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The International Association of Ports and Harbors

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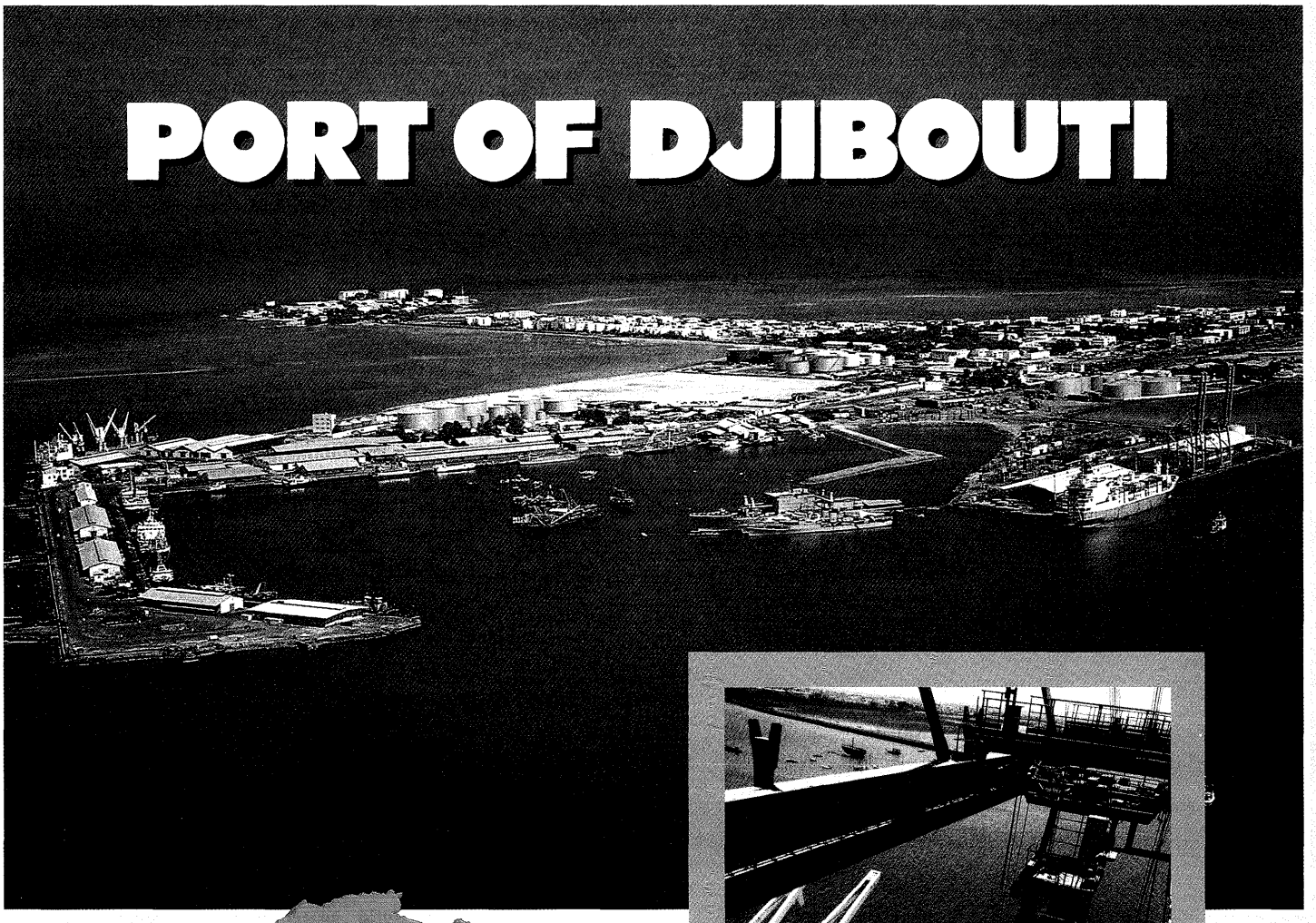
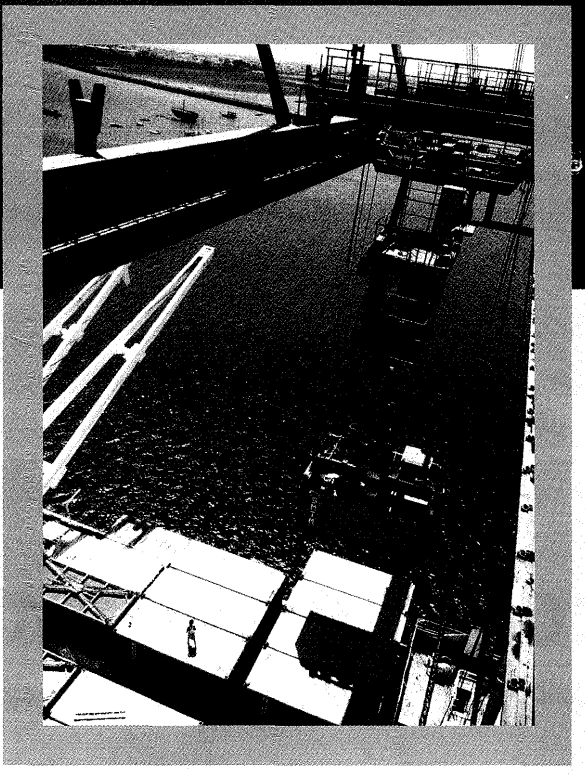
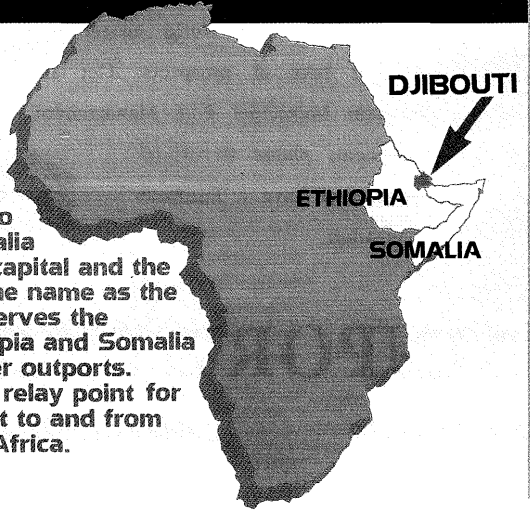
IAPH 18 CONFERENCE 17-23 APRIL 1993 SYDNEY

PORT OF DJIBOUTI







Djibouti is situated at the entrance to the Red Sea, between Ethiopia to the west and Somalia to the south. The capital and the port share the same name as the country. Djibouti serves the hinterland of Ethiopia and Somalia as well as the other outports. It also serves as a relay point for liner transshipment to and from the Gulf and East Africa.

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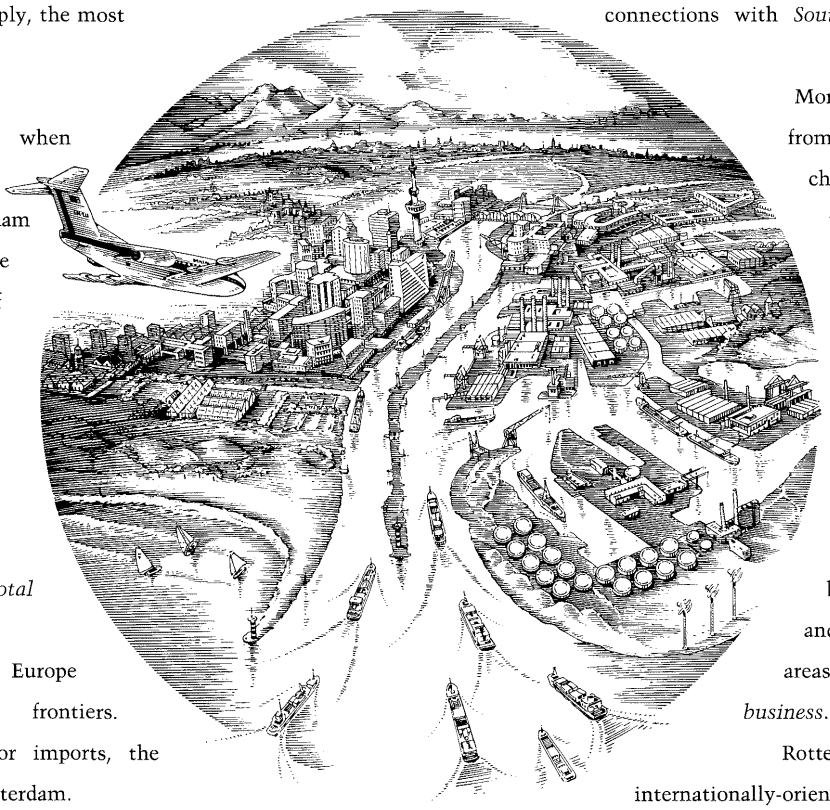

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Port of Rotterdam

ROTTERDAM: MAINPORT EUROPE

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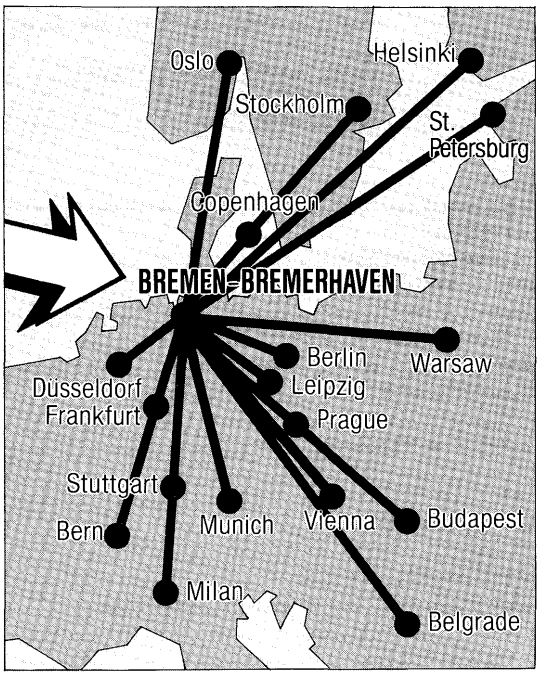

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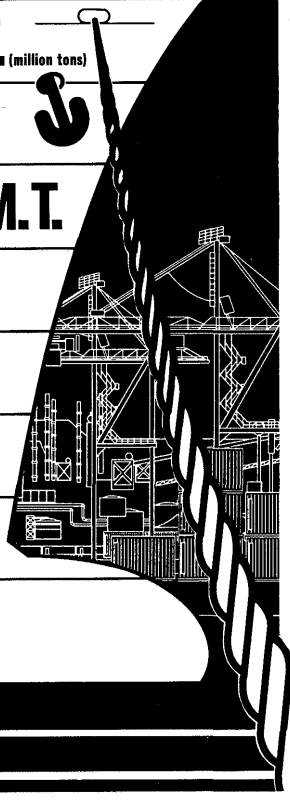
INDUSTRIAL GAS 1,6 M.T.

CHEMICALS 2,2 M.T.

GENERAL CARGO 11 M.T.



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Atelier Paul Bertrand

IAPH ANNOUNCEMENTS AND NEWS

IAPH Trade Facilitation Committee Re-established

(PLA Press Information Issued on 8 February 1993)

The first meeting of the IAPH Trade Facilitation Committee under the newly appointed Chairman, David Jeffery (Chief Executive of the Port of London), was held in London last week (4th February).

Re-establishing the Committee after a seven year break, Mr Jeffery set its task as "educating ports to realise the role they play as the hub of the maritime transport chain". The meeting was attended by representatives from Europe, the USA and the Far East.

The Committee made a commitment to reduce the time taken to process the information accompanying cargoes by greater use of computers and advanced information technology. Mr Jeffery pointed out that technological advancement had left many ports behind, albeit that cargo physically moved faster as a result of economic and competitive pressures.

Concentrating on business rather than technical issues, the Committee members recognised that many of the procedures currently in operation today are determined by maritime law. However, the meeting considered that this should not be seen as a reason for ignoring facilitation procedures, rather that perhaps the laws needed to be re-addressed in the light of the progress in cargo movement.

Commenting after the meeting, David Jeffery said: "We all recognise that ports have a major role to play in the facilitation of cargo. As a neutral body, a port can act as a catalyst not only as a distributor of cargo but also of the information relating to it.

"Outdated manually based systems have a high price tag in terms of staff time and cost, and in delaying cargo movement. The technology required to overcome this exists today and should be adopted by all concerned within the ports industry. We must encourage greater co-operation between ports, shipowners, agents and statutory bodies to introduce this technology for the benefit of all concerned."

(Left to Right) Joseph Bayada (General Manager Cyprus Ports Authority), Paul Hanappe (Research Director INRETS, France), Hans-Ludwig Beth (Chief Executive Officer, Marketing & PR Port of Hamburg), Mr Alec Feehley (Secretary Cork Harbour Commissioners), Keith Wicks (Head of Management Services PLA), David Jeffery (Chief Executive PLA and Chairman of Committee), Pascal Lelarge (Development Manager Port of Le Havre Authority), Larry Sposi (Manager, ACES The Port Authority of New York and New Jersey), Yoshikazu Kawasaki (Senior Executive Director International Port Cargo Distribution Association of Japan), Barry Aldous (Trade Services Manager, PLA)

Report of the IAPH Committee on Trade Facilitation

By David Jeffrey
Chief Executive of the Port of London

Introduction

1. After a prolonged period of relative inactivity, the re-formed Trade Facilitation Committee (TFC) met in London, England early in January 1993 under its newly appointed Chairman, David Jeffery (Chief Executive, Port of London Authority). The meeting was attended by representatives from the Far East, USA and Europe. members from Canada and Singapore were unable to attend due to prior business commitments.
2. The TFC agreed that it should concentrate on the business rather than technical issues and that it needed to work closely in conjunction with other bodies to ensure that ports' interests were properly represented and taken into account within other trade facilitation groups.
3. The TFC made a commitment to reduce the time taken to process the information accompanying cargoes by the greater use of computer systems, data communications networks and advanced technology.
4. It was recognised that outdated manually based systems can cause higher cost and delays in cargo movements and that technology exists today to overcome these problems. Ports need to be educated to realise the role they play at the heart of the maritime chain and need to be encouraged to co-operate with shipowners, agents, statutory bodies and others, to introduce new technology for the benefit of all concerned within the maritime transport industry.
5. The TFC believes that ports have a key role to play in the process of facilitation of cargo movement. As a 'neutral' body, a port can act as a catalyst, not only as a distributor of cargo but also the information relating to it.

Terms of Reference

6. The TFC considered its present terms of reference and role. It was agreed that the following revision should be recommended for the endorsement of the Board and Exco:-

   Recognising that the flow of cargo and movement of ships through a port can be significantly affected by the related documentation information processes and other procedures, the task of the IAPH Trade Facilitation Committee is to seek to minimise the effects of such impediments.
   The role of the Committee is to:-
   i) analyse documentation and information flows, and other similar procedures, both mandatory and commercial, related to the movement of cargo and ships through ports;
   ii) identify effective methods and processes to simplify and to harmonise such procedural requirements, so as to minimise disruption to the movement of cargo and ships through ports, in particular by the use of modern Information Technology (IT) and electronic communications techniques, including Electronic Data Interchange (EDI);
   iii) ensure that member Ports are informed of such processes and techniques, as well as related developments, with a view to their wider adoption, further development and to increase compatibility within the ports industry;
   iv) liaise with other relevant international bodies, be they official, trade or ad-hoc, in conjunction with other committees of the IAPH to ensure that the interest of ports are properly represented.

Policy and Strategy

7. To meet its objectives, the TFC agreed that consideration would need to be given to both the use of modern information technology and separately to procedures and documentation, which affect the flow of information.
8. The TFC agreed the following policy and strategy statements for:-
   a) Use of Information Technology and Related Techniques
   The Committee believes that the use of modern Information Technology (IT) and electronic communications techniques especially Electronic Data Interchange (EDI) provides a means for the effective transfer of quality information between partners to facilitate trade.
   Thus the policy of the Committee should be to assist member Ports to participate in the benefits from such developments and encourage standardisation, thereby increasing compatibility within the trade and transport arena in which they operate;
   The strategy to support this policy is to:-
   i) identify opportunities, encourage the utilisation of IT and related techniques by Ports and their Port Communities to facilitate trade.
   ii) help, through the adoption of standards, to secure compatibility of developments including the development of EDI messages in accordance with EDIFACT standards and for their adoption as United Nations Standard Messages (UNSMs);
   iii) ensure that all member Ports and their associated Port Communities are aware of related developments and standards, where appropriate providing advice, guidance and support, including the development of guidelines to assist ports in the use of electronic techniques for trade facilitation purposes such ad EDI;
   iv) participate actively in the various groups involved in the processes associated with the development of relevant standards including the approval of EDI messages ad UNSMs, and the work of the Transportation Community Information Exchange Group (TCIEG) and the Edifact Board Transportation Message Design Group.

   b) Procedures and Documentation
   The Committee recognises that in practical terms not all trade facilitation issues can be improved by the use of modern IT and electronic communications

techniques and in some ports the use of such facilities are currently not practicable.
Therefore the policy of the Committee will be to actively encourage the simplification and harmonisation of all processes and procedures to minimise the effects on the flow of cargo and movement of ships through ports;
The strategy to support this policy is to:-

i) monitor all recommendations and changes to procedures relevant to the facilitation of trade as proposed by internationally recognised official or similar bodies to ensure that ports are not disadvantaged and that any benefits to Ports and their Port Communities can be maximised;
ii) ensure that all member Ports are aware of such proposals and changes where necessary providing advice, guidance and support on conformity by ports;
iii) maintain contact, as appropriate to trade facilitation issues, with such official bodies as Untied Nations (UN) including the International Maritime Organisation (IMO), the European Community (EC) and the Customs Co-operation Council (CCC);
iv) liaise on aspects of common interest with other relevant international representative organisations such as the International Chamber of Shipping (ICS) and the International Cargo Handling Co-ordination Associations (ICHCA).

Work Programme

9. The TFC agreed that at the meeting to be arranged following the 18th World Ports Conference it would consider its work programme for the next year.
10. This programme would include an analysis of current systems and procedures and the preparation of a basic information system model for ports.

Reports Sent to Sydney Conference

Prior to their departure for Sydney, the Tokyo secretariat staff were busily involved in the preparation of the various reports and documents which will have to be completed well in advance for the Conference week so as to allow the secretariat to arrange for the shipment of these documents to Sydney in time for submission to the various meetings in Sydney. In addition to the series of documents prepared by the Head Office such as the Secretary General's Report, a summary of which is introduced below, a number of reports, which had originally been prepared by the respective Technical Committees and the Liaison Officers, were compiled in Tokyo for printing and sending to Sydney.

As the Conference draws nearer, the Secretariat staff in Tokyo feel like as if their offices were part of a store house due to the enormous volume of papers and reports piled up, occupying the floor space between their disks. By the end of March, the printed matter had been delivered to the office, to be airfreighted to Sydney.

The reports to be distributed to the participants at Sydney will be:

1. The Secretary General's Report (the overall activities of IAPH for the past two years and completed details of the Association's financial and membership situations.)
2. COPSSEC Report — Chairman: Jean Smagghe (containing the reports from Sub-Committees — Ship; Sea Trade; Marine Safety; Dredging Task Force; Port Planning; Guidelines on Port Planning and Design; Port Safety and Environment; Guidelines on Soil Pollution in Ports)
3. Trade Facilitation Report — Chairman: David Jeffery (Policy and Strategy: Use of Information Technology and Related Techniques and Procedures and Documentation)
4. Recent Dredging Experiences of International Ports (Dwayne Lee, DTF Chairman, Todd Le, Port of Los Angeles)
5. CLPPI Report — Chairman: Paul Valls (Ports and Sustainable Development; Compensation for Maritime Damage and Limitation of Liability Conventions; Legal Aspects of Ports Operations; Relations with other International Bodies)
6. IAPH/BPA Representation Reports/IMO Liaison Report (A. J. Smith)
7. Report on IAPH/CCC Cooperation for the Prevention of Drug Smuggling (by A.J. Smith)

Secretary General's Report to Conference

Introduction

Acknowledgement

In submitting this biennial report to the 18th Conference, I would like to express the deep appreciation of IAPH to our hosts, the MSB Sydney Ports Authority and other responsible organizations and their officials in Australia for their strenuous efforts and dedicated service in making the arrangements for the 18th World Ports Conference of IAPH. Let me also express our heartfelt thanks to the South Carolina State Ports Authority, Charleston, for hosting the mid-term meeting of Exco and the other committees of our Association in May 1992, where all 24 members of Exco and some 80 other IAPH activists gathered together and made various important decisions to guide the activities of our Association.

IAPH Activities

Our Association has been extremely active during the two years that have passed since the Spanish Conference in 1991, which was undoubtedly one of the most memorable and exciting events in the history of IAPH. As the participants will recall, we spent the conference week on board a cruise ship visiting Spanish ports and islands in the Mediterranean while holding serious business sessions.

As for the details of the Association's activities during the months following the 17th Conference two years ago, we have kept our members informed of all developments through announcements in "Ports and Harbors", circular letters and by other forms of communication.

The numerous achievements we have been able to report to IAPH's worldwide membership have been due to the valuable advice received from the President and Vice-Presidents and the leadership displayed by the committee chairmen, as well as to the devoted service they have given us. We cannot, of course, overlook the fact that our chairmen's efforts have been consistently backed by the port organizations they represent and by the enthusiastic committee members who have energetically participated in their respective committee activities.

I am also grateful to the IAPH European Representative in London, and to the other Liaison Officers - including those who have served in their capacities as IAPH representatives or consultants — as well as to the British Ports Federation (and currently the British Ports Association, which has taken over from the BPF to resume the functions of IAPH's London Office following the dissolution of the BPF in December 1992) for their wonderful performance in representing our Association at the various meetings of UN agencies or at other international maritime forums.

Our Technical Committees, which have formed the backbone of IAPH's activities, have constantly directed their efforts to tackle a host of contemporary issues, focussing on common themes such as how ports — both in developed and developing countries — can better function to achieve further innovations and rationalization in their development and operations. Furthermore, our committees have been working hard to find ways in which ports could contribute to boosting the quality of the environment, both from a global and regional perspective.

It has been one of our major goals to expand the field of our activities so as to help ports to cope with the impact of changes in the international economy and trade patterns, along with the progress of intermodalism and EDI.

In order to meet these requirements, the Exco, on the basis of the recommendation of the Strategic Planning Committee (chaired by President John Mather), decided at its meeting in Charleston last May to restructure the Technical Committees in an attempt to strengthen the respective committees and to realign their work areas. I strongly hope that the recommendation will be unanimously supported by the delegates at the Sydney Conference so as to give yet greater momentum to our future activities.b

Membership

Our membership campaign efforts, headed by the Membership Committee Chairman, have been supported by innumerable IAPH officers and other individuals, who have taken every opportunity to convince non-members of the merits of joining our ranks. Naturally, our Head Office has been centrally involved in these endeavours. However, as outlined in this Report, the number of Regular Members we were able to add during the two year term 1991-1992 amounted to only seven, while we must report that 13 Regular Members left our Association for various reasons. Thus, as far as the 1991-1992 term is concerned, there was a decrease of six Regular Members over those in the previous term (1989-1990). Nevertheless, since January this year 10 Regular Members have been newly registered and one has left. As a result, three more Regular Members than the end of last term are now with us as of March 15, 1993.

Apart from the matter of how many members we have gained or lost, I am pleased to report here that IAPH has newly-joined Regular Members from China, Romania and Vietnam. I am confident that the activities of our members and committees will be further enriched and expanded by the input from these new members based on the great reserves of knowledge and experience available in their respective ports. By making the best use of the talents and insights of the entire membership, IAPH will be able to grow further as a world port forum covering a wide range of issues and will thus enable its members to derive an increased level of benefit.

Finance

The report on IAPH's Settlement of Accounts for 1991-1992 is presented in this Report, together with a copy of the auditor's statement by Chuo Shinko Audit Corporation, a Certified Public Accountants firm in Japan. As for the General Accounts, although the total revenues in the two years were below the budget, the balance was in the black as a result of the total expenses being kept below the budget. We can say that the 3% dues increase introduced in 1992 and the recent increase in the number of dues units subscribed by Regular Members has had a considerable effect in absorbing the negative impact on our revenues from rate fluctuations which have resulted in a much higher value for the Yen than the rate adopted when we prepared the budget.

Needless to say, the finances of the Association have been under constant pressure from exchange rate fluctuations. In fact, this is the single largest element affecting the financial state of IAPH as far as the revenues for each year are concerned.

Let me emphasize that the financial state of IAPH at present is viable. However, if we want to secure a financial foundation stable enough for us to maintain the current level of activities and further increase the scope of our activities, we must find measures to balance the revenues and expenses from the standpoint of the medium and long term, while keeping our eyes on exchange rate fluctuations.

In view of this, our Head Office is determined to continue directing its utmost efforts towards the wise management of the Association's finances so as to keep them on a firm footing in the medium and long term, under the guidance of the Finance Committee.

International Cooperation

Through its various activities, IAPH has been endeavoring to give all possible assistance towards the growth of developing ports so that they may increase their capabilities. These efforts have been continued by our Association from the standpoint of IAPH's ideal of contributing towards the overall efficiency of world ports, both developed and developing. The CIPD activities have been at the forefront of IAPH's efforts in our cooperation programs.

We have also been conducting a fund-raising campaign to raise the resources to be used for bursary money (the IPD Fund). Thanks to the generous support given by various members who made voluntary contributions to the Fund, and with the most generous contributions made by the IAPH Foundation of Japan, we were able to achieve the targeted amount of US$70,000 to conclude the 1991-1992 term's of fund-raising campaign. I offer my deep appreciation to those who have made voluntary contributions to the IPD Fund.

The Journal of IAPH: "Ports and Harbors"

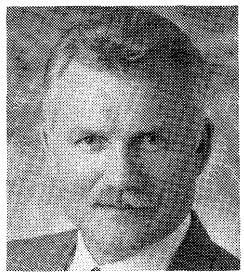
"Ports and Harbors" has been serving IAPH's worldwide members as the main medium through which they can voice their views and obtain useful information and the ideas of others concerning the issues faced by world ports and the

maritime industry. The Head Office renews its deep appreciation for the great support of all the members and committees in supplying Tokyo with useful information and articles on their activities on a timely basis as well as for the support given in the form of advertisements in the journal. Our staff will continue their utmost efforts to increase the readability of "Ports and Harbors" and to make it as attractive as possible for the Association's members and readers at large. The Head Office urges all members to use the space available in the journal as actively and frequently as possible and also seeks the positive support of our advertising efforts.

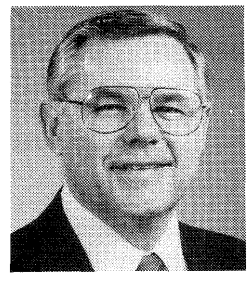
March 1993

Hiroshi Kusaka
Secretary General

19th Conference Set For June 10-16, 1995



Mic R. Dinsmore
Executive Director
Port of Seattle



John Terpstra
Executive Director
Port of Tacoma

The Ports of Seattle and Tacoma, which are jointly hosting the 19th World Ports Conference of IAPH in 1995, have recently announced that Seattle's new executive director, Mic R. Dinsmore, will serve as Co-Chairman of the Steering Committee with John J. Terpstra of the Port of Tacoma . Serving as Co-Vice-Chairmen will be Rod Koon, Director of Port Relations, Port of Tacoma; and Margo Spellman, Acting Director of Port Communications, Port of Seattle.

The other member serving on the committee will be JoAnne K. Lee of Seattle (Marketing Specialist, Port Communications).

The dates for the Conference will be from June 10 (Sat) to 16 (Fri), 1995 subject to the Board's approval at the Sydney Conference.

The following logo for the 1995 Conference will be used by the hosts on their materials to promote the event.

Port of Nakhodka, 2nd Member from Russia

Nakhodka Marine Commercial Port has recently applied for Regular Membership of IAPH, as the second IAPH Regular Member from Russia along with Sea Commercial Port of St. Petersburg, which has been with IAPH since 1970.

According to the information contained in the application form submitted to the Secretary General by Mr. Geliy N. Miasnikov, General Director on March 16, 1993, the Port handled a total of 4,983,000 MT (General cargo:3,848,000 and Bulk cargo: 1,135,000 in 1992, thus the Port has been registered as a 3-unit Regular Member port under the IAPH's tonnage based dues formula.

The Secretary General has expressed the warm welcome of IAPH to the newly joined Port of Nakhodka, whose active participation in the various activities of our Association is greatly anticipated.

More information on the Port will be introduced in the "Membership Notes Column" in the next issue.

Monograph No. 10 Sent to All Members

Monograph No. 10, entitled "Computerized Terminal Management" authored by Mr. Eric Lui, Deputy Director and Mrs. Poh Hui Ying, Assistant Manager, Information Systems, Port of Singapore Authority, was sent to all members from the Tokyo Head Office in late March 1993.

The monograph is one of the series being prepared by UNCTAD's Shipping Division in collaboration with IAPH. The content of the 35-page monograph is introduced as follows:

1. Container terminals are highly capital intensive. They have to be well managed in order to realize their potential capacity and achieve a reasonable level of efficiency and service performance for their customers. A good management system cannot function without computerization.

2. The advancement of Information Technology provides a wide range of options for the container terminal operator to computerize its management system. It can range from a simple data entry and retrieval system with batch or on-line input to a highly sophisticated computer directed real-time operation system. The choice depends on the size of the operation and its projected growth in the medium term.

3. The Port of Singapore Authority (PSA) has invested over a hundred million Singapore dollars to build up its present suite of computer applications to support container terminal management and operations. Every year, tens of millions of dollars are also spent to maintain these applications so as to keep them up-to-date with the operational requirements. In 1991, PSA handled 6.35 million TEUs of containers. The number of on-line transactions in the mainframe computer for that year was 240 million. The largest computer file in its database was the container details file which had 50,000 records.

4. Irrespective of the degree of sophistication adopted, the computerization effort follows a certain methodology. It starts with analyzing the data flows from and to external

organizations and data flows within the terminal. From this analysis, the necessary computer processes are identified and the accompanying data files can be created in a database management system.

5. The degree of sophistication and the extent of computerization adopted will depend on the handling capacity of the terminal and management's inclination in achieving manpower savings. These include manpower for data entry as well as for executing physical tasks in the terminal, such as gate processing and yard and shipside operation supervision.

6. This monograph describes the development cycle of a computer application and provides an outline for the computerization of some of the core functions in the container terminal. Sample screens and management reports are used to illustrate the development of these applications. It supplements two other studies published by UNCTAD, which are publications TD/B/C.4/AC.7/11 and TD/B/C.4/AC.7/11/Supp.1, entitled "Guidelines for port managers on the use of computers". These publications provide an overview of the general issues involved in computerization of port operations and give detailed descriptions of computerized systems for container control, general cargo control and operations of ships in the port.

IMO Values Report On Dredged Material

At the request of Mr. Manfred Nauke, Chief, Office of the London Covention 1972, Marine Environment Division, IMO, IAPH Head Office arranged for the IMO to receive a second supply of the Report of the IAPH Survey on Disposal of Dredged Material (1987-1990), following our submission last October.

In his recent letter, the IMO official says,

"The report contains very valuable background information on dredged material disposal. I intend to make the reports available to the Sixteenth Meeting of the Scientific Group, which will be held from 10 to 14 May 1993, for discussion under agenda item 5: Beneficial uses and alternative disposal of dredged material.

Conference Committee Members Chosen

In accordance with the requirements of the By-Laws, five committees are to be formed for each biennial conference of our Association. Of the five conference committees, the members of the Nominating Committee (which will prepare the nominations of the offices of President and three Vice-Presidents for the next term, and present them to the Board) are to be appointed by the Board, while those of the other four committees - the Credentials, Budget, Resolutions and Bills and Honoary Membership Committees — are to be appointed by the President.

The Secretary General, upon consultation with the President, has prepared a list of the proposed Nominating Committee members and submitted it to the Board of Directors for their voting by correspondence, setting the voting date on April 15, 1993. Furthermore, the members of the other committees were appointed by President Mather on March 22. The appointments approved by the President and proposed for the Board's approval were as follows:

NOMINATING COMMITTEE
(The Board's appointment)

African/European Region:
P.J. Keenan, Cork Harbour Commissioners, Ireland
John Mather, Clydeport Limited, U.K. (as Chairman)
J.M. Moulod, Port of Abidjan, Cote d'Ivoire

American Region:
P. Murphy, Port of Halifax, Canada
C. Rowland, Canaveral Port Authority, U.S.A.
J.J. Terpstra, Port of Tacoma, U.S.A.

Asian Region:
Goon Kok Loon, Port of Singapore, Singapore
T. Okabe, Japan Port and Harbor Association, Japan
M. Rajasingam, Klang Port Authority, Malaysia

BUDGET/FINANCE COMMITTEE
(Presidential appointment)

African/European Region:
D.J. Jeffrey, Port of London, U.K.
A.C. Mumba, Kenya Ports Authority, Kenya
G. Wennergren, Port of Gothenburg, Sweden

American Region:
L. Liburdi, Port Authority of NY & NJ, U.S.A.
D.J. Taddeo, Port of Montreal, Canada
W.D. Welch, South Carolina State Ports Authority, U.S.A. (as Chairman)

Asian Region:
Y. Haraguchi, Nagoya Port Authority, Japan
H.K. Lee, Korea Maritime and Port Administration, Korea
R.P. Snodgrass, Westgate Transport, New Zealand

CREDENTIALS COMMITTEE
(Presidential appointment)

African/European Region:
O.B. Cham, Gambia Ports Authority, Gambia
E. Muurinen, Port of Helsinki, Finland
G.C.G. van den Heuvel, Port of Amsterdam, Netherlands (as Chairman)

American Region:
P. Mandia, Port of Los Angeles, U.S.A.
R. Pearce, Fraser River Harbour Commission, Canada
R. Tucker, Port of New Orleans, U.S.A.

Asian Region:
A.R. Al-Naibari, Ports Public Authority, Kuwait
Tu Deming, Shanghai Port Authority, China
T. Iijima, Yokkaichi Port, Japan

HONORARY MEMBERSHIP COMMITTEE
(Presidential appointment)

African/European Region:
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N. Shanley, Dublin Port and Docks Board, Ireland
P. Struijs, Port of Rotterdam, Netherlands

American Region:
R. Gaudreault, Port of Quebec, Canada
C.J. Lunetta, Port of Miami, U.S.A.
H. Plomarity, Port of Corpus Christi, U.S.A.

Asian Region:
S. Fujino, Japan Port and Harbor Association, Japan
R. Cooper, Ports of Auckland Ltd., New Zealand (as Chairman)
G.J. Martin, Port of Brisbane, Australia

RESOLUTIONS & BILLS COMMITTEE
(Presidential appointment)

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K. Jurriens, Port of Rotterdam, Netherlands
C. Veng, Port of Copenhagen, Denmark

American Region:
D.R. Caddo, Thunder Bay Harbour Commission, Canada
P.J. Falvey, Port Authority of NY & NJ, U.S.A. (as Chairman)
P. Lelli, Port of Tacoma, U.S.A.

Asian Region:
M. Fox, Maritime Services Board of NSW, Australia
H. Kayahara, Ministry of Transport, Japan
Dato Sulaiman bin Mohd. Noor, Johor Port Authority, Malaysia

The IPD Fund: Contribution Report

Contributions to the Special Fund For the Term of 1992 to 1994 (As of Apr. 10, 1993)

Contributors Paid:	Amount (US$)
ABP (Associated British Ports), U.K.	3,000
Akatsuka, Dr. Yuzo, Univ. of Tokyo, Japan	100
Akiyama, Mr. Toru, IAPH Secretary General Emeritus, Japan	1,000
Barcelona, Puerto Autonomo de, Spain	1,000
Cameroon National Ports Authority, Cameroon	480
Cayman Islands, Port Authority of, the Cayman Islands	250
Clydeport Limited, 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, the Netherlands	350
de Vos, Dr. Fred, IAPH Life Supporting 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
Gambia Ports Authority, the Gambia	250
Ghana Ports and Harbors Authority, Ghana	250
Halifax, Port of, Canada	250
Hiroshima Prefecture, Japan	523
Japan Cargo Handling Mechanization Association, Japan	259
Japan Port and Harbor Association, the, Japan	493
Japanese Shipowners' Association, the, Japan	516
Klang Port Authority, Malaysia	200
Korea Container Terminal Authority, Korea	100
KSC (Kuwait Oil Company), Kuwait	1,000
Marine Department, Hong Kong	500
Maritime Services Board of New South Wales, Australia	367
Mauritius Marine Authority, Mauritius	200
Montreal, Port of, Canada	500
Nagoya Container Berth Co., Ltd., Japan	518
New York & New Jersey, Port Authority of, U.S.A.	1,000
Okubo, Mr. Kiichi, Japan	274
Pacific Consultants International, Japan	243
Penta Ocean Construction Co., Ltd., Japan	500
Point Lisas Industrial Port Development Co. Ltd., Trinidad	100
*Primer Concurso Internacional de Memorias Portuarias: Carlos Armero Sisto, Anuario de Puertos: Buenos Aires, Argentina	300
Public Port Corporation I, Indonesia	180
Qubec, Port of, Canada	250
Shipping Guides Limited, U.K.	500
South Carolina State Ports Authority, U.S.A.	1,000
Tauranga, Port of, New Zealand	500
Toyama Prefecture, Japan	254
UPACCIM (French Ports Association), France	1,905
Vancouver, Port of, Canada	500
Total:	US$24,212

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

Membership Notes:

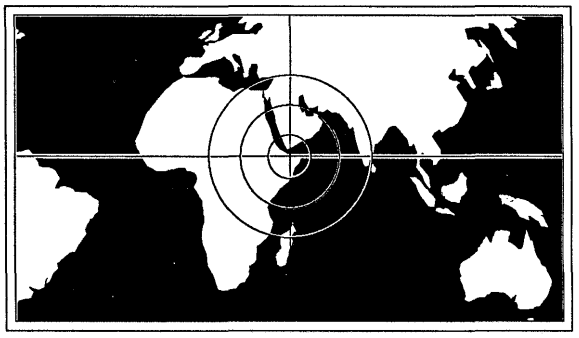
New Members

Regular Member
Empresa Nacional de Administraao dos Portos, E.P.
[Regular] (Cape Verde)
Address: P.O. Box 82, St Vincent
Mailing Addressee: Mr. Jorge B. Duarte
Director General
Tel: 238-314016, -314414
Fax: 238-314661

(Continued on Page 13)

PORT AUTONOME INTERNATIONAL DE DJIBOUTI

REPUBLIC DE DJIBOUTI



THE GATEWAY TO THREE CONTINENTS

TRANSSHIPMENT TO PORTS IN THE RED SEA AND THE GULF OF ADEN

TRANSIT TO ETHIOPIA AND SOMALIA

For more details of this and other services, contact:

DIRECTION DU PORT AUTONOME INTERNATIONAL DE DJIBOUTI
PO BOX 2107 DJIBOUTI

Telex: 5836 PORTAUTO DJ

Telephone: 253 35 23 31 *Facsimile: 253 35 61 87*

DJIBOUTI REGISTRATION

The Republic of Djibouti is pleased to announce the new Djibouti Flag

For more details, contact:

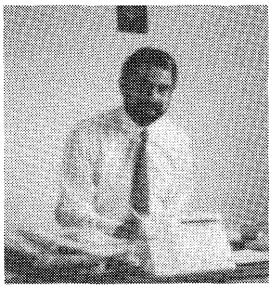
DIRECTION DES AFFAIRES MARITIMES
PO BOX 59 DJIBOUTI

Telephone: 253 35 34 35 *Facsimile: 253 35 15 20*

OPEN FORUM

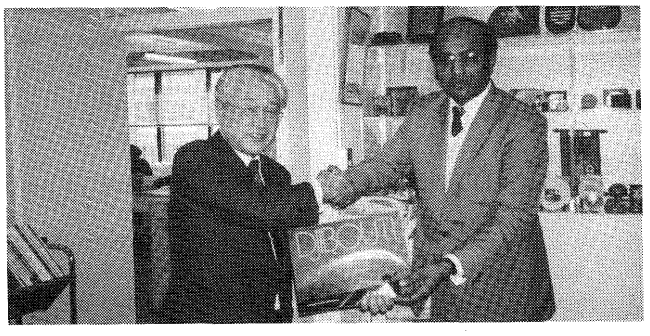
"Putting Djibouti on the Map"

**By Peter Cave,
Director of Egerton
Shepherd Limited,
U.K.
Representative of the
Port of Djibouti**



Introduction

In January 1993, a delegation from the Port of Djibouti visited the IAPH Head Office in Japan during a mission to the region promoting the use of the Port of Djibouti as a transshipment hub for the region, as well as for trade with the hinterland. Meetings were held with shipping lines and



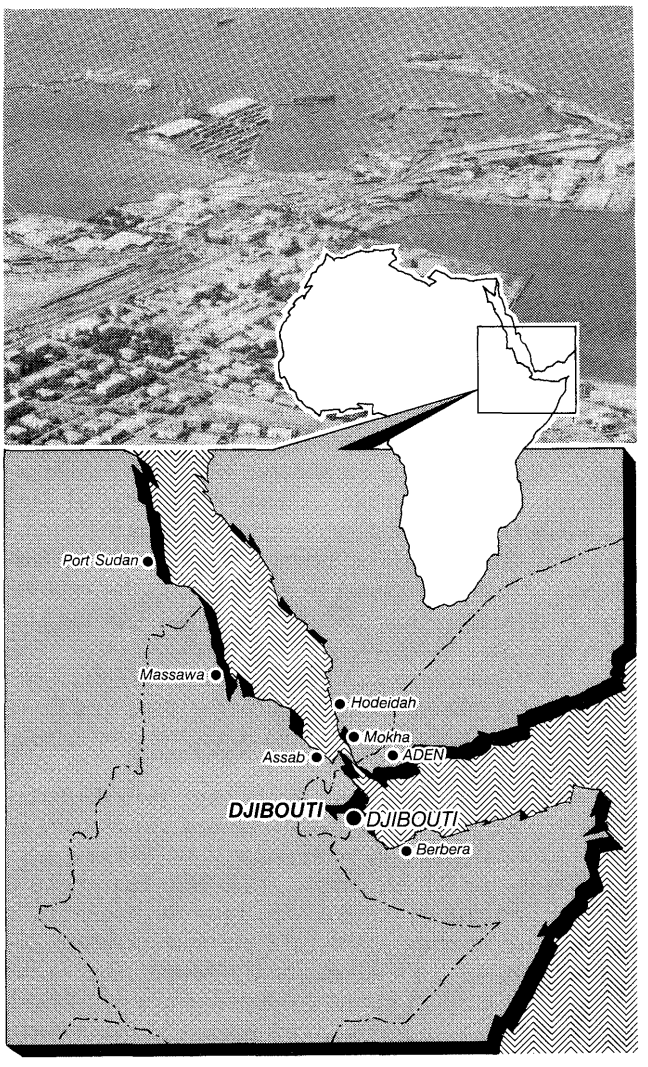
A.M. Omar, Administration & Financial Manager, Port of Djibouti (right), presents IAPH Secretary General Kusaka with a book on Djibouti upon the Port's delegation's visit to IAPH on February 3, 1993.

trade organisations throughout Southeast Asia where many senior executives admitted to having very little knowledge of this part of Africa, and in some cases, not knowing where Djibouti is.

This report has been prepared by Peter Cave, the UK Representative of the Port of Djibouti, in the hope that it will stimulate Djibouti's colleagues from ports and harbors around the world to help put the Port of Djibouti on the map for shipping lines and trade organisations in their countries.

Geographical Location

The Republic of Djibouti is situated at the entrance to the Red Sea in between Ethiopia to the West and Somalia to the South. The capital and the port share the same name as the country. Djibouti is a former French colony which achieved full independence in 1977. Since then the country has remained an oasis of political and economic stability in a region of considerable turmoil and unhappiness.



The Port

The population of Djibouti is only about 520,000, including 110,000 refugees from Ethiopia and Somalia. Djibouti itself has a very small requirement for import cargo and produces negligible export cargo. Hence the main rationale for both the Country and the Port itself is to serve the hinterland of Ethiopia and Somalia and the outports of Berbera, Aden, Mokha, Hodeidah, Port Sudan, Assab and Massawa. Additionally, Djibouti serves as a relay point for liner transshipment to and from the Gulf and East Africa. With the new facilities being built at Djibouti, capable of taking third generation container ships from Southeast Asia and Australia, it is hoped this type of business will be greatly expanded.

Hinterland Cargo

Fighting in both Ethiopia and Somalia has depressed trade with the region and has brought their economies to a virtual standstill. Famine, not necessarily through lack of rain, but due to civil war and threatened transport corridors, has swept through both Djibouti's neighbours several times in the past two decades. These problems have dominated activety in the region to the detriment of any commercial activity.

Now, with the end of the civil war in Ethiopia, and the Unites States and UN forces bringing some order to Somalia, the prognosis for trade is much better. The interim Government in Ethiopia's capital, Addis Ababa, is gaining credibility and, with this confidence will come outside investment and reinvestment. Already there are good signs this is happening. At least one company, dormant in Ethiopia for years, with a caretaker manager, is preparing to open up their tea interests again in Ethiopia. Coffee exports, already running at over 180,000 tonnes per year, are also set to increase. Other commodities, such as cotton (with a similar reputation to the fine product exported from neighbouring Sudan), hides (popular for shoes because of their resilience and pliability) and beans are also starting to move in quantity.

More important perhaps for Djibouti than the resurgence of this trade, is the will of the new Government in Addis to use Djibouti in favour of its own Port of Assab. The reasons for this are simple: Assab is in Eritrea and it is likely Eritrea may achieve some form of devolution, if not full independence. Hence the previous preference for using Assab over Djibouti has been reversed. During the 1986 famine much of the northern population of Ethiopia were resettled in the South. Addis Ababa and the southern agricultural regions have better road links with Djibouti and there is a railway line linking the capital with the Port. The Ethiopians acknowledge that Djibouti, because it is more developed and efficient than their own Ports, is essential to the massive revitalisation of the economy envisaged.

If Ethiopia is the new Kenya, Somalia need not be the new Tanzania. Whilst Ethiopia will inevitably benefit from being the headquarters of the Organisation of African Unity (OAU) as well as the UN's Economic Commission for Africa (ECA), Somalia looks as though it will receive a different type of patronage from the world community. By raising the profile of Somalia in the public eye, President Bush has created a popularist legacy which the world will now have to live up to. Again, Djibouti is the most sensible route to northern Somalia and is already in the process of building new roads between the Port and the Somalian border. Hopefully, before long, these will join right through to the northern Somalian capital of Hargeisa.

Facilities at the Port

The whole reason for Djibouti's existence is the Port, whether as a commercial centre or as a military base, it is strategically placed. For this reason the Port has 14 berths able to accommodate dhows to bulk carriers and salvage tugs to container ships. In 1985 a new purpose built container terminal was built and recently the Italians have completed berth 14 suitable for bulk carriers (300 metres quay at 13 metres draft).

The Container Terminal is currently being extended. The storage area has been increased from 9 hectares to 22 hectares. This will allow the extension of the present 400 metre quay to double the length to 800 metres. It is intended that both berths will eventually be dredged to 12 metres draft. Technical studies have been done to raise the present container gantry cranes so that they can work over third generation container ships with the possibility of one, and perhaps two, more gantries being added in the future.

To survive, Djibouti must attract transshipment as well as transit cargo. To do this they must offer not just the physical capability but create the right environment for shipping companies to use the Port for this purpose. This has been done by designating the Port a free zone so that transshipment cargo as well as transit cargo pass through the Port without intervention from Customs. There are extremely attractive tariffs for transshipment cargo cased on a sliding scale and up to 30 days free storage for transshipment containers. If asked what the most important selling point is for the Port, it must be the attitude of the management who are determined to provide shipping companies with the service they require.

Bunkering

Historically Djibouti started life as a bunkering port and this is a culture that has continued. Being only two hours deviation from the major shipping lanes through the Red Sea, Djibouti is poised to service the passing trade. An agreement has recently been signed with Japan to upgrade the facilities to bring them into line with other modern ports in the area.

Ship Registry

Djibouti is very progressive and has been working on its own ship registry for a number of years. In the last few weeks this has been launched and is already creating some interest amongst international shipowners. Although more expensive than some registries in the first year, in order to establish a standard, in subsequent years Djibouti should prove more economic than nearly all other countries currently offering registration. All documentation and tariffs are produced in English and French.

And Finally ...

As the size of East-West tonnage increases, shipping companies are looking for a few efficient hub ports on these routes to service the North-South and regional trades. Geographically Djibouti is ideally placed, the facilities are tested and tried and being upgraded, it is commercially developed with a fully convertible currency and now Djibouti has the last ingredient, a good base of hinterland cargo. Djibouti is coming of age — the gateway to a market of over 80 million people.

SPI to Launch 5-Month Diploma Program in Aug.

The Singapore Port Institute (SPI), which is the training arm of the Port of Singapore Authority (PSA), will be launching a five-month diploma programme in August 1993. Applications for the course are now open. The introduction of the Diploma in Marine Operations & Administration Programme is believed to be the first in this region. It will be SPI's second diploma programme following the success of its first diploma programme in Shipping & Port Management, which has been jointly organised with the University of Delaware, USA since 1990 and has just begun its 4th intake.

The Diploma in Marine Operations & Administration Programme is jointly developed by SPI and the Maine Maritime Academy, USA. The inaugural programme will be conducted from 30 August 1993 to 8 January 1994.

The Diploma Programme will serve to enhance the professional development of officers currently employed in the local and regional maritime industries. The training to be provided is relevant to the current and future employment of participants at mid-career level. The curriculum is academically sound and based upon proven experience and current practices in the maritime field. The diploma therefore provides senior and middle-management officers engaged in marine activities in ports, government institutions, shipping companies and related agencies, with a comprehensive and academically relevant course of study for career enhancement.

The syllabus is designed to provide insights to the technological and trade problems of shipping; policies which affect shipping and ports; the importance for maritime safety; management and administration of marine corporations or associations and maritime law and its effects. The programme comprises five modules:

(A) Maritime Operations
- Technological Changes in ships and Ports
- Maritime Trade and Payments
- Economics of Ship Operations
- Port Operations
- Traffic Management and Logistics

(B) Shipping and Port Policies
- Merchant Marine Policies — planning and implementation
- Port Authority Policies — planning and implementation
- International Maritime Agencies — public and private
- International Influence and Effect on Shipping Policies
- International Influence and Effect on Port Policies

(C) Maritime Safety
- Safety of Ships — national and international regulations
- Safety of Life at Sea — national and international regulations
- Search and Rescue Operations
- Hazardous Cargo
- Causes and Effects of Marine Pollution

(D) Management and Administration
- Principles of Management and Administration
- Planning, Coordination, Decision-Making and Control
- Application of Information Technology/Quantitative Methods
- Financial Management and Administration
- Human Resource Management/Communication Skills

(E) Maritime Law and Insurance
- Law of the Sea
- Mortgages, Title, Registration of Ships
- Carriage of Goods by Sea and Contracts
- Maritime Employment, Personal Injury and Death
- Maritime Insurance : hull, cargo, protection and indemnity

These modules will be taught through intensive lectures followed by self study periods preceding the end-of-module examinations.

Successful completion of the Programme leads to the Diploma in Marine Operations and Administration, which will be jointly issued by the SPI and the Maine Maritime Academy, USA.

The Maine Maritime Academy is an established institution, which is dedicated to maritime education since 1941 and a member of the American Association of State Colleges and Universities. All the lecturers are qualified professionals selected from the Maine Maritime Academy, United States Merchant Marine Academy, US Coast Guard and the University of Delaware, USA.

The Singapore Port Institute (SPI) has a training tradition which spans three decades. It has been providing training opportunities for PSA staff as well as personnel from the local and regional port and shipping industries since the early 70s. To date, some 60,000 personnel from local industries and over 3,000 executives from 55 countries have attended PSA's range of management, port operations, technical and marine courses organised by the Institute. SPI

Membership Notes:

(Continued from Page 9)

Changes

Cameroon National Ports Authority [Regular] (Cameroon)
Mailing Addressee: Mr. Tchouta Moussa
General Manager

Constantza Port Administration [Regular] (Romania)
The telephone system in Romania has been changed recently.
Tel: 40-91-611540, 40-91-619100, 40-91-618240
Fax: 91-662965 (Internal)
40-91-662965 (External)

also provides customised programmes for regional ports. In recognition of PSA's commitment to human resource development, PSA was awarded the National Training Award (Public Sector) in 1989 and again in 1992.

The Programme is open to personnel who are interested in advancing their careers in the maritime field. The minimum entry for applicants is 5 GCE 'O' Level Passes or equivalent qualifications. The programme fee is $5,200 (Singapore) per person. The closing date for application is 5 June 93. For further information, please contact:

Training Manager
Singapore Port Institute
Port of Singapore Authority
No. 2 Maritime Square
Telok Blangah Road
Singapore 0409
Telephone : 321-1107
Telefax (Singapore) : 321-1416

Programme of UNCTAD Policy Seminars

(Organized just before the Third UNCTAD Intergovernmental Meeting of Port Experts 25-29 October 1993)

Port Marketing — Thursday, 21 October 1993.

EDI and the Port Community — Friday, 22 October 1993.

At UNCTAD Headquarters, Geneva.

These seminars are for senior decision-makers from the port industry and Government of officials with responsibilities for ports. Maximum: 100 participants. (From all countries with priority to developing ones).

All subjects will be presented by leading specialists and supported by audio-visual programmes. The seminar will be delivered in English and French and interpretation into all UN languages will be available. A manual presenting the subjects covered by the seminar will be given to participants at the time of their registration.

Application/Information:
Chief, UNCTAD Port Section
Fax: + 41 22 907 00 50
Phone: + 41 22 907 20 39/36

Policy Seminar on Marketing

Objective: to explain the concept, role and modern techniques of marketing in port management to show its importance and relevance in the context of trade and transport trends and the competitive environment of ports.

Session 1 : 10:00 - 11:30
Ports in a changing environment
UNCTAD & International Consultant
- The new international trade requirements
- The competitive environment
- The new opportunities and risks for ports

Session 2 : 11:45 - 13:00
Becoming a market oriented port
M. Suykens
- The changing of attitude. Marketing research and implementation (objectives, information, segmentation and tools).

Session 3 : 15:00 - 16:00
The establishment of a port community
Port of Le Havre
- The organization and motivation of the port community, the marketing function of the port industry. The various steps, to organize and institutionalize a port community.

Session 4 : 16:15 - 18:00
Port marketing in a country
Ports of Belgium
- The case of a large port (Antwerp), a middle size port (Ghent), a newly developed port (Zeebruge).

Policy Seminar on EDI and Port Community

Objective: to present the concept and the latest development in the field of electronic data interchange (EDI) in international trade and transport, with specific focus on ports.

Session 1 : 10:00 - 11:15
Introduction to EDI
1. EDI: what it is, what it does?
UNCTAD — A. Bellego
2. EDI: its relevance for the port community
EDI-Transport
France, P. Lelarge
3. How to start up?
EDI-Transport, France

Session 2 : 11:30 - 13:00
EDI and the UN System
1. the EDI standards
- Why standards?

UNCTAD, A. Bellego.
- UN/Edifact: the EDI syntax and message

ECE, Mr. Hansell
2. ACIS programme
UNCTAD
- ACIS (Advanced Cargo Information System) is an UNCTAD programme to improve transport efficiency through improvements in the related information flows.

3. EDI and Trade Efficiency
UNCTAD
- The Asycuda Customs System installed in many ports in developing countries is being enhanced to incorporate EDI capabilities.

Session 3 and 4 : 15:00 - 18:00
Presentation of experiences
1. EDI in Ports: the french experience
EDI-Transport France
2. The Australian experience
E. Bubeer Conaust Ltd.

1st Int'l Symposium on Ports in St. Petersburg

The First International Symposium on Ports, Navigation and Environment Protection will be held in St. Petersburg, 21-24 September this year.

Preliminary topics (proposed by the Russian party):

Section 1: Development and operation of ports in view of environmental requirements.
- Development and operation of ports in Russia (Far East), Ukraine and Baltic States.
- Free port zones and their interaction with municipal infrastructure.
- Economic aspects of investing port development projects.
- Environment protection and ports operation (current control, waste reclamation, oil spread control, treatment of sewages).

Section 2: Navigation and environment protection.
- Ways of utilizing the marines of Russia, Ukraine and Baltic countries jointly with world-wide shipping companies.
- Main trends of large tonnage shipbuilding in Russia, the former USSR and COMECON countries.

— Prospective trends of fishery fleet development in interaction with international companies.
— Environment protection and navigation, navigation safety.

The Organizing Committee
Address: 192288 St. Petersburg, P.O. Box 115
Telex: 121423 NILAS SU "ECO"
Fax: (812) 3522688
Phone: 3150774

The London Convention: 20 Years of Progress

(Reproduced from "IMO NEWS")

Background

The London Convention (LC) is 20 years old this year. It was adopted on 13 November 1972 at a conference organized by the British Government under the official title of the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter.

The Convention was one of a number of international treaties adopted in the early 1970s, when concern for the world's environment and a knowledge of widespread contamination was rapidly growing. An important catalyst was the United Nations Conference on the Human Environment held in Stockholm in 1972; the London Conference was arranged a few months later. The Convention entered into force in 1975 with 25 member nations and has now been ratified by 69 countries spanning the globe.

The Convention's purpose is to effectively control all sources of marine pollution and prevent pollution of the sea through regulation of dumping into the sea of waste materials.

The Convention covers materials transported to sea for the purpose of dumping and also includes incineration activities. It is administered by IMO.

The Convention defines dumping as "any deliberate disposal at sea of material and substances of any kind, form or description from vessels, aircraft, platforms, or other man-made structures, as well as the disposal of vessels, aircraft, platforms or other man-made structures themselves." The definition was later modified to include incineration at sea.

Sources of marine pollution

Wastes dumped into the sea from ships contribute only 10% or less of the pollutants that enter the sea each year, according to a study carried out by the United Nations Group of Experts on the Scientific Aspects of Marine Pollution (GESAMP) in 1990. Land-based sources contribute 44%, 33% comes from the atmosphere, 12% from maritime transportation and the remaining 1% from offshore production.

What materials are currently dumped

Dredged material: Dredging accounts for about 80-90% of all material dumped at sea and amounts to hundreds of millions of tonnes a year. The majority of dredging is for navigation to keep harbours, rivers and other waterways open and is directly related to the economy of seafaring nations. The ocean disposal of dredged material represents only 20 — 22% of the total dredged and the remainder is placed on land for disposal or productive purposes.

Approximately 10% of dredged sediments are heavily contaminated with toxic metals and petroleum compounds, organochlorines such as pesticides, and nutrients such as nitrogen and phosphorus. These sediments are rigorously controlled through the Convention's regulatory guidelines for dredged material. For the vast majority of "clean" dredged material the LC encourages productive or beneficial uses of the sediments (e.g. land development, marsh creation, fishery enhancement). Following stringent Convention guidelines these clean materials may also be disposed of at sea in an environmentally acceptable manner. "Clean" dredged material is merely soil (sand, silt or clay) eroded from land.

Unregulated disposal of dredged material can, however, cause major physical impacts if not properly disposed of or placed. Gravel, for example, is required by spawning fish such as herring and is the natural habitat of crustacea such as lobsters. Both will be adversely affected if the gravel is covered by other types of sediment.

Industrial waste: Several million tonnes of industrial wastes may also be approved for sea disposal. Most of the industrial wastes consist of acid and alkaline waste, scrap metal waste, coal ash and flue desulphurization sludges. Between 1980 and 1985 the reports submitted to the LC Secretariat from the member countries show that the largest amount of industrial wastes dumped at sea was 17 million tonnes in 1982 but by 1987 it was down to 6 million tonnes.

Sewage sludge: The sludge resulting from municipal sewage treatment operations can be used beneficially as fertilizer on agricultural land or for land reclamation, particularly if it is not contaminated with high levels of metals, oils and organic chemicals from industrial sources. However, in some cases it can be economically and environmentally preferable to dispose of it by carefully controlled placement at sea rather than on land.

Municipal sewage sludge normally does not contain contaminants in large quantities, but excessive dumping may still have harmful effects such as eutrophication and human health risks from the presence of pathogens. After reaching a peak of about 17 million tonnes in 1980 sewage dumping has steadily declined and is expected to decrease still further. Sea disposal of sewage sludge was stopped by the United States in 1991 and is due to be discontinued in the North Sea by 1998 at the latest.

These three groups comprise most of the waste material currently dumped at sea. The potential environmental problems associated with unregulated or uncontrolled disposal are:

human health risks from the presence of pathogens;
eutrophication due to nutrients and organics;
toxic effects on marine organisms and/or man, caused by various chemicals; and
resource-use conflicts with other legitimate uses of the sea such as fishing (including aquaculture), and recreation.

How does the Convention control marine pollution from dumping?

Wastes proposed for ocean disposal are regulated by the technical annexes to the Convention and fall into the following categories.

The "black list" (annex I) consists of the materials that are most dangerous to the environment and their dumping is prohibited. It is as follows:

1. Organohalogen compounds.
2. Mercury and mercury compounds.

3. Cadmium and cadmium compounds.

4. Persistent plastics and other persistent synthetic materials.

5. Crude oil and petroleum products.

6. High-level radioactive wastes.

7. Materials produced for biological and chemical warfare.

The "grey list" (annex II) consists of less harmful materials that can only be dumped into the sea after a special permit has been issued. The "grey list" consists of: wastes containing significant amounts of arsenic, lead, copper, zinc, organosilicon compounds, cyanides, fluorides, pesticides and their by-products.

In the issue of dumping permits, consideration must be given to the "grey list" substances, which include containers, scrap metal and other bulky wastes which may present a serious obstacle to fishing or navigation; low-level radioactive wastes; and substances which may become harmful due to the quantities in which they are dumped, or which are liable to seriously reduce amenities.

The "white list" consists of materials which are not harmful and can be dumped after a general permit has been issued. All other substances or materials fall in the "while list" category. There is no list of substances or other matter but instead a list of factors to help evaluate whether or not a permit to dump at sea should be issued.

Criteria establishment

Annex III of the Convention describes the conditions and waste characteristics that must be met before a disposal site is located and dumping is approved. This annex describes the general and specific provisions that member nations must consider in establishing their domestic criteria prior to approving sea disposal of acceptable materials. Annex III is further supplemented with detailed technical guidelines adopted by the Convention for specific wastes and situations. These "rules of the road" ensure maximum protection of the marine environment.

The Convention requires Contracting Parties to establish appropriate administrative authorities for enforcing its provisions and encourages the creation of regional arrangements for preventing pollution by dumping.

Most important, the Convention is a living document that responds to new information, pollution issues and environmental concerns through a process of consultative meetings, scientific and legal debates, consensus building and the addition of new member nations. Past amendments and proposed future actions to the Convention reflect our growing knowledge of waste management or of the potential harm from certain substances or processes.

The amendments made so far have dealt with:

Incineration: this affects annex I and introduces measures to permit the incineration of wastes at sea, listing substances which require special care when being incinerated.

Settlement of disputes: affects the articles of the Convention rather than an annex.

Permits issued under annex III: additional procedures regarding sufficiency of scientific information that must be followed when issuing permits under this annex.

The implementation of the London Convention is conducted through a Consultative Meeting of Contracting Parties, which normally meets once a year. The Consultative Meeting has several scientific groups. The International Atomic Energy Agency (IAEA) provides advice on radioactive waste issues.

Recent and future trends

The dumping of certain wastes into the sea has become increasingly controversial over the years and many countries would like to see it eliminated altogether.

Incineration at sea: The incineration of noxious liquid wastes at sea was first used in 1969 as a means of destroying certain chemical by-products which are particularly hazardous. Incineration was not considered at the outset when the London Convention was adopted. By 1978, however, its use was more widespread. Consequently, annex I was amended to contain incineration regulations.

The regulations make it clear that incineration at sea is regarded as an alternative to other means of disposal.

By the late 1980s, however, opinion was moving steadily against incineration at sea as a means of waste disposal. Incineration in the North Sea was reduced by 54% by 1991 and subsequently eliminated there and elsewhere in the world.

In 1988 the LC Contracting Parties adopted a resolution in which they agreed "to take all steps possible to minimize or substantially reduce the use of marine incineration of noxious liquid waste by 1 January 1994".

Radioactive wastes: A number of countries have dumped low-level radioactive wastes at sea since 1946. The wastes were from nuclear power production and from industrial, medical and research uses of radioisotopes. The type of waste involved is similar to the non-nuclear parts of an industrial economy (including items such as broken machinery and old clothing). The difference is that wastes contaminated by radioactive materials require special handling, treatment and disposal. The waste has typically been incorporated into concrete-filled drums designed to provide shielding and containment of the waste prior to dumping and to ensure that the waste reaches the sea floor intact.

In the early 1980s, two member nations proposed an outright ban on the dumping at sea of any radioactive waste. After considerable discussion, the 1983 Meeting adopted a moratorium on further dumping pending a review by an independent panel of experts of the relevant scientific and technical considerations.

A resolution was adopted at the 1985 Meeting which requested Contracting Parties to suspend radioactive dumping pending completion of additional scientific and technical studies and assessments and, more important, additional studies on the wider political, legal, economic and social aspects of radioactive waste dumping. These studies are nearing completion.

Sea-bed disposal of high-level radioactive wastes: Although the London Convention bans the dumping of high-level radioactive wastes into the sea, there is no specific mention of the sea-bed. This form of disposal was not technically feasible in the early 1970s and consequently was not considered when the Convention was adopted in 1972.

By the 1980s, however, the emplacement of encapsulated materials into the sea-bed was being seriously considered as a future means of disposal. Some governments were concerned about this possibility. After considerable discussion, in 1986 it was agreed by a majority that no disposal

into the sea-bed should take place until it was proved to be technically and environmentally acceptable, including a determination that such wastes could be effectively isolated from the marine environment and a regulatory mechanism was elaborated under the London Convention.

Transboundary movement of wastes for disposal: The problem of the movement of wastes across boundaries has been considered by a number of international organizations during the last few years. In October 1986 the Tenth Consultative Meeting resolved that Contracting parties should not export wastes for sea disposal "unless there are both compelling reasons for such export and clear evidence that the wastes would be disposed of in compliance with the requirements of the London Dumping Convention."

In 1989 international concern about this subject culminated in the adoption of the Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.

Industrial wastes: The dumping into the sea of industrial wastes has been gradually declining for many years, and in 1990 the Thirteenth Consultative Meeting adopted a resolution calling for the dumping of industrial wastes to be stopped by 31 December 1995 — or if possible before.

It was further agreed that an evaluation of the consequences of this decision would be carried out by 1992 to see if there ware any difficulties involved in adopting different technologies.

Conclusions

Since it entered into force, the LC has proved to be a valuable instrument for controlling the dumping of wastes into the sea and subsequent global protection of the marine environment. Membership in the Convention has grown from 25 to 69 countries, with others considering joining. The regular Consultative Meetings have proved to be equally useful in global environmental consensus building and have made many major decisions on controlling or prohibiting harmful impact on the sea.

In the closing years of the 20th century, attitudes towards the environment have changed. Many governments are now doubtful about the wisdom of using the oceans as a dumping ground for harmful wastes and this concern has been reflected in actions taken by the Convention.

At the Fourteenth Consultative Meeting (1991) the Contracting Parties took this a stage further when they adopted a resolution calling for the application of the "precautionary approach" to dumping.

This involves taking "appropriate preventive measures when there is reason to believe that substances or energy introduced into the marine environment are likely to cause harm even when there is no conclusive evidence to prove a causal relation between inputs and their effects."

This "better safe than sorry" approach was a basis for the ban on the dumping of low-level radioactive wastes introduced in 1985: those supporting the ban claimed it was up to proponents of sea disposal to prove that it was safe to dump, not for opponents to prove that it was unsafe.

The Consultative Meeting is currently debating a draft waste assessment framework, which constitutes a holistic approach for use by regulatory agencies in assessing the suitability of materials for disposal at sea. Key elements of this framework are: the prohibition of certain materials, waste prevention audits, assessment of alternatives, waste characterization, dumpsite selection, evaluation of potential impact, permit issuance considerations and monitoring. Application of the framework to a material proposed for ocean disposal will assume maximum protection of the marine environment and call for a full assessment of land-based alternatives as well as low-waste/no-waste technologies. The recently adopted precautionary approach serves as the foundation for the framework.

Finally, the Contracting Parties to the Convention have been considering long-term strategy, particularly in the light of the United Nations Conference on Environment and Development held in Brazil in July 1992. These activities will move the Convention into the 21st century as a global standard in pollution prevention.

The Scientific Group to the Convention has served as a valuable sounding board for detailed technical discussions on identification, assessment and management of wastes proposed for sea disposal. The Group has produced state-of-the-art technical guidelines, frameworks and procedures that are the building blocks used by member nations for a global waste management programme that will ensure maximum environmental protection.

Even though 69 countries have ratified the Convention, it is still possible for uncontrolled dumping operations to continue by non-Member nations — to the detriment not only of their own environment but that of neighbouring countries as well. An immediate priority for the LC Contracting Parties is to encourage other countries, especially in the developing world, to accept the Convention and to provide the technical assistance to them that will enable them to implement it effectively.

Asia-Pacific Symposium In Kobe in September

The Asia-Pacific Ports Symposium September 6-8, 1993, Kobe

Organized by: Japan Overseas Ports Cooperation Association, and Port of Kobe;

Under the auspices of: Ministry of Transport (MOT), Japan International Cooperation Agency (JICA), and Overseas Economic Cooperation Fund (OECF);

Co-sponsored by: International Association of Ports and Harbors (IAPH), Sasakawa Peace Fund (SPF), Japan Port and Harbor Association (JPHA), and Overseas Coastal Area Development Institute of Japan (OCDI)

Introduction

A symposium will take place in Kobe to provide Asian and Pacific ports with an opportunity to meet together and exchange information on strategic waterfront management and development. Recalling seven out of the world's top ten busiest ports are located in the region, attention will be paid to the harmonious development of regional ports as well as competitive port management, which could result in a continuing evolution of regional economy and maritime transportation. The symposium highlights regional cooperation in waterfront management and future development.

Proposed Topics

Key issues being covered are:

— Harmonious development of re-

gional ports (Medium- and long-term port development plans);
- Relocation, renewal and rehabilitation of port facilities;
- Balancing the port activities and the environmental requirements;
- Legal framework for the waterfront administration, protection and development;
- Competitive terminal operation, port management, and commercialization;
- Regional maritime transportation and shipping network; and
- Other issues on strategic port management and development.

Participants

Port Authority executives from Asian and Pacific countries are invited to the symposium. Participants in the symposium will include business executives and senior representatives from ports, government departments, port-related public sectors, cargo handling companies, shipping lines and other port-related private firms, and those who are interested in this symposium. The symposium programs are expected to attract some 400 delegates.

Participating Ports (Invited)

Australia	Maritime Services Board, N.S.W.
Cambodia	Port of Phnom Penh
Canada	Port of Vancouver
China	Port of Tianjin Authority, Shanghai Port Authority
Fiji	Port Authority of Fiji
Hong Kong	Marine Department
India	Bombay Port Trust
Indonesia	Port Corporation II
Japan	Ports of Kobe, Yokohama, Tokyo, Nagoya, Osaka, Kitakyushuu
Korea	Pusan District Maritime and Port Authority
Malaysia	Klang Port Authority
Myanmar	Myanmar Port Authority
Pakistan	Karachi Port Trust
Philippines	Philippines Ports Authority
Russia	Port of Nakhodka Authority
Singapore	The Port of Singapore Authority
Sri Lanka	Sri Lanka Ports Authority
Taiwan	Kaohsiung Harbor Bureau, Keelung Harbor Bureau
Thailand	Port Authority of Thailand
USA	Port of Los Angeles, Port of Seattle
Vietnam	Vietnam National Maritime Bureau
ADB	Asian Development Bank
ESCAP	Economic and Social Commission for Asia and the Pacific

And other interested ports/organizations

Provisional Program

Sunday, September 5, 1993
- Arrival and registration of participants
- Welcoming reception

Monday, September 6, 1993
- Opening of the seminar
- Welcome by Authorities (City of Kobe, JOPCA, IAPH, MOT)
- Introduction of distinguished guests and heads of delegations
- Keynote address on strategic waterfront management and development
- Presentations on proposed topics

Tuesday, September 7, 1993
- Discussions on the present situations and future plans of waterfront management and development (Group 1 and 2)
- Panel discussion on the symposium topics

Wednesday, September 8, 1993
- Conclusions and recommendations
- Closing remarks
- Field trip to the waterfront of Kobe and adjacent areas

Thursday, September 9, 1993
- Departure of participants

Information

Those who are interested in the symposium and wish to be kept informed of developments please send contact details, viz. (a) names, (b) organization, (c) position held, (d) address to the Asia-Pacific Ports Symposium Organizing Committee (APSOC).

Research/review papers on the proposed topics are invited for presentation at the symposium and those interested are requested to send a summary of their papers (preferably typed on A4 size, max. two pages) to the Asia-Pacific Ports Symposium Organizing Committee (APSOC), c/o the Japan Overseas Ports Cooperation Association by May 31, 1993. The writers of papers selected for presentation at the symposium may enjoy free accommodation in Kobe and receive per diem for their participation. However, travel expenses are the responsibility of the participants. Further details can be provided on request from Kazutoshi Sasayama, Mayor of Kobe City and Chairman, APSOC.

Kazutoshi Sasayama
Mayor of Kobe City & Chairman, APSOC
c/o The Japan Overseas Ports Cooperation Association
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Tokyo 105 JAPAN
Tel: 81-3-3508-0371
Fax: 81-3-3508-0372

New Publications

The Port Commissioner: A Briefing Paper

By Thomas J. Dowd. WSG-AS 93-01. (Seattle: Washington Sea Grant Program, January 1993). 4 pages. Order from: Washington Sea Grant Program, 3716 Brooklyn Avenue, N.E., Seattle, WA 95105. Tel: (206) 685-2430. Fax: (206) 543-1417. No charge.

Directed particularly at new port commissioners, this "briefing paper" highlights what Prof. Dowd regards as the basic responsibilities and functions of a port commission with special emphasis on the "critical" importance of "a teamwork relationship between the commission and the executive director/manager and among the commissioners themselves."

As a first step, the new commissioner should understand "your legislated authority and the powers of your port" and its goals and policies. "Developing a Port Mission Statement, goals/objectives, and general operating policy is the responsibility of each port commission."

"The basic functions of a port commission," says Professor Dowd, "are planning and policy development." After carefully outlining and illustrating the planning and policy making

process, he goes on to suggest ways a port commissioner "can improve your management effectiveness," namely "by delegating responsibility and respecting delegated authority, establishing priorities, obtaining additional input to resolve issues, sticking to your job, doing the necessary homework, and following through."

The port commissioner is advised to resist the temptation to "micromanage" every port activity: "The day-to-day management of the port is the executive director/manager's responsibility...Do not meddle in their areas of responsibility." Instead, "Make sure you are getting your job done at the policy level."

Cogent, well written, and authoritative, Prof. Dowd's "briefing" is an important contribution to the literature on port governance and management and will be profitable reading for both new and experienced port commissioners and for port staff as well.

(AAPA Advisory)

Containerization International Yearbook 1993

The container liner shipping industry continues to live in uncertain times. Political upheaval in Europe, together with poor prospects for economic growth in the industrialised regions, provide a backdrop against which the ocean carriers are currently having to take investment decisions and reconsider their service alignments.

In her introduction to *Containerisation International Yearbook 1993,* editorial director Jane Boyes comments that despite this austere trading environment, new tonnage is still being ordered. Operators are continuing to upgrade to larger vessels, but the total slot capacity of vessels on order has declined from 350,000 TEUs at the end of 1991 to 275,000 TEUs at the end of 1992.

"Carriers have sought to artificially control overcapacity and bring some certainty to selected markets by tradewise groupings which put a ceiling on capacity... Expect more strategic alliances between major operators in 1993... Carriers view this as the only means by which they can economically secure a global presence and offer frequent sailings. Only Cosco it seems has pockets deep enough to mount a major transpacific and Asia/Europe offensive without the need for such partners."

The world's container ship fleet now totals over 5,100 vessels with a combined total of 3.6 million TEU capacity. In this analysis of the current fleet and vessels on order, Adrian Bascombe, shipping editor of the Yearbook, highlights the trend towards deploying larger ships. The number of orders for fully cellular vessels has fallen by one-third between 1991 and 1992 but slot capacity on order has fallen by rather less than 20%.

In recent years, much attention has been focussed on domestic intermodalism. During 1992, a milestone was reached when US domestic container movements by rail exceeded trailer movements for the first time. In this review of the US intermodal scene, John Fossey, associate editor of *Containerisation International* magazine, suggests that the largest single factor has been the tremendous strides made by railroads in improving quality of service.

The intermodal picture within Europe, however, is rather less encouraging. Intermodal traffic has a share of less than 5% of the total cross-border intra-European transport market. David Eller, deputy editor of *Containerisation International* magazine, reports that European Community (EC) policy is for road-rail swopbody traffic to triple in volume by the year 2000. "A key element is EC Directive 91/440 which is intended to liberalise railway activities within the Community... but despite 18 months having elapsed there has been a noticeable lack of new intermodal operators emerging."

A specially-commissioned report for the 1993 edition of *Containerisation International Yearbook* compares the size, type and ownership profile of the world's container fleet of 1992 with that of 1982. During the 10-year period, the box fleet almost doubled from 3.8 to 7.32 million TEUs, while carriers now control over half of the TEU total compared with only 44% in 1982.

The effects of recent political upheaval in eastern Europe, the Gulf War and the booming economies of the Far East are reflected in the latest World Container Port Traffic League, while the Ports and Terminals section of the 1993 Yearbook includes a port-by-port breakdown of these container traffic figures, and their expected final figures for 1992.

Other regularly updated sections in the new edition include the comprehensive All-water Carriers (detailing ports of call, vessels, boxes owned and leased), the Register of Container-Carrying Vessels (listing over 5,000 ships), containership managers and shipbrokers, and intermodal rail operators. The Equipment Guide, with its many quick-reference tables, now shows over 200 container manufacturers, as well as listing chassis and equipment fabricators, and a guide to computer software packages. Container leasing and repair companies are covered in depth in separate sections.

Containerisation International Yearbook 1993 is available from National Magazine Co Ltd (Quadrant Subscription Services), Oakfield House, Perrymount Road, Haywards Heath, W Sussex RH16 3DH, UK.

Tel: (0444) 445577/+44 (444) 445577.
Fax: (0444) 445599/+44 444 445599.
Prices: UK £125, Europe £150/US$260 airmail, other places £180/US$315 airmail.

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The Law of Harbours and Pilotage, 4th Edition

By RPA Douglas OBE and GK Geen MSc.

Published by Lloyd's of London Press.

314 + xxviii pp. Cased. ISBN: 1 85044 490 0. £58 + £3 p&p per order.

The last three years have seen a number of major changes to the law relating to the management and operation of harbours. The Environmental Protection Act 1990, the Aviation and Maritime Security Act 1990, the Ports Act 1991 and the Transport and Works Act 1992 have all had significant impact on harbour law. *The Law of Harbours and Pilotage, 4th Edition* is a much-needed updated account of the law in this area which encompasses all these recent developments. A number of new chapters have been added, and others have been rewritten to incorporate discussion of the new legislation and its effects.

The Law of Harbours and Pilotage is a highly practical work which, in describing the powers, duties and liabilities of harbour authorities also addresses the kind of legal problems that are likely to be encountered in practice.

In this new edition, the privatisation of ports under the Ports Act 1991 is discussed in a new chapter and the chapter on types of harbour authorities has also been extensively amended and expanded to take account of the provisions for the privatisation process. The chapter on prevention of pollution now deals with the new power under the Environmental Protection Act 1990 for harbour owners to prosecute the owners of foreign ships.

Changes made by the Transport and Works Act 1992 in the provisions which may be included in the harbour revision and empowerment orders and the procedure for making such orders are fully covered by the revised chapter on subordinate legislation under the Harbours Act 1964.

In addition there are new chapters on port security, following the Aviation and Maritime Security Act 1990 and harbour laws, which are dealt with more fully than in the previous edition.

The book covers all the aspects of the powers and duties of harbour authorities where problems are likely to arise, including: the various licences and consents necessary, conservancy functions, bylaws and other regulatory powers, prevention of pollution, levying of charges, borrowing, accounts and audits, harbour revision and empowerment orders and other subordinate harbour legislation. In the area of marine pilotage, it deals with the duty to provide pilotage services and the attendant powers and duties, the duties and rights of pilots, division of control between master and pilot, between ship and tugs and between the master of a ship and the harbour master.

The extensive appendices set out some important new or amended statutory provisions and also include typical and up-to-date examples of local harbour legislation.

Lloyd's Maritime Directory 1993

Editor Chris Emery.

Published by Lloyd's of London Press.

ISBN 1-85044-474-9. ISSN 0268-327X.

960 pp. Hardback. Price £135.

The 1993 edition of *Lloyd's Maritime Directory,* the 12th edition to be published by Lloyd's of London Press, reflects world events by separating the states that used to form Yugoslavia and USSR. Information is also gradually being received from Russia, Ukraine and the Baltic States, enabling some detail of the shipbuilding and repair industries in those states to be published in this new edition.

The main shipowners/managers section now contains full details of 6,125 companies and some 31,000 vessels under their control, all extensively updated using Lloyd's unique shipping database. The Towage & Salvage section now lists vessels of 150 Gt and over, and a three letter code for abbreviations of vessels flags that conforms to the International Organisation for Standardisation listing has been introduced.

Other handy reference sections give details of ship management services, shipbuilders and repairers, marine engine builders and repairers, marine consultants, marine lawyers, insurers, P&I clubs, and banks and finance.

The introductory editorial 'The Year in Shipping' highlights major events in the 1992 maritime year.

EC Shipping Law

By Vincent Power.

A *Lloyd's Shipping Law Library* title published by Lloyd's of London Press Ixxxix + 771 pp Cased ISBN: 1 85044 312 2 £95 + £3 p&p per order.

The importance of the EC for the shipping industry is undeniable. The EC is the world's largest trading bloc, and some 90% of its foreign trade and 40% of its internal trade is carried by sea. This new title in *Lloyd's Shipping Law Library* looks at the implications which EC law has for shipping.

It discusses in detail issues affecting: registration; cabotage; competition; freedom of establishment; employment; finance. It also provides an introduction to EC law and EC transport law and an overview of shipping in the European Community. It records all the major developments in the formation of EC shipping law, putting each into a legal and commercial context.

For ease of reference the full appendices bring together in one place the text of the major EC laws relevant to this area, many of which are otherwise difficult to locate.

Vessel and Port Technologies

Vessel and Port Technologies — "Evolutionary, not revolutionary" change is forecast for "vessels and ports at the turn of the century" in fascinating paper delivered at last January's annual meeting of the Transportation Research Board by Professors Mark Chadwin and Wayne K. Talley of Old Dominion University.

Techniques and equipment (e.g., computerized operations and planning systems and electronically transmitted documentation) now utilized in only

the most advanced countries and ports "will become the norm" they say.

In the ocean carrier industry, rationalization and concentration will continue; huge multi-modal conglomerates "will dominate the major markets."

Professors Chadwin and Talley predict:

* Containerization will continue but at a slower rate than in the 1970s and 1980s.

* Chronic excess capacity will continue to plague the container vessel market;

* Larger, faster gearless cellular vessels will dominate the major trade routes; "jumbos" of 5,000 to 6,000-TEU capacity are likely by the year 2000.

* RO/ROs and other types will be attractive for military purposes, in "short sea" trades, and in other deployments where they are better suited than large container ships or car carriers.

* Container barging "should also grow" because of demand in "shortsea, shoal water, coastal feeder service and inland water operations."

* Unmanned container ships, though technologically feasible, will not be placed in service; however, "crews of less than 10 will be commonplace."

* Radical new ship designs (SWATHS, Trisecs, componetized vessels, etc) will not be built, but smaller hydrofoils or hovercraft for transporting "priority containers" on short trade routes will.

* Container terminals will operate 24 hours a day; store containers in stacks, not on chassis; apply techniques that move more than one container at a time; and vastly expand use of automated systems and computers.

* Environmental concerns and gentrification pressures "will force ports to develop future terminal sites outside central cities."

* Traditionally competitive advantages" such as deep channels; speedy access to major shipping lanes; large affluent populations; industrial centers that generate exports and imports; well developed rail, truck, air, and barge services, etc. "will become even more important in an era of 5,000-TEU vessels."

However, labor issues pose the greatest challenge, with the authors warning that "many changes in labor-management practices" will be essential if productivity gains from automation and computerization are to be fully realized. Workers will have to be more highly educated, and to undergo more extensive training "before they go to work and periodically thereafter."

Especially imperative are changes "in the arm's length relationship between terminal managers and unionized workers; in restrictive job jurisdictions and work rules; in the irregular and uncertain nature of terminal employment; in expensive, often self-defeating job preservation schemes; and in the reluctance of both management and labor to consider new methods and new technologies."

The winners in the highly competitive market of the 1990s and beyond will likely be "the ports and terminals that make these transitions quickly and smoothly." *(AAPA Advisory)*

The Americas

Montreal, One of World's Major Inland Ports

Montreal, one of the most populous metropolitan areas in North America, is a city that has experienced rapid growth in the past 100 years. It is one of the most highly industrialized centres on the continent. By the early part of this century it had become one of the world's busiest inland ports and Canada's leading transportation, commercial and banking centre.

As a communications centre, Montreal is recognized as Canada's most important interchange point with rail, road, air and water transportation. More than 40 national and overseas-based airlines regularly serve its huge international airports, Dorval and Mirabel. Montreal is the hub of a system of multilane highways leading to all parts of North America, as well as the headquarters and busiest junction point of Canada's two largest railroads.

Located 1,600 km (1,000 miles) from the Atlantic Ocean, Montreal is one of the world's major inland ports, serving as a gateway to the great producing and consuming areas of Central and Western Canada and the American Midwest and Northeast. This vast hinterland has a population of more than 100 million people.

More than 40 shipping lines link Montreal to some 200 ports around the world. There are no locks between the Atlantic and the Port of Montreal, which is active and open to navigation year-round.

Montreal, Canada's Number One Container Port, is on the shortest, most direct shipping route between North America's industrial heartland and the vast markets of Northern Europe and the Mediterranean.

Stretched out over a distance of 25 km, the Port of Montreal offers its users ample, up-to-date equipment and facilities which can handle all types of cargo. It boasts five full-scale container terminals, 22 transit sheds, berths for handling dry and liquid bulk, two grain elevators, a railway network and large-capacity cranes. Repair, bunkering and towing services ensure a very flexible operation.

The Port of Montreal has an economic impact of 1.2 billion dollars per year on the Montreal region.

Montreal Port Corporation

The Montreal Port Corporation is a local port corporation formed on July 1, 1983, under the Canada Ports Corporation Act.

Under the legislation, which was enacted in 1982 and proclaimed in February 1983, a new national organization known as Ports Canada was formed to replace the National Harbours Board and to assume authority over the harbours under the board's jurisdiction. It is Ports Canada's prerogative to recommend corporation status in favour of ports that measure up to criteria specified in the act.

The local port corporation status provides the Port of Montreal with the necessary authority to fulfil its responsibilities in such areas as tariffication, marketing and promotion, supply of goods and services, human resources and property management.

The offices of the corporation are located in the Port of Montreal Building, Wing No. 1, Cité du Havre, Montreal, Quebec, H3C 3R5. Telephone: (514) 283-7011. Fax: (514) 283-0829.

A Diversified Port

Montreal is a very diversified port as evidenced by the types of cargo handled: containers, breakbulk, dry bulk and liquid bulk. Commodities

handled at the Port of Montreal include fruits, nuts and vegetables, grains, raw sugar, alcoholic beverages, lumber, pulp and paper, chemical products, asbestos, iron, steel and alloys, non-ferrous metals, machinery and implements, iron ore, manganese ore, scrap metals, coal, gypsum, fertilizers, salt, coke, cement, petroleum products, etc.

Containerization

Five full-scale container terminals covering an area of approximately 60 hectares are equipped with 13 huge gantry cranes, straddle carriers and other equipment for year-round handling of containerized cargo. Containers can also be loaded and unloaded at several cargo berths by means of mobile cranes. Special ramps are available for the accommodation of roll-on/roll-off vessels.

Grain Elevators

There are two grain elevators with a total storage capacity of 330,000 tonnes. The most modern, with a capacity of 260,000 tonnes, is primarily devoted to the export of grain. It has an unloading capacity of 3,000 tonnes per hour, while the vessel loading capacity is 4,500 tonnes per hour. The other grain elevator serves the domestic market.

Passenger Facilities

The modern Iberville Passenger Terminal serves a number of passenger vessels and cruise ships which carry more than 30,000 people to and from the port each year.

Other Facilities

- 22 transit sheds with a total floor area of 128,600 square metres;
- Berths for handling dry and liquid bulk;
- A railway network with more than 100 km of track serving most berths; a switching capacity of 700 cars to and from berths per day; rail connections with Canadian National and Canadian Pacific Railways;
- A self-propelled floating crane with a rated capacity of 250 tonnes;
- Bunkering services including oil delivered to vessels at any berth in the harbour;
- Towing services including tugs ranging from 850 to 1,300 H.P. as well as marine salvage vessels.
- There are also a number of firms specializing in machinery and structural repairs.

Harbour Security

The Port of Montreal is among the safest ports in the world. The safety of individuals and goods within port limits is ensured by a most efficient police force and highly-trained security guards.

The port perimeter is enclosed by fencing and the limited number of entrances are under surveillance. Terminals also are enclosed by chain-link fences with guards on duty at the gates who have direct emergency phone connections with the port police station. The port police department is responsible for a key control system for all transit sheds and other facilities.

As a service to port users, the police force provides special attention to high value cargo. There is direct liaison with Interpol and key North American police forces.

Shipping Operations

In 1964, Montreal changed from a seasonal port to a year-round operation. Navigation in the harbour and St. Lawrence River continues uninterrupted throughout the winter months.

Vessels approaching from the Atlantic benefit from an elaborate radio communications system that distributes up-to-date information on conditions in the St. Lawrence.

Vancouver: 10% Drop From '91 Bulk Tonnage

According to statistics released by the Vancouver Port Corporation (VPC), the Port of Vancouver registered an all-sector performance of 63.3 million tonnes in 1992, a 10 percent drop from the '91 figure of 70.7 million tonnes. The tonnage decline corresponds to a 26 percent drop in coal tonnage, along with declines in sulphur and potash, which fell 19 and 21 percent respectively.

Slumping coal shipments reflected production disruptions at southeastern B.C. mines. The fall in sulphur tonnage is attributed to world over-supply and resulting low prices, while the potash decline is linked to weaker world demand for fertilizer products.

Offsetting those bulk commodity decreases was a record throughput in another bulk commodity — grain — which climbed 8 percent to 14.5 million tonnes. Container traffic also jumped 15 percent to post a new record of 441,055 TEUs (Twenty-foot Equivalent Units), up from 383,563 TEUs the year before, representing the third consecutive year of strong growth in that sector. Container tonnage also grew 10 percent to 3.6 million tonnes.

According to VPC Chairman Patrick Reid, the port statistics send an important signal to the port and transportation communities and to government.

"It is clear that some bulk commodity producers are experiencing real difficulties, due mainly to increasing competition from other resource-based economies around the world," said Chairman Reid. "The cost of shipping from source to market is a significant element in commodity pricing and every effort should be made by governments at all levels to ease the tax burden carried by the Canadian transportation system. In turn, that system must seek ways and means to help producers maintain their competitiveness."

Mr. Reid also praised the container and grain terminals for their efforts in achieving new records. "Both the container and grain terminal operators have committed to improving productivity and the proof of their success is in the numbers."

Behind sulphur at 3.7 million tonnes and potash at 2.8 million tonnes, domestic fuel oil shipments were next on the bulk products list at 2.3 million tonnes, followed by exports of liquid chemicals at 1.9 million tonnes and wood chips at 1.4 million tonnes. Bulk shipments in total accounted for 53.4 million tonnes.

The general cargo picture revealed a continuation of the downward cycle for lumber shipments, down 5 percent to 2.5 million tonnes. Pulp shipments remained steady at 1.9 million tonnes. The general cargo total for '92 was 6.3 million tonnes.

Another highlight of 1992 was the Vancouver-Alaska cruise. Figures released at the conclusion of the 1992 cruise season showed the tenth consecutive year of growth in this industry with 449,239 revenue passengers, eclipsing the previous record of 423,928 set during the '91 season.

VPC President Norman Stark viewed

the port's '92 statistical performance as a reminder that while Vancouver is Canada's largest and busiest port, it is not immune to world market forces and stiff competition.

"Issues facing the port affect a range of players — from terminal operators and labour to railways and trucking lines," commented Mr. Stark. "It's important, therefore, that we address these issues collectively, as a community. This is happening, and as a result, I am confident we will find innovative ways to further improve our cost-effectiveness."

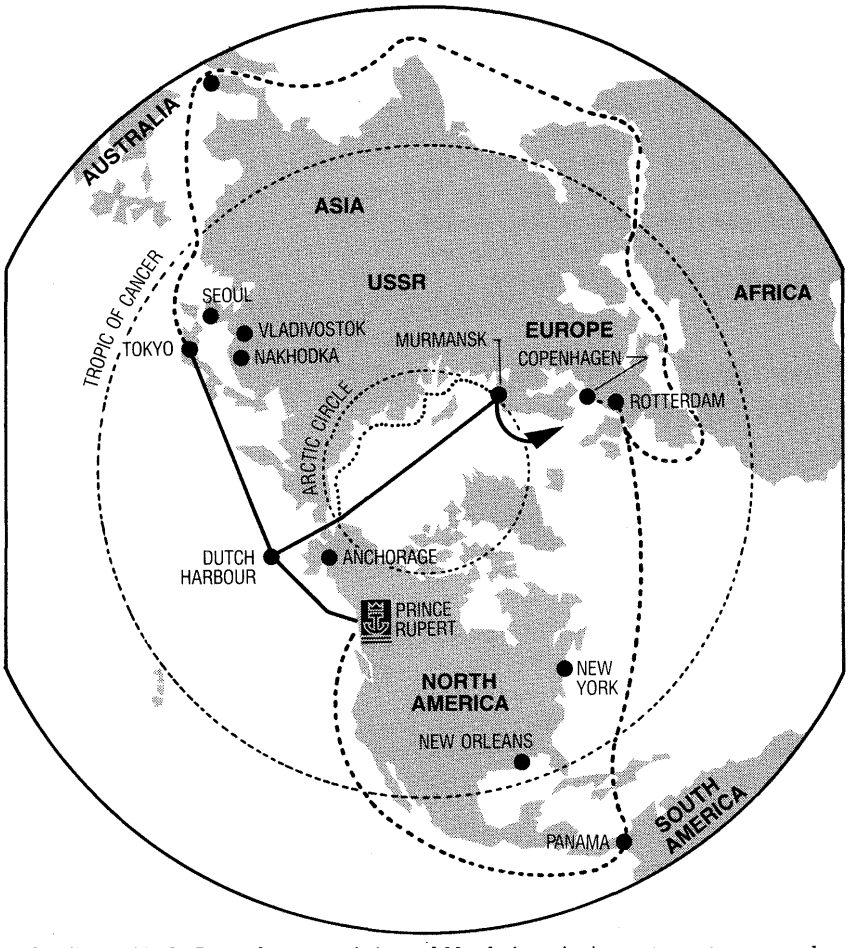
The 1992 total tonnage figure of 63.3 million tonnes was the sixth highest in the port's history. The port's all-time record is 71.3 million tonnes set in 1988.

Polar Route Key to 21st Century Shipping

Rarely does history provide the opportunity to participate in development of a new trade route. Such an opportunity is now at hand as the result of a joint agreement signed in November 1991 by representatives of fifteen regions bordering the shores of the Arctic Ocean. The accord launched the Northern Forum, a priority project to test the viability of a Northern Sea Route.

Interest in the polar sea route has resulted from the consolidation of the European Economic Community and resultant lowering of trade barriers, and the break-up of the former USSR. These developments have generated predictions that northern hemisphere trade will increase, and with it will come a growing need for Atlantic-to-Pacific shipping. Thus, the prospect of a Northern Sea Route is attractive. Because of its strategic location, the Port of Prince Rupert is participating in the project. Situated at the head of North America's most northerly rail line with transcontinental connections, and located on the West Coast Route which feeds directly into the Northern Sea Route, the development of polar shipping routes could have significant impact for the Port.

Estimated time savings for shipments issuing from North America's west coast ports to those in Europe via a polar sea route is up to ten days, and from Asia as much as 20 days may be saved.



The Great Circle Route between Asia and North America's west coast sweeps close to the Aleutian Islands nd the Port of Dutch Harbour. Estimated time savings from the North American west coast to Europe via polar routes is up to 10 days; time savings from Asia may be as much as 20 days. Satellite technology could be used to monitor and analyze ice conditions and identify ice leads; this information would be provided to ships travelling the polar routes.

Currently, some five million tons of cargo are shipped from the U.S. west coast to Europe each year, Japan ships approximately 725,000 containers (FEU) while 675,000 containers are shipped back. The flow of these shipments accounts for a balanced volume which would help provide sufficient back-haul to ensure the round-trip revenue necessary for viability.

At a meeting in October 1992 in Tromso, Norway, the State of Alaska and Murmansk Shipping Company signed an agreement to test two Northern Sea Route shipments. Scheduled for the spring and fall of 1993, data will be collected by scientists and technicians to compare costs and other characteristics of Northern Sea Route operation to those of other routes. If the route is determined not to be viable at this time, these data will establish benchmarks for future use. If the route is viable, plans call for the ice-free International Port of Dutch Harbor (Alaska), on the Great Circle Route, to be developed as the transshipment point to connect the West Coast and Asian Great Circle Route with the Northern Sea Route. Here, cargo would be exchanged between icebreakers and vessels heading east and west.

Currently more than 700 icebreakers and ice-strengthened vessels ply the Russian Arctic Coast; these can enter the trade immediately.

Commercialization of the Northern Sea Route would enable the former Russian Republic to earn hard currency and could facilitate the new confederation's integration into the world economic system.

Other countries are expected to become involved in building and operating vessels on the polar routes. Norway, Japan, Korea and Great Britain have

expressed interest in financing, construction of vessels or operation of the polar routes.

Shippers are now being sought for the test venture. Producers in the Port of Prince Rupert's catchment area who are interested in more information on the scheduled test shipments are invited to contact the Marketing Manager, Prince Rupert Port Corporation.

(Currents)

Savannah Deepening: GPA Signs Agreement

The Georgia Ports Authority signed an agreement with the federal government allowing work to begin on the deepening of the Port of Savannah's channel to 42 feet. Currently, the channel is 38 feet in depth.

The Local Cooperative Agreement (LCA) formally spells out the responsibility between GPA and the federal government on the deepening project. Specifically covered are issues relating to funding, easements and disposal sites.

"Today is an historic day for all Georgians," said Mr. George J. Nichols, executive director of the Georgia Ports Authority (GPA). "Deepening the Savannah River channel to 42 feet will give us one of the deepest channels in the South Atlantic. This will allow us to continue to develop, stimulate and encourage the waterborne commerce of this state."

Without such harbor improvements, Mr. Nichols added, the new larger container ships calling on the Port of Savannah would have to lighten their loads or wait for high tide before using the harbor. "Either of these choices would be prohibitively expensive for our customers and ultimately for us," he said.

Work on the project will begin in March and is expected to cost $57 million. The federal government will share the cost with the state of Georgia. It is expected to take 13 months to complete the job.

The Savannah harbor deepening is the third navigational improvement made at the Port of Savannah. In 1991, a new bridge was constructed across the Savannah River raising the vertical clearance to 185 feet. Just this past spring, the Savannah River channel was widened from 400 to 500 feet.

"These changes, combined with enhancements at our terminal facilities, have a tremendous economic impact upon the state of Georgia," said Mr. Nichols. "Some 63,000 people throughout the state have jobs directly related to the export and import of goods. These jobs generate nearly $200 million in state and local taxes every year."

Joining Mr. Nichols at the signing ceremony was Col. Donald Holzwarth, Savannah District Engineer for the U.S. Army Corps of Engineers and Tybee Beach Mayor Walter Parker. Mr. Nichols presented the mayor with a bucket of sand representing the first of the 900,000 cubic yards of sandy dredge material that will be used to renourish Tybee Beach.

North Carolina Ports: Growth in Key Areas

The first half of the 1993-1994 fiscal year for the North Carolina State Ports Authority brought growth in key tonnage categories. In addition, new cargoes and new carriers made significant contributions to activities at the North Carolina Ports during the period.

At the North Carolina State Ports Authority's Board of Directors meeting in Morehead City, Board Chairman P.A. Thomas noted that breakbulk tonnage handled at Morehead City for the first six months of Fiscal Year 1993-1994 increased 61% over the same period the previous fiscal year.

"Commodities contributing to that tonnage growth include forest products such as hardboard, medium density fiberboard, lumber and veneer," Mr. Thomas said.

"In Morehead City we also see excellent growth in exports of frozen poultry and steel billets," he continued.

At the Wilmington Terminal, Mr. Thomas reported that container tonnage rose 30 percent compared to the same period last year.

"In Wilmington, several of our key commodities are enjoying higher tonnage levels," Mr. Thomas continued. "Our tobacco shipments are up 113%; forest products, excluding woodpulp, are up 49%, and woodpulp is up 13% over the same period last year."

According to Mr. Thomas, other successes enjoyed by the North Carolina State Ports Authority are new carriers that have started service to the North Carolina Ports, and the new trade lanes that have been opened to customers using the North Carolina Ports.

"All of this adds up to very positive news from the North Carolina ports as we look to the remaining six months of this fiscal year," Mr. Thomas concluded.

Water Resources Act to Benefit Port Canaveral

On October 31, 1992, President Bush signed into law the Water Resources Development Act of 1992. The bill provides funding for navigation project authorizations.

Brevard County U.S. Representative Jim Bacchus, who was instrumental in getting the package passed, said: "This project will help us realize the full, long-term potential of Port Canaveral by bringing new business and jobs to Brevard County".

This news bodes well for the Canaveral Port Authority. The bill contains authorization to approve the first installment of $6.1 million for Port Canaveral's widening and deepening project in Fiscal Year 1993.

This project consists of widening the inlet channel from 300 feet to 400 feet and deepening the entrance channel, Middle Turning Basin and a portion of the channel of the West Turning Basin to a depth of -39 feet, with a one-foot advanced maintenance and a one-foot allowance.

The bill also contains language directing the Secretary of the Army to expedite completion of the Corps report on the port's sand bypass system.

Port Canaveral would receive $1 million early in their 1992-1993 fiscal year budget with the remainder being paid over the next three to four years. The port authority will provide the additional $5.7 million needed to complete the project.

History

The entrance channel to Port Canaveral is 400 feet wide and the channel connecting the Middle Turning Basin to the West Turning Basin is 400 feet wide. A bottleneck exists between the Trident Turning Basin and the Middle Turning Basin where the channel narrows to 300 feet. The project will eliminate this bottleneck and provide

a continuous 400 foot channel from the entrance to the port to the Center and West Turning Basins. This will provide a greater margin of safety and maneuverability for ships.

Studies conducted by the Corps of Engineers in the early 1960s proposed widening and deepening of the Canaveral Harbor. In 1962, Congress authorized the Canaveral Harbor extension and a sand transfer facility. Funding was provided by Congress in 1987 to conduct a reconnaissance study for the widening and deepening portion. The study's result was favorable, and Congress funded a feasibility study in 1988-89.

A Final Feasibility Report and Environmental Impact Statement was completed by the Corps of Engineers in 1990. The report and statement concluded the project would benefit both the port and surrounding area.

Port Canaveral's yearly cargo tonnage is three million tons. With the widening of the channel and the deepening of the harbor, annual cargo tonnage has the potential to increase through the accommodation of deeper draft vessels. The project is expected to begin in July, 1993 and finish in May, 1994.

The beaches of Brevard County are a natural asset providing recreation and enjoyment to locals and tourists. A large number of businesses are also dependent on the beaches for their well-being and employment.

The Florida State Department of Natural Resources has recognized the problems inlets cause in disrupting the natural flow of sand, causing beach erosion south of the inlet. The DNR encourages the use of sand transfer facilities as vital and essential corrective measure.

After the port was constructed, the beaches north of the inlet accreted and the beaches south of the inlet eroded. Even though a sand transfer facility was authorized by Congress in 1962, funding was never obtained due to technological reasons, and the project never constructed. After a Corps of Engineers' study reported the project will benefit the port and surrounding area, Congress appropriated funds in 1989, 1990 and 1991 for planning and design of the transfer facility.

Over a three year period, the Corps of Engineers has conducted numerous studies regarding various methods of bypassing the sand. The Corps has decided on a system that will bypass 500,000 cubic yards of sand every five years form the north side of the inlet to the south side.

The Canaveral Port Authority is securing the necessary permits required by the Department of Natural Resources and the Department of Environmental Resources. Federal funding for the project in the amount of $5 million is expected in Fiscal Year 1994.

Brevard County Gains Recreation

An additional part of this overall project includes the development of an additional recreational facility. Port Canaveral already possesses more recreational facilities than all other Florida ports combined. Included are three recreational parks, a five-acre beach, double-wide boat launching ramps, an athletic field, bike and jogging trails, marinas and camping facilities ranging from full hookup to primitive.

Included in this project is the conversion of the jetty at Jetty Park into a first-class fishing pier. The existing rock jetty will be capped, making access along its 1,200 feet available to everyone. The pier will be accessible to the handicapped, lit at night and feature guard rails for additional safety.

Approximately 150,000 cubic yards of sand, dredged from the widening and deepening of the harbor, will be placed on a nearshore berm. The berm was created by the port authority earlier this year to negate erosion of area beaches by replenishing sand currently being lost to the system by wind and waves. *(Port Canaveral Journal)*

Portland's Long-term Auto Strategy Pays Off

As long ago as 1985, the Port of Portland believed the mini-landbridge concept — transporting autos by rail from the West Coast to the East Coast — would prove more cost effective than the all-water, Panama Canal, route.

"We developed a strategy along these lines, followed it, and today we are enjoying the results of our planning and effective marketing," says Mr. Francois Elmaleh, Port automotive division manager.

One of those results was the recent announcement by Hyundai Motors that it will double its import volumes through Portland during 1993 — expand its distribution to 43 states from Portland — and utilize the mini-landbridge to eastern markets.

In support of this change, Hyundai will close its New Jersey port of entry.

"This was dramatic validation of our 1985 strategy," Mr. Elmaleh asserts.

Another validation was by Honda Motors. This Portland auto customer tested the mini-landbridge route to Boston/New York and Savanna/Jacksonville, and reported it to be efficient and cost effective.

As a result of its dedication to the import/export auto industry, today Portland commands about a 12 percent national market share of auto imports and a 20 percent West Coast share.

While other auto ports are suffering, Portland sees major gains in the future. The mini-landbridge plays heavily into these prospects.

"Compared to the all-water route, the mini-landbridge speeds autos to the showroom 10 to 14 days earlier, saves inventory costs and enhances vessel utilization," Mr. Elmaleh explains.

The mini-landbridge is of particular value to Portland because it has service from three transcontinental railroads and its geographic location puts it two days closer than California ports to Asian auto makers.

Adding to Portland's bright future as an auto port is long-term agreements with its key customers — Toyota to the year 2001 — Honda to 2006 — and Hyundai to 2013.

"Our customers know they have a long-term home here and it behooves them to enhance their operations, maximize efficiency and minimize costs. This makes a very strong case for full utilization of the mini-landbridge," Elmaleh says.

In addition to auto imports, Portland has become Honda's West Coast export port for the production of their Marysville, Ohio, plant.

During 1992, Portland handled an estimated 280,000 cars, about 25,000 of which were Honda exports to Asian markets. *(Portside)*

Seattle Brings More New Trade to Northwest

More than 1.151 million TEUs of containerized cargo passed across Seattle harbor docks in 1992. The volume, while representing a three-tenths (.3) of one percent decline in container traffic, may be misleading due to shifting customers and new cargo crossing docks along Elliott Bay.

Seattle's "flat line" in container volumes is viewed positively by Port officials. "After the shift of Evergreen Line to Tacoma and the closing of operations by other, smaller carriers, Seattle's working waterfront faced a loss of 105,000 TEUs annually," said Mr. Frank Clark, managing director of the Port's marine division. "We focused on regaining lost containers by continuing to provide both excellent infrastructure and the leadership for collaboration between carriers, local business, labor, government, and trading partners to attract new international commerce to the Pacific Northwest. We succeeded in a big way."

In one year's time, the Puget Sound's leading harbor regained all but 3,600 of the "lost" containers. Seattle harbor activity included calls by bigger vessels. Perhaps the most notable were new vessels with 4,400 TEU capacities deployed by Hundia Merchant Marine.

"Seattle's ability to replace what would amount to about nine percent of its 1991 container cargo demonstrates our role in advancing the region's position in the global economy and the importance we place in understanding customer needs and having facilities in place to meet those needs," noted Mr. Mic Dinsmore, the Port's executive director. "The results benefit the entire region as new containerized trade coming to Seattle adds to the existing volume, including Evergreen's through its calls on our neighboring Pacific Northwest port, Tacoma."

"Continuing to attract new commerce to the region means added revenues to local businesses, tax dollars for government and, most importantly, jobs that support families," added Mr. Dinsmore. While the dollar value of the 1992 trade is still being compiled, port forecasters expect that the Port's two-way trade picture, including containerized and other cargo, will slightly exceed 1991's $26 billion in waterborne trade.

Two of the Port's 1992 maritime accomplishments bode well for an even brighter future as an economic and trade catalyst — the announcement of long-term, Seattle expansion plans by American President Lines (the world's largest Transpacific carrier); and the Port's recent facility expansion for Trans Pacific Container Company at Terminal 30 to support Mitsui OSK Lines' plans to increase cargo crossing Seattle docks.

Combined, the Seattle and Tacoma harbors facilitated the movement of 2.2 million TEUs in 1992 as compared with 2.18 million TEUs in 1991 — an increase of about 1.4 percent overall.

"Both ports are doing exceptionally well in a tough economy," concluded Mr. Mike LaTorre, director of marine services. "Looking ahead to 1993, we're expecting more than 1.2 million TEUs to pass through the Seattle harbor to points across North America and throughout the Pacific Rim. That's a four percent increase. If Tacoma has similar growth, it will be a good year for the region's businesses and the workers who really make international commerce happen."

By the year 2000, the Port of Seattle

has projected that the two primary Puget Sound container ports, Seattle and Tacoma, will develop infrastructure to support 3 million to 3.5 million TEUs handled by steamship companies and maritime workers.

The Port of Seattle is an economic catalyst to the entire Puget Sound region. It develops and manages commerce through the Seattle harbor, Settle-Tacoma International Airport, warehousing and distribution centers, Shilshole Bay Marina, and Fishermen's Terminal. The Port impacts more than 80,000 jobs in the region and handles greater than $30 billion a year in two-way trade.

New-generation System Installed in Charleston

The Port of Charleston has installed a complete new generation of computer technology to enhance the ORION cargo data processing system.

The new central processing unit is an IBM ES 9121 model 210, coupled with new 9340 Series disc drives. It replaces two IBM 4381's and provides additional speed and capacity, according to Mr. John D. Christensen, manager, information services.

"The new disc drives, using Escon channels (fiber optics), provide 36 billion characters of storage with two-and-a-half times the access speed of the 3380's they replaced," Mr. Christensen said. "The whole system should provide expansion capability for the amount of time we have ORION available to the community, and should ensure a more stable environment.

"Under the old environment, we had two machines running separate operating systems," Mr. Christensen explained. "This is eliminated under the new system, which should help us maintain a stable environment. We were also glad to get the data center moved to the second floor to ensure against potential flooding damage," he said.

The old computer system was located on the Authority administration building's ground floor. The new computer system installation prompted the relocation of some Authority staff member offices, both in the data processing and the engineering departments.

The new data center has six persons, including the manager and computer operators and an data entry specialist, Mr. Christensen noted. "We're also considering realigning our operators to provide additional shift coverage," he said.

"In addition, the central manifest staff has been transferred to the information services department to provide added support for ORION. All this is geared toward providing the best possible environment for what is recognized as the best cargo tracking system in the U.S., ORION."

As some Ports Authority staff members moved to new locations within the administration building, engineering department staff members and equipment moved to the Port's Wando Terminal.

"This move places us closer to our major work, which currently is the completion of the Wando Terminal expansion," said Mr. Randy Bowers, manager of engineering.

Mr. Bowers and 10 engineering staff personnel moved to the Wando terminal's Building #448, adjacent the terminal manager's office. Mr. Bowers said the department's files, computers, furniture and large copy machine were all moved to the new location with little disruption of services. *(Port News)*

Port of Tacoma Attracts Diversity of Business

During a year of moderate growth in container shipping, the Port of Tacoma attracted a diversity of new industry and a healthy influx of jobs.

The year-end 1992 cargo figures show the Port with a 3.3 percent increase in container volume, surpassing 1 million TEUs for a second consecutive year.

The Port handled 1,054,449 TEUs at its container terminals in 1992, compared to 1,020,707 in 1991. While the growth rate is down compared to previous years, the Port saw increased container traffic in an economy struggling against the effects of worldwide recession.

"We have to feel good that we were able to attract additional containerized cargo during a period of economic slowdown," said Mr. Jack Fabulich, president of the Port of Tacoma Commission. "Many ports saw a decrease in 1992, but our trade ties with the Pacific Rim proved to be resilient."

Mr. Fabulich said the efficiency of the Port of Tacoma's two dockside intermodal rail yards helps attract cargo in any economic climate.

In total cargo tonnage, the Port of Tacoma handled 13.3 million short tons in 1992, down 5.7 percent from the 14 million short tons handled in 1991. Decreases in log and grain exports contributed to the tonnage decline.

However, the decline in grain tonnage is viewed as temporary since creation of a new joint venture, Tacoma Export Marketing Company (TEMCO), is expected to result in increased grain shipments in 1993. This joint venture was formed between Continental Grain and Harvest States Cooperative, a regional grain marketing cooperative headquartered in St. Paul, Minnesota.

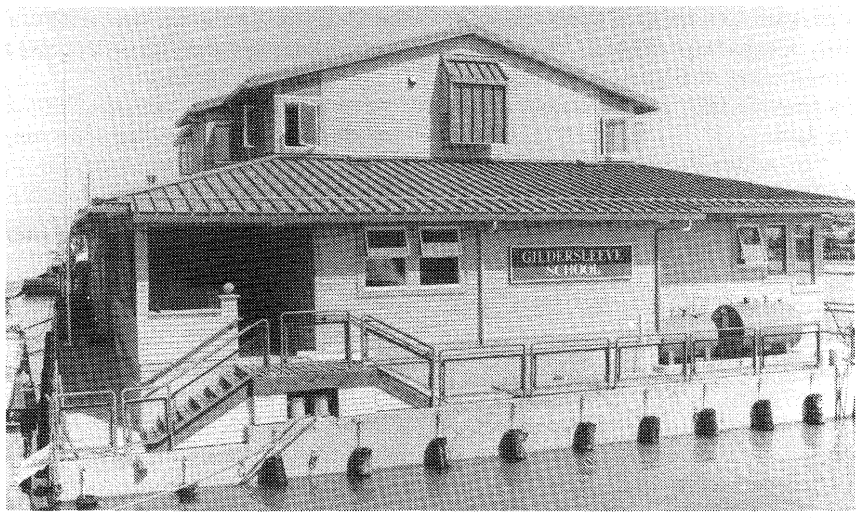
"We can anticipate tonnages to improve as we see a rebound in grain shipments and continued steady growth from our existing shipping lines," said Mr. John Terpstra, executive director of the Port of Tacoma.

Companies Drawn to Tacoma

Beyond the shipping trade, the Port attracted several major industrial development projects in 1992. Three companies, with combined employment of about 250 jobs, decided to build facilities on Port property.

- Tredegar Film Products will eventually employ about 100 people at its new facility. It manufactures a high-grade plastic film, which will be exported to Japan for use in making disposable diapers and other hygiene products. The company leases an 85,000-square-foot warehouse at the Port Commerce Center.
- Toray Composites (America) purchased 26 acres of the Port's property at the Frederickson industrial site, where the company will build a $40 million manufacturing plant for carbon fiber composites. The material is used in everything from airplanes to tennis racquets. The plant will employ about 120 people.
- Tenaska Power Partners of Omaha, Neb., purchased 25 acres at Frederickson for an electric cogeneration plant that will employ about 25 people. The plant will produce 240 megawatts of power for the Bonneville Power Administration.

In addition, construction of The Boeing Company's new aircraft wing plant at Frederickson also brought an influx of construction and aviation jobs



A floating schoolhouse topped a long list of 1992 construction projects at the Port of Tacoma. Also built at the Port were floating pontoons for the Interstate 90 bridge and a $10 million luxury yacht. Businesses leasing land from the Port produced about 2,500 jobs last year.

into Tacoma and Pierce County. A second Boeing plant is due for completion at the Frederickson site in 1993, and eventually the two facilities are expected to employ 1,000 workers.

"Our land availability and our maritime trade have helped draw these companies to Pierce County," said Mr. Fabulich. "We've also seen great cooperation between the city, the state, the county and the Port, to make it easy for these companies to locate here."

Strong Year for Construction

In 1992, the Port also experienced a banner year for both large and small construction projects. Everything from the floating pontoons for Seattle's new Interstate 90 bridge to a floating schoolhouse for Alaska was built at the Port.

Overall, employment produced on Port-leased industrial land resulted in 2,503 jobs last year, according to a survey of the Port's lease customers. This employment figure is up 19 percent, compared to the last survey results which showed 2,100 jobs in 1988. Average wages earned with these jobs were $28,788 per year.

These jobs include shipbuilders who worked on a $10 million luxury yacht for Puglia Shipbuilding and garment makers who stitch together sportswear for BRB Manufacturing.

Also contributing to the job growth was Jesse Engineering, a metal fabrication company that has become a $20 million business by making inroads in both the domestic and international markets. The company employs about 200 workers and currently is building customized containers for shipping Boeing aircraft components.

Environmental Projects Progress

The year also saw several accomplishments on the environmental front. The Port completed cleanup work that allowed four of six land parcels (86 acres) to be transferred to the Puyallup Indian Tribe. Cleanup work on the remaining two parcels will continue during 1993.

The land transfers are part of a land settlement agreement involving the Puyallup Tribe, state and local government, and private landowners.

When the first land transfers were completed in March 1992, the tribe immediately began work on the Chinook Landing Marina on the Hylebos Waterway. The 219-slip marina is due to open this February.

Africa/Europe

Projects Underway to Improve Cyprus Ports

Two contracts worth US$80 million in total have been awarded by the Cyprus Ports Authority in February, to initiate the construction of a new Container Terminal at Limassol Port.

The projects to be executed under the above contracts involve the total or partial creation of facilities to be available by the end of 1994.

The major of the two contracts, worth US$75 million, provides for the construction of a 14-m-deep quay length of 630 m, including a ro-ro berth. It furthermore involves the execution of project supportive works i.e. the extension of the main breakwater of the port by 500 m and the dredging of the entrance channel and the turning circle of the basin to 15 m.

The contract was won by "Arthirodon" a Greek Company which was the successful tenderer in an international competition conducted for the assignment of the project. Incidentally Archirodon was also the contractor for the previous quay extension of Limassol and Lamaca ports.

The second contract, worth some US$3 million, was won by CYBARCO, a Cypriot company, and provides for the pavement of the first 60,000 m2 of a 200,000 m2 container stacking area, to be completed by the end of the year.

The execution of both projects is already underway.

Port of Rouen 1993-97 Development Plan

The 1993-1997 development plan schedules investments to stimulate the volume and diversification of the Port's traffic and even more efficient services whilst protecting the environment.

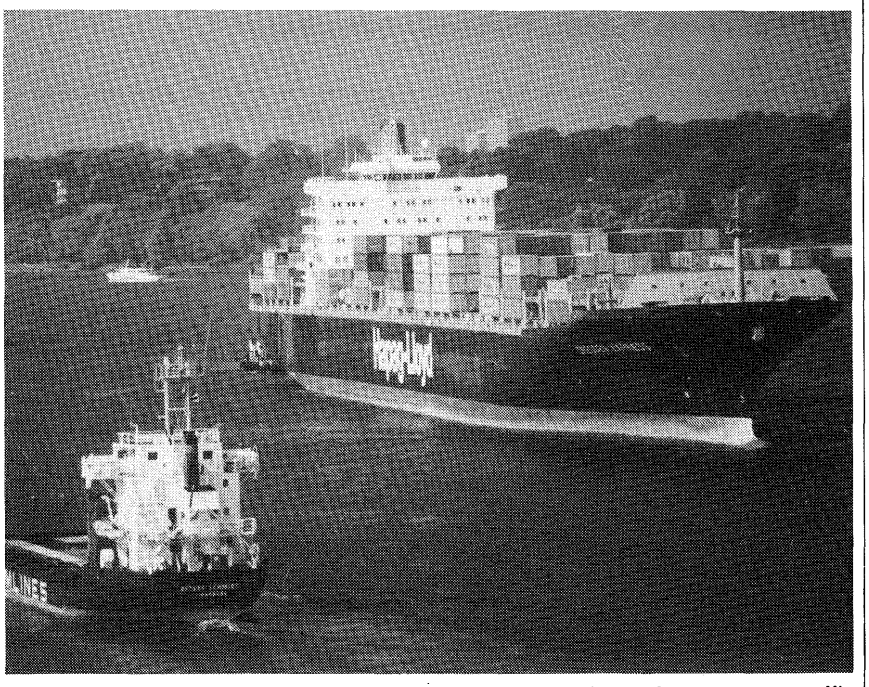
This plan's start coincides with the inauguration of the European Single Market. English Channel and North Sea ports shall all be competing fiercely for a piece of the pie. The Port's reform, under the aegis of a French government plan to modernise ports, is one factor that will enable it to compete for cargo. Cost will be lower at the port; 242 dockers, down from 755, will work on Rouen's waterfront. The Port's position inland on an estuary is an essential asset, reducing the necessity of costly long hauls overland. The Port intends to develop and diversify its collection-storage-distribution role which its location and its dedicated terminals favor.

In order to achieve the development plan's objectives, the Port Authority has scheduled investments of approximately FF750 million over five years. A ten-year programme is to increase

draught upstream to 12 metres and downstream to 10.5 metres to improve access. Big investments will mean more efficient forest product and sugar terminals as well as a solid bulks terminal at the advantageously situated Grand-Couronne.

Investments will include those in a platform and storage-distribution units on this site. New lifting gears will complement the existing gear on the site to make the terminals even more efficient.

The Port also schedules investments to attract cruise ships without neglecting those to improve safety on land and water. The development plan's objective for 1997 is to boost the volume of traffic passing through the Port to 27 million tonnes each year, with general breakbulk cargo increasing at the sharpest rate. The Port's even greater efficiency linked to the reform of the port network will enable Rouen to attract cargo which hitherto bypassed the Port and thus generate income to finance its investments. *(Rouen Port)*



Sea-feeder traffic via the Port of Hamburg grew much faster than overseas traffic in 1992.

Hamburg's Hub Function Strengthened

The Port of Hamburg recorded a significant growth in transit traffic in the first half of 1992. The volume of cargo handled rose by 11.6% from 4.3 m t in 1990 to 4.8 m t in 1992. Sea-to-sea traffic grew even faster — by 22.6%. Thus, the trend to higher growth rates in sea-feeder traffic than in direct traffic continued.

Hub of Northern Europe

As the "Atlantic's most easterly port", Hamburg considerably strengthened its position as the hub of Scandinavian traffic. Liner and feeder services, fast rail links and a closely-woven network of ferry links and motorways guarantee a rapid flow of goods to and from Scandinavia — a huge market with the spending power of 22 million relatively prosperous inhabitants and a highly developed manufacturing industry exporting its products to overseas markets via Hamburg.

In 1991 and 1992 Hamburg handed more containers bound for and coming from Scandinavia than Rotterdam and Bremen's Ports together.

Denmark tops the list of transit partners with 652,521 t in the first six months of 1992 (up 15.9% on the 1990 figures). Sweden is second with 581,585 t (up 16.8%), Finland 4th with 457,822 t (up 19.3%) and Norway 6th with 230,049 t (up 18.5%). The creation of a European Economic Area by the EC and EFTA member-states opens up further prospects for the development of traffic to and from Scandinavia.

The enormous growth in traffic with Poland — up 141.1%! — was partly due to the introduction of direct-block trains to Warsaw and Kraków. The dramatic political upheavals of the past three years have returned the Port of Hamburg to a central position on the European geopolitical landscape and German unification gave Hamburg its traditional hinterland back. These catchment areas open up new potential transit cargoes — exports and imports.

Over twice as much cargo was handled for Russia as for the former Soviet Union (an increase of 116%). Besides, the Baltic Republics, Ukraine, Byelo-Russia and other states from the former Soviet Union now appeared for the first time in the list of Hamburg's transit partners.

Hamburg at Hong Kong Intermodal Freight Show

The Port of Hamburg was represented at the Hong Kong Intermodal Freight Show and Conference by the Port of Hamburg Marketing and Public Relations (Regd. Assn.), Gerd Buss (AG & Co.), DAKOSY Daten-kommunikationssystem GmbH, EUROKAI KGaA and Hamburger Hafen- und Lagerhaus-AG (HHLA).

There are many similarities between Hong Kong and Hamburg. Both the crown colony and the city state are important manufacturing and trading centres. Their ports are among the most dynamic in their regions. While Hong Kong ranks number one in the world container league, the Port of Hamburg holds seventh place and is setting itself new targets.

Both ports play dominant roles in the Far East - Europe long distance trade in their regions and both are important transit centres. Hong Kong serves as an important gateway to China and as a traffic hub for South East Asia. Hamburg as the "Baltic's most westerly" and the "Atlantic's most easterly" port serves the whole of Scandinavia, the Baltic, and Eastern and Central Europe. Connections have been established with respect to all modes of transport, i.e. sea feeders, inland waterway vessels, international

Top 10 — Main Trading Partners of Hamburg
Container Traffic

Country		1,000 TEUs					
		Import		Export		Total	
		1990	1991	1990	1991	1990	1991
1	Hong Kong	149	175	54	62	203	237
2	Japan	100	92	115	132	215	224
3	Singapore	100	124	80	85	180	209
4	Taiwan	69	78	38	53	107	131
5	Sweden	43	47	53	51	96	98
6	Norway	33	39	31	37	64	76
7	Korea-South	38	38	27	35	65	73
8	USA	34	28	40	42	74	70
9	Denmark	32	39	27	29	59	68
10	China PR	19	28	20	40	39	67
	Other Countries	417	436	450	499	867	936
	Total Traffic	1,034	1,124	935	1,065	1,969	2,189

Source: Statistical Department Hamburg

railway links, road haulage and intermodal traffic. This network is becoming more closely-knitted all the time.

Hamburg's "hinterland" has a population of approx. 150 million inhabitants. This is a very attractive market with excellent growth prospects not only for Hong Kong companies but also for other Far East exporters.

With a container throughput of approx. 245,000 TEUs in 1992 (237,000 TEUs in 1991, 203,000 TEUs in 1990) Hong Kong is the Port of Hamburg's most important trading partner (see attached list). The Far East accounts for some 42 per cent of the port's container traffic although it only makes up 9 per cent of Germany's foreign trade.

Hamburg's port economy is convinced that in future, traffic to and from the Far East, especially to and from Hong Kong, will continue to grow dynamically. As far as exports to Hong Kong are concerned, growth potential is seen in chemicals/plastics, machinery, paper and board, food and beverages, iron and steel. With imports from Hong Kong, electro-technical goods, apparel and textiles, chemicals/plastics will continue to be of great significance, particularly in view of the distribution function filled by firms based in the Port of Hamburg.

The greatest boost to growth for the Elbe port will come from cheaply produced durables and non-durables for which there will long be a pent-up demand in Central and Eastern Europe. In view of the prospects opened up by the Single European Market, closer cooperation between EC and EFTA states and the economic development of Central and Eastern Europe, Hamburg has a great chance of further strengthening its position as the hub of Europe's Far Eastern trade.

The Port of Hamburg recently opened a representative office in Hong Kong. It is under the management of Mr. E. Gotting, the Delegate of German Industry and Commerce in Hong Kong. The office serves as a one stop information bureau on the Port's activities. Qualified cargo handling and logistics consultants are glad to supply any interested parties with their know-how — an impartial and free service. The Port of Hamburg's service is not just restricted to its Port. The firms operating there offer foreign traders a freight accompanying service to destinations throughout Europe and overseas.

Amsterdam-Rotterdam Daily Shuttle Service

From Monday 1st March 1993 an inland vessel container service will shuttle between the port areas of Amsterdam and Rotterdam six days a week. This cooperative initiative of the Port Management of Amsterdam (GHB) and the Amsterdam company Lucassen BV is aimed at making the capital port more attractive to users. By guaranteeing this transport facility shippers will be able to use Amsterdam for cargoes not intended for Amsterdam. This can offer shippers significant time savings.

This initiative will also promote inland water transport and reduce container movement by road in the crowded western conurbation of the Netherlands, the 'Randstad'. Shippers' considerable interest was shown by the fact that the first departure was completely booked.

The GHB has for some time been working on plans in the context of the Ministry of Transport's Structural Plan for Traffic and Transport (SVV2). Shipping goods by barge on inland waterways is being promoted in an attempt to reduce the road traffic problems in the West of the country. The development of the international multimodal transport centre 'Amsterdam Westpoint' was the first example. The daily 'container shuttle' is the second.

The transport of containers by inland vessel from and to all terminals in the harbours of Amsterdam and Rotterdam is guaranteed six days a week. The barge (the lighter 'Gamma') will have a capacity of 24 TEUs. Lucassen BV will be despatch processing at its office on the 'Bonte Zwaan', Tasmanstraat 2, 1013 AH Amsterdam (020-6866710, Mr. P. Heijkoop).

GHB Managing Director Godfried van den Heuvel sees the new container service as a major gain for the port. "Each departure will carry the equivalent of a large number of trucks. The security of a guaranteed service also offers benefits. The GHB is participating with energy and enthusiasm in this new project". Managing Director A. Poot of Lucassen BV adds "Things will not end here. We have already opened a 3 to 4 times a week service between Amsterdam, Rotterdam and Antwerp with the 208 TEU carrier the 'Maria D'. We are convinced there is a need for a regular service without the hassle of traffic jams and with a guaranteed handling at both ends."

Transshipment Nearly Steady: Rotterdam

Goods transshipment in Rotterdam in 1992 totalled 293.2 million tons, an

increase of 0.4% in comparison with 1991. The large quantities of crude oil shipped in from the Middle East in December played a particularly important role in increasing the annual result. The record level of container transshipment (44.3. mln tons, +9.9%) also contributed to the good annual result. Transshipment of general cargo as a whole was also above the level of 1991 (+6.6%). Poorer results were achieved in the dry bulk sector (—5.2%) and in the transshipment of mineral oil products (—19%).

Crude Oil

The considerable increase in imports of crude oil played an important role in the positive annual result. Due to a good month in December, imports in the fourth quarter were high at 24.6 million tons, 12.3% more than the fourth quarter of 1991. This is the result of very high production by the OPEC countries (particularly Iran and Saudi Arabia) and the record level of Norwegian oil production. The consequent low price for crude oil encourages the build-up of stocks in Rotterdam. Imports are expected to remain high in the first quarter of 1993. It takes a tanker loaded in the Middle East around three weeks to reach Rotterdam. Imports of crude oil rose from 91.2 million tons in 1991 to 96.6 million tons in 1992.

Mineral Oil Products

In 1992 the transshipment of mineral oil products fell by 19% to 20.4 million tons. This was partly due to the decline in demand for heavier products, such as fuel oil. The European refinery companies will need to invest heavily in, for example, the construction of hydrocrackers so as to be able to convert these products into lighter products such as petrol and kerosene.

Another cause of the decline was the increase in the processing of oil products in the producing countries. This led to a reduction in imports, while the level of imports of chemical products increased.

Ore and Scrap Metal

The European steel crisis was clearly felt in ore imports. Following a reasonable first half-year, imports in the second half of 1992 radically fell, eventually totalling 37.9 million tons, a decline of 4.7% in comparison with 1991. Medium-term prospects continue to be bleak.

In spite of the low prices for scrap metal, exports (mainly scrap metal) fell only slightly by 2.1% to 2.9 million tons.

Coal

Coal imports were somewhat disappointing in the second half of 1992 as the result of considerable stockpiling in the first half. Nevertheless, coal imports continue to be an important growth market in the dry bulk sector in Rotterdam. Imports rose in 1992 by 2.1% to 19.7 million tons. Exports on the other hand fell from 4.4 to 3.3 million tons. This was the result of the loss of German coal exports via Rotterdam to Southern European destinations.

Containers

In 1992 container transshipment achieved a new record: 44.3 million tons. In spite of the deteriorating (European) economy, this represented an increase of 9.9% in comparison with 1991.

In terms of TEUs, the number of containers increased from 3.8 to 4.1 million.

Imports rose by 7.1% to 20.0 million. This was a result of the labour unrest in French ports and the acquisition of several large shippers who are importing their cargo via Rotterdam.

Exports of containerised cargo showed a higher level of growth: increasing by 12.3% to 24.3 million tons. This was partly due to the reviving economy in the United States.

Ro/ro

The export of ro/ro cargo (goods in vehicles) rose by 5.8% to 3.8 million tons due to the poor economic situation in the United Kingdom. In order to be able to meet domestic demand, the country has to import more. Ro/ro imports fell slightly to 3.4 million tons.

Other General Cargo

Imports of other general cargo rose by 5.2% to 8.7 million tons. This was largely due to the large supply of Russian aluminium on the Western European market. The London Metal Exchange stores approximately three-quarters of its unsalable aluminium stocks in the Port of Rotterdam. Exports of other general cargo were 15% below the level of the previous year at 3.5 million tons. From a structural point of view, the transshipment of other general cargo shows a declining trend in favour of the transshipment of goods in containers.

New IDS Introduced to Dutch Piloting Service

The Dutch engineering company Etrometa, manufacturer of hydrographic data collecting and presentation systems, has developed an Information Distribution System (IDS) for piloting services.

IDS is a real-time data broadcasting system for dedicated use of local hydrographic and meteorological data. It enables users to maximize the utilization of fairways to seaports through the independent provision, every minute, of the most recent available hydro meteo data. This results in both improvement of the effectiveness of the ships voyage and environmental safety.

The piloting service of the River Western Scheldt, which is the fairway to the Port of Antwerp (South West region of the Netherlands) recently started a one-year test with the Information Distribution System. The pilots will report on their experiences on a regular base, in principle after each piloting trip.

Continuous Information

A prerequisite for the test is measuring network that provides hydro meteo data. The South West region of the Netherlands was chosen as a test area because in this area a real-time data broadcasting system is present. It was put in operation by Etrometa

in 1982 for the construction of the Storm Surge Barrier in the Eastern Scheldt. This system has become part of a permanent infrastructural hydro meteo information facility in the region and now also forms the base for the test with IDS.

IDS is a transmitting system that distributes hydro meteo data in a harbour approach area by means of a VHF radio link. In the test the data consist of waterlevel and waveheight and in some locations in the Western Scheldt actual wind information. However, the total scope of data can consist of:

- waterlevel and predicted variations
- wave data:
  * significant waveheight
  * swell: energy and direction
  * predictions.
- visibility.

The data are always connected to a certain occasion. The system also facilitates dissemination and presentation of text messages to pilots. This information may regard weather forecasts, data about deficiency of navigational aids, accidents, etc. To receive the data the pilot carries a portable IDS receiver, the size of a hand-held mariphone, with him aboard the ship. The pilot chooses the data he requires by the use of push-buttons on the receiver. It has a display in which the requested data appear. Information can be presented of two locations at the same time. See figure 1.

Advantages and Safety

Due to the autonomous availability of hydro meteo data to the pilot, there is less threshold to use these data and to maximize the planning and proceeding of the approach voyage. This has economic advantages as it leads to a reduction of the keel clearance with the margins which earlier had to be kept when less accurate and less timely data were available. Furthermore the information and its accuracy result in a decrease in the risk of accidents.

In addition to supporting pilots, the information supplied by IDS may also be used by sounding vessels, dredgers, coast guard vessels and ferries.

The first evaluation of the test with IDS took place after four months. The results were positive; in cases of doubt about the situation the pilots judge IDS as a reliable and accurate source of information. The test will be continued and extended with the distribution of text messages.

Further information address:

Etrometa B.V., P.O. Box 132, 8400 AC Gorredijk, The Netherlands, Tel. +31 5133 3435, Fax +31 5133 3112.

Big European Forwarding Company to Barcelona

(Article provided by the Port of Barcelona's Tokyo Representative Office)

A plot of land of 26,840 m² in the ZAL Zona de Actividades Logisticas (Logistics Activities Center) of the Port of Barcelona will be the home of the new international terminal of DANZAS, Europe's most important forwarding company. The contract confirming this agreement was signed on Friday, March 5 by the President of the Port of Barcelona, Mr. Josep Munné, the Managing Director of DANZAS Europe, Mr. Cees van Leeuwen, and the President of DANZAS Spain, Mr. Carlos Yabar.

DANZAS's project in the ZAL will be completed in two phases. The first one, representing an investment of $5 million, features a 5,500 m² warehouse with an attached, two-floor office building. The second phase, to be carried out within the coming three years, consists of expanding the warehouse by 3,000 m² and adding a third floor for offices.

By setting up these new facilities, DANZAS is consolidating the position of the Port of Barcelona as its central distribution point for maritime traffic in the Iberian Peninsula and the South of France, as well as for international land and air traffic. The ZAL will also be a "gateway" for DANZAS Europe for all the traffic going to Miami and to South America. With this installation, the company expects be able to obtain an increase in total traffic of up to 20%.

The ZAL is basically an intermodal distribution center for companies working with the Port of Barcelona, specializing in maritime traffic. A whole series of operations is carried out when the transport chain is broken, thus increasing the added value of the merchandise. In addition to the usual operations of intermodal exchange, other services related principally to stock management and distribution, such as light industrial processing, quality control, packing, labeling and administrative processing (invoicing, statistics, etc.) are offered.

The ZAL is being carried out in two phases. DANZAS is setting up its facilities in the first one which totals 65 hectares. The second phase will cover an additional 135 bectares once the River Llobregat has been diverted. Development, management and promotion of the ZAL Project lie in the hands of a private company named CILSA (Centro Intermodal de Logistica, S.A. Intermodal Logistics Center), which was founded by the Port of Barcelona, which as of today is its only shareholder.

The DANZAS group is an international transport organization represented in the five continents by 727 offices in 38 countries and a total of 160,000 employees. The parent company DANZAS AG, with its headquarters in Basel, Switzerland, is of mainly Swiss-owned capital. Its shares are quoted on the Geneva and Basel stock exchanges.

25 Million Tonnes of Cargo in Tarragona

The traffic of goods loaded and unloaded in the Port of Tarragona increased 2.2% in 1992 moving 24,923,464 tonnes last year and 24,388,207 tonnes in 1991.

First of all, the increase of the fruit and vegetable traffic in the Port has been 128,047 tonnes, 84,008 tonnes more than 1991. Because of that increase we dare say that this traffic is consolidated and growing up.

The Port Authority of Tarragona opened the cold-storage terminal that was inaugurated last November.

Vehicles is another traffic that is growing up, for in 1991 were exported and imported 64,142 vehicles and 84,969 in 1992. So the Port Authority has the project to build a new vehicles terminal.

Also the container general cargo increased 24%. In 1991 it was 26,848 containers and 234,272 tonnes but the last year it was 33,186 containers and 306,260 tonnes. So we can say that more than half of the general cargo in the Port of Tarragona belongs to container traffic. In 1992 632,489 tonnes

of general goods were moved.

Talking about the summary of the great groups of goods: petroleum products, liquid bulks, dry bulks and general cargo, among others have an increase of 4.4% in general cargo, (26,855 tonnes), as in 1991 were moved 605,634 tonnes and 632,489 tonnes in 1992.

Also petroleum products increased 5.5% from 14,552,110 tonnes in 1991 to 15,358,903 in 1992. In 1991 there was a decrease in crude oil because the petroleum industry has a triannual stop.

Moreover, there has been an increase of 1.7% in liquid bulks from 1,470,220 tonnes in 1991 to 1,495,731 tonnes in 1992.

Nevertheless, the traffic of dry bulks decreased last year 4.7%, compared to that of the previous year. In this way were moved 7,462,870 tonnes in 1991 and 7,111,154 tonnes in 1992. This decrease was produced by the divestment of the coal traffic to the thermic industry in Alcudia (Mallorca) and a falling in the demand of coal market for cement and building industry.

About the dry bulks, the agri-foods products (cereals to make feeds) some types decreased and others increased, the total volume amounting to almost the same as that of the previous year. We dare say that these products are consolidated. The Port of Tarragona was leader in 1991 in Spain in cereal traffic.

Heaviest Ever Unit Loads Handled at ABP-Barrow

Two slug catchers, each weighing in excess of 700 tonnes, were recently discharged at the refurbished and strengthened ro-ro facility at No. 7 berth in Ramsden Dock, Associated British Ports' (ABP) port of Barrow. The slug catchers, which will be used to extract liquid from gas pumped ashore, were the first units to be discharged at the ro-ro facility and the heaviest ever unit loads to be handled at the port's commercial quays.

The specialised German ro-ro vessel *Submerger I* discharged the slug catchers for delivery to British Gas Exploration and Production Limited's (BGE&P) North Morecambe onshore terminal, which is presently under construction at Barrow.

The port is heavily involved in the British Gas North Morecambe development with 37 kilometres of concrete pipe stockpiled at Ramsden Dock for shipment offshore in early summer this year.

The slug catchers are the latest of a series of shipments of heavy-lift and out-of-gauge modular units to be unloaded at Barrow for the BGE&P North Morecambe Terminal project. The loads were transported from the Docks to the Terminal site by Middlesbrough-based Mammoet Transport, who has also been involved in the sea transport operation.

Captain John Green, Port Manger & Harbour Master, ABP-Barrow, said: "The British Gas project has provided the port with a further opportunity to demonstrate its capability of handling large project cargoes and its ability to provide an effective base for offshore activities in the Northern Irish Sea."

ABPH, Conoco to Extend Immingham Oil Terminal

Associated British Ports Holdings PLC and Conoco Limited are to invest more than £18 million in the industrial future of Humberside by extending the Immingham Oil Terminal which handles products from Conoco's Humber Refinery at South Killingholme and from the adjacent Lindsey Oil Refinery, owned jointly by Total Oil and Fina plc.

Associated British Ports (ABP), Britain's largest ports operator, will build at a cost of around £14 million a new branch jetty and associated civil works, which will provide a third large berth capable of handling tankers of up to 80,000 dwt. The £9 million contract for phase 1 of the project, which includes the construction of the jetty berthing head, mooring dolphins and road approach has been awarded by ABP to AMEC Civil Engineering Limited.

Conoco, through Humber Oil Terminals Trustee Ltd. (HOTT), which represents the interests of Conoco, Total and Fina, will provide the pipelines, pumping systems and associated connections with the existing pipework linking the terminal with the refineries. A contract for this work has still to be awarded.

Although ABP and Conoco currently are financing the project, with the oil company as sole user of the new facilities, Total and Fina have an option to participate which they may exercise at any time before the jetty is commissioned.

The new berth is expected to begin operating in April 1994, the 25th anniversary of the commissioning of the Immingham Oil Terminal.

Mr Stuart Bradley, ABP's Managing Director, said:

"The new jetty is a significant expansion of the comprehensive oil terminal facilities at Immingham. This further investment will strengthen an already thriving business which has handled over 300 million tonnes of liquid cargoes since it opened in 1969. It is another example of ABP's willingness and ability to inject new capital to support the enterprise of our customers."

Mr Alan Hodson, Director and General Manger of Conoco's Humber Refinery, said:

"This development reflects Conoco's policy of investing in success. After nearly 25 years of growth in the Humberside, we need additional export-handling capacity at Immingham and we are glad to cooperate with ABP in an important project that will enhance the efficiency and competitiveness of our business."

CORRECTION

With reference to the article **Amsterdam: Int'l Center For Combined Transport** appearing in the March 1993 issue of this journal, the figures showing the deep-sea quay in the column of the article on page 38 indicated the quay as being "a 100-metre long", while it should have been **"a 400-metre long".** The correction was recently requested by Mr. John de Vries, Real Estate Department, the Port of Amsterdam. Further in this connection, the same port official has provided us with the following facts:

"Also there will be a 200-metre-long coaster quay and a 200-metre-long inland barge quay, so the total comes to a length of 800-metres multifunctional quay.

— IAPH Head Office

Felixstowe Consultants Restructured

Felixstowe Port Consultants Ltd. has come into being as a restructured enterprise in the Hutchison Whampoa Group.

Currently the company is studying privatisation feasibility for a major South American port and, in technical partnership with a London-based firm, financial management, information and container control systems in West Africa.

Wholly owned by Port of Felixstowe Ltd., its head of Technical Services is Mr. Dick Bridges, a specialist in worldwide consultancy for many years.

Mr. Frank Doe, who is head of Marketing has put together port systems in North America, mainland China and Europe as an executive of Furness Withy Terminals and Hongkong International Terminals.

Felixstowe Port Consultants draws on a vast store of knowledge and experience, which began being made available in 1975 through a division of Felixstowe Dock & Railway Company.

This expertise, however, has been in demand since the mid-1960s, when Felixstowe pioneered large-scale containerisation in Britain.

The Port went on to build a reputation for good labour relations and innovative technology, handling all kinds of cargo, and achieving results at every level from workforce to top management.

In-house training plays a big part in this success. The Port, through Felixstowe Port Consultants Ltd. helps people from developing ports to study new methods and equipment at Felixstowe, and Felixstowe sends teams to teach new skills overseas.

The fact that Felixstowe has never known ownership outside free enterprise is seen as a plus for the consultancy service.

Port of London Authority Trims Charges Increase

The Port of London Authority has informed port users that conservancy charges increases effective from 1 January would be substantially below inflation and for pilotage services would be nil.

This inflation-busting policy has been adopted by the PLA as its contribution to economic recovery. Conservancy charges on ships and on cargo, which are the PLA's main source of income, will be increased by only 2%. Pilotage charges will be held at 1992 levels.

Announcing this to the London Port Users' Consultative Committee, PLA Chief Executive David Jeffery said: "We know how tough it is for port users in this recession and we want to play our part in an economic recovery. We have taken full note of our customers' position and the guidance in the Chancellor's Autumn Statement by trimming our budget. I hope that 1993 sees the start of a recovery to which we will have made a worthwhile contribution".

Asia/Oceania

Port Hedland Port Authority CORPORATE PLAN

Mission Statement

To provide, operate, develop and monitor port facilities and services, such that the differing needs of Government, customers, employees and townsfolk, who together comprise our stakeholders, are efficiently and cost effectively fulfilled, and port trade enhanced thereby.

Strategic Plan and Operational Objectives:

The Strategic Plan covers operational, environmental, developmental and financial areas as it strives to achieve its main aim — to facilitate the transfer of cargoes and goods between two disparate modes of transport, that of land and sea.

The main objectives are:-

Operational:

- To provide expert shiphandlers and safe and expeditious ship manoeuvring procedures, so as to allow an uninterrupted 24 hours per day access into and out of the port for shipping, including ultra large bulk carriers.
- To provide wharves, berth pockets, covered and open storage facilities, and services in sufficient quantity and type in order to meet customers needs in a cost effective manner.

Environmental:

- To ensure as far as possible the conservation and protection of the land and sea environment in and adjacent to the port, such that future generations will enjoy conditions no less than presently exist.

Developmental:

- To facilitate and co-ordinate the port development aspirations of users and potential users in a "user pays" mode, ensuring that the new development which takes place is compatible with existing port activities.

Financial:

- To maintain the Authority as an independent, financially viable, corporate body, whose charges accurately reflect the costs of the individual services which it provides, without overt or covert cross subsidisation.
- To ensure that port charges remain at affordable rates and are comparable with rival ports, since the nature of the business of the main port users, that of iron ore production, transport, and sale of product to international purchasers, is highly competitive.

Citizenship:

- To ensure that the port's activities and policies reflect changing community values, both in the broad sense of nation and state and in the more particular sense of town and region.

(1991 - 1992 Annual Report)

Council on Security Formed at Chiba, Japan

1. The current situation

1.1 Security at the public wharf areas has been maintained as an administrative function of port management bodies by means of providing gates, barriers and no-entry signs at various points. At night, with the support of the police forces in the locality, road control has been undertaken in certain areas. Also, with the support of various port-related business associations, various safety measures have been promoted.

1.2 However, it can be assumed that the effect of such measures is insuffi-

cient and needs to be improved, except as regards the road traffic control activities conducted at designated areas. As a matter of fact, it must be accepted that such incidents as acts of delinquency and disturbance to port operations still occur. Among such incidents are:

.1 Vehicles falling into the sea due to reckless driving by young people
.2 Road being blocked by youngsters as circuits for speeding
.3 The entry of anglers and their cars, which might cause hindrance to port operations, damage to public facilities, the threat of fire by bonfires, misdemeanors by youngsters, cars being driven into the sea during acts of suicide

1.3 Moreover, as there is an increasing threat of smuggling and other serious problems, the need for improvement of security and safety in public wharf areas has been expressed by business circles, the police and other relevant institutions.

2. Establishment of the Council

2.1 In order to improve safety and security in public wharf areas effectively and in a comprehensive way but without causing problems for port operations, it is thought apprpopriate to organize and strengthen the ties of cooperation and collaboration among the concerned parties of the prefecture, the central government, the relevant cities and industrial and business circles.

2.2 In the circumstances, the Prefectural Government, by looking into the implications and considering how to implement workable measures and systems, on 1 April, 1992, introduced the following measures:

.1 To establish a council, to be known as the "Chiba Prefectural Council on Safety and Security in Public Wharf Areas, the central secretariat of which shall be located in the Ports Administration Division of the Prefectural Government, and
.2 To establish at each Port Office (of the Prefecture) yet another layer of administration to be known as the "Area Council on Safety and Security at Public Wharves", the secretariat of which shall be located at each of the area port offices.

2.3 The Council shall examine the comprehensive policy and measures for ensuring safety and security in public wharf areas. Moreover, the Area Council shall, in support of the Council, examine and prepare measures for establishing safety and security in the respective designated areas.

Composition of the Council Members

Chiba Prefectural Government
Director General, Public Works Department (As Ex-officio President)
Director, Ports Administration Division, Public Works Department
Director, Ports Construction Division, Public Works Department
Director, Traffic Safety Measures Division, Planning Department
Chief, Chiba Port Office
Chief, Chiba South Port Office
Chief, Kisarazu Port Office

Chiba Prefecture Police Force
Director, Planning Division
Director, Guidance Division
Director, Control Division

Central Government Agencies
Ministry of Finance: Inspector General, Chiba Customs Office, Yokohama Customs Bureau (As Observer)
Ministry of Transport: Director, Chiba Office, Kanto District Bureau of Transport
Maritime Safety Agency: Director, Chiba District Bureau of Transport

Municipal bodies in the Chiba Port
Chiba City: Chief, Commerce, Industry & Tourism Division, Bureau of Economics and Agriculture
Ichikawa City: Director, Public Works Administration Division, Public Works Department
Funabashi City: Chief, Traffic Safety Measures Division, Citizens Department
Kisarazu City: Chief, Public Works Administration Division, Public Works Department
Narashino City: Chief, Sewage Systems Division, Public Works Department
Ichihara City: Chief, Traffic Safety Division, Citizens Department
Kimitsu City: Chief, Public Works Administration Division, Public Works Department
Futtsu City: Chief, Public Works Administration Division, Construction Department

Port-Business Associations
President, Chiba Harbour Transportation Association
President, Keiyo Harbour Transportation Association
President, Kisarazu Harbour Transportation Association
Director, Chiba Union of Harbour Transportation Businesses
Director, Keiyo Union of Harbour Transportation Businesses
Director, Kisarazu Union of Harbour Transportation Businesses
President, Chiba Port Sanitation Society
President, Chiba South Port Sanitation Society

Notes: The Area Council is composed of representatives of the relevant offices located in each area, with customs officers as observers.

Osaka Nanko Tunnel Construction Underway

Construction of the immersed Osaka Nanko Port Tunnel linking Minato Ward of Osaka City to Sakishima (the South Port) is in smooth progress. On January 15, the first of ten elements of the immersed tunnel was brought into the port. The gigantic elements (concrete caissons) weigh 31,000 tons (103 meters long, 35 meters wide and 8.6 meters high) each. All ten elements will be joined on the seabed to constitute the bottom part of the tunnel.

When completed in the spring of 1996, the long awaited Osaka Nanko Port Tunnel will have a 4-lane roadway and a railroad, providing enhanced accessibility to the port.

EDI Link Between Penang and Singapore

Penang Port Commission (PPC) signed a Memorandum of Understanding (MOU) with Port of Singapore Authority (PSA) on May 22, 1992 for the establishment of an Electronic Data

Interchange (EDI) link relating to the exchange of shipping information between the two ports.

The Memorandum was signed by the Chairman of PPC, Tuan Syed Mohamed Aidid and Chairman of PSA, Mr. Lim Kim San.

With this signing, Penang is the first Malaysian Port to communicate electronically with an established port in the ASEAN region.

The information to be provided to each party includes ships' arrival/departure and container loading information. The EDI The information to be provided to each party includes ships' arrival/ departure and container loading information. The EDI link which is scheduled for implementation in the third quarter of this year will facilitate planning for berth, containers to be discharged/loaded and appropriate handling gears and facilities for non-ISO containers and containers carrying dangerous cargo.

With EDI links, port users will benefit from faster, more comprehensive and more accurate transmission of information, thus enabling them to gain competitive edge and to serve their customers better. The information also facilitates pre-planning by the ports to increase their productivity and efficiency in operations so that both PPC and PSA can provide better services to port users.

Besides Penang, PSA also has EDI links with Ports of Bremen, Hong Kong, Seattle, Le Havre, Hamburg, Marseilles and Thailand.

Besides increasing productivity, the EDI link will also foster closer ties between PPC and PSA.

Prior to the signing ceremony of the MOU, the 13-member PSA delegation was briefed on the current development of the Port of Penang.

(Berita Pelabuhan)

Ports of Auckland Statement of Corporate Intent

Objectives of the Group:

The prime purpose of Ports of Auckland Limited is to provide port facilities, resources and competitive, cost-effective services for the efficient development and handling of trade through the ports of Auckland and Onehunga.

In pursuing its purpose the Company will follow key principles which are central to its business strategy:

- **A Commitment to Service.** The Company recognises that the needs of the customer are paramount. It will systematically improve the quality and cost effectiveness of services provided to its customers.
- **A Commitment to Productivity.** The Company will strive continuously to improve the productivity of all its resources. It will attain standards which are comparable with the top 10% of international ports, engaged in similar port activities.
- **A Commitment to its People.** The Company will develop a shared commitment with its employees towards increasing productivity and establish an efficient, safe, profitable and customer-oriented business. From that basis it will be committed to the provision of secure and fairly rewarded employment which will recognise employees' aspirations. The Company will ensure employees are adequately trained for the tasks they are required to undertake.
- **A Commitment to the Environment.** The Company will have proper regard in all its activities for the natural environment in which it operates and, in seeking an acceptable balance between economic and environmental issues, strive to minimise the impact on that environment. In respect of dredging activities and disposal of dredging materials, the Company will continue to investigate those alternative means of disposal which are unlikely to adversely affect natural water.
- **A Commitment to Consultation.** The Company recognises that its activities may impact on the environment or on communities and will consult with interest groups or affected organisations and individuals prior to any statutory consents being sought.
- **A Commitment to the City.** The Company recognises an obligation to act as a good corporate citizen both in its operation of the ports and in the development of its holdings and will strive to achieve a good urban environment in the harbour edge and other foreshore boundaries.
- **A Commitment to its Shareholders.** The Company is committed to operating as a successful business and achieving the financial objectives set out in the Port Plan as amended from time to time. *(Annual Report 1992)*

Auckland: Efficient Use Of Wharf Space Urged

Operating the port on a 24-hour schedule has brought new management disciplines and style for Ports of Auckland Ltd, with the emphasis on ensuring the most efficient and effective use of the available wharf space.

The focus is on meeting trade growth, and Ports of Auckland is concentrating on using the space available to its maximum, and ensuring quick turnaround of both ships at the berth, and cargo across the wharf.

In essence, ports are transit facilities, designed for cargo movement. Slow moving cargo simply causes congestion, incurs demurrage and slows down efficient operation of the port. If "on-wharf" storage is required, that is a separate topic, and areas are available for that, but most importers and exporters are aware that ports provide temporary buffer storage and they do not use the cargo handling areas as storage facilities.

The conventional wharves in the Port of Auckland fulfill a continuing role, providing berthage and cargo handling for a range of cargoes, some of which are not containerised. Queens Wharf, for example, is often used for imported motor vehicles, imported CKD, imports of bananas and other fresh produce, and exports of kiwifruit — sometimes all at the same time, and these same activities can happen also at Jellicoe and Freyberg wharves.

The introduction of 24-hour operation has changed the appearance of the port too. Often visitors remark that a wharf seems idle, yet perhaps in just the previous overnight shift, several hundred cars may have been discharged from the ship, and taken away by road transport. For city office workers, this activity could go unnoticed, so that the wharf may seem again empty when they arrive at work the next morning.

This development has put greater pressure on Ports of Auckland managers to efficiently use their wharf areas, and they are responding to that challenge. Shed space is being re-utilised for cargoes requiring protection. In some areas, again such as Queens Wharf, the breastworks are being used

for cargo handling.

The demolition of some of the former WIC buildings on Freyberg and Jellicoe has created additional flexibility on those wharves, and with Shed 55 now being used by Seapack, this operation involving container packing and unpacking is going on alongside the movement of general cargo handling, and export of logs, from Monash Street carpark, and the former sandpit area.

Learning to operate more efficiently within the existing space is a lesson which will pay dividends for the port and its users in the years to come. This will delay the need for costly port expansion, and already the timetable for possible expansion at Bledisloe and Fergusson has dropped back. Similarly, the need to fill in the basins between Jellicoe, Freyberg and Bledisloe as outlined in the Port Development Plan has also moved further into the future.

(Ports of Auckland)

Record Performances At Keppel Terminal

By S. Gunasagaran
Keppel Terminal
Port of Singapore Authority

The PSA staff at Keppel Terminal and the crew from the *Margrethe Maersk* performed exceptionally well during its call on 24 November 1992. It surpassed the productivity rate of 100 containers per vessel hour, despite the vessel's high throughput. 2,141 containers were handled under 19 hours.

Achieving such production rates require conducive stowage, good planning, teamwork and coordination. It is no mean feat to drive and sustain the production rate over such long hours, especially for vessels with high throughput like the *Margrethe Maersk*.

Since Oct 92, Keppel Terminal has seen five vessels surpass the productivity rate of 100 containers per vessel hour.

We look forward to even better record performances in 1993!

Vessel	GRT	Arrived	Total Throughput Handled	Boxes handled per vessel hour
* Oriental Bay	50235	17/10	1233	117
* Jervis Bay	50235	14/11	1419	103
* Repulse Bay	50235	23/11	1406	106
** CY Frontier	35863	21/11	1317	122
*** Margrethe MS	52191	24/11	2141	101

* Far East/Europe (Westbound) — Agent: P&OCL Containers
** Round The World Service — Agent: Cho Yang
*** USA/Far East/USA Service (Panama) — Agent: Maersk(S) P/L

New Trust to Play Major Role at Westhaven

Ports of Auckland Limited is to establish a commercial trust to own and administer the new 255 berth expansion of Westhaven marina, with provision for bringing other areas of the existing marina under trust ownership at a later date if berth holders are agreeable.

The move has been made to underline the company's commitment to providing boat harbour facilities at Westhaven for as long as it is able to under the terms of the Resource Management Act. This will give berth holders long term security, and will meet the desires of the boating fraternity, giving them and the community input into the operation of the marina.

The company which will be appointed as Corporate trustee to administer the Trust, will have a board of eight directors, four being members of the port company's board and invitations will be extended to four others to represent boating and community interests, including the Mayor of Auckland.

The Corporate Trustee will run the marina extension on a commercial basis, with berth holders paying market values for 35 year licenses which they can trade freely during the life of the licence. The Trustee will contract with the port company to build the marina on the Trust's behalf.

The company is planning to use some of the income from developing the new extension to the marina to create a fund whose purpose will be to find various ways of enabling children who would not otherwise have the opportunity, to experience the pleasures of boating in the harbour and Gulf.

Mr Graeme Alexander, chairman of Ports of Auckland Limited, says the company is doing extensive work to establish appropriate valuations for the berths to establish current market rates and a pricing structure will be established shortly. Swing mooring holders in Westhaven and those on the waiting list will be given preference for the new berths.

The majority of the existing berths at Westhaven are on 21 year licences due to expire in the year 2003.

Mr Alexander said an opportunity will later be put on these berth holders to come under the Trust umbrella and lengthen their tenure in line with those in the marina extension.

"However, this would be totally up to each individual berth holder. There will be no pressure to vary existing licences and contract rights," he said.

Mr Alexander said the company wishes to avoid the situation which developed when berths were licenced by the harbour board following the last major marina expansion. At that time, the price of a licence was based on construction and maintenance costs rather than the market value of the licence.

"While we have endeavoured to deal with the black market trade that developed as the value of the marina berths increased, this time we intend to seek commercial value at the start of this process, and then allow the licence holders to trade their berths," he said.

The company has obtained all of the necessary planning approvals and expects to begin construction in February and complete the project by March or April the following year.

(Ports of Auckland)

Auckland Dredging: 'Negligible' Impact

Dredging and disposal monitoring by the Environmental Management Department of the Auckland Regional Council have shown no signs of harmful impacts.

This message is contained in the first

newsletter issued by the Department since disposal began.

The monitoring has confirmed that the activity is being carried out in accordance with the environmental requirements, and that the disposal has in fact shown that "the dredging operation releases much less suspended solids into the harbour waters than was initially expected. The sediment plume associated with dredging is very localised.

"In general at a distance of about 200m from the active dredging operation it is hard to distinguish between a dredging effect and levels of suspended solids normally found in the port area."

The consent to dredge and dispose granted to Ports of Auckland Ltd includes a complex set of monitoring requirements. The nature, extent and reporting times for results of the monitoring programmes were approved by the Planning Tribunal. Substantial amounts of preliminary work were required in order to establish baseline conditions within the area of the disposal site, at the Noises and at a control site (Tiritiri Matangi Island). The required baseline information was received by the EMD and checked before approval to begin disposal was given.

Monitoring of water quality produces the most rapidly available feedback on potential impacts of the disposal operation. Results are reported within 48 hours of sample collection. Monitoring involves the collection of replicate water samples at different depths from sites close to the Noises and close to Tiritiri Matangi Island (the control site). Baseline conditions were established before disposal began.

Water quality impacts during disposal can be shown by a comparison of results from the Noises both with the established baseline conditions and with results from the control site unaffected by disposal. A number of suspended sediment trigger levels were established in the consent in a similar way to that described above for monitoring the effects of dredging.

Ports of Auckland are required to carry out at least seven surveys of water quality at the Noises and at Tiritiri during disposal of the first 150,000 m^3 of dredged sediment and then at least weekly following this period until completion of the disposal operation. The results of eight surveys have been received and checked for compliance and for exceedance of trigger levels.

"Negligible"

"Results show negligible impact upon water quality at the Noises. Suspended solids and water clarity levels recorded near the surface, centre and bottom of the water column were not significantly different at the Noises when compared to similar measurements from Tiritiri Matangi Island. None of the trigger levels have even been approached. Results collected during disposal operations have not been statistically distinguishable from natural background levels established before disposal began.

"EMD staff have received reports from Gulf Island residents about sightings of discolorations in the sea. Residents on Rakino Island claimed during the first week of disposal operations that a sediment plume drifted past their island in the early part of a storm with strong onshore winds.

"POAL have carried out acoustic/sonar investigations of plumes associated with the disposal operation. This is additional to the requirements of the discharge consent. These investigations provide a cross-section of the water column showing sediment density beneath the recording device. Results confirm that the vast majority of sediment does fall directly to the bottom with only a small percentage remaining as a plume near the surface. These plumes have been tracked and found to become indistinguishable from naturally occurring background levels of suspended sediments less than a kilometre from the disposal site.

"Water quality monitoring carried out at the Noises confirms this result. These results do not prove that the reported early sightings of a plume were not associated with the disposal operation however no further plume sightings have been reported to date. Aerial photographs in the harbour and at the disposal site taken in conjunction with water quality data show that a plume may still be visible when the concentration of suspended solids is extremely low.

Microalgae

"EMD staff have received a sample of what was thought to be sludge collected from Onetangi Beach on Waiheke Island in mid September. This was found to be a naturally occurring microalgae that has undergone 'rapid' population growth in coastal waters. Drifts of this microalgae have washed up at beaches at a number of points along the east coast. Dense algal populations have recently been reported by divers as far north as Tutukaka. These algae commonly form a source of food for marine organisms within coastal areas but are usually present in lower numbers.

"Algal blooms are an unpredictable natural phenomenon the causes of which are still not fully understood by marine biologists. Records do show that algal blooms are not uncommon around this time of year. They also show the unusual weather patterns we are currently experiencing, known as El Nino, may be associated with an increased chance of dense blooms appearing. These dense algal blooms are often unstable and die off as rapidly as they initially grow. Dead algae drift through the water column sometimes forming a sediment-like layer close to the sea bed.

EMD staff viewed photographs taken prior to the start of disposal and following eleven days of disposal. The pictures showed sediment-like deposits overlying marine plant and animal communities on the subtidal rocky shores of the Noises. POAL also viewed the photographs.

"POAL undertook a photographic survey of established monitoring quadrants at the Noises and at the control site, Tiritiri Matangi Island. This is additional to the requirements of the consent.

"Results showed that similar densities of the deposits were present both at the site potentially affected by the disposal operation, the Noises, and at the unaffected control. On close examination much of the deposit was seen to be made up of fine strands stuck to the surface of the rocky shore biota. Samples examined in the laboratory of EMD staff proved to be faecal strand material produced by filter feeding organisms living on the rocky shores. It appears that the algal blooms reported above have triggered a great increase in feeding behaviour by certain marine animals. A similar increased rate

of feeding and consequent accelerated production of waste products has been reported for shellfish being studied in the Whangateau Harbour by Auckland University workers at the Leigh Marine Laboratory.

Dredging And Disposal Update

Ports of Auckland has completed its dredging and disposal programme to bring the port back to the published marine depths.

The dredge "W.H. Resolution" has completed its contract with Ports of Auckland and has now left the port for Australia. The dredge worked 24 hours per day, over six and half weeks since the end of September to dredge and dispose of the 262,000 cu metres necessary to bring the port back to stated depths.

A decision on whether the balance of 8,000 cu metres will be dredged after the end of the snapper spawning season has yet to be made.

At the Port of Onehunga the dredging work there is continuing, using both Ports of Auckland own staff, and a contract dredge. Some 15,000 cu metres is being removed to bring the berth back to full depth, and the silts disposed of in the Purakau Channel, in another part of the Manukau Harbour. This dredging and disposal programme is expected to end in December.

The special liaision groups which have been established with environmental and interest groups in both harbours have now met twice, and are progressing their terms of reference, and scoping study ideas.

Ports of Auckland has made no decisions in regard to the dredging needs and disposal method for the decades ahead and is open to suggestions as to what should be done with the dredgings.

The Chief Executive, Mr Robert Cooper, says the company has already received suggestions from interested organizations on the future disposal of larger volumes.

"It is a regional problem. The company is not responsible for the fact that sediment pours into the harbour and our views on the need to deal with the problem of sediment quality at source are well known. The costs of dredging and disposal of the dredging material is one which should rightly concern the whole region."

"In the final event, the solution must be financially viable as well as being environmentally acceptable," Mr Cooper said. *(Ports of Auckland)*

PORTNET Milestone: Users Hit 1,000!

A Breakthrough!

PSA's PORTNET has reached a significant milestone. In November 1992, PSA received and welcomed our 1,000th subscriber, Voltainer Singapore Pte Ltd. Voltainer is an international NVOCC (Non-Vessel Operating Cargo Carrier) with about 40 offices worldwide.

PORTNET is PSA's electronic links with its customers. With PORTNET, customers can access PSA's information database for vessel, cargo, container and shipping details. The on-line system allows real-time information and electronic processing 24 hours a day, seven days a week. Port users enjoy reduced closing time for submission of documents, as well as accurate and fast turnaround of information.

PORTNET was launched to share the wealth of shipping and cargo information in PSA's database with the maritime community and replace paper documents with electronic means. During its launch on 1 Jan 1989, PORTNET had only about 100 subscribers and a modest 50 transactions. Today, PORTNET has developed into a system of more than 600 transactions and facilities.

PSA has been able to make significant achievements towards realising these objectives because of the valuable contribution and support of the Singapore National Shipping Association, Singapore Freight Forwarders' Association and the Singapore Lorry Owners' Association towards the development of PORTNET.

With the many documentation and enquiry services now ready, PSA will work on enhancing the user-friendliness of the systems with even more 'Help' facilities on-line. Our visits to shipping agents and hauliers have helped us obtain valuable first-hand feedback on the system. We will also consider using client-server computing for better user-interface and improved processing.

With vessel and container information enquiry facilities well in place, PSA will introduce more enquiry facilities for cargo information. We aim to provide shippers, consignees and the ancillary industries (involving ship supplies, ship management, bunkering services, cruise services and ship repairs) with useful information for their business transactions.

PORTNET has been constantly enhanced to match the business changes and operational demands. Each time, its user-friendliness is also improved to serve our customers better.

"PORTNET has helped us in our work in terms of time savings. The facilities for enquiry of the Berthing Schedules and container information help us in our arrangements for re-shipment. We hope to see even more user-friendly facilities being developed".

Ms Doris Tan, Executive,
Todd Trading Pte Ltd

"PORTNET has certainly increased the productivity of our staff. There is less typing and we can print out the information from PORTNET as a confirmation that the information has been received by PSA. There is no problem of documents being lost in transit which happens in the past when paper documents are submitted".

Mr Tan Pang Tong,
Freight Manager,
Leo Shipping Pte Ltd.

"We foresee that PORTNET will bring about time savings with the faster documentation turnaround. There will be less leg-work in travelling to the various departments and counters in PSA".

Mr. Peter Lye
Voltainer's EDP Manager
(Far East).

SINGAPORT '94 Largest In Biennial Series

SINGAPORT '94 (SP'94) will be held from 22 - 25 March 1994 at the World Trade Centre, Singapore. Organised by the Port of Singapore Authority (PSA), SINGAPORT has come a long way since its first show in 1989. It is

now the largest maritime show in Asia and one of the world's top maritime events.

SINGAPORT '92 saw 471 exhibitors and 7 national pavilions from 28 countries occupying a net exhibition area of nearly 3,800 sq m. The show attracted 5,400 visitors from 49 countries — an increase of 26% over 1990. SP'94 builds on the success of SINGAPORT '92 and promises to be the largest in the biennial series. The show has already generated a lot of interest, with a majority of the individual and national group participants at SINGAPORT '92 having already made space reservations at SP'94. The exhibition will cover Expo Halls 3, 4, 5, and 6 of World Trade Centre with provisions for outdoor displays. More than 7,000 trade visitors from all around the world are expected to attend this event.

One of the special features of SP'94 is the ASEAN Ports Pavilion which will showcase port and maritime activities and services provided by port authorities in the ASEAN region. SP'94 will also feature specific technology-related workshops and product presentations designed to meet the needs of executives, users and professionals from the various maritime sectors.

The SP'94 Conference is another highlight. Fifth in series, the Conference will focus on key issues facing the world's port, shipping and maritime industries. A distinguished panel of international speakers with vast experience and expertise in the various maritime fields will be invited to speak at this Conference. Pertinent issues to be discussed include trends in shipbuilding and shiprepair, environmental issues, ship financing and ship classification. Interesting panel sessions have also been incorporated to allow delegates to discuss and exchange views.

Singapore's NIPS for Navigational Safety

By Yong Mei Fong
Public Relations Dept.
Port of Singapore Authority

From 1 Oct 92, PSA will implement the Navigational Improvement Points System (NIPS). This system will apply to licensed drivers/masters of pleasure and harbour craft.

With NIPS, drivers/masters of pleasure and harbour craft will acquire demerit points for some offences committed under the existing regulations. The points will be assigned from the day the offence is committed.

While the usual prosecution process for any infringement of port regulations continues to apply, NIPS is designated to identify the high-risk and repeat offenders who can then be re-educated through PSA's navigational course.

NIPS aimed to make recalcitrant drivers/masters more aware of navigational safety so that they will be considerate and responsible users of our waterways. The system is therefore applicable to the drivers/masters and not the owners of the craft.

PSA has briefed the representatives of the various harbour/pleasure craft communities on this system. Mr. Daniel Tan, Executive Secretary of the Singapore National Shipping Association (SNSA) said that SNSA supports NIPS.

"The SNSA considers NIPS essential in view of the Port becoming busier and congested with many large ships plying in and out of the port. When implemented, NIPS should create greater safety awareness among the masters and drivers when they navigate their harbour craft such as ferries, bunker barges or tugs and barges within the port."

Feedback from other associations has also shown that the shipping/craft community supports the promotion of navigational safety. The President of the Singapore Power Boat Association, Dr. John Lai said, "Basically, we are all for it. It is a means of controlling and governing actual behaviour on the sea.

"NIPS will make people more aware of other water-users and the responsibilities they have as users." The Manager of Changi Sailing Club, Mr Edward Yow, also believes that the implementation of NIPS will help to improve the standard of navigational skills of pleasure boat drivers and also deter reckless drivers/masters.

In order for drivers/masters to familiarise themselves with NIPS, PSA allows a 6-month "educational" period after 1 October 1992. During the 6 months, offenders will still be booked and prosecuted or have their offences compounded as usual. However, points will not be issued; drivers will instead be warned.

PSA has also printed a booklet stating the demerit points to be awarded for each offence committed for distribution to the pleasure/harbour craft community for a better understanding of NIPS.

With the increase in vessel traffic, PSA hopes that the implementation and enforcement of NIPS will help to ensure navigational safety, hence safeguarding the interest of all users of Singapore's waterways. *(Port View)*

LCT: Contract Signed On Terminal Operation

The Port Authority of Thailand (PAT) signed a contract to lease the bulk terminal No 6, at Laem Chabang Port (LCP) with Aawthai Warehouse Co.

The company will start operation within 14 months after signing the contract with the PAT. The leasing contract will last 25 years and is allowed to renew for five years only.

Under the contract, the firm will have to pay the PAT Bt. 5 per ton if the cargo passing through the terminal exceeds the specified volume of 800,000 tons per year (within a period of four years from the signing contract date). However, if the cargo volume is lower than the target, the company also has to pay the guaranteed minimum payment to the agency.

In the first year, the company expects to handle at least 400,000 tons. After all facilities have been completed, the volume will progressively increase to 700,000 tons.

According to Vice Admiral Somnuk Debaval, PAT's Director General, the company has to follow the pollution control and environment protection measures of the National Environment Board. In case the firm's operation causes any adverse effect to the surroundings, the PAT has authority to order the company to improve the condition or stop its operation without paying any compensation for damages arising from the disruption of terminal operation.

The Aawthai Warehouse Co is a joint venture of over seven sugar manufacturers and trading firms.

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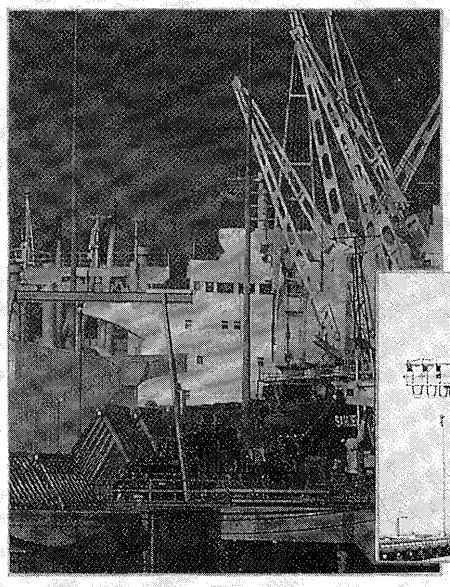

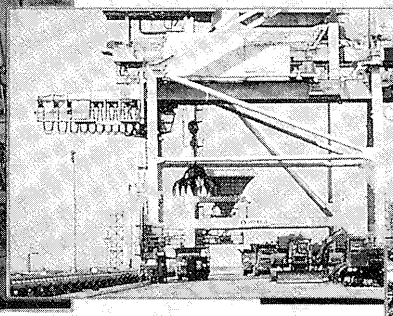

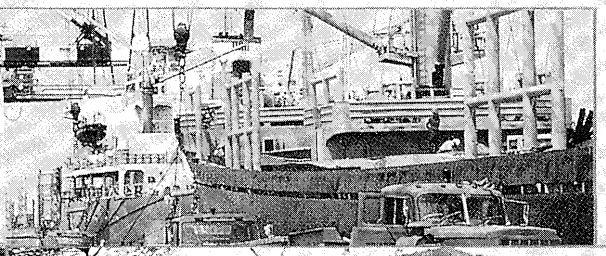

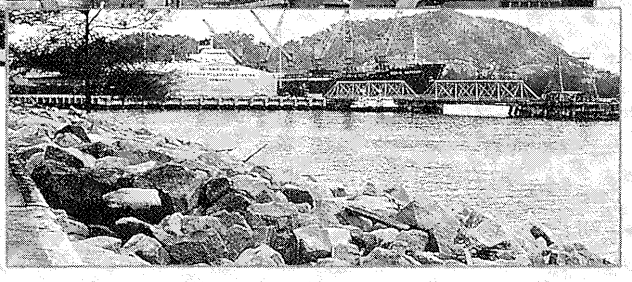

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