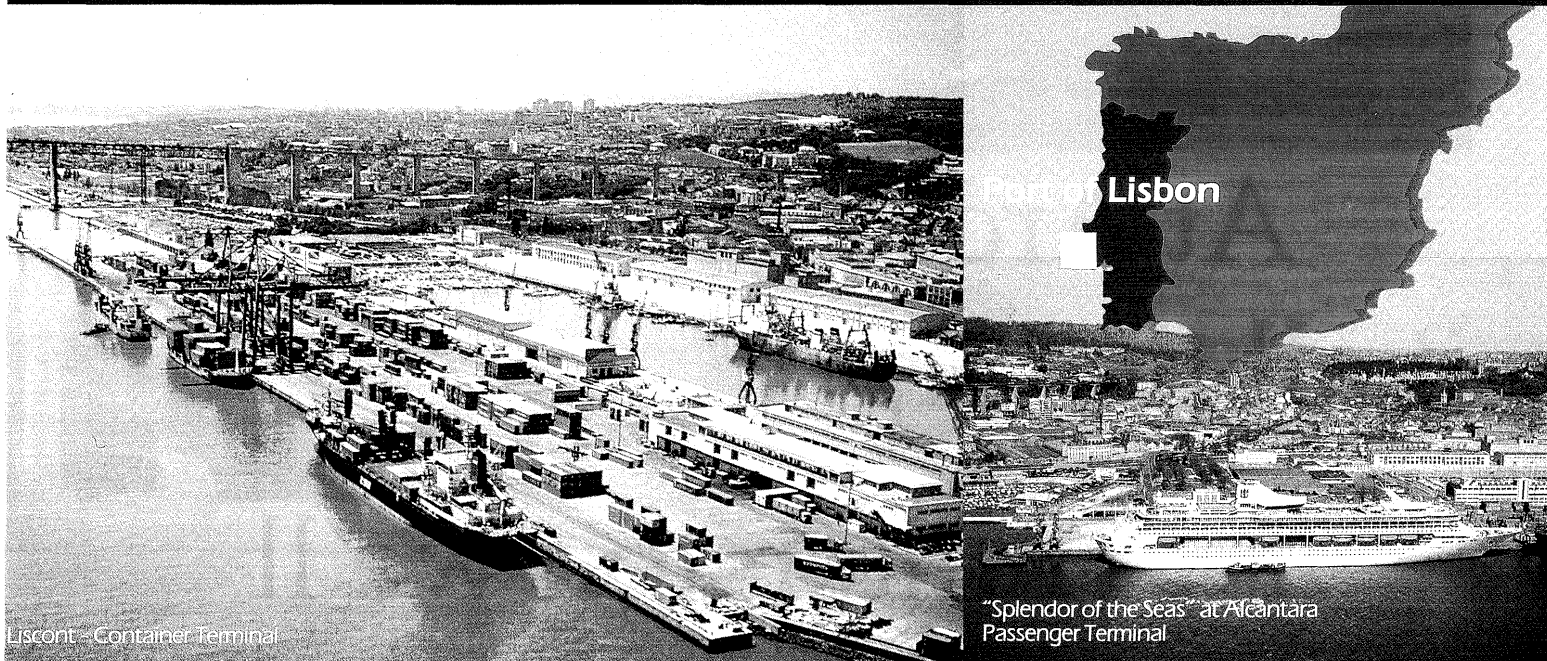


Ports & Harbors

November 1997 Vol. 42 No. 9



Port of Lisbon

Liscont - Container Terminal

"Splendor of the Seas" at Alcântara Passenger Terminal



Santo Amaro - Pleasure Boats Dock

Alcântara - Aerial View

Port of Lisbon

IAPH marks its 50th Anniversary

African Ports Seminar in Mombasa scheduled for 19-21 January 1998

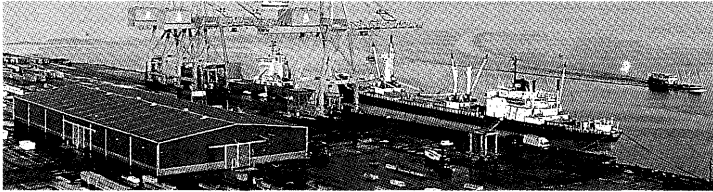
Financing the Development of Ports by Roger Mountford, Hambros Bank

PSA Corporation launched to enhance value and efficiency to its customers

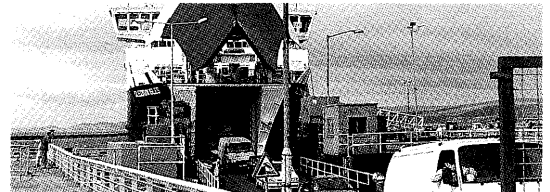
At Glasgow
we've got the quay...



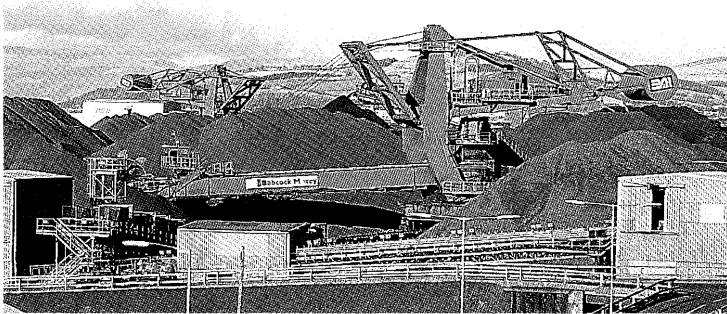
At Greenock we've got
it covered...



At Ardrossan we've got
it all tied up...



At Hunterston we'll
even move
mountains.



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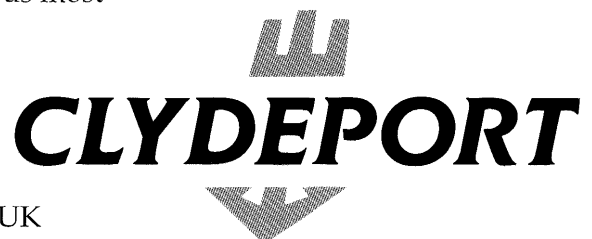
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— we can handle it.

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Executive Vice-President
International Affairs of
Association of French
Ports (UPACCIM)
France

First Vice-President:

Dominic J Taddeo
President & Chief Executive Officer
Port of Montreal
Canada

Second Vice-President:

Akio Someya
Executive Vice President
Nagoya Port Authority
Japan

Third Vice-President:

Pieter Struijs
Vice Chairman/Executive Director
Shipping
Rotterdam Municipal Port Management
Netherlands

Conference Vice-President:

M. Rajasingam
General Manager
Klang Port Authority
Malaysia



Port of Lisbon

SWITCHING from multipurpose operation to a higher level of specialization, the Port of Lisbon is showing increasing capacity for the handling of containers. See page 24.

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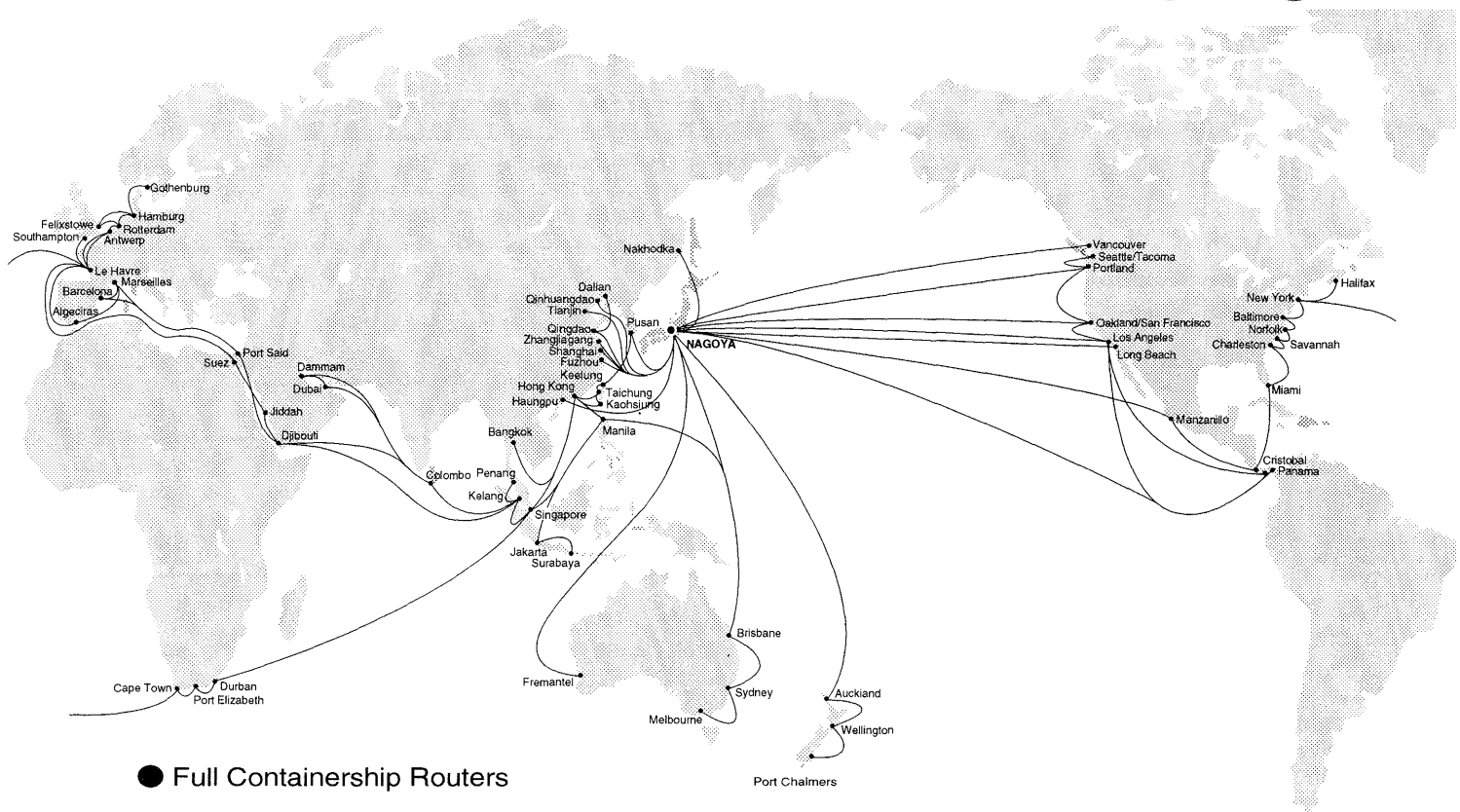
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-To meet increasing demand for further efficiency in container handling, the Port of Nagoya has introduced new high-standard container terminals into service this year.

-With its favorable location and strategic road network, the Port of Nagoya provides easy access to every part of Japan.

*One mile ahead through **Nagoya***



NAGOYA PORT AUTHORITY

8-12 Irifune 1-chome Minato-ku Nagoya 455 JAPAN

Tel: 81-52-654-7840 Fax: 81-52-654-7995

IAPH ANNOUNCEMENTS AND NEWS

IAPH Observes 42nd Anniversary

NOVEMBER 7, 1997 marks the 42nd anniversary of the foundation of IAPH. Forty-two years have passed since our Association came into being at the inaugural conference held at the Hollywood Roosevelt Hotel in California in November 1955.

The creation of IAPH was the brainchild of a group of Japanese pioneers, with our founding fathers **Mr. Gaku Matsumoto**, the then President of the Japan Port and Harbor Association (JPHA), and **Dr. Chujiro Haraguchi**, the then Mayor of Kobe, and **Mr. Toru Akiyama**, our Secretary General Emeritus (ex-Vice Minister of Transport), being the central figures.

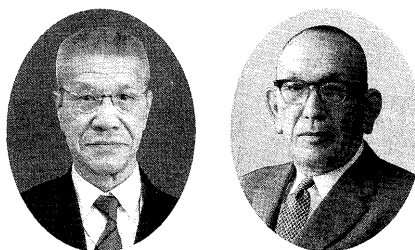
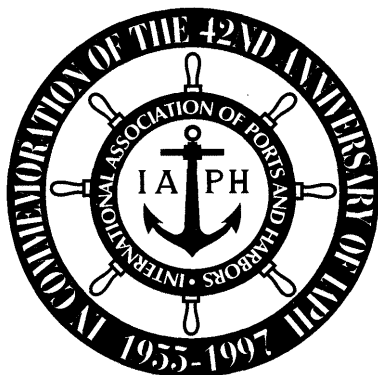
The 30th anniversary conference of the JPHA held in Kobe in October 1952 provided the impetus for the eventual formation of our organization.

According to the book "IAPH The First 25 Years", at the Kobe meeting, Mr. Matsumoto's enthusiasm to create an international body of world ports won the strong support of the invited delegates, especially those who represented ports on the US west coast such as Oakland, Long Beach and Los Angeles.

After three years of groundwork painstakingly prepared by the Japanese pioneers in close cooperation with their US counterparts, the inaugural conference was held in 1955 attended by 126 representatives of ports and related organizations from 14 countries - Brazil, Canada, China (Taiwan), Germany, Japan, Korea, Liberia, Mexico, Peru, Sweden, Thailand, USA, Venezuela and Vietnam.

At this inaugural conference, the Constitution and By-Laws were adopted and the Board of Directors was established with representatives from the above 14 countries comprising the membership.

The second Conference took place four years later in Mexico City in 1959, and the IAPH Conference soon became a biennial event. The past 42 years have witnessed 20 such gatherings held at various venues throughout the world, the most recent one being in London in June this year. The next conferences are scheduled for 15-21 May in 1999 in Kuala Lumpur, Malaysia,



Mr. Gaku Matsumoto **Dr. Chujiro Haraguchi**

Founding Fathers



Mr. Toru Akiyama
Secretary General
Emeritus

and then in Montreal, Canada for the period 19-26 May 2001. The history of our conferences is illustrated in the list of the logos and themes of these events.

Mr. Jean Smagghe of France currently heads IAPH as its 22nd President. The three Vice Presidents are **Mr. Dominic Taddeo** (Montreal), **Dr. Akio Someya** (Nagoya) and **Mr. Pieter Struijs** (Rotterdam) representing the three regions, namely Africa/Europe, Americas and Asia respectively. They also oversee the activities of the 12 Technical Committees, which fall into three categories dealing with Port Affairs, Trade Affairs and Human and External Affairs respectively.

Furthermore, the IAPH/IMO Interface Group, established in 1994, has been energetically supporting the activities of the relevant IMO Committees by presenting the views of IAPH concerning the issues of port/ship interface and environmental

protection.

The London Conference provided the setting for a particularly historic initiative when it passed the resolution to establish a Special Task Force named IAPH 2000, with the aim of reviewing and analyzing the structure of the Association, changes under way and future trends in the port and maritime industries. The Task Force will recommend possible directions for the Association to take during the early years of the next millennium.

Throughout the past four decades, a growing number of enthusiastic members of IAPH has made constant efforts to build on the achievements of their predecessors, and the scope of our Association's activities has increased year by year. Obviously, the efforts of these activists have been backed by their own port organizations.

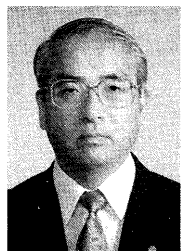
Mr. A. J. Smith of the IAPH London Office has actively participated in various meetings of IMO, UNCTAD and other international organizations, and his reports on the conclusions from these meetings have been made available to "Ports and Harbors" on a regular basis.



President
Jean Smagghe



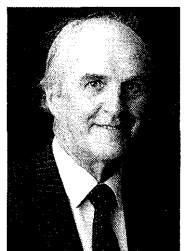
1st Vice-President
Dominic J. Taddeo



2nd Vice-President
Akio Someya



3rd Vice-President
Pieter Struijs



European Rep
Alex J. Smith



Secretary General
Hiroshi Kusaka

The day-to-day work of IAPH is carried out through the Head Office in Tokyo in close contact with the President, the Vice Presidents and the Chairmen of the various Internal and Technical Committees as well as with liaison officers. The Head Office staff, headed by Secretary General **Kusaka**, are determined to work tirelessly to promote the interests of current and future members of IAPH. Meanwhile, the Secretariat team is kept occupied as its members try to answer all the commu-

nications which are faxed or e-mailed to Tokyo 24 hours a day from various people – both inside and outside IAPH – demanding their quick responses.

As has been the case in past years, the Head Office members are confident that they can continue to rely on the full support and understanding of IAPH's global members as they celebrate the

anniversary day of the Association's establishment and renew their admiration to the founders whose vision is clearly addressed in the motto of IAPH initiated by Mr. Matsumoto: **WORLD PEACE THROUGH WORLD TRADE – WORLD TRADE THROUGH WORLD PORTS.**

–By Kimiko Takeda, IAPH Head Office

IAPH CONFERENCES

Preparatory Conference
in Kobe
9-11 October 1952

1st in Los Angeles
7-10 November 1955

2nd in Mexico
22-25 June 1959

3rd in New Orleans
1-4 May 1963

4th in London
10-14 May 1965



5th in Tokyo
8-13 May 1967



6th in Melbourne
3-8 March 1969



7th in Montreal
6-12 June 1971



8th in Amsterdam/
Rotterdam
6-12 May 1973



9th in Singapore
8-15 March 1975
Towards Greater International
Port Cooperation



10th in Houston
24-30 April 1977
World Port Role in Economic
development



11th in Deauville/
Le Havre
12-19 May 1979
World Port of the Future



12th in Nagoya
23-30 May 1981
Port Contribution to Human Prosperity



13th in Vancouver
4-11 June 1983
Ports and Their Communities



14th in Hamburg
4-10 May 1985
Communication Through Ports



15th in Seoul
25 April-1 May 1987
Port Looking into the 21st Century



16th in Miami
22-28 April 1989
Port – The Intercontinental Connection



17th in Barcelona
5-11 May 1991
Challenges for Ports - Today and Tomorrow



18th in Sydney
17-23 April 1993
Ports - Impact of Global Economic Change



19th in Seattle/Tacoma
10-16 June 1995
New Challenges - New Partnerships



20th in London
31 May-6 June 1997
Maritime Heritage-Maritime Future



21st in Kuala Lumpur
15-21 May 1999
Global Trade Through Port Co-operation



22nd in Montréal
19-26 May 2001



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 Chuo-ku, Tokyo 104, Japan Fax: 3-3542-5086

The IPD Fund: Status Report on the 1997 campaign -Donations amount to US\$13,000 in three months

SINCE our last announcement in the previous issue of the journal, in which we reported the amount contributed by the first eight donors as being US\$5,725, we are pleased to offer an updated report on the on-going fund-raising campaign below. Of the targeted amount of US\$70,000, a little over 19% has so far been collected in three months after the campaign started in July this year. We offer our deep gratitude to the support of those who have quickly responded to the Secretary General's appeal with fresh donations, and now invite all members' continued support of the project.

List of Contributors to the Special Port Development Technical Assistance Fund

(As of 30 September 1997 - in order of receipt at the Tokyo Head Office)

ORGANIZATION	COUNTRY	US\$
Georgia Ports Authority	USA	1,500
Bintulu Port SDN BHD	Malaysia	1,000
Ports of Auckland Ltd.	New Zealand	500
Fremantle Port Authority	Australia	250
Port Services Corporation	Oman	985
Associated British Ports	UK	1,000
Nanaimo Harbour Commission	Canada	250
Japan Cargo Handling Mechanization Association	Japan	240
South Carolina State Ports Authority	USA	750
Mauritius Marine Authority	Mauritius	1,000
Overseas Coastal Area Development Institute of Japan	Japan	1,000
Port of Rotterdam	the Netherlands	1,000
Port Authority of the Cayman Islands	Cayman Islands	500
Kuwait Oil Company (KSC)	Kuwait	750
Port of Copenhagen	Denmark	1,000
Saeki Kensetsu Kogyo Co. Ltd.	Japan	235
Marine Department, Hong Kong	China	500
Port of Montreal	Canada	1,000
Total:		13,460

1-3 December 1997: IAPH Committees to meet in Perth; Observers will be most welcome

AT the initiative of Captain Ian Baird, General Manager, Port Hedland Port Authority, a member of the Committee on Marine Operations, three Technical Committees – the Port Safety and Environment, the Marine Operations and the Port Planning and Construction Committees – are planning to meet in Perth, Western Australia, from 1 to 3 December 1997.

According to information received from Captain Baird, Mr. John Hirst, Executive Director, the Association of Australian Ports and Marine Authorities Inc (AAPMA), who is also a member of the PSE Committee of IAPH, is arrang-

ing for an AAPMA Port Operations and Technology Group to meet in Perth in an effort to persuade more people to come to Perth during the IAPH Committee meetings there.

Captain Baird has secured 40 rooms at the Sheraton Hotel in Perth for the Committee members, a sufficient number to accommodate any IAPH members who may wish to attend the meetings. The room rates are quoted as A\$150 for Standard type and A\$170 for De Luxe room.

The programs will include:

Sunday 30 November

Evening – A cocktail party for early

arrivals (hosted by AAPMA)

Monday 1 December

a.m. AAPMA POT Group Meeting
p.m. Joint AAPMA/IAPH Seminar
evening: Seafood Dinner (hosted by AAPMA)

Tuesday 2 December

a.m. Port Safety & Environment/ Marine Operations /Port Planning & Construction
p.m. A technical tour of the Port of Fremantle
evening: Dinner hosted by the Port Hedland

Wednesday 3 December

a.m. Resume Committee meetings
p.m. Joint meeting of three Committees

Thursday 4 December

An optional technical tour of the Port of Port Hedland
06:25 depart Perth Airport
08:35 arrive Port Hedland
17:00 depart Port Hedland
19:10 arrive Perth

(The airfare Perth to Port Hedland, on international add-on basis, will be about A\$450.)

The members of the Committees and any IAPH members who wish to attend the meetings should contact:

Captain Ian Baird, General Manager
Port Hedland Port Authority
P O Box 2 Port Hedland, Western Australia 6721
Tel: (091) 73 1400 Fax: (091) 73 1760

Draft Agenda: AAPMA

Port Operations & Technology Working Group 1 December 1997

1. Role of IAPH in IMO and how AAPMA and its Members can Influence Outcomes and Directions
2. IAPH/IMO Current Technical Issues
3. Pilotage Minimum Standards - Progress Report
4. Dangerous Goods Standard - Progress Report
5. Environmental Issues - Progress Report and Actions to be taken
 - * Oceans Policy
 - * ANZECC Issues
 - * Ballast Water
 - * New Issues
6. Other issues

Probable Papers to be presented at AAPMA/IAPH Seminar on Monday 1 December 1997:

1. Risk Assessment – why it has proved to be a major business opportunity (case study from Fremantle)

2. Technology, Time and Tonnage – A New Partnership – how new developments in underkeel clearance are allowing us to safely bring the bottom closer (case study from Port Hedland)
 3. The Benefits of an Open Consultative Process in Obtaining Long Term Sea Dumping Permits (case study from Newcastle)
 4. DGPS System – An Overview of DGPS Development in Australia – an AMSA Perspective
 5. Pilotage Fatigue (Paper by Queensland Department of Transport pilot)
- "Reserve Papers"
- * Pilot Aid for Manoeuvring Ships - Launceston
 - * Computerised Aid for Piloting Ships – Port Kembla
 - * Port State Control – Issues in Australia and the Pacific (Asustralina Maritime Safety Authority)

**The Combined meetings of the IAPH Committees on Port Safety & Environment and Marine Operations
2 and 3 December 1997**

Agenda will include:

- Establishment and operation of reception facilities, including financing mechanisms
- To examine and comment on the character of the difference charging systems as mentioned in SPI's submission to MEPC40
- The use of TBT on ships' hulls
- Aquatic organisms in ballast water
- Implementation of IMO instruments and related training requirements
- Availability of qualified port marine personnel (one of the conclusions of the 4th International Conference on Safety in the Port Environment, Bremen, 14-16 April 1997)
- Tug assistance in port waters
- VTS in small ports
- Dry Bulk Carrier Safety
 - 1 Code of Practice
 - 2 Ship/Shore Safety Checklist
- Aspects of Port State Control
- Emergency preparedness and response
- Quality assessment for ports/terminals
- Discussion issue: to consider feasibility of formal safety assessment as discussed in document MEPC40/1/1 (for ships). Does the paper contain useful elements for ports?
- Pilotage pre-planning
- Training of VTS-operators
- Co-operation IAPH-PIANC (results of

PIANC Conference 12 September in NL)

**IAPH Port Planning & Construction Committee Meeting
2 and 3 December 1997**

Agenda will include:

- Updating of IAPH Guidelines for Port Planning & Design (May 1993)

- Master Plan for Port Development
- Study of Environmental Issues Affected by Port Development
- Container Port Pavement
- Link Bridge for Passenger Vessels
- Application of Information Technology and GPS in Port Engineering
- Establishment of a New Offshore Bulk Concentrates Facility at Townsville

African Ports Seminar

**Mombasa, Kenya
19 - 21 January 1998**

A three-day seminar is scheduled to take place in Mombasa, Kenya, from 19 to 21 January 1998, organized by the Kenya Ports Authority (KPA) jointly with the Port Management Association of Eastern and Southern Africa (PMAESA), the Port Management Association of West & Central Africa (PMAWCA) and IAPH. In conjunction with the Seminar, a meeting of IAPH Officers in the Africa/Europe region will be held at the same venue.

Recently the organizer has issued invitation letters to potential participants. For the benefit of IAPH members who may wish to participate in the Seminar, we introduce below the letter from Mr. Mwangola, KPA's Managing Director, and draft programs of the meetings which have been supplied by Mr. Alex Kabuga, KPA's Marketing and PR Manager, who serves as Acting Secretary General of PMAESA.

The organizer emphasizes that the seminar will take place in a very peace-

ful environment and atmosphere and all delegates will have the chance to enjoy the "sun and sand" for which Mombasa is well known, although there have been some exaggerated news reports carried by international media on the recent disturbances in the outskirts of Mombasa.

Mr. Mwangola's letter dated 24 September 1997 follows.

Dear Colleagues:

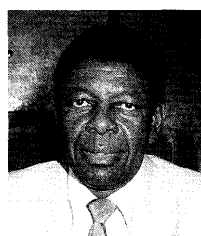
As you are probably aware the Kenya Ports Authority (KPA) in conjunction with the Port Management Association of Eastern & Southern Africa (PMAESA) is hosting the above historic Seminar in January 1998. In so doing KPA and PMAESA are also receiving assistance from the Port Management Association Western & Central Africa (PMAWCA) and the International Association of Ports & Harbors (IAPH).

The venue of the Conference is a beach hotel just north of Mombasa Island - the Whitesands Beach Hotel. The theme of the Conference which reads "The Challenges Facing African Ports in the next Millennium" has been aptly chosen to reflect the importance that ports in Africa are attaching to refurbishing, and upgrading their facilities and adopting commercialization practices so as to offer better services to all our port users.

There will be exhibition opportunities for those with equipment or services related to the port industry to offer to the African ports executives attending the Seminar. The exhibition will run in parallel with the Seminar at the same venue. At the moment we are putting into place details of the Seminar and the Exhibition and we would urge all our fellow colleagues in the



Eng. S. M. E. Luhigo



Mr. L. J. Mwangola



Mr. A. Kabuga

ports and shipping industry to attend this important Seminar.

In order to ensure that arrangements proceed smoothly we have engaged the services of a professional Conference and Exhibition Organizer to manage the event in conjunction with KPA and PMAESA. They will be contacting you directly soon. The details of the firm and the contact person are as follows:

Exhibition & Conference Organizer (E.C.O.) Ltd

P. O. Box 47768

Nairobi, Kenya

Contact: Mr. Charles Campbell Clause

Phone: +254-2-446862/4, 445800

Telefax: +254-2-443267

E-Mail: ECO@Users.africa on line.co.ke

Application Forms for registration will be mailed to you very soon. An interesting spouses programme including pre-Conference and post-Conference safaris has been arranged for the delegates and their spouses. The details of these and other programmes will be sent to you in due course.

Lastly, I wish to inform you that Mombasa is a lovely, lively and interesting city with a unique combination of old Arab influence and modern development set in Africa and a well developed port with a rich history. Put these dates in your diary and urge your colleagues and associates to attend the Seminar.

Yours sincerely,

L.J. Mwangola

Managing Director

Kenya Ports Authority

Provisional Programs

(as of 5 October 1997)

African Ports Seminar
to be held at the Whitesands Hotel
Mombasa, Kenya
19 - 21 January 1998

**"Challenges Facing
African Ports in the
Next Millennium"**

Cosponsored by IAPH-PMAESA-
PMAWCA
Supported by IMO

Sunday 18 January

**Meeting of IAPH Officers in
Africa/Europe Region**

Afternoon Session 1 - Programme to be finalized and communicated to the officers concerned by Mr. Pieter

Struijs, IAPH Vice President representing the Africa/Europe region (Rotterdam)

Monday 19 January

0900 **Official opening**
(Chairman: Mr. Mwangola, Managing Director, KPA)
• Welcome Address by the Managing Director of KPA
• Address by the President of PMAWCA
• Address by the President of PMAESA
• Address by the President of IAPH
• Official opening address by the Minister of Transport and Communication of Kenya

0945 **A Macro-economic view of trade for the beginning of the next millennium**
Speaker: David Jeffery - President of European Seaport Organization (ESPO)
Challenges facing the African ports in the next millennium
Speaker from Economic Commission for Africa (ECA)

Discussion

1055 Coffee Break

1115 **Working Session 1: Port efficiency** (Chairman: President of PMAWCA)

- **What should be port efficiency** - Speaker: Bert Kruk, Port of Rotterdam
- **The four phases achieving operational efficiency** - Speaker: Tan Kee Chai, Port of Singapore
- **The problems facing African ports in terms of port efficiency**
Speaker: Eng. S.M.E. Luhigo, Tanzania Harbours Authority

Discussion

1315 Lunch

1445 **Working Session 2: Information systems** (Chairman to be named)

- **What is a Port Community System, Le Havre example** -

Speaker: Paul Scherrer, Port of Le Havre
- **An experience from an African port**
Speaker: from PMAWCA
- **Presentation of UNCTAD's system ACIS** -
Speaker: C. Hunter or G. Crook

Discussion

1630 End of the session

1645 Visit to the Port of Mombasa

Welcoming Cocktail

Tuesday 20 January

0830- Meeting of the African ports
Subject: Creation of a pan-African Port Management Association

0930 **Working Session 3: Total quality management in port industry**
(Chairman: to be named)
Speaker from PMAESA

Discussion

1030 Coffee Break

1050 **Working Session 4: Port Safety and Environment** (Chairman: Peter van der Kluit, Chairman of the IAPH Committee on Port Safety & Environment)
- **Sustainable development** - Speaker: Pieter Struijs, Port of Rotterdam
- **Handling of dangerous goods** - Speaker: Mike C L Compton - PSO
- **Dredging** - (Speaker to be named)

Discussion

1230 Lunch

1400 **Meeting of Africa/Europe IAPH Officers - Session 2** (to be chaired by the IAPH Vice President representing the Africa/Europe Region)

2000 Free evening

Wednesday 21 January

Provisional Programme (conducted

by IMO)

Chairman of the Seminar: Mr. Pieter Struijs - IAPH Vice President representing the Africa/Europe Region (Port of Rotterdam)

- 0900- **Opening of the Seminar**
- Brief explanation of its purpose and explanation
Overview of IMO activities and interests in ports and port waters
Dispersal to Workshops 1 and 2 dealing with
Maritime Safety
and Marine Environment
Protection matters respectively

- 0930- **WORKSHOP NO. 1 - MARITIME SAFETY MATTERS**
Chairman: Captain W R Dernier, South Africa
Chairman of SAGNET
1 Hydrographic Surveys/Charting
Presenter: Rear Admiral G. Angrisano, President, IHO
2 Aids to Navigation including VTS
Presenter: Torsten Kruuse, Secretary General, IALA
3 Port State Control (PSC)
Presenter: Captain W R Dernier, Director, Department of Transport, Republic of South Africa

- 0930- **WORKSHOP NO. 2 - MARINE ENVIRONMENT PROTECTION**
Presenters: Captain H.J. Roos, Bremen, Chairman
IMO's Ship/Port Interface Working Group
1 Waste Management/ MARPOL 73/78
Requirements for Reception Facilities
2 Emergency Preparedness and Response for Pollution Incidents

- 1400- **SEMINAR RESUMES IN FULL SESSION**
to discuss recommendations from Working Session Nos 1 and 2 respectively;
to formulate recommendations for action and/or submission to appropriate authorities.

- 1700 **SEMINAR CLOSES**
CLOSING COCKTAIL

IAPH London Conference 1997



Sheila and Terry Hatton leave the PLA

The Tokyo Office has recently learned from Mr. Terry Hatton, Conference Planning Officer and a member of the Organizing Committee for the London Conference of IAPH, that he and his wife Sheila, who also worked for the Organizing Committee and arranged very attractive programs for the people who accompanied those attending the Conference, are leaving the Port of London Authority effective on 30 September 1997.

For Terry and Sheila, who have been

by the other members of the Secretariat, expressing the deep appreciation of IAPH for the fine job they did for our Conference, which turned out to be an epoch-making event in the history of IAPH, and at the same time wishing them every success in their future activities.

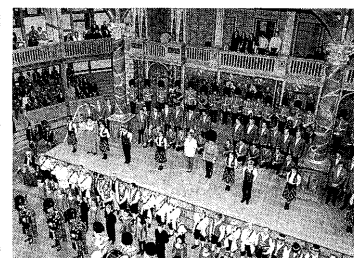
Sheila and Terry Hatton wish to bid "farewell" to all IAPH friends whom they met in London.

Video of Opening Ceremony Available

The video of the Opening Ceremony of the 20th World Ports Conference at the Shakespeare's Globe Theatre is now available from the Port of



From left, Terry and Sheila Hatton are pictured with Geoff and Judith Adam, Margaret and Robert Cooper and Lord Mayor of London Alderman Roger Cork at the Guildhall reception on 3 June 1997.



working for the PLA for over 30 years, nothing has been more challenging and exciting experience than working to organize the London Conference as members of the Organizing Committee and meeting the participants from all over the world during the conference week in London.

In his letter addressed to Mr. Kondoh of the Head Office, Mr. Hatton recounts, "Although the preparation work for the Conference was stressful, I enjoyed the challenges as I enjoyed working with you and the members of your team during and after the conference week."

Secretary General Kusaka, sent a letter to Mr and Mrs Hatton, jointly signed

London Authority. The video is 55 minutes long. Anyone wishing to purchase a copy of this unique event should sent the sterling equivalent of £14.00 (this also covers airmail postage and packing) to the Port of London Authority at Devon House, 58-60 St Katharine's Way,

From Working Session 3

IN this issue we feature in the OPENING FORUM column, the presentations made by Mr. Roger Mountford, Director, Corporate Finance Division, Hambros Bank Ltd., who spoke on the subject "Financing the Development of Ports" in Working Session 3 which was held on Tuesday, 3 June 1997 under the subject "Commercial Issues Facing the Ports and Shipping Industries".

Present:

Mr P Struijs (Chairman)
Port of Rotterdam

Mr P F Chun
Hong Kong, China

Mr B Coloby
Port of Le Havre

Mr P J Keenan
Port of Cork

Mr P van der Kluit
Port of Rotterdam

Mr H T Kornegay
Port of Houston

Mr F G Portal
Puertos del Estado, Spain

Mr M T Y Tong
Port of Singapore

Mr A J Smith
IAPH Liaison Officer with IMO

THE Group first discussed Mr Smith's circulated report on the 25th meeting of IMO's Facilitation Committee which included a report on the meeting of IMO's Ship/Port Interface Working Group (SPIWG). It was noted that IMO will expect IAPH to contribute to on-going work on:

- (a) EDI Messages for the Clearance of Ships and the use of EDI for the collation of pre-ship arrival data requirements.
- (b) Financing schemes for the establishment and operation of reception facilities.
- (c) Development of ship/port interface-related training packages for inclusion in IMO's Integrated Technical Co-operation Programme.
- (d) Education and training of port marine personnel.
- (e) Tug assistance in port waters.

The Group expressed satisfaction with the Executive Committee's approval of an Environmental Policy Statement, Safety and Health Policies for Ports, Waste Management Policies for Ports and Guidance for the Acceptance of Disabled Ships in Ports.

Given the importance of such documents to IAPH members and the expectation that these were the first of many, the Group felt that they should be printed and circulated by the Secretariat. They should also be translated into the French and Spanish languages.

The Group then noted, and considered the agendas, of IMO meetings scheduled in the period 1997/1998, of

**A Summary
Report of the
Meeting of the
IAPH/IMO
Interface Group**

**held in the offices of the
British Ports Association,
London, UK
on Tuesday
16 September 1997**

**By A J Smith,
IAPH European Representative**

interest to ports, as follows:

Marine Environment Protection Committees (MEPC 40) - 15 to 19 September 1997

Legal Committee (LEG 76) - 13 to 17 October 1997

Nineteenth Consultative Meeting of Contracting Parties to the London Convention - 27 to 31 October 1997

Assembly - 17 to 28 November 1997
Sub-Committee on Dangerous Goods, Solid Cargoes and Containers (DSC 3) - 9 to 13 February 1998

Marine Environment Protection Committee (MEPC 41) - 30 March to 3 April 1998

Maritime Safety Committee (MSC 69) - 11 to 20 May 1998

Sub-Committee on Safety of Navigation (NAV 44) - 20 to 24 July 1998

Facilitation Committee (FAL 26) including Ship/Port Interface Working Group - 7 to 11 September 1998

Marine Environment Protection Committee (MEPC 42) - 2 to 6 November 1998

Maritime Safety Committee (MSC 70) - 7 to 12 December 1998

An indication of matters of concern to ports arising from these agendas will be provided to relevant IAPH Technical

Committees. Position papers will then be developed either for use directly during the meetings in question, or for circulation and action by IAPH members or both.

It is evident even now that more attention must be given to a number of matters which have already been given some consideration by IAPH Committees including:

- the establishment and operation of MARPOL 73/78 reception facilities including the provision of guidance on financing mechanisms;
- the presence of unwanted aquatic organisms in ballast waters;
- port/terminal-related aspects of dry bulk carrier safety;
- recruiting and training of marine operational personnel;
- pilotage pre-planning;
- the implementation of IMO instruments/recommendations at ports;
- port-related aspects of the recently adopted (26 September 1997) Air Pollution Annex VI to MARPOL 73/78;
- emergency preparedness and response to incidents in port waters;
- formal safety assessment as it might be applied in ports;
- financial security (compulsory insurance);
- compensation for pollution from ships' bunkers;
- port-related aspects of wreck removal.

The Group agreed that there were evident gaps in the coverage of the specific interests and concerns of terminal operators in an international context and, in particular, where effective and authoritative representations needed to be made to IMO. Every opportunity will therefore be taken to establish accords and mutually beneficial joint action with terminal operator representatives throughout the IAPH regions. More generally, the gaps which have become apparent in the coverage of the multifarious activities occurring within port areas give added emphasis to the need to enhance IAPH relationships with organisations representing local interests directly involved in such activities.

The Group noted that a paper on Environmental Indexing of Ships would be presented to MEPC 40 by the Norwegian Government. In so far as its substance bore a close similarity to the Green Award System established in the Netherlands, it was agreed that contacts made at MEPC 40 should emphasise the importance of avoiding a proliferation of such systems. Where possible, it was important to ensure that the best elements of these should be fos-

tered.

IAPH 2000 featured strongly in Group discussions from the standpoint particularly of the IAPH/IMO relationship.

The predominant role of IAPH as the definitive voice of the world's ports in international fora was stressed. There was an acknowledgement however of the urgent need to develop a system or systems to take the fullest account of the expectations of the world's ports in

the formulation of policies or positions to be adopted by IAPH. These expectations will understandably differ between the various IAPH regions. Questions of associated costs and practicality will necessarily also have to be tackled in policy development. It was then agreed that the Group's distilled views would be conveyed to the IAPH 2000 Working Group.

Finally, the Group was privileged to

receive a short presentation by Jan Brooke, a noted Environmental Consultant, on aspects of the development of a methodology to facilitate the balancing of the costs of environmental investments with the costs of development and/or operations and management investment. The Group agreed to encourage direct IAPH involvement in a PIANC Working Group which had been set up for these purposes.

Membership Notes:

New Members

Regular Member

Autoritat Portuaria de Barcelona (Spain)

Address: Portal de la Pau, 6
08039 Barcelona
Mailing Addressee: Mr. Emili Arbos
Head of President's Office
Tel: 34 3 306 88 00
Fax: 34 3 306 88 11

Associate Members

Cold Region Port and Harbor Engineering Research Center [Class B] (Japan)

Address: Kita Bldg. 9F., Kita-7, Nishi-2
Kita-ku, Sapporo 060
Mailing Addressee: Dr. Eng. Akira Ozaki, President
Tel: (011) 747-1688
Fax: (011) 747-0146

National Institute of Ocean Technology [Class D] (India)

Address: IC & SR Bldg., IIT Campus
Chennai 600 036
Mailing Addressee: Prof. M. Ravindran, Executive Director
Tel: 0091-44-2353684
Fax: 0091-44-2353686

E-mail:

mravi@niet.ernet.in

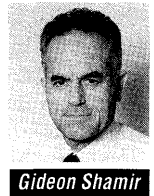
Institute of Shipping and Maritime Economics [Class D] (France)

Address: Gavy-Oceania, B.P.152
44603 St. Nazaire
Addressee: Dr. Nicolas Terrassier
Managing Director
Tel: +33 (0)2 40 90 50 53
Fax: +33 (0)2 40 90 50 86
E-mail: terrassier@sc-eco.univ-nantes.fr

Changes

Ports & Railways Authority [Regular] (Israel)

Mailing Addressee: Mr. Gideon Shamir
Director General
Director General: Mr. Gideon Shamir
Ashdod Port Manager: Mr. Arie Gavish
Haifa Port Manager: Dr. Moshe Naveh
Mr. Shamir is serving as IAPH Director from Israel.



Gideon Shamir

National Port Authority [Regular] (Liberia)

Mailing Addressee: Mrs. Elsie Dossen-Badio
Managing Director
Managing Director: Mrs. Elsie Dossen-Badio
Deputy Managing Director for Administration: Mrs. Wheatonia Dixon Barnes
Mrs. Dossen-Badio and Mrs. Dixon Barnes are serving as IAPH Director and Alternate Director from Liberia



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Visitors

MR. Robert E. Boyle, Executive Director, Mrs. Lillian Borrone, Director of the Port's Commercial Department, and Mrs. Barbara K. Olton, Manager Port Relations, Marketing Division, The Port Authority of New York and New Jersey, visited Yokohama and Tokyo in the second week of September 1997, during a trade development mission to Asia.

One of the primary purposes of their visit to Japan was to take part in a symposium marking the completion of a 15-km long link (a 5-km bridge and a 10km tunnel) between Kawasaki and Kisarazu, two major cities located on the opposite sides of Tokyo Bay, nicknamed the Aqua Line, held on Tuesday 9 and Wednesday 10 September, at auditorium in Yokohama.

On Thursday 10 September 1997, Mr. Boyle was the

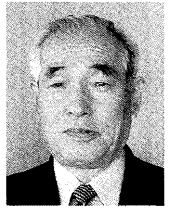
speaker of a special morning session devoted to the presentation of the Port Authority. Furthermore, the delegation visited the Port of Yokohama at the invitation of Mr. Hidenobu Takahide, Mayor of Yokohama and the Supreme Representative of the Port of Yokohama. On the evening of the same day, at a Tokyo hotel, the Port Authority Mission organized a reception attended by the representatives of local shipowners, airlines, car carriers, bankers, insurers and various business sectors which are located in New York. Mr. Kusaka and Mr. Kondoh were invited to attend the reception.



Picture – Courtesy of the Tokyo Office, PANYNJ
Mr. Robert Boyle, in the center, Mrs. L. Borrone and Mrs. Boyle, to the right, and Mrs. B. Olton, the 3rd from the left

Obituary

DR. Tadashi Hida, a Founder Honorary Member of IAPH, passed away at the age of 86 on 6 September in Tokyo.



DR. Hida, a former Director General, Bureau of Ports and Harbors, Ministry of Transport, was one of the key members who assisted our Founding Fathers in their efforts towards the creation of IAPH. He supported the work of IAPH in the early days of our Association in his capacity as a councilor to the late Mr. Gaku Matsumoto, a Founding Father and the first Secretary General of IAPH. Dr. Hida continued giving his cooperation to the Tokyo Secretariat, which was then led by Mr. Toru Akiyama, the second Secretary General for the period 1967-1973. From 1973, Dr. Hida served on the Board of the IAPH Foundation and he remained a supporter of the activities of IAPH.

After Dr. Hida left government office in 1963, he joined Yahata Steel Inc. (currently Nippon Steel Inc.) and served as President of Tetra Co., Ltd. while also being involved with various other organizations, including ICHCA Japan and the Japan Port and Harbor Association.

His funeral was held in a Buddhist temple in Tokyo on 12 September. From IAPH, the Secretary General and senior staff members attended the service.



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1015 North America Way, Miami, Florida USA 33132

Financing the Development of Ports

By Roger Mountford

Director, Corporate Finance Division
Hambros Bank Ltd.

(Presentations made at Working Session 3
during the IAPH London Conference -3 June 1997)

LADIES & Gentlemen: As your Chairman has said I am not the speaker originally advertised. It was to have been John McGregor, who served as Secretary of State for Transport in the Conservative Government. Unfortunately he could not be with us today. The last time I did something for John McGregor, with colleagues from Hambros Bank I helped to privatize a large part of Britain's railways. Having spent nearly 3 years privatizing the railways I know it is vital to stay on the track. So let me begin by telling you where the track will lead us.

Today's sessions of your conference concern the commercial and financial pressures on ports and harbours around the world. You have heard about the rising expectations of shippers and shipowners, the new complexities of intermodalism, and the subtle intricacies of risk. In keeping with this theme I am required to talk about the financial pressures which you, as port owners and operators, are probably feeling. But ladies and gentlemen, do not despair. Do not be tempted, please, to fall victim to the warmth of the room, or the effects of launch. For the financial pressures you may already be feeling are the harbingers of good news – of new opportunities to raise funds from new sources.



My track leads to a destination I think you may find attractive – the conclusion that there have never been so many sources of funds interested in financing the development of ports.

What financial pressures, then, do you face?

Those port and harbour authorities which remain government-owned all face the consequences of rising social demands on the public sector. Everywhere you look there is a combination of ageing populations, increasing structural unemployment and rising expectations of social security. This cocktail of social demands is very powerful in any democracy. But it leaves governments everywhere with a mighty hangover – how can they finance pensions and welfare and continue to fund transport and other infrastructure needs?

Take the European Union as an example. Twenty years ago the nations which now comprise the EU spent 1.5 percent of their GDP on transport infrastructure. By 1980 that figure had dropped to 1.2 percent and it is now running at between 0.8% and 0.9 percent. Over the same period overall transport usage has shown a year-on-year rate of growth of 7.3 percent for

containerized freight and around 2.2 percent for passenger transport.

However, you do not have to live in a country straining to meet convergence criteria for monetary union to recognize the pain this phenomenon is creating. In a post-Keynesian world governments everywhere wish to restrain the public budget and find new ways to get infrastructure investment financed. Even in a country like the Netherlands which has made transport its key strategic priority, the public is voicing growing concern over government expenditure on infrastructure.

At the other end of the spectrum – the fully privatized ports – the financial pressures are different. But they are no less real.

In the early years following privatisation port managers drove down costs. The UK's largest port operator reduced its direct labour force by 85 per cent. between 1989 and 1995, while increasing volumes by over 13 percent. The port companies also set about realizing surplus assets – for which there had been little incentive while publicly owned.

Most privatized port companies in the UK now have their shares traded on the London Stock Exchange. The cost reductions and realization of assets they achieved in their early years translated, in the jargon of the Stock Exchange, into a rapid increase in earnings per share, accompanied by annual increases in dividends to shareholders. Expecting this pattern of rapid growth in the "bottom line" to continue, investors have given a high rating to port shares – that is to say, share prices grew to levels representing a relatively high multiple of earnings per share.

Against share prices which continue

strongly to rise, the privatized port managers realize they must find new ways to achieve year-on-year growth in earnings and dividends. In common with many other privatized businesses some ports have tried diversification – with rather mixed results. Some have grown through consolidation, using their particularly highly-rated shares to buy another port – as Forth Ports did when they bought Tilbury in an auction which I and my colleagues at Hambros arranged on behalf of Tilbury's shareholders. With few opportunities at present to buy UK ports they are looking overseas, making equity capital in the London Stock Exchange available to attractive ports anywhere in the world.

Before looking overseas, however, as your conference is being held here in London, let us consider how well the UK ports industry is coping.

There are today 5 major UK port companies listed on the London Stock Exchange. Their aggregate value at privatization was around £400 million. The shares in those 5 companies today have a combined market value of around £2 billion. Now add in the value of the UK's other major privately-owned ports (Felixstowe, Bristol, Harwich, Thamesport and P&O's interest in ports and container terminals worldwide). I estimate you would arrive at a total valuation of over £3 billion. This compares with a total market value of the major Hong Kong-based operators of over £6 billion and of fully-privatized ports in the rest of the world of less than £2 billion.

So clearly privatization has created profits for investors. What has it done for the ports as an industry?

First, it has changed attitudes. In many of the privatizations employees at all levels, not just senior managers, were allocated shares. Dock labour came to identify with the growth and prosperity of their port. Individuals acquired shareholdings whose value grew to become significant to them and their families. As I discovered for myself. My colleagues and I at Hambros were appointed to arrange the sale of Tilbury which was owned by its managers and over 1,000 employees. After the sale was negotiated I had to explain the terms of the sale, in detail, to groups of a hundred dockers at a time. As I am sure all of you would expect, they were well-informed and direct in their questions!

Today, even though the original employee – shareholders may have sold or retired, every listed port company operates one or more share incentive

schemes for employees.

The second significant effect of listing the shares of port companies has arisen from the reporting requirements for public companies. All the companies must publish detailed accounts, compiled consistently in accordance with the companies acts, and must provide all the extra disclosure required by the London Stock Exchange. This provides the basis for benchmarking the efficiency of port operators. It reveals the strong management and the weak. Consistent and public financial reporting gives confidence to bankers and other debt markets, giving the ports easier access to debt as well as equity finance.

The combination of 6 traded port shares, worth some £2 billion, and consistent published accounts have created the conditions for an actively-researched sector to emerge.

Let me put this into perspective. In 1980, the transport sector generally represented about 4.3 percent of the UK's Gross Domestic Product. But the value of listed transport companies represented less than 1 percent of the total stock market. The major reason for this shortfall was the extent to which the government owned large elements of the transport industry. Today the figures are 5 percent and 2.7 percent. There is still room for growth in the listed transport sector. But ports have become a significant part of the stock market along with 8 bus and train operators, British Airways, British Airports Authority and Railtrack – all the result of privatizations. It is a sector which every institutional investor must now include in its share portfolio. This has in turn justified the employment by stockbrokers of specialist transport analysts who analyze the sector in depth. By way of illustration, research on ABP (the UK's largest port operator) is published by no fewer than 18 broking firms. Their research analysts publish profit forecasts and recommendations to buy or sell shares, or to switch from the shares of one company they expect to perform poorly into another whose management has impressed them.

The transparency of the stock market contrasts with the situation found in some countries where ports are owned and operated by local and municipal governments, and no separate port accounts are published at all. It is perfectly understandable that a government may set non-financial targets for the management of a major infrastructure. Nevertheless, those objectives are more likely to be achieved if the effi-

ciency of the undertaking can be accurately compared with others. Those market pressures – to produce full and clear disclosure and growing earnings – help to create an active market in port shares.

It is interesting to note that, although the US stock market is over 4 times larger than London, the only quoted American port operator (recently renamed American Port Services) chose to list its shares in London. When asked why, they explained that the London market has a body of research analysts and well-informed institutional investors they could not find in New York. The result is that they can raise equity capital here, for investment in ports in the USA, significantly more cheaply than they can raise it at home. Last year American Port Services raised over \$30 million in a placing of shares, nearly doubling its equity capital base.

You may guess from these remarks that I think port privatization in the UK has been a success. But ask me whether the UK style of full privatization (which we can see also in New Zealand) – of ownership and operation – is appropriate elsewhere then my answer is that in many places it is not.

The most obvious difference between the UK and New Zealand and other countries is in their geography. The mainland of Great Britain has more than a dozen major ports and countless smaller ones. New Zealand has 14 ports. Some British ports, like Milford Haven or Felixstowe, are quite specialized. Nevertheless, no port is free from the pressures of competition. There has been no need for anything other than the ordinary monopolies law, which governs all businesses, to preserve this competitive spirit.

In other countries, where one port dominates the economy of the nation, or at least a region, privatisation of the port as a single company would introduce the need for a comprehensive system of regulation. As the British government discovered, after privatising our gas industry as a single company, it is better to find a structure which creates competition than to pin all your hopes on regulation.

In the context of a port this means privatising stevedoring activities into a number of independent companies. The operation of quays, cranes and tugs can be divided and privatised if it is economic to do so. Locks, dredging, pilotage, the role of harbour authority and responsibility for long-term development can be left to a government-owned agency. As the Chairman of the

new Antwerp Port Authority has observed, this is likely to maintain strong links with the local municipality, in what he calls the "best Hanseatic tradition". The alternative – where greater emphasis is placed on running the port as a business – is to privatise it as a regulated local monopoly.

A good example of the division of responsibilities is to be seen in Malaysia. The Klang Port Authority retains marine and landside infrastructure but has granted 21 to 30 year operating licences to three separate stevedoring companies. These were subsequently privatised and in 1992 Malaysia achieved the first stock market listing of a pure port company in Asia.

Where, however, a major development of new quays is needed, or an entire terminal, a 20 to 30 year concession may look rather short compared with the payback period on such long-lived assets.

Hong Kong has developed one of the largest container ports in the world with little burden on public finance. As the need for each new terminal has been proven the Government has offered it, usually by public open tender, to the competing operators. The winner then takes full responsibility for construction, finance and operation throughout the lease period. Given the rapid pay-back achievable in Hong Kong the operators there have had little difficulty raising bank finance for construction. Equally, when my firm advised on the sale of shares in both Hong Kong International Terminal and Modern Terminals we found a ready market in Hong Kong, China and further afield.

The natural advantages enjoyed by Hong Kong, with its enormous and fast growing hinterland, are not of course found everywhere. I do see, however, that Buenos Aires is adopting a similar approach. So let me turn to the new approaches to project finance which may enable you to finance the development of new port infrastructure, with the minimum financial contribution by your respective governments.

These new techniques were known originally in the UK as the Private Finance Initiative, and are being applied to the financing of new roads, urban railways and hospitals. Now more generally known as funding by way of Public Private Partnership ("PPP"), this approach is ideal for you to use to finance new port development.

The essence of the idea is that a project is carefully divided into components. Private sector sources of funds

are used to finance and manage just those components as it can at an attractive cost, without government guarantee. The government then finances the components which it can finance more effectively than the private sector.

Your Ministry of Finance may raise the traditional objection, used by our own Treasury into the 1980s, that governments can borrow at lower rates than any commercial company. Even in those cases where a bank can borrow more cheaply than a government it will add a margin before lending funds to a project, and may in addition require government to guarantee the debt or appropriate as security some future stream of revenue such as taxes or tolls. Either way, the cost of private funds will be higher than government funds.

Even where this is true governments may find an advantage in blending private and public funding. This arises from the differences in accounting between private companies and governments. A private company must provide in its balance sheet for any contingent liability it takes on, or at least disclose its existence by way of note. Government accounts do not. The result is that, transferring most of the risks and rewards of a project to the private sector, a government can eliminate the borrowing from its own national accounts.

In a well designed project financing, however, the blending of private and public funding can reduce overall costs to the benefit of all the parties. The key to this apparent conundrum lies in the identification of risk and the allocation of each risk to the party best able to absorb it.

Let us dismantle the development of a typical new port into its components and consider which party is best able to assess each risk and shoulder it.

The construction of quays and wharves may best be left to a construction consortium, who will take responsibility for its detailed design. Within the consortium risks will be allocated to the engineers and different specialist contractors. The consortium then undertakes to deliver a finished product by a given date, and to maintain it for a stated period.

Cranes and other equipment need not be bought, but leased over their lifetime. And why burden the project with the risk of repairs and maintenance? No party should be better placed to take this risk than the manufacturer. So a whole-life supply and maintenance contract may remove a funding need and a risk which, to all the other par-

ties, is unquantifiable.

If there is a requirement for power why install a power plant as part of the project? A local electricity utility may be best placed to buy and maintain the generating equipment, hedge the cost of fuel, enter into a long-term supply contract and sell surplus power through the grid.

Financial risks, of fluctuating interest rates or exchange rates, can often best be borne by banks who are active in running swap books.

Responsibility for dredging of a channel may well be one component which stays with government, especially if the channel is used by a wide variety of shipping. But even here, private finance may be available to fund it – as I shall describe later on.

This leaves revenue risk, usually the greatest single source of uncertainty in a business with such high fixed costs as a port.

At its simplest, revenue risk may be reduced by involving customers. They may either participate directly in the ownership of the facilities of interest to them – as P&O does in the container terminals at Southampton and Tilbury. Or they may be persuaded to enter into long-term usage contracts as Sea-Land has with ECT. These arrangements resemble the "take-or-pay" contracts which have been used for decades to finance pipelines.

I sense there may be some sceptics in this room at a time when the major liner companies are assembling alliances with the stated objective of increasing their buying power with the terminals. So long as governments underwrite port expansion with the objective of maintaining or increasing market share then the lines will make terminals compete on price and will resist long-term contracts. There may, however, be a role for government. It may "kick-start" the project by contributing to it an existing facility which is ultimately to be replaced – as the Hong Kong Government has done with its new airport. Or, to use another example from Hong Kong, it may give what we bankers call a negative pledge – a promise that no further terminals will be permitted until volumes through the existing port reach a stated level. This last example also illustrates one way in which a government can relieve the private sector participants of a political risk which they would be unable to price.

I hope this brief explanation illustrates the proposition that a project can be viewed as a package of risks, and

that for most of these risks the appropriate private sector partner is better placed than government to quantify and absorb that risk.

My colleagues at Hambros have used techniques of this kind to analyse and structure projects ranging from the supply of new underground trains in London, to financing a conference centre in Vancouver, the Olympic Stadium in Sydney and new roads and railways in Finland.

A port project is not specially complex, compared with say the construction of a nuclear power station, or its decommissioning. Work my bank has performed for the nuclear industry has broken down and quantified literally hundreds of individual risks in a nuclear project, ranging from those which are mundane to others which are extremely unlikely to occur, but nonetheless may deter those who cannot cope with them.

If each risk in a major project is individually analysed and priced then a robust financial plan can be created. Provided that the contractual framework which holds the parties together is properly enforceable through the courts, I believe that any viable project – for a port or any other infrastructure – can be financed in large part by the capital markets.

A port project, like any business venture, needs 4 elements to succeed.

1) A good track record.

This may be evident if the project is to extend an existing port. Or it may be assumed from the involvement of an experienced operator, putting some of its own capital at risk.

2) A convincing business plan

This needs to be based on realistic volumes and commercial pricing. It also needs a robust capital structure, able to withstand the effects of potential sensitivities.

3) A clear advantage in the marketplace.

Location and deep water are obvious examples, but timing, the involvement of shipping lines or freeport status may offer competitive advantages too.

Lastly,

4) An attractive Internal Rate of Return, sufficient to reward the capital invested.

If all this can be assembled into a convincing business case then the capital markets are there to serve you.

Ladies & Gentlemen, let me close by running quickly through the sources of funds you could tap.

I hope you were persuaded earlier that public equity markets – at least in

the UK, South East Asia and New Zealand – welcome opportunities to invest in the port industry.

In some respects the private equity market led the way – as it often does – by financing the early development of Hong Kong's container port. This involved, for example, the Commonwealth Development Corporation taking what eventually became its most valuable single investment. More recently, the venture capital funds who backed management and employee buy-outs in the UK have also had successful investments. When the management team bought out a state-owned terminal operator at Le Havre last year, they were backed by the French office of 3i, the UK's largest provider of venture capital funds.

The growing use of Private Public Partnership is beginning to spawn specialist infrastructure funds. These are being established, with appropriate long-term funds and management skills, to invest purely in infrastructure projects.

Among the leaders in this area is Infratil, which has infrastructure funds to invest in both Australia and New Zealand. In March 1996 Infratil Australia acquired 50 percent of the Port of Portland, in collaboration with a transport operator. In New Zealand Infratil has a stake in the Port of Tauranga, and investments in several other ports, an airport and power projects. Several infrastructure funds have more recently been established in the UK.

The long-term debt markets are also waking up to the opportunities to place long-term funds into infrastructure projects.

This is, of course, nothing new. In the 19th century the bond markets financed the construction of railways in North America, China and Japan. In the 1960s the bond issue which launched the eurodollar market was by Autostrade, to finance highways in Italy.

But a new generation of institutional investors has to be educated to finance areas of development which governments and supra-national agencies have claimed as their own for many years.

Institutions, such as insurance companies and pension funds, with long-term liabilities, have a natural appetite for soundly-structured long-term assets. US institutions, in particular, need to invest some US\$45 billion each year.

Last year my Group's private place-

ment team in New York participated in raising \$166 million, with maturities of 12 and 16 years, for a highway project in Indonesia.

In the market we have seen maturities of up to 40 years being achieved for power generation projects.

The banks, of course, will respond to competitive pressure. Our team in Canada is already negotiating 25 year fixed rate bank loans for a Private Public Partnership deal.

In the shorter maturities too, banks are likely to face more competition. I see, for example, that port operators in the Philippines are issuing long-term commercial paper, to re-finance bank loans and finance new cranes.

Even the securitisation market, better known for financing mortgage and credit-card receivables, may have a role in providing additional, off-balance sheet debt. A channel in the sea-bed does not sound much like a traditional banker's idea of security. But the dredging of a channel could be financed against the security of charges to vessels using it. The large number of shipowners would remove credit risk, while the risk of interruption in a busy estuary might be considered small and covered for accidental blockage by insurance.

This may sound fanciful, but it has already been done.

Mr. Chairman, despite the pressures you feel in your industry I do not think they are so very different from those faced in other businesses.

I hope that my remarks have persuaded you that corresponding new opportunities are opening up to finance the development of a growth and profitable ports industry.

Roger Mountford is Director, Corporate Finance Division at Hambros Bank Ltd., where he is responsible for the corporate finance practice in the transport sector. He and his team have advised on a range of global port transactions in the UK, throughout Continental Europe, and the Far East. He was educated at the London School of Economics and Stanford Business School.

WORLD PORT NEWS

8th African Port Symposium

theme:

African Ports Facing the Challenges of the Next Millennium

Banjul, The Gambia, 24-26 November 1997

UNDER the patronage of His Excellency Col. Yahya A J J Jammeh (Rtd.), President of the Republic of the Gambia and Commander-in-Chief of the Armed Forces and under the auspices of the Secretary of State for Works, Communications and Information, the Gambia Ports Authority in collaboration with the Port Management Association of West and Central Africa (PMAWCA) will organize the 8th African Port Symposium in Banjul, the Gambia from 24 to 26 November 1997. Alongside the Symposium, an international exhibition will be held for display of features, films and/or samples of equipment, machinery, products and other items associated with ports and shipping.

Programme will include:

Sunday 23 November 1997

0900 – 1600 Excursion to Tendaba Camp

Monday 24 November 1997

a.m. Opening Session
p.m. Working Session No.1-
Structural Changes in the Port and Shipping Industry

Tuesday 25 November 1997

a.m. Working Session No.2-
Port Operations and Finance
p.m. Working Session No.3-
Commercial and Environmental Issues of Port Management

Wednesday 26 November 1997

a.m. Working Session No.4
Human Resources Development in Ports
p.m. Official Closing
Ceremony
2000 – Gala Night hosted by the Hon. Secretary of State for Works, Communications and Information

For application and further information, please contact:

The Gambia Ports Authority

Liberation Avenue

P.O. Box 617, Banjul, The Gambia

Tel: (220) 227266 Fax: (220) 227268

World Maritime Day 1997

Optimum Maritime Safety Demands Focus on People

**Message From A. O'Neil,
Secretary-General of IMO**

EACH year, IMO and its 155 Member States celebrate World Maritime Day. We see it as an occasion when we can focus people's attention on shipping safety and the protection of the marine environment, IMO's two principal concerns. This year we have taken the opportunity to concentrate on the most important factor of all and the theme we have chosen could not be more straightforward: optimum maritime safety demands a focus on people.

Most of us are familiar with statistics indicating that many accidents are caused by human error and no doubt that is true, whether we are talking about the home, the office or ships at sea. But all too often we regard human error as something that is inevitable. This is, I believe, the wrong approach. Accidents do not just happen, they are caused – and they are caused by people making mistakes. If we can correct this, then we can reduce accidents and save lives and property.

This, of course, may appear to be obvious enough, but unfortunately, all too often, the response to an accident has been to change the technical requirements. These changes have sometimes had little relation to the cause of the accident and therefore have done nothing to prevent it being repeated.

The other reaction to an accident is to look for someone to blame. The danger in this is that personalising the responsibility might result in the underlying causes being missed or ignored. There have been, for example, many cases where an accident happened because somebody fell asleep. It is a simple matter to pile all the blame on to that one individual. But perhaps we should also ask why that person fell asleep? Was it laziness, stress – or fatigue?

And if it was fatigue, what caused it? And why did the company that operated the ship allow it to be navigated by someone who was physically and mentally unfit at the time to do the job properly?

This is a problem that cannot be solved by adding more regulations. It requires a change of attitude – the adoption of a culture which puts safety at the top of its list of priorities. For two decades now IMO has been emphasizing that more should be done to ensure that existing regulations are properly implemented. That is where people come in, because it is people who can make this happen.

Over the last few years IMO has devoted more and more attention to achieving this. We have taken steps to improve the way Governments implement IMO standards on ships under their flag and we have encouraged the establishment of regional agreements for carrying out ship inspections by port States. Attention now is focused on two initiatives in particular.

The first is the entry into force next July of the International Safety Management Code. This Code was developed by IMO to ensure that shipping companies around the world treat safety seriously. Amongst other things, the Code requires that they develop a special safety management plan and appoint a senior official to be responsible for its implementation. This could involve major changes to the structure and organization of shipping companies and we believe that it will result in major improvements to the safety of shipping.

But there is concern that some shipping companies seem to think that the Code is somehow voluntary and will not apply to them. I would like to stress that the ISM Code is going to be mandatory and to apply to virtually every ship in the world. Companies which do not have the proper certification, as prescribed in the Code, would be in violation of the Convention for the Safety of Life at Sea and could find themselves out of business because their ships will be denied entry into ports around the world. It is impossible, under SOLAS, for implementation of the Code to be deferred. It will enter into force on 1 July 1998 – and that date

cannot be avoided.

The second initiative concerns the 1995 amendments to the Convention on Standards of Training, Certification and Watchkeeping for Seafarers. They entered into force on February 1st this year and are intended to raise the quality of the seafarers who operate the world's ships. This will improve their efficiency and enhance their safety as well. And, like the ISM Code, the amendments cannot be avoided.

By next year Parties to the Convention are required to submit to IMO details of their administrative, educational and certification procedures. These will then be considered by the Maritime Safety Committee, IMO's senior technical body – which is open to all Member States. Those who pass this scrutiny will be able to prove that the seafarers who hold their certificates meet international standards. Those who do not could find that their certificates would not be internationally recognized and their seafarers would be refused a berth.

These two initiatives – the ISM Code and the revision of the STCW Convention – are both concerned with people. It is the managers of shipping companies who are best placed to make ships safer. The Code will help them to do so. It is the officers and crews who operate those ships who have to carry out management decisions and are often the first to suffer if something goes wrong. The revised Convention will provide the framework to ensure that they are appropriately trained and possess the skills to do the job properly.

I believe that these two major developments, combined with other IMO initiatives designed to improve the way convention requirements are implemented, will help to ensure that shipping safety improves dramatically in the years to come. By concentrating on management and seafarer standards they focus attention where it is most needed – on people.

XXIV ICHCA Conference **31 May– 4 June 1998, Sydney**

THE theme will be Coordination of cargo handling activities from an international perspective. The geographic focus will be West Pacific Rim countries with reference to recent developments in North America and Europe.

Speakers will address the problems of rapid growth of cargoes in the region

and the implications for ports, land-sea and land-air interface, congestion, documentation, communications, etc. Since the region embraces some of the biggest container ports in the world we expect to address the issues of hub ports and development of alternative container terminals in the region.

Separate sessions on rail, air and sea will each consider the experience of prominent speakers from Germany, UK, USA and South Africa on current issues affecting international transport in the APEC region.

The conference will address the technology of cargo handling with reference to terminal equipment, electronics and radio control of vehicles and containers within a terminal, remote sensing, DGP's and the latest cargo handling equipment (cranes, RTG's, forks, reach stackers, etc.). Terminal design for optimum throughput and productivity will be addressed by the speakers invited to describe the experience of designing and operating some of the most advanced terminals.

The bulk cargo session will consider issues of loading and discharging and the implications for hull stress, terminal management and operations. Speakers from Australia, South Africa and Japan will discuss new techniques and equipment.

Recent developments in safety and training will be considered by ICHCA's Safety Panel. This session will cover procedures and practices and will address contentious issues such as the US regulations on automatic twistlocks and securing container.

Regulatory authorities such as customs and quarantine will address both air and sea delegates on issues of concern to them. The Conference will provide a forum for all parties to discuss regulatory issues and coordination to improve the flow of cargo through the ports and airports.

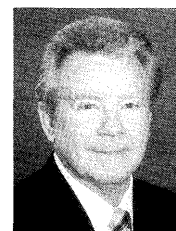
ICHCA 98 follow the meeting of the Asian Shipowners Forum and one session will be devoted to the concerns of ASF, whose members control almost half of world shipping. On ship technology, papers will consider the potential and likely practical case management problems of fast ships in both short and long distance trades in the region.

For details, write to:

Sponsorship & Exhibition Coordinator
ICHCA 98 Conference Secretariat
GPO Box 128, Sydney NSW 2001, Australia
Tel: 61-2-9262-2266
Fax: 61-2-9262-3135

WSA Appoints Welch **Senior Consultant – Ports**

WILBUR Smith Associates (WSA) is pleased to announce the appointment of W. Don Welch as Senior Consultant – Ports. Welch served as Executive Director



of the South Carolina State Ports Authority (SCSPA) from 1971 until his retirement earlier this year. Under Welch's leadership, the Port of Charleston grew from a relatively small Southern port to its current position as the second largest container port on the U.S. East and Gulf Coasts. As Executive Director, Welch was directly responsible for port development activities including the investment of some \$300 million in new and improved port facilities. The SCSPA operates three seaports: the Port of Charleston, a world-class container port, handling over 11 million tons per year; and the Ports of Georgetown and Port Royal, specialized bulk and breakbulk ports handling about 1.5 million short tons of cargo per year.

Throughout his career, Welch has held numerous leadership positions in various professional and maritime trade organizations. He is a Past Chairman of the American Association of Port Authorities (AAPA), and until recently, was Chairman of the AAPA's Educational Seminar Program. He also served as Chairman of the Finance Committee and as a member of the Executive Committee of the International Association of Ports and Harbors until his recent retirement.

Institute of Shipping and Maritime Economics

THE Institute's activities are the study of shipping industries. This aims at assisting maritime operators, shippers and institutions that promote economic development through research/studies and training activities.

Studying shipping and port industries

Identifying market opportunities in the fields of shipping and ports

Facilitating trade by assisting shippers in managing associated risks

The activities of the institute are

geared towards the:

- prospective analysis of markets that are related to shipping and port activities;
- assistance in the development of shipping and port activities;
- identification of factors of performance in shipping, ports and ancillary services, and of the activities required to improve competitiveness;
- better understanding of shippers' needs and of trade's risks;
- assistance in the devising of logistic strategies to improve the control of cargo flows and physical distribution networks;
- training of English-speaking staff who is capable of analysing the shipping markets, of devising logistic strategies and implementing them, of assessing the risks of international trade.

The Institute of Shipping and Maritime Economics carries out studies for its partners, but also for other companies and institutions, and takes part in research programs that are financed by local, national or international public institutions.

For further information, please contact:

Institute of Shipping and Maritime Economics
Gavy Oceanis B.P.152
44603 Saint-Nazaire cedex
France
Tel: +33 (0)2 40 90 50 53
Fax: +33 (0)2 40 90 50 86
E-Mail: terrassier@sc-eco.univ-nantes.fr

between countries and continents. They are essential hubs which allow the world and its population to conduct trade, become acquainted with each other's products and increase their prosperity. They allow people to get to know other cultures, to understand one another better and lay the foundations for long-term relations, sustainable economic development and peace.

Rotterdam Municipal Port Management (RMPM) has various powers and responsibilities with respect to the environment and sustainability and it takes them very seriously.

The RMPM prefers pragmatic solutions to policy which gets on further than the paper it is written on. This RMPM environmental report provides insight into a number of relevant policy developments and projects in the Rotterdam port and industrial area in the broad sense, whilst also covering local, regional and supra-regional aspects.

The RMPM functions as a one-stop-shop where port businesses can apply for all the necessary licenses or set the necessary procedures in motion. In this way, bottlenecks can be spotted at an early stage.

In consultation with the RMPM and any other authorities which might be involved, an appropriate solution is sought. In 1996, major environmental licensing procedures were those for the new ARCO and Eastman premises. In the Fruitport and Waal/Eemhaven area, a large number of medium-sized and smaller companies set up business last year, some relocating from other areas of the port. In 1996, the Port Management assisted a total of some fifty companies in completing the various procedures. Furthermore, a proposal was prepared aimed at improving the alignment between the environment

license and the building permit.

The implementation of the whole package of RMPM tasks has an impact on the quality of the environment. In this way, the RMPM is no different from any other company, institution or department. Everyone must be aware of his responsibility for his actions. He must keep asking himself if something could be done better, more efficiently, in a more environmentally friendly way and/or more sustainably. The RMPM too. Fortunately, the RMPM does not stand alone. The port businesses, other authorities, departments and neighboring municipalities are doing the same thing all the time. In this respect, the ROM (Rijnmond Physical Planning and Environment) project often serves as a platform for cooperation and the coordination of projects in which the dual objective – strengthening mainport Rotterdam and improving the residential and living climate – takes actual shape. These projects have already proved to be more than paper tigers. The annual report 'Environmental Monitor Rotterdam City Region' presents the facts.

Naturally, there is still a lot to be done and gained in the environmental field up to the year 2010, for the time being the 'final year' of the ROM project. There can and must be no sitting back. The RMPM does hope that this report will show where and for what it stands when it comes to the environment and sustainable development. It gives a sense of satisfaction to know that the efforts of all parties are producing tangible results. And that Rotterdam, partly as a result of its image as 'Clean port' and clear environmental regulations, is still a very attractive port in the economic sense too. (Mr. W.K. Scholten, General Director)

New Publications

Milieu bericht 1996

INTRODUCTION to the Environment Report 1996:

It would be impossible to exchange goods, import raw materials, conduct trade and achieve such far-reaching globalization of the world economy without ports. As a result of the growth in world trade, ports are becoming even more important. They form bridgeheads

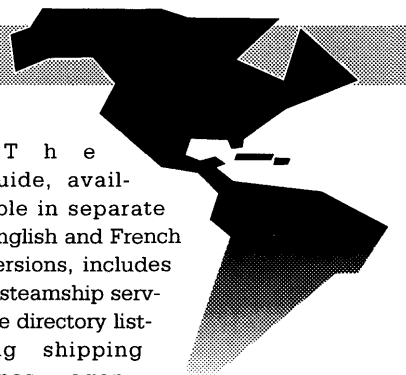
The Americas

Montreal: New Port Guide Now Available

THE 1997-98 edition of the Port of Montreal Guide is now available.

The 72-page reference book provides a comprehensive and complete look at port facilities and details on all aspects of international transportation through the Port of Montreal System.

The guide, available in separate English and French versions, includes a steamship service directory listing shipping lines, agencies, trade lanes, terminal operators, railways,



trucking companies, etc.

To obtain a copy of the guide or further information, please contact:

Communications Department
Montreal Port Corporation
Port of Montreal Building, Wing No. 1
Cité du Havre
Montreal, Quebec
H3C 3R5
Tel.: (514) 283-7050
Fax.: (514) 283-0829
E-Mail: pdmimkg@port-montreal.com
(Portino)

Prince Rupert Port Corporation Introduced

THE mission of the Prince Rupert Port Corporation is to expedite the growth and diversification of the port and ensure the safe, efficient transfer of goods and people.

The Port of Prince Rupert is the linchpin for a \$20.5 billion a year economy straddling Canada's Northwest Transportation Corridor from Saskatchewan to Alberta to British Columbia. The region's enormous potential was documented in a comprehensive federal government Task Force Report released in the first quarter of 1997.

As the west coast terminus to this corridor – 30 hours closer to booming Asian markets than its nearest rival port – the Port of Prince Rupert offers state-of-the-art terminal facilities and efficient rail and highway transportation links.

Bulk shipments of coal, grain and forest products move to markets throughout the Pacific Rim and elsewhere, and the port is actively pursuing its potential as a container port. More than 400 hectares of land with deep water berthing is available for development by a wide range of heavy industry.

Ridley Terminal Inc.

This coal terminal is a world leader in the efficient and reliable movement of coal from unit trains onto ships. The terminal can handle vessels up to 250,000 DWT, using computer-based technology to load 9,000 tonnes an hour of metallurgical or thermal coal originating from mines in Western Canada. The coal is exported mainly to Asia.

Ridley Island Land Development

More than 400 hectares of industrial development land is available on Ridley Island, making Prince Rupert one of the most attractive locations on the west

coast of North America for large scale heavy industry expansion.

Fairview Terminal

More than 150 lift trucks, some carrying as much as 18 tonnes of cargo, efficiently load ships at three deep sea berths. Designed to handle 1.5 million tonnes a year, the 21.5 hectare dock has three covered storage sheds. Twenty-two light towers allow round-the-clock loading of lumber, specialty grains, pulp and other products.

Prince Rupert Grain Ltd.

This modern terminal can process for export more than five million tonnes of grain a year, the highest of any grain cleaning elevator in Canada. Eight shipping bins and three tower-mounted loading spouts can load 4,000 tonnes of wheat or barley an hour. State-of-the-art engineering and technology allow grain to be cleaned as fast as it is unloaded.

Prince Rupert Port Corporation
110-3rd Avenue West
Prince Rupert, B.C. V8J 1K8
Phone: (250) 627-7545
Fax.: (250) 627-7101
E-mail: pcorp@kaien.com
www.rupertport.com
(Annual Review 1996)

Savannah and Brunswick: Double Digit Increases

GENERAL cargo handled via the deepwater ports of Savannah and Brunswick increased an impressive 19.5% in fiscal year 1997, ending June 30. Combined, more than 3.2 million tons of general cargo transited the port facilities during the 12 month period.

The Port of Savannah handled 2,293,379 tons of general cargo during the year; reflecting a 16.3% increase over the previous fiscal year. General cargo tonnage handled at the Port of Brunswick increased to 983,916 tons; advancing 27.4% during the year on a comparative basis.

The Ocean Terminal facility in Savannah handled 1,562,423 tons of general cargo while the Garden City Terminal contributed 730,956 tons to the Savannah total. In Brunswick, the Mayor's Point Terminal handled 448,290 tons, Marine Port Terminal handled 335,024 tons and the Colonel's Island Terminal handled 200,602 tons of gener-

al cargo.

Primary general cargo handled via the Ports of Georgia included woodpulp (875,752 tons), linerboard (536,514 tons), iron and steel (482,880 tons), clay (480,221 tons), machinery (224,953 tons), automobiles (206,284 tons) and foodstuffs (142,135 tons).

Auto units handled via Georgia Ports Authority facilities in FY'97 increased an unprecedented 85.1% as compared to the prior 12 month period. The Colonel's Island Terminal, located at the Port of Brunswick, recorded an impressive 80.7% increase in business during FY'97. Overall, the deepwater ports of Georgia handled 139,509 automobiles; another record setting FY'97 performance.

Expansion projects currently underway at the Port of Savannah include the construction of a seventh container berth, the acquisition of property for an eighth container berth, studies for deepening the channel depth and the expansion of general cargo warehousing and berthing capabilities. Improvements at the Port of Brunswick include the development of additional acreage for the storage and handling of automobiles, the replacement of the Sydney Lanier Bridge and a study to deepen the Brunswick navigation channel.

GPA Inland Terminals: Cargo Activity Brisk

THE Georgia Ports Authority inland barge terminals located in Bainbridge and Columbus, Georgia continue to offer an efficient low-cost transportation alternative to/from the Gulf of Mexico and major markets in the Southeastern United States. A growing number of shippers are availing themselves of the cost advantages afforded by inland water transport.

The Apalachicola-Chattahoochee-Flint River network provides a nine foot navigation channel between the inland barge terminals and the Gulf of Mexico. The inland barge terminals feature secure berthing facilities as well as equipment, warehousing and open areas for the handling and storage of cargo. Modern highway and rail connections are available to easily access terminal facilities for delivery or distribution of a vast array of liquid and dry bulk cargo to end users.

Cargo activity at the inland barge terminals remained brisk during fiscal year

1997. Tonnage results indicate that total volume exceeded 100,000 tons for the fifth consecutive year at Bainbridge and Columbus. Overall, the inland barge facilities handled 103,226 tons of liquid and dry bulk cargo including nitrogen solution, jet fuel, ammonium sulfate, gypsum, caustic soda, urea and cottonseed during the twelve month period ending June 30.

The Bainbridge and Columbus inland terminals provide a unique and strategic advantage for regional industries. Trade Development efforts to increase utilization of the terminals and encourage the use of the waterway continue in earnest.

Houston: New Computer For Storing Documents

THE Port of Houston Authority has announced plans to purchase a computer system to maintain copies of the many paper documents stored in the PHA central records department.

Currently, many of the Port Authority's stored files consist of space-consuming manila folders and paper documents maintained by the central records staff. Filing, cataloging, locating and retrieving these thousands of documents can be difficult.

The Port of Houston Commission recently authorized the Port Authority to seek bids for a computerized document management system. The cost of the hardware, software, technical support and training for the system is estimated at \$300,000.

With the new system, documents will be scanned, indexed and converted to digital format as readable text. Staff will be able to perform computer searches by text and by categories, making the process much more efficient. *(Port of Houston)*

Long Beach: Over 300,000 TEUs in Single Month

THE Port of Long Beach moved the equivalent of 309,629 TEUs during June, making it the first port in the Americas to move more than 300,000 TEUs during a single month. The June count reflected a 19% increase over June 1996, and helped the port achieve 13% growth during the first six months of the calendar year.

June's import trade showed particu-

larly impressive gains, surging 25.2% over June 1996 to 165,763 TEUs. Export containers grew by 11.5% over last year to 100,262 TEUs. Empty containers increased by 9% to 43,604 TEUs.

"Things are looking good," said Don Wylie, director of Trade and Maritime Services. "These are traditionally low-volume months, and we generally don't get busy until the latter part of the summer, when holiday inventories start to move."

Economists attribute several key factors to the growth spurt. "Continued consumer confidence is partly feeding the import frenzy," said Associate Economist George Huang of the Los Angeles Economic Development Corp. "The Consumer Confidence Index was at 122.8 between January and March, and we're still feeling that impact now."

The strength of the US dollar also is a factor. "A strong US dollar has more buying power overseas," said Huang. "That's another reason why imports are up. Shippers are responding to retailers' demands for more quality imports for store shelves. In turn, there are more sales for such products, which feed consumer spending."

Meanwhile, freight rates remain competitive on the shipping end. The freight war has driven several shippers to form partnerships with one another, said Wylie.

"These partnerships come with vessel sharing agreements, which often provide for economies of scale," said Wylie. "These efforts are boosting volume through Long Beach terminals."

Board of Commissioners OKs Long Beach Budget

THE Port of Long Beach Board of Harbor Commissioners recently adopted its 1997-98 fiscal year budget, allocating \$443.3 million in expenditures between Oct. 1, 1997 to September 30, 1998. Total expenditures are \$79.5 million less than this year's budget of \$522.8 million.

The capital outlay portion of the budget – typically the largest component – is down from \$339.2 million this fiscal year to \$259.5 million. This decline reflects the completion of five of six infrastructure projects and the near completion of a new 170-acre, \$270 million container terminal and on-dock rail facility for Hanjin Shipping Co. That terminal will open this summer. Started in 1993, the infrastructure projects

included the building of six grade separations, or overpasses, to separate rail from vehicular traffic at various points throughout the harbor.

The \$259.5 million in capital expenditures allocated for fiscal year 1997-98 include some \$230 million in terminal enhancements and rail and roadway improvements. More than \$25 million are being set aside for various environmental and engineering projects.

The budget also allows for personal services expenditures for the addition of 27 new port employees. These new hires will bring the total budgeted workforce to 306 regular port workers. Most of these jobs were previously budgeted positions that were never filled. Total revenues for the upcoming year are estimated at \$234.7 million.

Budget & Projects Budget (Fiscal Year – 1 October through 30 September)

1997/1998 Annual Budget: \$156,970,956.

1996/1997 Annual Budget: \$141,286,778.

#Net profit after all payments and deductions: \$83,815. (Estimated)

Major Sources of Port Revenues:

1. Wharfage (Port Cargo Fees)
2. Property Lease Fees
3. Sale of Muni Bonds for major construction projects.
5. some grant funds for special projects from federal and state government agencies.

Major Capital Projects, Under way or Recently Completed – Expenditures: (Forecasted Total Coast of Each)

New Pier "A", 177 Acre Container Terminal – \$290,000,000.

Port Roads, Bridges & Railroad Improvements – \$152,000,000.

Pier "J" (Berths J266-270) Terminal Breakwater – \$27,000,000.

Pier "B" Street (8th St.) Rail Staging Yard – \$93,000,000.

Committed Future Major Capital Project – Forecasted Expenditure:

Pier "J" (Berth J234) Container Terminal Project – \$71,000,000.

Possible Future Capital Project – Forecasted Expenditure:

New Pier "S", 150 Acre Container Terminal – \$220,000,000.

Pier "E" (Berth E20) Slip Fill, New Dock and On Dock Rail Projects – \$59,700,000.

New Pier "T", 145 Acre Maritime

Terminal (Former Navy Station - *\$200,000,000.

New or Expanded Pier "T", 250 Acre Maritime Terminal (Former Naval Shipyard) - *Over \$200,000,000.

Special Projects:

Alameda Corridor Expenditures to date - \$205,800,000.

- On a 12 month basis

* - Estimated cost

SC Ports Tonnage Close to 12 Million

THE South Carolina State Ports Authority is about to set record tonnage and TEUs marks for Fiscal Year 1997, which ended June 30. Final numbers are still being compiled, but it appears that combined breakbulk and container tonnage will come very close to 12 million for South Carolina's three ports, Charleston, Georgetown, and Port Royal. TEUs will likely reach 1,100,000. Breakbulk tonnage is nearly 200,000 tons ahead of a very challenging budget for the year. Revenues are also up including revenue per breakbulk ton, revenue per container ton, and revenue per container move.

"I haven't heard a final number, but with 11 months finalized and partial numbers on the 12th, things look very good," said Duane Grantham, executive vice president and chief operating officer for the South Carolina State Ports Authority. "Certainly, containers are where most of the growth is, from a pure volume standpoint. We will probably grow on the order of 11 percent in TEUs and 12 percent in container tons. But from both a tonnage and a revenue standpoint, we are especially pleased with the growth we are seeing on the breakbulk side. Targeting specific commodities, adding Forest Lines with breakbulk liner service, and successfully bringing in some of these big project shipments, all have been important elements in our growth. We are planning to continue that pattern."

It is a good thing that tonnages and revenues are up. A review of press and *Port News* clippings over recent months will reveal the major commitments the Authority has made to continually improve productivity and plan for additional capacity in the future. Some very expensive projects are being funded, including investments in new container handling equipment; new computer systems for the container yards, break-

bulk operations, and finance; organization and paving improvements to the terminals; and multiple studies related to new facilities on Daniel Island including an environmental impact study, economic feasibility studies, a transportation study, and, of course, dredging issues.

Until the new facilities come on-line, the Port of Charleston is focusing on increasing productivity, and finding success.

"Charleston has always had good crane operators, and they are continuing to excel," Grantham said. "We worked a 900-lift ship recently at 48.3 gross moves per hour. Now, we aren't making 48 g.m.p.h. on every vessel, but we are working ships so fast we are really having to change the way we do things in the yard to keep up. That is an investment we make with smile."

(Port News)

Tacoma: Ground Broken On Hyundai Terminal

OFFICIALS of Hyundai America Shipping Agency, Inc. (HASA) and the Port of Tacoma officially broke ground on Hyundai's new \$60 million container terminal Wednesday, August 13. The 50-acre facility is scheduled to begin operation by early 1999.

In an address to more than 220 people who turned out for the event, Hyundai Executive Vice President K.S. Pakh said the new terminal facility is a sign of more change to come.

"We believe this is the beginning of a new era for Pacific Northwest trade with Pacific Rim countries," said Pakh. "At the center of this trade will be the Port of Tacoma. We are proud to make Tacoma our new gateway here in the Pacific Northwest."

Hyundai is currently the sixth largest container shipping line serving North America and the company has set its sites on overtaking the number five slot within the next few years.

"This new terminal site is a real milestone for us," said Port of Tacoma Commission President Jack Fabulich. "In more than 20 years as a Port Commissioner, I don't think I've ever had a better feeling about a Port development project. We are here to witness this event because of the dedicated efforts of Port staff and my fellow Commissioners."

In April of this year, Hyundai

Merchant Marine (America) Inc., a subsidiary of Korea's Hyundai Merchant Marine Co., Ltd., signed a 30-year lease for a 50-acre container terminal on the Port's Blair Waterway. The terminal will feature a 12-acre, dedicated on-dock intermodal rail yard. It will be Hyundai's first direct-lease terminal in North America and its second worldwide. Hyundai plans to fund the purchase of cranes and container handling equipment for the terminal.

The lease agreement requires the terminal to be expanded to 60 acres within the first five years of operation. Over the life of the lease the terminal may be expanded to as much as 100 acres.

"I think this will mean a lot for jobs and for prosperity in the future," said U.S. Representative Norm Dicks (D., Bremerton). Construction of the terminal will generate an estimated 206 construction jobs over a two-year period, according to Port estimates. Hyundai's terminal operations are expected to bring 294 jobs to Pierce County and will support an additional 126 jobs statewide. Total direct wages for those jobs is expected to exceed \$14 million annually.

Sea-Land Terminal at Tacoma: 25 Acres Added

CHASSIS and containers are rolling across 25 acres of fresh pavement at the Port of Tacoma's Sea-Land Terminal. The additional land makes the Tacoma facility Sea-Land's largest marine terminal on the West Coast, at 132 acres. The additional acreage will help Sea-Land handle anticipated growth and accommodate Maersk Line, which began sharing the terminal with Sea-Land in October 1996.

"Part of our success in Tacoma has been the ability to provide customers with terminals that allow them to grow," said Down Meyer, Interim Executive Director of the Port. "That's why Sea-Land came to Tacoma in 1985 and it's still an important factor for current and future customers."

The 25 acres were created by filling part of the Milwaukee Waterway with material dredged from the Sitcum and Blair waterways. The project deepened the Blair and Sitcum waterways and removed contaminated sediments.

(Pacific Gateway)

Africa/Europe

Antwerp: New Traffic of Concentrated Orange Juice

THE Bulk Services Corp., a full subsidiary of three Brazilian fruit producers – Cambuhy Citrus, CTM and Montecitrus – has chosen the port of Antwerp as its gateway to bring frozen concentrated orange juice (FCOJ) into Europe. The Brazilian companies are investing BEF 275 million in a site at Antwerp's Left Bank port area to handle the frozen juice and distribute it throughout Europe.

The terminal will be owned by a subsidiary called Southern Juice Terminal NV and will be equipped with an on-line blending installation, a drum filling station, a laboratory to conduct all kinds of analyzes, a dairy pack installation, two automated tank filling stations and 22 steel tanks with a total storage capacity of 24,000 tons. From the terminal, 95 percent of the juice is distributed directly to customers by tank lorries; the remaining five percent is drummed and reshipped to Scandinavia or the Mediterranean area.

Antwerp is already Europe's premier fresh fruit port, with a volume of 2 million tons per year. It successfully diversified into fruit juice traffic since the early nineties when it attracted investments from Citrovia, another importer of FCOJ. With the additional volume from Southern Juice, Antwerp will represent over 20 percent of all European imports of frozen concentrated orange juice.

Goods Traffic Growing Buoyantly at Helsinki

THE economic upswing is directly reflected in the operations and finances of the Port of Helsinki. Goods traffic is growing buoyantly because in the January-June period, total cargo traffic increased by 7 percent and general cargo traffic by 8 percent compared with last year. The number of passengers has turned upwards to slight growth of 1 percent following the dip that occurred in the first part of the year. Our market shares have remained at the same level in both modes of traffic.



Turnover was FIM 191 million, representing an increase of 4 percent on the previous year thanks to the growth in traffic. At this stage it is estimated that the turnover for the entire year will be FIM 382 million. Operating expenses have fallen by 5 percent from previous year. Savings have been made in areas such as personnel expenditure at the same time as the number of personnel has declined.

Operating profit before depreciation was FIM 11.5 million greater than in the first half of previous year. The result has likewise improved by nearly the same amount. The result for the entire year will exceed the budgeted forecast by an estimated FIM 10 million. A sum in accordance with the approved objectives will be credited to the City's account as income on its basic capital and as interest on the long term loan.

(Port of Helsinki Info)

Indonesia: Significant Partner for Hamburg

"SUCCESS in the EU markets via the Port of Hamburg" is the title of a workshop for Indonesian transport experts taking place in Jakarta from September 19 - 21. During the event staged in cooperation with Hamburg Business Development Corporation (HWF), Port of Hamburg Marketing and Public Relations pointed to the significance of Indonesia for the Port of Hamburg.

With its numerous import and export firms, consulates, banks and insurance companies, the City-State of Hamburg is the central interface in trade between Germany and its neighbors on the one hand and Indonesia on the other.

Germany is Indonesia's most important European market with bilateral trade worth DM 7.3 bn in 1996 (up from DM 6.779 bn in 1995). Imports rose particularly fast – by 15.5% to DM 440.9 m – and Indonesia is one of the fastest-

growing economies in South-East Asia.

In 1996 520,000 t of cargoes were carried by sea between Hamburg and Indonesian ports (up from 436,000 t in 1995). Of last year's total around 427,520 t was bulk (compared to 300,000 t in 1995). The containerization rate in general cargo was less than 25% (compared to 85% for all cargoes handled by the Port of Hamburg). This is mainly due to the fact that the majority of container traffic to and from Indonesia is transported via Singapore. So as Indonesian ports are modernized, there will be enormous growth potential for container traffic.

The most important German exports were potash fertilizers, scrap machinery and waste paper while vegetable oils and fats, copper ore, cocoa beans, oil-cake and coffee were the main imports. Outgoing transit traffic was dominated by paper, cardboard and plastics, incoming by rubber and coffee.

In 1996 the Port of Hamburg handled some 200,000 t of transit cargoes for Indonesia. The most important destinations for cargoes coming from Indonesia were Poland, Denmark and the Czech Republic which accounted for around 70% of incoming transit cargoes. Finland, Austria, Sweden and Denmark were the main suppliers of transit cargoes bound for Indonesia accounting for 85.5% of the total.

One of Hamburg's decisive advantages, besides the efficient service its port operators offer, is its infrastructure with excellent hinterland connections – whether by rail, truck, feeder or inland-waterway vessel. There has also been a remarkable degree of involvement in the organization of hinterland traffic by Hamburg's cargo-handling companies.

As a result of joint ventures between forwarders and railway companies a number of new direct block-train connections have been set up between Port terminals and cargo-handling centers in Poland, Hungary, the Czech Republic and Austria.

Now there are at least five trains a week and trucks leaving daily for all the key industrial and trading centers in Hamburg's hinterland (e.g. Warsaw, Prague, Budapest, Vienna, Salzburg, Milan, Munich and Basle). In addition, there are 8 - 10 feeder ship sailings a day to other European ports and innumerable road haulage services.

The increased efforts by Indonesian exporters to win new markets in Central and Eastern Europe are also presenting Hamburg's warehousing and distribution companies with interesting marketing opportunities. The

expansion of Indonesia's infrastructure, including its ports, has raised hopes in Hamburg of not only more project consignments but also of new opportunities for Hamburg's consultancy firms. To create the right conditions for fruitful partnerships between Indonesia and Hamburg, it is important to cultivate and consistently expand these ties – to the advantage of both sides. Hamburg's port economy will certainly play its part in this by intensifying its involvement in Indonesia.

Elbe Links Port of Hamburg With Hinterland

HAMBURG is situated on two rivers, the Elbe and the Alster. Although the Inner and Outer Alster form the picturesque heart of the city, its blood flows through the Elbe, the river that keeps Hamburg's industrial heart pumping. As a port city, Germany's leading import and export centre, and the home of numerous banks and insurance companies specializing in shipping and trade and of shipping lines, Hamburg is very dependent on the Elbe's shipping traffic. The Upper Elbe is an important link between the seaport of Hamburg and its hinterland.

940 km of the 1,165-km River Elbe are navigable for inland waterway vessels. The Elbe not only opens up the industrial regions around Dresden, Halle, Leipzig and Magdeburg for Hamburg but also the Czech Republic as far as Prague and an extensive economic region from the River Oder in the east to the Rhine and its tributaries in the west via canals and rivers flowing into the Upper Elbe.

This has meant that Germany's biggest seaport, Hamburg, is also one of the most important cargo-handling centers for inland shipping. In 1996 11,300 inland-waterway vessels carrying 9.2 m t of cargo called in at the Port of Hamburg. 7.4 m t, i.e. or four fifths of Hamburg's inland waterways traffic, came via the Upper Elbe. And of this total one third was accounted for by eastern Germany.

Access to the seaport of Hamburg via the Elbe has always played an important role for the Czech Republic. 30% of the total cargo traffic passing the Czech-German border on the River Elbe (1996: 1.7 m t) was accounted for by traffic to or from Hamburg.

Improved market conditions – new concepts

Hamburg's port economy is convinced that with the countries of Europe growing closer together and Eastern Europe opening up, there is every chance that the Elbe will regain the significance it enjoyed prior to World War II.

That is why Hamburg's port economy is battling to ensure that inland-waterway vessels continue to be exempt from port dues in Hamburg (despite the precarious state of public finances in Hamburg and Bonn), the Upper Elbe is developed into an inland waterway that is fully navigable all the year round, and the central and eastern German canal system is extended to allow inland shipping to gain a larger share of the Port's hinterland traffic.

"In the context of increasing bottlenecks in road traffic," HHVW Chairman Dr. Hans Ludwig Beth explains, "greater use has to be made of the capacity available in inland shipping." Thus, Hamburg's port economy supports inland development in the development of new transport and logistics concepts.

The Elbe Container Line, a German-Czech shipping line operated by Deutsche Binnenreederei (DBR) and Czechoslovakian Elbe Shipping Co. (CSPL), was launched in 1995. This inland container line offers weekly departures on the 700-km Elbe route between Hamburg and Prague.

On the 8-10-day trip the container service calls in at the ports of Magdeburg, Aken, Riesa, Dresden, Decin, Usti and Melnik. In 1996 3,500 TEUs or cargo were carried by the new line. In the medium term 10,000 TEUs would seem to be a realistic figure. A ro-ro liner connection between Hamburg and the Czech Republic is currently at the planning stage. DBR and CSPL with their various logistics and transport services account for around a third of the Port of Hamburg's total inland-shipping traffic.

Despite the new service, it is still mainly bulk and conventional general cargoes that are transported on the Elbe: petroleum products, building materials, grain, fodder, agricultural produce, fertilizers, ores, iron and steel, scrap metal, kaolin, all kinds of heavy goods, investment goods and cocoa. About half of the Czech Republic's traffic is made up of oilcake and other animal feedstuffs. Potash fertilizers, grain and scrap iron play an important role among the cargoes coming downstream from eastern Germany while fuel and

heating oil are the main commodities carried upstream.

By the way, in 1995 58 inland-waterway firms were based in Hamburg – most of them individual skippers or independent barge-owners – with a total turnover of DM 235 million.

Amsterdam Ports Region Heading Towards Record

The Significant growth achieved by the Amsterdam Ports region over recent years is continuing this year. This means a stronger position and a higher market share of the Amsterdam ports in the Dutch port market as a whole.

Over the last six months, the Amsterdam Ports region, (including the ports of Velsen, Beverwijk and Zaanstad) again booked record goods movement. Over the first half of 1997, total transshipments increased 6.3% to more than 28.8 million tons, made up of 19.2 million tons dry bulk (+4.2%), 5.6 million tons liquid bulk (+19.3%) and 4.6 million tons general cargo (+0.6%).

Expectations are that the year's total goods transshipments will yet again break the previous record in the same way as 1996's 54.7 million tons passed 1995's record of 50.3 million tons.

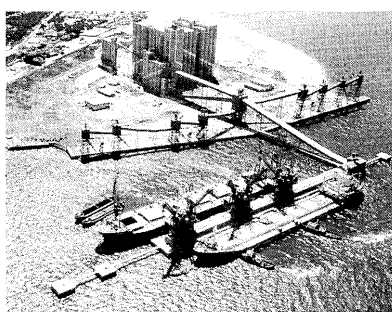
Lisbon Port Renovating Financial Info System

THE Lisbon Port Authority (APL) is renovating its entire financial information system, implementing the renowned and powerful international software, SAP R/3.

Implementation will be complete by the beginning of 1998 and will provide for accounting, management control, third-party accounts, treasury and assets through the use of SAP R/3 modules, Financial Accounting (F1), Controlling (CO), Treasury (TR) and Assets Management (AM).

The APL is also introducing important means of rationalizing and simplifying procedures, as part of the company's objective to improve efficiency and competitiveness.

Lisbon Experiences 10% Container Traffic Increase



Silopar-Silos Trafaria

SEVERAL important events have occurred this year regarding container traffic in the Port of Lisbon, which experienced a 10% increase in the number of TEUs handled in the first six months of 1997.

New connections to important ports have been implemented, namely a fortnightly container service to Casablanca, which began in June. Last July this service was moved to a weekly basis in order that a more effective service could be provided. Evergreen Line, which started calling at Lisbon last year, providing a direct service to destinations in the Far East, increased the number of calls, which in April passed from a fortnightly to a weekly basis.

This growth has led the Lisbon Port Authority to allocate investment in order to increase the performance of existing container terminals. Santa Apolonia Container Terminal (which is managed directly by the Port Authority) will be increased in area from 8 ha to 19

Paço do Bispo-Aerial View

ha, with an improved depth alongside of 13 meters. Alcantara Terminal (managed by a private company, Liscont) will see an increase in depth allowing ships with 13 meters draught to berth alongside. To complement these development projects, the Port Authority, together with other national bodies, will improve the port's access to rail and road connections in the eastern and western area.

Finally, cooperation with landside logistical terminals is being improved, enabling intermodal operations and new landside links to be established which will make the port more user-friendly.



Tanguis Estuary

Int'l Comparative Study Of Ports Commissioned

IN order to identify the best organizational practices, commercial strategies and information systems, the Lisbon Port authority (APL) commissioned a bench-marking study of different ports. The ports collaborating with the study were Antwerp, Barcelona, Bilbao, Bordeaux, Genoa, Ghent, Liverpool and Rotterdam.

Identification of the best practices will enable APL to consolidate the implementation of an information systems plan, linked to its strategic objectives for port-related business.

Goole: ABP's New Shed Designed for Paper Trade

ASSOCIATED British Ports (ABP) has officially opened a new shed at its Port of Goole, for use by one of the port's major customers, Paltrans Shipping AB (PAL Line).

The 3,500 sq m shed at Goole's Stanhope Dock represents an investment by ABP of over £700,000, and complements the nearby £3 million Aldam Terminal which has accommodated PAL Line's service since 1994. The new shed will cater for the substantial paper trade at the port which mainly consists of coated paper imported from Sweden by PAL Line for paper producer, AssiDoman Frovi. The paper is used in the printing and packaging industries.

Earlier in 1997, Paltrans Shipping AB celebrated 20 years' trading with Goole. In the past 10 years, PAL Line's traffic has grown from approximately 150,000 tonnes to over 600,000 tonnes per annum. The company has invested £30 million in four new ships for its trade between Goole and Sweden, the most recent one being delivered in February 1996.

Commenting on the additional facilities, Goole Port Manager, Colin Silvester, said: "This shed is another example of ABP's willingness to provide modern facilities for its customers. We look forward to working with PAL Line and their colleagues for another 20 or more years."

Anthony Dean, Managing Director of PAL Line (UK) Limited, said: "Goole is geographically ideal for distribution within the UK for European shipping. Situated 80 km from the sea, it is both economically and ecologically sound, reducing the number of miles cargo travels on our already congested roads.

The port of Antwerp is unique.

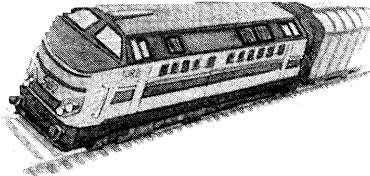
Antwerp lies in the heart



of Europe, close to Brussels,

the capital of the European Community. Situated at the intersection of

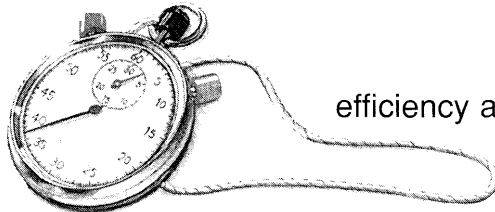
major road-, rail and waterway networks,



Antwerp is

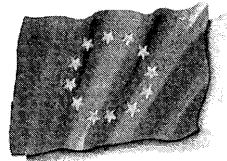
unrivalled as a storage and distribution centre. The Port of Antwerp is world famous for the

speed,



efficiency and quality of its goods handling and is very

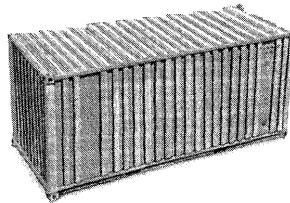
attractive to business and industry. Antwerp is



an abundant source

of added value. But the Port of Antwerp is much more than just location, infrastructure

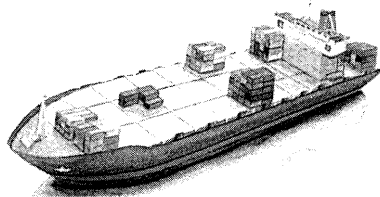
and technology.



It is people who make the difference.

People who work for their customers night and day, putting their heart and soul into care for

clients, ships

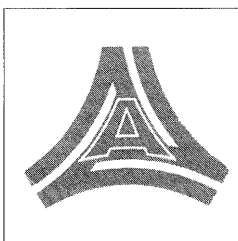


and cargo. In Antwerp you'll get a businesslike

but friendly



reception. In Antwerp, you'll be well looked after.



PORT OF ANTWERP

the hub with a heart

Contact : Havenhuis, Entrepotkaai 1, B-2000 Antwerp, Belgium

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Add to this ABP's commitment to modernizing and improving what was an under-used area, and the result is the current boom which Goole is experiencing. This shed is tangible evidence of that and contracts are coming on stream regularly, like this one for AssiDoman Frovi – a partner for APL Line, for ABP and for Goole."

'Royal Viking Sun' Sails Into Southampton

ASSOCIATED British Ports' (ABP) Port of Southampton welcomed Cunard Line's *Royal Viking Sun* to the Queen Elizabeth II passenger terminal on Saturday, 23 August, for her first visit to the port.

The 37,845 GT *Royal Viking Sun* called at Southampton at the end of a tour of the British Isles before departing on a Mediterranean itinerary. Voted the world's highest-rated cruise liner by the *Berlitz Complete Guide to Cruising and Cruise Ships*, she is one of the most spacious ships afloat with capacity for 740 guests.

During her stay at Southampton, the port's Business Development Manager, Shay Devine, presented a port plaque to the ship's master, Captain Halle Gundersen.

Port Manager, Andrew Kent, said: "We are delighted to welcome *Royal Viking Sun* to Southampton and look forward to maiden calls from other famous cruise ships such as *Mercury* and *Arcadia* later this year. There will also be an element of nostalgia in the city with the return of one of the world's favorite liners, *Norway*, in September. With this blend of classic liners and brand-new cruise ships, Southampton continues its tradition as the UK's principal cruise port."

Southampton handled 5.3 million gross tonnes of cruise shipping in 1996, nearly twice the amount of the next placed UK cruise port.

Paris: Fresh Momentum For Combined Transport

Container Transport

The Chambre de Commerce et d'Industrie de Paris (CCIP) and Port Autonome de Paris (PAP), the members of the Paris Terminal joint venture, decided to boost its development by specializing as a multimodal container

transport center and combined transport platform serving the Gennevilliers port and northwestern Paris area.

Specialists Join Forces

As a result, the joint venture has been replaced by the container activity of the new legal entity, Paris Terminal S.A., a share corporation whose capital will be owned by PAP and CCIP, Port Autonome du Havre and several transport operators: Terminaux de Normandie and Compagnie Fluviale de Transport (which already hold an interest in Logiseine), and Compagnie Nouvelle de Conteneurs (CNC), a subsidiary of SNCF (the French national railways).

Projects Aiming to Succeed

Pier 1 at the port of Gennevilliers, which offers river, rail and road transport links, will accommodate:

- Logiseine, the Paris-Le Havre river line (stopping at Rouen and Limay), which will operate two weekly round trips
- CNC, whose morning and evening train shuttle service to the Villeneuve-St-Georges nodal point connects with 40 national centers, permitting the transport of maritime containers and swap bodies (which road carriers attach to the trailer chassis)
- Logifer, still in the planning stages, to operate entire trains carrying containers and swap bodies to southern France
- road carriers who appreciate the high-quality service offered by the port.

Large Capital Investment

Paris Terminal S.A. occupies about

ten hectares on either side of the road serving Basin 1 and along the length of the port.

The wharfside area will be cleared and equipped for handling and trimodal transshipment. In addition to a gantry for river freight, it will have a "rail and road" gantry extending the river gantry's track and running the entire length of the swap bodies. At the entrance to the center, to be enclosed, an office building will be built to accommodate the operators and provide driver reception.

The State (acting through the F.I.T.T.V.N.) and the Region of Ile-de-France will contribute to this project. The State has committed itself to investing FF 5 M in 1996 and plans to spend a comparable sum in 1997. The Region of Ile-de-France has agreed in principle to a FF 3.5 M subsidy in 1996.

Success in Sight

This plant renovation and development effort will span a 3 to 5 year period. By the end of the century, total movements for 20-ft-equivalent containers should reach the 100,000 mark (all transport modes included).

Following the drop to 13,500 movements in 1994, the efforts undertaken by the new team to turn the situation around have produced results: there were nearly 30,000 movements in 1995 while 50,000 are expected for 1996, including 10,000 via the river.

These figures support the strategic aims formulated by PAP:

- to make Gennevilliers the major multimodal platform for the northwestern Paris area
- to develop a partnership with other port and logistics platforms.

Asia/Oceania

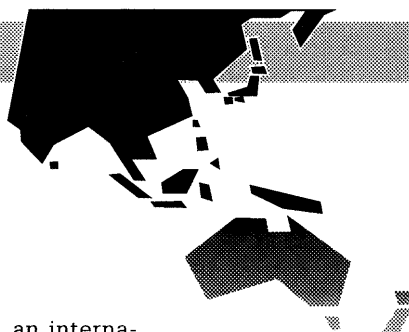
Ports Corp South Australia on WEB

PORTS Corp South Australia has its own internet site to promote its wide ranging services and South Australia's ports. The page is currently drawings scores of enquires from Australia and overseas.

Ports Corp Marketing Manager, Mr Wayne Parham, says the website reflects Ports Corp's acknowledgement of the growing need to communicate at

an international level, and the way in which the internet, particularly overseas, is becoming an important marketing tool.

"The page covers all our activities including Port Adelaide and all regional ports, it promotes the advantages of



using South Australian ports and gives details of Ports Corp administration and important contacts. It also has links to other maritime organisations," Mr Parham says.

It can be found at <http://www.portscorp.com.au> (Port Briefings)

Guangzhou: Sustainable Growth in Turnover

AS a maritime transportation hub in South China, the Port of Guangzhou has links with more than 300 ports in 80 countries and regions in the world at present. Since 1992, the Port has taken advantage of the continuous rapid economic developments in South China's Guangdong Province.

The Port of Guangzhou has achieved a total turnover of 339 million tons in the last five years, with an average annual growth rate of 8.1%, while container traffic reached 2.08 million TEU, with an average annual growth rate of 14%. In 1994, the Port marked a breakthrough with the record level of 70 million tons, ranking it the third largest in China in terms of traffic volume. What is more, the Port achieved the highest turnover, 74.5 million tons in 1996.

In respect of infrastructure construction, the Port of Guangzhou has invested a considerable amount, mainly in the following projects, in the last five years:

1) The first five berths for conventional cargo and its operational facilities in

Xinsha Terminal Project phase I were completed in 1995. The designated annual capacity is 9.1 million tons. After two years in operation, it has handled 11.82 million tons of cargo.

2) Marine works for the next five berths were finished in April 1997. Land works in the hinterland are now under way.

3) The Dangerous Cargo Wharf at Danshine has been largely completed.

4) Two coal ship-unloaders have been delivered to the Coal/Coke Terminal, adding some two million tons yearly more to the handling capacity.

5) Various telecommunications upgrading projects have been finished recently.

Furthermore, in order to meet the trend towards greater draft for ocean-going container vessels, the Port of Guangzhou commenced the channel excavation project on 18 June 1996. The project is considered vital for the Port to maintain its key role in South China. Initially, a channel depth of 11.5 m is envisaged. Eventually in 2005, the channel will be dredged to 14.5 m - 15 m in its entirety, providing free passage to ships up to 50,000 t afloat.

The Port of Guangzhou is dedicated to expanding the handling and warehousing business for both container and conventional cargo. In line with this development, it is estimated that the turnover will amount to 100 million tons by the year 2000, with 1.5 million TEU, and 120 million tons by 2005, with 2.3 million TEU. Furthermore, the Port is negotiating with business partners to expand in other sectors.

Bluff Focus on the End of an Era: South Port NZ Ltd

BLUFF was the first port in the world to be equipped with all-weather meat loaders. Systems were in place elsewhere to discharge bananas and load butter through a conveyor system but it seems that the advantages of an enclosed system for loading frozen meat had not occurred to anyone. When considering future developments at Bluff staff of the then Southland Harbor Board appreciated the need to improve loading rates for frozen meat through the use of mechanical means.

A Donald portable elevator ways purchased in 1953 and modified for the loading of carcasses. Although it could not be weather-proofed its success convinced the Board to invest in enclosed all-weather conveyors for carcass loading. From the basic design produced by the Board's staff William Cable Ltd produced a detailed plan from which the five loaders were evolved.

A transfer shed, in which frozen carcasses are transferred from road or rail transport to the conveyor was built and the first meatloader entered service on 4 February 1963 loading cargo aboard the New Zealand Shipping Company's vessel *Hauraki*. Five loaders, each weighing 150 tonnes, were built.

With the coming of containerization many predicted "white elephant" status for the loaders, but these predictions were to be confounded. While the traditional refrigerated and general cargo liners built for the New Zealand trade, generally with five or six refrigerated holds, were phased out they were replaced by smaller, fully refrigerated ships. Few of these ships had more than four holds, rendering one loader redundant. In 1981, therefore, number 5 loader was dismantled and partially utilized in the construction of the grain loading facility at number 2 berth.

The four remaining loaders – officially designated "all weather package loaders" – continued successfully into the 1990's. Refrigerated ships were now designed to be "pallet friendly", loading shrink-wrapped and palletized cargoes which the loaders could not handle. Given the increasing age of the loaders, leading to prohibitive maintenance costs, it was decided to dismantle number 4 loader which was then used for spare parts. Number 3 loader followed earlier this year leaving only two. When the *Haru Verdy* berthed at Island



Huangpu Container Terminal—Guangzhou Harbour Bureau

Harbor number 5 on 25 July this year she became the last vessel to work via the meat loaders. When she sailed on 2 August she marked the end of an era which had begun with the *Hauraki* 34 years before. *(The Bluff Port Sider)*

PSA's Container Volume Hits All Time High

THE Port of Singapore Authority (PSA) has hit an all time high record in its 25 years of containerisation. For the month of July 97, it recorded a container throughput volume of 1.25 million TEUs. This is the highest monthly container throughput since the start of containerisation in 1972.

The July record rides on the back of a strong 8.5% growth for Jan. - Jul 97 compared to the same period last year. PSA handled 8 million TEUs for the first seven months of '97 while it handled 7.37 million TEUs for the corresponding period in '96.

The strong growth in container throughput can be attributed to the strong support from customers, high productivity achieved by the port and healthy international trade.

"We want to thank our customers for their continued support in using PSA and generating July's record throughput. We are always striving to improve our already high standards of productivity to better the quality of our service. We will continue to work closely with our customers to give them value-added service and share our productivity gains with them," said Mr Khoo Teng Chye, Group President, PSA.

High productivity has played an important role in helping PSA achieve the all time high. On average, vessels are turned around in less than 12 hours at PSA. But what differentiates PSA from the competition is the ability to handle a large volume of containers within a short vessel turnaround time.

Vessel rate

Third generation container ships are serviced at an average rate of 86 containers per hour, the highest in the world.

Average No. of Containers Handled

For the third generation container vessels of PSA's major customers, the average number of containers handled per vessel call is more than 2,000 TEUs.

Last year, PSA achieved vessel rates of more than 100 containers per hour for 455 container vessels. PSA's world record of 229 containers per hour achieved in July 95 on the vessel *Mette Maersk* at Brani Terminal has remained unbeaten.

In a speech delivered by Dr John Chen, Minister of State for Communications at PSA's National Day Observance Ceremony on 13 Aug 97, he said, "In terms of productivity, PSA has performed better than the national average. The value that each worker added in 1996 was almost 10% higher than in 1995." This was the last National Day Observance celebrated by PSA as a statutory board.

Commenting on how PSA coped with the high volume, Mr Khoo said, "We had anticipated the higher throughput at the terminals and prepared ourselves to cope with the demand. Our operations team worked closely with our customers in the scheduling and operational planning of their vessels to ensure a fast turnaround. PSA hopes to see continued growth in the container volume for the second half of the year."

PSA and APP to Operate Pulp and Paper Cargo

THE Port of Singapore Authority (PSA) and Asia Pulp and Paper Company Ltd (APP) signed an agreement on 18 July 1997 to set up a joint venture company which will manage and operate a central distribution centre at PSA's Pasir Panjang Wharves for the storage, handling, transshipment and distribution of pulp and paper cargo from APP's paper and pulp mills in Indonesia. The name of the new company is "PSA-APP Distribution Pte Ltd."

APP is one of the largest integrated paper company in Asia outside Japan and is one of the lowest-cost producers of pulp and paper in the world. The group's integrated operation has production facilities in three Asian countries with a combined pulp, paper and packaging capacity of 5.2 million tons per annum at the end of 1997. Its primary focus is on the growing Asian markets of China, India, Malaysia and particularly Indonesia where the Group is a leading producer of paper, containerboard and corrugated shipping containers. APP has always dedicated itself to providing superior value to its customers. This joint venture with PSA

is consistent with the Group's vision of providing excellent service to its customers by placing great emphasis on efficiency and productivity.

Mr Suresh Kilam, Chief Executive Officer, APP said, "In the pulp and paper industry today, providing a high level of service to customers through efficient distribution and state-of-the-art information access, has become a key element of successful business strategy. Our alliance with PSA is aimed at giving APP this edge in the marketplace."

Mr Lee Chee Yeng, President (Warehousing & Logistics Division), PSA said, "As the world's leading container terminal operator, PSA has the capability to manage and operate efficiently this Central Distribution Centre for pulp and paper cargo. We will work closely with APP to further streamline their supply chain through integrated logistics management and the application of information technology for our mutual benefit."

Joint Development of Taicang by COSCO, PSA

THE Port of Singapore Authority (PSA) and China Ocean Shipping Company (COSCO) have signed a letter of intent to explore cooperation in the development of the COSCO International City in Taicang, China. This was signed by Mr Khoo Teng Chye, Group President, PSA and Mr Chen Zhongbiao, President, COSCO on 26 Sep 97, in the presence of Dr Yeo Ning Hong, Chairman, PSA.

COSCO is China's national shipping line which owns one of the world's largest fleet of container vessels. It has plans to develop a COSCO International City in Taicang which will include port, industrial, commercial and residential areas. It will cover an area of 50 square kilometers, with a coastline of 9.7 kilometers. 5 kilometers of this coastline will be developed into container berths.

COSCO has invited PSA to participate in a joint development of the port area. The areas of cooperation include a joint effort in the planning, design and construction of port facilities; management and operations of the container terminal; and equity participation in the container terminal. With the letter of intent, PSA and COSCO will deliberate and determine the scope and form of cooperation between the two organisations.

"COSCO has ambitious plans for

Taicang and we want to invite a world-class port operator to jointly develop it with us. We believe that the combined expertise of the two big organisations will bring about much synergy in building a successful port," said Mr Chen Zhongbiao.

"We are very pleased to be invited by one of our major customers to enter into a joint development project with them. We share COSCO's vision to develop Taicang into an advanced and modern international container port to support the rapid economic and industrial growth in the Yangtze Delta. In April this year, we had signed a long-term Terminal Service Agreement with COSCO. That marked the first step towards a strategic partnership between PSA and our valued customers. This letter of intent sees us progressing

further in our cooperation with COSCO, extending into areas of port and logistics-related services in China and other parts of the world," said Mr Khoo Teng Chye.

The development of the COSCO International City will take place in phases. The construction of the first 270-meter multi-purpose berth will begin in oct 97. The development of 3 container berths will start next year.

Situated near Shanghai, Taicang Port is well located to capture the cargo of Jiangsu province in the vibrant Yangtze Delta. It has a vast hinterland and wide cargo base with cargo from Suzhou, Wuxi and Changzhou. The development of Taicang is also part of the Chinese Central Government's plan to set up an international shipping center for the Yangtze Delta region.

Speech by Dr Yeo Ning Hong, Chairman PSA, at the Official Launch of PSA Corporation Ltd on 30 Sep 97 at 6.30 PM at the Ritz-Carlton Millenia Singapore

On behalf of the Port of Singapore Authority, I extend a very warm welcome to all our guests here tonight. I want to specially thank our guests from overseas, who have flown in to join us on this auspicious occasion.

Since the founding of Singapore, 178 years ago in 1819, the Port has played a critical role in the nation's economic development. Today, Singapore is the world's busiest port in terms of shipping tonnage. Last year, it handled 770m gross tonnes of ships, double that of the second busiest port. PSA is also the world's largest container terminal operator. Last year, it handled 12.94m TEUs, again double that of the second biggest operator. PSA is served by 400 shipping lines, linking it to 600 ports worldwide, with 650 ship movements in the port everyday.

By international productivity benchmarking, be it number of TEUs handled per vessel hour, per metre of berth, per quay crane, per sq metre of yard space, etc. PSA ranks amongst the best. PSA is a world class port, acknowledged and recognised by the shipping community as such.

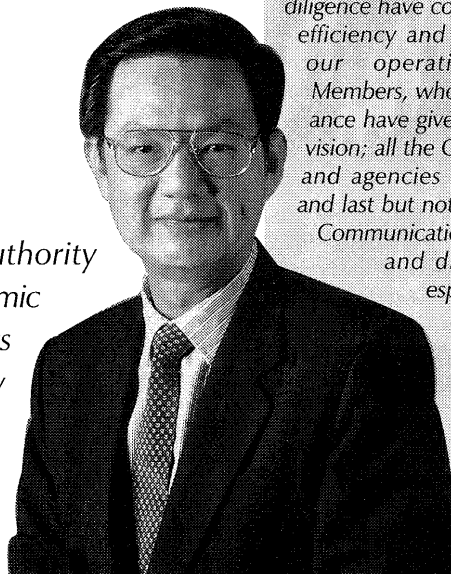
For the Port's achievements over the years, I want to thank first of all our customers and our business partners for choosing us for their patronage and support. I want to thank also our staff, whose teamwork, commitment and diligence have contributed both to the efficiency and the effectiveness of our operations; our Board Members, whose wisdom and guidance have given us our mission and vision; all the Government ministries and agencies for their assistance; and last but not least, the Ministry of Communications, for its leadership and direction. I want to

especially recognise two individuals, my predecessors in more roles than one; Mr Howe Yoon Chong, Chairman of PSA from 1970-1979 and Mr Lim Kim San, Chairman of PSA from 1979-1994.

The move from a world-class port to a world-class corporation



On 1 October 1997, the Port of Singapore Authority became PSA Corporation, launching the most dynamic era in our 178-year history. Corporatisation boosts our flexibility and allows us to respond more quickly to the needs of our customers. As PSA Corporation expands our network of world-class seaports and logistics services around the globe, we will continue to pass on rebates and enhanced value and efficiency to our customers, our partners in growth.



Dr Yeo Ning Hong, Chairman PSA

The immense contributions these two outstanding leaders of Singapore have made over the past three decades, have set the example for all of us in PSA. We strive to emulate them by seeking to give of our best at all times.

For the new PSA Corporation, our mission is to excel as the world leader in port, logistics and related services. Our vision is to move from being a world class port to being a world class company. And our strategic intent over the next 10 year timeframe is to operate a string of ports overseas, handling some 10m TEUs, and managing up to a third of our total port, logistics and related business overseas.

As many of our guests here tonight know, for business overseas, much depends on key factors beyond our control or influence such as the pace with which Governments open up or privatise their ports, their logistics and their harbour front businesses, the speed with which bureaucrats change their mindset and their willingness to work with foreign investors, and the overall economic growth of the Asia Pacific region.

Given the large base of our existing domestic business and its continuing strong growth, our objectives are sufficiently stretched to motivate us to give of our best at all times.

In envisioning our future, we need to reach for the sky. This will inoculate and safeguard us against the common but deadly disease of complacency, with its symptoms of slow growth or stagnation. This is a disease that successful organisations and nations are particularly vulnerable to. At the same time, we need to be down to earth with our feet firmly on the ground in operational matters, in being customer focused, in cost-consciousness, in project analysis and feasibility studies.

With corporatisation, we take another new and exciting step into the great unknown, the future. But given our heritage and the continuing support of our customers and business partners, we believe we can make PSA the world's Port of Call, and add another step to PSA's long and illustrious journey.

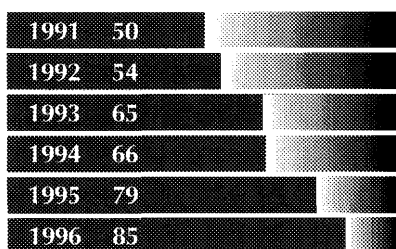
It is my pleasure now to invite our Guest of Honour, the Minister for Communications, Mr Mah Bow Tan, to address us.

Who is PSA Corporation? How does it rate globally?

WE are the world's single largest container terminal operator, handling about one-tenth of the world's container throughput, or more than 13 million twenty-foot equivalent units (TEUs) of containers a year. The Port of Singapore has been the world's busiest port by shipping tonnage since 1982. Linked by 400 shipping lines to 600 ports worldwide, it is also the world's largest transshipment hub.

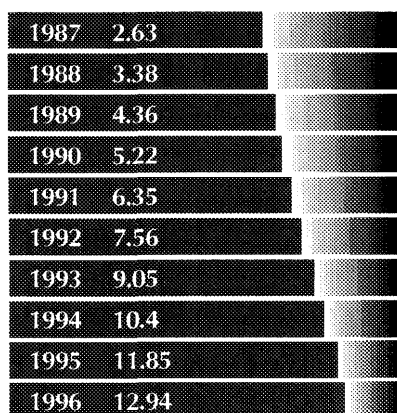
PSA has built a solid track record of managing the increasing complexities of shipping connections within our container terminals speedily, efficiently and reliably at improved productivity levels.

- Third-generation container ships are serviced at an average rate of 86 containers per hour – the world's highest.
- 455 container vessels were serviced at vessel rates of over 100 containers per hour in 1996.



Vessel rate (containers/hour)

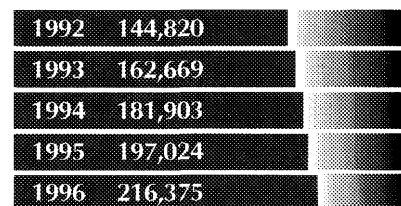
- Our record vessel rate of 229 containers per hour, achieved on the "Mette Maersk" in July 95, remains the world's highest.
- More than 50 percent of containers are transhipped within three days.



Container throughput (TEUs)

Numerous international awards attest to PSA's excellence in port and

logistics operations. The Asian Freight Industry Awards, organised by Cargonews Asia, has bestowed Singapore the tile of "Best Seaport in Asia" for the past 10 years in a row. It has also honoured PSA as the "Best Container Terminal Operator in Asia" for the past eight years, and the "Best Warehouse Operator" for nine consecutive years. These awards bear testimony of our customers' acknowledgement of our quality service at the right price.



Value added per employee at 1990 prices (\$)

What are PSA's strategies to diversify and globalise its business?

PSA Corporation's core business will remain in container operations, making up an estimated 70 percent of our turnover in the next few years. We will build on our solid base as the world's single largest container terminal operator to diversify on a global scale and into the port-related and logistics industry.

Our goal is to become a high-growth global corporation providing seaport services through a wide network of ports, and growing our other businesses in logistics and related services, including inland container depots, warehouses and harbourfront developments.

INTERNATIONAL BUSINESS

Corporatisation gives PSA greater flexibility and nimbleness to grasp the many opportunities that abound internationally. We aim to build on our competencies in port development and operation, warehousing and logistics, and exhibition and harbourfront commercial business to become a global company in international port terminal investments, operations and management.

The overseas ventures will give PSA Corporation a second wing in addition to our existing business as a regional hub port. They can also enhance our partnership with major shipping lines through co-operation and joint ventures

when developing overseas ports.

We are actively seeking suitable partners with whom we can form strategic alliances, ranging from equity partnerships to full-time management and consultancy. By sharing our accumulated experience and skills, we can create successes all over the world.

What is PSA Corporation's long-range mission? And vision?

To excel as the world leader in seaport and logistics services of the best value to our customers.

Our vision is to move from being a world-class port operator to a world-class corporation with a network of ports, logistics and related businesses throughout the world, recognised everywhere for quality and value.

To achieve this vision, we are committed to the following values:

CUSTOMER FOCUS:

We believe that customer service and satisfaction are fundamental to any successful long term partnership. We will provide our customers with services of the right quality and at the right price.

TEAMWORK:

We believe in using our collective skills, knowledge and experience to meet our customers' needs. Through teamwork and commitment, we will build upon our strengths to realise our full potential and achieve our shared vision.

INNOVATION:

We believe in the creativity of our people and our ability to contribute new ideas for improvement.

We will constantly seek innovative ways to create additional value for our

customers.

PSA Corporation's flagship joint venture projects include the Dalian Container Terminal and Fuzhou Port in China. We are also active in the Middle East where we have clinched a contract to build the Aden Container Terminal in Yemen.

customers.

COMMUNICATION:

We believe that open communication is essential to build trust and understanding with our customers, our people, our shareholders and the countries we serve. Only then can we meet our customers' needs, our people's aspirations and our shareholders' expectations, and be a good corporate citizen.

What resources does PSA Corporation offer its customers?

Highly-skilled people

People are the most important resource in PSA. Their skills, commitment and experience drive the engine of our success.

We invest some S\$16 million – about four percent of our annual payroll – in training and retraining annually to equip our staff with the necessary skills and mindsets to meet the rapidly changing needs of the industry.

Each staff spends eight man-days on training a year. In 1996, a corporate-wide "Adventure Learning" programme was launched to build teamwork and

communication in the organisation.

The PSA Institute, PSA's training arm, conducts training courses for both PSA staff and the local and overseas maritime industry. Since the 1970s, the Institute, presently offering some 80 port and port-related courses, have trained about 100,000 local industry personnel. Through its 21 courses on port management, operations, engineering and marine topics, it has trained some 4,450 overseas personnel from 63 countries.

We enjoy an intensive QC (Quality Circles) culture, achieving 100% participation in our Productivity Programme. At the 1996 National QCC Conventions, PSA won 17 Gold, 12 Silver and six Bronze awards, and three prestigious National QCC Awards. At the Public Service level, PSA clinched numerous Outstanding WIT Awards. Through QCs and joint QCs with our customers, we will continue to identify ways to improve our productivity and reduce unnecessary wastage.

Cordial and harmonious industrial relations has made possible round-the-clock, 365-day operations at PSA. We will continue to build on this strong foundation by maintaining rapport, trust and understanding with our house Unions – the Singapore Port Workers' Union and Port Officers' Union – through regular dialogue sessions and staff events.

Cutting-edge technology

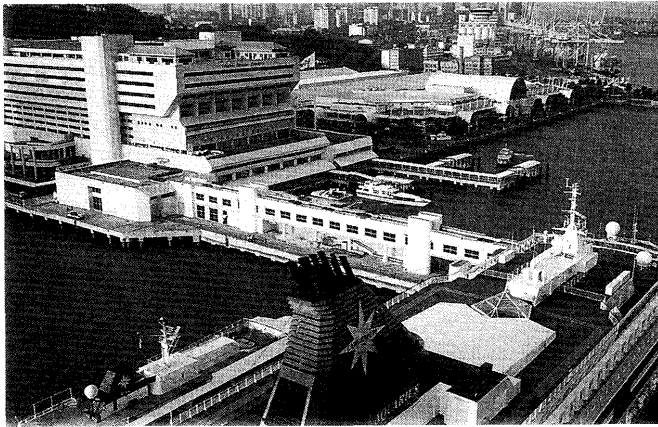
CITOS (Computer Integrated Terminal Operations System) and PORTNET drive the operations at the container terminals.

PORTNET facilitates the fast exchange of information between PSA and its customers, allowing the latter to place bookings for berths, tugs and pilots, and submit information for the planning of loading and unloading operations on a ship. It allows freight forwarders and hauliers to book a time to pick up or offload their containers.

Customers can also check the progress of activities at the container terminals and cruise terminal.

CITOS plans and directs all handling operations at the container terminals, allowing PSA to manage the huge complexities of shipping connections efficiently and reliably. Here, a typical third generation vessel discharges some 500 containers to be re-loaded onto more than 20 second carriers for transshipment to about 30 ports. And loads some 1,500 containers transhipped by some 100 first carriers from





their effort in processing their accounts.

STAR

Providing shipping lines with regular reports on their performance and costs, it enables them to analyse and fine-tune their operations and planning.

more than 20 ports.

Using expert systems, CITOS plans the use of berth, yard, equipment and manpower required. From the central yard control computer, work instructions are transmitted to the machine operators using a real-time wireless data transmission system.

PSA will continue to break new ground in IT to pump more efficiency and productivity out of its operations, and provide customers with value-added services through customised products designed to meet their needs. We aim to help our customers better manage their business by improving work processes, increasing productivity and lowering costs.

Some examples are :

FASTCONNECT

A re-engineered transshipment system, it makes possible tighter connection times and cuts down cumbersome procedures to make transshipment through Singapore easier and more transparent.

FLOW-THROUGH GATE

Using a vision system and memo paging, the system enables hauliers to pass through the container terminal gates in less than 30 seconds.

BOXNET

Enables hauliers to exchange information electronically with PSA so they can improve fleet utilisation and streamline operations.

PORTNET-ON-WINDOWS

Windows-based, the intranet-based electronic commerce system allows PSA to enhance its electronic interface with customers.

FINANCIAL EDI

By transmitting bills and other financial information to PSA's customers electronically, it allows them to reduce

World-class infrastructure

Investment in infrastructure has been the most dramatic evidence of PSA's commitment to meeting its customers' needs, now and into the future.

Massive investment in container-handling facilities and equipment has generated huge economies of scale and extensive shipping connections to offer shipping lines the fastest transit times, highest reliability and a wider scope of services, while keeping costs low.

PSA's container terminals enjoy a reputation as an integrated one-stop facility geared for fast response to the special needs of shipping lines, such as consortium re-alignment and service expansion. We offer customers a seamless and transparent interface for every port call, through integration of our services such as between the container terminal and marine operations.

NEW STATE-OF-THE-ART CONTAINER TERMINAL

We will continue to expand and improve, through major new developments such as our new **Pasir Panjang Terminal (PPT)**, which demonstrate our commitment to the transshipment business.

Phase 1 and 2 of PPT, costing some S\$7 billion, comprise 26 berths with a handling capacity of 18 million TEUs. The terminal will begin operating with four berths in 1998, with the fifth and sixth berths coming on stream in 1999.

PPT represents PSA's continuing efforts at re-engineering to improve our already high productivity and service standards. A high-capacity, high-productivity terminal, it will usher in a new wave of automation.

Each berth will handle 750,000 TEUs a year, a 25 percent increase in productivity compared to the existing container terminals. It will be serviced by new-generation quay cranes which

have a 55-metre outreach to handle the largest ships in the world with a width of 18 containers.

State-of-the-art remote-controlled bridge cranes will further improve the productivity of yard operations and drive costs down. These cranes can stack nine containers high. They are faster and more efficient than the rubber-tired gantry cranes, and will up the capacity per berth. The productivity gains can be shared with our customers to help them lower costs.

How does corporatisation benefit PSA's customers?

More customised service

Corporatisation heralds a new mindset at PSA, one that is more customer focused as we evolve from a statutory board to a commercially-run organisation.

As a corporation, our focus has shifted from improving operational efficiency to creating greater value for our customers.

We will formulate win-win relationships through customised Terminal Service Agreements like the Virtual Terminal Agreements.

Tailored to meet the specific needs of each customer, these Agreements guarantee a package of services and certainty of rates to meet their business and operating needs.

And assure them a consistently high level of service and rebates for moving containers through Singapore.

We will also provide more value-added services and accommodate last-minute requests, such as "catch-up" services for vessels which are delayed and need to be put back on schedule, and tight connections, including just-in-time transfers from ship to ship, for boxes which have an urgent time-to-market.

Shipping lines will benefit as we strengthen the lines of communication. We already have programmes such as "Key Customer Managers" and "Chat Time" to open more channels for customer feedback, and build greater rapport. Through feedback, we were able to simplify our tariff charges to reduce administrative hassles for our customers.

Our aim is to make our customers long term partners. More projects will be initiated, through the joint Quality Circles, to identify ways to increase productivity and save costs, creating win-win partnerships.

Bintulu Port

Strategic Location

Located strategically along the busy sea-lanes between the Far East and Europe. Poised to be the major gateway for the rapidly growing industrial area in central Sarawak.

Modern Facilities

Well-equipped facilities to handle containerized, breakbulk and dry and liquid bulk cargo.

Efficient Services

The customer takes first priority and enjoys our excellent customer-friendly services as we are totally committed to service excellence. Be our partner in Bintulu. It's your window of opportunity in Sarawak.

Your Window of Opportunity in Sarawak, Malaysia



Bintulu Port Sdn Bhd

P.O. Box 996, 97008 Bintulu,
Sarawak, Malaysia.

Tel: 086-251001/20 (20 Lines)

Fax: 086-253597 Telex: BIPORT MA73179

e-mail: bpsb@po.jaring.my

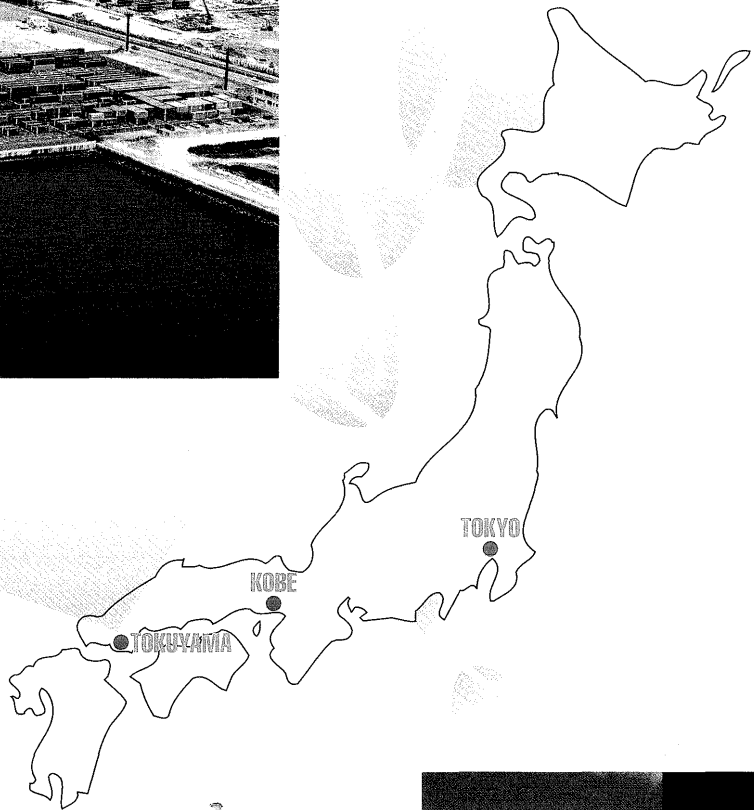


Open To The World

PORT of TOKUYAMA-KUDAMATSU

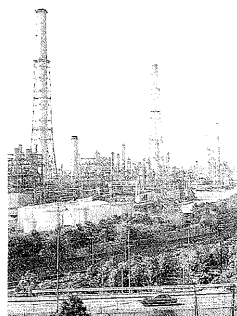


Tokuyama Container Terminal

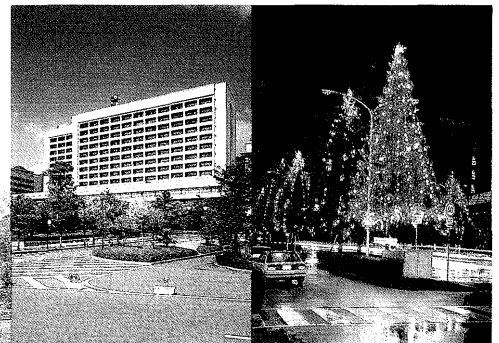


Port of Tokuyama-Kudamatsu is situated almost in the center of the Inland Sea coast line. Behind the port is formed a seaside industrial zone and this port is one of the Specially-Appointed-Important Harbor in Japan.

We keep on making efforts to improve the port and its facilities including the Tokuyama Container Terminal and 14-meter-deep berth which is one of the deepest berth in the western Japan.



Tokuyama Complex



The Prefectural office Tokuyama Christmas Trees Festival



Port and Harbor Division
Yamaguchi Prefectural Government
1-1 Takimachi Yamaguchi-city
Yamaguchi Prefecture 753 JAPAN
TEL 81-839-33-3810 FAX 81-839-33-3829