regulations and inspections including the U.S. and Canadian Coast Guard.

The federal Marine Administration (MARAD) agreed to be the lead agency on a new business action committee to follow-up on these issues including greater consultations between the two governments responsible for the waterway.

A further meeting was slated for late October in Ottawa but was postponed to 1993 due to concurrence with the Constitutional referendum.

### **Modal Shifts & Environmental Impacts**

In 1992 both Transport Canada and the International Association of Great Lakes Ports (IAGLP) conducted mirror studies examining the effects of shifts in mode of transporting commodities on the environment.

In both cases several commodities and routings were selected (ie. grain from Thunder Bay to Quebec) and the questions asked (i) how much additional fuel would be consumed if one tonne of commodity was carried by rail or truck rather than marine? (ii) how many more harmful emissions would be emitted from the shift? (iii) what additional costs would be generated for government as a result of a shift (ie. extra landfill sites for used truck tires, greater costs for infrastructure, noise abatement, etc.). The results of these studies, expected to demonstrate the environmental superiority of the marine mode, will be released to the public early in 1993.

### **Economic Impact Study**

During the year Transport Canada also commissioned an examination of the economic impacts of Seaway commerce

on the economies of Ontario and Quebec.

Conducted by Transmode Consulting the report concluded that the Seaway generates over \$3.3 billion of economic activity each year and creates over 17,000 direct employment positions.

### **Port Cartier Port Fees**

On April 20, 1992, Quebec Cartier Mining (QCM) advised members that effective April 21, 1992, port fees for lakers would be increased as follows:

Grain only	100%
Ore only	48%
Grain and Ore	31%

The total additional cost to CSA members based on 1991 volumes would be over \$630,000.

The reason for this sudden extraordinary action was a dispute between QCM and "Les Silos Port Cartier" who own and operate the grain elevator in Port Cartier. The two entities could not agree on the amount of money that "Les Silos" should pay QCM for the movement of grain through the port. As a result QCM cancelled a 1983 agreement and "Les Silos" immediately halted payments as per the contract.

Apart from the money question there is also a requirement in the original 1966 agreement, when the elevator was constructed, that Port Cartier had to be competitive with other grain elevators in the region ie. Baie Comeau.

Les Silos then sought an interlocutory injunction.

In the meantime, the CSA advised QCM that we could not accept such inflationary and unjust increases and would only pay port fees based on 1991 rates. It was

clear that these were pressure tactics designed to bring "Les Silos" to the bargaining table.

In early October, the Superior Court ruled in favour of the injunction action taken by "Les Silos", and QCM was instructed to rescind its' April 20th directive. Despite the ruling, QCM issued a revised schedule of port fees retroactive to April 1992. As these revised ratio represented an increase of 80% over 1991 rates, the CSA again advised QCM that they could not agree to such onerous increases and would continue to pay basis 1991 rates.

The CSA held various meetings with QCM officials to explain the current economic difficulty of the industry and the need for a more common sense approach to port fees.

At year-end, QCM and "Les Silos" were still maintaining their hard-line positions. Further talks are expected to take place in the first quarter of 1993.

### **Oil Pollution Response**

In May, the Government's long awaited response to the main recommendations of the Brander Smith Report was issued. This took the form of proposed changes to the Canada Shipping Act with four major provisions. These were i) a person or ship guilty of pollution under the Act could be liable to a fine of \$1M or imprisonment of up to 3 years or both. The existing limit is \$250,000. ii) Courts would be given authority to impose, on convicted pollution offenders, obligations to contribute to R&D and show proof of good conduct in terms of pollution related activities up to 3 years after conviction. iii) The International Salvage Convention of 1989 would be

ratified by Canada. iv) the Oil Pollution Response Convention, 1990 would be ratified and in order to permit this the following two requirements would be implemented by appropriate legislation.

- 1 The requirements for ships, ports and oil-handling facilities to have an oil pollution emergency plan and to report pollution incidents.
- 2 The establishment of a national system for preparedness and response including the establishment of a Competent National Authority and Response Authorities to conduct spill response operations.

Under item iv) 1 the requirement for ships would be met by compliance with Regulation 26 of Annex I to the Marpol Convention 73/78. In general terms Members would have little difficulty meeting these requirements and already substantially do so. The major area of concern lies with iv) 2. In August, CSA wrote to Ran Quail, Commissioner of Coast Guard, stating that we did not agree with the Governments stated intention of applying the new requirements to dry cargo vessels as well as tankers.

Our contention was that Brander Smith was concerned with tankers only, that the main concern in the public domain related to tankers and that involving dry cargo vessels would impose an unfair burden on them and complicate the development of the regulations unnecessarily.

We also contended that applying the same response requirements on small tankers and much larger ones was discriminatory with regard to

Canadian tankers, particularly those on the Great Lakes trade.

In November, Coast Guard convened a meeting of interested parties to consider their newly issued Proposed Guidelines for Response Authority Response Plans. A working group was established to consider the guidelines and it was agreed to meet monthly starting in December '92 with a minimum of four 3 day meetings to be held. The hope was that by the end of these four meetings a consensus would be arrived at on all the main elements of the guidelines.

It became immediately clear that the costs to shipowners would directly relate to the requirements of these guidelines and CSA was represented on the working group by Neil Hunter as delegate with several member company representatives in attendance as advisors.

The December meeting agenda included discussion on items such as Role of the Coast Guard; the inter-relationships between the polluter, a Response Authority and the Coast Guard; Geographic Areas of Risk; and, Response Time Standards.

The Coast Guard opened the session with a presentation concerning its role under the proposed response regime. The Coast Guard stressed that although improvements to spill response would be funded and operated by the private-sector, it would remain "lead agency" for ship-source spills. Under the new regime, the Coast Guard could assume one of five roles: monitoring, advising, directing, contributing, and taking over full responsibility for response. The Coast Guard, together with the relevant environmental authorities,

would decide on termination of clean-up activities.

The work group then moved on to discuss Proposed Geographic Areas of Risk. From these deliberations, three primary criteria were put forward; cargo volume (loading, unloading and transfers must reach at least 500,000 tonnes per annum, traffic and convergence, and infrastructure. Finally, the work group discussed response time standards.

Although substantial agreement was achieved on many of the elements under discussion it was clear at the end of the meeting, that there were, equally, many areas of wide diversion and much work remained to be done in the future meetings.

Shortly after the December meeting, CSA members formed a working group with the intention of producing a CSA Plan which would meet the requirements of the proposed legislation in the most cost effective way. The hope was that this plan could be prepared in time to be presented at or before the last scheduled meeting of the Coast Guard/Industry Working Group.

## Substance Abuse

In July, after one year of silence the Government convened a meeting of the Industry / Government Working Group. A new team of Government players was introduced together with a revised draft of the proposed regulations.

The Industry was generally well disposed to the regulations with the major objection that they were still not modal specific ie they covered all forms of transport and were insufficiently clear in some areas as to which modes were affected.

The Public Service Alliance of Canada (PSAC) dismissed them out of hand as being counter to the provisions of the Chamber of Human Rights.

In December, revised marine-mode regulations were issued, with the advice that they had been sent to the Minister. CSA is satisfied with this new format and has no major concerns with this new format and has no major concerns with their application should legislation be brought in though the extreme opposition of the P.S.A.C. makes the prospect somewhat doubtful at least in the near future.

Late in the year we also learned that the USA had postponed their requirement that foreign (hence Canadian) operators entering U.S. waters must demonstrate that their safety sensitive employees are participating in a substance use program, from January 93 till January 95.

## Precise Navigation

In 1991 CSA and the St. Lawrence Seaway Authority jointly sponsored a trial of a system called RANAV which we hoped might lead to a breakthrough in precise navigation on our waters. Our conclusion was that the system was technically flawed and too expensive. In 1992, we kept looking and focused on a company called Laser Plot, located in Auburn Mass. Trials were held December 91 and April 92 resulting in C.S.L. installing a permanent system on one of their Lakers. At the end of the season, everyone involved was delighted with the performance of the system which was driven by G.P.S. (Global Positioning System) a U.S.A. satellite system originally designed for military use but now offered freely to commercial users.

This G.P.S. has the ability to position ships to within 10-30 metres but a refinement called differential correction can provide accuracy as "low" as +/- 1 metre and generally +/- 5 metres.

Early in the year Coast Guard suggested they might provide the necessary installations to allow the differential correction to be received by G.P.S. users but as the year wore on nothing seemed to be happening. Everyone agreed D.G.P.S. was the system of the future but it seemed as far away as ever. Therefore, in December, CSA hosted a workshop in Ottawa to demonstrate the capabilities and value of D.G.P.S.

Four manufacturing companies made presentations and over 50 people representing over 30 different organisations attended. At the end of the meeting there was a general feeling that nothing other than the most pressing financial considerations should stand in the way of Coast Guard moving ahead promptly with a clear plan for the provision of the differential signals, with the St. Lawrence River as the first priority and the Gulf of St. Lawrence and Great Lakes shortly after.

### **Atlantic Pilotage Authority (A.P.A.)**

Early in 1992, the A.P.A. quietly canvassed their users on the possibility of charging a user fee for pilotage certificates issued to shipowners employees. Their argument was two fold. Firstly, there is a clerical cost to the issuance and tracking of the certificates, secondly, although there is a relatively high number of certificate holders operating in their region a high pilot availability is still required by companies which have these certificates. We

were not consulted but were concerned in case the fees proposed would be unreasonably high (our worst fears were realised in March 1993) and an undesirable precedent would be established. We can expect to hear more of this in 1993.

### **Great Lakes Pilotage Authority (GLPA)**

In January, we wrote to the Chairman of the G.L.P.A. advising that CSA members were now prepared to accept most of their (1988) proposed amendments to their regulations pertaining to pilotage waivers. We did this with some reluctance but had decided that some gesture was justified to try to break the impasse which had existed since the proposals were made. We explained that we remained firmly opposed to the majority of the recommendations in the 1989 Gauthier Report. On balance we felt we had made significant concessions and had opened the door to a meaningful compromise. In February we wrote to the Minister, Mr. Corbeil, and advised him of our offer as we knew him to be actively seeking a solution to the problem left to him by his predecessor.

Our offer was acknowledged and at year end nothing further had transpired.

Early in the year the G.L.P.A. advised us of their intention to apply for a tariff increase of 4.8%. At that time we stated we would not object as our members accounted for only about 1% of their assignments.

However, when the tariff increase was made late in the year the increase was 5.5%. Furthermore, in the interim the House of Commons Standing Committee on

Transport recommended a freeze on government imposed charges.

For those reasons, CSA appealed the G.L.P.A. proposal.

### **Residual Cargo Disposal**

For some time now, I.M.O. has been considering extensions to their list of marine pollutants and materials such as coal, salt, potash and iron ore have been mentioned. It came, therefore, as no surprise when the U.S. and Canadian Coast Guards quietly advised that cargo sweepings or tunnel/hold washings put over the side would be cause for investigation should anyone lodge a complaint.

In mid-year a case involving a non-CSA member was taken to court by our Coast Guard. Late in the year the U.S. Coast Guard investigated two cases involving a U.S. and a Canadian company and early in 1993 assessed fines of \$300 in each case.

The USA has acceded to Annex V of MARPOL 73/78 which covers garbage though to date Canada has not and probably will not do so this year. At year end we learned that Coast Guard was proposing to let a contract "for the study of cargo residues on the Great Lakes to determine if control measure are required" (our underlining).

We can expect to hear more on this subject during 1993.

### **Regulations Review**

In the February budget, the Government announced that a general review of all regulations would be undertaken starting with the ministries of Agriculture, Consumer and Corporate Affairs and Transport Canada. The plan

was for each department to report to the Standing Committee on Finance. The Standing Committee was then to report to Parliament, all this by September 1992.

As the summer progressed, we were advised that Coast Guard were conducting an exhaustive in-house review of all regulations under the Canada Shipping Act, Arctic Waters Pollution Prevention Act, Navigable Waters Protection Act and the Public Harbours and Government Wharves Regulations, a grand total of 114 regulations.

The CSA Regulation Review Committee was alerted and advised to begin their own in-house review of those regulations which most affected them.

In August, we were requested by Mrs. Martin, Minister of State for Transport to comment on the regulations. A meeting of the Regulation Review Committee was held and a response subsequently sent to Mrs. Martin.

In our response, we stressed the need for Coast Guard and Classification Societies to harmonise their requirements and eliminate all duplication. We stressed the importance of on-going Industry/Coast Guard consultation to ensure that Government has a clear understanding of the operational and fiscal consequences of the regulatory regime. We recommended that Canadian and U.S. Coast Guards harmonise their regulations where possible to avoid difficulties for Canadian vessels in the U.S. trade. We also stressed the need for a very close examination of all proposed new regulations with particular emphasis on the cost, benefit considerations.

## Transportation Accident Investigation and Safety Board Act

This new act came into force in August 1992.

CSA had objected to a number of provisions in the original proposals which were multi-modal and very much influenced by the air mode. Many of our objections and/or proposals were accepted and those items which remained unchanged did not appear to be of a serious nature.

We can therefore be satisfied with our efforts and reflect that the regulatory consultation process can work for us if we take full advantage of it. Time alone will tell if our confidence is justified or whether the preponderance of military, air orientated personnel on the various levels of the Board will prove to be a problem.

## Tanker Issues

1992 was a big year at I.M.O. In particular the Marine Environment Protection Committee (M.E.P.C.) meeting in March produced final construction regulations for new and existing tankers (Regs 13F and 13G to Annex I of Marpol 73/78.) At the October meeting guidelines for the enhanced survey of tankers were formulated and these will be finalised, hopefully in 1993.

In the U.S.A. 1992 was a year that saw a lot of talking but little action. OPA 90 continued to produce more proposed legislation and a Coast Guard / Industry committee studied proposals for ship-shore oil spill response. The main issue was whether tankers should carry equipment for on-water oil recovery. At year end it appeared that, timebeing, this would

not be required though there are strong elements demanding this.

On the question of shipowners liability the battle raged with no apparent resolution in sight. Coast Guard claimed there was no real danger to insurance companies and the P&I Clubs insisted there was and said they would not underwrite unlimited liability under any conditions. Meantime existing P&I coverage remains in place and one just wonders what would happen if a serious oil spill occurred in the waters of a State which had legislated unlimited liability as they are permitted to do under OPA 90.

During the year the U.S.A. published their final ruling on double-hulled tankers. As anticipated the previously published phase-out schedule was retained. This means that older, larger, single-hulled tankers will begin to be phased-out in 1995 and all single-hulled tankers will be banned from U.S. waters by the year 2015.

At year end the U.S. Coast Guard issued their guidelines for certification of oil spill response contractors and confirmed that all tanker owners intending to trade into the USA must submit their proposed spill response plans by February 18 1993.

## Changes in C.S.A. fleet Vessels of 1,000 GRT and over - 1992

Company	Vessel	GRT	Remarks
<b>Socanav</b>	<b>Le Cedre</b>	4,009	Sold Foreign
<b>CSL</b>	<b>White Fish Bay</b>	18,370	Sold scrap
<b>CSL</b>	<b>Atlantic Huron</b>	23,356	Transferred to Cdn Registry
<b>Incan</b>	<b>Incan Superior</b>	3,838	Transferred to West Coast service
<b>Imperial</b>	<b>Tofino</b>	650	Sold, remains Cdn registry

In Canada there was also plenty of discussion and happily a greater measure of agreement.

An Industry/Coast Guard work group met several times during the year to discuss the issue of double-hulled tankers. By year end it had been agreed that Canada would implement the IMO standards for tankers of all sizes NB: IMO standards permit tankers less than 5,000 TDW to be fitted with a double bottom only.

This means that all new Canadian tankers and all new foreign tankers operating in Canadian waters must be double-hulled in accordance with IMO standards which were established at the meeting of the Marine Environment Protection Committee (MEPC) in March 1992.

It was also agreed to adopt the U.S. phase-out schedule for single-hulled tankers. There was little alternative to this given the substantial trade of Canadian vessels to U.S. ports. This schedule is not unduly onerous to Canadian flag tankers and will avoid potential problems with U.S. authorities while giving owners time to restructure their fleets.

One major issue remained unresolved at year end. The Canadian Petroleum Producers Institute (C.P.P.I.)

proposed that all tankers in the Arctic should be double-hulled within 5 years if carrying persistent oils and 7 years if carrying non-persistent oils. While recognising the need to protect Arctic waters, some owners felt that these time frames allowed too little time to finance new vessels. It was also pointed out that the record for the last 17 years showed only 2 small oil spills.

As an interim measure the Industry / Coast Guard working group agreed to develop improved standards for operation of tankers and barges in the Arctic. At year end a final draft had been issued and seemed likely to meet general approval and implementation in 1993. The question of when double-hulls might be required remained undecided.

### Composition of CSA Fleet

Member	Bulker	Self Unloader	Tanker	Foreign	Other	31/92
Algoma	6	11		1		18
CSL	1	13		3		17
Enerchem			5	1		6
Desgagnes	4				4	8
Logistec					1	1
Imperial			4		2	6
Incan					1	1
GLBC	14			1		15
Paterson	7					7
P & H	3					3
Shell			1			1
Socanav			13			13
ULS	10	6				16
Oceanex					3	3
<b>Total</b>	<b>45</b>	<b>30</b>	<b>23</b>	<b>6</b>	<b>11</b>	<b>115</b>

### CSA Fleet - Ten Year Profile

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
<b>Ships</b>	156	137	136	131	129	121	119	124	119	115
<b>G.R.T.</b>	2,102,788	1,957,000	1,915,246	1,835,375	1,776,518	1,651,440	1,660,676	1,798,835	1,747,168	1,776,394
<b>Bulkers</b>	84	69	65	60	64	55	56	51	47	45
<b>G.R.T.</b>	1,148,167	1,098,525	941,607	943,953	968,123	899,828	887,255	768,358	789,943	771,573
<b>%</b>	54,6	56,1	49,2	51,4	54,5	54,6	53,4	42,7	44,8	43,4
<b>S-U</b>	37	34	35	35	35	33	34	36	31	30
<b>G.R.T.</b>	773,638	688,394	801,626	729,546	663,302	588,919	632,214	620,881	591,895	615,251
<b>%</b>	36,8	35,2	41,9	39,7	37,3	35,7	38,1	34,5	34,2	34,8
<b>Tankers</b>	30	29	28	28	23	28	25	24	25	23
<b>G.R.T.</b>	165,073	154,171	149,476	149,476	123,390	140,990	135,236	131,620	137,082	133,073
<b>%</b>	7,9	7,9	7,8	8,1	6,9	8,3	8,1	7,3	7,9	7,5
<b>Foreign</b>								9	8	6
<b>G.R.T.</b>								272,005	210,064	186,708
<b>%</b>								15,1	12,1	10,7
<b>General</b>	3	3	6	6	4	3	3	3	3	4
<b>G.R.T.</b>	13,983	13,983	20,610	10,476	19,012	19,012	2,691	2,691	2,691	41,806
<b>%</b>	0,7	0,7	1,1	0,6	1,1	1,2	0,2	0,2	0,2	2,4
<b>Misc.</b>	2	2	2	2	3	2	1	1	5	7
<b>G.R.T.</b>	1,927	1,927	1,927	1,927	2,691	2,691	3,280	3,280	15,493	15,493
<b>%</b>	0,1	0,1	0,1	0,1	0,2	0,2	0,2	0,2	0,8	0,87

## Part II Statistical Report of 1992 operations

### Summary of Tonnage

#### Introduction

**T**his part of the report describes the cargoes carried by CSA member fleets under Canadian flag in the year. A distance factor is attached to each cargo movement in order that comparisons of trade patterns over time and among commodities may be drawn.

#### Summary by Commodity

In 1992, CSA member fleets hauled 69.875 million tonnes of cargo. The average length of haul was 2980 kilometres.

The table below is a summary of commodities handled and tonne-kilometres generated.

Cargo Volumes' table shows total movement in each of the years 1983 to

1992. Tonnage carried in 1992 fell short of the five year average by 7.6 million tonnes (10.9%) and fell short of the ten year average by 7.5 million tonnes (10.7%). Tonne-kilometres in 1992 also fell short of the five year average by 16.7 %, and also fell short of the ten year average by 20.6%.

Tables indicate that ten commodities showed increases in tonnage carried in 1992, two showed declines.

Changes in tonne-kilometres was split with an increase in seven commodities and a decrease in the other five commodities tracked.

#### Summary by Type of Trade

Type of Movement	Tonnes	%	Tonne-Kilometers (000)	%
Import	24,338,092	34.8	20,738,273	27.7
Export	11,393,805	16.4	14,111,261	18.9
Domestic	32,431,250	46.4	39,624,049	53.0
Cross-Trading	1,711,853	2.4	265,644	0.4
<b>Total</b>	<b>69,875,000</b>	<b>100.0%</b>	<b>74,739,227</b>	<b>100.0%</b>

#### Cargo Summary

Commodity	Tonnes	%	Tonne-Kilometers	%
Coal	15,446,704	22.1	7,543,061,000	10.1
Gain	12,112,736	17.3	24,625,874,000	32.9
Iron Ore	15,602,615	22.3	19,693,130,000	26.3
Tanker Prod.	6,660,826	9.5	4,731,130,000	6.3
Limestone	6,446,056	9.2	4,508,428,000	6.0
Salt	5,841,481	8.3	5,430,134,000	7.3
Gypsum	962,050	1.4	1,370,314,000	1.8
Potash	654,067	0.9	820,616,000	1.1
Cement	780,865	1.1	594,306,000	0.8
Coke	665,597	1.0	862,083,000	1.2
General Cargo	632,635	0.9	991,361,000	1.3
Misc Bulk	4,069,368	6.0	3,568,790,000	4.8
<b>Total</b>	<b>69,875,000</b>	<b>100.0%</b>	<b>74,739,227,000</b>	<b>100.0%</b>



### Seaway Usage

	Tonnes	Percent of Seaway Total	Percent of CSA Total
Through the Welland	11,866,309	34.0	17.4
Through Montreal – Lake Ontario	6,835,717	19.6	10.0
Through both	16,209,649	46.4	23.8
total seaway	34,911,675		51.2
Through neither	33,282,325		48.8
total :	68,194,000		

### Cargo Tonnage as Proportion of Trades

	% Domestic	% Import	% Export
Coal	3	52	15
Grain	25	14	6
Iron Ore	31	13	21
Tanker Products	14	0	3
Limestone	11	7	11
Salt	9	2	22
Gypsum	2	0	2
Potash	1	0	4
Cement	0	0	7
Coke	0	2	1
General Cargo	2	0	0
Misc Bulk	2	10	8

### Cargo Volumes (Millions of Tonnes)

	83	84	85	86	87	88	89	90	91	92
Coal	17.4	20.6	17.4	15.5	17.4	21.2	19.1	16.4	15.3	15.4
Iron Ore	16.9	17.1	14.5	13.9	15.1	16.4	17.9	16.5	15.2	15.6
Grain	20.1	18.6	14.5	13.8	15.6	13.2	10.5	12.0	15.9	12.1
Limestone	3.1	3.9	5.5	6.5	7.2	6.9	8.6	9.0	6.2	6.4
Tanker Prod.	10.8	10.7	8.9	8.4	8.1	8.5	6.8	8.7	10.3	6.6
Salt	3.5	4.8	4.5	5.4	4.4	4.8	4.7	4.8	5.7	5.8
Gypsum	0.9	1.2	1.7	1.3	1.6	1.7	1.4	1.5	0.5	0.9
Potash	1.4	1.8	1.7	1.3	1.3	1.0	1.2	1.4	0.8	0.6
Cement	0.9	0.7	0.7	1.0	0.9	0.9	1.1	1.0	0.6	0.7
Coke	0.5	0.7	0.6	0.9	0.8	1.2	0.9	0.9	0.3	0.6
Gen. Cargo	0.4	0.6	0.3	0.3	0.4	0.3	0.2	0.3	0.1	0.6
Misc. Bulk	4.4	5.6	4.5	3.9	3.8	4.4	4.9	4.9	3.6	4.0
<b>Total</b>	<b>78.9</b>	<b>84.9</b>	<b>74.8</b>	<b>72.1</b>	<b>76.5</b>	<b>80.7</b>	<b>77.3</b>	<b>77.4</b>	<b>74.4</b>	<b>69.8</b>

### Volume Change in Cargoes 1991 – 1992

Commodity	Tonnes		Tonne-Kilometres	
	% Increase	% Decrease	% Increase	% Decrease
Coal	0.6			7.7
Grain		23.6		28.9
Iron Ore	2.8			4.8
Tanker Products		51.7		51.5
Limestone	4.2		7.5	
Salt	3.0		19.4	
Gypsum	95.1		63.6	
Potash	15.9		6.6	
Cement	31.6		3.0	
Coke	108.7		75.8	
General Cargo	640.0		655.5	
Misc Bulk	2.1			17.3
Aggregate Change		8.4		16.2

## Analysis of Traffic by Commodity

### Coal

Tonnes 15,446,704  
Tonne-Km. 7,543,061,000

In 1992, coal cargoes amounted to 22.1% of total tonnage and 10% on tonne-kilometres generated.

Fully 82% of the trade was in imports, generally originating at the Lake Erie ports of Sandusky, Toledo, Ashtabula and Conneaut which combined accounted for 12.6 million tonnes. The coal was hauled to steel mills and other industrial facilities in the upper Lakes and to Ontario Hydro thermal generating stations at Sarnia and Nanticoke (6.4 million tonnes). Coal transiting the Welland Canal for Lake Ontario and St. Lawrence ports generated 4.7 million tonnes of cargo, over 500,000 tonnes specifically shipped to St. Lawrence ports.

Thunder Bay was the port of origin for both domestic and export coal in the amount of 2.46 million tonnes. The domestic destinations of this commodity includes Sarnia, Nanticoke, and St. Lawrence River ports, while export cargoes were bound for the Chicago area.

In 1992, in excess of 130,000 tonnes were hauled from Sydney to such ports as Montreal, Sept-Iles and Canso a slight increase over the previous year (3%).

Imports to facilities in the upper Lakes remained relatively constant from 1991

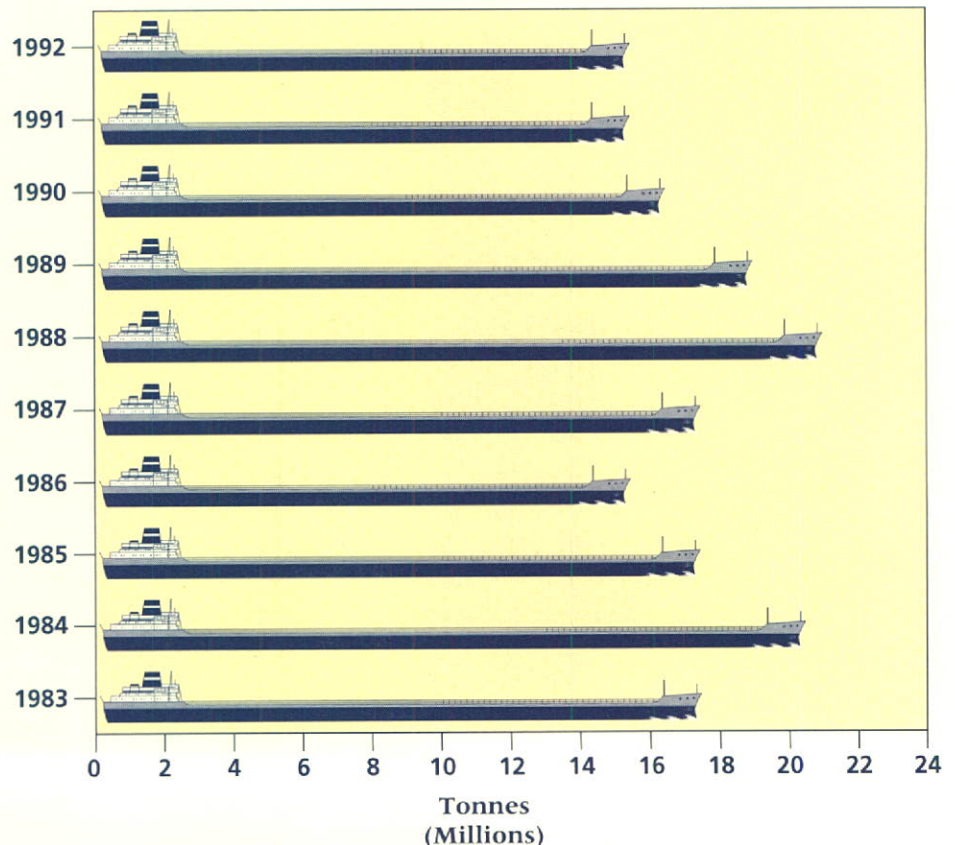
(1.2 million tonnes) as did tonnage through the Welland Canal to Lake Ontario and St. Lawrence ports (9.1 million).

Overall tonnage in 1992 rose by just under 100,000 tonnes and fell short of the five year average by 2.4 million tonnes (15.9%). Tonne-kilometres generated were less than both the previous year (8.3%) and the five year average (31.5%).

For the past decade the vessel of choice for the coal trade has been the self-unloader. 1992 was no different as 99% of this commodity used this type of vessel.

### Coal Tonnage

#### 10 Year Profile



## Coal Tonnage 1987 — 1992

	Tonnes (000's)	Tonne-Kilometres (000's)
1987	17 336	8 944 580
1988	21 233	11 030 436
1989	19 086	11 823 733
1990	16 435	9 718 187
1991	15 348	8 169 696
<b>Five Year Average</b>		
1987 - 1991	17 907	9 937 326
1992	15 447	7 543 061

## Summary - Coal Trade

	Tonnes		Tonnes-Kilometres	
	Millions	Percent	Billions	Percent
<b>Import Trade</b>	12.691		4.194	
Over (Under) 1991	0.365	3.0%	(0.263)	(5.9%)
<b>Import Cargo</b> as proportion of total tonnage		82.2%		55.6%
1991 figure		80.3%		54.6%
<b>Export Trade</b>	1.739		1.876	
Over (Under) 1991	1.681	2918.3%	1.575	523.3%
<b>Export Cargo</b> as proportion of total tonnage		11.3%		24.9%
1991 figure		0.4%		3.7%
<b>Domestic Trade</b>	0.987		1.207	
Over (Under) 1991	(1.978)	(66.7%)	(2.204)	(64.6%)
<b>Domestic Cargo</b> as proportion of total tonnage		6.4%		16.0%
1991 figure		19.3%		41.8%
<b>Cross-Trading Trade</b>	0.031		0.266	
Over (Under) 1991	0.031	(66.7%)	0.266	N/A
<b>Cross-Trading Cargo</b> as proportion of total tonnage		0.2%		3.5%
1991 figure		0.0%		0.0%
Cargo hauled in <b>Self-Unloaders</b>		100 %		
Average length of haul	488 Kilometres			
Average length of haul, 1991	532 Kilometres			



## Grain

**Tonnes** 12,112,736  
**Tonne-Km.** 24,625,874,000

Grain accounted for 17.4% of tonnage and 33% of tonne-kilometres generated.

The largest trade is domestic, mainly transshipments of western Canadian grain from terminal elevators in Thunder Bay to transfer elevators in the lower St. Lawrence.

In 1992, terminals at Thunder Bay loaded 7.1 million tonnes of grain destined for Canadian ports. These included Goderich and the ports of Georgian Bay (563,000 tonnes), the Windsor-Sarnia area (320,000 tonnes), Port Colbourne (171,000 tonnes), Hamilton (77,000 tonnes), and Halifax (95,000 tonnes).

The St. Lawrence ports of Montreal, Sorel, Trois-Rivières, Québec, Port Cartier and Baie Comeau received 6.15 million tonnes.

Smaller grain cargoes were loaded at Goderich for Owen Sound and Prescott, Windsor for Prescott, Sarnia for Toronto, Port Colbourne for Montreal, Hamilton for Baie Comeau, Port Stanley for Cardinal.

Grain tonnages originating at traditional Canadian loading ports were well below forecast as the Republic of Russia, the Seaway's largest grain customer, failed to meet payment schedules and shipments were halted.

Imports from the United States increased substantially to 3.4 million tonnes up from 2.0 million tonnes the previous year. This increase was due in large part to a bolstered U.S. "Export Enhancement Program" and early freeze-up of the

Mississippi's head waters.

The bulk of trade was carried to St. Lawrence transfer elevators from Duluth (1.8 million tonnes), Toledo (1.2 million tonnes), and Chicago (305,000 tonnes). The balance was hauled in small quantities from those same ports to Hamilton, Toronto, Port Colbourne, and Cardinal.

Exports to the U.S. also rose, reaching 636,000 tonnes of which 281,000 tonnes originated at Thunder Bay destined for ports on the upper Lakes. Small cargoes

were also hauled to those ports from Sarnia and Owen Sound.

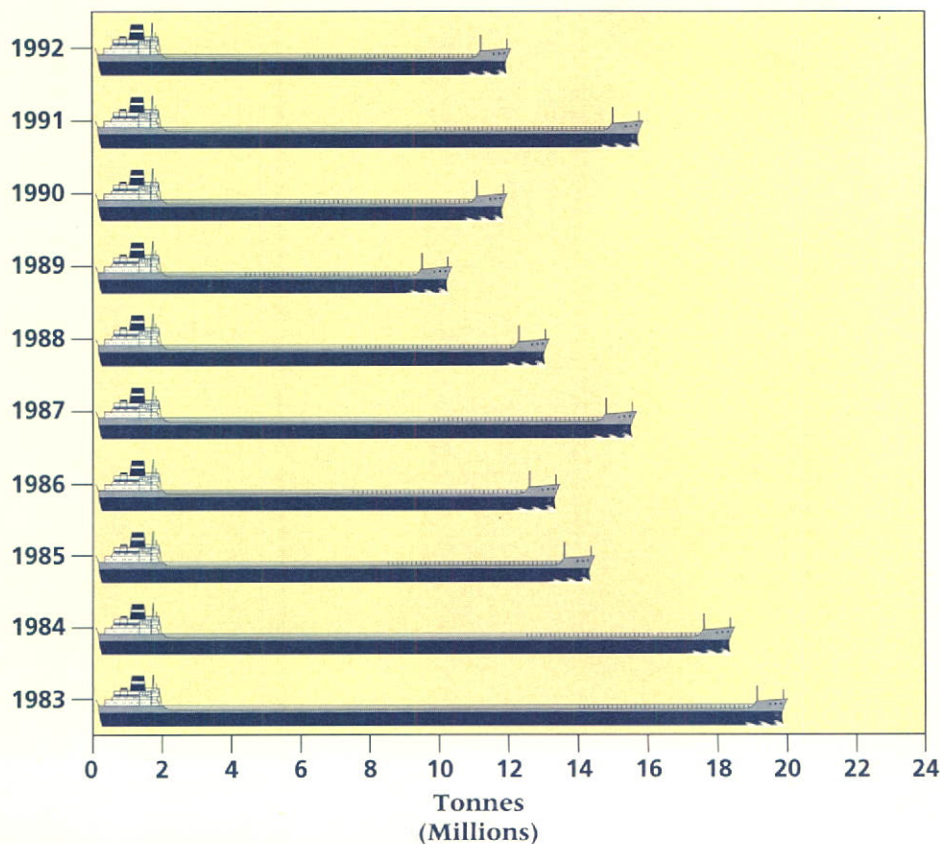
Grain movement is characteristically divided into two categories: short haul, which involves movement through only one or neither section of the Seaway and long haul, involving passages through both sections. The latter mainly involves grain destined for export through the lower St. Lawrence elevators, and is integrated, as far as possible, with the upbound ore trade.

In 1992 short haul cargo amounted to 2.4 million tonnes (20% of the total) while the balance of 9.74 million tonnes was long haul.

Straight deck bulkers carried 90% of grain cargo tonnage (10.9 million tonnes) and generated 96% of tonne-kilometres. The average length of haul for the gearless bulker was 2,180 kilometres. The average length of haul was 2,101 for grain carried in self-unloaders.

## Grain Tonnage

### 10 Year Profile



At 10% of the total tonnage, the share of grain carried by self-unloaders in 1992 was less than that of 1991 (11%) and was higher in volume terms as well (1.7 in 1991 vs. 1.2 in 1992)

Grain movement showed a marked decrease from 1991 volumes. Overall cargo volume sank by 3.7 million tonnes (30.5%) and tonne-kilometres followed by 40%.

The 1992 tonnage fell short of the five year average by 1.3 million tonnes (10.0%).

## Grain Tonnage 1987 — 1992

	Tonnes (000's)	Tonne-Kilometres (000's)
1987	15 621	32 089 670
1988	13 203	26 976 888
1989	10 546	21 202 003
1990	12 008	25 003 733
1991	15 847	34 645 264
<b>Five Year Average</b>		
1987 - 1991	13 445	27 983 000
1992	12 113	24 625 874

## Summary - Grain Trade

	Tonnes		Tonnes-Kilometres	
	Millions	Percent	Billions	Percent
<b>Import Trade</b>	3.436		7.854	
Over (Under) 1991	1.368	66.2%	2.784	54.9%
<b>Import Cargo</b> as proportion of total tonnage		28.4%		31.9%
1991 figure		13.0%		14.6%
<b>Export Trade</b>	0.636		0.485	
Over (Under) 1991	0.229	56.2%	0.170	54.1%
<b>Export Cargo</b> as proportion of total tonnage		5.3%		2.0%
1991 figure		2.6%		0.9%
<b>Domestic Trade</b>	8.041		16.288	
Over (Under) 1991	(5.331)	(39.9%)	(12.974)	(44.3%)
<b>Domestic Cargo</b> as proportion of total tonnage		66.4%		66.1%
1991 figure		84.4%		84.5%
Cargo hauled in <b>Bulkers</b>		89 %		
Average length of haul	2,033 Kilometres			
Average length of haul, 1991	2,186 Kilometres			



## Iron Ore

**Tonnes** 15,602,615  
**Tonne-Km.** 19,693,130,000

Iron ore accounted for 22.4% of tonnage and 26.3% of tonne-kilometres produced. There was a slight increase of 425,000 tonnes (3%) in tonnage and a slight decrease of 4.9% in tonne-kilometres over the 1991 levels.

Domestic and export cargoes have their origin at the St. Lawrence ports of Pointe Noire, Port Cartier, and Sept-Iles. Exports from these locations to Lake Michigan ports (Burns Harbour and Chicago) accounted for 1.3 million tonnes and 600,000 tonnes to the Ohio ports of Conneaut, Lorain, Cleveland, and Ashtabula.

Imports totals reached 3.1 million tonnes, most of which originated at the Lake Superior ports of Marquette, Superior, and Duluth and was bound for Hamilton.

Of the 10.1 million tonnes of domestic trade, all originated in the lower St. Lawrence, with 5.9 million tonnes bound for Hamilton, with the balance heading for other ports on the St. Lawrence.

Straight deck bulkers carried 55% of the ore (8.58 million tonnes) in 1992, and generated 60% of the tonne-kilometres. The balance was shipped in self-unloaders.

Of the tonnage carried upbound through the Seaway (8.1 million tonnes) 4.8 million tonnes was carried on self-unloaders, a proportion larger than that of 1991 when 4.3 million of the 8.3 million tonnes upbound were carried in these same vessels.

The balance was hauled in gearless bulkers, a movement which, is as far as possible, integrated with the down-bound movement of prairie grain destined for St. Lawrence elevators.

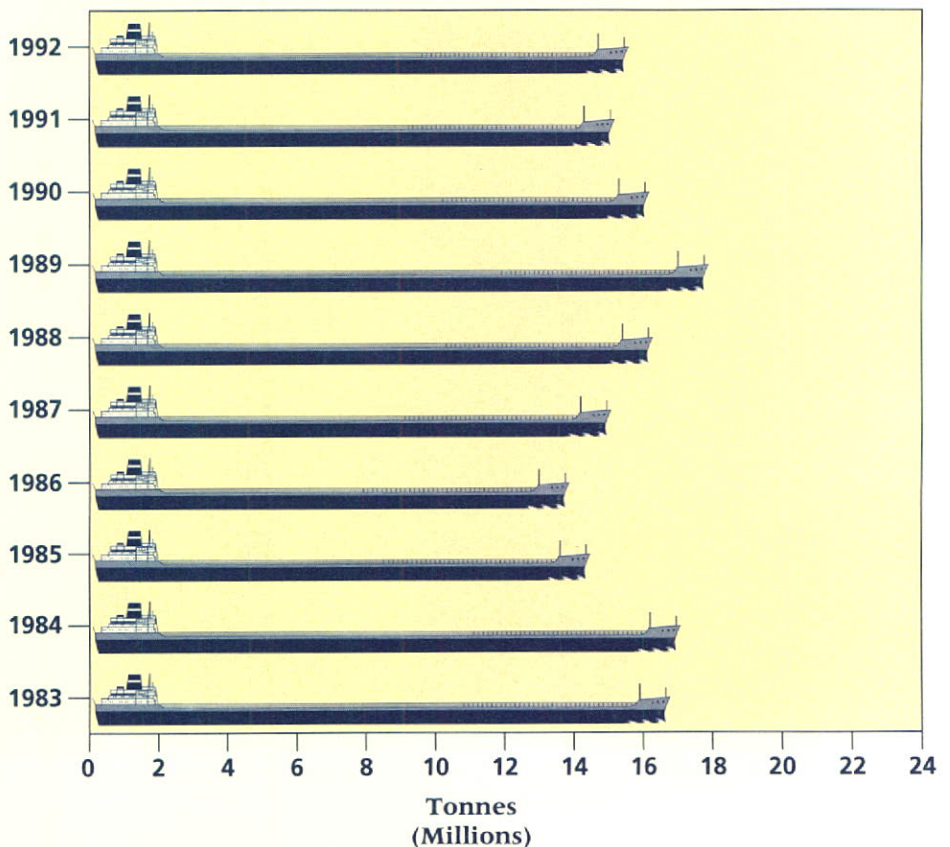
Total tonnage fell short of the five year average by just over 500,000 tonnes (3.7%), as did the corresponding tonne-kilometres produced (17.2%).

As the summary below indicates, domestic trade

levels rose in 1992 while imports and exports declined. Exports to Michigan and Ohio ports showed a decrease of just over one million tonnes (50%). Import movements from Lake Superior ports to Canadian facilities in the upper Lakes and to Hamilton also fell as domestic movements from St. Lawrence ports rose sharply.

## Iron Ore Tonnage

### 10 Year Profile



## Iron Ore Tonnage 1987 — 1992

	Tonnes (000's)	Tonne-Kilometres (000's)
1987	15 140	19 978 638
1988	16 407	23 685 187
1989	17 895	26 099 574
1990	16 263	25 312 712
1991	15 178	20 675 889
<b>Five Year Average</b>		
1987 – 1991	16 176	23 120 000
1992	15 603	19 693 130

## Summary – Iron Ore Trade

	Tonnes		Tonnes-Kilometres	
	Millions	Percent	Billions	Percent
<b>Import Trade</b>	3.087		5.102	
Over (Under) 1991	(2.250)	(42.2 %)	(0.749)	(12.8%)
<b>Import Cargo</b> as proportion of total tonnage		19.8%		25.9%
1991 figure		35.2%		28.3%
<b>Export Trade</b>	2.361		5.022	
Over (Under) 1991	(1.049)	(30.8%)	(1.738)	(25.7%)
<b>Export Cargo</b> as proportion of total tonnage		15.1%		25.5%
1991 figure		22.5%		32.7%
<b>Domestic Trade</b>	10.155		9.570	
Over (Under) 1991	3.723	57.9%	1.504	18.7%
<b>Domestic Cargo</b> as proportion of total tonnage		65.1%		48.6%
1991 figure		42.4%		39.0%
Cargo hauled in <b>Self-Unloaders</b>		53 %		
Average length of haul	1,262 Kilometres			
Average length of haul, 1991	1,362 Kilometres			



## Tanker Products

Tonnes 6,660,826  
Tonne-Km. 4,731,130,000

Tanker products accounted for 9.4% of total tonnage and 6.3% of tonne-kilometres generated in 1992. Tanker products include gasoline, heating fuel, bunker oil, calcium chloride and caustic soda.

Domestic trade is the largest at 4.68 million tonnes (70.9%). The Windsor-Sarnia area originated 1.23 million tonnes of this trade and the refinery at Nanticoke, an additional 206,000 tonnes. Products were carried from these facilities to ports on Lake Superior (283,000 tonnes), Georgian Bay (347,000 tonnes), Lake Ontario and the St. Lawrence River (359,000 tonnes), with small amounts bound for Atlantic Canada.

Refineries on the lower St. Lawrence originated 2.3 million tonnes, all but 101,000 tonnes of this were hauled to ports within the same region. The balance was shipped upbound to various Lake Ontario ports. Arctic shipments accounted for 144,000 tonnes in 1992.

Upbound shipments from Halifax to the lower St. Lawrence ports amounted to 449,000 tonnes, while an additional 329,000 tonnes were shipped from Halifax to various Atlantic Canada ports. Maritime volumes totalled 1 million tonnes.

The export trade amounted to just 286,000 in 1992 (a decrease of 22.5%). Most of this originated in the Sarnia area (70,000 tonnes) and was destined for Chicago,

Cleveland, and Oswego, N.Y. Small quantities were also shipped from Nanticoke to U.S. ports on Lake Ontario (example: Oswego). This port also received 152,000 tonnes from the Clarkson and Oakville facilities.

Relatively few tonnes were imported to Hamilton from Chicago.

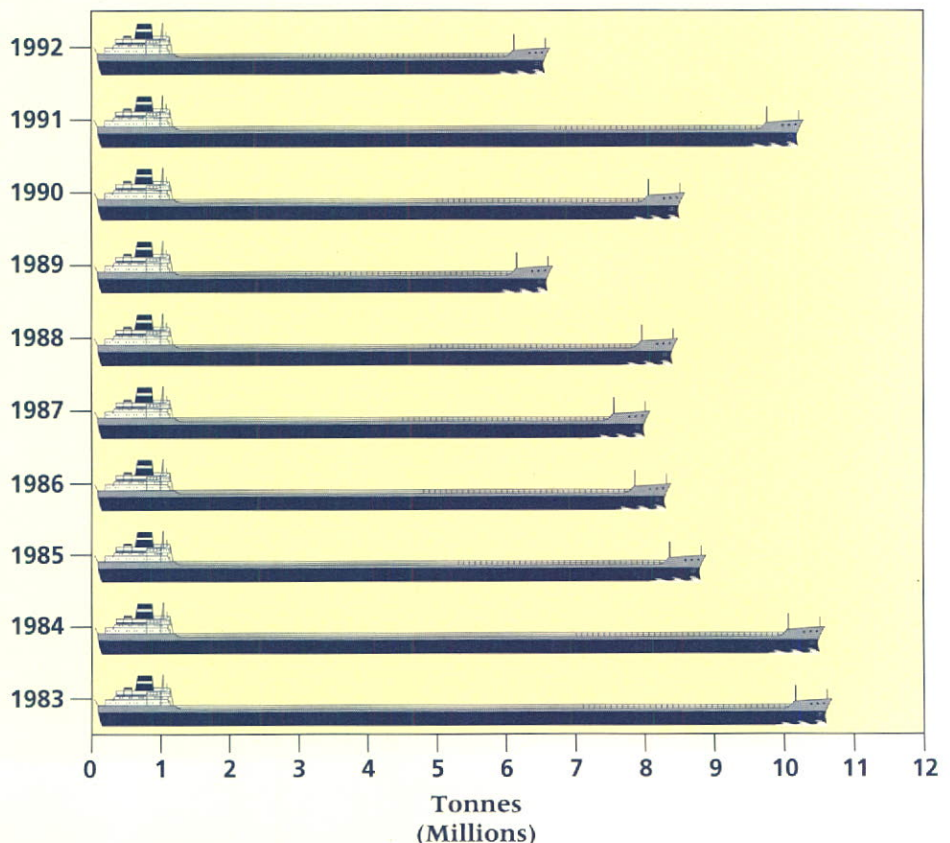
The liquid bulk movement posted an overall decrease in 1992 of 3.7 million tonnes.

Domestic volumes fell sharply, (47%) as Canada struggled through a recessionary period.

Export volumes, although dropping only slightly in comparison (23%) account for only a small portion of the overall tonnage (286,000)

## Tanker Tonnage

### 10 Year Profile





## Tanker Products Tonnage 1987 — 1992

	Tonnes (000's)	Tonne-Kilometres (000's)
1987	8 094	32 089 670
1988	8 549	26 976 888
1989	6 765	21 202 003
1990	8 665	25 003 733
1991	10 299	34 645 264
<b>Five Year Average</b>		
1987 – 1991	8 474	27 983 000
1992	6 601	4 731 130

## Summary - Tanker Products Trade

	Tonnes		Tonnes-Kilometres	
	Millions	Percent	Billions	Percent
<b>Import Trade</b>	0.007		0.011	
Over (Under) 1991	0.007	57.9%	0.011	N/A
<b>Import Cargo</b> as proportion of total tonnage 1991 figure		0.2%		0.2%
		0.0%		0.0%
<b>Export Trade</b>	0.286		0.166	
Over (Under) 1991	(0.066)	(18.8%)	(0.013)	(7.3%)
<b>Export Cargo</b> as proportion of total tonnage 1991 figure		5.7%		3.5%
		3.4%		1.8%
<b>Domestic Trade</b>	6.386		4.554	
Over (Under) 1991	(4.261)	(52.9%)	(5.017)	(52.4%)
<b>Domestic Cargo</b> as proportion of total tonnage 1991 figure		98.1%		97.3%
		96.6%		98.2%
Average length of haul	950 Kilometres			
Average length of haul, 1991	947 Kilometres			



## Limestone

**Tonnes** 6,446,056  
**Tonne-Km.** 4,508,428,000

Limestone accounted for 9.2% of tonnage and 6% of tonne-kilometres generated in 1992.

Limestone imports totalling 1.7 million tonnes have their origin in Michigan ports and on the west shore of Lake Huron (ports such as Calcite, Port Dolomite, and Stoneport) and from Drummond Island. These cargoes were carried to Sault Ste.-Marie (324,000 tonnes), the Windsor-Sarnia area (953,000 tonnes), Port Cartier and Sept-Iles (197,000 tonnes).

Exports increased to 1.3 million tonnes in 1992, up from 847,000 tonnes the previous year. This tonnage was hauled from Manitoulin Island (1.0 million tonnes) to U.S. ports primarily on the upper Lakes, with smaller volumes moving down the Eastern Seaboard to the Gulf of Mexico. Cargo also moved from Port Colborne to various Lake Erie locations (174,000 tonnes).

The highest proportion of the stone trade is domestic, accounting for 3.5 million tonnes. The bulk of this tonnage originated at Meldrum Bay and Colbourne (1.1 and 1.5 million tonnes respectively).

Destinations for limestone included Lake Superior ports (175,000 tonnes), the Windsor-Sarnia area (731,000 tonnes), Lake Ontario ports (1.5 million tonnes). Smaller volumes of limestone trade intra Atlantic Canada (238,000 tonnes).

Limestone is the common term for carbonate rocks which may be classified

according to their content of the minerals, calcite and dolomite.

Limestone has a wide variety of applications depending on mineral constituents and the primary process to which it is subjected.

While the bulk of the limestone carried on the Great Lakes is used as aggregate for concrete and asphalt, other applications include – developed from calcined

limestone – are as a flux and as a neutralizing agent in industrial processes.

It may also be used as an agricultural additive.

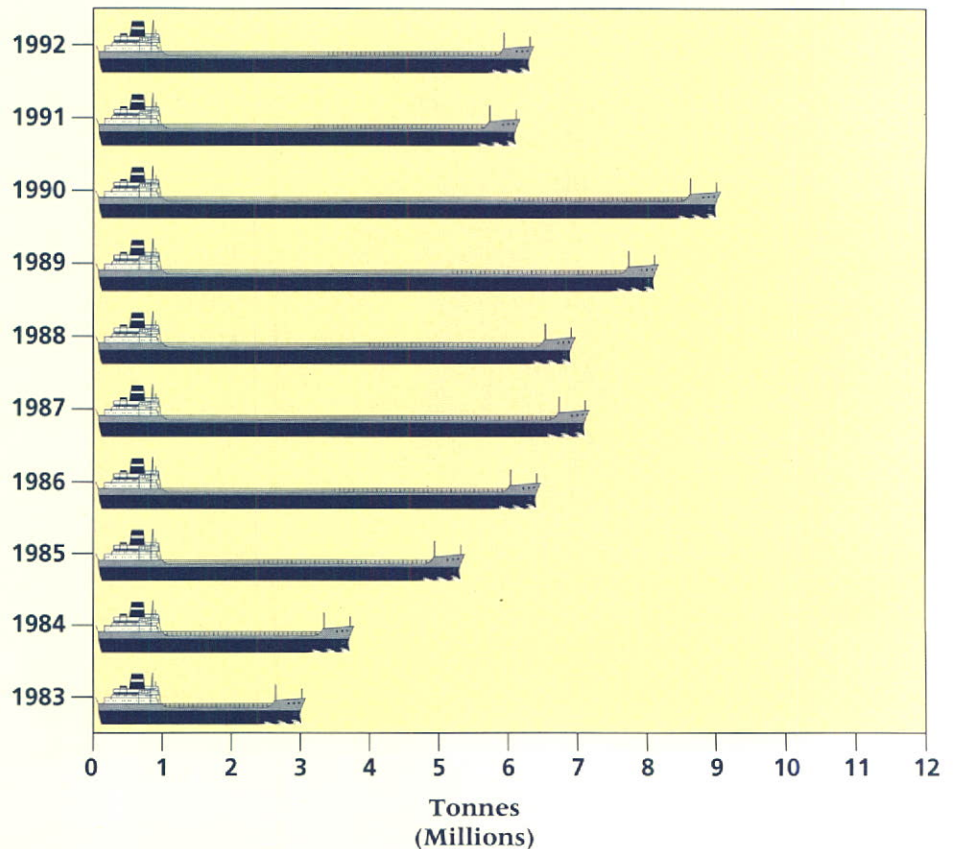
Limestone is found in a multitude of locations throughout the provinces of Ontario and Quebec. Other sources include the U.S. Great Lakes States. It is a low priced commodity and is generally moved short distances only.

Stone shipments in 1992 rose slightly when compared to the previous year (4%) but fell when matched against the five year average (17.8%). Tonne-kilometres generated in 1992, however, exceeded the five year average by 10.8%.

The type of vessel used for the stone trade did not vary from 1991 as virtually all stone was moved using self-unloaders.

## Limestone Tonnage

### 10 Year Profile

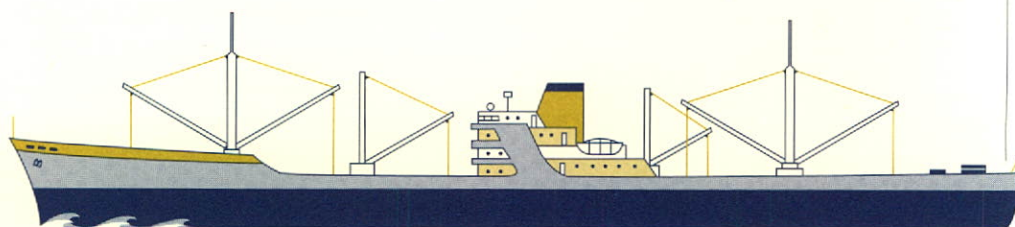


## Limestone Tonnage 1987 — 1992

	Tonnes (000's)	Tonne-Kilometres (000's)
1987	7 199	3 157 700
1988	6 994	2 996 034
1989	8 574	3 820 476
1990	9 047	6 166 880
1991	6 185	4 196 589
<b>Five Year Average</b> 1987 - 1991	7 599	4 066 200
1992	6 446	4 508 428

## Summary - Limestone Trade

	Tonnes		Tonnes-Kilometres	
	Millions	Percent	Billions	Percent
<b>Import Trade</b>	1.685		0.952	
Over (Under) 1991	(0.777)	(31.5%)	(0.681)	(41.7%)
<b>Import Cargo</b> as proportion of total tonnage		26.1%		21.1%
1991 figure		39.8%		39.0%
<b>Export Trade</b>	1.301		1.388	
Over (Under) 1991	0.454	53.6%	0.684	97.1%
<b>Export Cargo</b> as proportion of total tonnage		20.2%		30.8%
1991 figure		13.7%		16.8%
<b>Domestic Trade</b>	3.459		2.168	
Over (Under) 1991	0.584	20.3%	0.313	16.9%
<b>Domestic Cargo</b> as proportion of total tonnage		53.7%		48.1%
1991 figure		46.5%		44.2%
Cargo hauled in <b>Self-Unloaders</b>		100 %		
Average length of haul	699 Kilometres			
Average length of haul, 1991	678 Kilometres			



## Salt

**Tonnes** 5,841,481  
**Tonne-Km.** 5,430,134,000

Salt accounted for 8.4% of total tonnage and 7.2% of tonne-kilometres generated in 1992.

Domestic cargoes totalled 2.84 million tonnes. Goderich and Windsor, Ontario collectively loaded over 2.4 million tonnes bound for ports on the upper Lakes (164,000 tonnes), the lower Lakes (575,000 tonnes), and the St Lawrence (318,000 tonnes).

Domestic shipments from the Magdalen Islands and Pugwash were distributed among ports on the upper St. Lawrence (1 million tonnes), the lower St. Lawrence (613,000 tonnes), and the Atlantic (182,000 tonnes).

Imports of 476,000 tonnes were loaded at Cleveland, Ohio and destined for ports on Lake Ontario (221,000 tonnes) and the St. Lawrence (255,000 tonnes).

The largest component of the export trade originated at Goderich (1.5 million tonnes) and Windsor (581,000 tonnes) and were carried to ports on Lake Michigan (857,000 tonnes), Lake Huron (680,000 tonnes) Lake Erie (783,000 tonnes) and the Detroit area (90,000 tonnes). Smaller quantities were transported to the Gulf of Mexico.

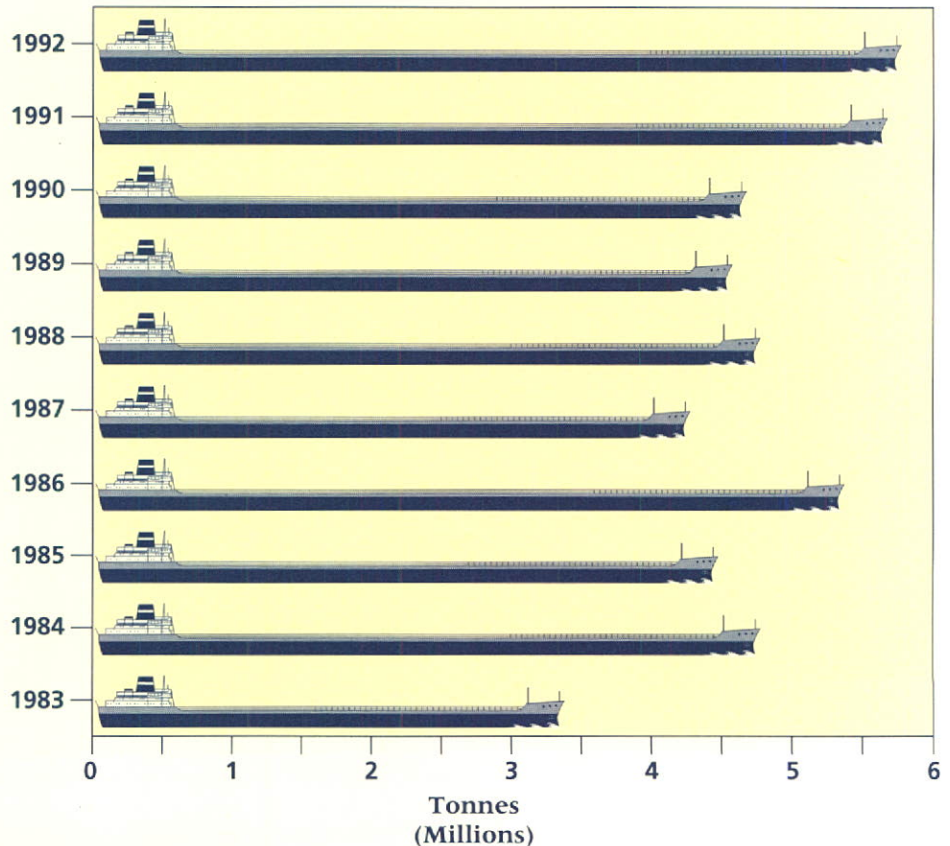
Tonnage totals in 1992 increased by 3% (172,000 tonnes) bolstered by increased exports of over 400,000 tonnes offsetting slight decreases in both import and domestic tonnages.

Tonnage in 1992 exceeded the five year average by 963,000 tonnes (19.7%) and, similarly, total tonne-kilometres also increased (37.9%).

Salt is used by many communities for road de-icing and as an input in industrial processing (ie. meat packaging, food processing, and the fishing industry.)

## Salt Tonnage

### 10 Year Profile



## Salt Tonnage 1987 — 1992

	Tonnes (000's)	Tonne-Kilometres (000's)
1987	4 398	3 611 735
1988	4 841	3 968 423
1989	4 686	3 620 937
1990	4 800	3 929 569
1991	5 669	4 545 988
<b>Five Year Average</b>		
1987 - 1991	4 878	3 935 330
1992	5 841	5 430 134

## Summary - Salt Trade

	Tonnes		Tonnes-Kilometres	
	Millions	Percent	Billions	Percent
<b>Import Trade</b>	0.476		0.272	
Over (Under) 1991	(0.076)	(13.8%)	(0.164)	(37.7%)
<b>Import Cargo</b> as proportion of total tonnage		8.1%		5.0%
1991 figure		9.7%		9.6%
<b>Export Trade</b>	2.518		2.687	
Over (Under) 1991	0.425	20.3%	1.324	97.1%
<b>Export Cargo</b> as proportion of total tonnage		43.1%	9.5%	
1991 figure		36.9%		30.0%
<b>Domestic Trade</b>	2.848		2.471	
Over (Under) 1991	(0.177)	(5.8%)	(0.275)	(10.0%)
<b>Domestic Cargo</b> as proportion of total tonnage		48.8%		45.5%
1991 figure		53.4%		60.4%
Cargo hauled in <b>Self-Unloaders</b>		98 %		
Average length of haul	930 Kilometres			
Average length of haul, 1991,	802 Kilometres			



## Gypsum

Tonnes 962,050  
Tonne-Km. 1,370,314

Gypsum accounted for 1.3% of total tonnage for 1992 and 1.8% of tonne-kilometres generated.

This commodity is generally used in the construction industry with applications in the formation of concrete and drywall. As interest rates fell throughout the year housing starts rose and the demand for gypsum based products increased.

All the gypsum moved originated in Atlantic Canada at either the port of Halifax or Little Narrows, Nova Scotia.

Domestic tonnages totalled 726,000 tonnes up 56% from 1991. The bulk of this tonnage was destined for the markets of Montreal (329,000 tonnes) and Toronto (214,000 tonnes).

Smaller quantities were exported, destined for U.S. eastern Seaports and the Gulf of Mexico (236,000 tonnes).

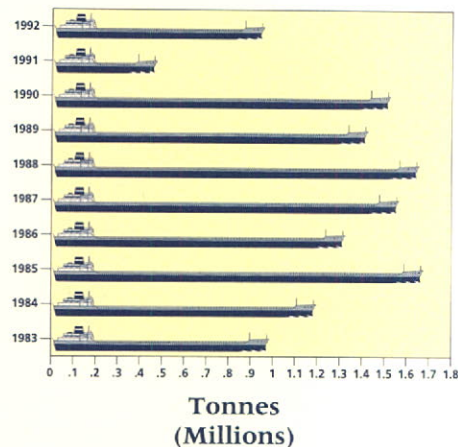
Overall tonnage more than doubled over the previous year, and as a result tonne-kilometres also increased (63.3%).

Overall tonnages dropped when compared with the five year average (69.7%) as did the tonne-kilometres (46.1%).

As in 1991, self unloading vessels carried 100% of this commodity.

## Gypsum Tonnage

### 10 Year Profile



## Gypsum Tonnage 1987 — 1992

	Tonnes (000's)	Tonne-Kilometres (000's)
1987	1 581	3 613 450
1988	1 665	3 766 696
1989	1 426	3 177 048
1990	1 535	3 664 044
1991	493	837 600
<b>Five Year Average</b>		
1987 - 1991	1 633	2 966 000
1992	962	1 370 314

## Summary - Gypsum Trade

	Tonnes		Tonnes-Kilometres	
	Millions	Percent	Billions	Percent
<b>Export Trade</b>	0.236		0.318	
Over (Under) 1991	0.208	729.4%	0.239	299.9%
<b>Export Cargo</b> as proportion of total tonnage		24.5%		23.2%
1991 figure		5.8%		9.5%
<b>Domestic Trade</b>	0.726		1.052	
Over (Under) 1991	0.261	56.3%	0.294	38.8%
<b>Domestic Cargo</b> as proportion of total tonnage		75.5%		76.8%
1991 figure		94.2%		90.5%
Cargo hauled in <b>Self-Unloaders</b>		100 %		
Average length of haul		1,424 Kilometres		
Average length of haul, 1991		1,699 Kilometres		

## Potash

Tonnes 654,067  
Tonne-Km. 820,616,000

Potash accounted for 0.9% of the total tonnage carried in 1992 and 1.0% of the tonne-kilometres generated.

The largest portion of this trade is found in exports (471,000 tonnes) when compared to a domestic trade of 183,000.

This cargo is shipped predominantly from Thunder Bay to United States ports located on Lakes Michigan and Erie with smaller quantities destined for ports on Lakes Huron and Ontario.

Even smaller volumes move between Atlantic Canada and Baltimore MD.

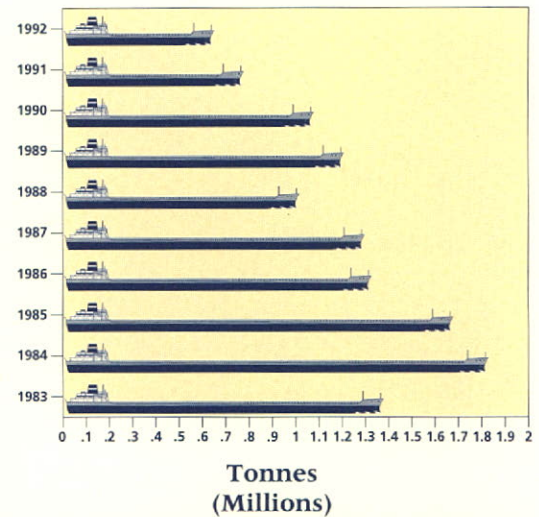
Overall tonnage dropped from both the 1991 levels (18%) and when matched against the five year average (60.6%).

Tonne-kilometres corresponded dropping 7.7% from the previous year and 57% from the five year average.

Self unloaders continue to dominate this trade, moving 100% of the tonnage in 1992.

## Potash Tonnage

### 10 Year Profile



### Potash Tonnage 1987 — 1992

	Tonnes (000's)	Tonne-Kilometres (000's)
1987	1 299	1 613 904
1988	1 024	1 210 027
1989	1 215	1 468 109
1990	1 081	1 416 344
1991	777	878 622
<b>Five Year Average</b> 1987 - 1991	1 079	1 295 600
1992	654	820 616

### Summary - Potash Trade

	Tonnes		Tonnes-Kilometres	
	Millions	Percent	Billions	Percent
<b>Export Trade</b>	0.471		0.527	
Over (Under) 1991	(0.210)	(30.9%)	(0.203)	(27.8%)
<b>Export Cargo</b> as proportion of total tonnage		71.9%		64.3%
1991 figure		87.6%		83.1%
<b>Domestic Trade</b>	0.183		0.293	
Over (Under) 1991	0.087	90.5%	0.145	97.6%
<b>Domestic Cargo</b> as proportion of total tonnage		28.1%		35.7%
1991 figure		12.4%		16.9%
Cargo hauled in <b>Self-Unloaders</b>		100 %		
Average length of haul	1,255 Kilometres			
Average length of haul, 1991	1,130 Kilometres			

## Cement

Tonnes 780,865  
Tonne-Km. 594,306,000

Cement and clinker accounted for 1.1% of the 1992 total tonnage and 0.8% of the tonne-kilometres generated.

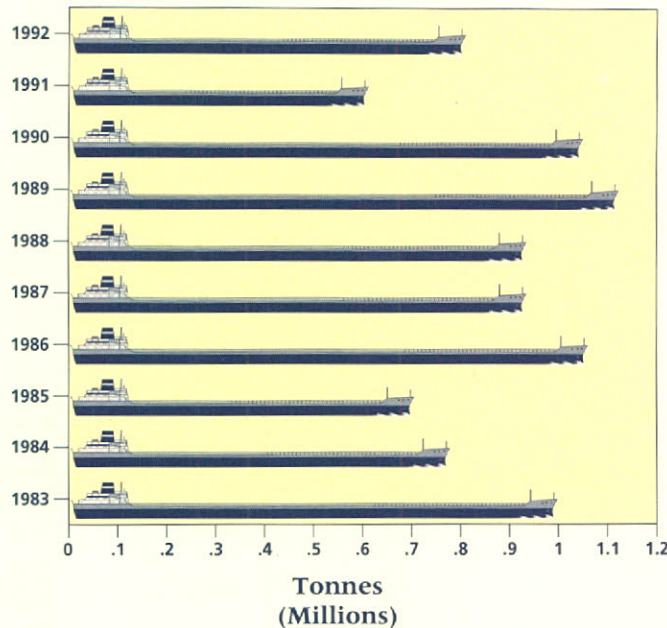
All cargoes originated at Lake Ontario ports and were bound for the export market.

Cement tonnage rose by 36% when compared to the previous year's volumes as a result of capital works projects and increased housing starts but fell (14.8%) when compared against the five year average.

Tonne-kilometres reacted similarly rising 2.9% from 1991 but falling 3.7% against the five year average.

## Cement Tonnage

### 10 Year Profile



### Cement Tonnage 1987 — 1992

	Tonnes (000's)	Tonne-Kilometres (000's)
1987	899	642 992
1988	963	629 100
1989	1 085	611 424
1990	1 009	628 678
1991	593	577 212
<b>Five Year Average</b> 1987 - 1991	897	616 800
1992	781	594 306

### Summary - Cement Trade

	Tonnes		Tonnes-Kilometres	
	Millions	Percent	Billions	Percent
<b>Export Trade</b>	0.781		0.594	
Over (Under) 1991	0.266	51.6%	0.105	21.4%
<b>Export Cargo</b> as proportion of total tonnage		100.0%		100.0%
1991 figure		86.8%		84.8%
Cargo hauled in <b>Self-Unloaders</b>		88 %		
Average length of haul	761 Kilometres			
Average length of haul, 1991	973 Kilometres			



## Coke

Tonnes 665,597  
Tonne-Km. 862,083,000

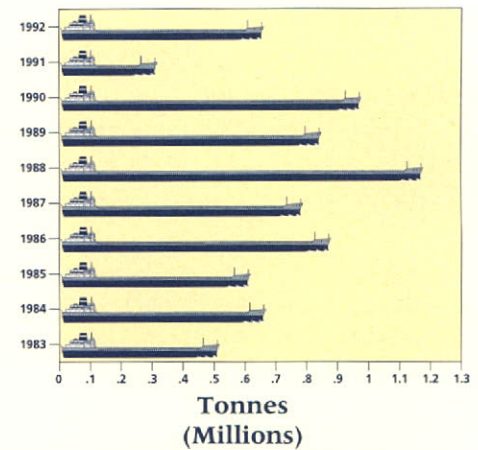
Coke movement accounted for 0.9% of the total tonnes moved and 1.1% of the tonne-kilometres generated in 1992.

Most of this trade is in the import sector (514,000 tonnes) loaded primarily at Lake Michigan ports and bound for ports along the St. Lawrence River with quantities remaining in the upper Lakes (198,000 tonnes).

Total tonnage in 1992 more than doubled from 1991 volumes (318,907 tonnes) but was off of the five year tonnage average by 24.7%. The same situation occurred with tonne-kilometres, as the 1992 levels are 60% lower than the five year average.

## Coke Tonnage

### 10 Year Profile



### Coke Tonnage 1987 — 1992

	Tonnes (000's)	Tonne-Kilometres (000's)
1987	796	1 604 027
1988	1 184	2 248 931
1989	869	1 505 781
1990	988	1 541 186
1991	318	490 394
<b>Five Year Average</b>		
1987 - 1991	831	1 458 001
1992	666	862 083

### Summary - Coke Trade

	Tonnes		Tonnes-Kilometres	
	Millions	Percent	Billions	Percent
<b>Import Trade</b>	0.514		0.733	
Over (Under) 1991	0.270	110.7%	0.335	84.3%
<b>Import Cargo</b> as proportion of total tonnage		77.2%		85.0%
1991 figure		76.4%		81.1%
<b>Export Trade</b>	0.084		0.048	
Over (Under) 1991	0.045	114.9%	(0.013)	(20.8%)
<b>Export Cargo</b> as proportion of total tonnage		12.6%		5.5%
1991 figure		12.2%		12.3%
<b>Domestic Trade</b>	0.068		0.082	
Over (Under) 1991	0.032	88.4%	0.049	150.8%
<b>Domestic Cargo</b> as proportion of total tonnage		10.3%		9.5%
1991 figure		11.4%		6.6%
Cargo hauled in <b>Self-Unloaders</b>		83 %		
Average length of haul	1,295 Kilometres			
Average length of haul, 1991	1,538 Kilometres			

## General Cargo

Tonnes 632,635  
Tonne-Km. 991,361,000

General cargo accounted for 0.9% of the tonnes transported and 1.3% of the tonne-kilometres generated in 1992.

Commodities carried in this category include semi-finished and finished steel products, pig iron, containers and other cargoes classified as "general" by the carrier.

Unlike 1991 when most tonnages were reported as export, this year the

dominant trade was in the domestic market (593,000 tonnes). Generally this movement is from Montreal to St. Johns and Halifax (526,000 tonnes).

Export cargoes dropped from the 1991 level, down to 38,000 tonnes a decrease of 23.6%.

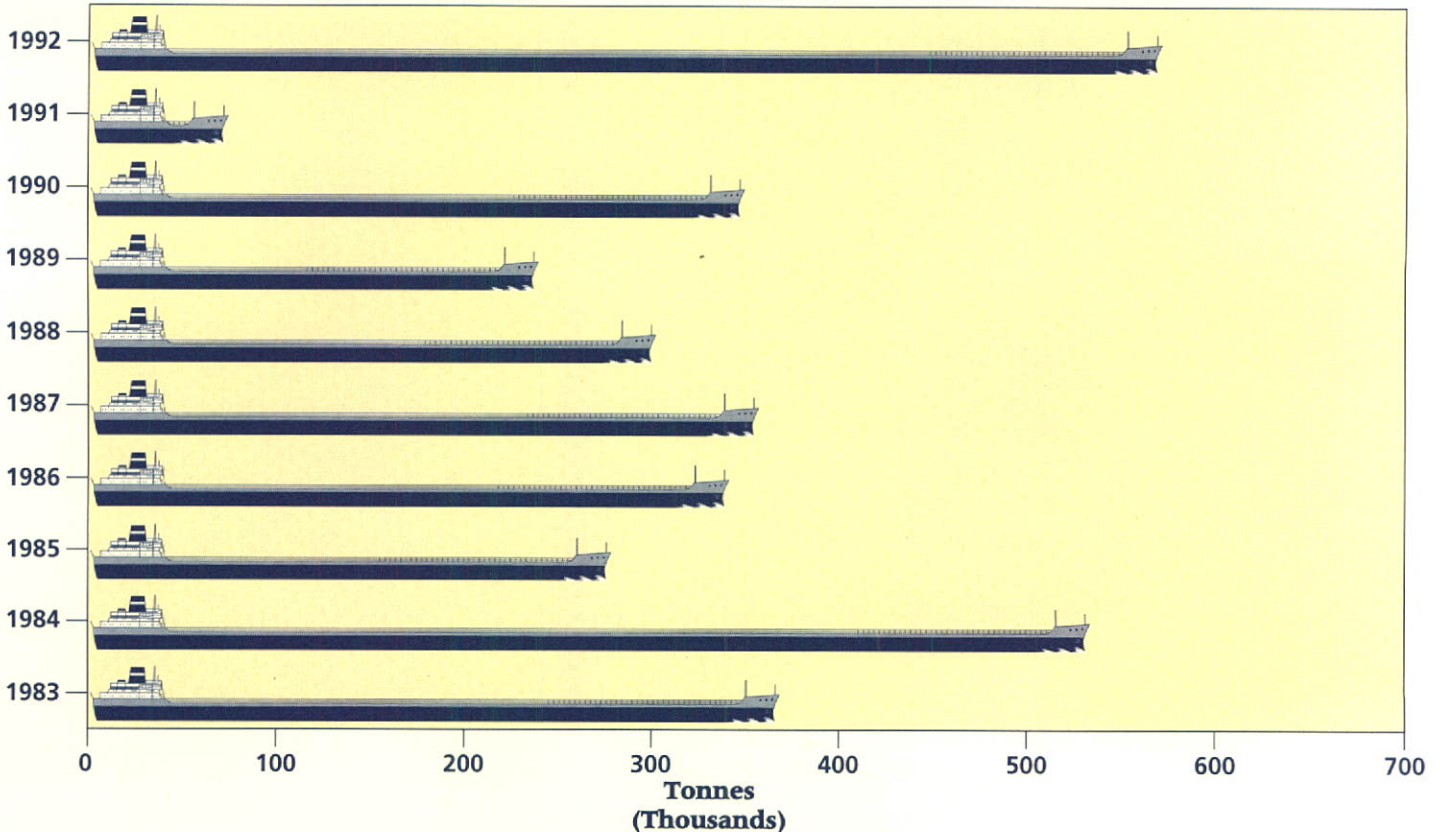
Imports in 1992 consisted of a lone cargo (2000 tonnes) from Marinette Wisc. to Baie Comeau.

Overall tonnage increased over seven fold from 1991 levels and more than doubled the five year average as Oceanex, a Montreal based container line, joined the membership of the Association.

Tonne Kilometres rose, for the same reason, by a similar amount over last year and three times the five year average.

## General Cargo Tonnage

### 10 Year Profile

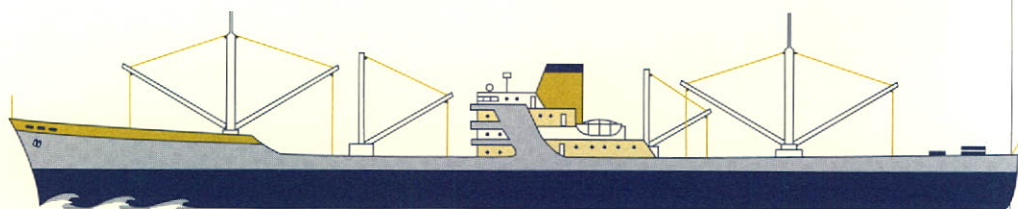


## General Cargo Tonnage 1987 — 1992

	Tonnes (000's)	Tonne-Kilometres (000's)
1987	366	555 736
1988	285	366 612
1989	215	316 285
1990	346	336 280
1991	85	131 225
<b>Five Year Average</b>		
1987 - 1991	259	340 800
1992	633	991 361

## Summary - General Cargo Trade

	Tonnes		Tonnes-Kilometres	
	Millions	Percent	Billions	Percent
<b>Import Trade</b>	0.002		0.003	
Over (Under) 1991	(0.004)	(67.1%)	(0.016)	(84.4%)
<b>Import Cargo</b> as proportion				
total tonnage		0.3%		0.3%
1991 figure	7.1%	14.1%		
<b>Export Trade</b>	0.038		0.033	
Over (Under) 1991	(0.009)	(18.7%)	(0.037)	(53.3%)
<b>Export Cargo</b> as proportion				
of total tonnage		6.0%		3.3%
1991 figure		54.6%		53.2%
<b>Domestic Trade</b>	0.593		0.956	
Over (Under) 1991	0.560	1710.8%	0.913	2126.9%
<b>Domestic Cargo</b> as proportion				
of total tonnage		93.7%		96.4%
1991 figure	38.3%	32.7%		
Cargo hauled in <b>Container</b>		83 %		
Average length of haul	1,567 Kilometres			
Average length of haul, 1991	1,535 Kilometres			



## Miscellaneous Bulk

Tonnes 4,069,368  
Tonne-Km. 3,568,790,000

Commodities in this category accounted for 5.8% of the total tonnage and 4.7 of the tonne-kilometres generated.

This section aggregates bulk commodities as an individual category for one or more of the following reason;

- movement is not on a regular basis from year to year,
- tonnages may be comparable to commodities discussed separately,
- only a single origin-destination and/or a single carrier is involved in the trade.

At 2.4 million tonnes, imports have surpassed the domestic trade as the largest proportion of movements. Exports followed at 944,000 tonnes and domestic movements fell to 685,000 tonnes.

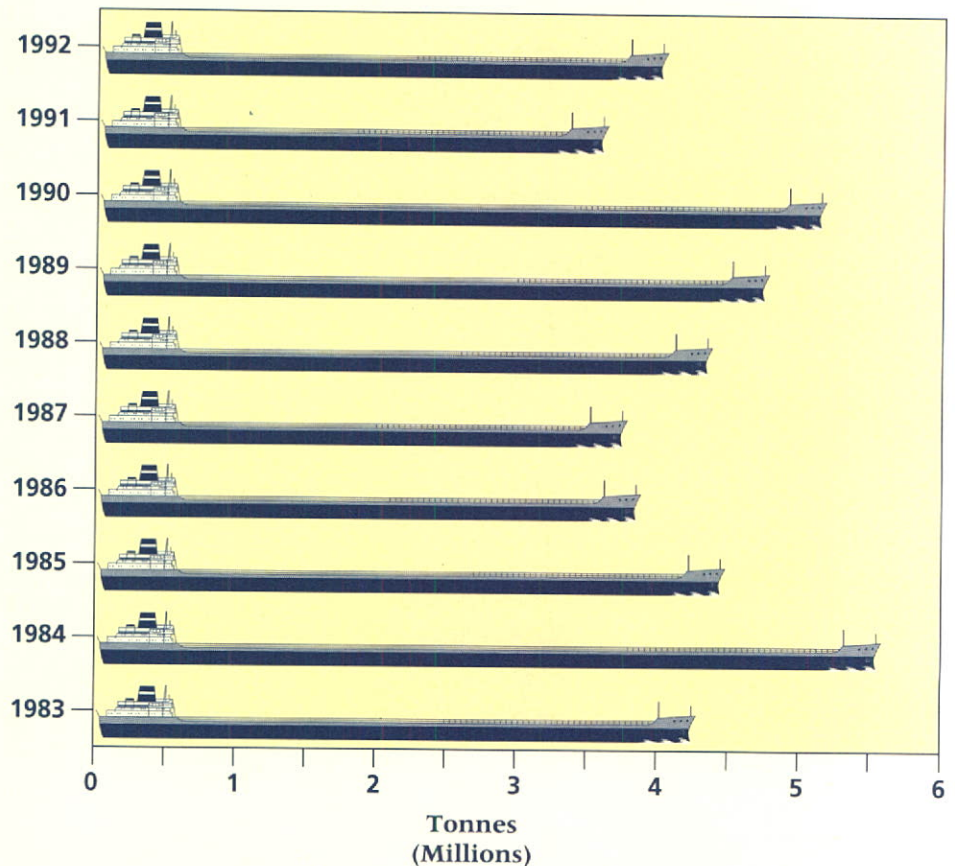
Tonnage in 1992 rose by over 440,000 tonnes to achieve levels similar of that of the late 1980's.

The data includes, among other items, the following type of commodities;

- ore and concentrates, other than iron, 1,675,000 tonnes,
- quartzite 790,000 tonnes,
- silica and sand 726,000 used as a metallurgical flux in the manufacturing of glass and in the production of ferro-silica and silicon metals.

## Miscellaneous Cargo Tonnage

### 10 Year Profile



## Miscellaneous Bulk Tonnage 1987 — 1992

	Tonnes (000's)	Tonne-Kilometres (000's)
1987	3 729	3 651 432
1988	4 362	3 857 223
1989	4 860	3 935 175
1990	5 203	4 776 099
1991	3 628	4 315 545
<b>Five Year Average</b>		
1987 - 1991	4 292	4 060 000
1992	4 069	3 568 790

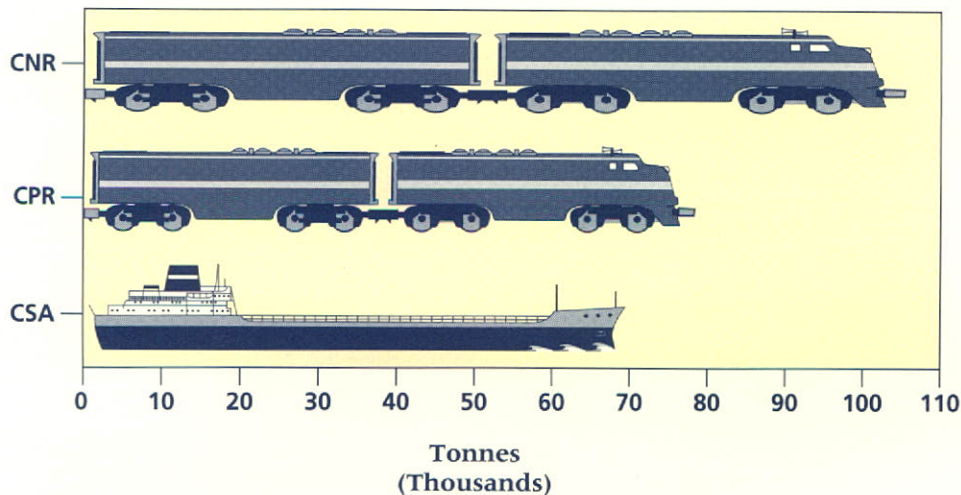
## Breakdown of Miscellaneous Bulk

Commodity	Type of Trade	Tonnes (Thousands)	Tonne-Kilometres (Millions)
Ores & Concentr	Import	2 083.494	995.924
Ores & Concentr	Export	720.625	825.029
Ores & Concentr	Domestic	203.922	242.349
Total		2 008.041	2,063.302
Quartzite	Export	98.024	69.205
Quartzite	Domestic	297.529	79.584
Total		395.553	148.789
Silica / Sand	Import	256.090	326.584
Silica / Sand	Export	95.180	42.794
Silica / Sand	Domestic	129.230	617.167
Total		480.500	986.545
Clay	Import	101.042	296.558
Total		101.042	296.558
Other Misc Bulk	Export	30.221	29.332
Other Misc Bulk	Domestic	54.011	44.264
Total		84.232	73.596

## Tonnes Carried in 1992 (000's tonnes)

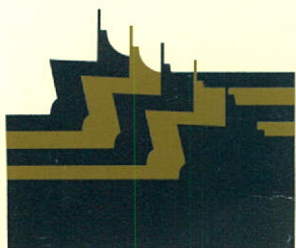
CNR	105.6
CPR	78.5
CSA Members	69.8

## Tonnes Carried in 1992









**Canadian Shipowners Association**

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**June 1993**