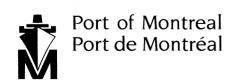


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Ports & Harbors April, 1994 Vol. 39 No. 3

Ports Harbors

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Comisión de Promoción de la Inversión Privada **COPRI**

The Government of Peru

through

The Special Committee for the Promotion of Private Investment in Puerto de Ilo

invites interested parties to participate in an

International Public Tender for the Concession of the Maritime Terminal

Puerto de Ilo

Expected Tender Date: June 17, 1994

The Information Memorandum will be available as of April 4, 1994 at: (upon signing a confidentiality agreement)

Cepri - Puerto de Ilo Calle Uno Oeste s/n - CORPAC Edif. Ministerio de Industrias Piso 17, Lima 27 - Peru Tel: 51.14.414331 Fax:51.14.414331 Attn: Arturo Ramirez

Recipients of the information memorandum will be invited to purchase the Public Tender Documents ("Bases de Licitacion")

For further information please contact the CEPRI Puerto de Ilo or its Financial Advisers:

ABN AMRO Bank Tel: 31.20.6282984/6287713 Attn: Hubert Willems Amsterdam Prisma Inversiones y Finanzas S.A. Tel: 51.14.417635/429388/221470 Attn: Humberto Guillen Lima

March 1994

IAPH ANNOUNCEMENTS AND NEWS

New Appointments

Mr. David Jeffery of London New Exco Member



President Carmen Lunetta has appointed Mr. David J. Jeffery, Chief Executive Officer, the Port of London Authority, to serve on the IAPH Executive Committee. At the Sydney Conference last year, where the membership of Exco was enlarged, 8 out of 9 Appointive Exco Members were named, with a vacancy to be filled by someone from the Africa/Europe region.

It was opportune for President Lunetta to appoint Mr. Jeferry as an Exco member through the regional caucus on the occasion of the recent gathering of IAPH African and European members, organized by Mr. Jean Smagghe in Paris on February 24 and 25, 1994.

Mr. Jeffery is already well-known within IAPH as an activist, who chairs the Trade Facilitation Committee and represents IAPH at the IMO Working Group on Ship/Port Interface. He is also responsible for the promotion and organization of the 20th World Ports Conference of IAPH, to be held in London in 1997.

With the addition of Mr. Jeffery to the Exco as an Appointive member, at the moment there is one more vacancy in the Exco to be filled by someone from the American region through election by the Board.

Mr. Rahmatullah of ESCAP, a Special Adviser to Human Resources Committee



Mr. M. Rahmatullah, Chief, Transport, Communications and Tourism Division, the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), has agreed to serve as a "Special Adviser" to the IAPH Committee on Human Resources (chair: Goon Kok Loon, Deputy Executive Director, Port of Singapore Authority), succeeding Mr. David L. Turner, Mr. Rahmatullah's predecessor at ESCAP.

IAPH Mid-term Copenhagen Meetings 29 May - 3 June 1994

On 1, March 1994, the host port secretariat in Copenhagen and Mr. R. Kondoh from the Tokyo Head Office, who was visiting Europe to attend a regional meeting of IAPH members called by Mr. Smagghe in Paris on February 24 and 25, had a preliminary meeting with Mr. Erik Schäfer and Mr. Carl Veng at the Port of Copenhagen to discuss the preparations for the forthcoming mid-term meetings of Exco and the other Committees. As a result, it was confirmed that the mid-term meetings will take place in accordance with the following schedule:

Schedules (as of March 8, 1994)

Sunday, 29 May

Arrival of IAPH members, staff and guests

1200/1730	Registration/Information Desk at Admiral Hotel
1300	Departure on board vessel alongside Admiral Hotel for tour of Port of Copenhagen for early arrivals, including light lunch and visit to old Sea Fortress (Casual Attire)
1700	Return to Admiral Hotel
Evening	Free
Monday, S	
0800/1730	Registration/Information Desk at Admiral Hotel
0700/0900	Breakfast buffet
0000/1100	
0900/1100 0900/1100	Legal ProtectionRoom 2Port Planning & ConstructionRoom 3
0900/1100	Port Planning & ConstructionRoom 3Committees for Human and External Affairs (Coordinating Vice President Taddeo meets with chairpersons and their nominees)
0900/1100	Port Planning & ConstructionRoom 3Committees for Human and External Affairs (Coordinating Vice President Taddeo meets with chairpersons and their nominees) Room 4Human Resources: Goon Legal Protetion: Valls Port Comumities: TaddeoLunch at Admiral Hotel, hosted by Port of
0900/1100 1100/1200 1200/1400	Port Planning & Construction Room 3 Committees for Human and External Affairs (Coordinating Vice President Taddeo meets with chairpersons and their nominees) Room 4 Human Resources: Goon Legal Protetion: Valls Port Comumities: Taddeo Lunch at Admiral Hotel, hosted by Port of Copenhagen
0900/1100	Port Planning & ConstructionRoom 3Committees for Human and External Affairs (Coordinating Vice President Taddeo meets with chairpersons and their nominees) Room 4Human Resources: Goon Legal Protetion: Valls Port Comumities: TaddeoLunch at Admiral Hotel, hosted by Port of

	(continued)	Room 2
1600/1700	Committees for Trade Affairs	(Coordinating
	Vice President J. Smagghe mee	ets with chair-
	persons and their nominees)	Room 3/4
	Sea Trade: Liburdi	
	Ship Trends: Moulod	
	Combined Transport and	Distribution:
	Wennergren	
	Trade Facilitation: Jeffery	
1700/1800	"Get-together drinks" at Ac	lmiral Hotel,
·	hosted by Port of Copenhagen	,
Evening	Free	

SPOUSE PROGRAM:

Besides the ordinary program, spouses have the option of the following additional program:

Registration required at the Information Desk, Admiral Hotel

1130	Buses leave Admiral Hotel
1200	Lunch at Tivoli Gardens, hosted by Port of
	Copenhagen
1 4 2 0	

1430Buses return to Admiral Hotel

Tuesday, 31 May

- 0800/0900Information Desk at Admiral Hotel0700/0900Breakfast buffet
- 0800/0900 Constitution and By-Laws (Internal Committee) Room 2 0900/1100 Cargo Operations Port Building*
- 0900/1100Finance (Internal Committee)Room 31100/1200Committees for Port Affairs (Coordinating
Vice President R. Cooper and Coordinator
P Keenan meet with chairpersons and their
nominees)Room 3/4Port Planning & Construction: Ng
Dredging Task Force: Lee
Marine Operations: Watson
Port Safety & Environment: van der Kluit
Cargo Operations: Terpstra
- 1200/1300 Lunch at Admiral Hotel, hosted by Port of Copenhagen

1330/1600 Bull Session (to be attended by all delegates) Port Building*
 1630/1830 Technical Tour of the Port of Copenhagen (pre-registration required) Departure by vessel alongside Admiral Hotel
 1830/1900 "Get-together drinks" at Admiral Hotel, hosted by Port of Copenhagen

Evening Free

Wednesday, 1 June

0800/0900	Information Desk at Admiral Hotel
0700/0900	Breakfast buffet

0800/0900Constitution and By-Laws (Internal Committee)Room 20800/1100Port Planning & Construction
(reserve)Room 3

0900/1130 EXCO MEETING (Part One) Port Building*

- 1200
 Buses leave Admiral Hotel

 1230
 Lord Mayor's Reception at Copenhagen City

 Hall
 Busses return to Admiral Hotel

 1400
 Busses return to Admiral Hotel

 1430/1730
 EXCO MEETING (Part One continued)

 Port Building*
- 1800 Departure by vessel alongside Admiral Hotel
 1830 IAPH President's Reception at Royal Yacht Club
 2030 Optional bus transfer to TIVOLI GARDENS (midnight fireworks)
- Evening Free (on your own)

Thursday, 2 June

0800/0900	Information Desk at Admiral Hotel
0700/0900	Breakfast buffet
0900	Buses leave Admiral Hotel
	Castle Tour of North Sealand
	Visit to Hamlet's Castle "KRONBORG"
	Lunch at STORE KRO, the Royal Inn
	Visit to "FREDERIKSBORG CASTLE" at
	Hillerd, hosted by Port of Copenhagen
1700	Return to Admiral Hotel

Evening Free

Friday, 3 June

0800/0900	Information Desk at Admiral Hotel
0700/0845	Breakfast buffet

- 0900/1200EXCO (Part Two)Port Building*1200/1400Lunch at Admiral Hotel, hosted by Port of
Copenhagen
- 1415/1700
 EXCO MEETING (Part Two continued)

 Port Building*
- Evening Free

Meeting Room: 1 (IAPH Head Office Secretariat) Meeting Rooms: 2, 3 and 4 at Admiral Hotel *Boat leaves Admiral Hotel 15 minutes prior to meeting

Contacts:

Host port:	Mr. Erik Schafer, Managing Director
	Port of Copenhagen Authority
	Fax: 45 33 93 23 40
	Tel: 45 33 14 43 40
	P.O. Box 2083, DK-1013, Copenhagen K.
	Denmark
Venue:	Copenhagen Admiral Hotel
	Fax: 45 33 32 55 42
	Tel: 45 33 11 82 82
	Toldbodgade 24-28, DK-1253 Copenhagen
	K. Denmark

4 PORTS AND HARBORS April, 1994

Trade Facilitation Committee prepares Guidelines: Computer Technology Strategy

The Trade Facilitation Committee at its meeting held in November last year in New York discussed about the need for distribution of the Guidelines to IAPH members and for this purpose the document prepared by the Committee was supplied to our Head Office. Following Chairman Jeffery's report on the New York meeting which was featured in the previous issue, we cover the Guidelines in this issue.

Introduction

1. "Information" and communications are key to most businesses including ports. Effective utilization of these in most cases can only realistically be achieved through the use of modern computer technology. Ports are therefore very dependent on such technology, a dependency that is growing. The way it can be used by ports today is significantly different from a few years ago and is much more widespread. Many port functions are now highly dependent on it with requirements for access to information and facilities to process it ever growing. Ports like many businesses have been able to benefit from the desktop computer revolution.

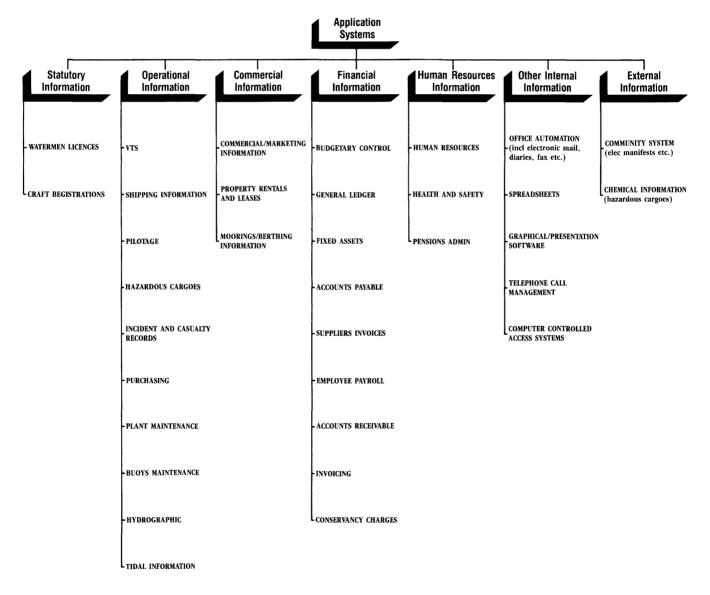
Strategy Preparation

2. In building strategies for utilisation of computer technology all ports need to start with an overall objective. Such an objective could be to:

hold in electronic form all information key to the port's business and make it available whenever and where required (subject to access rights) through a comprehensive electronic communications network.

3. Before embarking on the preparation of a strategy it is essential to take stock of the current use and investments in computer technology by the port since most ports already utilise computer technology in some shape or form. Many port offices now have personal computers (PCs) or computer

Port Computer Applications and Systems



terminals in them for effective day-to-day working. These are used for a multiplicity of tasks ranging from local processing of data to wordprocessing to accessing databases on larger minicomputers or even mainframes. The population of these desktop devices is growing rapidly.

4. To obtain the fullest utilisation of investments in computer technology a properly prepared strategy and carefully set standards are necessary to ensure that proper management control is achieved. The standards should aim to maintain compatibility and interoperability of software and hardware to ensure maximum portability of data and the widest sharing of information. The pitfalls encountered by many organizations by not properly controlling and managing their computer revolution and in particular that on the desktop can be avoided.

5. With the dramatic move of computing power to the desktop demands for access to data and for the movement of information has also grown. To meet these and future demands and also to prevent isolated pockets of information developing it will undoubtedly be necessary for the desktop devices, as well as the larger computers to be linked into a communications network. It is therefore important that computer technology strategies include electronic communications.

6. The applications and systems to which computer technology within a port are to be applied (see Appendix for sample list) must be identified, and the priorities/sequence for implementation set. Success is more likely if an evolutionary approach is taken rather than mass change.

7. Even when a strategy has been prepared the developments in computer technology must continue to be monitored and the port's strategies and plans adjusted accordingly even to the extent that the concepts and technology eventually used being different from that originally envisaged. Through flexible and controlled strategies and implementation processes newer technology can be used as it becomes available without abandoning existing investments.

8. Strategies should not concentrate on just the internal requirements of a port. They should be widened to target a port's interfaces and communications with external parties including customers, suppliers and port services. Port Community systems can potentially provide a ready made and cost effective communications gateway for ports to communicate electronically with many of its customers, suppliers, statutory bodies and other port services. As the capabilities of Community systems are expanded so the information they hold increasingly will include elements and facilities useful to the port itself (e.g. electronic manifests). 9. The principles adopted for computer technology including data communications can also be adopted for 'voice' com-The dividing line between computer and munications. telecommunications technologies is fast disappearing. Ultimately when the appropriate technologies become technically and economically available these will likely merge enabling effective and economic multi-purpose communications networks to be created for a port.

10. Developments in 'wireless' communications will also likely offer ports significant possibilities to extend and improve the automatic capture of real time information and make electronic access to port information from craft, plant and other mobile or remote locations including homes of employees both practical and economic.

Summary

11. Computer technology can have a significant influence

on the manner a port provides its service and meets its obligations and can also be a major contributor to the quality of its services. It can also influence the shape and size of a port's organisation, and on its working methods (e.g. home based working).

12. A port that has a sound computer technology infrastructure coupled with a property prepared flexible strategy has a sound foundation to enable it to take advantage of appropriate new technology as it becomes economically available. This will enable the port to be more effective and possibly more competitive. Such a comfortable position will not come about by accident nor necessarily by massive financial investment. It can only be achieved through the development and implementation of consistent but flexible technology policies and strategies, careful planning, prudent purchasing, effective monitoring of developments, and above all proper management control.

5 October 1993

IAPH Accounts for 1993 Audited

In line with past practice and in accordance with the provisions contained in the By-Laws, the auditing of the settlement of accounts for 1993 was conducted by the Certified Public Accountants of Chuo Audit Corporation (member firm of Coopers & Lybrand International) for three days from Febuary 7, 1994.

As a result, the Secretary General has received the CPA's statement from the auditor to the effect that financial conditions present fairly the results of transactions of IAPH for the year ended on December 31, 1993 and the financial conditions of the Association as of this date.

Concerning the General Account, among other matters, the following points were observed:

The balance of revenues and expenses for the term was in the red in the amount of \$1,055,000, as a result of the high value of the yen against other currencies. However, when the funds carried from the previous term were considered as well, an amount of \$229,665,000 was set to be carried to the next term.

The attainment of such a surplus, despite the chronic appreciation of the yen, can be attributed to these factors:

- There was a sizeable number of new members (particularly from the ports in Asia).
- Interest rates on the operating funds during the term were advantageous.
- Cost saving measures were constantly observed.
- Funds allocated for "strategic action projects" were not fully disbursed.

The Head Office Secretariat was preparing to report the result of the audit to the Officers and the Chairman of the Finance Committee before they meet in Copenhagen in late May this year, where the matters will be fully reviewed and discussed in order to plan financial strategies for the future term.

The IPD Fund: Contribution Report

Contributors

Contributions to the Special Fund For the Term of 1992 to 1994 (As of March 10, 1994)

Amount

(UISS)

Paid:	(US\$)
ABP (Associated British Ports), U.K.	3,000
Akatsuka, Dr. Yuzo, Univ. of Saitma, Japan	230
Akiyama, Mr. Toru, IAPH Secretary Genera	
Emeritus, Japan	1,000
Auckland, Ports of, Limited, New Zealand	500
Barcelona, Puerto Autonomo de, Spain	1,000
Bintulu Port SDN BHD, Malaysia	200
Cameroon National Ports Authority,	200
Cameroon	480
Cayman Islands, Port Authority of,	100
the Cayman Islands	250
Clydeport Ltd., U.K.	1,000
Constanta Port Administration, Romania	250
Copenhagen Authority, Port of, Denmark	1,000
Cotonou, Port Autonome de, Benin	100
Cyprus Ports Authority, Cyprus	1,000
Delfzijl/eemshaven, Port Authority of,	1,000
the Netherlands	350
de Vos, Dr. Fred, IAPH Life Supporting	550
Member, Canada	150
Dubai Ports Authority, U.A.E.	500
Dundee Port Authority, U.K.	250
Fiji, Ports Authority of, Fiji	100
Fraser River Harbour Commission, Canada	250
Fremantle Port Authority, Australia	250 250
Gambia Ports Authority, the Gambia	250 250
•	250 250
Ghana Ports and Harbors Authority, Ghana Hakata, Bort of (Fukuska City) Japan	
Hakata, Port of, (Fukuoka City) Japan	1,705
Halifax, Port of, Canada	250
Helsingborg, Port of, Sweden	500
Hiroshima Prefecture, Japan	523
Japan Academic Society for Port Affairs,	267
the, Japan Japan Carea Handling Machanization	267
Japan Cargo Handling Mechanization	250
Association, Japan	259
Japan Port and Harbor Association,	40.2
the, Japan	493
Japanese Shipowners' Association, the, Japan	
Johor Port Sdn. Bhd., Malaysia	500
Kawasaki, City of, Japan Klang Bast Authority, Malauria	1,702
Klang Port Authority, Malaysia	200
Korea Container Terminal Authority, Korea	100
KSC (Kuwait Oil Company), Kuwait	1,000
Kudo, Dr. Kazuo, Tokyo Denki University,	4 000
Japan London Authority Dont of U.K.	4,000
London Authority, Port of, U.K.	500
Maldives Ports Authority, Maldives	100
Marine and Harbours Agency of the Departme	
of Transport, South Australia, Australia Marine Department, Hong Kong	150
Maritime Department, Hong Kong Maritime Services Board of New South Wale	500
Australia	·
	367
Mauritius Marine Authority, Mauritius Melhourne Authority, Port of Australia	200
Melbourne Authority, Port of, Australia Miri Port Authority, Malaysia	1,000
want i oit Authority, Wianaysia	100

Montreal, Port of, Canada 500 Nagova Container Berth Co., Ltd., Japan 518 Nagova Port Authority, Japan 3,564 Nanaimo Harbour Commission, Canada 250 Napier, Port of, Limited, New Zealand 100 New York & New Jersey, Port Authority of, 1,000 U.S.A. Niigata, Port of, (Niigata Prefecture), Japan 860 274 Okubo, Mr. Kiichi, Japan Osaka Port Terminal Development Corp., 570 Japan Pacific Consultants International, Japan 243 Penta Ocean Construction Co., Ltd., Japan 500 Point Lisas Industrial Port Development Co. Ltd., 100 Trinidad *Primer Concurso Internacional de Memorias Portuarias: Carlos Armero Sisto, Anuario de Puertos: Buenos Aires, Argentina 300 **Public Port Corporation I, Indonesia** 180 Pusan East Container Terminal Co.Ltd., Korea 200 **Oubec**, Port of, Canada 250 Shipping Guides Limited, U.K. 500 Solomon Islands Ports Authority, Solomon 100 Islands South Carolina State Ports Authority, 1.000 U.S.A. Tauranga, Port of, New Zealand 500 254 Toyama Prefecture, Japan **UPACCIM** (French Ports Association), 1,905 France Vancouver, Port of, Canada 500 **Total: US\$41,460**

*1st International Contest of Port Annual Reports sponsored by the Yearbook of the Port of Buenos Aires (Editor, Mr. Carlos Armero Sisto)

Report by Bursary Recipient

on two seminars on Maritime and Port Structures, Institut Portuaire du Havre (IPER) 15 - 26 November, 1993

Eng. Luis Nataniel Monteiro Silva Chef de la Division d'Infrastructure Empresa Nacional de Administracao dos Portos (ENAPOR) **Cape Verde**

I had the privilege of participating in two seminars -"Conception and Construction of Breakwaters" and "Conception and Construction of Quays" - promoted by IPER and Ecole National des Ponts et Chauses, and financed by IAPH.

The main objective of these two seminars was to present new methods of calculating, conceiving and implementing maritime structures, namely quays and breakwaters, based on worldwide experience and advanced studies in this field.

The key point was to alert participating engineers about the costly classical technical mistakes which are frequently committed in projects and in the execution of maritime structures and to show the advantages and the reliability of the new methods and techniques.

In the first seminar, the following topics were dealt with:

- 1) Preliminary studies (soil, materials, and project wave);
- 2) Physical and mathematical models;
- Breakwaters' armour layers (hydraulic design, choice of armour units, methods of execution, maintenance, rehabilitation, pathology of structures);
- 4) Vertical breakwaters;
- 5) Study visits (according to the previous topics);
- 6) Utilization of geosynthetics;
- 7) Maintenance and preservation of structures; and
- 8) Criteria for choice of types of structures.

In the second seminar, the following topics were developed:

- 1) Preliminary studies and data collection;
- 2) Review of some notions related to general principles of conception and calculation;
- 3) Quaywalls;
- 4) Quays in caissons with superficial foundations;
- 5) Quays in "gabion de palplanches";

- 6) Structures on piles;
- 7) Quays in blocks;
- 8) Observing and preserving the structures;
- 9) Quays rehabilitation (examples); and
- 10) Criteria for choice of structure types.

In conclusion, the above seminars were very useful, topics covered being highly specialized and technically very advanced. Of critical importance was the wide experience of the speakers and the relevance of the information covered during the seminars. I acquired a considerable amount of useful information which will be of paramount importance for ENAPOR.

I offer my profound gratitude to IAPH, which promptly accepted the financing of this initiative and made possible my participation in these seminars.

Interim Report on Membership Survey

In the first part of January 1994, a questionnaire on IAPH membership survey was sent to all the IAPH members (Regular, Associate and Temporary), seeking their opinions, assessment and evaluation of the Association's current activities, programs and services, with the deadline for receipt of responses set for the end of February 1994.

In order to elicit as frank and candid responses as possible, the questionnare did not ask for the names of the

The Expanding Port of Niigata A Gateway to the Japan Sea Rim

Located roughly in the center of Japan and facing the Japan Sea, the Port of Niigata is regarded as historically significant as one of only five harbors, including Yokohama and Kobe, opened in 1868.

In recent years, Niigata's rapid transit network has developed in the form of the Joetsu Bullet Train Line and express roadways.

Along with its international airport, Niigata now has easy access to major metropolitan areas in not only Japan but also Korea and the Russian Far East.

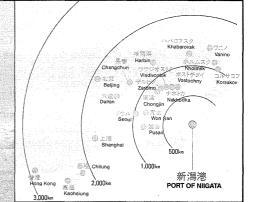
Currently, in addition to domestic routes, regular shipping lines have been established with Russia, Korea, Hong Kong, Taiwan and North Korea. In 1993, a regular passenger line to Vladivostok opened, along with the completion of an international terminal for passengers. The Port of Niigata is aggressively developing its facilities in many areas, including the completion of a 14 meter quay for large-sized containers in 1996.

The Port of Niigata looks forward to serving you. Come and experience Niigata Port !

Promotion Division

Bureau of Harbor and Airport Development Niigata Prefectural Government 4-1 Shinko-cho, Niigata 950, Japan TEL: 025-285-5511 (EXT. 3456) FAX: 025-284-5042 TELEX: 3122732 NIIPRE

8 PORTS AND HARBORS April, 1994



respondents or the countries to be identified, although several respondents volunteered to identify themselves.

While there were a number of questions raised in the questionnaire, three major lines of inquiry can be summarized as follows:

- 1) What are the major issues and challenges facing the world port industry today?
- 2) How do the members rate the current IAPH activities and programs.
- 3) How the level of IAPH services be further raised for increased benefits of all members in relation to Question 1) and 2).

As of March 4, 1994, responses had been received from 89 members, constituting approximately 26 percent response ratio (89 out of 343 members). Though it is premature to come to any conclusion as we are still waiting for many more responses coming until the deadline, there seems to exist a general overall trend in the mood prevailing among the respondents, to say the least as summarized below.

Brief Summary of Responses

1. What are the major issues and challenges facing the world port industry today?

While a full-scale compilation/analysis is yet to be made of responses to this specific inquiry under the present circumstances, there appears to exist a general trend prevailing among respondents.

Given the diverse nature and type of ports involved, the major issues/challenges selected differ greatly from one port to another. For instance, those identifying themselves as "operating ports" have a tendency to choose issues related to future port development such as "facility modernization", while those in the category of "landlord ports" tend to choose such issues as "privatization" and "property managment".

In addition, the difference seems to stem from another important factor, i.e., where a specific port places its emphasis in its day-to-day port management and operation, e.g., "dredging" identified as one of the major and critical issues by many North American respondents and "pollution control" identified by those who relatively are environmentally sensitive.

2. How do the members evaluate the current IAPH activities and programs.

Roughly speaking, there seems to exist a generally positive mood among the respondents as to the direct benefits they can gain from a range of IAPH activities - biennail conferences, publications and communications, etc.

With specific reference to the concrete benefits of membership, a significant number of respondents suggested "networking opportunities" (roughly 35 percent) as the most valuable.

3. How the level of IAPH services be further raised for increased benefits of all members in relation to Question 1) and 2).

As in the case with the above paragraph, IAPH services in general seem to be accepted by most respondents in a positive and warm manner. For instance, 60 percent of the total respondents rated the current level of IAPH services as "good", 12 percent "excellent", 18 percent "fair", nil percent "poor", and 10 percent "no comments".

4. Conclusion

Overall, the final results of this survey will no doubt prove to be of interest and of use for IAPH in its efforts to revive the present programs and activities and yet to determine its future course of action. The Head Office Secretariat is working on compilation and analysis of the survey results for presentation to the mid-term Excomeetings to be held in Copenhagen from May 30 to June 3, 1994.

Visitors to Head Office

On February 10, 1994, Mr. Göran Wennergren, President and CEO, Port of Gothenburg AB, together with Mr. Werner Stoppenbach, Executive Vice President of the Port, and Mr. Gunnar Ottenborn, Managing Director, Goteborgs P.D.I. (a stevedoring company for the handling of automobiles), visited the Head Office, where they were welcomed by Secretary General Kusaka and his staff. The visitors from Gothenburg were visiting Japanese car manufacturers and shipping companies. Mr. Wennergren took the time to visit Kyoto one day through the arrangement of the Japanese Foreign Ministry, which has recently appointed Mr. Wennergren as Honorary Consul-General of Japan.



From left. Messrs. Stoppenbach, Wennergren and Ottenborn

Membership Notes:

New Members

Associate Members Southern Research and Development Institute of Merchant Marine [Class D] (Ukraine)

Address:	15, lanzheronovskaya Str.,
	270026 Odessa
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Marine Terminal Operators and Their Insurance Cover



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The author is a Venezuelan lawyer. He completed his LL.M in Maritime Law in October 1993 at the University of Wales College of Cardiff (formerly called UWIST), U.K., after obtaining his Master's degree in Port Administration at the Department of Maritime Studies of the same university, under Professor Goss's supervision. While studying at Cardiff, Mr. Sabatino, a subscriber to and one of the most enthusiastic readers of the IAPH journal, contributed a paper entitled "Privatization in Latin America", which was carried in the January-February 1993 issue of "Ports and Harbors".

The IAPH Head Office expresses its deep appreciation to the author for his contribution of the paper, which is featured in this edition. At the same time, we wish to confirm our position that the views expressed in this paper are those of the author and do not necessarily reflect those of the International Association of Ports and Harbors.

1. Introduction

The transport industry has drastically changed during the past decades, with the advent of containerization and the subsequent development of multimodal transport.

These changes, moreover, have been matter of concern due to the complex issues arising out in the legal and insurance field. Thus, in the legal field attempts have been made to set up an uniform regime of liability applicable to the carrier, in order to avoid the fragmentation resulting from different regimes concerned with each mode of transport. Besides, in the insurance field insurers have been coping with what an author described as the "multimodal muddle of conflicting laws and regulations", where the insurers try to cover the risks of door-to-door movements by a combination of transports.

Transport technology in the 1990s are based on containerization and electronic date interchange (EDI) backing a rather complex network of multimodal operations.

Nevertheless, there is still a remarkable mis-match between developed and developing countries insofar as containerization and multimodal transport is concerned. Although there has been an increase in the use of containerization, multimodal transport in developing countries is not a widespread practice. In fact, the physical limitations of infrastructure, equipment and technology to move goods; inadequate institutional and legal transport environment discouraging transport operators to accept responsibility for multimodal transport services, and complicated import and export procedures (in particular Customs formalities) make it difficult the growth of intermodalism in these countries.

Despite the above, however, there are reasons to believe that his panorama could change in the coming years because of the privatization undertaken in the context of structural adjustment programmes or stabilization reforms, which are a component of IMF conditionality or a precondition for obtaining World Bank loans. This process is introducing significant reforms in the transport sector as well as commercial ports characterized by deregulation, decentralization of port authorities or privatization of port services, whereby it might be expected that the introduction of **new technologies** through private sector investments, and **different management practices** by the reformed port authorities will lead to a new era for this industry, improving the traditional role played by commercial ports in the transport chain of developing countries.

It should be thought that privatization or decentralization in developing countries, will make it easier or at least feasible the introduction of new technologies within the ports; however, this will also bring **new risks** in respect of which terminal operators and port authorities will have to make sure that proper measures are rightly placed in order to face them. After all, as pointed out recently by an expert, many operators in those countries are facing the difficult task of managing safe, efficient and profitably cargo handling facilities by using an outdated infrastructure and iadequately trained personnel.

Whatever the outcome of all this process might be, it is obvious that such changes will impose on marine terminal operators the necessity of evaluating the risks involved in terminal operations - in particular those derived from containerization - and the setting up of loss prevention programmes.

In addition, the adoption of reliable insurance programmes will be a paramount element in particular to Public Port Authorities when it is taken into account that in many cases reforms introduced in developing countries are aimed to make such ports accountable, profitable or at least financially independent. This means that central governments will not be willing - in theory - to grant subsidies to cover financial deficits and those risen from uncovered risks.

It follows that all the parties involved in multimodal transport such as the vehicles carrying goods, vessels, owner or lessees of containers, forwarding agents, shipowners, stevedores and terminal operators need some sort of insurance cover against their liabilities or for loss or damage to their property, this simply because they cannot rely on their rights of recourse against those operating a combined transport chain.

The present paper is concerned with the insurance cover available in particular to marine terminal operators, and its significance for developing countries, however, a few words seem to be appropriate for clearness's sake. Where the term "Marine Terminal Operator" is employed this is referred not only private companies operating such a terminal by way of leasing or similar agreements, but also it is referred to Public Port Authorities running the terminal, where applicable.

2. Multimodalism and New Risks

Containerization has had upon the transport industry a tremendous impact. The development of multimodalism, moreover, has eroded the rigid boundaries that have traditionally separated sea, rail and truck transportation; such distinctions between various segments of the transport industry are rapidly becoming blurred, so that the trend seems to be towards an age of "total transportation companies" able to offer integrated water, rail and truck service.

Nevertheless, the changes taking place at the transport industry have given rise to new problems in the legal and insurance field. Firstly, because the laws governing the rights and liabilities of carriers and shippers were developed separately for each mode of transportation, during decades when those transportation segments were viewed as distinct; and secondly, because even though containerization has contributed to speed transits so that goods are in transit for shorter times, and thus underwriters period of risk is reduced as well as the incidents of loss/damage /1, the container revolution has also brought with it a new set of risks greater than those associated with break-bulk practices.

It is in the context of these constraints that marine terminal operators must carry out their activities. There is little doubt that marine terminals play a new role nowadays, when ports have ceased to be a mere gateway through which cargoes and passengers are transferred from ship to quay and vice versa, to become a transport and distribution service centre /2. It should be borne in mind that these terminals are the result of the necessity to create technical and organizational units, in order to tackle the complexities involved in the handling of containers, complexities that do not exist in a conventional or traditional general berth.

It follows that container terminals, because of its capital intensive nature and complex operations, are subject to greater financial risks than the conventional berths are exposed to. Terminal operators are basically stevedores and warehouse keepers who enter into a contract of service and work for a principal. Nevertheless, they are cargo handlers who have invested heavily in equipment and are exposed to extensive liability because of the mechanical handling they perform, and the great accumulation of cargo in their custody. /3

As a consequence of this, terminal operators may face a variety of claims which taking into consideration the value of modern containerships, container handling equipment, containerized cargo as well as the risk of personal injuries are likely to reach significant monetary levels. Therefore, terminal operators are required to assess objectively the risks involved in their business, and to take out adequate insurance cover.

3. Terminal Operations and Its Legal Implications

There is no doubt that the introduction of modern technologies within the maritime industry, has led to the almost total extinction of firms operating exclusively as stevedores or warehousemen, giving rise to the growth of terminal operators carrying out a wide range of activities.

Unlike stevedores or warehousemen who are concerned with specific activities (i.e. handling and storage) these terminal operators have to be viewed as working in a much wider scope of operations, undertaking not only those services but also many others such as the movement of cargo form quay to the storage side and vice versa, stuffing and stripping of containers, repairs of them, etc. Accordingly, the expression **terminal operator** in the context of this paper comprises one primarily but not exclusively, concerned with

Membership Notes-

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Director:

Mr. T.W. Archer General Manager Northland Port Corporation (N.Z.) Ltd.

Alternate Director: Mr. R.P. Snodgrass Chief Executive Westgate Transport Ltd. the handling and temporary storage of goods. In view of the former then common law principles relating stevedores and warehousemen, have been assumed to be also applicable to these terminal operators.

3.1. Terminal Operators as Independent Contractors

Whereas in the past loading and discharge of cargoes from ships were done by the master, who acting as servant of the shipowner carried out the carrier's duty to stow it, nowadays operational and commercial reasons require the carrier to hand it over to stevedores and terminal operators who are experts in such tasks. Consequently, the carrier in order to fulfill his duties under a through contract of carriage must usually enter into third party contracts with stevedores, terminal operators and inland carriers, to ensure the effective arrival of goods to their final destination.

Although the legal status of a terminal operator - i.e. either they act as servant or independent contractor - will depend on the contractural agreement between him and the carrier, it could be said that terminal operators (likewise stevedores) are generally considered independent contractors, with entire control over the men they employ and the functions they undertake.

The fact that the legal status of terminal operators is one of an independent contractor, on the other hand, will have important consequences with regard to the defences available to them when performing their contract, the reason being that under the Hague-Visby rules /4 "servant or agent of the carrier (such servant or agent not being independent contractor)", are entitled to avail themselves with the defences and limits of liability which the carrier is entitled to invoke under the rules, in the event of actions in respect of loss or damage to goods brought directly against them. This express and deliberate omission of independent contractors as beneficiaries of the defences and limits of liability afforded by the rules, together with the fact that under such rules "carriage of goods" comprises the period of time from the actual loading of cargo until it is discharged from the ship (enabling the carrier not to take responsibility for pre-loading or after-discharge losses however caused /5), have left stevedores and terminal operators in a position where the protection of exemption and limitation clauses has to be achieved by way of the so-called "Himalaya" clause; however, as it will be explained later the incorporation of this clause in the bill of lading does not necessarily guarantee proper relief to terminal operators in the event of loss or damage to goods caused by them.

3.2. The Himalaya Clause

This clause has its origins in the well-known Himalaya case which involved a suit brought by Mrs. Adler passenger on a ship of the same name, as a result of personal injuries suffered by her after falling down from the gangway to the wharf. Mrs. Adler was unable to sue the shipowner who as exempted from liability under the terms of the passenger ticket, reason for which she sued the vessel's master and boatswain.

It was contended in the Court of Appeal on behalf of the master that he was entitled to the protection of the exemptions of the passenger ticket. Refering to this point Denning, L.J. stated:

"... My conclusion therefore is that, in the carriage of passenger as well as of goods, the law permits a carrier to stipulate for exemption from liability not only for himself but also for those with whom he engages to carry out the contract. This can be done by necessary implication as well as by express words. When such a stipulation is made, it effectively protects those who render services under the contract, although they were not parties to it ...". /6

Nevertheless, the court held that the passenger ticket in question did not expressly or by implication benefit servants or agents reason for which the master was held liable in tort. Since then specially drafted "Himalaya" clauses have been inserted in bills of lading, in order to protect stevedores and terminal operators. It generally provides that a shipowner, as agent for the servants and agents (including independent contractors) from time to time employed by the shipowner, agrees with the cargo owner that these servants, agents and independent contractors shall be protected by the limits of liability and other defences arising from the contract of carriage.

It was in Midland Silicones Ltd. v. Scruttons Ltd., where Lord Reid by explaining his "agency argument" opened the possibility of success for stevedores and terminal operators, in claiming the protection of bills of lading's limitation clauses provided four criteria are satisfied; a) the bill of lading must make clear an intention to protect the stevedore/terminal operator; b) it must also make clear that the carrier contracts for the stevedore's benefit as well as the carrier's own; c) the carrier must have authority from the stevedore/terminal operator and d) there must be consideration for the stevedore/terminal operator for the protection of the bill of lading's exemption provisions. /8 Therefore, it is not enough the inclusion of a Himalaya clause in the contract of carriage, for this to be effective it should also satisfy the four criteria laid down by Lord Reid. It follows that the omission of any of these four criteria might place the terminal operator in difficulties when trying to enforce the Himalaya clause, given the variation in legal opinions.

3.3. The Effectiveness of the Himalaya Clause

Shippers and consignees usually have a direct contractual relationship with the carrier and not with the terminal operator. In an attempt to avoid limits of liability within the contract of carriage, cargo interests have attempted to sue the terminal operator directly in tort alleging negligence. Two are the problems that terminal operators will have to deal with. On the one hand, because they act as independent contractors, then they do not enjoy the defences and limits of liability afforded by the Hague-Visby rules, reason for which they have to rely on specific clauses to mitigate responsibilities in the event of damages to cargo or to third parties, namely: the Himalaya and the Circular Indemnity clauses. On the other hand, they should have these clauses tested by the courts in order to see whether they comply with Lord Reid's requisites and, therefore, are applicable. Here it is where terminal operators may find difficulties when trying to invoke benefits by means of Himalaya clauses, either because they are not well drafted or because they are contrary to particular domestic law.

It has been beyond the scope of section 3.2. to carry out a complete examination about the way in which the Himalaya clause has been construed in different common law jurisdictions. Suffice it is to say that although its validity is recognized in most jurisdictions today, the clause **per se** does not guarantee the benefits of exemption and limitation clauses contained in the bill of lading to terminal operators. Accordingly, under English law following the Eurymedon and the Raymond Burke case, there is no doubt that an elaborately drafted Himalaya clause does not automatically avail the terminal operator, so as to exempt him from liability.

In the United States, moreover, the general rule is that the extension of a carrier's COGSA limitations, defences and exceptions to stevedores and terminal operators through the bill of lading is not dependent upon a single clause, but upon the interaction of several carefully worded clauses. /9 Thus, for a court to be able to decide that a bill of lading validly extends such defences to the terminal operator, three clauses are required: the Himalaya clause, a Period of Responsibility clause and a clause Paramount. /10 Therefore, the Himalaya clause alone would be of little value, since it would have to be accompanied by a clause stating that the provisions of COGSA shall apply before loading and after discharge, and throughout the entire time the goods are in the custody of the carrier (i.e. the Period of Responsibility clause), as well as one clause providing that COGSA will govern the rights and liabilities of the parties to the bill of lading (i.e. The clause Paramount). In Canada and Australia there has been inconsistency in the approach by courts there with regard to the authority given by the sub-contractor to the carrier to include him as beneficiary of the Himalaya clause.

Even where a Himalaya clause has been well drafted, it may not be enforceable by the courts. In Canada, for example, a Himalaya clause would relieve the stevedores/terminal operators from ordinary negligence, but not from gross negligence. /11 Besides, it is interesting to note that sometimes terminal operators may find obstacles to invoke exculpatory clauses. Thus, attempts made by terminal operators in the United States to escape liability by means of exculpatory clauses have failed; courts there have been very hostile towards these clauses on the ground that terminal operators would appear to be characterized as engaging in a business similar to that of a common carrier or public utility in which case exculpatory clauses are not enforceable, without showing of actual notice, alternative rates and absence of monopoly. /12

It is evident that all these inconsistencies in construing the Himalaya clause are the result of a lack of uniformity, which could be partly solved once the Convention on the Liability of Operators of Transport Terminals be adopted by a large number of countries. Again, it should be taken into account that the rules are restricted to cargo claims, so "from a total risk management or insurance perspective, the issues covered by the convention are very limited in scope". /13

In view of the inconsistencies referred to there is no doubt that a prudent terminal operator should avoid to reply on exemption, limitation and indemnity clauses as the best way to get relief in case of damage or loss caused by him. /14 However, this does not mean that by taking out insurance, terminal operators should not have paid attention to these clauses on the ground that they will be indemnified by the insurer anyway; from this viewpoint could be thought that the effectiveness of the Himalaya clause is main concern of underwriters, who by subrogation will exercise recourse actions where possible. Nevertheless, this is not true since in practice the Himalaya clause has the effect of reducing the premiums payable under the terminal operator's liability insurance policy. /15

Therefore, a cautious terminal operator will seek to be protected by well drafted exemption, limitations and indemnity clauses in order to pay lower premiums, and at the same time will need to take out proper insurance so as to cover the many liabilities to be faced in their operations in which case they will be able to get indemnity, even where the exemption, limitation or indemnity clauses are not effective. The insurance required by these terminal operators, however, is a specialized one given the particular risks to which the assured is exposed.

4. Risk Analysis and Risk Management as a Technique to Define Insurance Needs

Terminal operators may have to take out insurance policies, either under the terms of operating agreements entered into between them and port authorities; as a result of the terms of terminal tariffs previously drafted by such authorities; according to the liability and indemnity clauses inserted in contracts agreed upon with particular users; or simply because the terminal operator not being able to bear the consequences of the materialization of one risk, decides to transfer it to a specialized company (i.e., insurance company). Besides this, a terminal operator may decide that the financial risk involved in his operations is not so great as to justify the purchase insurance and consequently he may operate on a self-insured basis. /16

In view of the mentioned above then the problem to be dealt with firstly is not with whom to insure the terminal operations but what risks should be underwritten and which ones should be borne by the terminal operator himself. Decisions over this particular can be reached by using a technique called "risk analysis and risk management", to be briefly described here, whereby it is attempted to make the best possible choice between any combination of contract insurance coverage; setting up of an own insurance fund and the investment in loss prevention methods and safety procedures. /17

The first step within a **risk analysis** exercise will be to identify the types of risks a terminal operator is exposed to, in order to evaluate all possible terminal operator's liabilities and the impact on his assets /18. Broadly speaking these risks can be classified as follows:

- * Partial or total loss of, or damage to, his property.
- * Loss of income through business interruption or reduction of it as a result of property.
- * Loss of, or damage to, third parties and/or their property.
- * Loss of, or damage to, employees and/or their property.

Once the identification and evaluation of those risks have been completed, it is the purpose of **risk management** to reduce the frequency as well as the severity of pure risks /19 through the analysis of alternatives or options available to a risk manager, namely:

a.- Avoidance: This would be the most effective solution, so the terminal operator decides that a particular activity or operation will be discontinued because of the high risks involved.

b.- Loss control: This could be achieved basically by means of loss prevention and loss reduction in order to avoid risk occurrence.

c.- Self-retention: The terminal operator decides to bear the risk himself by paying losses/damages whenever they occur. The retention of risk may range from no insurance at all to an insurance with a deductive or even the formation of an independent company, so-called captive insurance com-

pany. /20

d.- insurance: Where the risk is passed on to an insurance company through a contract of insurance.

Leaving aside those cases where the law requires an insurance contract to be taken out, terminal operators would have to decide whether to do so or not. It is obvious that any decision in this respect will depend on the cost of insurance premius, the probability of risks within the marine terminal as well as the adequacy or inadequacy of existing contracts for certain risks, e.g. in France there is only one company that covers a client port for damage to port structures by ships, and only above the amount of the limited liability fund constituted by their owner. /21

Moreover, the financial situation of one port or terminal in particular as well as the nature of the operations undertaken, will determine the amount of insurance (if any) and in respect of which risks a fund will be set up, instead of buying insurance coverage. The Port of Rotterdam, for instance, operates as its own insurer and since it is a landlord pot has not direct responsibilities concerning terminal operations, so terminal operators are the ones taking out the necessary insurance. Bordeaux, on the other hand, has multiple-risk insurance that does not cover damage relating to the operation of equipment, whereas Le Havre has an insurance covering damage beyond the shipowners' limitedliability fund. The Port of Tacoma operates on self-insured basis with regard to unemployment insurance and workers' compensation. At December 31, 1992, the estimated insurance liability was \$44,100 for workers' compensation, such cash reserves reaching \$289,877.

Therefore, the final outcome of a sound risk analysis and risk management programme will be to decide about the insurance needs of a terminal operator who would have to seek proper insurance coverage either at the domestic or international market to be discussed next.

5. The Insurance Available to Marine Terminal Operations

Insurance coverage for terminal operators/port authorities may be found in markets of developed and developing countries. Thus, coverage is available from the American International Group, Lloyd's of London, Allianz, etc. /21 When seeking insurance terminal operators/port authorities have the choice of getting it either from the insurance market (i.e. insurance companies all around the world leading by Lloyd's of London) or from mutual insurance association or clubs. /22 This section will be mainly focused on the weakness of insurance domestic markets in developing countries, and a brief overview of the coverage offered by the Through Transport Club (Protection and Indemnity Club) and Sedgwick James (Insurance Brokers), the most important organizations committed to the insurance of terminal operations/port authorities worldwide.

Domestic insurance markets in developing countries offer certain problems to terminal operators seeking insurance coverage. Thus, many companies there are unable to underwrite big individual risks such as infrastructure, aircraft, ships, industrial complexes, etc., since this deserves a professional specialization and a level of insurance capacity that are beyond the reach of these countries; in fact these markets tend to be under-capitalized and under-staffed. /23 Consequently, they can hardly afford to be exposed to the adverse potential financial consequences of some large losses, such as weather hazards, natural catastrophes, infrastructure, large ships and aircraft, reason for which they are highly dependent on foreign insurance. Besides this, the insurance available in these markets may not cope with the particularities of the risks involved in terminal operations.

Another negative element in these markets, moreover, is the vulnerability of national currencies which may constitute an obstacle in respect of large indemnities. It should be borne in mind that there are cases where currency control represents a serious barrier for insurance practices, in particular, when contracting foreign insurance. For instance, in Ecuador, one operator was required to pay his premiums against a certified original debit note, in order to have the premiums leave the country. /25 In other developing countries such as Colombia, Barbados and Dominica, operators have to pay a tax for having procured a foreign insurer's coverage.

5.1. The Through Transport Club

The Through Transport Club Mutual Insurance Association Limited (Through Transport Club) was established in 1968 by the managers of three of the largest P&I Clubs in the world, originally to insure vessel operators for risks arising out of the loss or damage to their containers and chassis anywhere in the world, whether afloat or on land. The reason for this was that P&I Clubs had been reluctant to insure liability risks which were outside of ship operations on the high seas. Even though the initial coverage was exclusively directed to vessel operators, nowadays the insurance protection provided by the Club has expanded to stevedores and terminal operators, transport operators and port authorities. The TT Club is an organization operating as a collective self-insurance and working on a non-profit making basis. In this modality of insurance the premium is called "contribution" not being fixed but variable and to be paid in advance. Besides, the level of contribution for each member is rated individually all depending on the analysis of his claim record, his exposure under user contracts, his terms and conditions of business, etc.

The TT Club policy is a "specified perils" policy in the sense that it is tailored specifically to the operators set out in the Rules. /26 Details of the coverage terminal operators are entitled to, under the Club's protection can be appreciated in the pertinent Club Rules. In general terms an UNCTAD report has described the policy coverage as follows:

- Liabilities in relation to cargo.
 - Liabilities for:
 - a) physical loss of or damage to property.
 - b) death, bodily injury or illness.
 - c) consequential loss.
 - d) claims in respect of removal of cargo, containers, trailers, handling equipment.
 - e) additional costs and expenses incurred by a member in complying with an order from any authority with regard to removal of cargo, container, trailer, handling equipment.
 - f) claims by any authority in respect of quarantine and disinfection.
 - g) fines and other financial penalties.
 - h) personal injury.
- Insurance of:
 - a) containers/trailers.
 - b) handling equipment.
 - c) cargo.
 - d) property.

* Costs and expenses:

- a) of investigation, defence and mitigation.
- b) of disposing of damaged or worthless cargo.
- c) as a result of loss consequent upon waiver of general average.
- d) of repossessing leased containers.
- e) incurred upon interruption of business.
- * Discretionary insurance.

Under this the Directors of the Club have the power to pay a claim which is not specifically covered according to the terms of the member's insurance. This represents a significant difference with regard to the traditional policy, so that members are protected against gaps in the wordy of the policy and unforseen claims.

Furthermore, the Through Transport Club provides many other services such as risk management whereby the Club can can review an operator's entire insurance program to ensure that he has no areas without cover; loss prevention services through the publication of a number of informational brochures and seminars addressing specific areas where loss prevention measures can be taken; security and safety surveys carried out by outside consultants and advisory services, which is given by a staff of attorneys who are able to review operating agreements, stevedore and terminal service agreements and other contracts that affect a member's business. Therefore, the advantages of using the services of a global insurer like this organization could be summarized as worldwide protection (very significant in the handling of claims), stable insurance rates, a network of experts, risk management advice, loss prevention advice and advisory services. /27

5.2. The Sedgwick James Plan

Another organization which works actively with the insurance of port activities is Sedgwick James who has designed a Comprehensive Insurance Plan for Port Authorities. Although the Plan in question covers the many risks associated with responsibilities that port authorities usually assume, it may afford coverage to those port authorities performing operational services, or engaged in the operation of container terminals. /28

It is essential to point out the Sedgwick James is a broker and not an insurance company, providing insurance and risk management services mainly to public port authorities worldwide. The **Comprehensive Insurance** offered by this group it is intended to provide a coverage whereby gaps between risks exposed or produced overlapping resulting from the purchase of different policies might be avoided, this by means of a number of separate programs in only one package. /29

The Plan in question has been conceived taking into consideration that the exposure of a port authority can be grouped into five categories, namely: a) damage to or caused by vessels owned, leased, chartered or operated by the port authority; b) damage to all other property; c) loss of revenue or business interruption; d) third party liability, removal of wreck and environmental protection; and e) employers liabilities/workmens's compensation which is not covered by the Plan. In the context of this work letters b) and d) deserve particular attention, since they could afford protection to a port authority engaged in the handling and storage of cargo. Thus, the Plan provides coverage for damages to fixed assets (i.e. buildings, storage sheds, warehouses, repair sheds, etc.); mobile assets (i.e. mobile cranes, portainers, trucks, etc.) and marine property such as piers, wharves, jetties, moorings, etc. /30 All this property bei(ng covered for full replacement costs and cover provided on an "all risks" basis, including fire, lightning, explosion, aircraft, impact, storm, etc. Furthermore, the Plan furnishes coverage to port authorities for third party liabilities, e.g. those arising out from damage caused to vessels and cargoes, death and bodily injury, etc.

Together with the Comprehensive Plan for port authorities, Sedgwick James is involved in risk control services, producing reports including recommendations on how risk, losses and claims can be effectively handled.

6. Final Remarks

This paper has been written on the assumption that current ports reforms in developing countries /31 will bring the introduction of modern technologies, giving rise to new risks in respect of which proper insurance coverage is needed. It could also be assumed that these changes will lead to an increase in accidents, reaffirming so the necessity of setting a sound insurance programme as well as mechanisms for risk management and loss prevention. The former is corroborated by a study concerning the cost of accidents within the port transport industry, carried out by the National Ports Council in the 1970s, which revealed that accident costs vary with the degree of mechanization. It was found, among other things, that as a berth becomes more capital intensive (i.e. from conventional to container) then the total cost of accidents increases dramatically; cost of personal accidents decreases, both in magnitude and in proportion to damage accidents whereas cost of damage accidents increases, both in magnitude and in proportion to personal accidents. /32

Insurance practices, therefore, will be influenced by the degree of modernization in operations reached by terminal operators and port authorities acting as such. Although many of the considerations discussed in the previous pages may not be applicable to ports where containerization and multimodal practices are still in early stages, there is little doubt that those considerations would allow to draw some remarks which could be taken into account when formulating insurance programmes, particularly, in developing countries undertaking fundamental changes in their port organizations. These remarks, involving Port Authorities and Terminal Operators, could be summed up as follows:

6.1. Port Authorities should be aware that their role as a Landlord authority is not restricted to look after the real estate of public dominium. On the contrary, despite the fact that such authorities would not be concerned with operational aspects, liabilities of port operators/terminal operators should be clearly established as well as compulsory cargo insurance imposed, in order to guarantee to port users (which in general sense involve shippers, consignees, shipping lines, etc.) a minimum of security when using port facilities. This is particularly relevant to developing countries; thus, by handing over operational services to private sector, port authorities there have to bear in mind that their function should not be only limited to ask for indemnities (e.g. bond or surety) to safeguard the port authorities from eventual liabilities and property damage. /33

6.2. It is advisable for Operational and Non-Operational Port Authorities as well as Terminal Operators the setting up of one department to carry out the risk management task, after all it is not enough to determine what are the risks a Port Authority/Terminal Operator are exposed to, but also the monitoring, up-dating and re-adjustment of an initial identification of those risks. This department, therefore, would be in charge of identifying those risks requiring insurance, and those which could be tackled by means of contingency funds. /34

6.3. After assessing the nature and frequency of those risks, Port Authorities/Terminal Operators should make the necessary allocation for insurance and contingency funds within their budgets. In may cases it would appear that port authorities tend to rely on their ability to limit liability undervaluing the importance of it, so it is not surprising to find that 64% of the small ports (those handling less than 7.5 million tonnes of cargo per annum) within the European Community do not have a fixed insurance cost allocation in their accounting. /35

6.4. Operational Port Authorities and Terminal Operators should contract with their user shipping lines under a standard contract, this would make the port authority/terminal operator responsible only for its own fault or negligence, limiting any liability in negligence to reasonable monetary levels. In addition, Himalaya and Circular Indemnity clauses should be included.

6.5. When seeking insurance Port Authorities/Terminal Operators would have to make it clear to the insurers what the real requirements are. It should be borne in mind that although insurance premiums depend on the amount of cover, the level of the deductible (i.e. the portion of damage to be paid by the policy-holder) will also influence it. Therefore, if the insurance contract is taken out against substantial risks, then it is advisable to accept a rather high deductible; if on the other hand, several small accidents are possible, the deductible should be low, like the level of cover per accident. /36

6.6. Port A.uthorities should avoid to buy multiplicity of policies which could lead to overlapping and gaps of risks. In this respect the purchase of a Comprehensive package would be advisable as a way of achieving substantial reductions in premiums, more extensive cover and minimizing gaps in coverage. /37

6.7. In those countries where the purchase of foreign insurance is permitted, Port Authorities/Terminal Operators should use the services of a specialized risk management or reliable international insurance broker, in order to take advantage of professional expertise rarely present in domestic markets of developing countries. /38 Despite the fact that a national insurer will be able to satisfy the domestic needs of his client, this task becomes more complicated when dealing with major claims arising on foreign territory, where there are several nationalities involved and where different legislation have to be applied, "in such cases the 'national insurer' will usually be obliged to, sometimes due simply to a language problem, sub-contract the handling of the claim and his power of control on this matter can only be theoretical". /39

6.8. Whatever the foreign insurance available to a Port Authority/Terminal Operator, the services of the TT Club should be taken into account in the making of any insurance programme, given the multiple advantage that a TT Club member may enjoy. After referring to other insurance options available to terminal operators, an UNCTAD report has stated that "it would be surprising if container terminal operators could completely rule out the risk transfer to the Through Transport Club. Developing-country operators would be well advised to consider carefully the P&I mutual insurance, as a cost-effective and safe way to limit liability for possible damages, risks and expenses, which are steadily

increasing". /40

This paper has attempted an overview of one field many times neglected by those involved in the complex operations of a marine container terminal. There is little doubt that the significant financial risk terminal operators are exposed to, makes almost compulsory for them to review that attitude and take advantage of the alternatives available in the insurance market, in order to face the varietly of liabilities they may face without exposing themselves to the unpredictable consequences of uncovered risks.

Notes and References:

- 1 Richardson (1978) "Deep Sea Container Services", <u>Through</u> <u>Transport: Problem Areas, Documentation and Insurance,</u> page 1.
- /2 UNCTAD (1992) Port Marketing and the Challenge of the Third Generation Port, page 2-3.
- /3 Sollie, I. (1985) "Terminal Insurance and Liability Issues", <u>Proceedings of the UNCTAD and Antwerp Port Engineering</u> <u>and Consulting Seminar on Container Terminal Management</u> <u>Vol. 1</u>, page 537.
- /4 Article IV Bis (2). Basically these defences are the package limitation and the one-year delay for suit provision.
- /5 Harrington, Sean (1977) "Liability for Pre-loading and After-discharge Losses in Quebec", <u>European Transport Law</u>, Vol. 12, page 483.
- /6 <u>Adler v. Dickson</u> (1955)1 Q.B. 158;(1954) 2 Lloyd's Rep. 267.
- /7 (1962) A.C. 446.
- /8 <u>Midland Silicones Ltd. v. Scruttons Ltd.</u> (1962) A.C. 446, 472, per Lord Reid.
- [9 Zawitosky, Joanne (1985) "Limitation of Liability for Stevedores and Terminal Operators under the Carrier's Bill of Lading and COGSA", <u>Journal of Maritime Law and Commerce</u>, Vol.16, No.3, page 363.
- /10 <u>Robert C. Herd & Co., v. Krawill Machinery Corp.</u>, 359 U.S. 297 (1959)
- /11 <u>Eisen und Metall A.G. v. Ceres Stevedoring Co. Ltd.</u> (The Cleveland), (1977) 1 lloyd's Rep. 665.
- [12 Gorman, Francis J. and others (1982) "Exculpatory and Limitation of Liability Provisions in Terminal Operators's Tariffs", <u>Journal of Maritime Law and Commerce, Vol. 13</u>, No.4, page 454.
- /13 Daniel Negron (1992) <u>Analysis United Nations Convention</u> on the Liability of Operators of Transport Terminals in <u>International Trade.</u>
- /14 An article pointed out that even though port authorities may feel secure taking into account their statutory limitation provisions or those inserted in standard conditions of trade, many people feel that they would be unable to stand behind the limitations of their standard conditions, resulting all this in an increased level of insurance being purchased. (see "Liability and Loss", <u>Port Development International</u>, April 1993, page 51.)
- /15 Harris, Roger (1993) "Liability Equals Responsibility: Canadian Maritime Transport Terminal Operators in the 1990s", <u>Canadian Business Law Journal</u>, page 239.
- 116 In practice this does not occur in respect of all the risks which are likely to take place in a marine terminal. In other words, a terminal operator may decide to have underwritten particular risks, leaving others outside the policy and accepting them in which case it is said that the terminal becomes its own insurer.
- UNCTAD (1986) <u>Rights and Duties of Container Terminal</u> <u>Operators and Users</u>, page 50. See also Sollie, I. (1985)
 "Terminal Insurance and Liability Issues", <u>Proceedings of</u> <u>the UNCTAD and Antwerp Port Engineering and Consulting</u> <u>Seminar on Container Terminal Management Vol. 1</u>, page 535; UNCTAD (1993) <u>Legal Aspects of Port Management</u>, page 85. These three reports contain useful information on

this topic, being the base for this section.

- The identification of risks can be done, among other ways, /18 through the utilization of insurance company checklists, analysis of past losses, inspections, review of contracts and operational manuals, etc. The evaluation stage, however, may result quite difficult since it requires the measurement of risks in terms of exposure and frequency. See UNCTAD (1986) Rights and Duties of Container Terminal Operators and Users, page 46-50. From all these items the review of contracts deserves particular mention, since this is a significant element to be taken into account by the insurers, in order to ascertain element to be taken into account by the insurers, in order to ascertain the true extension of liabilities. Thomas A. Harman has pointed out that an analysis of the legal aspects is of great importance to determine whether a "passing off" of liability exists. Thus, if tariffs and contractual agreements clearly point up the responsibilities of the ports as well as those of the lessor, tenant or customer/user and if the liability is clearly passed, the risk becomes acceptable. (see Harman Thomas A. (1986) "Risk Management", WWS/World Wide Shipping, February/March, page 47.)
- (19 According to the theory of risk management, "risks" can be divided into speculative and pure. A speculative risk is one where there is a chance for gain as well as for loss. A pure risk, however, implies in itself a loss so there is no room for any gain.
- /20 Sollie, I. (1985) "Terminal Insurance and Liability Issues", <u>Proceedings of the UNCTAD and Antwerp Port Engineering</u> <u>and Consulting Seminar on Container Terminal Management</u> <u>Vol. 1</u>, page 545.
- UNCTAD (1993) <u>Legal Aspects of Port Management</u>, page 90.
- /22 The survey prepared by Sedgwick Marine & Cargo Limited on European ports community, has shown the predominant use of local insurance company/broker. Thus, 76% of those ports use local company/broker, whereas only 3% employ foreign broker.
- 123 The insurance market (in opposition to mutual insurance) is referred to that made up by enterprises underwriting risks on fixed premiums as a profit; in this market insurers only underwrite small lines on larger risks, tending to be grouped into very distinct sectors such as marine, non-marine, aviation, motor, life, etc.. On the contrary, mutual insurance associations or clubs are set up as a non-profit organization, where the assured (members) contribute to the club's insurance fund in proportion to their individual risks, as rated by the underwriter. This fund (generally tax-free through off-shore registration) is used only to balance the cost of claims, reinsurances and management. Mutual insurance associations called Protection and Indemnity Clubs were established to insure shipowners in respect of liabilities towards cargo owners, they arose in the mid-19th century due to the fact that the London insurance market was reluctant to cover such liabilities, resulting in the shipowners grouping themselves in Clubs to provide one another with mutual insurance.
- /24 UNCRAD (1984) <u>Insurance in the Context of Services and</u> <u>the Development Process</u>, TD/B/1014, page 18.
- [25 Questionnaire answered by Mr. Daniel C. Negron, Associate General Counsel at Bradshaw & Associates Limited New York. (General Correspondents for the Through Transport Mutual Insurance Association Limited).
- 126 It should be said that the Club also provides a comprehensive coverage for Port Authorities engaged, among other tasks, in the provision of stevedoring, terminal or depot services and storage and warehousing of cargo.
- /27 Negron, C. Daniel (1992) <u>TT Club Presentation in the</u> <u>Association Naviera de Venezuela</u>, Caracas, page 14.
- /28 The liability coverage for port authorities available from Sedgwick James, includes comprehensive general liability, terminal operators liability and umbrella liability.
- [29 Sedgwick James (1988) Port Authorities Comprehensive

<u>Insurance Plan</u>, page 3. The package provides by Sedgwick, for example, comprises in addition to the standard CGL provisions, wreck removal, public officials' legal liability and real property coverage. Nevertheless, this comprehensive insurance package for port authorities is not exclusively provided by Sedgwick James, in 1988 the TT Club launched its port authority cover, this was done taking into consideration the many problems faced by large port authorities for the insurance of their liabilities.

- /30 Sedgwick James (1988) <u>Port Authorities Comprehensive</u> <u>Insurance Plan</u>, page 7.
- /31 Port reforms in developing countries are the result of World Bank/IMF recommendations, these basically involve decentralization of port administration and privatization of port services. For a review of this process in Latin American ports see Sebatino Pizzolante, Jose A. (1993) "Privatization in Latin America", <u>Ports and Harbors</u>, January-February, Vol.1 38, No.1., page 20
- *Accidents Sources (1976) The Cost of Accidents within* <u>the Port Transport Industry</u>, page 21
- /33 This could be done by including within the "authorizations", given to private operators, a clause requiring compulsory liability insurance for loss or physical damage to vessels, containers nd cargo. In this way a guaranteed minimum of indemnization would be available to the harmed party, irrespective of the port operators' financial position either at the time of the incident or at the time of the court ruling is enforced.
- /34 It is common to find port authorities, particularly in developing countries, taking multiplicity of policies without a serious analysis of risks; in other words, insurers are the ones suggesting what are the risks to be insured, instead of being the port authority the one requiring insurance in respect of risks previously identified, by a relevant department within the port.
- /35 Sedgwick Marine & Cargo Limited, <u>Survey on European</u> <u>Ports Community</u>, page 4-4.
- UNCTAD (1993) Legal Aspects of Port Management, page 94. According to Dave Heckert many individual ports have recognized the value of deductibles to eliminate frequency of losses, while maintaining catastrophic coverage for the larger losses. (see Heckert, Dave (1989) "The James' Ports Program — An Update", <u>WWS/World Wide Shipping</u>, December/January, page 56.)
- /37 It has to be taken into account that a collection of separate insurance policies arranged in different insurance markets, independent of each other, encourages the creation of uninsured areas.
- /38 The purchase of foreign insurance, of course, would be linked to the availability of foreign currency. It is interesting to note that due to the constraints in the acquisition of it, some ports in developing countries have been allowed to levy port charges in foreign currencies for the procurement of equipment and spares overseas. For instance, a port authority has been allowed to lodge 50% of its foreign exchange earnings into a London account. This system of foreign exchange retention scheme could be very useful for the setting of contingency funds and the purchase of insurance.
- /39 Jouin, Didier (1990) "The Multi-Modal Transport Operator and the Need for an International Insurance Cover", <u>Transport in the 1990s</u>, Seminar organized by the TT Club, 18th June (Paris), page 61.
- (40 UNCTAD (1986) <u>Rights and Duties of Container Terminal</u> <u>Operators and Users</u>, page 79.

International Maritime Information WORLD PORT NEVS

IMO to Expand Marine Navigational Vocabulary

The Standard Marine Navigational Vocabulary, which was adopted by IMO in 1977 as a means of improving communications in English between ship and shore, is to be expanded to assist communication between crew members.

The Sub-Committee set up a working group to consider the subject which prepared a number of basic principles. They are:

• the phrase-book approach should be retained;

• every effort should be made to limit the number of phrases to covering major verbal communication;

• the phrase book should build on a minimum level of knowledge of the English language;

• it should be comprehensive and aimed at all crew members;

• it should be called Standard Marine Communications Phrases.

The Standard Marine Navigational Vocabulary was developed in response to a decision made by IMO's Maritime Safety Committee (MSC) in 1973 that, where language difficulties arise, a common language should be used and that this language should be English.

In recent years crews made up of many nationalities have become common in shipping, giving rise to some concern about the ability of crew members to communicate with each other and with passengers and others on board.

New Publications

Innovative Breakbulk Technology and Its Impact on Waterfront Land

By U.S. Department of Transportation, Maritime Administration. Report No: MARD-840-93002. (Springfield, VA: May 1993). 160 pages. Tables. Figures. Order from: National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161. Fax: (703) 321-8547. Tel: (703) 487-4650. Price: n/a.

Despite containerization, very substantial quantities of general cargo continue to move through U.S. ports -100 million tons annually by one estimate. However, the "breakbulk system" is undergoing major technological changes that will have significant implications for the U.S. public port industry.

These developments are described in this fine report prepared for the U.S. Maritime Administration by the National Ports and Waterways Institute of Louisiana State University. The research was supported by the ports of Baltimore, Philadelphia, Camden, and New Orleans, and by Lykes Bros. Steamship Co., Inc.

"Breakbulk" is defined as general cargo handled in different packages such as bundles, crates, barrels, pallets, bales and so forth and in "relatively small lots less than 1,000 tons." Cargos handled in U.S. breakbulk terminals are categorized as (a) neobulk (generally forest and steel products and bagged chemicals and grains), (b) specialized (niche) cargoes (mainly fresh fruits and vegetables, (c) project cargos (including, for example, rolling machinery, crates, structures, containers, pallets, bags, etc. that are usually designed for a single project); and (d) traditional breakbulk (referring to a mixture of small, normally loose, but sometimes unitized, cargoes stowed together in one vessel hold).

The report is organized in the three parts. "Breakbulk technologies" are the focus of Part 1, which defines the "breakbulk system" and its historic evolution, current breakbulk terminal operations, and trends in terminal operators, and trends in terminal operations and facilities.

Three future terminal types are hypothesized — the "Universal-Neobulk Terminal," "Specialized-Reefer Terminal," and the "Combination-Container Terminal." In each case, the study reviews and assesses a range of future

technologies.

Part 2 concentrates on the Universal-Neobulk Terminal and especially on one technology — a combination of an overhead crane and so-called "super bales." A general model is used to combine the cost of facilities, machines, and labor and to calculate total cost per storage-ton. The model, says the report, "can be modified and applied to any type of technology."

The utilization of waterfront land is dealt with in Part 3. Present breakbulk terminal locations "usually are not adequate" for breakbulk facilities of the future, especially the Universal-Neobulk Terminal, which "will require large sites with convenient road and rail access." As a result, "most of the waterfront currently occupied by breakbulk terminals has limited use for future maritime purposes."

In summary, the study finds that despite containerization, the breakbulk system "is viable and ever growing" but "in the midst of an evolutionary process centering on the development of new operational concepts." This process "will require fundamental adjustments by U.S. breakbulk ports. Many present breakbulk terminals will be closed down while others will be relocated and expanded."

(AAPA Advisory)

The Ships Atlas — 5th Edition

The 5th edition of *The Ships Atlas* was published on February 7, 1994 by the Shipping Guides Ltd. The 1st edition was published in 1984, the 2nd in 1987, the 3rd in 1989 and the 4th in 1991.

The publisher's words by Feagal Hogan, Technical Editor, on the new edition follow:

For this edition we have completely redrawn all maps improving coverage areas where this has been requested by subscribers. We feel that the presentation has been improved tremendously. *The Atlas* now contains 70 large format maps (A3/A4) and over 30 handy-sized inset maps of the "busy" areas for the shipping industry. Other than the 2 polar maps, all are drawn on Mercators' Projection, the standard maritime format.

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The Americas

Cargo Tonnage Moving Thru Halifax on the Rise

Cargo tonnage moving through the Port of Halifax increased in 1993. David Bellefontaine, President and Chief Executive Officer of the Halifax Port Corporation (HPC), announced that, although 1993's increase in traffic was modest, it does indicate a positive trend. "The economic recovery has sparked increases in specific cargo areas, which have buoyed overall Port traffic."

The Halifax Port Corporation anticipates continued growth in 1994, and has frozen all of its major tariffs for the fourth consecutive year to help achieve that objective.

The Port moved more than 14 million tonnes of cargo in 1993, of which 80% was bulk, 18% or 2.5 million tonnes was containerized, and the remaining 2% was non-containerized general cargo. Overall tonnage was up 1%. Gross revenue for the Port Corporation, at \$11 million, was comparable to 1992.

Compared to 1992 statistics, the

Port's fastest growing cargoes are containers, especially inbound, which grew at a rate of 18%, and inbound breakbulk cargoes, which are up 14%. All types of outbound bulk increased over the last year: grain volumes tripled, and total outbound bulk increased by 4%. Passenger traffic increased to 31,000 passengers carried on 47 vessels.

The 2.5 million tonnes of containerized cargo was moved through the Port in 184,002 containers, or 300,933 twenty-foot equivalent units (TEUs). Domestic container movements accounted for 10% of the volume, and foreign movements accounted for 90%. In Halifax, container movements are well balanced: 52% of all containers are inbound, and 48% are outbound.

There were 1,624 vessel arrivals in Port in 1993, down by 5% from the 1,711 arrivals in 1992. The average vessel size in 1993 was 19,203 gross registered tonnes (GRTs), up by 3% from 1992. Over the last ten years vessel size has doubled at the Port of Halifax.

Better Days Ahead for Port of Montreal

Hit hard once again by the recession, petroleum products traffic dropped to an all-time-low four million tonnes, bringing down by one million tonnes to 16.5 million tonnes the total amount of cargo handled at the Port of Montreal in 1993.

Containerized general cargo traffic increased, however, by 2.9 per cent to reach 5.9 million tonnes, a new record for Canada's number one container port despite the recession, the exceptional ice jams of last February and fierce competition. A record 598,120 20-foot containers or the equivalent moved through the port in 1993, 60,864 more than the previous year.

"The Port of Montreal succeeded in weathering the storm of a hard recession all the while maintaining its containerized cargo traffic at record levels, and that is very encouraging," said Mr. Dominic J. Taddeo, president and chief executive officer of the Montreal Port Corporation in presenting the summary of port activity for 1993.

This summary shows essentially that the recession once again hit hard non-containerized general cargo traffic, which remained virtually stable, and dry and liquid bulk traffic, which decreased. In the bulk category, only grain traffic increased, although not enough to indicate any change within this sector of activity.

After hitting the bottom of the wave last year, better days are ahead for the Port of Montreal. According to forecasts released by the port corporation for the five-year period 1994-1998, containerized cargo traffic should increase to 6.1 million tonnes in 1994, and 7.1 million tonnes in 1998, with an average annual growth rate of 3.8 per cent.

"Our containerized cargo, the traffic category that has experienced the strongest growth at the Port of Montreal for more than 25 years, will reach new heights throughout the next five years," Mr. Taddeo said.

Total traffic handled at the port should increase to 18 million tonnes in 1994, and 21.4 million tonnes in 1998.

"With all the initiatives that the port corporation and its partners in the industry have taken to make our port system more competitive, everything is in place for the Port of Montreal to experience growth along with the economy on the whole," Mr. Taddeo said, specifying that rebounds are forecasted for all cargo sectors.

The chairman of the board of the Montreal Port Corporation, Mr. André Gingras, joined the president and chief executive officer in stressing that the Port of Montreal will make great strides provided that "nothing happens to undermine its competitiveness," as the competition is always on the look-out. Both Mr. Gingras and Mr. Taddeo urged workers and employers to work side by side so that nothing gives way to the competition, and to continue to offer clientele reliable, fast, economical and safe cargo-handling.

In his presentation, Mr. Taddeo announced that the port corporation has budgeted capital expenditures of \$87 million in its five-year corporate plan covering the period 1994-1998. "With the anticipated increase in traffic and revenues, and a rigid control of operating costs, we will have all the financial self-sufficiency necessary to continue to improve, redeploy and expand our facilities," he said.

The port corporation reported a net operating income of \$1.7 million in 1993 despite a \$900,000 decrease in revenue from operations. This figure was achieved following a \$1.7 million decrease in operating and administrative expenses.

Net income, before an unusual item, totalled \$5.6 million, including net investment income of \$3.9 million. The \$5.8 million unusual item represents the sale of the port corporation subsidiary that operated Contrecoeur Terminal (the infrastructures remain the property of the corporation), bringing the total net income to \$11.4 million.

Mr. Taddeo explained that the port corporation has made cost control one of its top priorities so that it can maintain its financial sell-sufficiency and continue to invest in the development of the port without ever being a burden on the taxpayer.

"From 1986 to 1993 inclusively, our operating and administrative expenses did not increase, but rather decreased, while inflation in Canada over the same period was 30.5 per cent," Mr. Taddeo said. Control of operating costs also has allowed the port to institute measures — from tariff freezes to tariff incentives — that contribute to the overall competitiveness of the Port of Montreal.

Gold-headed Cane to Captain Igor Farafonov

In keeping with a tradition dating back to 1840, the President and Chief Executive Officer of the Port of Montreal, Mr. Dominic J. Taddeo, presented the famous Gold-Headed Cane to Captain Igor Farafonov, master of the M/V Nikolay Golovanov, the first ocean-going vessel of the year to reach port without a stopover.

The Nikolay Golovanov also was the first ship to reach Montreal in 1989, the 25th anniversary of year-round navigation at the port. The Port of Montreal has been open 12 months a year since January 4, 1964, when the Danish vessel *Helga Dan* inaugurated year-round navigation in Montreal.

The first arrival of 1994, the M/V Nikolay Golovanov is a Russian-flagged container carrier. Owned by the Baltic Shipping Co., it is operated by Balt-Canada Line, represented in Montreal by Morlines Maritime Agency Ltd. The ship came from the port of



Mr. Dominic J. Taddeo (right), President and Chief Executive Officer of the Port of Montreal, presents the Gold-Headed Cane to Captain Igor Farafonov, Master of the Nikolay Golovanov.

Bremerhaven in Germany and opened the navigation year in Montreal by crossing the port's limits at Sorel at 2:56 p.m. on January 1, 1994. It then proceeded to tie up at Maisonneuve Terminal, Berth 67, where its cargo of 582 containers was handled by Termont Terminal Inc., terminal operators and stevedores.

The Nikolay Golovanov is scheduled to leave January 5. The container ship is part of the Balt-Canada Line fleet of four vessels that ensure a weekly service between Montreal and Liverpool (England), Rotterdam (The Netherlands) and Bremerhaven. Balt-Canada Line also has а roll-on/roll-off service between Montreal and St. Petersburg (Russia).

Captain Farafonov was born on May 25, 1953, in Saratov, a port city on the Volga. He went to sea for the first time at age 23 and attained the rank of captain in 1990.

Captain Farafonov has won the Gold-Headed Cane for the first time. He was an officer aboard the *Nikolay Golovanov* when it inaugurated a new year of port activity in Montreal in 1989. Captain Farafonov has been with the Baltic Shipping Co. since 1977.

The Port of Montreal also paid tribute to the pilots of Saint-Laurent Central Inc. who brought the *Nikolay Golovanov* safely into port. Pilots Pierre Labelle and Claude Chandonnet were each presented with wine goblets.

Before an audience of dignitaries,

including the Consul General of Russia in Montreal, Mr. Nikolai Smirnov, Mr. Taddeo spoke of the reasons that still motivate the port to perpetuate the tradition of the Gold-Headed Cane.

Mr. Taddeo stated: "Now, in addition to honouring the master of the first ocean-going vessel of the year, the Gold-Headed Cane also reinforces the importance of year-round navigation to Montreal.

"The Gold-Headed Cane not only acknowledges the experience, training and sound judgment of the officers and crew who bring the first ocean-going vessel safely into port each year, but it also pays tribute to the imagination, ingenuity and determination of those Canadians who have made winter navigation a reality."

In fact, winter navigation is extremely important to the Port of Montreal, which handles approximately one-quarter of its annual volume of general cargo in the winter months. Without the container traffic loaded and unloaded at its docks in January, February and March, the Port of Montreal would not have been able to attain its current status as Canada's number one container port and a leader on the North Atlantic.

The Port of Montreal generates an economic impact of approximately \$1.2 billion per year for the Greater Montreal region and Quebec and creates some 14,000 direct and induced jobs.

Mr. Silver Elected North Fraser Chairman

David Silver is the newly elected Chairman of the North Fraser Harbour Commission succeeding Irene Frith.

Mr. Silver is President of Western Heat & Energy, a wholesale supply company that distributes natural gas heating products throughout Western Canada and the Pacific Northwest.

He is a community activist having served in volunteer positions with several community organizations. He is currently Vice-President of the North Fraser Harbourfest Society.

Mr. Silver was appointed a Commissioner in 1993.

The North Fraser Harbour Commission is responsible for the administration of marine traffic on the North and Middle Arms of the Fraser River. It is responsible for the management of land areas under its administration. It is a leader in environmental land management having implemented a habitat banking program which has gained international recognition.

Port Canaveral Begins Beach Renourishment

The Canaveral Port Authority began another beach renourishment project recently. The first truckload of 100,000 cubic yards of sand was placed on a stretch of Cape Canaveral beach. The project is scheduled for completion in mid-May, 1994.

The port authority is placing the sand on a 6,000-foot stretch of beach running from Central Boulevard on the north to Pierce Avenue on the south. The port authority-funded project is being done at an estimated cost of \$400,000. The sand will provide interim storm protection until the port's sand bypass project is underway.

This is the third project by the Canaveral Port Authority to replenish area beaches. In 1993, the port authority constructed an offshore sand berm along a stretch of Cocoa Beach. Natural wave action washes the sand onto the beach. The berm will be renourished with 100,000 - 150,000 cubic yards of sand in late spring, 1994.

The sand berm project was followed by the placement of a geotextile tube on the south side of the jetty at Jetty Park. The tube blocks the northern movement of sand. This keeps sand from reentering the harbor inlet and saves in maintenance dredging costs. Approximately 67,000 cubic yards of sand that previously would have been lost to tidal flow action is now being saved by the geotextile tube.

In fall, 1994, the port authority's sand bypass project will begin. Approximately 625,000 cubic yards of sand will be moved from the north side of the port and deposited on southern beaches.

The Canaveral Port Authority will continue to initiate and research methods of reclaiming sand to renourish area beaches.

Port Canaveral Wins CAFR Award Again

The Canaveral Port Authority has received the Certificate of Achievement for Excellence in Financial Reporting (CAFR) for the second consecutive year. The award was presented by the Government Finance Officers Association of the United States and Canada (GFOA), a nonprofit professional organization. The Certificate of Achievement is the highest form of recognition in governmental accounting and financial reporting.

The award honors the port authority's comprehensive annual financial Report (CAFR) of the fiscal year ended September 30, 1993 for its constructive "spirit of full disclosure" and the clear communication of its financial story to potential users.

The award was presented to port commission Secretary/Treasurer, Ralph Kennedy and Director of Finance, Bert Francis. The port officials were recognized as the individuals primarily responsible for preparation of the CAFR.

Georgia Ports Authority: Another Record Year

Cargo volumes in 1993 surged to the highest levels in history at Georgia's deepwater seaports in Savannah and Brunswick and inland barge facilities in Bainbridge and Columbus, the Georgia Ports Authority (GPA) re-

ported.

Total tonnage increased to 9.1 million tons, 6.1 percent ahead of the 8.5 million tons moved in 1992. This is the sixth consecutive year in which GPA has recorded tonnage increases.

The growth in tonnage was paced by the continued strong performance in container traffic and breakbulk cargoes.

Specifically, GPA moved 536,362 TEU's (twenty-foot equivalent units) in 1993, a healthy 3.5 percent increase over the 517,277 TEU's moved in the previous year. Similarly, container tonnage was up four percent to 4.2 million tons.

"This continued strong performance helps keep the Port of Savannah secure in its position as the tenth largest container port in the United States," said GPA Executive Director George Nichols.

Equally impressive was the three percent growth in the general cargo, or breakbulk segment. GPA ended the year with a total of 2.4 million breakbulk tons.

The increase was almost entirely attributable to exports of Kaolin clay, which was up by 45,000 tons. Cocoa beans and woodpulp helped offset the drop in shipments of iron, steel, linerboard, plywood and paper products.

The remainder of the growth can be attributed to the re-emergence of bulk movements, driven primarily by agricultural and petroleum shipments. After dropping to 2.2 million tons in 1992, bulk movements totaled 2.5 million tons last year.

"Overall, we are greatly encouraged by this strong performance," said Nichols, "particularly in light of the continued sluggishness that exists in the global economy and the fierce competition in the international arena."

The 1993 performance also shows a greater balance of exports and imports. "Historically, GPA has exported the majority of its cargo," said Nichols. "While 1992 exports accounted for 57% of all cargoes, the split in 1993 was 54-46 percent. That's good for business because our customers make money when they're hauling freight, not air."

"The stronger performance of imports was fueled by sustained economic growth at home," he added. "The future looks even brighter. According to the U.S. Bureau of the Census, Georgia's population grew twice as fast as the nation's in 1993, making it the fastest-growing state in the Southeast."

Port of Houston: Bidding For Surplus Cranes

The Port of Houston Authority has declared surplus, Three Rubber Tired Gantry Cranes, and will be accepting sealed bids, in duplicate, until 1:00 p.m., May 26, 1994, in the office of Len Waska, Purchasing Manager. Bids should be delivered to Port of Houston Authority Executive Office Building, 111 East Loop North, Exit 29, Houston, Texas. Bids sent by mail should be addressed to Port of Houston Authority, P. O. Box 2562, Houston, Texas 77252, to expedite delivery. Regardless of method of delivery, all bids must be received in the Purchasing Manager's office prior to 1:00 p.m., on the above specified date.

For further information, please contact:

L. K. Waska, Purchasing Manager, Port of Houston Authority. Tel. (713)670-2460

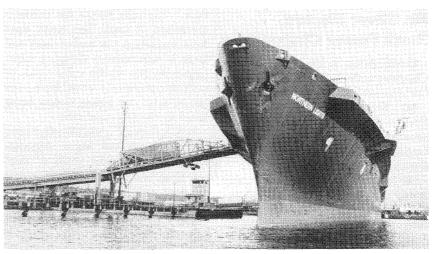
Tacoma Container Traffic Reaches All-time High

Container traffic at the Port of Tacoma reached a record high in 1993 as a result of larger trans-Pacific vessels and stronger trade ties with Alaska.

In a year spent preparing for future growth, the Port's container volume grew nearly 2 percent in 1993. Final volume figures showed 1,074,558 twenty-foot equivalent units (TEUs) for the year. Container volumes were up from 1,054,449 TEUs during 1992 and 1,020,707 in 1991.

"Our steady growth is encouraging, especially given the lackluster economies we saw both in the United States and Japan during the past year," said Robert Earley, president of the Port of Tacoma Commission. "It really points out the necessity for ports to remain diversified with their facilities and their trading partners."

In total cargo tonnage, the Port of Tacoma handled an estimated 12:53 million short tons in 1993, down from 13.2 million short tons handled during 1992. The decline in tonnage was caused primarily by reduced shipments of bulk



Increased Alaska cargo was a chief contributor to Port of Tacoma's container growth in 1993. Totem Ocean Trailer Express added the "Northern Lights" to its fleet, which eventually will enable the company to provide a three-ship rotation between Alaska and Tacoma (Port of Tacoma photo by Chris Phillips).

commodities such as grain, alumina and wood chips.

In a preliminary financial report for the year, operating revenues at the Port totaled \$49.8 million for 1993. Net income was \$13.8 million before recognizing a present-value write-off of \$9.2 million for a Natural Resources Damage Assessment. The assessment resolves all potential state and federal claims against the Port for past environmental impacts on natural resources in Commencement Bay. The funds, which will be paid out over six years, will be used to restore wildlife and fish habitat in Commencement Bay.

Preparing for the Future

The Port took the first major step in its \$450 million 2010 Plan when it embarked on a dredge-and-fill project in October 1993. The one-year, \$18.1 million project will deepen the Port's two busiest waterways, expand the Sea-Land Terminal, complete a Superfund cleanup project and enhance the marine habitat near the mouth of the Puyallup River.

The Port also took steps to install an integrated air system for faster dispatch of double-stack trains in the North Intermodal Rail Yard.

The Port of Tacoma ranks as the sixth largest container port in North America and among the top 25 worldwide.

Growing Trade

Taiwan's Evergreen Line was a healthy contributor to Tacoma's 1993 growth as it introduced its new R-class container vessels. Two of the new ships began calling Tacoma during the second half of the year. The R-class ships are among the world's largest container vessels—each capable of carrying 4,228 TEUs.

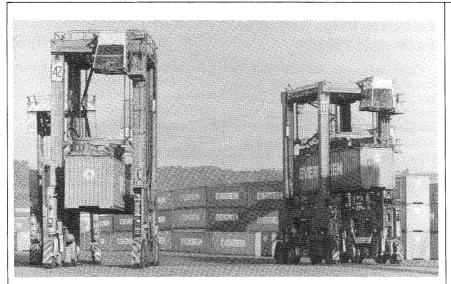
Increases in Alaska-bound cargo also contributed to Tacoma's growth. Much of the Alaska cargo consisted of consumer goods and food products. A strong summer construction season in Alaska also provided healthy cargo flow. With Tacoma handling about 80 percent of Alaska's waterborne domestic cargo, many Puget Sound warehousing companies, cold storage facilities and food producers benefit from the growth trend.

The Port of Tacoma also experienced a banner year for economic development in 1993 as several major companies opened or began developing new manufacturing facilities. The Port economic development efforts helped attract about \$46 million in new investment to Pierce County.

• The Port Commerce Center attracted an expanded Dyno Overlays plant with a complete production, research and sales/management staff. The company manufactures wood overlay materials and employs about 50 people.

• U.S. Gypsum, a manufacturer of gypsum wallboard and "readymix" filling compound, also established a new distribution and production facility at the Port. The company's two Tacoma facilities employ about 65 people.

• At the Port's industrial site in Frederickson, Toray Composites



Straddle carriers move some of the containers that led to record shipping volumes at the Port of Tacoma in 1993. The Port handled 1,074,557 twenty-foot equivalent units (TEUs) for the year (Port of Tacoma photo by Chris Phillips).

(America) was nearing completion of a \$40 million manufacturing plant that will produce carbon fiber composites. The facility will employ 120 people and will supply composite material to the Boeing Company's wing and spar plants at Frederickson.

Russia and China Ties

In international trade, the Port developed new ties with China and Russia and broadened its emphasis on growth prospects with the Pacific Rim. Japan and China are now Tacoma's largest trading partners, together representing about 61.5 percent of Tacoma's total international trade.

In northern China, the Port of Tianjin joined in a sister port agreement with the Port of Tacoma. In southern China, a delegation from Fujian Province visited Tacoma during a tour organized by the World Trade Center Tacoma. During the visit, the delegation signed a letter of intent designed to improve trade opportunities between Tacoma and China.

Tacoma's trade with Russia also came on strong in 1993 as the far Eastern Shipping Company (FESCO) began regular service between Vladivostok and Tacoma. During the first nine months of 1993, Tacoma's trade with Russia was valued at more than \$40 million, according to U.S. Department of Commerce figures. This marked nearly a 600 percent increase from about \$7 million for the same period in 1992.

Cargoes consisted of mixed com-

modities, including autos, construction trucks, heavy tractors and mechanical equipment. The growing Russia link also led to some unusual shipments, including imported Russian motorcycles, exported frozen chicken and turkey, and exported evergreen seedlings for a Weyerhaeuser Company reforestation program.

The Port of Tacoma also led efforts to organize "Gateways to Emerging Markets," a U.S.-Russia trade conference held in Vladivostok in October. Co-sponsors were the Puget Sound Ports Group, FESCO and an association of ports in the Russian Far East. The conference attracted 240 Russian and American business people and trade officials.

Africa/Europe

1993 a Red-letter Year For Port of Antwerp

Despite the downbeat economic climate, trade in the port of Antwerp during 1993 totalled no less than 102 million tonnes, a result only 1.5% down on the record set in 1992. In view of the slow start to 1993 and traffic developments in other European ports, we may safely conclude that Antwerp has every reason to be satisfied with this figure.

Perhaps the most significant aspect of all is that the decline in goods traffic

was restricted to the dry bulk trades, while new records were established in other areas. General cargo rose to 46.8 million tonnes (up by 3.3%) and container traffic grew by 1.8% to 20 million tonnes. Liquid bulk goods rose 2.9% to 27.7 million tonnes, whereas dry bulk fell back 12.4% to 27.5 million tonnes. This decline is chiefly due to a slump of 2 million tonnes in the coal and ore trades, a development which hit other ports as well. According to provisional figures, 15,700 ships called in Antwerp during 1993, representing a total tonnage of 149.5 million G.R.T.

The mediocre results for the first six months were by large compensated by the last quarter. Indeed October saw a new record set, with 9.86 million tonnes of goods being handled, while November and December also saw figures of around the 9 million tonnes mark.

Several major infrastructure works are planned for 1994, with the construction of a second Scheldt-side container berth topping the list. Work on the new berth will commence in the next months and the port authorities have already started the procedures whereby the concession will be granted. The name of the new concession holder will be announced at the end of February. 1994 will also see the start of work on the construction of the Verrebroek Dock on the left bank of the Scheldt.

Helsinki West Terminal Under Construction

Construction of a new Western Terminal intended for ships in service between Helsinki and Tallinn is on its way in the Helsinki and Tallinn is on its way in the Helsinki West Harbour. The work began at the turn of the year. The new passenger terminal has been an old warehouse.

Piping containing asbest has been pulled down in the terminal. The foundations of the gangway has been dug half-way. In part, the foundations of gangways must be rammed down. Necessary investigations of the sea bed have been made for the ramp. Work on the ramp will begin in April.

A new pipeline will be laid to the Terminal and other buildings at Hietasaari Street. The work is scheduled for the beginning of March.

Construction of vehicle control buildings and shelter roofs will begin in Autumn.

It has been agreed that the new Western Terminal will be opened for traffic on May 1st, 1995.

Mr. Leloup New Head Of Le Havre Authority

In the course of its first meeting which was held on 17 January, the new Board of Directors of the Port Authority elected its Chairman, as planned: this is Mr. Eric Leloup, a well-known personality of the Le Havre's port community who was elected in the first ballot. The Board is also composed of Mr. Didier Chabrol, Vice-Chairman and Mr. Jean-Pierre Bonon, Secretary.

Mr. Eric Leloup has been a member of the Board of Directors of PAH since July 1989. It is also a regular member of the Le Havre Chamber of Commerce and Industry (member of the Board).

Chairman of the Board of Directors of the Seed Transports Company, Mr. Eric Leloup was President of "UMEP" (Port Employers Association) from 1989 to 1993, President of the "Syndicat des Transitaires" (Forwarding Agents' Association) from 1985 to 1989 and member of the Board of Directors of "FFOCT-Fédération Française des Organisateurs Commissionnaires de Transport" (French Federation of Forwarding Decision-makers).

Mr. Didier Chabrol was in charge of various functions as the Prefect's Principal Private Secretary and Secretary General of the Prefecture. He was Sub-Prefect in Le Havre from 1988 to 1991 before being appointed as Managing Director of the SOGESTRAN Group in Le Havre and President and Chief Executive of "SEREP".

Mr. Jean-Pierre Bonon, President of the Le Havre Chamber of Commerce and Industry occupied important functions in TOTAL and ATO-CHI-MIE. He is a member of the Management Committee of the "Assemblée des Chambres Françaises de Commerce et d'Industrie" (Assembly of the French Chambers of Commerce and Industry) and has various important duties within both local and national organisations.

He has been a member of the Board of Directors of PAH since 1979.

Le Havre Plays Key Role In Project EWIIS

Once again, the sea transport of dangerous goods has been put in the hot seat. A strong gale is enough to lose containers at sea, some of them being stuffed with chemicals, or to see detonators, which have been lost at sea too, driven ashore on French coastlines.

If, of course, it is advisable to take all the necessary steps to avoid that such accidents occur, it is also as essential to prevent as far as possible all the aftermaths of such accidents.

Thus, the Port of Le Havre has been aware for long of the importance of a coordinated supervision of the transport of dangerous goods.

The principal service that European ports can do certainly consists in creating an information system network between one another. It is indeed of prime importance to know with the necessary accuracy and before any accident, the contents of the dangerous shipments carried on board the ships sailing the European waters.

The numerous existing regulations (or underway, as the Order of the European Union on the declarations of dangerous cargo as soon as the ship is sailing to one of the European Countries) remain unheeded if there are no adequate and realistic means of information processing and transmission.

As early as late 1991 - early 1992, the Port of Le Havre and the Port of Rotterdam have been fully aware that their information systems could make huge progress as regards prevention and intervention, in case of accidental loss of dangerous cargo at sea, if an information system network was created. From a simple data base which would record in Europe the ship movements inward and outward the ports, in a centralized way, it would be possible indeed to consult the information systems of port authorities who get all the data related to the dangerous cargoes carried on board in order to intervene in case of accident.

Conversely, once a container carrying dangerous goods or particularly noxious goods has been driven ashore on the beaches, it would be possible to identify the ship which was carrying this cargo. This was starting from this consideration that a two-year project (1992 and 1993) was set up, with the financial assistance of the European Community, in order to design a European information network and test its pertinence.

Actually, ships legally have to declare the dangerous goods to the ports they call at. On the contrary, a ship can freely sail the ocean without reporting to a traffic control and supervision organisation (contrary to the existing regulations as for air traffic).

Consequently, the organisations in charge of rescue at sea do not generally know what the ship in trouble is carrying (they even do no know from where she sails and which destination she is bound for), whereas the ports which have accommodated the ship have all the data useful to be known in case of accident.

The project, which is called EWTIS (European Water Traffic Information System) thus consists in organising a computer network especially enabling the organisations in charge of rescue at sea to know from where a ship is sailing and to get direct access to the information available in the ports of call.

Such a network can also be used to exchange information between ports within the scope of the enforcement of international agreements concerning pollution at sea.

The high equality of the work done in the course of EWTIS development led other ports to join the project.

Thus, EWTIS has just created a pilot project enabling automatic interchanges of information between a score of participants (ports and organisations in charge of sea rescue) distributed in 6 countries of the European Union (France, the Netherlands, Germany, the United Kingdom, Italy and Greece). Although Spain, Portugal and Ireland were a bit late to take interest in the project to participate in a concrete way in the pilot project, they have asked to be associated to the different stages of work.

As the stage of pilot project has proved both the pertinence of the concept and the technical feasibility of the project, it now remains to set up a computer system with enough capacity to process every transport by sea concerning the European Water traffic.

The progress of the EWTIS project, which can be validly carried out only by involving the overall European Union, is now a political choice that the present governments have to make in the various countries forming the Union.

Particularly concerned by environmental matters, the Port of Le Havre which has played a part of prime mover in EWTIS, counts on the active support of France which cannot let this situation which is prejudicial to the citizens last any longer, owing to its exceptional sea board, when available technical solutions would contribute to limit the consequences of maritime disasters.

Rouen: Labour Reform Augurs Higher Volumes

Rouen has a comfortable lead in carrying out the reform of its dock labour system. In November 1992 an agreement was signed to employ dockers on a monthly basis. Early in December, and thereafter stevedoring companies hired 224 dockers on monthly salaries whilst 17 remained registered as per diem workers.

During the first nine months following the reform of the dock labour system at the Port, productivity increased, rates decreased and the volume of general cargo was up 15%. The reform has changed the attitude of dock labour at the Port. Structures which permit fruitful negotiations between labour and management have been set up and indeed, achieve harmonious labour relations. The status of dock workers in French society has improved, a manager of a stevedoring company at the Port said.

There has been a marked improvement in the level of quality of handling. Another stevedoring company manager observed that there are fewer breakdowns of equipment and consequently, his insurance premiums have dropped sharply. Still another is delighted that he has 72% fewer claims linked to cargo handling.

Dockers at the Port are getting involved in the companies which employ them and are becoming more committed to client satisfaction. This evolution contributes to a better understanding of respective roles and requirements. A meaningful labourmanagement dialogue can produce technical improvements which mean even more efficient cargo handling at the Port. A case in point is that of the dockers who loaded 750 tonnes in two hours, impressing the Vallourec group's export manager. The unprecedented direct transfer, at Bassin-aux-Bois, of 1,000 tonnes of pulp loaded on the self-propelled Samson for delivery to Pont-Sainte-Maxence on the Oise river also illustrates how the reform of the dock labour system, by improving maritime-river traffic coordination, enables the Port to capture market shares from Antwerp and Rotterdam. And since 1 July 1993, cargo is handled at the Port from 6 a.m. to 10 p.m. daily except Sundays and bank holidays without additional cost.

The Port has regained loaders' confidence. The latter are preoccupied by the quality of handling but are equally attentive to its cost. The reform of the dock labour system enables stevedoring companies to respect the deadlines and technical imperatives of each job. It has also entailed a significant drop in rates. An important agrifood exporter told the stevedoring company handling his cargo at the Port, "When it comes to reliability and rates, you needn't fear the competition from Antwerp."

Mr Raymond Vidil, president of Marseilles Committee of French Shippers and head of the Compagnie Marfret Maritime told the Rouen Propeller Club on 13 September why regular line shipowners opt for one port over another. Time is money and shipping cargo up river costs both. "The Port's decision to shift operations to Grand-Couronne was to its advantage," he said. A geographical asset must be analysed in terms of the volume of cargo a port's logistical platforms can engender. And if a port is to keep pace it has to be reliable and its labour force must be flexible. "At Rouen," he said, "these goals have been met. Higher productivity and lower rates at the Port mean our freight costs less to transport."

The objective of the reform of the dock labour system is the expansion of port activities and the volume of traffic. Rouen has lead the way. Stevedoring companies at the Port are systematically competing for loaders' and shippers' cargo. Big stevedoring companies with extensive logistical facilities are studying their return to Rouen. This will be an asset for the entire dock labour system. Stevedoring companies express their confidence by declaring, "Antwerp was yesterday, today is Rouen's day." (Rouen Port)

Hamburg: Total Cargo Turnover Highest

Despite recession in the major industrialized nations the Port of Hamburg improved its position in competition with other overseas ports in 1993. Total cargo turnover in the Port Hamburg rose to 65.9 million tonnes in 1993, 1.2% up on the previous year's total of 65.1 million tonnes. This made 1993 a record year with the highest cargo turnover ever achieved in the Port of Hamburg. Container turnover rose by an above-average 9.6% to 2,486,130 TEUs, up from 2,268,00 TEUs in 1992. And this enabled Hamburg to win back 7th spot in the world container-port league. In Europe Hamburg is still the No. 2 behind Rotterdam. Within the North Range. however, Hamburg was able to increase its market share to 25%, up from 24% in 1992 and 18% in 1983. In 1993 64% of the cargo handled by Germany's seaports was accounted for by the Port of Hamburg (up from 50% in 1983).

The rapid growth in container traffic contrasted with falls in bulk and conventional cargoes.

Yet, despite the favourable results in quantitative terms, Hamburg's cargo-handling companies had mixed feelings at the end of 1993. Earnings continued to fall during the year. With profits from foreign trade diminishing and international shipping rates still falling, trade and industry, shippers and shipping lines put the price thumbscrews on the port operators.

Conventional general cargoes

The steady fall in conventional cargo turnover continued during 1993. Recession resulted in reduced imports of iron, steel and automobiles while the new EU import restrictions on bananas led to a fall in imports of tropical fruits. However, in paper and cellulose Hamburg was able to strengthen its already.

Forecast

The prospects for the Port of Hamburg in 1994 are generally favourable. Growth is expected to be boosted by the expected increase in world trade and the successful conclusion to the GATT Uruguay Round (though GATT itself soon to be superseded by the Multilateral Trade Organization -MTO).

The new economic and political structures in Eastern Europe, and above all in eastern Germany with the disappearance of a disadvantageous border so close to the city, have had a stimulating affect on Hamburg. The fact that the Nordic EFTA states have joined the European Economic Area is another positive factor. Trade and traffic with Northern Europe has always had a decisive impact on trade and transport in Hamburg. Whereas trade to and from Scandinavia is a factor of steady significance, transport-related demand in Russia and the Baltic Republics has yet to live up to expectations because of the fundamental upheavals taking place in their economic systems. Nevertheless, the transition to a market economy, economic recovery and consistent Western aid and investment will transform these countries, in the medium term, into interesting trade partners with a strong transport-related demand.

Hamburg's port economy is confident that container traffic will reach 4.2 m TEUs, or 43 m t, by 2000. The strongest boost to growth will come from South-East Asia where economic growth and the import boom will continue unabated.

IR£1 Million Passenger Handling Contract at Cork



At signing of contract for new IR£1 million Passenger handling facility at Ringaskiddy Ferry Terminal are:--

Back Row Left to Right: Mr. D. Owens, Port of Cork; Mr. T. Murphy, Senior Engineer (Maint.), Port of Cork; Mr. J. French, Project Manager, Project Management; Mr. J. Tuohy, Deputy Managing Director, Project Management; Captain P. Farnan, Harbour Master, Port of Cork; Mr. T. Cullinane, Ascon Limited; Mr. S.J. Geary, Marketing Manager, Port of Cork.

Front Row Left to Right: Mr. J.B. O'Sullivan, Harbour Engineer, Port of Cork; Mr. Brendan Barrett, Managing Director, Ascon Limited; Mr. Jim Cregan, Chairman, Port of Cork; Mr. P.J. Keenan, Chief Executive, Port of Cork.

Work has commenced on a IR£1 million contract at the Port of Cork for the supply and fabrication of a foot passenger handling facility at the Ringaskiddy Ferry Terminal. The contractors are Ascon Ltd., one of the leading engineering contractors in Ireland.

The Port of Cork has enjoyed rapid growth in ferry traffic in recent years — in 1993 the Port handled 300,000 passengers, an increase of 40% over 1992. In the process the Port became Ireland's no. 1 passenger port in terms of continental passengers. Three ferry companies – Swansea Cork Ferries, Brittany Ferries and Irish Ferries – provide high frequency services to Swansea, Roscoff, St. Malo, Cherbourg and Le Havre. The Cork-Roscoff service is the shortest and fastest direct sailing from Ireland to mainland Europe.

The new facility is required to service the jumbo ferries currently operating to the port and will ensure that passengers are transferred in comfort and safety between the ferries and the Passenger Terminal which is being renovated and refurbished at present. Considerable attention has been paid to the aesthetics of the passenger link, particularly to interior finishes and colour schemes. The structure has been designed to allow easy access for passengers with impaired mobility. It is expected that the new facility will be operational for the peak Summer season.

Abidjan Promotion Events in Paris, Le Havre

A delegation from Abidjan's port community was recently welcomed to Le Havre, which it was visiting as part of its first ever trade mission of this type to Europe. The first stop was Paris, where a major promotional event attracted a great many professionally interested visitors from both the Paris area and the major French port communities.

In coming on to Le Havre, the African delegation wished not only to stress the close links of friendship and cooperation that exist between the two ports, but also to seek out and meet members both of the port authority and of all the port-related professions in Le Havre, with whom the major part of seaborne trade between France and West Africa is known to originate. The Ivory Coast party was led by the Chairman and General Manager of the Port of Abidjan Authority, Mr Jean-Michel Moulod, and included members of the port authority, the main port professions and the Customs authorities, together with representatives of the neighbouring land-locked countries of Mali and Burkina Faso, for which Abidjan is the principal transshipment port.

With a traffic of 10.5 million tonnes a year, the port of Abidjan has 28 berths along a marked-out water area of 2,500 acres where about 60 vessels can be accommodated and worked simultaneously. Some 200,000 TEU containers a year pass through Abidjan, which is the second port in Africa after Durban and the leading port on the continental for the tuna fishing industry.

Moreover, its good road and rail connections with neighbouring countries make it the great gateway to the ocean for countries like Guinea, Liberia, Burkina Faso and Mali, for which it handles some 500,000 tonnes of goods per year. (Port of Le Havre Flashes)

1993 Best in 20 Years For Port of Gothenburg

Last year was the best one in 20 years for the Port of Gothenburg, Sweden. Total cargo turnover was 27.1 million tonnes, a six per cent increase over the figures of 1992.

The increase is mainly on the petroleum side. With 17.6 million tonnes of crude and refined products handled last year, this cargo sector represents two-thirds of the total cargo turnover of the port. Oil imported, exported and domestically distributed increased by ten per cent over the 1992 figures.

The good result in oil business was partly due to Russian transshipment of export oil. Another reason might be the volumes shipped of the new environment-friendly diesel fuel being produced at a Gothenburg refinery.

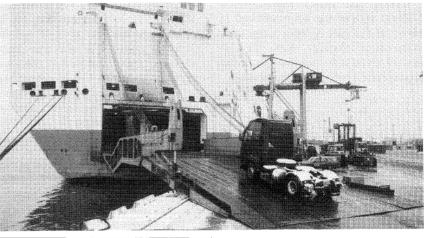
General cargo showed a considerable difference in imports and exports. Imports were down ten per cent while exports were up five percent. Together they account for a two percent decrease.

New Lines Added to Gothenburg's Port Scene

Gothenburg port has recently been added to the Grimaldi/Cobelfret service from Northern Europe to West Africa and South America's East coast.

The first call of the service at Gothenburg's Skandia Harbour was

made by the m/v Repubblica di Amalfi on February 6. Among the cargo loaded onto the 42,000-GRT vessel were lorries for South America. The Repubblica class vessels are container/roro vessels. The Swedish agents, Strandbergs Fraktkontor, have been able to have the carriers call at Gothenburg directly after several years



The reason behind this development is mainly to be found in the state of the Swedish krona, which makes Swedish products especially attractive on the export markets.

Containers constitute a considerable part of the general cargo but saw a better development than general cargo as a whole. The result last year was 370,000 containers TEU (including empties) or equal to that of 1992. of successfully feeding the line's Continental calls with Swedish cargo.

The cargo is expected to be of traditional Swedish composition on the outbound voyages to West Africa and South America. Homeward bound the vessels will carry eg Brazilian coffee, tobacco, furniture, plywood, and timber.



Most of the general cargo was shipped in containers, 370,000 of them, and most of these were handled in the Skandia container harbour.

Helsingborg: Gateway to Sweden, 2nd Largest

The Port of Helsinki is the second largest port in Sweden and has developed rapidly during the last years. The ferry traffic between Sweden and Denmark convey 14 - 15 million passengers and some 2 million vehicles each year; this traffic makes Helsingborg one of the busiest ports in the world!

The yearly turnover of goods is 8 - 10 million metric tons and this number includes all types of cargoes passing through the Port. 41% of the total import of perishables to Sweden is imported via Port of Helsingborg.

The strong infrastructure of Helsingborg is essential to the Port. Two European freeways, railways and searoutes intersect here. Two all-train ferries is leaving the port every second hours. Total transit time for the train from Helsingborg to Hamburg, via Copenhagen, is only 16 hours.

In addition to the freeways and rail services there are feeder- and ferry services between Helsingborg and Denmark, Norway, Finland, Iceland, the Baltic Sea, the Mediterranean Sea, Germany, the Netherlands, Belgium, France and the UK.

During the 1980's approximately US\$100 million has been invested in new port facilities in order to generate more cargo volumes. Today the port has all necessary facilities for giving appropriate service to its customers.

(Gateway)

Riga-Helsingborg Weekly Direct Traffic

The Latvian Maras Linija will operate a direct LoLo traffic between Riga, Latvia, and Port of Helsingborg on the Swedish southwest coast. Starting on 7th February, Maras Linija is operating a weekly direct traffic, with two container vessels, between Riga and Aarhus in Denmark. From the 8th of March Port of Helsingborg will be included in this service. The LoLo service includes containers and breakbulk cargo.

The industry of south Sweden has already shown a great interest in this transport alternative and welcomes the opportunity to further strengthen their business relations with the Baltic countries and Russia.

SCT Throughput Hits Half Million Mark

Southampton Container Terminals (SCT) has underlined its position as one of the leading terminals in Europe by handling over 500,000 TEUs for the first time in 1993.

The figure was more than ten percent up on the previous year and reflected the general growth of Far East traffic and SCTs development as a major transshipment centre for Europe.

The actual total of 502,000 TEUs comprised some 350,000 boxes, with imports slightly exceeding exports.

Users of the terminal include an impressive portfolio of the world's major shipping lines – P&O, Maersk

Line, Hapag Lloyd, Mitsui OSK and NYK — all operating in the Far East trade.

Over ten percent of traffic is now transshipment, with the Terminal's deep-sea customers all making use of the network of short-sea operations which feed cargo to and from Ireland, the Continent, the Iberian Peninsula, the Canary Islands and North Africa.

By shipping via Southampton, which is invariably the first port of call in Northern Europe for the Far East operators, considerable time savings are achieved against transshipment via Continental ports such as Rotterdam.

Managing Director Bruce Dawes commented: "Reaching 500,000 TEU throughput is a milestone for SCT. It confirms our position as one of the leading terminals in Europe and at the same time underlines the value of the investment we have made to create a solid platform for the future."

"We experienced significant growth during the second half of 1993 and with the predicted rise in Far East traffic we except that to be sustained during 1994."

Ocean Village Office Development Site Sold

Associated British Ports Holdings PLC (ABPH) has sold an office development site in Ocean Village, Southampton to Kyle Stewart Properties Ltd. for £440,000.

The site, which has detailed planning consent for almost 18,000 sq ft net of offices, is located between existing buildings let to Barclays Bank and Price Waterhouse. Kyle Stewart expects to start work early in 1994 so that the new building, to be known as Arcadia House, will be available for occupation in early 1995.

The 65-acre Ocean Village scheme is Southampton's biggest waterfront development.

Port of Hull Attracts New German Service

Washbay Linie G.m.b.H. Hamburg (Washbay Line) has announced the start of a new weekly roll-on/roll-off, container and general cargo service between Hamburg and Hull. The fist sailing from Associated British Ports' (ABP) Port of Hull took place on 20 January using the m.v. *Laila* (2,342 dwt).

In 1966, Washbay Line pioneered roll-on/roll-off services between Hamburg and ABP's Port of King's Lynn where the Line continues to call on a regular basis.

Mike Fell, ABP's Port Manager at Hull, said: "Washbay's decision to add the Port of Hull to their UK calls will strengthen Hull's links with North Germany and Eastern Europe, especially as Washbay is offering a multipurpose service covering vehicles, mobile plant, containers and general cargo."



Brisbane: Half-year Figures Encouraging

Trade figures for the six month period to December 31, 1993, are the best on record suggesting the Port of Brisbane can expect its best ever year despite the current tough economic climate.

Total trade for the first half of 1993/94 rose nearly 14% to 8,405,590 tonnes, compared with 7,380,270 tonnes last year, and 8,312,750 in 1991/92, the previous best six monthly total.

Imports jumped 19% to 4,500,430 tonnes, while exports increased 8.4% to 3,905,160 tonnes.

Major contributors to this steady trade performance were imports of metal ores, other dry bulk cargo eg. fertiliser and chemicals, general industrial cargo, and crude oil, plus exports of grain, refined oil, and general rural products, particularly cotton lint exports, which lifted 14%. Brisbane's container trade also showed promising results for the period, rising 5.5% to 113,106 TEUs, an increase of almost 6,000 TEUs over the previous total. Containerized imports rose 6% to 55,517 TEUs, and exports almost 5% to 57,589 TEUs.

Mr Ian Brusasco, Chairman of the Port of Brisbane Authority welcomed the encouraging half year figures as a good indicator for a record trading year in 1993/94.

"We have seen both the wet and dry bulk trades improve to help lift the port's total trade figure over one million tonnes above last year's mark for the same period," said Mr Brusasco.

"It is also particularly pleasing to see Brisbane's container trade performing so well, indicating another record year is most likely."

(Brisbane Portrait)

Port Environment Study Released by Brisbane

A 200 page resource book, "Brisbane's Port Environmental Study" has been released by the Port of Brisbane Authority for public scrutiny.

The book compiles field studies conducted on six major components of the habitat system within Moreton Bay in 1991/92, and will provide an invaluable knowledge base for effective resource management. Chief Executive Office, Mr Greg Martin said the field studies were a necessary part of the port's overall development.

"The Authority recognises the need for careful monitoring of the environment in conjunction with the development of a world-class deepwater port at Fisherman Islands," Mr Martin said.

"The studies, to be repeated each year over a three year period (to quantify natural variations within the study area), will assist in the development of environmental management strategies to allow responsible development and management of the port," he added.

Specifically, the review identified key floral and faunal components of the port environment which could be monitored and used to gauge what effects port development may have.

Key study areas were:

1. Mangrove areas fringing the port development and nearby areas.

2. Subtidal and intertidal seagrass areas on the southeast face of Fisherman Islands.

3. Current patterns and associated sediment characteristics around and above these seagrass areas.

4. Feeding and roost areas of birds using seagrass and mangrove areas, with particular reference to migratory water birds.

5. Fishing grounds adjacent to the port.

6. Significance and impacts of commercial baitworm digging practices within seagrass beds.

Principal consultants engaged in the study include CSIRO Fisheries (seagrass), WBM Oceanics (mangroves, currents and sediments, fisheries and baitworm digging) and Dr P. Driscoll (birds). (Brisbane Portrait)

Port of Newcastle Breaks Throughput Record

The Port of Newcastle set a new annual record for total throughput with a figure of 52.5 million tonnes in 1993. This is compared to the record 50.8 million tonnes achieved at the end of the 1992/93 Financial Year. The 1992/93 figure was the first time that the Port had 'cracked' the 50 million tonne mark and was a milestone in the Port's history. The 1993 calendar year figure has quickly dated the history books! (Scuttlebutt)

Sir Richard New Head Of Ports of Auckland

Sir Richard Carter, until recently executive chairman of Carter Holt Harvey group, has been elected chairman of the Ports of Auckland Limited. Mr. Dryden Spring, current chairman of the N.Z. Dairy Board, continues as deputy chairman.

After his appointment, Sir Richard said that he was looking forward to leading the company following its recent change to public listing.

He said he had confidence in the company's further growth and development, its commitment to a strong commercial drive and the enhancement of shareholder wealth.

He felt this had the full support of all shareholders.

Sir Richard succeeds Mr. R.G. Alexander, the founding chairman of the port company.

Port Development In 8th Plan

(Reproduced from 'INDIAN SHIPPING', Journal of Indian National Shipowners' Association)

There are 11 major ports and 139 minor intermediate ports located along the 5560 kms. long coast line of India.

The traffic handled at major ports was 147.26 million tonnes in 1989-90. In 1990-91 and 1991-92 the traffic increased to 152.55 million tonnes and 155.00 million tonnes respectively. Port wise traffic growth is given in the Table I.

The composition of traffic has un-

(million tonnes)

TABLE I Volume of Traffic at Major Ports

Name of the Port	1984-85	1989-90	1990-91	1991-92
Calcutta/Haldia	10.18	14.69	14.90	17.95
Bombay	25.20	27.46	29.82	28.32
Madras	15.00	23.94	24.51	23.35
Cochin	3.92	7.11	7.32	7.48
Vishakhapatnam	12.87	21.12	19.42	19.28
Kandla	15.75	18.93	19.68	20.30
Mormugao	14.51	14.16	14.90	14.64
Paradip	2.14	6.18	6.88	7.02
New Mangalore	3.38	7.66	8.03	8.51
Tuticorin	3.78	5.33	5.07	5.47
JNPT	_	0.70	2.02	2.68
Total	106.73	147.28	152.55	155.00

TABLE II Commodity-wise Traffic at Major Ports (million tonne)					
POL	49.73	62.00	65.78	63.60	
Iron ore	26.00	33.20	31.86	33.06	
Coal	4.50	17.70	19.80	21.60	
Fertilizers	6.00	6.66	7.72	9.46	
(including raw materia	als)				
Foodgrains	1.10	*	*		
Containers	3.23	6.00	7.92	27.28	
General cargo	16.17	21.72	19.47		
Total	106.73	147.28	152.55	155.00	

* Included in General Cargo.

dergone significant charges as shown in the Table II.

The POL traffic has registered significant growth, while foodgrains traffic has dwindle as a consequence of increasing self-reliance. A recent phenomenon is the growing trend of container traffic and coal traffic which is likely to increase substantially in the Eighth Plan.

Capacity at Major Ports:

The capacity at major ports increased from 132.73 million tonnes in 1984-85 to 161.32 million tonnes in 1989-90, and 167.58 million tonnes in 1991-92. The commodity wise capacity are given in Table III.

Productivity:

The port productivity, in terms of ship turn-round time and average ship berth day output, registered an improvement over the Plan period. The average turn-around time of a ship declined from 11.9 days in 1984-85 to 8.9 days in 1989-90 and 8.1 days in 1990-91, while the average ship berth day output, increased from 2314 tonnes per day in 1984-85 to 3277 tonnes in 1989-90, and 3372 tonnes in 1990-91.

However, labour and equipment productivity are still areas of concern. The output per gang shift is low despite the fact that the norms fixed in 1983 itself are at a low level. The manning scales evolved three decades ago have not changed, though modern cargo handling techniques have been introduced during this period. The ports continue to be afflicted by pockets of surplus labour. Therefore, there is an urgent need to revise the norms of output and the manning scales.

Equipment utilization has been low for most categories of equipment. In the case of modernised handling system for iron ore, the actual performance is much lower than the rated capacity and in some ports lower than the norms. Low productivity is due mainly to operational constraints such as equipment breakdown, time spent on surveys and deballasting, power failures etc. Efforts need to be made to remove these constraints to improve productivity.

TABLE III Commodity — wise Capacity at Major Ports

Commodity			(mi	llion tones)
	1984-85	1989-90	1990-91	1991-92
POL	55.25	72.15	72.15	76.65
Iron Ore	41.50	41.50	41.50	42.50
Coal	6.25	6.50	6.50	6.50
Fertilizers	3.90	6.60	6.60	6.60
Containers	4.48	5.82	5.82	6.58
General Cargo	22.35	28.75	28.75	28.75
Total	132.73	161.32	161.32	167.58

The present container handling rates are also low compared to international standards. For example, the number of Tonne Equivalent Units (TEUs) handled per crane hour ranges between 7 in Bombay to 15 in Madras compared to 26 in Colombo and 32 in Singapore. There is need to improve the container handling rates to make Indian ports internationally competitive.

Seventh Plan Outlay and Programme: The Seventh Plan provided an outlay of Rs. 1104.79 crores for the Ports Sector. The expenditure totalled Rs. 1341.53 cores, of which major ports accounted for Rs. 1273.39 crores. Out of the total expenditure of Rs. 1341.53 crores, Rs. 701.00 crores or 52% came from the internal resources and inter-corporate loans of major ports. The budgetary support accounted for 48% of the expenditure. A large part of the budgetary support was on account of foreign aided projects (about Rs. 360 crores) and hence, net budgetary support was only 21% of the expenditure.

"There has been a shortfall in expenditure during 1990-91 and 1991-92 — Rs. 220.28 crores in 1990-91, and Rs. 347.72 crores in 199192. The main reason for this is the delay in sanction/implementation of a number of projects such as laying of submarine pipelines at Bombay, oil jetty at Haldia, coal handling facilities at Paradip and Ennore, the dredging of Jiggerkhali in the Hoogly Estuary, slow expansion of infrastructural facilities at JNPT etc.

During the Seventh Plan, Jawaharlal Nehru Port (JNPT) was completed and commissioned in May 1989. The port has three container berths, two bulk berths and can handle 5.9 million tonnes of traffic. Other schemes completed during the Seventh Plan / Annual Plan 1990-91 and 1991-92 include the sixth general cargo berth at Kandla, one oil jetty at Madras, one multi-purpose berth at Mormugao, a general cargo berth a Mangalore, a general cargo berth and a fertilizer berth at Paradeep, an oil berth and cruse oil discharging system at Outer harbour, Visakhaptapam, apart from container handling facilities at a number of ports.

Eighth Plan — **Traffic and Capacity:** The Eighth Plan traffic projections and the capacity build up required to serve this traffic are set out in Table IV.

The port-wise capacity and traffic

TABLE IV Commodity — wise Port Capacities and Traffic Projections						
				(in million tonnes)		
Commodity	Capacity as on 31.3.92 Plan (1992-97)	Projected Traffic for 8th Plan by Ports	Capacity addition during by user agency	Capacity addition as ports as on 31.3.1997	Total capa- city	
POL	76.65	87.81	24.00	5.50	106.15	
Iron Ore	42.50	36.00			42.50	
Fertilizers	6.60	15.67*	_	_	6.60	
(including raw mate	rial)					
Coal	6.50	36.00*	30.50	5.00	42.00	
Other break bulk	28.75	37.43	9.81	0.35	38.91	
Container	6.58	15.73*	10.75		17.33	
Total	167.58	228.64	75.06	10.85	253.49	

projection at the end of the Eighth Plan is presented in Table V.

The major increase in capacity will take place at Paradip, Madras, Cochin, New Mangalore, Kandla and JNPT mainly to handle POL, Coal an Container traffic. The Eighth Plan visualises actual physical capacity addition of about 88.91 million tonnes (MT). The details of the capacity addition are given below:

COMMODITY REMARKS

P.O.L.	Improved throughput at
29.50	Bombay, New berths at
(m.t.)	Haldia, Kandla and Man- galore.
~ .	0
Coal	Coal traffic for coastal
35.50	thermal plants will require
(m.t.)	port handling facilities at
	loading port of Paradip and
	receiving ports of Madras,
	Cochin, Tuticorin, New
	Mangalore.
Container	Improved container handl-
10.75	ing facilities at Madras,
(m.t.)	JNPT, Cochin, Bombay,
× ,	Calcutta, Haldia, Kandla.
General	Additional general cargo
Cargo	capacity at Haldia, Kandla,
10.16	Tuticorin, Mormugao.
(m.t.)	· · · · · · · · · · · · · · · · · · ·
()	

Eighth Plan Thrust Areas: The following are the thrust areas:

- a) Modernisation of port facilities and use of updated technology so as to improve the efficiency of operations and reduce the handling cost;
- b) Intensive utilisation of existing

infrastructure through operational and managerial measures so as to optimise installed capacity utilisation;

- c) Expansion of facilities to handle at least 50 percent of general cargo in container form;
- d) Deepening of drafts at selected major ports to receive larger vessels;
- e) Improvement in productivity of labour and equipment to improve the efficiency of port operations;
- f) Improvement in financial viability of ports;
- g) Alternative sources of funding port development; and
- h) Encouragement of private sector

participation in selected port activities.

Strategies Visualised: In the Eighth Plan, modernisation of ports and cargo handling facilities, especially to handle container traffic will continue to receive priority. The development of containerisation will also necessitate rationalisation of container handling charges and tariff structure in major ports.

The Plan will provide for establishment of container freight stations as well as new Inland Container Depots. The concept of Multi-Modal-Transport System will be encouraged. The intermodal linkages between various modes of transport will be strengthened in order to allow smooth flow of traffic to and from the ports.

Since many ports will continue to handle traditional break-bulk cargo along with container cargo, the concept of multi-purpose terminals will be adopted to combine modern handling techniques with conventional operations.

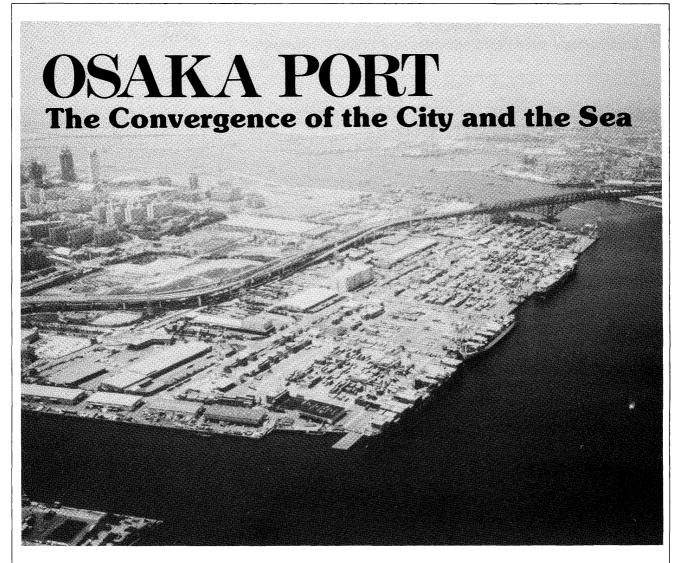
A major constraint in the effective utilisation of modern container terminals at Madras, Jawaharlal Nehru and Cochin Ports is the cabotage law which restricts coastal traffic movement to Indian vessels only. This prevents large foreign Container vessels especially of the fourth generation category from using these ports as a base for transshipment of containers. This has re-

(Continued on Page 34)

TABLE V Port Capacity and Traffic

(in million tonnes)

Port	As on 31.3.1992		As on 31.3.1997	
	Traffic	Capacity	Traffic	Capacity
Calcutta/Haldia	17.95	18.85	22.73	27.35
Paradip	7.02	6.80	20.22	31.60
Vishakhapatnam	19.28	18.80	26.38	21.75
Madras	23.35	25.92	34.70	34.92
Tuticorin	5.47	5.50	9.34	8.70
Cochin	7.48	9.76	13.61	15.36
New Mangalore	8.51	10.00	15.51	18.10
Mormugao	14.64	17.10	17.75	17.01
Bombay	28.32	27.25	29.52	30.25
Kandla	20.30	21.70	27.70	37.60
JNPT	2.68	5.90	11.18	10.85
Total	155.00	167.58	228.64	253.49



Introduction

By the sixth century, the ancient port of Osaka had already become a major transportation hub linking Japan with China and Korea. In the seventeenth and eighteenth centuries, with the rapid development of a commercial economy, the harbor served as the entrance to Osaka — then known as "the nations's kitchen" — and was described as a bustling port with "a thousand ships entering and a thousand ships leaving."

It was against this historical background that Osaka Port opened as an international trading port in 1868. Since then, the port has grown to become the focal point of the economy and culture of the entire metropolitan region.

Now, with the twenty-first century approaching, Osaka Port is poised for even greater change. As Japanese society becomes more cosmopolitan and reliant upon information, Osaka Port will serve not only as Osaka's gateway to the world — with port facilities expanded to include 170 large berths — but also as an attractive living environment, and interface between the city and the sea.

The Principal Facilities of OSAKA Port:

Ultra-Modern Facilities linking OSAKA with the World 1) Container Terminal

The container terminal currently has 12 operational berths with depths of 12-13 meters and the latest Super Panamax model super-cranes. Annual container volume is over 10 million tonnes, with some 2,600 container ships berthing each year. Construction is in progress on three new 14-meter deep, large container berths that will accommodate today's large container ships.

2) Ferry Terminal

Osaka Port functions as a hub port at the center of a network of regular domestic ferry lines, serving points ranging from the many islands within a 50-kilometer radius of Osaka to destinations throughout Japan.

The ferry terminal is one of the largest in Japan, with nine ferry berths. Fifteen ferry routes linking various points in Western Japan are served from this terminal, with an average of 20 departures per day.

One international ferry per week links Osaka with the Chinese port of Shanghai.

3) Passenger Terminal

The Tempozan Passenger Terminal can accommodate world-class passenger liners such as the *Queen Elizabeth* 2 and the *Rotterdam*. A two-story terminal building combines convenient passenger lobbies with immigration, customs and quarantine facilities. This terminal is next to Tempozan Harbor Village, an attraction visited by five million people annually. It features the world's largest aquarium, as well as restaurants, a shopping mall and many other facilities.

The OSAKA Advantage:

Reliable Service at an Exceptional Location

1) Routes Linking 400 World Ports

About 2,600 of the 6,000 ships plying international routes that berth annually at Osaka are container ships. Container ships sail directly between Osaka and 400 major ports in roughly 100 countries in North and South America, Europe, Africa, the Middle East, Southeast Asia and Oceania. Around 400 ships a month sail from Osaka on international routes.

Osaka Port is currently constructing large container terminals and related facilities to accommodate the increasing container tonnage handled in the port and the larger size of modern ships.

2) The Hinterland of OSAKA Port: A Major Center of Production and Consumption Osaka Port is situated in southwestern Osaka City. The gross domestic product of the greater Osaka region, the hinterland of Osaka Port, comprises three percent of the world's total GDP, roughly equivalent to the GDP of Canada; it is expected to approach the GDP of Great Britain by the year 2000.

Sixteen million people live within a 50-kilometer radius of Osaka Port, forming a major production center that represents 20 percent of Japan's GNP.

3) A Well-Developed Transportation Network

The Greater Osaka region, centered on Osaka Port, benefits from a comprehensive, well-developed transportation network that extends in every direction and affords rapid access to all areas of the region. For this reason, Osaka offers time and cost advantages over other ports in the country.

With a direct expressway link to the Kansai International Airport, Japan's sole 24-hour airport, due to open on September 4, 1994, Osaka Port will play an increasingly important role as an integrated transport hub for sea, land and air routes. Osaka Port's distribution network extends beyond the Greater Osaka region to link all of Japan throughout a well-developed system of expressways, feeder services and ferry links.

The OSAKA Port Waterfront: A Multipurpose Development in a Maritime Environment

More than just cargo-handling facilities, OSAKA Port is building a whole new city center, promoting the "TECHNOPORT OSAKA PRO-JECT" on newly-reclaimed land.

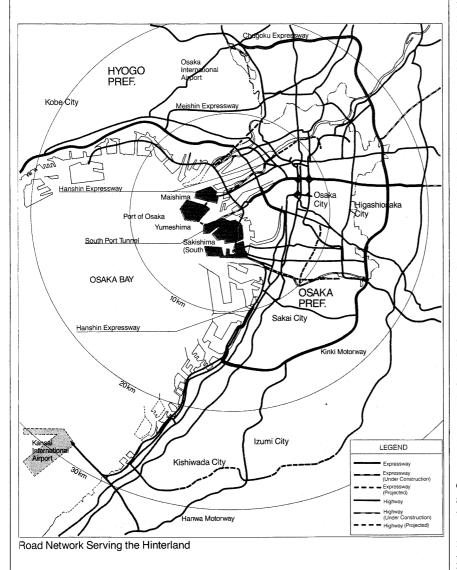
A 160-hectare area called Cosmo-square is being developed to integrate technology, commerce, information and culture in an attractive and environmentally sound setting.

Current facilities include a world-class international trade fair center, private laboratories working on advanced technology, and numerous office buildings. Scheduled to open in 1994 are the Asia-Pacific Trade Center, poised to become one of the largest import wholesale centers in the world; the Osaka Building scheduled for 24hour operation; and the Hyatt Regency Hotel.

TO BUSINESS OPPORTUNITY AND LOGISTICAL EFFICIENCY

The Osaka hinterland: a small country The Port of Osaka: unto itself with 20 million consumers and 3% of the world's GDP. A grand ferry and domestic liner network linking Osaka with all of western Japan. Rapid, failsafe port services and distribution facilities linking air, land and sea, including Kansai International Airport, Japan's sole 24 hour airport. Constantly expanding, improving, progressing: one of the most talked about container ports in the world. Sounds inviting, doesn't it? Gateway to Japan PORT OF OSAKA 2-8-24, CHIKKO, MINATO-KU, OSAKA, 552, JAPAN. OSAKA, 552, JAPAN. TELO6-572-5121 TELEX:525-6320 OPPA J ort of Osaka PORT & HARBOR BUREAU, CITY OF OSAKA TEL.06(572)5121 FAX.06(572)0554 TEL.06(571)2200 FAX.06(573)6231 OSAKA PORT PROMOTION ASSOCIATION OSAKA PORT TERMINAL DEVELOPMENT CORPORATION TEL.06(612)0171 FAX.06(612)7790

The Osaka Sister Port Cultural Exchange Center, opening in 1995, will include an exhibition hall introducing cultures and lifestyles representative of the six sister ports of Osaka — San Francisco, Melbourne, Le Havre, Shanghai, Valparaiso and Pusan. It is hoped that this center will deepen friendly relations between Osaka and its sister ports.



Port Development-

(Continued from Page 31) sulted not only in under-utilisation of infrastructure at these ports but also in the diversion of traffic to nearby ports of Singapore and Colombo, depriving the country of foreign exchange earned through container handling. At present the Indian shipping fleet has hardly any container or cellular vessels, leave alone fourth generation vessels. In view of this, it would be desirable to suitably amend the cabotage law to allow foreign lines to operate on selected stretches of coastal waters so as to allow optimal utilisation of container facilities set up at our ports.

The existing levels of output in terms of cargo transferred or handled are relatively low and port productivity is a matter of concern. In the Eighth Plan, efforts will be made to improve the availability and utilisation of equipment to achieve higher productivity levels. Labour productivity at ports, too is very low. There is need to optimise this through extensive manpower training to enhance skills and managerial capabilities. Manning scales need to be reviewed and new techniques for cargo handling operations adopted.

Due to acute budgetary constraint, alternative sources of funding will need to be explored. One such concept is user investment. Construction and maintenance of such facilities by users is likely to result in more thorough utilisation and higher throughput. Another area of funding is inter-corporate loans introduced during the Seventh Plan. This should be continued.

The private sector investment will also be encouraged in select-port activities ranging from leasing of equipment to private management of terminals. In India, a beginning has already been made for the involvement of private sector in ports. For example, private sector in many ports employ their own equipment for their cargo handling operations. Stevedoring is another private sector operation in many ports.

The dredging capacity would be increased by replacing the overaged dredgers with modern and larger capacity dredgers to meet the increasing dredging demand. Apart from port and harbour dredging, there is considerable demand for different categories of dredging activities as riverine dredging, dredging of inland canals, irrigation channels and reservoirs. In view of this potential, it is desirable that the Dredging Corporation of India (DCI) acquire small portable dredgers suitable for such activities.

There is need to conduct hydrographic surveys and to prepare modern charts to improve port development activities and open unexplored areas to deep draft ships.

There is near absence of effective research and development units in ports. Planning and research cells will be set up in all the ports to improve the quality of planning techniques and expedite plan formulation.

There are at present two major institutions for training of personnel at the management levels. These are National Institute of Port Management (NPM) and Indian Institute of Port Management (IIPM). Apart from this, there are Labour Training Institutes in several ports like Bombay, Madras, Calcutta and Vishakhapatnam to train various categories of staff. The facilities at these institutes need to be upgraded to cater to the requirements of neighbouring ports.

Andaman and Lakshadweep Harbour

works: In the Eighth Plan, the main schemes relate to the construction of breakwaters at a number of places, construction of Haddo Wharf and procurement of dredging equipment.

Intermediate and Minor Ports:

At present, there are 139 minor or intermediate ports. The primary responsibility for their development and management rests with concerned State Governments.

The total traffic handled at minor ports has not registered significant increase over the years. Minor ports face various technical difficulties and shortcomings such as slow response to technological change in shipping and cargo handling, fall in iron-ore export and reduction in fertilizer traffic. Hence, the total traffic handled by these ports is growing at a much lower rate than that of the major ports.

Therefore, there is an urgent need for the concerned States to provide adequate funds for the development of minor ports so that they can meet the requirements of the hinterland and effectively cater to coastal and sailing vessels, thereby, reducing the pressure on major ports so some extent.

During the Seventh Plan, an outlay of Rs. 20 crores was provided in the Central Sector to render financial assistance to the States to develop selected minor ports. However, no expenditure was incurred on account of lack of formulation of schemes in time.

Eighth Plan Investment Programme: An outlay of Rs. 3216 crores is included in the Eighth Plan for Port Sector in the Central Plan. The outlay provided in the State Plans for ports and lighthouses is Rs. 319.28 crores.

Source: Eighth Five-Year Plan (1992-97)

26.6% Profit Lift By Ports of Auckland

Producing another excellent result, Ports of Auckland Limited has lifted its profit after taxation by 26.6% for the six months ended 31 December 1993 to the comparable period in 1992. It rose from \$9.812 million to \$12.426 million for 1993.

The substantial improvement followed an 8.3% lift in revenue from \$51.417 million to \$55.700 million. Annualised, the return on shareholders' funds rose from 8% to 10%.

"The company is well on target to achieve its forecast revenue and profits and, after considering the cash position and future capital expenditure requirements, the directors have set a fully imputed interim dividend of 5 cents per share for 1993," said the Ports of Auckland chairman, Sir Richard Carter. \$9.938 million would be distributed to shareholders, payable on 16 March 1994 and based on shareholders registered at the close of business on 4 March 1994. "The directors are of the opinion that this level of dividend is sustainable in future years," said Sir Richard.

Capital expenditure remained at forecast levels and there were no abnormal items in the two six month periods.

The rise in cargo volumes handled by the port, up 13% from 3.804 million to 4.292 million manifest tonnes for the six months, was above forecasts and favourably impacted both revenues and earnings before and after tax.

Auckland is country's leading container and general cargo port. It handled 161,828 TEUs (standard containers) which was up some 9% on 1992. Other general cargo volumes increased by some 20% to 1.730 million tonnes. Cargo ship visits were 879 compared to 880, and passenger cruise ships will increase to 28 from last season's 16.

"Productivity at the Ports of Auckland and Onehunga has continued its increase and there have been some impressive performances during the six months," said Sir Richard.

"For example, Fergusson Container Terminal recorded its highest ship exchange in a 24 hour period handling 1,489 TEUs, and at the Bledisloe complex a bulkship discharged 3,207 tonnes of wheat in 9 hours to achieve a record turnaround for a grain carrier."

"As another illustration of efficiency, when the company's stevedores were contracted by an overseas line for the discharging and loading operations of their ships, they immediately achieved a significant increase in cargo handling rates," he said.

The company has continued its programme to equip the port with high performance cargo handling equipment, and during the period commissioned five new heavy duty mobile units. The overall improved handling had been favourably impacted by the commissioning of four new Valmet straddle carriers and an Australian-built 32 tonne roll-on roll-off forklift.

The sophisticated computerised container tracking and handling system SPARCS had been extended to cover the Bledisloe complex and this will result in further improvements in ship turnaround times and asset utilisation.

"In our drive to further increase export volumes through the port and improve efficient handling of wood products, our company has built a 6,000 square metre forest products transit facility to be operated by SEAPACK, our cargo consolidation business," said Sir Richard. SEAPACK also achieved ISO 9001 accreditation, which is probably a world first for a port to achieve this particular high standard.

At the Port of Onehunga, a roll-on roll-off ramp extension to the wharf has been constructed to enable a shipping company to develop a weekly schedule to the South Island.

In December the Port Property division completed its \$6 million Viaduct Quay complex, comprising restaurants, shopping, entertainment and office space. The development was timely for the Whitbread Yacht Race festivities and should be a catalyst for redevelopment in the Viaduct Basin area.

Within the Westhaven Marina the 255 berth extension was proceeding to schedule with steady sales, and would be opened in November 1994.

Over the balance of the current financial year, and over the 1994/95 financial year, the company would recognise project profits available on the Westhaven Marina Extension.

As the project would still be udner construction at the end of the current financial year, profit recognition to June 1994 wil be on a proportionate basis.

"As New Zealand has begun an economic uplift and the company's busienss is correlated to growth in the economy, there are good reasons to be confident about prospects in the second half of the year," said Sir Richard.

"Ports of Auckland Limited continues to improve its operaitng efficiency and recently launched an initiative with its customers which, after four months of operation, has already proved mutuially beneficial," he said.

"And as part of its forward planning,

work will shortly begin on the re-alignment of Quay Street, to the south of the port, to facilitate construction of a major new port/rail exchange grid that will greatly improve container movements through the port," said Sir Richard./

"These initiatives demonstrate that the company is intent on ensuring that the 1994 financial year produces another good result for its shareholders," he said.

Mr. Powley Appointed Chairman of Southport

At the most recent Annual General meeting of the Port Company, Rex Powley was appointed chairman of the Board of Directors. Rex has been associated with the Port Industry for over thirty-one years having been a watersider for twenty-six years, retiring as President of the Bluff Watersiders Union. He was a member of the Southland Harbour Board having the unique position of being its final Chairman prior to its demise on the formation of the Port Company in 1988. Rex has been a director of South Port since the Company was formed and is looking forward to steering a steady course in the immediate future.

Tom Shirley, the former Chairman of the Port Company, leaves the board of directors having been the Chairman from day one. The record of the Company speaks for itself and he can be well proud of the Company he has led during its birth and infant years. (The Bluff Portsider)

EDI Link Between PSA, Port of Belawan

The Port of Singapore Authority (PSA) and the Indonesian Public Port Corporation I (PPCI), [PT (Persero) Pelabuhan Indonesian I], signed a Memorandum of Understanding to establish an Electronic data interchange (EDI) link between PSA and Port of Belawan (PB). The Memorandum was signed by the Deputy Executive Director of PSA, Mr Goon Kok Loon and the Managing Director of PPCI, Mr S. F. Makalew in Medan on 3 Feb 94.

The Memorandum defines the basis for co-operation between PSA and PPCI, which supervises 15 branch ports located in the provinces of Aceh. North Sumatra and Riau Province, for the establishment of an EDI link to exchange shipping information. The EDI link allows both parties to better plan their respective port operations providing advance and timely information flow. PSA will be providing the computer software to PB for the capturing of information on vessel arrival and departure. The information to be provided to each party includes Vessel Arrival/Departure Information and Daily Berthing Situation. At a later stage, facilities such as Container Stowage Instructions, Information on Dangerous Goods and Bayplans of Container Vessels will be extended to PB to allow shippers to benefit from better transshipment connections through Singapore. This agreement will first be implemented with PB before its extension to cover other ports under PPCI.

With this new EDI link, port users will benefit from faster, more comprehensive and more accurate transmission of information. This will give them the competitive edge and help them serve their customers better. The information also facilitates pre-planning by the ports to increase their efficiency in operations.

Situated in northern Sumatra, the Port Belawan serves the city of Medan and is the first Indonesian Port to establish an EDI link with PSA. PSA already has EDI links with several other ports worldwide viz Bremen, Hong Kong, Port of Seattle, Le Havre, Hamburg, Marseilles, Port of Thailand and Penang.

MAPS Provides Training For Genoa Personnel

In 1992, Map Services Pte Ltd (MAPS), a wholly owned subsidiary of the Port of Singapore Authority (PSA) signed an agreement with Sinport Sinergie Portuali srl (SINPORT), a subsidiary of the Fiat Group based in Genoa, Italy. The agreement provides for consultancy services and on-the-job training of personnel from the Voltri Container Terminal, Genoa.

The scope of the consultancy services includes review and advice on the design of the layout of the terminal, container handling operations procedure, documentation procedures and development of real-time computer system.

MAPS and SINPORT are working together to develop an efficient terminal equipment automation system which will help Voltri Terminal become the hub of the Mediterranean.

Late last year, the Operations Manager of Voltri Terminal was in Singapore for 13 days to familiarise himself with the systems and practices adopted by PSA in the management and operations of a high-tech port. In the same month, a PSA officer conducted a 6-day course on container operations at the Voltri Terminal for 40 staff.

Mr Marco Mignogna, the Maintenance Engineer from Voltri Terminal who was attached to Container Terminal Engineering Department, Brani Terminal Engineering Department and Supplies Department for training from 10 Jan - 4 Feb 94 said: "During the one-month attachment to PSA's engineering departments, I have gained the equivalent of 5 to 6 years of knowledge and experience in container handling equipment maintenance and repair systems."

Under this agreement, a total of 24 crane operators from the Voltri Terminal will also be trained through a 42-day programme in yard and quay crane operations at PSA's container terminals. 12 operators are in PSA currently undergoing training. The remaining 12 operators will be arriving in groups of 6 on 21 Feb and 15 Mar 94 respectively. All 24 operators are scheduled to complete their 42-day training programme by the end of Apr 94.

Crane Operator, Mr Massimilano Ricci who is currently undergoing training said: "The use of different training methodologies such as simulation training provides us with valuable hands-on practice and exposure to different types of ships under various operational conditions. This has helped me to acquire the knowledge and skills required to operate quay and yard cranes in the new Voltri Terminal."

The completion of the PSA-Voltri training project will tie in with the commissioning of the first berth in May 94 at the Voltri Terminal.

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