COMPTE RENDU DE COLLOQUE

LA PERCÉE DE L'INTERMODALISME

A N N E X E

PROGRAM

INTERMODALISM COMES OF AGE

WEDNESDAY, FEBRUARY 1

18:30 - 20:30

Early Registration
Provinces Ballroom Foyer

Reception
Provinces Ballroom

THURSDAY, FEBRUARY 2

07:30 - 08:30

Registration
Confederation Ballroom I Foyer

08:30 - 08:45

Opening Session
Confederation Ballroom I

Opening Remarks
Hassan Ansary, President, ICHCA Canada

Welcoming Remarks
- His Worship Jim Durrell, Mayor of Ottawa
- The Honourable Paul Dick, Associate Minister of Defence

08:45 - 10:15

Session I:
Promises and Challenges of Intermodalism

Moderator:
Vincent Champion, Editor, Cargo Systems

Speakers:
- Joe Dorto, General Manager, Virginia International Terminals, Inc.
- Chris Gillespie, President, Canadian International Freight Forwarders Association
- Michael Ircha, Professor of Civil Engineering, University of New Brunswick

10:15 - 10:30

Coffee Break

10:30 - 12:00

Session II:
Intermodalism - Partnership at its Best

Moderator:
Dominic Taddeo, General Manager and Chief Executive Officer, Montréal Port Corporation

Speakers:
- Ken Gray, Vice President, Cargo, Canadian Airlines International
- Ralph Teoli, President and Chief Executive Officer, CP Trucks
- Al Gillies, Vice President, Intermodal, CN

12:00 - 12:30

Reception
Confederation Ballroom II Foyer

12:30 - 14:00

Luncheon
Confederation Ballroom II

14:00 - 15:30

Session III:
The Role of EDI in an Intermodal Age
Confederation Ballroom I

Moderator:
Dan Hewitt, Project Director, Port Information Systems, Department of Communications

Speakers:
- Jerrol Larrieu, Director, Management Information Services, The Port of New Orleans
- Mike Boyne, General Traffic Manager, ACL
- Curt Ketchum, Vice President, CANSIF

15:30 - 15:45

Coffee Break

15:45 - 17:15

Session IV:
Intermodalism - Here to Stay

Moderator:
Frank Trotter, President, Trade & Transportation Group

Speakers:
- Lillian Liburdi, Director, Port Development, The Port Authority of New York/New Jersey
- Joedy Cambridge, Executive Vice President, Leeper, Cambridge & Campbell Inc.
- Peter Keller, President, CAST North America (1983) Inc.

17:15 - 17:30

Conference Wrap-up
Jean Michel Tessier, President and Chief Executive Officer, Canada Ports Corporation

18:30 - 19:30

Reception
Confederation Ballroom II Foyer

19:30 - 22:00

Conference Banquet
Confederation Ballroom II

Keynote Speaker:
The Honourable Thomas M.T. Niles, The United States Ambassador to Canada

KEYNOTE SPEAKER

Ambassador Thomas M.T. Niles was born in Lexington, Kentucky on September 22, 1939. He received his Bachelor of Arts degree from Harvard University in 1960 (magna cum laude) and a Master of Arts degree from the Univeristy of Kentucky in 1962.

The Ambassador joined the Foreign Service in February 1962. His first overseas posts included Belgrade and Moscow; from August 1971-October 1973 he served as Political Officer at the U.S. Mission to NATO in Brussels. From November 1973-July 1976, he was the Director of Commercial Affairs at the U.S. Embassy in Moscow. In 1976, Ambassador Niles returned to Washington to attend the National War College. From July 1977 until summer 1985, he held various high-level positions in the Department of State: 1977-79, as Deputy-Director for United Nations Affairs in the Bureau of International Organizations; 1979-81, as Director of the Office of Central European Affairs; and since June 1981, as Deputy Assistant Secretary for European and Canadian Affairs. From 1981-1983, Mr. Niles' responsibilities included U.S.-Canadian relations.

Mr. Niles was nominated as Ambassador to Canada by President Ronald Reagan on July 9, 1985. His nomination was confirmed by the U.S. Senate on July 31, 1985, and he was sworn in on August 13, 1985. The Ambassador arrived in Ottawa on September 9 and presented his credentials to Governor-General Jeanne Sauvé on Tuesday, September 10, 1985. Ambassador Niles speaks French, Russian, German and Serbo-Oroatian.

ICHCA CANADA
1989 Shipper Carrier Conference

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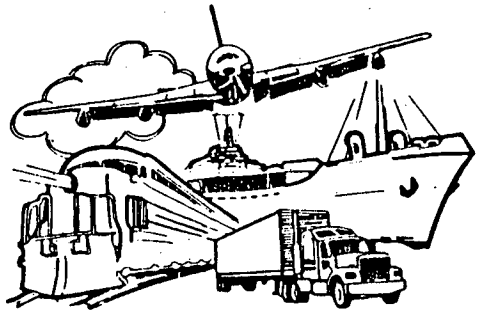

INTERMODALISM COMES OF AGE

OTTTAWA, ONTARIO
FEBRUARY 1 - 2, 1989

WINTERLUDE BAL DE NEIGE

Winterlude
February 3rd to the 12th Ottawa-Hull

Presentation to
ICHCA Canada
1989 Shipper-Carrier Conference
February 1-2, 1989, Ottawa

Hassan J. Ansary, Ph.D.
President, ICHCA Canada

Mr. Minister, Your Worship, other distinguished guests, Ladies and Gentlemen. It is indeed a pleasure for me to welcome you this morning as speakers, delegates and guests to the ICHCA Canada 1989 Shipper-Carrier Conference. As the incoming President of ICHCA Canada, I am certainly pleased to see such a good attendance, and was delighted to speak with many of you at last night's reception.

As you are aware, it was only a few hours ago that I officially assumed the role of the President of ICHCA Canada. Consequently, this is my first opportunity to address you collectively in this new capacity. In addition to the very pleasant task of welcoming you to this annual conference, I would like to acknowledge your confidence in asking me to take over from Wilf Danzinger, and share with you briefly, my view of the organization and some of the challenges it faces at this time.

I would also like to indicate generally, the direction I think we should take from here, and say something about the significance of the theme for this year's conference, highlighting the key areas we will explore during the day.

Given the rapid changes taking place in the cargo handling industry today, I am excited about the concept of an international organization, with appropriate subsidiary organizations around the world, through which all elements of the transportation chain may keep abreast of important technological and economic developments.

Improvements in the productivity and efficiency of goods movement and cargo handling is, I believe, at the heart of continued progress in the competitive positioning of corporate producers and whole economies. ICHCA, in my view, is an effective vehicle for the transfer of technology and information related to such improvements. As members of ICHCA Canada,

we can benefit directly from their application and results, thereby enhancing our economic well-being in global markets.

Today's conference is sponsored jointly by ICHCA Canada and Ports Canada, and we will address various aspects of Intermodalism. I believe this to be a particularly appropriate topic, in light of current developments. An ever-increasing role is being played by intermodalism in giving the shipper the degree of productivity and efficiency he demands in getting his goods to market in an increasingly competitive world environment.

The first half of the conference will be spent reviewing the promises and challenges of Intermodalism, of which there are many as you will see, and in examining some of the new forms of partnership we see in Intermodalism.

During the second half, we will look closely at the role of EDI in this age of Intermodalism, and spend some time determining the extent to which Intermodalism may be a passing fad.

I believe we will find the speakers for these respective panels most knowledgeable, and their presentations most informative.

The panel sessions will be followed by summary remarks by Mr. Jean Michel Tessier, President and CEO of Ports Canada. Then, as you know, we will have our evening reception and banquet, during which time we will be joined by the Honourable Thomas Niles, US Ambassador to Canada, who will be our guest speaker for that occasion.

As you can see, we have a busy day ahead and a lot of ground, or water if you like, to cover. So without further delay, I would like now to ask his Worship, Mayor Durrell of Ottawa to welcome you all to the National Capital Region.

ICHCA CANADA

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ASSOCIATION INTERNATIONALE DE LA COORDINATION DE LA MANIPULATION DES CHARGEMENTS

news release communiqué

FOR IMMEDIATE RELEASE

OTTAWA, ONTARIO -- At its annual general meeting, ICHCA Canada members elected a new slate of officers. Hassan J. Ansary, executive vice president of Ports Canada, the federal agency that administers 15 Canadian ports, assumes presidency of the Canadian arm of the international association. "ICHCA is a unique and important organization," said Ansary. "It can play a critical role in the transfer of technology and information related to improving the productivity and efficiency of goods movement and cargo handling."

Other directors elected include J.W. Hamblin of Northern Transportation Co. Ltd. of Edmonton as vice president and G. Bernard Bisson of Canada Ports Corporation of Ottawa as secretary-treasurer. The outgoing president, W.A Danzinger, will continue to serve on the board of directors as the immediate past president.

"I am excited about the concept of an international organization," commented Ansary, "through which all elements of the transportation chain can keep abreast of important technological and economic developments."

Formerly the chairman of the Canadian Port Development Forum, Ansary is seeking closer cooperation between ICHCA Canada and ICHCA USA and increased cooperation with the private sector and universities for joint venture projects.

ICHCA was established in 1953 with members from close to one hundred countries, with headquarters in London, UK. ICHCA is governed by a council of 20 nations in which Canada is an active member.

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PROMISES AND CHALLENGES OF INTERMODALISM

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Prepared for "Intermodalism Comes of Age", ICHCA Canada, 1989
Shipper-Carrier Conference, Ottawa, Ontario, February 1-2, 1989.

INTRODUCTION

The development of the intermodal systems in North America and the developed world has resulted in a highly efficient system of cargo movement. Intermodalism implies the ability of transporting unitized packages of goods among various modes including sea, land and air. The key to successful intermodal systems is unitization. Maintaining the integrity of the package of goods within a unit such as a container for as long as possible enables efficient mechanized handling systems to be developed. Ideally, the unit package remains intact from factory gate to the customer's door.

Marine containers provide the clearest example of an efficient intermodal system. The movement of general cargo during the past 20 years has undergone a revolutionary transformation from the traditional manual break-bulk approach to today's highly mechanized container system. This remarkable transformation in cargo handling systems has not come about without some costs. Containerization is an expensive approach. The construction of purpose-built cellular container ships and the world-wide liner service network required, the development of specialized container terminal facilities in ports, and the evolution of land-side intermodal transportation infrastructure have been costly.

Overall, the benefits to both the shipper and the carrier have been significant. Economies of scale derived from both larger vessels and the simplified cargo handling systems have resulted in considerably lowered costs for moving commodities. In turn these lower carrier costs have been passed onto the shippers in the form of reduced freight rates. Along with lower costs, shippers have benefitted from more expeditious handling of their goods. Today's "just in time" manufacturing processes would have been almost impossible to develop without the efficient cargo handling systems provided by containerization. Today's marine and domestic container provide a secure, weather proof structure which protects the goods from pilferage and other damage.

Increasingly, shippers are being offered simplified documentation for cargo movement. Many major carriers are providing one bill of lading for the point to point movement with one carrier being responsible for the entire move. This removes the need for shippers to become specialists in cargo movement thus leaving the job to the experts.

This paper has been prepared to examine the promises and challenges of intermodalism, particularly from a North American perspective. This will be accomplished by a review of the growth of intermodal systems, particularly the remarkable rise of double-stack container trains in the United States, and an evaluation of how these intermodal developments effect Canadian ports.

EVOLUTION OF CONTAINERIZATION

During the past few decades, the marine shipping world has witnessed the rise of a remarkable revolution - the era of specialization. Paralleling the growth of international trade has been the development of large, specialized dry and liquid bulk carriers and the transition from conventional break-bulk vessels to today's purpose-built "unitized" ships in the general cargo trades. Unitization has involved palletization, roll-on-roll-off (RO-RO), and most spectacularly, the development of containers and specialized cellular container vessels.

Intermodal services in the form of trailer on railroad flatcar (TOFC) began in the 1920's in the U.S. The movement of trailers and container-like vans for moving furniture aboard ships was initiated in the 1950's. The development of containerization as form of intermodal movement is generally considered to have begun with Malcom McLean's 1956 experiment. McLean was a trucking executive who used his operating rights on the Pan Atlantic Steamship Corporation to load truck trailers laden with cargo on the deck of a converted tanker for the U.S. coastal trade. By 1957, the company was taking delivery of self-geared container ships designed to carry 226, 35 foot containers. The company name was subsequently changed to Sea-Land Services, now one of the world's largest containership line (Mahoney, 1985).

The benefits of containerized intermodal movements were soon realized by others and the evolution towards containerized shipping was on. In 1966, Sea-Land introduced the first, purpose-built cellular container ship to the transatlantic trade. They were soon followed by U.S. Lines. Other operators were slow to adapt, but in time, most liner carriers came to recognize the economic benefits and cargo handling efficencies of shipping high value general commodities by container.

The slow start-up of containerization in the international trades was soon followed by a remarkable catch-up in terms of the slot capacity available. In 1970, there was 178,000 twenty-foot equivalent (TEU) slots available on board 186 purpose-built cellular container vessels. By 1985, the world's container fleet had 1.5 million TEU slots available on board 1,313 vessels (Fairplay, 1986). This represents an almost 850 percent increase in cargo carrying capacity. In 1970, some 7 million TEU containers were handled. By 1986, the number of containers handled increased to 59.4 million, an increase similar to vessel slot capacity. In terms of the world shipping fleet, the share of the available deadweight tonnage (dwt) occupied by container ships has increased from 1.6 percent in 1980 to 3.6 percent in 1987 (representing 22.8 million dwt) (UNCTAD, 1988).

Paralleling this growth of container ship fleet was the development of specialized container terminals in many of the developed world's major seaports. In the late 1960's, major

container terminals were build in Halifax, Saint John, Montreal and Vancouver. Similar terminals were built in many of the major U.S. seaports. In 1985, the four Canadian container terminals were handling more than 1 million TEU, about 10 percent of the total North American container throughput (Pettifer, 1987). Container terminals on the North American east coast, in 1970, handled about 1.3 million TEU. By 1985, this had grown to 5.6 million TEU, an increase of 436 percent (somewhat less than the world growth of TEU slot capacity) (Fairplay, 1987).

Cargo Diversion

Container traffic through Canadian ports is characterized, to a degree, by the diversion of containers to and from the U.S. Although there is a rough balance in the total number of containers in TEU exchanged between the two countries, in terms of the value of the commodities handled, Canadian ports tend to suffer. In addition, there is an imbalance between west and east coast ports. Typically, Canada's east coast ports, particularly Montreal, handle excess U.S. containers while Vancouver loses Canadian containers to competing U.S. west coast ports, notably Seattle and Tacoma (Faivre, 1985).

Dynamics of Containerization

The world's container fleet has developed during a period of considerable turbulence in the marine environment. The heady, boom period for international trade in the 1970's has given way to the 1980's recession with its almost 15 percent decrease in world trade. The estimated 3,505 million tons traded in 1987 is still about 6 percent less than the amount traded in 1980 (UNCTAD, 1988). Part of this loss in trade reflects fundamental shifts in the type of commodities being shipped; more and more, lighter plastic and electronic goods are being transported rather than the much heavier iron ore and coal for steel making. Another significant shift in the international trades is the dominance of the transpacific trades over the transatlantic.

Optimistic forecasts in the late 1970's coupled with seductive approaches by shipyards and government around the world for easy and low cost ship building led to an over-supply of ship tonnage in the world fleet. This over-supply exists even in the container trade. The estimated overcapacity of the world's container fleet is estimated by UNCTAD (1988) as being 25 to 35 percent. In certain trades, the estimated overcapacity is considered to be even higher. For example in the transpacific and transatlantic trades, the overcapacity is estimated at 43 percent (UNCTAD, 1988).

Overcapacity of supply in a period of a slow increase in demand has had a dramatic impact on freight rates for marine containers. UNCTAD estimates the 1987 freight rates for liner cargo (primarily containers) is only 22 percent higher than they were in 1980. This relatively low freight rate level requires

that ship owners ensure their vessels are being handled as efficiently and cost effectively as possible. The container fleet has sought such efficiencies through building larger vessels and operating out of ports which offer rapid turn-around (today, time in port is measured in hours rather than days).

Larger Container Ships

Larger ships improve efficiency through the "cube" rule. If a vessel is doubled in all her dimensions, her volume is cubed (increased by eight times). Doubling in size does not mean doubling the power plant necessary to drive the ship nor does it imply a doubling of the crew size. Thus, provided cargo is available to fill the additional space created, ship owners can obtain significant economic benefits from increasing their vessel size.

Larger ships tend to be less flexible in the sense there are a limited number of port facilities which can handle them. Few ports have the ability to dramatically increase their manoeuvering areas and water depth to accommodate ever larger container ships. Many ports also lack adequate storage space to handle their increased cargo loads. In the early 1970's, the typical cellular container vessel carried up to 1800 TEU. By the 1980's container ships were at the 3000 to 3700 TEU. In mid-1980, the world's largest container ships, U.S.L.'s Econships at 4258 TEU were placed in service. In the late 1980's, the 2500 to 3500 TEU container ship is becoming the average size vessel for the world's major trades.

These large container vessels and their increased number of containers have resulted in major capital expenditures by shipping lines. U.S.L.'s twelve Econships cost about US$47 million each in the early 1980's. These capital requirements have led a number of shipping lines to integrate horizontally through the formation of consortia to the costs of providing container services. ACL and OOCL are both consortia created by various shipping lines to offer container services. In addition, ports have had to make major capital investments to handle the increasing number of containers coming through their facilities.

Container shipping lines are increasingly becoming vertically integrated through the acquisition or control of land-side transportation services. The clearest example of this was the acquisition by CSX (a major regional railroad in the southern U.S.) of Sea-Land Services. CSX also operates an inland barge company and trucking services. This form of integrated intermodal transportation service enables CSX to offer "one-stop shipping" to its customers. Vertical integration continues in intermodal transportation. Increasingly this will lead to further productivity gains, lower costs, and improved "door-to-door" shipping services.

Load Centre Ports

High capital costs have led to a rationalization in the number of ports being served by major container shipping lines. Improved land-side intermodal service by both railroads and trucking firms have enabled container services to be consolidated in load centre ports. Container traffic from a large hinterland can now easily be transported to a major port consolidation facility which acts as a hub. Larger container ships can then limit their port of call to load centre ports. The development of a limited number of load centres along the east coast of North America implies that the choice of port for intermodal containers will increasingly be decided by the ocean carrier rather than the shipper. In many cases today, the shipper is "port-blind" with respect to how the containers are shipped. The matters of concern to the shipper tend to be cost, reliability, and total transit time (Hanelt and Smith, 1987).

Port of call rationalization by major container shipping lines has had a direct impact on the container throughput in the Port of Saint John. In 1987, the Japanese Three (Mitsui O.S.K., NYK Lines, and Yamashita-Shinnihon) ended their fifteen year association with the port. As the round trip voyage from New York to Saint John added four more days to their vessel schedules, the Japanese carriers terminated the Canadian leg of their service from the Far East. Mitsui O.S.K.'s American President Takahashi claimed: "that inbound cargo to East Canada and outbound cargo to the Far East is not balance, volume-wise. Recently, most eastbound cargoes are coming over the West Coast. The profitability of serving East Canada is declining" (Carey, 1987).

INTERMODALISM

Major legislative changes seeking to deregulate the U.S. transportation industry and increase competition among carriers and different modes spurred the rapid rise of innovative intermodal systems throughout North America. The major legislative change came from the 1980 Stagger's Act which revolutionized American railroads by placing them into a competitive framework. Railroads no longer were forced to adhere to published tariffs, but now were able to enter into "confidential contracts" with shippers. This meant the rail service could better reflect the needs of their shippers through the provision of innovative and specialized service. The effect of railroad deregulation was to drop rail rates about 20 percent. The Motor Carrier Act of 1980 also created additional intermodal competition by enhancing the ability of trucking firms to operate more freely.

The 1984 U.S. Shipping Act further reinforced the development of intermodal services. The Act clarified the legality of intermodal services enabling ocean carriers to enter into special contracts with the railroads and other modes to haul

containers. Both conference carriers and independent shipping lines have used this deregulated environment to negotiate low-rate contracts with the railroads to haul containers on dedicated line haul service (both single and double-stack) to major inland destinations. In 1980, some 3 million trailers and containers were transported by railcar in the U.S. This intermodal service almost doubled by 1987, with 5.4 million being loaded. Forty percent of the intermodal service was containers on flat cars (COFC), about one third of this amount was on double-stack container trains (DST) (Seeds, 1988).

Double-Stack Container Trains

One of the most remarkable innovations in intermodal service was the introduction of double-stack container trains. These specialized trains involve the stacking of standard and marine containers in a two-high configuration on board specially designed, deep well, railway flat cars. It has been estimated that by October, 1988, there were some 10,900 of these specialized railcars in service in the U.S. (Pinckney, 1988). In 1981, the first experimental service was introduced by Sea-Land Services between the Pacific and Gulf coasts. By 1983, only about 1 percent of the U.S. intermodal traffic was carried on double stack rail platforms. In 1988, this form of intermodal movement has been estimated to be 35 percent of all moves (Pilsch, 1988).

At the end of 1988, some 76 weekly departures of dedicated DST's were scheduled from U.S. west coast ports to eastern destinations. Forty one of the DST's were controlled by ocean carriers or their subsidiaries, seven were by railroads owned by ocean carriers, and the remaining twenty-eight were being marketed and controlled by the railroads as generic services to all shipping lines (Pilsch, 1988).

Figure 1 shows the current network of scheduled DST service throughout the continental U.S. As improvement have been made to the main lines including increasing height clearance under bridges and within tunnels, the provision of DST service has continued to spread eastward from west coast ports.

Double-stack container trains are increasingly replacing the more conventional intermodal services of TOFC and COFC, particularly on the long haul, high volume routes. Effectively doubling the volume capacity of the railcars, DSTs have resulted in significant economies of scale. Today's 200 forty-foot equivalent (FEU) DST represents a savings in the order of 30 to 40 percent over the conventional COFC service (Pilsch, 1988).

Despite the innovation of DSTs, intermodalism development in the U.S. has been plagued by trade imbalances with the Far East. Currently, the Far East supplies more commodity to the central and eastern U.S. than is returned. As the international containers must be repositioned in the west coast ports for re-

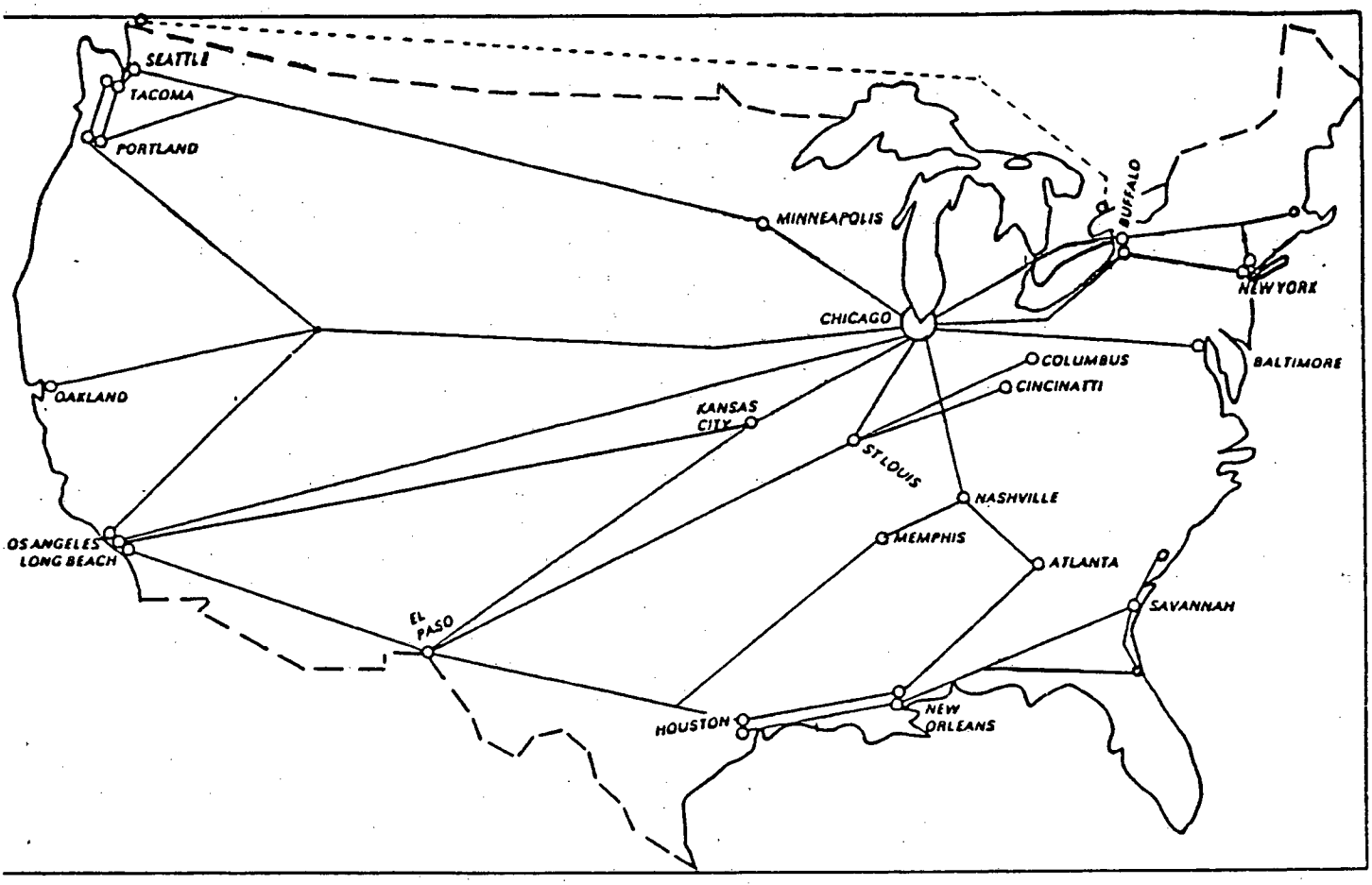

Figure 1. Double-Stack Train Routes

use in the transpacific trade, railroads and other involved in DST service are struggling to fill empty west-bound boxes with domestic goods. The overcapacity in the west-bound corridor has resulted in highly competitive rail rates.

The growth of U.S. DSTs and the need to acquire west-bound commodities has had an impact on Canadian railroads. Pressure is being placed on Canadian railroads to increase their west-bound traffic in the U.S. through their U.S. subsidiaries. Both Canadian railroads have experimented with DST service but have postponed its introduction. Canadian containers tend to carry different commodities that those in the U.S. Canadian containers tend to be heavier twenty-foot boxes as compared to forty-foot boxes in the U.S. This often means double handling of the heavier boxes within the ports as the lighter containers first off the ship must be temporarily stored until the heavier containers are removed from the ship's hold and placed at the bottom of a double stack railcar. The lighter container is them placed on top. Heavier containers along with relatively lower traffic volume routes have caused the Canadian railroads to delay implementing a DST service (Boyes, 1986).

Despite these difficulties, Canadian National is expected to inaugurate a DST service from Vancouver to Toronto early in 1989 This improved service probably results from the removal of the Port of Vancouver's infamous "container clause" which entitled unionized longshoremen to strip and stuff containers destined for or originating in warehouse and other facilities within a 90 mile radius of the Port. Vancouver expects to recapture some of the diverted Canadian traffic by offering better service (without the container clause) and expanding its container handling facilities.

Canadian National may also consider a DST service from Halifax to central Canada. As pointed out in a recent article (Strong Inland, 1988), "CN's highest volume corridor is from the Port of Halifax through to Montreal and Toronto and this traffic is served by performance sensitive intermodal trains". A 1988 study of Halifax as a potential load centre considered the economics of operating a mixed double-stack/single-stack service from the Port to intermodal yards in Montreal and Toronto. Based on this analysis, it was "estimated that double-stack service would achieve savings in the order of 20% of existing rail service costs" (Peat Marwick, 1988). The consultants went further to argue "that the economics of double-stack are sufficiently attractive that double-stack rail service will become a reality at Halifax within the foreseeable future".

Sea-air Movements

Sea-air emerged as a viable intermodal transportation alternative in the 1980's. This intermodal service provides a unique response to the need for flexible, reliable, timely and yet affordable international transportation of goods. The

primary movement in sea-air is from the Far East to Europe using the U.S. west coast ports as transhipment points. Recent years has seen the introduction of sea-air services to a number of other destinations including South America and Africa (Fawcett and Vellenga, 1988).

The development of sea-air has been greatly aided by the introduction of high capacity freight and combination aircraft which enable large-sized cargoes to be carried. Although twenty-foot marine containers are carried by aircraft from Japan to Europe via the Soviet Union, permitting true door-to-door service, the use of marine containers is the exception rather than the rule (UNCTAD,1988). Normally, marine containers are stripped at the transhipment point and stuffed into smaller and lighter aircraft containers or onto pallets. Thus, sea-air does not fully satisfy the requirements of a true intermodal service in that the unitized package is not kept intact for the entire journey.

The growth of sea-air services can be attributed to two major economic trends: the shift to globalization of the world economy whereby companies have increasingly shifted production to "offshore" production and international marketing activities; and the growth of "just-in-time" manufacturing processes requiring the development of reliable, cost-effective delivery systems. Sea-air service meets the requirements of both these trends by providing reliable and predictable service at about one-half the cost of an all-air service and in one-half the time of an all-water system (Fawcett and Vellenga, 1988).

Far East cargoes destined for Europe are transhipped on the U.S. west coast ports of Seattle, Los Angeles, and San Fransico, in the eastern Soviet Union at Vostochny and Vladivostock, and in south east Asia at Hong Kong, Singapore and Bangkok (UNCTAD, 1988).

In a survey of airlines, ocean carriers, freight forwarders, seaports and airports, the importance of a suitable transhipment point was highlighted. Five factors were identified as being crucial for the success of a transhipment point:

- geographical location of the transhipment point;
- availability of competent middlemen to coordinate the intermodal transfer;
- regular sea and air services;
- transportation infrastructure at the transhipment point (closeness of harbour to airport along with ready access and good coordination between the two is most important); and,
- ability to clear customs in a timely manner (Fawcett and Vellenga, 1988).

The relatively rapid growth of sea-air intermodal movements indicates it will continue to be a viable transportation

alternative. In the future, it is obvious that other, innovative intermodal systems will be developed for the benefit of shippers and carriers.

INTERMODALISM AND CANADIAN PORTS

The remarkable growth of double-stack container trains moving marine and domestic containers from west coast ports has had a significant effect on east coast ports in both Canada and the U.S. Initially, the rail movement of containers across the continent was seen as a premium service for time sensitive commodities able to bear higher freight rates. Lower rail rates due to volume discounts for scheduled service coupled with reduced costs arising from double-stack service now compete favourably with the rates charged for the all-water route from the Far East through the Panama Canal to the North American east coast. Shippers can now receive the benefits of timely delivery (important for just-in-time inventory systems) at moderate cost. In the view of one shipping expert, this shift in container movement to a rail-based intermodal system implies that, "the all-water service from the Far East will be a dead issue over the next ten years... cargo moving all-water to the Far East will diminish by at least 50 percent"(Ganzeal, 1987).

Currently, U.S. west coast ports handle about 75 percent of the U.S. - Far East container traffic. As the major west coast ports expand to handle the growing demand for container throughput, they will continue to erode Far East traffic moving through east coast ports. As shown in Table 1, the container traffic through selected major east coast ports increased by a mere 4.3 per cent from 1984 to 1987 (well below the growth rate of world container movements). On the other hand, selected major west coast ports increased their container throughput in the same period by more than 90 per cent. The major east coast load centre at New york is particularly suffering losing about ten per cent of its traffic during 1986 - 1987. Savannah suffered a major blow with the bankruptcy of U.S.L.'s round-the-world service in the same period. As discussed above, the Port of Saint John also has suffered a significant decline in container throughput with its loss of Far East traffic.

The apparent loss of Far East traffic in U.S. east coast ports will force these facilities to aggressively seek other U.S. mid-west and central Canadian cargo to maintain their throughput. Thus competition between Canadian and U.S. ports will likely increase as each group seeks to augment their existing traffic.

Montreal

Montreal is both Canada's largest inland port as well as the largest container terminal handling almost half of the container traffic through Canadian ports. Its primary market is the transatlantic trade, providing services to vessels whose only North American port of call is Montreal. A significant amount of

TABLE 1 Selected North American Container Ports

Port	TEU throughput (000s)				% change		
	1984	1985	1986	1987	1984-85	1985-86	1986-87
East Coast							
New York	2,235	2,367	2,340	2,100	7	-1	-10
Baltimore	768	706	567	NA	-9	-20	NA
Montreal	429	482	532	575	12	10	8
Savannah	283	369	501	362	30	36	-28
Hampton Roads	248	300	436	481	21	45	10
Halifax	205	202	277	332	-2	37	20
Philadelphia	157	133	145	160	-15	9	10
Saint John	79	68	47	18	-14	-31	-62
Total	4,404	4,627	4,845	4,595			
West Coast							
Los Angeles	802	1,037	1,345	1,580	29	30	17
Seattle	776	627	851	1,026	-19	36	21
Vancouver	152	178	223	281	17	25	26
Tacoma	150	500	666	697	233	33	5
Total	1,880	2,342	3,085	3,584			

its container throughput is diverted cargo to and from the U.S. mid-west. Harvey Romoff of CP Ships has claimed: "Without U.S. cargo there would not be sufficient Canadian cargo to sustain lines at either port [Montreal and Halifax] and what there is could easily be transshipped through New York or Baltimore" (Romoff, 1987). Increased aggressiveness by U.S. east coast ports seeking to recapture diverted traffic could erode Montreal's container throughput. For example, both Baltimore and New York are now offering rebates to shipping lines for containers destined for the mid-west coming through the port.

Montreal's dominance in the container trade is also threatened by the trend towards larger container ships. Draught limitations on the St. Lawrence River coupled with vessel speed restrictions may make the Port of Montreal less attractive in the future. The Port of Quebec has recently announced it will develop a container terminal to handle larger 2500 to 3000 TEU capacity vessels and thus be able to capture traffic potentially being lost from Montreal (Quebec Re-start, 1989).

Halifax

Halifax continues to grow, although most of its traffic is "top-up" for container ships travelling to and from New York. Halifax's geographic location near the great circle route from the U.S. east coast to Europe permits passing vessels to divert to the Port at little cost in terms of time. A significant proportion of Halifax's container traffic is picked up by various round-the-world vessels. As recently demonstrated in the transpacific trade with APL ordering large container ships beyond the Panamax limits (the maximum size of ship able to traverse the Panama Canal), the future of major intermodal container movements will likely be by sea between continents with land-bridging by dedicated intermodal rail service. Thus, Halifax too is threatened by the growth of west coast ports and intermodal systems across the continent.

The potential development of double stack container train service from Halifax to central Canada may result in increased container throughput in the Port. Enhanced intermodal service may create efficencies in handling west-bound containers through Halifax in the same manner that east-bound containers have created growth in the west coast ports.

Vancouver

Vancouver is in an advantageous position to capture some of the growing west coast container traffic. The removal of the contentious container clause coupled with CN's anticipated double-stack service to central Canada should enable the Port to significantly enhance its container throughput. The Port is posturing itself to take advantage of its position by planning an expenditure of more than $100 million over the next five years to improve its container handling capacity (Hunter, 1988).

Saint John

Saint John continues to seek an appropriate market niche to maintain and develop its container throughput. Recently, efforts have been focussed on attracting traffic from the Caribbean and South America (areas which have traditionally traded through Saint John).

CONCLUSIONS

Intermodal movements in North America continue to be dominated by dynamic shifts in trading patterns and economic activities beyond the control of port authorities. Coping effectively in this era of environmental turbulence requires a vigilant management team seeking opportunities from the many changes occurring about them. Coping requires rapid response to identified threats and opportunities. The changes occurring in container traffic throughput in west and east coast ports has resulted in increased competition between ports.

Intermodal systems will continue to develop and flourish. The benefits of improved cargo handling arising from intermodalism accrue to all - shippers, carriers and ultimately their customers.

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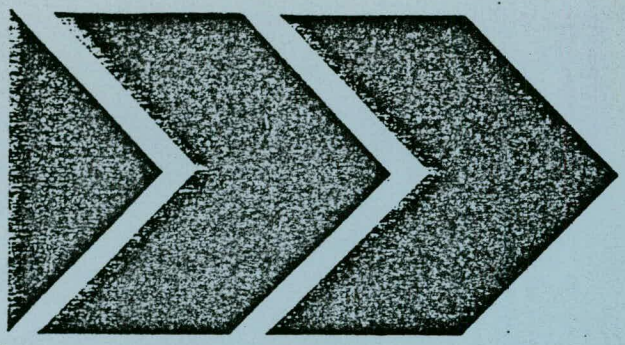

CN INTERMODAL: OUR INVESTMENTS ARE STACKING UP

Remarks by
A.J. Gillies
Vice-President Intermodal

to the International Cargo Handling
Co-ordination Association

Ottawa, Ontario
February 2, 1989

It's a pleasure for me to be here at this conference and to be in such good company for this particular session.

The associations fostered by conferences like ICHCA, and the exchange of ideas at this type of session, are extremely valuable to those of us in the transportation fraternity. And I certainly look forward to them.

The conference's theme, "Intermodalism Comes of Age," is an interesting one. We at CN have been in the intermodal business since 1952, the same year as ICHCA was incorporated. That makes both of us 37 years old, and by North American standards, we would be considered mature.

During those years, the ever changing nature of intermodalism has presented us with constant challenges and opportunities, and given us that sense of being in a perpetual state of adolescence, or "coming of age".

And I suspect these challenges and opportunities will characterize our business for some time to come.

Nevertheless, I believe that in many respects we have come of age, and in others, we still have a ways to go.

I will be talking about where CN Intermodal is today, and where we are going to be tomorrow, and what I have to say relates directly to the partnerships we have forged over the years, and to their continued importance in the years ahead.

And of course, partnerships are what this session is all about.

Having said that, I believe the railways can be justifiably proud of the leadership role they have taken in making intermodalism work in this country.

Our entry into intermodal transport traces its origins to the period after the Second World War when truckers began making inroads into our traffic. Its raison d'etre is much the same today - except that now we want to make some inroads in the traffic truckers enjoy.

In fact, intermodal is the fastest growing market segment in Canadian National, and it represents our most effective service option in truckload markets.

To that end, we at CN have embarked on a number of initiatives designed to make us viable and profitable right across the country.

The railway has repositioned itself over the last few years in response to deregulation south of the border, and re-regulation which took place here in Canada last year.

Simply stated, that has resulted in a renewed commitment to customer satisfaction, and delivering on that commitment through the operation of a safe, low-cost, core rail network between Halifax and Vancouver.

We in intermodal are playing an important role in the realization of that core rail network. As many of the underutilized portions of the system are sold or abandoned, we have to reach beyond our rail network to more customers than ever before.

Our expanded intermodal service to Newfoundland is a good example of how we do this. With the termination of railway services in that province, we began moving containers and trailers by highway from the Newfoundland ports. We added a new gateway through Halifax and, together with our partners in this intermodal effort, are providing service far superior than the totally rail-based system...and we are increasing our market share as well.

In effect, intermodal is bridging the railway service of the past with the core railway of the future. And we in intermodal are building our future on the strength of that low cost, transcontinental railway.

For instance, we have established a core network of inland terminals, or hubs as they are called. They are located in Moncton, Montreal, Toronto, Winnipeg, Edmonton, and Vancouver. These hubs are served by road, rail or a combination of the two, depending on economics and market requirements.

And we have been expanding and improving these hubs to meet the demands of the marketplace. Last year, CN completed its expansion of Montreal's Turcot yard, now christened Monterm. Work on a two-year expansion program for our Brampton intermodal terminal in Toronto is underway, and we recently received approval on a three year project to relocate and consolidate our Vancouver facilities. The price tag for these improvements is about $45 million.

On the equipment side, we have added to our trailer fleet, and continued the process of converting under utilized piggyback cars to container use.

Each of these projects reflects a conscious shift on our part to combine domestic and international business - trailers and containers. In the past, we have generally kept these blocks of business segregated, with separate marketing structures separate terminals in Toronto and Montreal, and a separate car fleet. This philosophy is changing quickly.

For example, the Monterm expansion has completed the process of amalgamating terminal operations in Montreal. The users of this facility are pleased with the change although its size takes some getting used to - it is almost two-and-one-half kilometers long. The gate is our most modern, and we are installing radio linked computers and cellular phones in our yard vehicles. These communication devices are absolute necessities in a facility this size.

The driving force behind the Brampton expansion is a need to provide additional container capacity in Toronto. When it is completed this July, we will shift all of our Trans-Pacific IMPEX business from Conport to Brampton. This will enable the development of more effective train services to and from the West. It will also provide much needed relief to Conport, which will continue to handle the traffic from the Ports of Halifax and Montreal.

While our Vancouver terminal expansion is focussed on the domestic marketplace, this facility will make it much easier to use empty IMPEX containers to move our domestic traffic. The top lift capability and relocation will see some blocks of traffic available as much as 14 hours earlier than at the present time.

To complement the expansion of our terminals, we will need additional rail car capacity to effectively serve our customers and partners.

And our plans for increasing that capacity this year, and beyond, also reflect the shift to combining international and domestic business.

In the recent past, we have avoided car purchases by dramatically increasing the productivity of our car fleet. For instance, cars in our Toronto-Moncton Laser service operate over 180,000 miles per year, probably the highest productivity anywhere for this type of service. But that's about as far as we can go without jeopardizing the consistent schedule our customers and our terminals need.

Our response to the current squeeze on car availability is two-fold. One of them involves the introduction of Canada's first, scheduled, double stack container service out of Vancouver this Saturday.

We are into this technology for the same reason as the Americans - it is the best and cheapest way to add capacity to your system. We have said all along that we would go double stack when it was economic. When the availability of rail cars dwindled, it became economic.

We currently have on lease 12 sets of five packs which will move 60 FEU's per week in each direction between Vancouver and Toronto. Although it is a small start, it demonstrates our willingness to work with shipping lines and ports people to provide a service that promises greater capacity for customers, more business for Vancouver, and potential financial rewards for us.

Our second response to increasing rail car capacity comes from the new cars that we plan to bring on line. These cars will be capable of double stacking marine containers as well as handling trailers.

Within 5 years, our Intermodal car fleet will be almost totally interchangeable between trailers, marine containers, and - yes - domestic containers. Maybe even 48 foot domestic containers handled double stack. The jury is still out on that one, but you can be sure that CN Intermodal will look a lot different in the 90's than it did in the 80's.

To complement our initiatives in terminal expansion, increased car productivity via double stacking, and new car purchases, we are also developing new communication links not only between offices, but also between offices and terminal equipment.

We have spent the past year restructuring our intermodal database and rewriting our intermodal computer systems to better accommodate EDI - Electronic Data Interchange.

As a result, some of our customers are now directly accessing our systems - not only to check on status information but to make things happen - such as releasing containers and ordering trailers.

In the near future, EDI's provision of timely and accurate information will make all of the partners in intermodal systems much more effective than they would be otherwise.

Truckers, for example, will be able to extract a list of all containers in a terminal that have been assigned to them for pickup. This could involve over 30 different customers for that trucker. A steamship company will be able to maintain a real time inventory of its containers and have an accurate indication of their status. All of this without touching a phone.

Although we are all somewhat impatient with the pace at which these electronic capabilities are being introduced, we would probably all agree that they are worth waiting for.

With new computer terminals, expanded intermodal terminals, new rail cars, double-stack container service, an efficient core railway from coast to coast, one might be lulled into thinking that we have all the answers.

But that is simply not the case.

The structure of our markets, as well as the competition for them, is changing swiftly and surely.

Free trade will undoubtedly change some patterns of freight flow. We will be challenged to be more effective with short haul trans-border intermodal movements than we have been in the past. We will have to strengthen our ties and develop a smoother interface with some of the US railroads to take full advantage of increases in trans border flow. We will also have to start running cabooseless trains, and running trains with reduced crews, just as they do in the U.S.

We have to work to ensure that the Port of Vancouver captures more of the rapidly growing Pacific Rim container trade. The competition for this traffic is intense between the US ports and railways and all of the partners in the Canadian routing will have to perform at optimum levels if we are to be a factor in this business. Much of our recent effort has been spent to improve our capability to handle containers via Vancouver and we plan to continue with these efforts

Furthermore, the improvements we have made complement a lot of good work done by our partners in Vancouver. This includes elimination of the container clause in the longshore contract; the formation of the Container Gateway Traffic Council of B.C. to promote container shipping in the province; and recognition of the need for better container facilities contained in the B.C. government's study on the transportation needs in the decade ahead.

While we are looking to the West we cannot rest on our laurels in Eastern Canada. We have been fortunate in that Halifax and Montreal have been two of the more successful ports in Eastern North America. But there is significant and growing competition in the East as well - the work of the Virginia Ports authority, Baltimore, and New York attests to this - and we must be prepared to improve in the East just to maintain position.

In summary, we know that there are no quick and easy solutions to high quality worldwide competition. But if we continue to work on them together, as partners, I'm confident we will succeed as a strong trading nation, and as vital cogs in the international distribution network.

Thank you.

Presentation by

Mr. Mike Boyne
General Traffic Manager, ACL

The Role of EDI in an Intermodal Age

ICHCA Canada 1989 Shipper-Carrier Conference
February 2, 1989 -- Ottawa, Ontario

THE ROLE OF E. D. I. IN AN INTERMODAL AGE

THE SUBJECT OF EDI TENDS TO INTIMIDATE PEOPLE.
MANY CONSIDER IT A HIGHLY TECHNICAL SUBJECT WHICH IS BEST AVOIDED OR LEFT TO COMPUTER EXPERTS.

INITIAL CONTACT WITH THE SUBJECT DOES NOTHING TO CHANGE THESE OPINIONS. PRELIMINARY RESEARCH QUICKLY SHOWS THAT THERE ARE MANY STANDARDS. WITHIN THESE, THERE ARE DIFFERENT SYNTAX AND MESSAGE STANDARDS; ADDITIONALLY BETWEEN DIFFERENT INDUSTRY GROUPINGS AND WITHIN THESE GROUPINGS, USE OF DIFFERENT LEVELS AND VERSIONS EXIST.

NO WONDER IT'S A TOPIC WE LAYMEN FIND BEST AVOIDED!

TO DO SO HOWEVER WOULD BE A GREAT MISTAKE. EVERYONE INVOLVED IN THE MOVEMENT OF CARGO SHOULD LOOK ON EDI AS AN OPPORTUNITY . WE NEED TO RE-EVALUATE AND RE-EXAMINE THE WAY THINGS ARE DONE. BY LEAVING EDI TO COMPUTER EXPERTS WE COULD WIND UP IN THE SAME SITUATION AS WHEN COMPUTERS WERE FIRST BEING INTRODUCED.

MANY OF US HAVE HAD NEGATIVE PERSONAL EXPERIENCES OF THOSE EARLY ATTEMPTS TO USE COMPUTERS.

WE'VE ALL LEARNED THAT THEIR INTRODUCTION OR UPGRADE WAS NOT AS EASY AS SOME HAS EXPECTED.

.....2/

THERE ARE MANY TODAY, WHO PAINT A SIMILAR ROSY PICTURE OF THE BENEFITS AND EASE OF INSTALLATION OF EDI.
END USERS HAVE EVERY RIGHT TO BE SKEPTICAL OF SUCH PICTURES.

WE WILL HAVE ONLY OURSELVES TO BLAME IF WE DON'T ACTIVELY GET INVOLVED IN THE INTRODUCTION AND DEVELOPMENT OF EDI IN OUR INDUSTRY.

EDI IS ONLY AN INFORMATION COMMUNICATIONS TOOL. WHEN USED PROPERLY IT HELPS US ACHIEVE THE RESULTS WE WANT. IT ALLOWS US TO HANDLE MORE CARGO WITH HIGHER LEVELS OF THROUGHPUT; EXPERIENCE THE BENEFITS OF BETTER DATA QUALITY AND ACCURACY. WE ALSO CAN ACHIEVE BETTER TIMELINESS OF INFORMATION.
EDI SIMPLIFIES OUR ABILITY TO EXCHANGE OR OBTAIN SHIPPING DATA. IT SPEEDS UP THE MOVEMENT, CLEARANCE AND DELIVERY.

SO FAR EDI HAS BEEN USED CHIEFLY TO REPLACE PAPER DOCUMENTS. IT TRANSMITS ELECTRONICALLY THE INFORMATION CONTAINED ON PAPER AT A FASTER RATE.

IN THAT RESPECT EDI WORKS AND ITS BENEFITS CAN BE MEASURED AT THIS LEVEL.

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REPLACING PAPER, HOWEVER, HAS ONLY A LITTLE EFFECT IN OUR TOTAL ENVIRONMENT. WE ARE STILL WORKING UNDER TRADITIONAL LEGAL, REGULATORY AND PROCEDURAL PRACTICES.

TO GET THE MOST OUT OF EDI IN CARGO HANDLING, EACH PARTNER IN THE TRANSPORT CHAIN HAS TO WORK CLOSELY WITH EVERY RELATED LINK. WE MUST JOINTLY REVIEW EACH OTHER'S OPERATIONAL NEEDS. OUR OWN INTERNAL REQUIREMENTS AS WELL AS THOSE FROM THE OTHER LINKS IN THE TRANSPORT CHAIN. TIME FACTOR RESTRAINTS AND REQUIREMENTS MUST ALSO BE CONSIDERED. ONLY BY DOING THIS CAN WE EXPLOIT EDI PROPERLY.

IT'S NOT MUCH USE IN BEING ABLE TO RECEIVE SHIPMENT DATA AT DESTINATION WITHIN HOURS OF ITS MOVEMENT, IF REGULATORY REQUIREMENTS AT DESTINATION STIPULATE THAT:

- THE MAIN DELIVERING CARRIER MUST PROVIDE CLEARANCE DOCUMENTATION TO THE RECEIVER.
- THE DOCUMENTATION MUST BE ON SPECIFICALLY COLOURED PAPER.
- THE RECEIVER CAN ONLY SUBMIT THIS CLEARANCE DOCUMENTATION DOCUMENTATION TO CUSTOMS ONLY WITHIN 24 HOURS PRIOR TO ITS PHYSICAL ARRIVAL AT DESTINATION AND ONLY AT THAT POINT .

....4/

BY DEVELOPING EDI LINKAGES WE BECOME MORE DEPENDANT ON EACH OTHER. THE EDI DATA AUDIT CONTROLS WE DEVELOP MUST MEET INTERNAL AND EXTERNAL NEEDS.

FINALLY, OUR INTERNAL EDP DEPARTMENTS WILL NEED TO BE REORGANIZED IN AN EDI ENVIRONMENT. THEY BECOME THE COMPUTER EQUIVALENT OF TELEPHONE SWITCHBOARDS. WE HAVE TO REVIEW EXISTING DATA EXCHANGE NETWORKS TO SEE WHAT METHOD OF DATA EXCHANGE BEST SUITS OUR NEEDS; ONCE ESTABLISHED, THESE MUST BE RE-EVALUED PERIODICALLY TO ENSURE THEY REMAIN EFFECTIVE.

IN CANADA, WE HAVE NOT BEEN LEADERS IN THE DEVELOPMENT OF INTERMODAL APPLICATIONS FOR EDI.

WE HAVE PARTICIPATED ONLY ON ITS NORTH AMERICAN DEVELOPMENT IN SPECIFIC INDUSTRIAL SEGMENTS. FOR EXAMPLE, IN THE GROCERY CHEMICAL AND RAIL INDUSTRIES TO NAME A FEW.

THE REASON WE HAVEN'T HAS BEEN DUE TO THE FACT THAT, TO MOST COMPANIES, CARGO HANDLING AND RELATED DATA EXCHANGE ACTIVITIES HAVE NOT BEEN VERY HIGH IN THEIR DEVELOPMENT PRIORITIES. FOR THOSE OF US IN TRANSPORTATION, OUR EFFORTS HAVE BEEN TO COMPUTERIZE INTERNAL OPERATIONS OR UPGRADE THEM TO MINIMIZE IN-HOUSE CLERICAL STAFFING.

....5/

FIRMS HAVE NOW BECOME MORE AWARE OF THE TRUE COST OF CARGO HANDLING AND THE ACCEPTANCE OF "JUST IN TIME" SYSTEMS. COMPANIES ALSO REALIZE THE NEED TO DEVELOP QUALITY CIRCLES WITH SUPPLIERS AND CUSTOMERS TO REMAIN COMPETITIVE.

MANY EDI GROUPS HAVE BEEN FORMED IN THE LAST YEAR TO GET CANADA'S TRANSPORTATION SECTOR ON THE EDI BANDWAGON. COMPANIES IN ALL CARGO HANDLING ACTIVITIES HAVE STARTED ACTIVELY PARTICIPATING IN THE DEVELOPMENT OF EDI LINKS IN OUR INDUSTRY. MANY RECOGNIZE THE NEED TO RECEIVE AND PROVIDE QUALITY DATA SERVICES, IF THEY WANT TO IMPROVE THE EFFICIENCY OF THEIR OPERATIONS. THESE FIRMS, HAVING BEEN HIT BY RECESSION IN THE EARLY 80'S, DO NOT HAVE SUFFICIENT INTERNAL MANPOWER TO OBTAIN/RECORD AND PROVIDE ALL THE INFORMATION CUSTOMERS NEED AND EXPECT. THIS INFORMATION IS USUALLY OBTAINABLE FROM RELATED LINKS IN THE TRANSPORT CHAIN.

IN THE MARINE INDUSTRY, WE ESTABLISHED SUCH A WORKING COMMITTEE EARLY LAST YEAR. WE HAVE AGREED ON THE FOLLOWING:

1. ON USING ONE OF THE EXISTING STANDARDS.
2. TO STRIVE TO USE THESE IN OUR EXTERNAL EDI COMMUNICATIONS.
3. TO MIGRATE TO EDIFACT AS THE UNITED NATIONS STANDARD COMES INTO BEING.
4. WE DECIDED TO USE ONLY ONE MESSAGE FORMAT INSTEAD OF SIMPLY REPLACING THE VARIOUS DOCUMENTS WITH MATCHING EDI MESSAGES.

5. TO DEVELOP EDI LINKS TO THE GOVERNMENT, PORT AUTHORITIES AND RAILWAYS WITH WHOM WE CURRENTLY COMMUNICATE ON PAPER.

DISCUSSIONS STARTED LAST YEAR HAVE LEAD TO AN AGREEMENT IN PRINCIPLE BY THE PARTIES INVOLVED THAT THE DATA THEY REQUIRE COULD BE OBTAINED FROM THE PROPOSED STANDARD. ADDITIONALLY OUR SUGGESTION THAT ONE GOVERNMENT CONTACT COULD CO-ORDINATE DATA TRANSFER TO ALL OTHER GOVERNMENT DEPARTMENTS WAS ACCEPTED.

OUT OF THIS A WORKING GROUP WAS FORMED EARLY THIS YEAR. THIS GROUP IS COMPRISED OF MEMBERS OF THE MARINE INDUSTRY, CANADA CUSTOMS, BOTH CN AND CP RAIL, AS WELL AS CANSIF, TO REVIEW THE PROPOSED EDI STANDARD TO ENSURE EVERYONE'S NEEDS ARE MET BEFORE DATA EXCHANGES START.

THIS GROUP WILL ALSO BE MAKING RECOMMENDATIONS TO THE VARIOUS CANADIAN STANDARD ASSOCIATIONS FOR REVIEW AND INCLUSION IN THE UNITED NATIONS STANDARDS CURRENTLY BEING DEVELOPED. THIS ACTIVITY IS ONLY A SEGMENT OF WHAT MUST BE PART OF OUR OVERALL EFFORT TO KEEP OUR INTERMODAL OPERATIONS RESPONSIVE TO CHANGING ROUTING AND TRADE PRACTICES.

THE MAIN EFFORT IN DEVELOPING AN EDI ENVIRONMENT IS NOT TECHNICAL OR STANDARDS. THESE BASICALLY EXIST NOW. IF WE WAIT FOR THE BIRTH OF WORLD-WIDE INTERNATIONAL EDI STANDARDS BEFORE USING EDI IN CANADA, WE WILL BE TOO LATE.

....7/

FROM A PHYSICAL DISTRIBUTION VIEW POINT, CANADIAN PORTS AND OUR RELATED CARGO HANDLING INFRASTRUCTURES HAVE ADAPTED VERY WELL TO THE INTERMODAL AGE. THE KEY TO HOW WELL WE MAKE USE OF EDI IN OUR ACTIVITIES, DEPENDS ON HOW WELL, WE COLLECTIVELY RE-THINK AND MODIFY OUR TRADITIONAL ROLES, OUR REQUIREMENTS AND PROCEDURES. WE MUST MAXIMIZE OUR ABILITY TO USE EDI TRANSACTION DATA IN CANADA.

THIS WILL MEAN MODIFYING OUR INTERNALLY PERCEIVED RESPONSIBILITIES. AS WELL WE MUST ACTIVELY BECOME INVOLVED IN WORKING TO REMOVING EXISTING LEGAL AND REGULATORY BARRIERS WHICH CURRENTLY EXIST.

PERHAPS TOO MUCH EMPHASIS IS BEING PUT ON DEVELOPING NEW EDI STANDARDS AND NETWORKS. THESE GROW OUT OF NEEDS BUT - WE HAVE TO START USING EDI FIRST!

SO FAR, I HAVE ADDRESSED ONLY THE USE OF EDI BY MAJOR ELEMENTS IN THE CARGO HANDLING CHAIN. THESE ARE THE HIGH VOLUME INTERMODAL LINKS. MOST OF THEM HAVE MAIN FRAME COMPUTERS AND DEDICATED NETWORKS. PLAYERS WHOSE CHIEF GOALS IN THIS AREA ARE TO COMMUNICATE HIGH VOLUMES OF DATA TO OTHER KEY GROUPS AS QUICKLY AS POSSIBLE, TO MINIMIZE LARGE AMOUNTS OF DATA TRANSCRIPTION, TO DECREASE POSSIBLE ERRORS, TO AVOIDING MISROUTINGS AND TRANSPORTATION DELAYS.

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ANOTHER AREA OF INTERMODAL EDI DEVELOPMENT DEALS WITH CUSTOMER INFORMATION SYSTEMS.

IN CANADA THIS ASPECT OF EDI IS STILL JUST IN ITS INFANCY.

MOST TRANSPORTATION COMPANIES HAVE OR ARE DEVELOPING THEIR OWN UNIQUE "CUSTOMIZED" EDI CUSTOMER SERVICE SYSTEMS.

SUCH SYSTEMS CONSUME INTERNAL PROGRAMMING RESOURCES, AS EACH FIRM ATTEMPTS TO PROVIDE INFORMATION SYSTEMS WHICH THEY FEEL WILL MEET WHAT THEY PERCEIVE ARE "CUSTOMER NEEDS". THE MAJORITY OF THESE SYSTEMS ARE BEING DEVELOPED WITHOUT PRIOR CUSTOMER CONSULTATION.

WE WILL CONTINUALLY FIND OURSELVES HAVING TO PROVIDE AND MODIFY THESE SERVICE PACKAGES AS OUR COMPETITION COMES OUT WITH "NEW AND IMPROVED" EDI MODELS.

THIS DOMINO EFFECT WILL CONTINUE TO CONSUME MORE AND MORE OF OUR INTERNAL RESOURCES AS WE STRIVE TO KEEP UP WITH THE "PERCEIVED" MARKET. WE SHOULD INSTEAD CO-ORDINATE OUR ACTIVITIES BY GETTING CARRIERS AND CUSTOMERS TO WORK TOGETHER TO DEVELOP STANDARD EDI CARGO INFORMATION PACKAGES.

SUCH STANDARD PACKAGES WILL COME, EVENTUALLY! AS EVERYONE WILL REALIZE THAT WE CANNOT SEPARATELY AFFORD TO DEVELOP, MAINTAIN AND MODIFY SUCH SYSTEMS.

WE MAY ALSO FIND THAT SOME CUSTOMERS MAY BE WILLING TO PAY FOR SUCH ADDITIONAL "VALUE ADDED" EDI SERVICES .

IN OTHER PARTS OF THE WORLD, COMPANIES ARE BEGINNING TO IMPOSE PENALTIES ON THEIR CARGO HANDLING PARTNERS IF THEY ARE NOT USING EDI. THAT DAY IS FAST APPROACHING IN CANADA .

LIKE IT OR NOT, THE USE OF EDI IN CANADA IS GROWING AND WILL CONTINUE TO EXPAND. ITS USE, MISUSE OR NON-USE WILL BE A FACTOR IN DETERMINING THE CONTINUING VIABILITY OF CANADIAN INTERMODAL GATEWAYS.

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Presentation to the International Cargo Handling and Coordination Conference - Ottawa, February 2,1989

By: Curt Ketchum

Vice President

CANSIF Canada Enterprise Inc.

Intermodal Cargo Transportation and E.D.I.

.... strategic partners for the future

Thank you Dan.....

I must say it is a pleasure to be here to participate in this conference, especially considering the theme which is clearly most appropriate and a very exciting one for us as we look towards the future of the cargo transportation industry.

As we've heard from the speakers involved in the two panel sessions this morning, the concept of intermodalism brings with it many promises and challenges, and allows for unique partnerships to be formed.

I would like to speak to you for a few minutes this afternoon about another kind of partnership that I believe will launch intermodalism successfully into the future of transportation.... That is specifically INTERMODAL CARGO TRANSPORTATION AND EDI ..... STRATEGIC PARTNERS FOR THE FUTURE.

As we look around us, the cargo transportation industry has entered yet another era of rapid and dynamic change.

Much of the motivation for this change is driven by the evolution of innovations like distributive manufacturing, where component parts of finished products are manufactured in multiple locations, and by cost effective storage techniques such as the "Just In Time" inventory practice.

To try and keep up with the need for change, many transportation firms have begun to compete in an environment requiring them to tread the fine line of offering price and service sensitive products, while at the same time controlling their costs in an attempt to protect already marginal profits.

One of the rising stars of this new service and price sensitive age is intermodalism , where by design cargo moves freely between multi-modal transportation partners, across boundaries transparent to the consumer.

Intermodal innovations like the sea-air product which provides expedited movement of air carriage coupled with the lower costs of truck and ocean services will undoubtedly lead us into the next generation of cargo transportation.... but as discussed this morning not without some major challenges.

I believe that one of the largest challenges will be the need to address the crippling affect associated with paper based processes, which unless dealt with, will continue to plague the cargo transportation process right into the future of Intermodalism. Although in the past paper has been the backbone for the communication of cargo transportation related information, we are only now beginning to recognize some of the real evils associated with paper that are lurking in the shadows.

As the result of fairly recent industry studies, it is now realized that paper involved in the cargo transportation process carries with it heavy penalties in terms of the cost of doing business, as well as the ability to expedite movement of goods from origin to destination.

In fact, it has been identified that in some cases, the handling of paper documentation can generate up to 50% of total transportation costs, and often is the primary reason for cargo being unnecessarily delayed for days and even weeks, totally choking the transportation chain..... including the customer.

In order for transportation companies to successfully enter the new age involving services like intermodalism, a cost effective solution to the paper problem must be implemented... and quickly if we as an industry are to successfully evolve and take advantage of the benefits to be afforded by the new age of intermodalism.

I believe EDI as a strategic partner can greatly assist participants in the intermodal chain in facing the paper challenge.

For those of you who are not familiar with EDI or Electronic Data Interchange, EDI is best defined as the process where paper based transactions are replaced by the electronic communication of information between business partners in common or standardized formats.

I think it is important to realize that EDI is not a technological feat to be conquered, but more of a way to do effective business with a business tool that uses technology that has been around for quite some time.

By using EDI as a business tool, participants in the intermodal chain have an opportunity to realize considerable benefits by eliminating, to the greatest degree possible, the requirement for paper in the processing, handling and distribution of cargo.

Already identified benefits include:

- *An overall simplification of the processing of shipping information;*

- *Streamlining of the process time involving booking, cargo tracking, waybill and bill of lading data capture, customs clearance and invoicing;*

- *Customer service benefits through the reduction of errors in information handling and faster response times for customer requests and enquiries;*

- *Improved Cash Flow*

- *A decrease in general office overhead.*

- *An conservative estimate of real savings of at least 10-15% of total transportation costs.*

It all sounds pretty good doesn't it?

It certainly is, but there are a number of key issues that must be considered for EDI to be a strategic partner and play an effective role in the successful delivery of intermodalism.

To begin with, the success of the partnership will rely heavily on breaking down the current boundaries between trading partners that are mostly there because of incompatible business processes and documentation requirements. This can only be accomplished through cooperation between intermodal trading partners in clearly defining the way to do business using EDI as a business tool.

The process must be user-driven and national in scope. The pitfalls associated with regional developments dealing with proprietary standards are too large and costly. This has been demonstrated in many countries where proprietary developments have taken place in multiple locations, ultimately resulting in many participants having to pay the same development costs over and over again.

In defining the way to do business the issue of standards will play a prominent role. It is imperative that internationally accepted standards be used and supported to ensure nonproprietary services. This will not only ensure a broader base of users, but in the long term will also facilitate networking with other systems developed around the world.

Although standards currently exist as the result of valuable work carried out by various international organizations, many of the standards required for communications between multi-modal partners have yet to be developed.

I believe the work of defining and developing the multi-modal business relationships will be the determining factor for the successful and timely development of standards for global application.

Without taking away from the importance of standards, the single most important key area for EDI in intermodal transportation must be the implementation of practical solutions. I believe this can be best accomplished through the implementation of pilot programs to ensure effective development and growth of EDI services.

The pilot method allows you to approach the business problem in chewable chunks, addressing the real needs of the community in a fast tracked way, while learning what is necessary for roll out of complete services for the community. As we have learned at CANSIF Canada during our development of air and marine pilot services, this approach is well controlled, very economical and allows for hard deliverables in very short periods of time.

Above all the pilot approach allows you to Keep It Simple, after all the whole concept of EDI focuses on effective communication of information.

While approaching the business problem, we must not forget that services must be made available to all members of the transportation community, small, medium or large in size and regardless of their current level of automation.

It is essential the services provide firms of all sizes and requirements the ability to exchange information electronically using their existing technology, whether it is as simple as a personal computer or as sophisticated as a large mainframe system. For this reason, I believe the solution lies not in the creation of large data base infrastructures but to build on the strengths of existing communications networks and to use them as avenues for the communication of information message sets amongst participants.

In addition to being a practical solution, this approach contributes to an economical development and a fast tracked solution.

Now that I've provided you with some personal insight regarding the key areas that I believe are important in having EDI play a strategic partnership role in the development of Intermodalism, I'd like to focus on some of the Critical Success Factors that I believe should be realized by firms contemplating EDI as a business partner.

First and foremost, in order for EDI to be a successful partner in the intermodal process, it will take sincere commitment from senior management towards investing in the future.

Let us not forget ... the extent of dividends... are in most cases ...directly proportional to the level of investment.... in other words implementation of EDI is not a FREEBEE, but the more you put into it the more you will get out of it!

One can expect that an initial investment will be required in order to realize the benefits that we've identified. This will come in the areas of both capital and human resource investment..... In any event it will be a small price to pay when one considers the end benefits that are to be realized by those firms involved in EDI.

Absolutely critical to the whole endeavour is to ensure that the BUSINESS COMMUNITY , that is those firms involved in everyday business..... define the BUSINESS REQUIRMENTS .. not forgetting of course that EDI is a BUSINESS SOLUTION and not a technological feat

And speaking of technology, let's think about the technology that is available to us today, especially in Canada.... with Canada's prominent position in telecommunications and technology, as far as I'm concerned, the last thing one should consider is REINVENTING THE WHEEL or... THINKING THAT IT CAN'T BE DONE.

And finally, the ultimate objective for this strategic partnership must be to communicate using an effective solution to the paper documentation problem that is practical and not riddled with technological WIZARDRY or legal MUMBO JUMBO.....

Just as the invention of the structural container revolutionized the marine and air industries, I believe the potential for a strategic partnership between Intermodalism and Electronic Data Interchange will provide the Canadian cargo transportation community the catalyst to be on the leading edge of offering competitive services and products as we enter this new and exciting chapter in the continuing evolution of cargo transportation.

I'd like to thank you for allowing me the time today to share with you some of my thoughts on this exciting subject.

Jean Michel Tessier
President & CEO
Ports Canada

Presentation To

ICHCA Canada
1989 Shipper-Carrier Conference

Ottawa, Ontario, February 1-2, 1989

Summary Remarks

Good afternoon Ladies and Gentlemen. It gives me great pleasure to be able to participate in this important transportation event, ICHCA Canada's 1989 Shipper-Carrier Conference. I have attended many such ICHCA conferences, but I always look forward to the presentation and discussion of the latest concerns and developments related to cargo handling. As was promised early this morning, a lot of very valuable material on intermodalism has been covered. I think you would agree that the presentations have been very thought provoking and relevant to the many different areas of cargo handling we represent. Now it is time to reflect briefly on what has been said, and bring it together in a way that may be of greatest value as we go about our respective tasks. For this purpose, you have asked me to provide summary remarks. This will not be easy, however I see it as a worthwhile challenge which, with your help, I will gladly attempt.

It has been a long and productive day. Many of the areas we have talked about are ones which I am sure we would like to pursue further. But we have a reception and banquet yet to attend, and I do not want to detract from that, or what has been achieved. So I will structure my remarks as efficiently as I can.

Following a few general observations, I will deal briefly with: some of the promises and challenges offered by intermodalism; some of the opportunities for partnership; the role of EDI; and last but not least, the prospect of intermodalism being here to stay. I will do this in the order in which we have explored intermodalism today, and then add my concluding remarks.

INTRODUCTORY REMARKS

First, I want to make a few introductory remarks, particularly about the significance of the topic we have been addressing, and the important role being played by ICHCA, and ICHCA Canada in this area.

We are all aware of the many aspects of transportation which have required attention over the years, as it has evolved to its present state, especially in the industrialized world. In the transportation of both people and goods, the objective of spanning physical distances safely and as timely as possible, has required much dedication and foresight from many individuals, businesses and organizations. The coordination of cargo handling, and the ongoing search for improvements in the overall process, have been major preoccupations of ICHCA. The sharing of

technological developments in cargo handling, among countries around the world, has contributed significantly to trade and economic advancement. I believe that the people who have served ICHCA in this major role can claim credit for much of the progress we have made. A disatisfaction with the status quo in transportation has been characteristic of most ICHCA participants that I know.

Intermodalism is the result of this constant search for improvements in transportation efficiency. Containerization was the result of looking for better ways to do things, and has been an important phase of intermodalism. So have the various technological improvements in rail and road transport vehicles, and the specialization of ocean going vessels. Similarly, major changes in berthing and the loading, discharging, and storage of cargo at ports and inland transfer points are part of the arrival of intermodalism as we know it today. ICHCA has been at the very core of all of these developments we have seen so far.

ICHCA Canada has struggled meticulously with cargo handling problems in Canada since its inception. I remember many of the people involved with ICHCA when containerization began in Canada in a very small way in the late sixties. I have known Wilf Danzinger for a long time

and know how much effort and thought he has put into intermodal transfer in Canada, especially in the movement of western goods to domestic and foreign markets. We watched Wilf succeed with his concept of an inland container terminal in Western Canada as a means of reducing the cost of transportation.

In Ports Canada we have always found ICHCA Canada to have a great deal of interest in what is happening at our ports, and willing to help explore problems on both the water side and land side in reducing vessel turn-around time. ICHCA Canada has tackled a broad range of issues including both those of general interest such as the competitiveness of the St. Lawrence-Great Lakes System, and the impact of transportation deregulation in the US and Canada on rail and road transport, as well as specific issues such as improvements to rail car technology in the handling of bulk commodities and containerized cargo. The ability to move western coal economically by rail to Ontario users has been a challenge of considerable interest to ICHCA Canada during recent years. There are many other regional and national problems which ICHCA Canada has addressed. In his opening remarks this morning, the Honourable Paul Dick, Minister of Supply and Services, acknowledged the significance of improved cargo handling

in Canada to our overall competitive position in world trade.

Now Hassan has taken over the responsibility of President. I will have more to say about this later, however I can assure you that having made this commitment, he will throw his energy and support behind the organization, with a strong sense of strategic purpose. The effort put into the planning of this conference is already a good example of his creativity and initiative in the area of cargo handling. I don't believe a more appropriate theme could have been picked at this time than Intermodalism.

Now I will proceed with some observations and summary remarks on the areas we have covered.

PROMISES AND CHALLENGES OF INTERMODALISM

Whatever our thoughts may have been about intermodalism at the start of this conference, I believe we should all be convinced now of both the promises and the challenges it offers as we move toward the 21st century. There is probably no other aspect of transportation and cargo handling which has disrupted as many existing patterns of relationship and interaction. Yet, few of us would disagree

that continued improvement in intermodal transfer of cargo is probably the single most promising option available to shippers in meeting todays competition in global markets. I believe that our first panel of speakers did an excellent job of bringing this out this morning.

I must acknowledge here the most distant traveller among our speakers, Vincent Champion of Cargo Systems, who came all the way from London, England to be our moderator for this first panel. I don't need to remind most of you of the close ties between Cargo Systems International and ICHCA. The knowledge and understanding of intermodalism gained from following trends in cargo handling was reflected in his introductory remarks, and I am sure, from any discussions you may have had with him during the day. As editor of Cargo Systems, he has day-to-day exposure to global develops in intermodal transportation. This serves him well in attempting comparison between Europe and North America. For those who nave not had an opportunity yet to see the most recent issue of Cargo Systems, the special feature on "Intermodal Europe" addresses new challenges in his part of the world, including the proposed new tunnel and the count-down to 1992 when full integration of the European Common Market is to be achieved.

Terminal Operator Perspective

In the discussion of what intermodalism has to offer, and the challenges to be met, I believe it was quite appropriate to begin with the views of a major private terminal operator. Being in the port business myself, of course, I have no great difficulty relating to the expectations which this key player has of intermodalism, and where he is prepared to make his contribution. In my view, Joe Dorto gave an excellent account of how the terminal operator in a large port adopts intermodalism as a way of life. While there are some obvious differences among terminal operators in terms of operating procedure and relationship with port authorities, the buck stops here at the port level in accommodating multi-modal transfer. Investment in modern intermodal cargo-handling equipment must be in step with changes in marine and surface transport technology, if terminal efficiency and attractiveness is to be maintained. Enhanced communication is equally important. Joe's prior experience with Sea-Land and the port authority, combined with direct responsibility now for terminal operations, gives him a good feel for the dynamics of intermodalism at the port level. Particularly for those of us involved with ports and terminals, this was a very informative presentation.

Freight Forwarders Perspective

There have been suggestions from some quarters that continued advancement in multi-modal transport may eventually wipe out the role of the freight forwarder. There may be some truth to this where sufficient vertical integration among large modal carriers would tend to envelope the function of the independent forwarder. As suggested however, this overlooks the traditional importance of the freight forwarder to the small and medium size shipper. In this and other respects, the forwarder can be expected to play a continuing key role in intermodalism, as Chris Gillespie is quick to point out.

Here is a player who has first hand knowledge of the implications of delays caused by documentation problems. As President of his own freight forwarding company, and President of the Canadian International Freight Forwarders Association, Chris Gillespie has fought rigorously for the streamlining of the cargo documentation process in Canada, and has argued strongly for the use of international standards in customs clearance. His account of the expectations of his sector of the cargo handling industry has provided an important dimension to our assessment of intermodalism.

Other Assessments and Comparisons

A review of intermodalism as it applies to cargo handling would not be complete without a sound overview of its growth and development in North America. This was accomplished in Mike Ircha's usual comprehensive fashion, as he reminded us of the broad picture of changes in transportation over the past few decades. His brief history of containerization, and the role of deregulation in intermodalism, provided some sound footing against which to compare advancements in Canada with those in the United States. While most of the strengths and weakness of the Canadian transportation and port system are familiar, some light was shed on more recent attempts to hold our own.

INTERMODALISM - PARTNERSHIP AT ITS BEST

We said earlier that Intermodalism has placed great pressure on many traditional relationships among players in the production and distribution world we know today. However, we have heard that Intermodalism has also created a greater need for partnership among the shippers, carriers, and other groups.

I still believe that in the port business, we see intermodalism from a unique perspective. As we have said in some of our older advertisements, the port is in the middle of transPORTation. I was pleased today that Dominic Taddeo, General Manager of the Montréal Port Corporation, was able to join us as moderator for our second panel. There is certainly no question that the Port of Montréal is in the middle of things. Intermodalism offers both threats and opportunities for this port, however current strategic plans for that port are designed with these developments in mind. This panel was very informative, covering Air, Trucking and Rail.

Air

We need to understand the workings of intermodalism as it affects all modes. The outline by Ken Grey, Canadian Airlines International, of developments within the air industry is important. In some respects, air transport has been subjected to greater intermodal pressures than any of the other modes. A certain amount of sophistication not yet fully shared by other modes has been the result of this additional pressure. More elaborate equipment scheduling and route planning adopted in the air industry will no doubt be adopted in other modes in the future.

As pointed out, the interchange of containerized cargo between air and sea has not progressed far to date because of equipment differences which have not yet been resolved. However, air-sea legs for higher value cargo has become increasingly attractive because of increased transit time on the air leg combined with lower cost on the sea leg. Major ports which have excellent surface transport connections to adjacent airport facilities can expect to benefit from this form of intermodalism in the future.

Trucking

Gone are the days when trucking was considered to have an economic range or radius from the city of less than five hundred miles. Especially since transportation deregulation, trucks are out to get their fair share of the action. Long-haul trucking is now competitive with many more rail routes than ever before. I can't think of anyone better qualified to give us the truckers view than Ralph Teoli of CP Trucks. A former CP Rail executive, Ralph has switched his allegiance to trucking. I believe his overview of the truckers response to intermodalism was excellent.

Rail

Rail of course has always been in the forefront of developments in intermodalism. Although much of the focus today is on whether or not we can or will eventually have double-stack trains in Canada, developments in container-on-flat-car (COFC), trailer-on-flat-car (TOFC), and other piggy-back arrangements were basic means by which intermodalism in Canada advanced. It is always good to hear from someone as knowledgeable about the rail industry as Al Gillies of CN.

The background to current difficulties in Canada in the introduction of double-stack rail service is familiar to most of us involved with cargo handling. However, it is also difficult to ignore the extremely attractive cost reductions experienced in the US through this technology. Fortunately, CN's commitment to continued experiment with limited double-stack is a serious one. I understand that almost literally as we speak, CN is in the process of officially inaugurating its first double-stack service between Vancouver and Toronto. I understand that is why Don Poirier is not with us today. There are also ongoing plans to introduce a limited service between Halifax and Montréal/Toronto at a later date.

THE ROLE OF EDI IN AN INTERMODAL AGE

Electronic Data Interchange (EDI) is a new business factor in transportation and cargo handling, but accommodates the growth of intermodalism. Its introduction in North America has taken different directions to date, but may be in for some streamlining, according to panelists concerned with the role of EDI in an age of intermodalism. The job of moderating for the three speakers on this panel was in the capable hands of Dan Hewitt, Port Information Systems, Department of Communications.

It is generally believed that EDI will do much to advance intermodalism in North America. However, as might be suspected, not all the players in intermodalism share the same view of how EDI should be introduced and used in the cargo handling environment. An interesting thing in particular about this panel was that it consisted of representatives from the different schools of thought. In Ports Canada we are playing a role in working closely with ports and other agencies in the development and introduction of appropriate international standards which hopefully will lead to the participation of our ports in a national system. Because of the long term implications of

EDI for our individual ports and the system, we are anxious to learn from projects which are presently underway.

Crescent (Port of New Orleans)

The Port of New Orleans is one of the leaders among US ports in the establishment of a regional EDI system. CRESCENT is an example of an existing service of a proprietary type. I believe that Jerrol gave an excellent overview of progress made in his port in the operation of this EDI project. Canadian ports have not reached that stage yet, so all comments were useful.

Container Line (ACL)

Ship owners and operators have much to lose from port delays caused by a lengthily cargo documentation process. The benefits of electronically clearing cargo in transit through a port, and of automatically tracing cargo location is well known. ACL is no exception to the potential loses suffered from paper burden. Mike Boyne of ACL was in a good position to give us an account of how things are done within the shipping line, and what his company is doing about EDI.

Cansif (Canadian EDI Agency)

As project manager of CANSIF, one of Canada's two developing EDI agencies, Curt Ketchum was able to pinpoint many of the foreseeable problems in Canada in providing EDI service. While we may have been expecting a strong sell for the CANSIF service in the future, what we got instead, I believe, was a well developed outline of the EDI concept and some very strong arguments for its application, in one form or another, as early as possible in the future. The benefits of EDI were clearly presented, but so were the challenges in terms of cost and senior management commitment. What you put in is what you take out.

The very significant potential cost savings were identified, up to 10-15%, and the need for simplicity and accessibility was stressed. Several advantages of the non-proprietary system were listed, the most significant of which appeared to be the avoidance of duplication in developmental costs.

INTERMODALISM - HERE TO STAY

After today, I don't believe anyone sees intermodalism as a passing fad. Considerable evidence has been given today

that intermodalism is indeed here to stay. The moderator for this panel was Frank Trotter of the transportation and Trade Group. Speakers consisted of representatives from a major US East Coast port, a consulting firm, and a Canadian shipping line. Frank is no stranger himself to intermodalism, having done numerous studies on rail line costing, the impact of deregulation and other transportation issues.

US East Coast Port

Coming from the largest North American port, New York/New Jersey, Lillian Liburdi is well qualified to talk about intermodalism. Her outline of expansions in the Port of New York/New Jersey to accommodate a greater level of intermodalism, was exciting and informative. This port has been striving to stay on the leading edge of the container industry, in one of the most competitive North American environments. It believes very strongly that intermodalism is here to stay, and plans to take full advantage of current developments. This is a port where air-sea has considerable potential, and attempts are being made to exploit them. We wish Lillian the best in her very challenging new role.

Consultant Observations

Joedy Cambridge of Leeper, Cambridge, & Campbell Inc was able to give a broad view of intermodalism, based on her extensive work with various modes of transportation and ports. Although much of her work is in the US, she has a strong perception of what is happening on the North American continent as a whole. She has demonstrated the importance of strategic planning in an intermodal environment.

Container Line (Cast)

Peter Keller, President and CEO of CAST North America (1963) Inc has had first hand experience in serving the US Midwest market, in competition with major US ports. Cast is a major beneficiary of transportation deregulation in the US, and also believes that intermodalism is here to stay. At the same time, there are ongoing challenges to the Port of Montréal, and of course to his business, as a sensitive point of operation. Continued advancement in road and rail transport could make US East Coast ports more competitive for US traffic presently going through Montréal. Peter has been one of our important contacts in our ongoing assessment of Ports Canada's competitive position with respect to container handling.

CONCLUDING REMARKS

What I believe all of this boils down to is that intermodalism promises, among other things, to bring about a degree of streamlining and efficiency in transportation that we could not have imagined possible only a few years ago. Everybody in the industry will be affected, and there will be many challenges to overcome. It will generate many more opportunities for partnership in the overall production and distribution process, many of which we can see taking shape now. EDI can be expected to play an increasing roll in the continued advancement of intermodalism, however the methodology by which it is applied will likely be streamlined to avoid excessive implementation costs and to retain international standards and accessibility to all forms of business. Also, intermodalism is definitely here to stay.

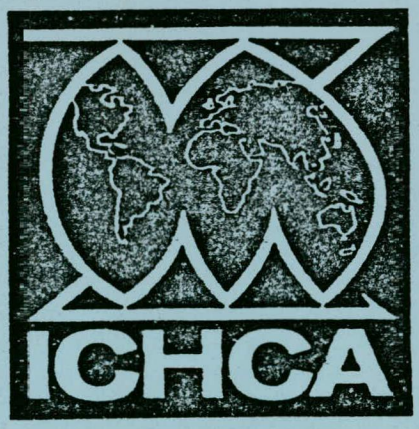
Intermodalism is a logical, cost-effective, time-saving transportation system which can be an integral factor in the facilitation of a nations international commerce. That is why it is worth striving for and is so essential to our national prosperity.

System implies synergy, in which total benefits from the system exceed those obtained by individual components of

the system. For the system to operate at maximum effectiveness, however, there must be complete cooperation, communication and adoption by each element of the system of common goals. Unilateral action by various members of the system can upset the balance of an intermodal system. An element of an intermodal system which is often overlooked, but which can have major ramifications if disrupted, is labour. We know that disruptive labour practices at a port can drive away port traffic because the traffic no longer flows freely through the system. The same of course could be said of a rail strike.

We must always remember that the transportation industry is not an end in itself. It is, instead, a vital support service whose major function is to facilitate the free flow of national and international trade. No wonder then we were able to conclude that intermodalism gives rise to greater partnership. It is good to know too, of course, that without transportation there would be no trade.

I don't want to take up more time. I believe we can all agree that this conference has been a major success as an additional source of information and contact. Please join me in thanking Hassan and all those who made it possible. Thank you again. See you at the banquet tonight.



CANADA

International Cargo Handling Co-ordination Association
Conference

Intermodalism Comes of Age

BIOGRAPHIES

February 1-2, 1989
Westin Hotel
Ottawa, Canada

Opening Session

Hassan J. Ansary, Ph.D.

Executive Vice President,
Canada Ports Corporation

Dr. Hassan Ansary is the Executive Vice President of Canada Ports Corporation. He is responsible for all commercial and technical activities of the Corporation including strategic planning, marketing, economic studies, engineering and EDI.

Prior to his appointment as the Executive Vice President, Hassan was, respectively, Vice President, Corporate Services, and Director of Corporate Development. Before joining Ports Canada, Dr. Ansary worked at two prominent Canadian corporations, Polysar and Domtar.

Hassan is the past Chairman of the Canadian Port Development Forum. He is also Vice-Chairman of the Planning and Research Committee of the American Association of Port Authorities and President of ICHCA - Canada. Dr. Ansary is Editor-in-Chief of *Portus*, the Ports Canada Quarterly.

His Worship James A. Durrell

Mayor of the City of Ottawa

Mayor Durrell entered politics in 1980 when he was elected Alderman for the Riverside ward. He was re-elected in this capacity in 1982 and elected Mayor of the City of Ottawa in 1985. He was re-elected as Mayor in 1988 and has been active as Chairman, Co-chairman or Executive member of various City and Regional Committees of great importance to this area.

Mayor Durrell was born in 1946, and completed his highschool and university education, receiving his Bachelor of Commerce from Acadia University in 1968. Outside his commitment to politics, he has spent 17 years with the London Life Insurance Company in the capacity of Regional Manager for Eastern Ontario.

Mayor Durrell's extensive civic and community involvement has kept him active on Boards of Trustees, Commissions, Associations, Institutes, Clubs and other organizations, too numerous to mention here. Needless to say, his relentless efforts to have Ottawa assume its role as a great world capital in the 21st century has been paying significant dividends. His quest for the 1994 Commonwealth Games is but one example of his attempts to create a separate identity for Ottawa with a distinct character, in addition to its role as a seat of government.

The Honourable Paul W. Dick, P.C., M.P.

Minister of Supply and Services

Mr. Dick was born at Kapuskasing, Ontario, on October 27th, 1940.

Educated in Ontario and New Brunswick, he received a Bachelor of Arts degree in Economics from the University of Western Ontario, and a Bachelor of Law degree from the University of New Brunswick.

From 1965-1967, he served in various capacities with the Progressive Conservative party as a student. He was President of the PC Club of the University of New Brunswick in 1965-1966, the National Vice-President of the PC Student Federation of Canada in 1966-1967, and a member of the National Executive of the PC Party of Canada.

Following University and overseas travel, from 1969-1972, Mr. Dick was the Assistant Crown Attorney for the County of Carleton, Ontario. Returning to private practice in 1972, he subsequently became the senior partner in the law firm of Dick and Nichols.

He was first elected the Member of Parliament for Lanark-Renfrew-Carleton in 1972 and was re-elected in 1974, 1979, 1980 and 1984. From 1974-1978, Mr. Dick was Chairman of the Federal Ontario PC Caucus; from 1976 to 1979, he served as the Federal PC spokesman on youth issues; and in 1980 was appointed Queen's Counsel.

In 1983, Mr. Dick became Deputy Opposition House Leader. He has also served as a member of the Standing Committee on Justice and Legal Affairs; on the Standing Committee on Finance, Trade and Economic Affairs; Privileges and Elections and Regional Economic Expansion.

In November of 1984, Mr. Dick was appointed Parliamentary Secretary to the Government House Leader and President of the Queen's Privy Council of Canada, and in 1985, he was appointed Parliamentary Secretary to the President of the Treasury Board.

Mr. Dick was appointed to the Federal Cabinet portfolio of Associate Minister of National Defence on June 30th, 1986, and on January 30th, 1989, he was appointed Minister of Supply and Services.

Mr. Dick is married to the former Judith Parish of Westmount, Quebec. They have twin sons.

Session I

Promises and Challenges of Intermodalism

Joseph A. Dorto

Deputy General Manager
Virginia International Terminals Inc.

Joseph Dorto is a native of New York City where he was born in 1950 and attended Queens College, majoring in marketing. He is also a graduate of the American Management Association Management School.

Prior to his Association with Virginia Terminals, Mr. Dorto has held various operational and sales managerial positions with Sea-Land Service, Inc. during 1969-1979. He was also Director of Trade Development, Virginia Port Authority during 1979-1981 where he was responsible for worldwide marketing. He was appointed Senior Managing Director of Marketing for the Port Authority in 1981. During his career with the port, traffic almost doubled to 5 million tonnes in 1986.

Mr. Dorto joined Virginia International Terminals in 1986 as Director, International Marketing, and the following year was named Deputy General Manager. His responsibilities include all facets of terminal operations. He was appointed to the Virginia International Trade Commission by Governor Gerald Baliles in 1987.

Mr. Dorto has been the recipient of several awards for his commitment to port and transportation improvements, including the "Outstanding and Dedicated Service Award" from the Society of Maritime Industries, and the "Commerce Builder Award" for his contribution to trade through Hampton Roads ports.

Christopher J. Gillespie

President
Gillespie-Munro Limited

Christopher (Chris) J. Gillespie was born in Quebec City on April 21, 1949 and very soon after moved to the City of Montreal where he pursued his formal education. He graduated in 1971 from Sir George Williams University with a Bachelor of Science.

During his summers as a university student, he occupied various positions within the family business and immediately after his graduation assumed full-time employment with Gillespie-Munro Limited. During this time, he gained practical experience in every department of the company and developed a thorough and detailed background in international freight forwarding, including activities in overseas projects, charter broking, marine insurance, export packaging, warehousing, consolidation/deconsolidation and air freight, to name only a few.

In 1979, after having served as its general manager and vice-president, he assumed the post of the company's president.

Chris was also president of The Grunt Club (Montreal's Marine Fraternity) during the period of 1985/1986, and is currently the National president of the Canadian International Freight Forwarders Association, Inc. (CIFFA). It is in this framework that he and his fellow forwarding colleagues have, in recent years, made significant strides to professionalize the industry.

He enjoys all outdoor sports, in particular skiing, hunting and fishing.

Michael C. Ircha

Professor of Civil Engineering
University of New Brunswick

Michael Ircha is a Professor of Civil Engineering and a member of the Transportation Group at the University of New Brunswick. Professor Ircha has graduate degrees in Urban Planning and Public Administration. He recently spent a year as Visiting Professor at the Department of Maritime Studies at U.W.I.S.T. in Cardiff.

Along with his research in planning, engineering and administration, Professor Ircha has undertaken a number of research projects relating to marine transportation and ports. These include evaluating the impact of free trade and regulatory reform on transportation in the Maritimes, reviewing Canada Ports Corporation's Competitive Ports Study, and an in-depth analysis of traffic at the port of Saint John. In addition to numerous publications in his other areas of interest, Professor Ircha has published several marine transportation articles in *Portus* and, most recently, in *Canadian Public Administration.*

Session II

Intermodalism - Partnership at its Best

Dominic J. Taddeo

General Manager and Chief Executive Officer
Port of Montreal

Mr. Taddeo was born in Montreal on March 21, 1939, and obtained his Bachelor of Commerce degree, majoring in Finance and Economics, from Loyola College in 1959

After graduation, he joined Thorne, Riddell & Co. as an Internal Auditor. In August 1966, he moved to Pratt and Whitney Aircraft of Canada Ltd. as Senior Internal Auditor and was appointed Chief Accountant in December 1967.

In February 1971, he joined McLean Kennedy Ltd., steamship agents, brokers and terminal managers, as Assistant Treasurer and was appointed Comptroller on January 1, 1971.

In September 1974, he joined the Port of Montreal as Director of Finance, and on December 31, 1979, he was appointed Director of Finance and Administration. He became Director of Operations on July 11, 1983, Deputy General Manager and Chief Executive Officer on October 25, 1983, and General Manager and Chief Executive Officer on March 30, 1984.

In 1976, Mr. Taddeo became an active member of the Canadian Port and Harbour Association, serving on the Port Pricing and Marketing Committee. He was elected President of the Association in September 1982. As Past President, he remains active with the Association, serving on the Past Presidents' Committee.

Mr. Taddeo is also an active member of the American Association of Port Authorities since 1976, having served on various committees. He has been a Director of the AAPA since September 1983 and was appointed to its Executive Committee in September 1985. He was elected AAPA Chairman, Canadian Delegation, in September 1988.

Since May 1985, Mr. Taddeo has been one of the two Canadian Directors of the International Association of Ports and harbours, and a member of its Executive Committee since 1986. He also serves on the Finance Committee of the Association.

Mr. Taddeo is a past Vice-President of La Commission Scolaire Baldwin-Cartier.

Kenneth Earl Gray

Vice President, Cargo
Canadian Airlines International

Mr. Gray joined Pacific Western Airlines in 1959 and served in a Management role in Inuvik, Yellowknife, Fort Smith, and Edmonton from 1959 through 1967. Relocating to Vancouver in 1967, he assumed responsibility for the Charter Department, and the development and operation of the Systems Operations Central Centre, prior to locating to Calgary in 1977. Mr. Gray was appointed Vice President, Contract and Charter in February, 1978, and Regional Vice President in March, 1979 responsible for Alberta - Saskatchewan - Yukon and Northwest Territories based in Edmonton. In February, 1987, Mr. Gray was appointed to his present position of Vice President, Cargo located in Calgary.

Mr. Gray served for many years as Chairman and Director of the Northern Air Transport Association, and is presently Chairman of CANSIF Canada Enterprise Inc.

Mr. Gray was born and educated in Calgary, Alberta and is a graduate of the Banff School of Advanced Management.

Ralph A. Teoli

President and Chief Executive Officer
CP Trucks

Ralph A. Teoli was born in 1941 in Montreal where he attended McGill University for his Bachelor of Engineering and M.B.A. degrees.

Prior to joining CP, Mr. Teoli was Assistant Engineer with Canadian National for two years and Manager of Traffic Planning and Analysis for Consolidated Bathurst for three years.

Since joining CP in 1965, he has had broad exposure to most operational and management functions related to marketing and sales. Positions which he has held include Director, Equipment Planning (1971-1972), Manager, Market Development (1972-1976), General Manager, Marketing & Sales (1976-1978), General Manager, Intermodal (1978-1981), Assistant Vice President, Intermodal (1981-1987), and Vice President, Marketing & Sales (1987-1988). He took over the responsibilities of President & CEO of CP Trucks last year.

Mr. Teoli has memberships and directorships in various transportation and trade related companies, clubs and associations, including the Montreal and Toronto Traffic Club, the Roads & Transportation Association of Canada (RTAC) and Brunterm, the container terminal operating arm of CP in Saint John, New Brunswick.

Mr. Teoli is married with two children and is a dedicated member of the Mayfair Squash and Raquet Club.

A.J. Gillies

Vice President, Intermodal
CN

Albert J. Gillies was born and educated in Verdun, Quebec. He attended McGill University, receiving a Bachelor of Electrical Engineering in 1958 and an M.B.A. in 1961.

He joined Canadian National in Montreal, Quebec, as an electrical apprentice in 1951, taking a leave of absence to complete his education. He subsequently held various engineering positions in the Equipment Department and in Research and Development. He then moved to the Marketing Department in Toronto, Ontario, and managed Market Development, Sales and Service Groups.

Mr. Gillies was then promoted to general management positions in Operations in Moncton, New Brunswick, and Toronto, as well as in Montreal as Assistant Vice-President — Intermodal, before the appointment to his present position of Vice-President, Intermodal, in Montreal.

He has system-wide responsibility for managing the Marketing and Operation activities of the Intermodal segment of CN's business.

Mr. Gillies is married and has four children and a grandson.

He is a member of the Professional Engineers of Ontario, Professional Engineers of Canada, Engineers Club, Kanawaki Golf Club, Toronto Board of Trade, Montreal Board of Trade, Transportation Clubs in Montreal and Toronto. M.A.A.A. and Mt. Stevens Club.

Session III

The Role of EDI in an Intermodal Age

Dan Hewitt

Project Director, National Office,
Port Information Systems
Communications Canada

Mr. Hewitt graduated from the University of Manitoba in 1976. Following graduation, his experience in the private sector led to the position of Manager of a textile factory in Perth, Ontario. He has since held several middle management positions in Canada Customs dealing with computer systems design and implementation.

Prior to joining the Department of Communications, he was responsible for the design of major components of the Customs Commercial system including CADEX, Customs' first EDI system. He held the position of Chief, Design and Development for Customs Commercial System Task Force, Department of National Revenue, Customs and Excise.

Since joining Communications, Mr. Hewitt has assumed responsibility for coordinating private sector activity in developing compatible port information systems. He is currently Project Director, National Office, Port Information Systems for the Department.

In his present capacity, Mr. Hewitt is a participating member of the Public Service Career Assignment Program (CAP). He is married, with three children and enjoys several recreational activities in the National Capital Region.

Jerrol Larrieu

Director, Management Information Services
Board of Commissioners of the Port of New Orleans

Jerrol Larrieu joined the Port of New Orleans as Head of Data Processing and to manage the Port's Community Cargo Release Automation Project knows as CRESCENT.

Prior to joining the Port, Mr. Larrieu was a consultant for McDonnell Douglas Corporation and was assigned to work on the Port's CRESCENT project. For five years, Mr. Larrieu worked as a senior consultant for the General Electric Co. in Atlanta, Houston and New Orleans. For over ten years, he was Director of M.I.S. for the New Orleans based Ingram Corporation. Mr. Larrieu was also with Chrysler Corporation, Space Division, for two years and TRW Systems Inc. for three years.

Mr. Larrieu holds membership in a number of organizations including the U.S. Customs Electronic Systems Advisory Committee (CESAC), The Data Coordination Committee (TDCC) and National Committee on International Trade Documentation (NCITD). He is also Chairman of the AAPA Customs Facilitations Committee.

Michael A. Boyne

General Traffic Manager
ACL Canada Inc.

Michael Boyne has been in his current position for five years (1984-1989), having worked for ACL in various positions and locations for the past 19 years.

As User/Management Information Systems co-ordinator, he is responsible for all user areas (Marketing/Sales, Documentation, Claims, Technical, Logistics and Finance). Mr. Boyne is a Member of ACL Canada Inc's Executive Committee.

He is a Member of ACL Canada Inc's Data Processing Steering Committee and representative for the shipping industry. Mr. Boyne is also Chairman of the EDI Committee for the Shipping Federation of Canada, and is a member of several Standing Committees, such as Rail, Customs, Hazardous Goods, which serve the inter-shipping lines, agencies, etc., in Eastern Canada.

Curtis (Curt) C. Ketchum

Vice President
CANSIF Canada Enterprise Inc.

As Vice President of CANSIF Canada Enterprise Inc., Mr. Ketchum is responsible for the development and management of CANSIF business services. CANSIF Canada is a joint venture corporation backed by national and regional transportation companies with a mandate to develop a national multi-modal Electronic Data Interchange service for Canadian cargo transportation.

Mr. Ketchum has twelve years of management experience in the transportation sector gained through work with Canadian Pacific/Canadian Airlines, where prior to CANSIF, he was responsible for the worldwide marketing of Canadian Airline's cargo product.

As part of his marketing function, Mr. Ketchum was responsible for Canadian Airline's cargo automation development. In this area, he designed, developed and implemented successfully a "first of it's kind" airline cargo autorate system. He initiated and chaired a Canadian air community management group with the mandate to develop an EDI system for the Canadian Airline Community; and was a member of an international airline steering group which successfully developed and implemented a worldwide automated Industry Rates Information System. Mr. Ketchum held numerous positions on International Air Transport Association committees, and was a member of a Canadian Airlines Chairman's Task Force which had the mandate of building an airline model for the year 2000.

Mr. Ketchum is well-experienced in large project management and transportation systems development. He has a broad range of experience in the negotiation and establishment of airline industry standards for electronic communication of data, and has diversified skills and experience in marketing, project planning, negotiating, strategic planning, advertising, pricing and transportation regulatory affairs.

He has written numerous transportation papers and articles and has been guest speaker at industry forums and universities on several occasions.

Session IV

Intermodalism - Here to Stay

Frank Trotter

President,
The Trade & Transportation Group

Mr. Frank Trotter is President of the Trade and Transportation Group, a firm of economic consultants specializing in the costing of transportation services. He is the author of many studies on railway service in Canada including grain, coal and intermodal traffic.

Mr. Trotter has undertaken economic analysis of port and marine services in Canada and has appeared as an expert witness in a variety of regulatory proceedings and arbitrations throughout Canada.

He holds many industry association positions including: President, National Transportation Week 1989 and Secretary, Canadian Transportation Research Forum, of which he is a former President.

As an active participant in a wide range of transportation matters, he holds the designation Member of the Chartered Institute of Transport and has been a strong supporter of ICHCA Shipper-Carrier conferences for several years.

Lillian Liburdi

Director, Port Development
The Port Authority of New York/New Jersey

Lillian C. Liburdi, Director of the Port Department, is responsible for the promotion, protection, and development of the Port of New York/New Jersey through the planning, construction, and operation of the Port Authority's marine terminals in Elizabeth, N.J.; Newark, N.J.; Brooklyn, N.Y.; and Staten Island, N.Y.; the New York City Passenger Ship Terminal in Manhattan; and the Erie Basin Fishport in Brooklyn, N.Y. She directs all facility operations and maintenance including liaision with port related unions and tenant operations.

With the Port Authority, Mrs. Liburdi has held positions as Director, Management and Budget Department; Assistant Director, Aviation Department; and various positions in the Rail Transportation and Terminals Department. She also served with the U.S. Department of Transportation as Deputy Administrator, and previous to that, as Associate Administrator of the Urban Mass Transportation Administration.

Currently, Mrs. Liburdi is a Board Member of the American Association of Port Authorities, Seamen's Church Institute, and the Maritime Association of the Port of New York-New Jersey. She is immediate past president of the Women's Transportation Seminar, a 2,000 member professional association, and is a member of numerous other transportation and port related organizations.

Mrs. Liburdi obtained her Master of Science degree in Civil Engineering/Transportation Management from Manhattan College and a Bachelors Degree in Political Science from American University.

Joedy W. Cambridge

Executive Vice President
Leeper, Cambridge & Campbell, Inc.

Joedy Cambridge is Principal and Executive Vice President of Leeper, Cambridge & Campbell, Inc., a transportation and economic research consulting firm headquartered in Alexandria, Virginia. In 1988, she also served as the National President of the Transportation Research Forum.

Ms. Cambridge has over fifteen years of experience in a wide range of transportation, trade and industrial development projects. She has directed a variety of projects focussing on areas such as the feasibility of port, airport, and industrial development projects; large-scale data collection efforts and analyses relating to commodity and passenger flows; analyses of port and airport facilities, services, and security matters; and extensive market evaluations. Current projects involve an economic evaluation of efficiency measures proposed for the Upper Mississippi River System; market analyses for automated terminal facilities; and examination of potential markets and applications for cargo screening facilities.

Ms. Cambridge currently serves on two committees of the Transportation Research Board, and has been involved in the American Association of Port Authorities, the National Association of Foreign-Trade Zones, the Women's Transportation Seminar, the Foreign Trade Data Users Group and other professional organizations. She holds an MBA from The George Washington University, a BA from Macalester College and has done post-graduate work at the Transportation Centre of Northwestern University.

Peter I. Keller

President and Chief Executive Officer
Cast North America (1983) Inc.

Born in Munich, Germany, Mr. Keller was raised on Long Island, N.Y. and attended Lehigh University, Bethlehem, Pennsylvania.

He served as a Captain in the U.S. Army Transportation Corps stationed in West Germany.

Mr. Keller was associated with Sea-Land service for 14 years. During that time, he held a number of operating, marketing, corporate staff, and executive positions in both North America and Europe.

Mr. Keller is a past director of the Equipment Interchange Association, North Atlantic Ports Association and the Transportation Data Coordinating Committee. He currently serves on the Board of EDI, Canada.

Since late 1982, Mr. Keller has been President and Chief Executive Officer of Cast North America. In his capacity of Senior Executive in North America, he is accountable for all Cast activities and subsidiaries including Cast Agencies, Cast Trucking, Cast Terminals and St. Lawrence Stevedoring.

Conference Wrap-Up

Jean Michel Tessier

President and Chief Executive Officer
Canada Ports Corporation

Mr. Tessier completed his master's degree in business administration at Laval University and port-graduate studies in marketing and transportation at the Universities of Sherbrooke and British Columbia.

After serving Canadian Pacific over an eleven-year period in logistics, transportation and marketing, Mr. Tessier joined the administration of the Port of Québec as Director of Marketing, Planning and Development in 1977. He continued his career in 1981 at the national office of the Canada Ports Corporation in Ottawa, directing marketing, planning and development on the national level. In 1985, he was appointed General Manager and Chief Executive Officer of the Port of Québec Corporation.

Mr. Tessier has also taught transportation and marketing at several universities.

On July 27, 1987, Mr. Tessier was appointed President and Chief Executive Officer of Canada Ports Corporation.

The Honourable Thomas M.T. Niles

The U.S. Ambassador to Canada

Ambassador Thomas M.T. Niles was born in Lexington, Kentucky on September 22, 1939. He received his Bachelor of Arts degree from Harvard University in 1960 (magna cum laude) and a Master of Arts degree from the University of Kentucky in 1962.

The Ambassador joined the Foreign Service in February 1962. His first overseas posts included Belgrade and Moscow; from August 1971-October 1973, he served as Political Officer at the U.S. Mission to NATO in Brussels. From November 1973-July 1976, he was the Director of Commercial Affairs at the U.S. Embassy in Moscow. In 1976, Ambassador Niles returned to Washington to attend the National War College. From July 1977 until summer 1985, he held various high-level positions in the Department of State: 1977-79, as Deputy-Director for United Nations Affairs in the Bureau of International Organizations; 1979-81, as Deputy Assistant Secretary for European and Canadian Affairs. From 1981-83, Mr. Niles' responsibilities included U.S.-Canadian relations.

Mr. Niles was nominated as Ambassador to Canada by President Ronald Reagan on July 9, 1985. His nomination was confirmed by the U.S. Senate on July 31, 1985, and he was sworn in on August 13, 1985. The Ambassador arrived in Ottawa on September 9 and presented his credentials to Governor-General Jeanne Sauvé on Tuesday, September 10, 1985.

Ambassador Niles speaks French, Russian, German and Serbo-Oroatian. He is married to Carroll Ehringhaus of Charlotte, North Carolina. They have two children: a son John and a daughter Mary.

Conference Banquet

CANADA

International Cargo Handling Co-ordination Association
Conference

Intermodalism Comes of Age

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