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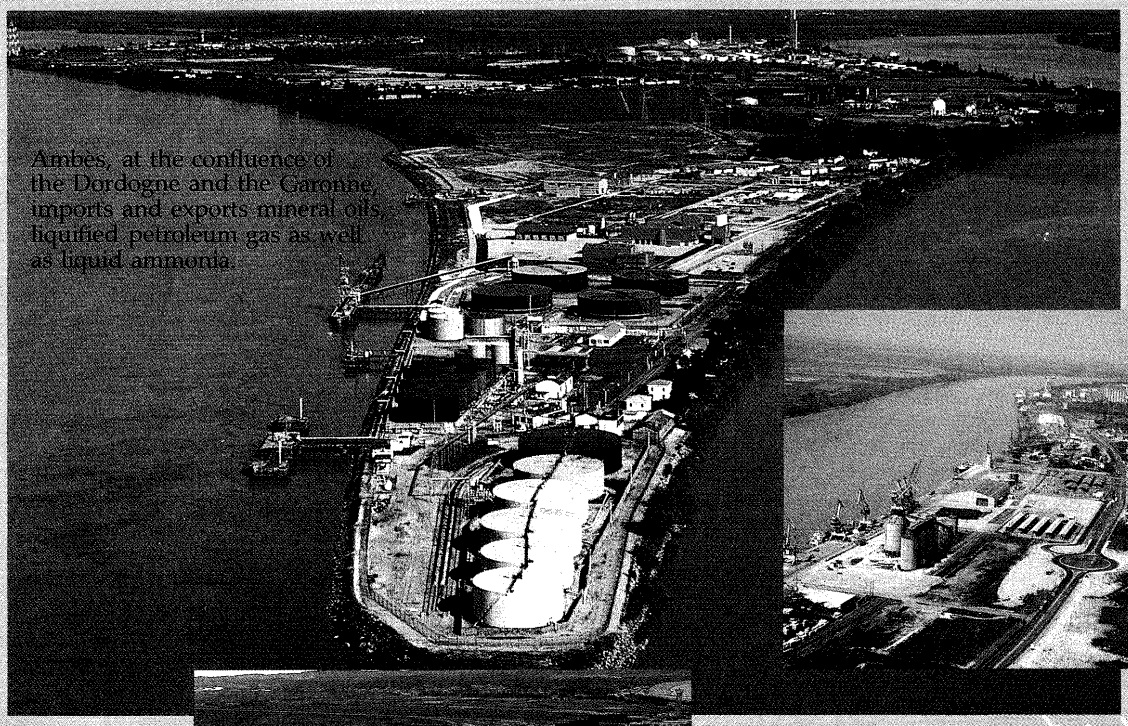
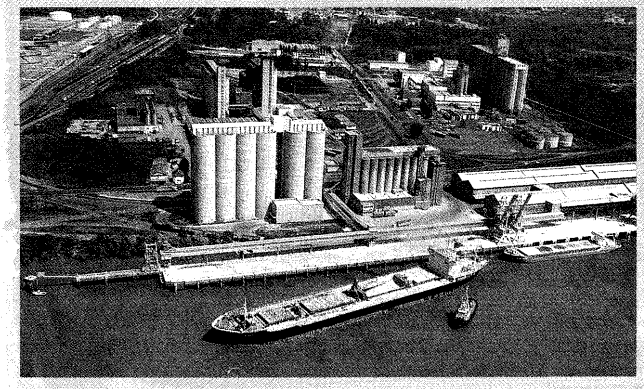


Ambes, at the confluence of the Dordogne and the Garonne, imports and exports mineral oils, liquified petroleum gas as well as liquid ammonia.

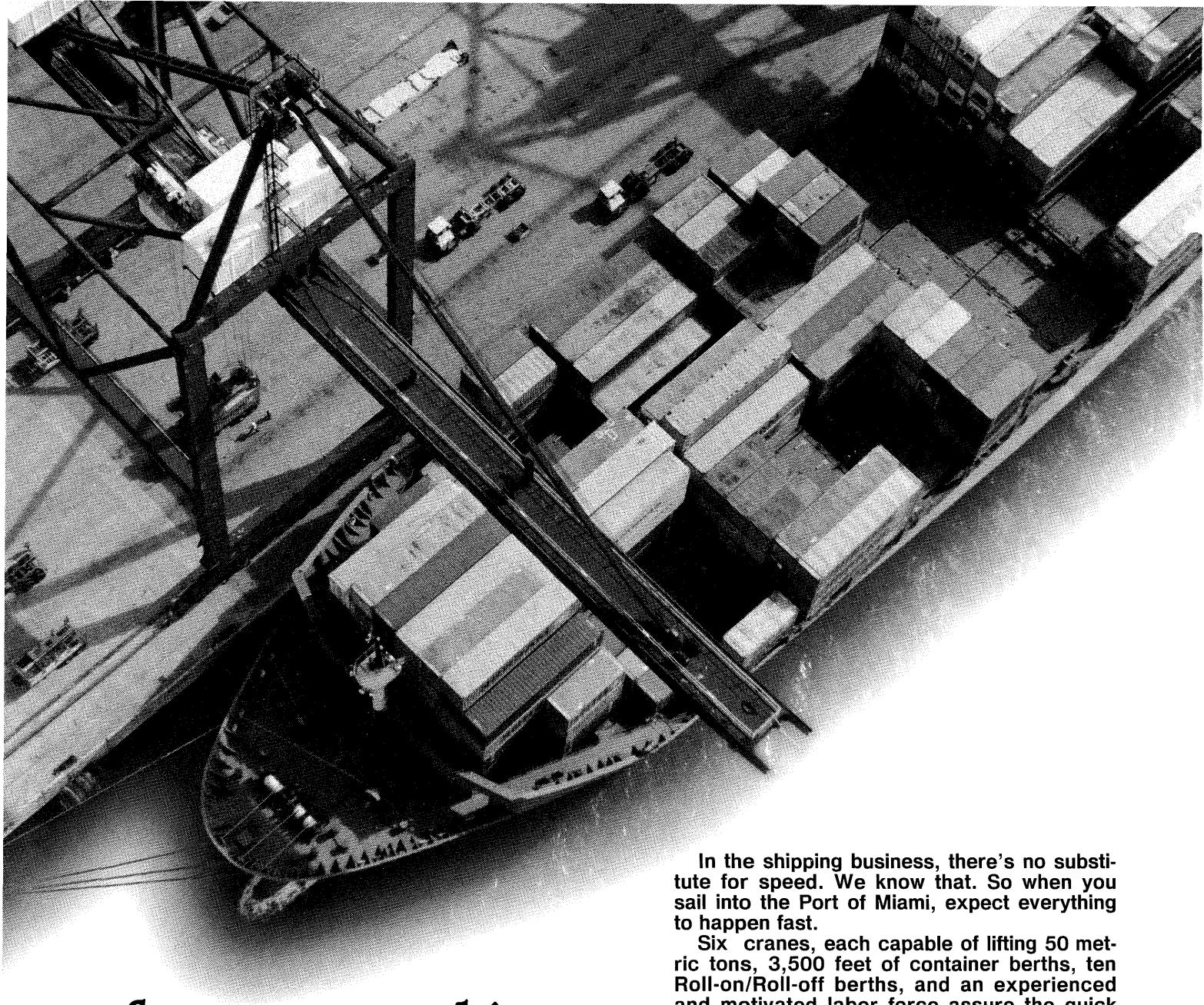
General view of the port of Bassens, extending some 3kms, at the gates of Bordeaux.

The container terminal at Le Verdon, located on the Atlantic seaboard is open 24 hours a day, 365 days a year.

Port of Bordeaux



Bassens: the grain terminal.



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In the shipping business, there's no substitute for speed. We know that. So when you sail into the Port of Miami, expect everything to happen fast.

Six cranes, each capable of lifting 50 metric tons, 3,500 feet of container berths, ten Roll-on/Roll-off berths, and an experienced and motivated labor force assure the quick turn-around of your vessel.

Our Miami International Cargo System (MICS) ties U.S. Customs' Automated Manifest System (AMS), its Automated Broker Interface (ABI), as well as the U.S. Department of Agriculture, into a community-wide computer network, all helping to speed the release of your cargo within hours of arrival.

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PORT OF THE AMERICAS
MIAMI

PORT of MIAMI

Port of Miami, 1015 N. America Way, Miami, Florida 33132 Phone (305) 371-7678 Fax (305) 372-7605

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Contents

IAPH ANNOUNCEMENTS & NEWS
New Year's Messages 3
President and VPs Meet in Miami 4
1994 Membership Dues Invoiced • 1994/1995 IAPH Bursary and Award Schemes Entry Conditions 5
List of IAPH-affiliated Training Institutions 7
IAPH Essay Contest 1994/1995 9
Survey Conducted Again on Non-ISO Standard Containers 10
IAPH Foundation Sponsors Publication • IPD Fund: Contribution Report 11
Minutes of Human Resources Committee Meeting 12
Report of Port Planning and Construction Committee Meeting • Report by Bursary Recipient 14
UNCTAD Meetings in Geneva: Ports — Preparing for the Millennium ...15
Mr. R. Kondoh Visits Shanghai and Nanjing • Membership Notes 18
Visitors to Head Office • Obituary 19
OPEN FORUM
London Dumping Convention Consultative Meeting: Report upon Attendance of IAPH Observer 21
Sustainable Development for Ports 24
INTERNATIONAL MARITIME INFORMATION
WORLD PORT NEWS
Resolution A.7457(18) of IMO Assembly • Invitation to Second Contest of Port Memos in 1994 • Theme Chosen for '94 Bremen Conference 29
BIMCO Statement on Stowaways, Port Security • More International Approach: Europe Dredging Association 30
ICS/ISF Guidelines on Safety Management • New Publications 31
The Americas
Halifax Freezes Tariffs Four Years Running • Montreal Continues Tariff Freeze in 1994 • Port of Long Beach Opens Offices in China 32
New Cranes Delivered to Oakland • First 747-400 Freighter Takes Off from Sea-Tac 33
Port Engineering — Building the Future: Port of Charleston 34
Tacoma, Fujian to Work for Closer Trade Ties 36
Africa/Europe
Actual Situation of Ports in Croatia 36
Port of Tallinn in profile 37
Plans for Vuosaari Port Soon Completed 38
Le Havre Organization of Cargo-handling • Garden Symbolic of Osaka-Le Havre Ties 39
Hamburg Port Interface in International Trade 40
More Containers, Less Bulk in Amsterdam 41
Landfarming Project Begins in Amsterdam • Transshipment Improves in Port of Rotterdam 42
Ro-ro Terminal at Hull for Superfreighters • ABF, NSF Choose Poster Winners 43
Environmental Study by ABP Southampton • Damaged Crane Moved Inland at Felixstowe 44
Asia/Oceania
Dedicated Cruise Terminal for Brisbane • Fremantle Port Vital to WA Economy • Zone Development Gives Impetus to Nanjing Port ...45
4th-Phase Construction in Qinhuangdao Starts • Technical Assistance Grant to Indonesia • Mauritius Freeport Authority in profile 46
Our Commitment to Singapore Shipping Industry • Port Authority of Thailand in profile 47
Bremen Mission Hosts Reception in Tokyo 48

SINGAPORE PORT INSTITUTE

The Singapore Port Institute (SPI), training arm of the Port of Singapore Authority (PSA), has trained more than 3000 personnel from 55 countries through its courses. For 1994, SPI will be offering the following courses for managerial, operations, technical and marine personnel from the shipping and port–related industries :

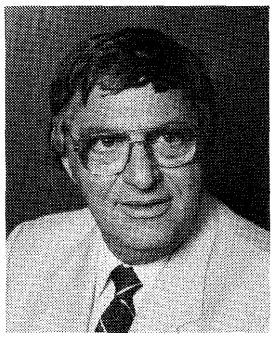
Course	Dates	Duration	Fee (S$)
Management of a Warehousing & Distribution Centre	9 - 13 May	1 week	$1,150
Prevention of Marine Pollution from Ships – MARPOL 73/78	16 - 20 May	1 week	$1,150
Port Management & Operations	6 - 17 Jun	2 weeks	$2,000
Management of Container Operations	4 - 15 Jul / 17 - 28 Oct	2 weeks	$2,000
Management & Operations of a Break – Bulk Terminal	25 Jul - 5 Aug	2 weeks	$2,000
Marketing of Port & Shipping Services	5 - 9 Sep	1 week	$1,800
Oil, Chemical & Gas Tanker Safety	5 - 16 Sep	2 weeks	$2,000
Port Engineering	5 - 23 Sep	3 weeks	$2,750
Diploma in Marine Operations & Administration	29 Aug 94 – 9 Jan 95	5 weeks	$5,200
Marine Fire & Oil Spill Control	26 Sep – 7 Oct	2 weeks	$2,000
Management of Port Security	3 - 14 Oct	2 weeks	$2,000
Drive Technology	7 - 18 Nov	2 weeks	$2,000
Container Ship Stowage Planning	14 - 25 Nov	2 weeks	$2,000
Operations Management – Application in Ports	21 - 25 Nov	1 week	$1,150
Handling, Transportation & Storage of Dangerous Goods	21 Nov - 2 Dec	2 weeks	$2,000
Practical Pilotage Attachment	On request	2 weeks	$2,600
Bridge Teamwork & Shiphandling Simulation	On request	1 week	On application

For course details and application forms, please contact the Singapore Port Institute : TELEX : PSA TRG RS28676; TELEPHONE : (65)321-1825 / 321-1826; TELEFAX : (65)276-9450.

PSA
PORT OF SINGAPORE AUTHORITY

IAPH ANNOUNCEMENTS AND NEWS

New Year's Messages



Carmen Lunetta
President

With the beginning of every new year, we have the opportunity to reflect upon the accomplishments of the year just ending — as well as look forward to the opportunities and challenges that lie ahead. So it is with great ehthusiasm and optimism that I extend New Year's Greetings to each and every of our IAPH family.

As we examine the issues facing our port communities, I believe there are significant reasons for optimism. First of all, are the achievements we have made in bringing the world's ports to a higher level of consistency in uniform standards and upgrading of technology. While there is still much to do, much has already been achieved.

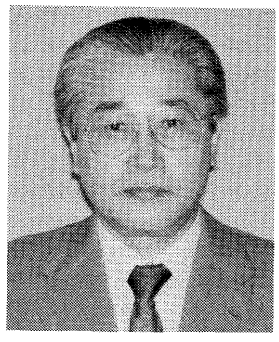
A second point of optimism is the changing political climate in many of our countries. With a general shifting away from military rule and government control of business toward privatization of many industries, the confidence of investors has returned, and new markets are emerging as traditional markets strengthen. These trends are not universal, and many real hurdles remain, but on the whole, our understanding of the importance of the global connections between markets can be seen in increased trade activity through our ports — and that is definitely a cause for optimism.

One factor which remains consistent in our review of the past year, is change. Change in political boundaries, traditional market alliances, and efforts — such as the NAFTA accord — which have tremendous potential for even more change.

In an effort to be even more responsive to the needs of IAPH members, a new organizational structure has been adopted. It will allow IAPH to provide a more timely response to global issues as they develop, which will be a significant advantage for our members.

Perhaps the greatest challenge facing the world's Ports Community, is to be able to anticipate the issues we will have to face and overcome in the next decade. Clearly, environmental issues will have a high priority on our agenda — and we hope to be positioned to spell out some of those issues at our 1995 Conference. IAPH has a tradition of alerting its members to the challenges that lie ahead — such as Walter Abertnathy's "White Paper" which predicted the emergence of the PANAMAX vessels, and allowed many of us to be prepared when those ships came on line. This organizational tradition of forward-thinking will serve IAPH's well in the years ahead.

And as we look ahead to 1994, it is my sincere pleasure to extend every good wish to you, your families, and your associates for good health, happiness and prosperity. I look forward to the opportunity to work with you, and to serve the interests of our industry.



Hiroshi Kusaka
Secretary General

At the outset of 1994, it is with great pleasure that I extend my hearty greetings to all members of IAPH's global family.

First, I would like to renew my profound thanks and appreciation to our friends at the MSB Sydney and the other Australian members for the magnificent efforts they made in hosting the 18th World Ports Conference of IAPH last year in Sydney. As many of you witnessed, the gathering was extremely successful with the animated discussions on various topical themes conducted by the participants during the conference week. Perhaps by now the Proceedings of the Sydney Conference, sent from the Tokyo Head Office last November, will have reached our members' hands. I trust that each recipient of the publication will recall the extremely warm hospitality the participants received while in Sydney and that they will no doubt pay tribute to the

(Continued on Page 4)

New Year's Message—

From Hiroshi Kusaka

(Continued from Page 3)

wonderful efforts of our hosts in producing such a stimulating forum for IAPH members.

If we focus on the business environment surrounding the ports industry during the last year, it is clear that while the economic growth of the Asian Region was the only source of encouragement for the world, the blight of recession affected all countries throughout the world. I imagine that, under these circumstances, 1993 must have been an extremely tough year for many members of our Association as they strive to meet the constant demands on them for innovation and improved efficiency.

As President Lunetta says in his message here, the New Year will no doubt be another challenging year for the port industry. The environment surrounding world trade has dramatically changed as a result of the integration of EC markets which has already into effect, the successful conclusion of the NAFTA accord, the envisaged economic growth of the Asia-Pacific Economic Region, which alone shows continued strength, and the conclusion of the GATT Uruguay Round of multinational trade talks, in which global consensus was finally reached after a long and hard course of negotiations. I hope that the respective IAPH members will be able to make the best use of all opportunities for the success of their businesses by providing their users with the highest quality of services which meet customers' constantly changing needs.

With the members' participation and cooperation, our Association has constantly been endeavouring to promote greater efficiency among all ports and harbors through the exchange of information about new techniques and technology relating to port development and management. IAPH's efforts have been directed to protecting the common interests of world ports by acting as their spokesman in various international maritime forums and to voicing port viewpoints so that they will be better understood.

I believe that our restructured technical committees will be all the better able to carry out their respective activities and, at the same time, I am sure that IAPH's working relations with the International Maritime Organization will be further enhanced this year for increased benefits of our members.

Finally, I would like to refer to this year's most important event. The mid-term meeting of the Executive Committee of our Association will be held from May 30 to June 3 this year, hosted by the Port of Copenhagen. The agenda will include strategies to help the technical committees deal with such global issues as technological innovation, environmental protection, the further expansion of IAPH's liaison work with the various UN agencies from which IAPH is given consultative status, the strengthening of our financial foundation and the master plan for the 19th IAPH Conference in 1995, to be hosted by the Ports of Seattle and Tacoma.

Again this year, my staff and I at the Head Office in Tokyo are determined to continue our utmost endeavours in further promoting the work of IAPH, and in doing so we seek your continued support and active participation in the Association's various activities.

President and VPs Meet in Miami

At the request of President Carmen Lunetta, an ad hoc meeting of the President and Vice Presidents was organized at the Port Director's conference room of the Port of Miami for 1½ days on Monday and Tuesday, 8 & 9 November, 1993, for the purpose of examining the current situation of the Association and to better prepare for the mid-term meeting of the Exco as well as the next Conference in Seattle/Tacoma in 1995.

Present at the Meeting were:
Mr. Carmen Lunetta, President of IAPH (Director, Port of Miami, U.S.A.)
Mr. R. Cooper, 1st Vice President (Chief Executive, Ports of Auckland Ltd., New Zealand)
Mr. Jean Smagghe, 2nd Vice President of IAPH (Executive Director, Port Autonome du Havre, France)
Mr. Dominic J. Taddeo, 3rd Vice President of IAPH (President & CEO, Port of Montreal, Canada)
Mr. John Mather, Immediate Past President and International Affairs & International Organizations Liaison (Chairman & Chief Executive, Clydeport Limited, Glasgow, U.K.)
Mr. P.J. Falvey, IAPH Legal Counselor (Special Counsel, The Port Authority of New York and New Jersey, U.S.A.)
Mr. W. Don Welch, Chairman of the Finance Committee (Executive Director, South Carolina State Ports Authority, Charleston, U.S.A.)

Specially invited to attend the meeting was Mr. Erik Stromberg, President, American Association of Port Authorities (AAPA), who was passing through Miami on a business mission to the Caribbean Islands. Representing the Head Office was Mr. R. Kondoh, Dy. Secretary General.

Mr. Kondoh, after attending the Miami meeting, visited New York to meet with Mr. Alvis Pauga, Manager, Research, Port Department, and Mr. Mat Baratz, Port Department Market Analysis Unit, The Port Authority of New York & New Jersey, to discuss matters concerning the activities of the Sea Trade Committee.

IAPH Officers and President Lunetta's staff from the Port of Miami

1994 Membership Dues Invoiced

A circular from the Secretary General of IAPH with an invoice for the membership dues for 1994 has been sent to all members of the Association from the Tokyo Secretariat. The relevant documents were dated December 10, 1993, the date on which exchange rates between the SDR (Special Drawing Rights) and the five major currencies shown below are based in announcing the following year's membership dues for the respective members in accordance with the number of units subscribed by the respective Regular Members or to which category of which class the Associate Members belong.

The value on the invoice is shown in SDR. The term "SDR" means "Special Drawing Rights", as adopted and applied within the monetary system by the IMF (International Monetary Fund).

For payment, each member is requested to quote the exchange rate between the SDR and one of the currencies from the IMF basket listed in the table below, as it was on December 10, 1993.

The table below shows the SDR value per membership unit for Regular and all classes of Associate Members. The equivalent rates of the dues in the five currencies are also indicated in the table.

MEMBERSHIP DUES FOR 1994

as of Dec. 10, 1993

1 SDR = ¥151.197 $1.38904 DM2.35859 Fr.8.07796 £0.929758

	SDR	¥	US$	DM	F.Fr	Stg£
Regular						
1 unit	1,010	152,708	1,402	2,382	8,158	939
2 units	2,020	305,417	2,805	4,764	16,317	1,878
3 units	3,030	458,126	4,208	7,146	24,476	2,817
4 units	4,040	610,835	5,611	9,528	32,634	3,756
5 units	5,050	763,544	7,014	11,910	40,793	4,695
6 units	6,060	916,253	8,417	14,293	48,952	5,634
7 units	7,070	1,068,962	9,820	16,675	57,111	6,573
8 units	8,080	1,221,671	11,223	19,057	65,269	7,512
Associate						
A-X-1, B & C	850	128,517	1,180	2,004	6,866	790
A-X-2	580	87,694	805	1,367	4,685	539
A-X-3	290	43,847	402	683	2,342	269
D	150	22,679	208	353	1,211	139
E	130	19,655	180	306	1,050	120
Temporary	500	75,598	694	1,179	4,038	464

Note: X applies to all caregories, i.e., I, II and III.

The Secretary General would appreciate members remitting their dues to the IAPH account at one of the following two banks, so that the Head Office can save on the bank commissions which are necessary if the payment is made by check.

The Fuji Bank Ltd., Marunouchi Branch, Account No.883953

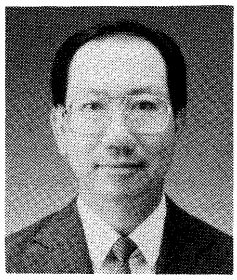
The Bank of Tokyo Ltd., Uchisaiwaicho Branch, Account
No. 526541 (Name of Account: International Association of Ports and Harbors)

All members' special cooperation in completing the 1994 dues as promptly as possible will be sincerely appreciated.

As for the 1993 dues payment situation, our accountant Mr. Onso has indicated that as of December 10, 1993, 10% of the total revenues budgeted for the last year remains unpaid. Against the budgeted amount of 146 million yen, a total of 131 million yen has actually been paid. Thus an amount of 15 million yen as arrears involving 37 (out of 237) Regular and 11 (out of 110) Associate Members has been carried over to the 1994 account. In this connection the Secretary General appeals to those dues delinquent members to settle the outstanding dues as soon as possible.

1994/1995 IAPH Bursary and Award Schemes Entry Conditions

Mr. Goon Kok Loon, Port of Singapore's Deputy Executive Director, who chairs the IAPH Human Resources Committee (formerly called the International Port Development Committee, or CIPD in short), has recently announced the details of the conditions for the IAPH Bursary and Award Schemes for 1994/1995.



The conditions for entry both to the Bursary and Award (Essay Contest) are featured in this issue together with a promotion poster which each member is requested to display in an eye-catching place in each port organization upon receipt.

The major points which were confirmed or newly added to the conditions for both the Bursary and Award Schemes as a result of consideration given by the committee members at its meeting held in Singapore on November 2 and 3, 1993, include:

Bursary Scheme

Continuation of organizational application: The application must be submitted by the IAPH member port/organization on behalf of the employee who is applying for an IAPH Bursary. (Formerly, any eligible individual was able to directly submit his or her application to the chairman of the Committee.)

Submission of a report by the bursary recipient: It is a condition that each recipient must submit to the Secretary General of IAPH a report on his/her participation in the training within one month of the end of the course. Unfortunately, however, some recipients have not been faithful to meet this requirement. In view of this, Chairman Goon comments that, if any bursary recipient fails to submit a report whithin the required period of time, the Committee will not grant a new bursary to any new applicants from that particular port/organization for a certain period of time.

Award Scheme (Essay Contest)

All entries must be accompanied by an English summary. In the Essay Contest, IAPH has accepted entry

papers in three languages, namely in English, French and Spanish. While these conditions will continue to apply for the Essay Contest 1994/1995, the Committee has added further conditions for entry to the new term Contest whereby all entries must be accompanied by a summary written in English, no matter which language the applicants may use in writing their papers.

The other conditions for entry to both schemes should remain unchanged as their details are featured in this issue.

THE IAPH BURSARY SCHEME 1994

Object

The object of the Scheme is to provide financial assistance towards the cost of sending selected applicants from IAPH member ports in developing countries on approved training courses overseas that are offered by training institutes affiliated with IAPH.

The Bursary Award

Subject to the availability of funds, a maximum of 10 bursaries will be awarded for each year, each not exceeding US$3,500.

Conditions for Entry

1 The applicant should not be older than 45 years of age and must have been employed at middle or senior management level by an IAPH member port for at least three years.

2 The application must be submitted in accordance with the suggested format, accompanied by a brief description of how the proposed training would benefit the applicant and his/her port and by evidence that the applicant has been provisionally accepted for the proposed training course. To ensure the applicant is duly endorsed by his/her port, the application must be submitted by the port's chief executive officer on behalf of the applicant.

3 In estimating the costs to be incurred for the proposed training, the course/tuition fees, accommodation and subsistence should be quoted, **explicitly excluding international airfares or other forms of primary travelling costs.** If the estimated total cost exceeds US$3,500, the port chief executive must submit a written statement that the balance shall be borne by the applicant's organization.

4 The application must be submitted at least 60 days before the commencement of the proposed training course. In this context, the applicant should be made aware of the time required for making the necessary arrangements, e.g. obtaining visas.

5 The final decision on awarding a bursary or not rests with the Chairman of the Committee on Human Resources. As soon as such a decision is made, the applicant will be informed of the result by the IAPH Secretary General through the chief executive officer of his/her port. At the same time, the Secretary General will take the necessary steps to disburse the approved funds from the Special Port Development Technical Assistance Fund, the remittance of which is to be made directly to the training institute involved. The recipient will be required to account for expenditures and to reimburse any monies not spent out of the bursary.

6 For the purpose of making this financial assistance available to as many applicants as possible, those who have already been awarded a bursary will in principle not be considered. For the same reason, the number of bursaries to be awarded to any member port will not be more than one for each two-year period.

7 After completion of the training course, each recipient must submit to the IAPH Secretary General a report on his/her participation in the training within one month of the end of the course. Such reports will be published in the magazine "Ports and Harbors".

A SUGGESTED FORM OF APPLICATION FOR THE IAPH BURSARY SCHEME 1994

I, the undersigned, hereby submit for your consideration an application for

Mr./Ms. _____
Name of Applicant

_____
Job Title

_____
Name of Port

who is an employee of this organization, together with supporting information and data on the applicant in accordance with the items stipulated below:-

(1) Brief personal history (date of birth, etc.)
(2) Brief employment history with the Port
(3) Educational qualifications (Please also indicate whether the applicant is fluent in English, French or Spanish.)
(4) Professional/technical qualifications
(5) Previous overseas training courses attended, if any
(6) Course for which application is being made (Specify nature of Course, duration, and location of host port/institution.)
(7) Amount of bursary for which application is being made (Particulars of expenses should be given in US dollars in support of the application.)

Course fees _____

Accommodation _____

Other particulars _____

Total: US$ _____

_____
Chief Executive Officer

_____
Name of Port

Note 1: A breakdown of the requested amount as under item (7) has to be made in accordance with the information provided by the training course organizer.

Note 2: State any other source from which financial assistance are being sought or have been already granted, if any, for instance, governmental, inter-governmental and lending institutions (e.g., UNCTAD, World Bank, etc.).

Please send the application to:-

The Chairman, IAPH Committee on Human Resources
c/o Secretary General, International Association of Ports and Harbors
Kotohira Kaikan Building, 1-2-8 Toranomon,
Minato-ku, Tokyo 105, Japan,
Fax: +81-3-3580-0364, Telex: 2222516 IAPH J

List of IAPH-affiliated training institutions

(* involved with the IAPH Bursary Scheme in the period of 1976 to 1993)

Europe/African region

	Name of Institute	IAPH Affiliation	Contact Address
*	IPER (Institut Portuaire du Havre), France	Port of Le Havre	Course Co-ordinator IPER 9, Rue Emile Zola 76087 Le Havre Cedex Fax: 35-41-2579
*	TEMPO (Technical & Managerial Port Assistance Office) the Netherlands	Port of Rotterdam	Rotterdam Municipal Port Management, TEMPO P.O. Box 6622 3002 AP Rotterdam Fax: 31-10-4778240
*	IFEP (Institut de Formation & D'Echanges Portuaires), France	Port of Marseilles	IFEP Port Autonome de Marseille 23, place de la Joliette B.P. 1965 13226 Marseille Cedex 02 Fax: 33-91-39-4500
*	IHE (Int'l Institute for Infrastructural, Hydraulic and Environmental Engineering) the Netherlands	Associate Member	IHE P.O. Box 3015 2601 DA Delft Fax: 31-15-122921
*	Dept of Maritime Studies & Int'l Transport, U.K.	Associate Member	Course Director Dept of Maritime Studies & Int'l Transport University of Wales College Cardiff P.O. Box 907 Cardiff CF1 3YP Fax: 222-874301
	Antwerp Port Engineering & Consulting v.z.w. Belgium	Associate Member	Prof. G. Derkinderen Chairman Antwerp Port Engineering & Consulting v.z.w. Van Schoonbekeplein, 6 B-2000 Antwerp, Belgium Fax: 32-3-226-4899
	Delft Univ. of Technology the Netherlands	Associate Member	Ir. K. d'Angremond Professor of Coastal Engineering Delft University of Technology Faculty of Civil Engineering P.O. Box 5048 2600 GA Delft Fax: 015-785124

	IMTA (Int'l Maritime Transport Academy) the Netherlands	Associate Member	Mr. P. Sollman, Director International Maritime Transport Academy PO Box 137 1780 AC Den Helder Fax: 02230-16520
	University of Plymouth, Institute of Marine Studies, U.K.	Associate Member	Prof F.F. Weeks Inmarsat Prof. of Maritime Communications University of Plymouth Drake Circus Plymouth PL4 8AA Fax: 752-232406

American Region

	Name of Institute	**IAPH affiliation**	**Contact Address**
*	IPPPM (Int'l Program for Port Planning & Management), U.S.A.	Port of New Orleans	Director, IPPM c/o CUPA/LUTAC University of New Orleans New Orleans Louisiana 70148 Fax: 504-286-6272
*	World Trade Institute, U.S.A.	Port Authority of NY & NJ	Manager Int'l Training World Trade Institute One World Trade Center-55W New York, N.Y. 10048
	MIT (Massachusetts Institute of Technology) U.S.A.	Associate Member	Ms. Carol Robinson Ocean Engineering Librarian M.I.T. Libraries James Madison Barker Engineering Library Room 10-500 Cambridge, Mass. 02139 Fax: 617-258-5623
	Oregon State University U.S.A.	Associate Member	Prof. Frederick J. Smith Agricultural & Resource Economics Oregon State University Corvallis, OR 97331-3601 Fax: 503-737-2563

Asian Region

	Name of Institute	**IAPH affiliation**	**Contact Address**
*	Singapore Port Institute Republic of Singapore	Port of Singapore Authority	Training Manager Singapore Port Institute SPI Building 2, Maritime Square Singapore 0409 Fax: 65-274-0721
	NIPM (National Institute of Port Management) India	Associate Member	Mr. R. Gopal Director East Coast Road Uthandi, Madras 600 096 India Tlx: 041-21082 NIPM IN

IAPH Award Scheme Essay Contest 1994/1995

How could the quality of port services be improved?
Your answer could win you the Akiyama Prize,
A silver medal and US$1,000 in cash
plus
An invitation, including travelling costs and hotel accommodation
to attend the 19th World Ports Conference of IAPH, 10 — 16 June 1995
in Seattle/Tacoma, U.S.A.

IAPH invites entries for its 1994/1995 Award Scheme
from those working at all levels
in IAPH member ports/organizations in developing countries

Conditions for Entry to the IAPH Award Scheme 1994/1995

1. Suggestions regarding how the quality of port services could be improved should be presented in English, French or Spanish, typewritten, and submitted to the Secretary General, the International Association of Ports and Harbors. Kotohira Kaikan Building, 1-2-8, Toranomon, Minato-ku, Tokyo 105, Japan.
2. The suggestions may cover marine, engineering or port operations services. Tangible benefits resulting from the changes should be quantified, together with the costs (if any) involved.
3. Entries may be made by individuals employed by IAPH member organizations, and should be the original work of the entrant. Those which are the result of official studies or otherwise sponsored projects will not be eligible.
   - 3.1 Entry texts should not exceed 20 pages excluding a reasonable number of appendices containing tables, graphs or drawings.
   - 3.2 The paper size must be A4 (21.0 x 29.7 cm).
   - 3.3 Regardless of language used (English, French or Spanish), the entry paper must be accompanied by a brief summary in **English.**
   - 3.4 Three (3) copies of the entry paper should be submitted to the IAPH Head Office at the above address.
4. Entries will be judged by a panel of experts appointed by the Chairman of the Committee on Human Resources (formerly called CIPD). The panel will give greater merit to papers identifying and evaluating specific improvements than to entries covering a wide range of improvements in general terms.
5. The First Prize for the winning entry will consist of:
   - 5.1 The Akiyama Prize (a silver medal plus US$1,000 or the equivalent in local currency); and
   - 5.2 An invitation, including travelling costs and hotel accommodation, to attend the 19th World Ports Conference of IAPH, to be held from 10 to 16 June 1995, in Seattle/Tacoma, U.S.A.
6. In addition to the First Prize, Second, Third and Fourth Prizes of US$500, US$400, US$300 will be awarded to the next best entries.
7. Additional prizes of US$100 each will be awarded to any other entries judged by the panel to be of a sufficiently high standard.
8. A summary of winning entry may be eligible for publication in the "Ports and Harbors" magazine.
9. At the decision of the panel, a bursary may be awarded to any one prize winner (subject to agreement of the employer)
10. The closing date for receipt of entries is **30 September, 1994.**

Survey Conducted Again on Non-ISO Standard Containers

At the instruction of Mr. J. J. Terpstra, Executive Director, Port of Tacoma, U.S.A., who chairs the Cargo Operations Committee, the Head Office in Tokyo circulated a survey form to all member ports on November 29, 1993 asking them to return the completed form by April 10, 1994. Mr. Terpstra's covering letter and the questionnaire form were as follows.

Chairman's covering letter dated November 10, 1993

Gentlemen:

As you will recall the IAPH Cargo Operations Committee conducted a survey in 1992 to assess the penetration of non-ISO standard containers. This survey was quite revealing and gave good information as to the penetration of non-ISO standard containers into the port system worldwide.

While proposals to change ISO standards have made no progress, we are aware that many non-standard containers are in use and that a number of transport businesses are planning to introduce them into their operating system and may have planned for or already have the capability to handle them.

The purpose of this second survey is to validate the results of the first survey and determine the advances these non-ISO standard containers have made into the port systems.

The Cargo Operations Committee would appreciate your assistance in completing the enclosed questionnaire and returning it to: The Secretary General, International Association of Ports & Harbours in Tokyo.

Yours sincerely,
John J. Terpstra
Chairman, Cargo
Operations Committee, IAPH

SURVEY ON THE PENETRATION OF NON-ISO STANDARD CONTAINERS

1. NAME OF PORT: _____

   Address: _____

   Contact Person: _____

   FAX/Telex: _____

2. CONTAINER THROUGHPUT – MOST RECENT FINANCIAL YEAR (1993)
   2.1 Total Number Containers Handled: _____

   2.2 Total Containers Expressed in TEUs: _____

   2.3 Total Non-ISO Standard Containers Handled: _____

3. IF NON-ISO STANDARD CONTAINERS HANDLED, PLEASE INDICATE VARIATIONS TO STANDARDS:

3.1 Length:	Number of 45' Units	Number of 48' Units	Number of Other (Specify Units)
	☐	☐	☐
3.2 Width:	Number of 8'6" Units	Number of Other (Specify Units)	
	☐	☐	
3.3 Height:	Number of 9'6" Units	Number of Other (Specify Units)	
	☐	☐	

4. FORWARD PLANNING
   4.1 Has your Port purchased, built or ordered container handling equipment since 1 January 1990? (please circile whichever relevant)

   Yes No

   4.2 If Yes, have you specified the equipment should be able to handle non-ISO standard containers?

4.2.1 GANTRY CRANES:	Yes	No
4.2.2 YARD CRANES/STACKERS:	Yes	No
4.2.3 STRADDLE CARRIERS:	Yes	No
4.2.4 FORK LIFT TRUCKS:	Yes	No
4.2.5 OTHER (please specify):	Yes	No

5. FUTURE DEVELOPMENTS
   5.1 If your Port has not handled non-ISO standard containers, are you aware of any plans to introduce such containers before: (please delete one).

5.1.1 1 January 1994:	Yes	No
5.1.2 1 January 1995:	Yes	No
5.1.3 Other Date: (please specify)	Yes	No

   5.2 Were you advised of these Plans by: (please delete one)

5.2.1 SHIPPING LINES:	Yes	No
5.2.2 CARGO SHIPPERS:	Yes	No
5.2.3 OTHER: (If Yes, please specify)	Yes	No

7. IF APPLICABLE, PLEASE SUPPLY ANY OTHER RELEVANT INFORMATION OR COMMENTS.

By April 10, 1994
Please return your completed form to:
Secretary General, IAPH Head Office
Kotohira Kaikan Building
1-2-8 Toranomon, Minato-ku, Tokyo 105 Japan
Fax: +81-3-3580-0364

Thank you for your cooperation!
Tokyo, December 1993

IAPH Foundation Sponsors Publication of 2 Papers

The IAPH Foundation, a Japanese Corporation, has recently sponsored the publication of two papers, the one entitled "Restructuring Port Operations in the Asia-Pacific Region" and the other "Revitalising the Australian Waterfront: Past, Present and Future Trends", both authored by Dr. Peter J. Rimmer, Head, Department of Human Geograpahy, Research School of Pacific Studies, The Australian National University. The author has been engaged in a wide range of transport studies in Australia, Indonesia, Malaysia, Papua New Guinea, the Philippines, Singapore and Thailand. He has also been a consultant for several Australian and international organizations, including the World Bank. Recently, the scope of his work has been widened to encompass multi-modal transport and communications developments within the Trans-Pacific ocean economy.

Dr. Rimmer acted as our reporter for the Sydney Conference in April last year and his reports synthesizing the working sessions were carried in the IAPH journal and then in the official proceedings.

The author has prepared the first paper entitled "Restructuring Port Operations in the Asia-Pacific Region" for the Australian Transport Research Forum and has introduced the following introductory words:

> Abstract: Government-owned port administration and management in the Asia-Pacific region has been characterised by non-economic objectives, lack of market discipline and lack of competition. As additional infrastructure alone cannot redress these problems, an examination is made of three strategies — administrative modernisation, commercialisation/corporatisation, and privatisation — for overcoming the operational problems of port organisations by reference to a series of case studies. Administrative modernisation is exemplified by the Port of Thailand, commercialisation/corporatisation by Singapore and New Zealand ports, and privatisation by Port Kelang and Port Tauranga. An assessment is made of the strengths and weaknesses of these different strategies of port institutional change.

The second paper entitled "Revitalising the Australian Waterfront" was orginally prepared for a seminar organized by the Waterfront Revitalization Research Center (President: Mr. Kiyoyasu Mikanagi), a Tokyo based institute which is an Associate member of IAPH. We express our deep appreciation to the Waterfront Revitalization Research Center for the permission afforded IAPH to include the paper among the Foundation-sponsored publications of 1993.

The IAPH Head Office will be able to complete the publication of the two papers before Christmas, and will arrange for all members to receive a copy mailed from Tokyo.

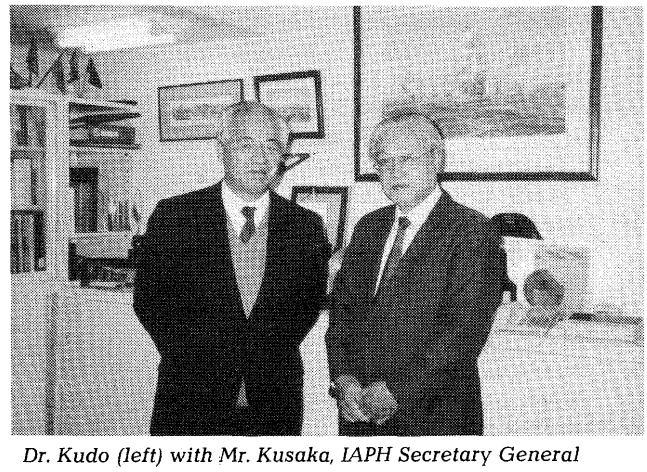
The IPD Fund: Contribution Report

Dr. Kazuo Kudo donates $4,000

On the afternoon of December 7, Dr. Kazuo Kudo, an IAPH Life Supporting Member from Japan, visited the Head Office to hand a sum of US$4,000 (¥450,000) to IAPH as a contribution to the IPD Fund. Dr. Kudo, a former research engineer at the Ports and Harbors Bureau, Ministry of Transport (MOT), is one of the seven Life Supporting Members of IAPH. His association with IAPH dates back to the Association's Conference held in Tokyo in 1967 as he was assigned to assist the organization of the Conference. After serving with various institutes such as the Asian Development Bank (ADB) in Manila and the Overseas Coastal Development Institute, Japan, to which he is still affiliated in his capacity as an adviser, Dr. Kudo is currently a professor to the Tokyo Denki (Elecro-mechanics) University (Faculty of Science & Engineering).

According to Dr. Kudo, the contribution was arranged in memory of his father Mr. Mori-ichi Kudo. His father died at 85 on November 30, 1993 at Dr. Kudo's home in Kawasaki. Dr. Kudo is using part of the incense money received at his father's funeral.

Dr. Kudo says, "I have long wished to give some financial support to IAPH's international cooperation programs for training personnel from developing ports. My father's departure has made me take this action as I know my father would like me to do something useful to help people who need more training and education, and for such a purpose, nothing could be more appropriate for me than to make contributions to the IPD Fund."



Dr. Kudo (left) with Mr. Kusaka, IAPH Secretary General

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

Contributors Paid:	Amount (US$)
ABP (Associated British Ports), U.K.	3,000
Akatsuka, Dr. Yuzo, Univ. of Saitama, Japan	230
Akiyama, Mr. Toru, IAPH Secretary General Emeritus, Japan	1,000
Auckland, Ports of, Limited, New Zealand	500
Barcelona, Puerto Autonomo de, Spain	1,000
Bintulu Port SDN, BHD, Malaysia	200

Cameroon National Ports Authority, Cameroon	480
Cayman Islands, Port Authority of, the Cayman Islands	250
Clydeport Ltd., U.K.	1,000
Constanta Port Administration, Romania	250
Copenhagen Authority, Port of, Denmark	1,000
Cotonou, Port Autonome de, Benin	100
Cyprus Ports Authority, Cyprus	1,000
Delfzijl/eemshaven, Port Authority of, the Netherlands	350
de Vos, Dr. Fred, IAPH Life Supporting Member, Canada	150
Dubai Ports Authority, U.A.E.	500
Dundee Port Authority, U.K.	250
Fiji, Ports Authority of, Fiji	100
Fraser River Harbour Commission, Canada	250
Fremantle Port Authority, Australia	250
Gambia Ports Authority, the Gambia	250
Ghana Ports and Harbors Authority, Ghana	250
Halifax, Port of, Canada	250
Helsingborg, Port of, Sweden	500
Hiroshima Prefecture, Japan	523
Japan Academic Society for Port Affairs, the Japan	267
Japan Cargo Handling Mechanization Association, Japan	259
Japan Port and Harbor Association, the Japan	493
Japanese Shipowners' Association, the Japan	516
Kawasaki, City of, Japan	1,702
Klang Port Authority, Malaysia	200
Korea Container Terminal Authority, Korea	100
KSC (Kuwait Oil Company), Kuwait	1,000
Kudo, Dr. Kazuo, Tokyo Denki University, Japan	4,000
London Authority, Port of, U.K.	500
Maldives Ports Authority, Maldives	100
Marine and Harbours Agency of the Department of Transport, South Australia, Australia	150
Marine Department, Hong Kong	500
Maritime Services Board of New South Wales, Australia	367
Mauritius Marine Authority, Mauritius	200
Miri Port Authority, Malaysia	100
Montreal, Port of, Canada	500
Nagoya Container Berth Co., Ltd., Japan	518
Nagoya Port Authority, Japan	3,564
Nanaimo Harbour Commission, Canada	250
Napier, Port of, Limited, New Zealand	100
New York & New Jersey, Port Authority of, U.S.A.	1,000
Niigata, Port of, (Niigata Prefecture), Japan	860
Okubo, Mr. Kiichi, Japan	274
Osaka Port Terminal Development Corp., Japan	570
Pacific Consultants International, Japan	243
Penta Ocean Construction Co., Ltd., Japan	500
Point Lisas Industrial Port Development Co. Ltd., Trinidad	100
*Primer Concurso Internacional de Memorias Portuarias: Carlos Armero Sisto, Anuario de Puertos: Buenos Aires, Argentina	300
Public Port Corporation I, Indonesia	180
Qubec, Port of, Canada	250
Shipping Guides Limited, U.K.	500
Solomon Islands Ports Authority, Solomon Islands	100
South Carolina State Ports Authority, U.S.A.	1,000
Tauranga, Port of, New Zealand	500
Toyama Prefecture, Japan	254
UPACCIM (French Ports Association), France	1,905
Vancouver, Port of, Canada	500
Total:	US$39,055

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

Human Resources Committee

Minutes of Meeting held on 3rd November 1993 at 09:30am In the Conference Room, 40th Storey, PSA Building

Present

Mr. Goon Kok Loon, Chairman (Port of Singapore Authority, Singapore)
Mr. Joseph Bayada, Member (Cyprus Ports Authority, Cyprus)
Mr. H. Ramnarain, Member (Mauritius Marine Authority, Mauritius)

In Attendance

Mr. R. Kondoh, Dy Secretary General, IAPH Secretariat
Mr. H. Nagai, Assistant Under Secretary, IAPH Secretariat
Mr. J. Menon, Training Manager, Port of Singapore Authority, Singapore

1. Introduction

The Chairman welcomed Mr. Bayada as a member of the Human Resources Committee and thanked all for being present at the meeting despite the short notice.

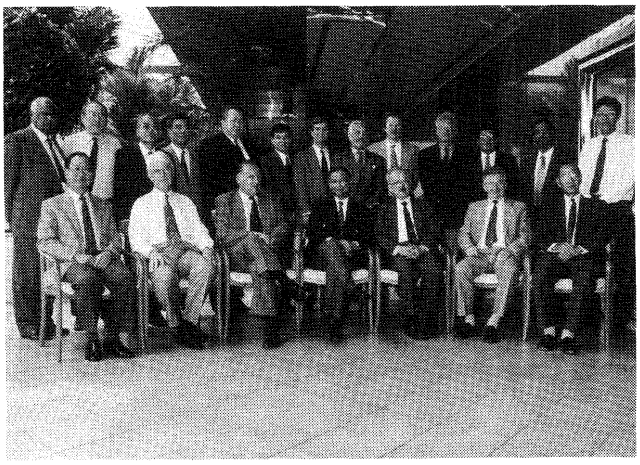
He said that the meeting would provide an opportunity to review past programmes and to formulate the Committee's terms of reference for the next two years.

2. Bursary Scheme

Mr. Kondoh reported that 12 bursary applications from 12 countries were received during April to October 1993. After evaluation, 4 bursaries were awarded to officers from the Cameroon Ports Authority, Ghana Ports Authority, Gambia Ports Authority and Empresa Nacional de Administracao dos Portos, E.P., Cabo Verde. Mr. Kondoh stressed that in administering the bursary scheme, care was taken to ensure that bursaries were not repeatedly disbursed to the same individuals and organizations.

Mr. Kondoh briefed the Committee on the status of the fund-raising campaign for 1992-1994. The Committee noted that to date the IAPH Secretariat had managed to raise US$29,033 of the targeted sum of US$70,000. Mr. Kondoh said the Secretariat would strive to meet the target during the stipulated time frame.

Mr. Bayada enquired whether the Secretariat had up-



IAPH participants on the 40th story of the PSA building.

dated the "IAPH Survey on Training Facilities" published in October 1991. Mr. Kondoh replied that it was difficult to update the publication on a regular basis. However, he assured Mr. Bayada that a list of approved training institutions was included in the Bursary Application Form to keep applicants informed of training opportunities.

The Chairman said that the Singapore Port Institute regularly publicised its courses through articles and advertisements in the monthly Ports & Harbors magazine. He suggested that the Secretariat invite member ports and affiliated training institutions to do likewise. Mr. Kondoh agreed to solicit advertisements from the ports and training institutions concerned.

3. Award Scheme

The Chairman informed the meeting that, during the 18th IAPH Conference in Sydney, it was generally agreed that the title of the IAPH Essay Competition be linked to the theme of the Biennial Conference. This would provide variety essay titles.

Mr. Bayada was of the opinion that it would not be prudent to link the essay title to the theme of the Biennial Conference as this might exclude participation in the essay competition from less developed member ports. To reinforce his point, Mr. Bayada said that if the theme of the Biennial Conference happened to be EDI applications, it would not be of much significance to less-developed ports.

The Chairman acknowledged Mr. Bayada's concern and agreed to retain the current focus of the essay competition, namely "How could the Quality of Port Services be Improved?". However, he emphasised, where possible, an attempt should be made to link the essay title to the theme of the Biennial Conference. Mr. Kondoh would keep the Chairman informed of the theme for the next IAPH Conference as soon as it was confirmed.

The Chairman mentioned that during the recent essay competition, the judges had not been able to assess essays submitted in French and Spanish. He said that there was a need to identify individuals from member ports who were fluent in French and Spanish to serve as judges. Mr. Kondoh would search for suitable candidates and keep the Chairman informed. Mr. Kondoh also agreed to announce the names of judges in "Ports and Harbors" as soon as they become available.

With increasing participation from East Asian ports in IAPH, the Committee discussed the suggestion to include Mandarin as one of the languages in the essay competition. After some deliberation, it was agreed to keep the suggestion in abeyance until an official request was received from East Asian member ports. In the meantime, the languages for the essay competition would remain English, French and Spanish.

4. UNCTAD Monographs on Port Management

Mr. Kondoh reported that to-date 11 monographs had been published and distributed to member ports. The monographs covered the following subjects:

1) Changing from daywork plus overtime to two-shift working
2) Planning land use in port areas: getting the most out of port infrastructure
3) Steps to effective equipment maintenance
4) Operations planning in ports
5) Container Terminal Pavement Management and Supplement
6) Measuring and evaluating port performance and productivity
7) Steps to effective shed management
8) Economic Approach to Equipment Selection & Replacement
9) Multi-Purpose Port Terminals - Recommendations for Planning and Management
10) Computerized Container Terminal Management
11) Electronic Data Interchange Concerning Ports

Mr. Bayada said that the monographs helped to keep member ports updated on issues of concern and interest. He enquired whether the monographs would continue to be published jointly by IAPH and UNCTAD, and suggested that monographs be produced on marketing of port services, port tariffs and rationalising manning levels.

The Chairman assured Mr. Bayada that the project would be continued and took note of the suggested subjects for future monographs.

5. Terms of Reference

The Chairman agreed in principle with the need to keep the terms of reference of the Human Resources Committee as broad as possible. This would enable the Committee to progressively expand its role and activities in the field of human resource development.

Nevertheless, the Chairman stressed that expansion of the Committee's role would ultimately depend on the availability of adequate funds and resources. In the meantime, the Committee would continue to administer the well-proven programmes such as the Bursary Scheme and the IAPH/UNCTAD monographs on port management.

In the light of these considerations, it was agreed that the terms of reference of the Human Resources Committee for the next 2 years should be reflected as follows:
"The Committee will propose, develop and administer programmes for the provision of training, education, and technical assistance to developing ports. The programmes to be offered over the next 2 years will include the IAPH Bursary Scheme, Award Scheme and the IAPH/UNCTAD monographs on port management."

6. Conclusion

There being no further matters raised for discussion, the Chairman adjourned the meeting at 11:00am.

Recorded by: Mr. J. Menon
Approved by: Mr. Goon Kok Loon

Port Planning and Construction Committee

Report of Meeting held on 3rd November 1993 at 09:30am In the Conference Room, 40th Storey, PSA Building

Present

Mr. Philip Ng, Chairman (Port of Singapore Authority, Singapore)
Mr. Leo Visser, Vice Chairman (DHV Environment & Infrastructure, the Netherlands)
Capt. R. Buchanan, Member (Dept. of Marine & Harbours, South Australia)
Mr. J.M. Halling, Member (Port of Tauranga Ltd., New Zealand)
Mr. M. Ohno, Member (Japan Port Consultants Ltd., Japan)
Mr. V. Balakrishnan, Member (Klang Port Authority, Malaysia)
Mr. P. Palu, Member (Baltic Ports Organization, Denmark)
Mr. P. Wiedemeyer, Member (Port of Hamburg, Germany)
Mr. T. Frawley, Member (Jardine Transport Services, Hong Kong)

As a follow-up to the 18th IAPH Conference held in Sydney in April 1993, the Port Planning and Construction Committee met on 3rd November 1993 in Singapore. The previous afternoon had been spent visiting the port facilities of Port of Singapore Authority.

At the meeting, the following 4 papers were presented:-

(1) Planning and Design of Port Facilities — PSA's Experience — presented by Mr. Ng Geok Kwee of Port of Singapore Authority
(2) Multi-Purpose Terminal Layout and the Provision of Covered Storage Areas — presented by Mr. John M. Halling of Port of Tauranga Ltd., New Zealand
(3) Port-City Relations — Singapore Experience — presented by Mr. Loh Chee Kit of Port of Singapore Authority
(4) Land Issues — Unused Land for Other Uses — presented by Mr. Robert Buchanan of Port Adelaide, South Australia

IAPH participants inspect the Computer Integrated Terminal Operations System (CTOS) at a PSA container terminal.

Another paper on "Port-City Relations: A Canadian Perspective" was submitted by Mr. Jean-Michel Tessier, President & CEO of Canada Ports Corporation. Due to his heavy commitments the author was not able to attend the meeting.

The above papers give a comprehensive account of the experience gained by the representative countries on the topics discussed.

The Committee discussed the Guidlines and agreed that one way to update/improve them is to publish papers on specific subjects related to the Guidelines. The papers, to be published once every two years, would also incorporate useful comments from members. It is proposed that two or three papers related to the Guidelines for the 19th IAPH Conference in Seattle in 1995 be published.

Since the Guidelines were prepared this year, the Committee agreed that they should only be reviewed in 1999. In the meantime, there will be constant updating of the Guidelines with an IAPH Reference Document comprising the more recent reports and/or articles on specific subjects. The Reference Document will be produced once in every two years.

Although the response to the Questionnaires on the Guidelines from members was poor, the indication shows that members find them useful and are generally satisfied with the contents and arrangements of the various topics. The meeting discussed and agreed to include a section on the capacity calculations of the various port facilities and also a section on the illumination levels of port operation areas.

Representatives from the IAPH Secretariat were informed that presently there are no clear demarcations on the responsibility of the various committees dealing with topics like Port-City relations, security, ship/shore interface, safety and health. In order not to duplicate the efforts of the various committees, it was suggested that the IAPH Secretariat assist in further streamlining the role of each committee.

Report by Bursary Recipient

Attendance at the 29th Seminar on Port Management held in Delft, The Netherlands, 11 May - 18 June '93

By Beat Christophe Edgard
Office National des Ports (CNPA)
Cameroon

About twenty-two port administrators, managers of all kinds and senior staff members working in the port industry from twelve countries all over the world attended the seminar this year.

During six weeks, we attended lectures and visited several ports in the Netherlands as well as in France and Belgium. Lectures were delivered from 9 am to 3 pm at the International Institute for Infrastructural, Hydraulic and Environmental Engineering (IHE) and were devoted to a thorough treatment of the organisation and management of ports.

The lectures were about the following aspect of port management and multimodal transport:

- responsibilities and liabilities in port organisations
- systems approach to port problems and terminal operations
- developments in port planning and design
- principles of integrated planning and hinterland connections
- decision-making in real estate operations
- port equipment, selection and maintenance
- environmental aspects of ports
- cargo handling, the handling of dry bulk cargo
- human resources management
- labour relations
- port tariffs

Lecturers came from ports in both the Netherlands and abroad, so as many aspects and points of view as possible were discoussed in the classroom.

The programme was divided into five periods :

— The first study period, which was mainly an observation one, was held in Amsterdam. Related to my coming late, I nearly missed it.

— The second study period was held in Delft.

— The third study period took place in Delft too, with various site visits to the port of Rotterdam; it gave us the opportunity to observe at first hand the operation of some of the world's most advanced terminals such as Europe Combined (ECT) Terminals, Rotterdam Europort and Distripares.

— The fourth study period was held in Delft, with one a week workshop on Resource Control Management during which we went through practical productivity techniques, break-even analysis, work measurement, techniques for rating work and so on. A three day computer simulation game with respect to the management of a terminal over a number of years ended our indoor training course.

A highly appreciated part of the seminar consisted of the participants' statements.

Each participant, made a presentation on his port, highlighting the specific problems the port was faced with. Each statement was followed by discussions among the participants.

I still remember the bright and surprising study presented by the Nigerian participants, related to the disruptive occupancy of the port operating area by pedestrians.

— The fifth and last study period consisted of a one-week study tour of France and Belgium. We went by coach from Delft and drove to Rouen. Then, on our way back, we visited the port of Rouen and the landing beaches at Normandy, the port of Le Havre, the port of Boulogne, the port of Calais and the Eurotunnel, the port of Dunkerque and the port of Gent. In addition to the recreational aspects, the tour also provided a special opportunity for comparison of the organization of various ports.

Overall, this seminar gave me a total overview of all aspects of port management. The contents of the lectures were updated to include the latest developments in port technology in Europe as well as abroad. Some subjects like the one on responsibilities and liabilities in port organization were of real interest to me as regards, my everyday work concerning the management of the port area in respect of its legal aspects.

It is quite centain that I upgraded personal port management capabilities during the programme. I also learned a lot about the activities of other transport operators. I now know more about the economies of countries like Nicaragua, Kuwait, Israel, Malaysia, Indonesia and Tanzania. The names of ports such as Ashdod or Haifa in Israel, or Port Klan in Malaysia now sound familiar to me.

Of what profit can such a seminar be for my organization? Obviously, the skills I got during the seminar are of use to me in my every day work dealing with a problem. Some of the documents I brought back are currently being consulted by colleagues.

I was given the opportunity through the seminar to present my port and its performance to a larger public. Overall, the seminar heightened my sense of friendship with my countrerparts from around the world.

UNCTAD Meetings of the Intergovernmental Group of Experts on Ports Geneva, October 25-29, 1993

Ports — Preparing for the Millennium

By J. P. Lannou
Assistant to the IAPH Liaison Officer with UNCTAD
Head of Equipment Operations Dept.
Port of Le Havre Authority

Introduction

1. Over recent years, international transport, including sea trade and ports has become increasingly important in the world economy. One single world market has emerged where production, transport, and distribution and consumption of goods are no longer concentrated in one limited geographical area, but are instead spread over the whole planet. These dramatic changes have been made possible through the development of sophisticated and integrated transport and distribution systems and networks, often controlled by mega carriers and shippers, with the majority of goods moving by sea. These developments took and are still taking place in a competitive environment, resulting in great trade volatality generating risks and opportunities for ports. Risks are particularly high for countries and ports which have not anticipated these changes and are not

prepared to take the strategic decisions, in particular to adjust their management organization, facilities and services to the trade requirements. Opportunities are coming from the fact that, in the process of integration of the transport and distribution functions, a modern port has many assets, which can enable it to become one of the few nodal points of strategic importance for international trade.

A. General recommendations

2. Ports must recognize that they play a key role in the transportation logistics chain and assure the effectiveness of their contribution by defining themselves broadly. Focus on functions within the boundary of the port is insufficient.

3. The Group recommends the reflection by governments on the importance of the role of their ports and their great potential for fostering and development. In order to obtain the support of governments and to have them adapt policies favourable to ports, the Group recommends the use of long term (or master) planning and strategic business planning methodologies to assist governments and ports in translating objectives into policy, strategy and implementation steps, including performance goals and evaluation mechanisms. These must ensure the inclusion of management, human resources, legal, financial and operational tactics, including managerial autonomy where appropriate.

4. The Group recommends that the UNCTAD secretariat continue its work in cooperation with its sister agencies within the UN and other available expertise in the many areas of port activity, including technical assistance, studies, training and communication, and that the findings and results of its activities be shared through its usual methods and IGE meetings on a more frequent and regular basis. The IGE invites the Standing Committee to examine the possibility of convening such meetings in the future. Further, the Group proposes that port matters be more often included as specific items on the agenda(s) of national, regional, intergovernmental and international meetings regarding trade, development and environmental issues, and that they not be treated solely as sub-items of other topics.

5. The IGE notes with great interest that ports have selected many forms of organization and management structure. It also noted that privatization/commercialization is of great value as an organization/management approach, but this cannot be seen as an end objective, in and of itself. The Group recognizes that privatization/commercialization/federalization could be of value in certain areas, judiciously chosen, relevant and appropriate to the conditions prevailing in the country. Because this is an emerging approach and because other approaches may be equally useful depending on the local government and social conditions, the Group recommends further study and analysis of the strengths/weaknesses of each of these concepts and an assessment of the economic implications of splitting functions between the public and private sectors.

6. Regional cooperation among ports has been achieved in some areas and proven to be useful. The Group recommends that UNCTAD identify and document where, and in what form, these cooperative efforts exist, the areas of activity covered and the value identified by the participants.

7. The Group supports the conclusions and recommendations of the informal meeting of legal experts on port matters which are embodied in UNCTAD/SHIP/639/Annex I, in particular the reference to an international body of port jurists.

8. Taking into account the importance of environment and sustainable development, the Group recommends that:

(a) There should not be any competition between ports based on the lack of protection of the environment. For this purpose, pollution norms, environmental pricing systems, etc., should be assessed in accordance with the problems to be solved, taking into account the specific and technical/financial capacities of each port. Such an item should be on the agenda of the regional port associations. On occasion, government support may be indispensable in achieving this kind of assessment.

(b) Guidelines should be produced that clarify the responsibilities of the port authority and other entities, both governmental and non-governmental, in relation to the protection of the environment.

(c) The examination and use of incentives and the use of innovative funding sources should be considered by international institutions of national governments where and when a concrete strategy and plan with the prospect of a reasonable outcome has been developed.

(d) To effectuate sustainable development efforts, most specifically port environmental responsibilities, a focal point should be established in all ports for environmental matters in order to collect and disseminate information (accidents, data, publications, laws, conferences, etc). Such a focal point should contribute to the formulation of the port's environmental policy in such a way that international instruments or recommendations are taken into account, as well as national interests and regulations.

(e) In addition, the focal point should assist in the implementation of the adopted policy. A coordination mechanism such as an Environmental Committee should be created to coordinate action, inform all interested parties and give them the opportunity to present their views and obtain their support. The mechanism should seek the advice of representatives of relevant national authorities, the port operator, port users, and people living in the vicinity of the port.

(f) Ports and cities are naturally interdependent. The critical nature of their linkage needs to be recognized and strengthened. Among the many concerns for the future discussed by the IGE was the need to ensure that we can balance the need to sustain our ports and their links to cities while we sustain and protect the environment for future generations. Maritime activities do not and cannot take place in pristine estuaries. That must be recognized. However, the IGE does not believe that ports are currently equipped to achieve the desired balance.

B. Specific recommendations

I. Port policy

9. The Group recommends that port policy reflect the fact that ports are important but that they are only one link in the entire transport chain (railways, roads, waterways), while the other integrated functionaries like customs, policy and local authorities comprise the others.

10. The Group recommends that this policy be implemented by the optimum utilisation of labour, more efficient

cargo handling, intensive use of EDI, streamlined procedures and the efficient use of equipment. The IGE recommends the examination and use of incentives and that the use of innovative funding sources be considered by international institutions or national governments where and when a concrete strategy and plan with the prospect of a reasonable outcome has been developed.

II. Port organization and management

11. The Group recognizes the need to modernize the present organization of the port system. This is a process which needs to take into account the social and economic realities and particularities of the country under consideration. The Group feels that the method for examining and carrying out the diagnosis of a port system proposed in TD/B/C.4/AC.7/13 appears to be the best means to ensure the proper organization and control of a port and recommends its use as one key tool to be employed. It recognizes also that the modernization process must be supported by an appropriate legal framework, which will take into account the most adequate division of responsibilities between central, regional and local levels, the role to be played by national and foreign private entities and the role of port labour as ports become more capital/technology oriented.

12. Ports have to make every effort to be efficient, especially in the cost and quality of service they offer to customers, to ensure the port is a successful transport and distribution centre.

13. The Group reached the consensus that, in today's commercial environment, port management should be market-oriented to better satisfy the needs of customers, while keeping in mind the fact that port infrastructure is also of national strategic importance. This entails ensuring that marketing functions become one of the priorities in the organization and management of the port and that all actors in the port community should be united to promote the port.

14. The Group recommends that a port policy, with clear objectives and development strategies focusing on the institutional changes needed to cope with changes in trade and transport be defined. It suggests that the UNCTAD secretariat explore the possibility of the International Association of Cities and Ports preparing a study on the issue of sustainability and the linkage between cities and ports, to be published within existing resources by UNCTAD.

C. Recommendations of the IGE concerning the UNCTAD secretariat activities

15. The Group, having reviewed the UNCTAD publications in the ports field, has found them highly satisfactory. They are generating a high level of interest in all countries, particularly in developing ones which do not always have the capacity to carry out similar in-depth investigation. However, there is no doubt that information on the type of work done by the UN system in the field of port organization and management is not disseminated widely enough. The UNCTAD Ports Newsletter is a very useful initiative, which is contributing to filling this gap. However, its distribution should be amended to include, in addition to the general manager of one or two ports, other key stakeholders. Further, subscriptions should be encouraged to ensure a reliable distribution methodology within UNCTAD.

Issues to be addressed

16. Account being taken of the fact that four studies have already been envisaged, as part of the UNCTAD work programme in 1994 and 1995*, the Group recommends the following topics as priorities for further studies, if enough resources are available:

1. Survey of national port systems;
2. Analysis of the relationship between the city and the port;
3. Case studies on human resources development in ports.

17. The Group feels that cooperation between ports at various levels in the field of sharing information, exchanging experiences, training activities and marketing expertise should be strongly encouraged by UNCTAD and governments.

18. Training is one of the most important domains where the assistance by UNCTAD should be provided. The Group appreciates the efforts and positive results and recommends that the necessary resources be assured and that the training programmes be maintained and reinforced.

* *These are, in 1994: "Strategic port pricing" and "Comparative analysis of privatization, commercialization and deregulation in the ports field", and in 1995: "Potentialities for regional cooperation in the ports field" and "Financial aspects of port management".*

19. The Group has taken note, with appreciation, of the fact that more than 50 per cent of the resources available to UNCTAD in the ports field are allocated to technical cooperation and training activities. It reiterates its support of the present clear-cut delineation of activities of UNCTAD's various training programmes in the ports field in order to avoid duplication and overlapping. The UNCTAD secretariat's initiative to launch a port diploma course for middle managers and new recruits is welcome and should be further pursued in cooperation with the AAPA and other interested organizations. This should be complemented by the development of new policy seminars and the updating of existing ones to take into account the new developments taking place in trade and transport. The Group recommends that the TRAINMAR network be extended and strengthened for the benefit of middle and junior port managers, the strengthening of port training initiatives and the fostering of cooperation amongst training institutions.

20. The Group was pleased to have a presentation on the UNDEP/UNCTAD/WFP technical cooperation programme to rehabilitate the ports of Somalia. It strongly recommends that donor countries and ports in a position to do so join in their endeavour and contribute to the full rehabilitation of the Somalia port system. The IGE further recommends that UNCTAD should act as an information exchange point for ports seeking information on technical cooperation cases like those of Somalia and Liberia.

D. Miscellaneous items

21. The Group is of the view that a biennial meeting is advisable, preceded by high level seminars. The Standing Committee is invited to consider this possibility.

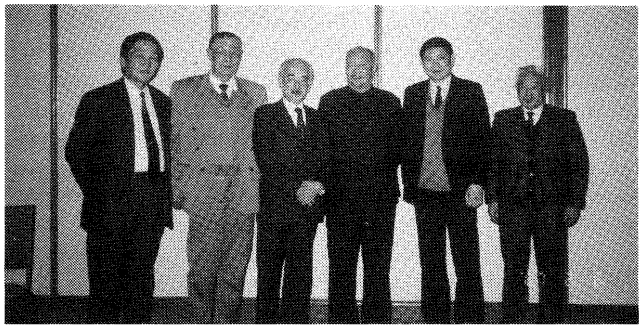
22. The Group recommends that a list should be drawn up for the reference of governments and ports, on request, indicating ports, private companies and individuals who are able and willing to offer port management expertise.

Mr. R. Kondoh Visits Shanghai and Nanjing

From 6 to 11 December, 1993, at the invitation extended by Mr. Li Ming Gui, Secretary General, China Ports and Harbors Association (CPHA), Shanghai, Mr. Rinnosuke Kondoh, Deputy Secretary General, visited Shanghai to pay his respects to the newly joined Chinese port members and to exchange views with them on how to enhance the participation by the port members at IAPH activities. On December 6, in a CPHA conference room, Mr. Kondoh was received by Mr. Li Weizhong, President and Mr. Li Jisan, Executive Vice President of the Association. At an evening function organized by Mr. Li Weizhong, Mr. Tu Deming, Director, Shanghai Port Authorty, and his colloague Mr. Lin Hai Hu were also present.

On the morning of December 8, Mr. Kondoh went to the Shanghai Waigaoqiao Free Trade Zone at the Pudong New Area, on a visit arranged by Mr. Li Ming Gui. There he was received by Mr. Zhong Wei Lin, General Manager, Shanghai Waigaoqiao Port Service Company which is responsible for the construction and overall management of the Waigaoqiao Harbour. At the Huanpu terminal complex of the Port of Shanghai, on the afternoon of the same day, Mr. Kondoh was received by Mr. Chen Yong-Qiang, General Manager, Shanghai Harbour Zhanghusbang Stevedoring Corporation. There he was brought up to date on the organization's activities.

On December 9, Mr. Kondoh visited the 4th district port of the Port of Nanjing and its container and general cargo terminals complex. He was received by Mr. Xi Zhicheng, Director, Nanjin Port Authority, with whom he exchanged views on the roles played by Nanjin Port, The port is more than 350 km inland from Shanghai and is served by 25,000 tonners. It functions as the regional hub port for river traffic and as a production and commodity ditribution center for the vast hinterland of the inland areas.



Mr. Kondoh receives a warm welcome from the CPHA officials. From left, Messrs. Tu Deming, Li Jisan, Kondoh, Li Weizhong, Lin Hai Hu and Li Ming Gui in Shanghai.

Mr. Kondoh with Mr. Zi Zhicheng (right) in Nanjing

Membership Notes:

New Members

Temporary Member

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Johannesburg 2017
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Executive Manager (Commercial)
Telex: 4-24205 SA
Tel: 11-7737807
Fax: 11-7738690
Chief Executive Officer:
Mr. A.N. Davidson
Executive Manager (Commercial):
Capt. J.T. Mors

Changes

The Marine and Harbors Agency of the Department of Transport [Regular] (Australia)
(Formarly Department of Marine and Harbors)

Ports & Railways Authority [Regular] (Israel)
Mailing Addressee: Mr. Shoresh Lerer
Director-General

Myanma Port Authority [Regular] (Myanmar)
Mailing Addressee: U Tin Oo
Managing Director

Tarragona Port Authority [Regular] (Spain)
Address: Passeig de l'Escullera, s/n
43004 Tarragona

Sri Lanka Ports Authority [Regular] (Sri Lanka)
Mailing Addressee: Mr. A.P. Hapudeniya
Chairman & Chief Executive

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Miguel Diaz de la Portilla
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Javier Souto
Sherman Winn

Assistant to the Port Director:
William Franco-Velez
Rudolph Givens
Patricia Cooke
Pamela Boynton
Suzanne H. Tindall

Korea Tug Owner's Association [Class A-2-3] (Korea)
Mailing Addressee: Mr. H.K. Park
Chairman

Corrigenda to the Directory 1994

Due to an oversight on the side of this office, the tonnage figures involving some of the Chinese ports have been erroneously referred to in the 1994 edition of the IAPH Membership Directory on pages 142-149. We offer our apology to the members concerned for this incorrect reference and hereby announce the originally reported figures as follows: — IAPH Head Office

Dalian Port Authority		
(5 units)	General :	8,991,899
	Bulk :	43,726,184
	Total :	52,718,083
Guangzhou Harbour Bureau		
(6 units)	General :	15,984,780
	Bulk :	25,204,256
	Total :	41,189,036
Nanjing Port Authority		
(4 units)	General :	1,965,257
	Bulk :	31,539,108
	Total :	33,504,365
Qingdao Port Authority		
(5 units)	General :	8,315,000
	Bulk :	22,935,000
	Total :	31,250,000
Qinhuangdao Port Authority		
(6 units)	General :	5,517,000
	Bulk :	75,698,000
	Total :	81,215,000
Shanghai Port Authority		
(7 units)	General :	29,875,000
	Bulk :	90,307,000
	Total :	120,182,000
Tianjin Port Authority		
(5 units)	General :	15,092,878
	Bulk :	12,585,060
	Total :	27,677,938
Zhanjiang Port Authorities		
(3 units)	General :	2,031,407
	Bulk :	13,114,818
	Total :	15,146,225

Visitors to Head Office

On November 16, 1993, **Mr. Robert J. Ridge,** Vice President & General Manager, Trellex Morse, a US fender system manufacturer, together with the officials of Tokyo Boeki, a local agency, visited the Head Office. They were received by Mr. R. Kondoh, Dy. Secretary Genera, with whom they exchanged views on the on-going port development projects and the marketability of marine-oriented equipment and supplies in the region.

On November 24, 1993, **Mr. Bill Box,** UK Contributing Editor, Seatrade Week Newsfront, accompanied by **Mr. Chris Eve,** Manager, Japan Representative Office, The Seatrade Organisation, visited the Head Office. There they exchanged views with Mr. R. Kondoh on the current and future prospects for shipbuilding, container shipping, inclusive of such items as those related to terminal handling charges and regional and coastal shipping.

On November 30, 1993, **Mr. Ko, Kwang-Sak,** Deputy Director, and **Mr. Lee, Sun-June,** Senior Researcher, Shippers Cooperation Division, Korea Shippers Council of Korea Foreign Trade Association, accompanied by **Mr. Jahng, Show,** Assistant Manager, Tokyo Branch Office of Korea Foreign Trade Associatiom, visited the Head Office, where they exchanged views with Mr. R. Kondoh on the trade and shipping issues involving the two countries.

OBITUARY

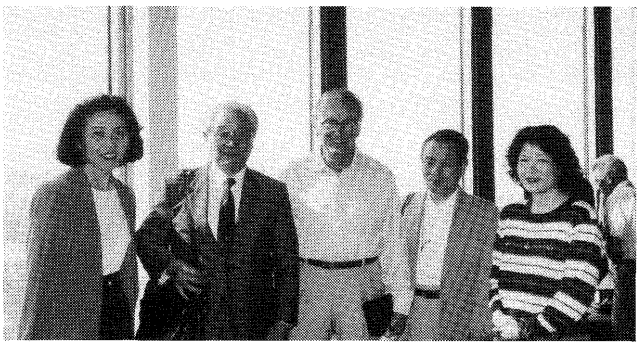
Mr. James F. Stewart
Wellington, New Zealand

On the morning of January 4, 1994, the first day the Head Office staff were back at work after their New Year holidays, they were shocked at the news received by fax from Mr. K. J. Gilligan of Napier, New Zealand, that Mr. J. F. Stewart, an IAPH Honorary Member and former General Manager of the Port of Wellington, had died on December 26, 1993.

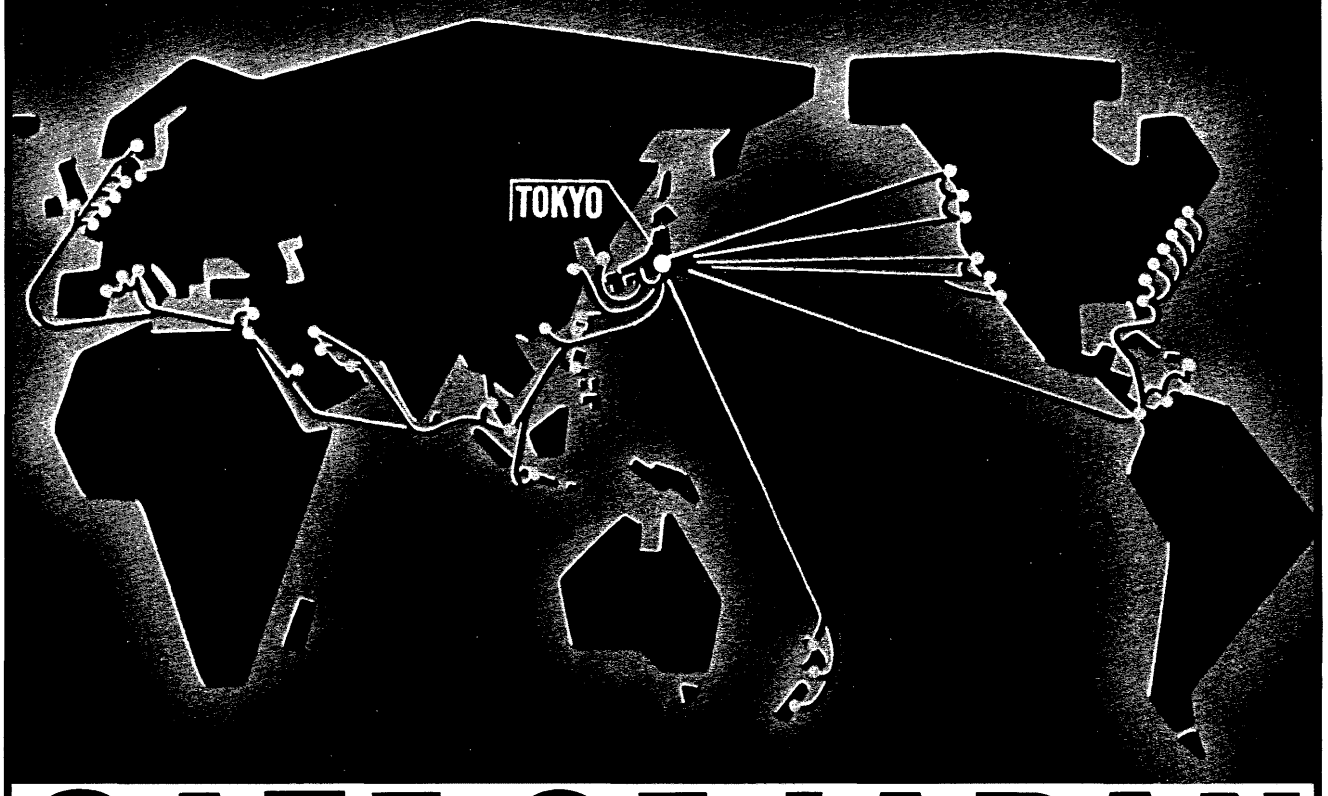
According to the news from Mr. Gilligan, the IAPH Director representing New Zealand (Managing Director, the Port of Napier Ltd.), Mr. Stewart died from natural causes.

Throughout his term of office as General Manager of the Port of Wellington, Mr. Stewart enthusiastically supported the activities of IAPH. From 1977 he served on the Legal Protection of Port Interests (CLPPI) and the By-Laws Committees and displayed his jurisprudence as the committees reviewed the By-Laws for recommendation to the Conference plenary sessions. In appreciation of his meritorious service and contribution to the development of the Association, IAPH elected Mr. Stewart as an Honorary Member at its Conference held in Hamburg in 1985.

The Secretary General Mr. Kusaka, jointly with the other secretariat members, has sent a letter of condolence to Mrs. Judy Stewart (address: 2 Parklands Drive, Karori, Wellington 5, New Zealand) and has expressed the deep appreciation of IAPH members for the contribution Mr. Stewart made towards the work of IAPH. Mr. Stewart was a regular participant at IAPH gatherings and participated in all the conferences starting from the 9th in Singapore in 1975 until the 18th in Sydney in 1993, which turned out to be the last IAPH Conference that Mr. Stewart was able to attend. Mr. Stewart (center) is pictured with the Tokyo Secretariat members at the Sydney Tower, where they met by chance during their city tour after the Conference.



WORLD-WIDE CONTAINER SERVICE



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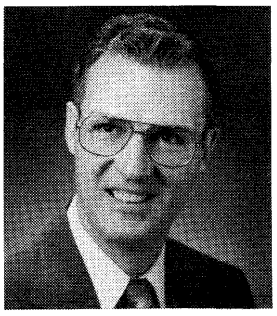
OPEN FORUM

International Maritime Organization

Sixteenth Consultative Meeting of Contracting Parties to the London Dumping Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 8-13 November 1993

Report upon Attendance of the IAPH Observer



By Dwayne G. Lee

Chairman, the IAPH Dredging Task Force
Deputy Executive Director of Development
Port of Los Angeles, U.S.A.

During the week of 8-13 November 1993, I attended the Sixteenth Consultative Meeting of Contracting Parties to the London Convention 1972 as the IAPH observer. The meeting was held at the headquarters of the International Maritime Organization (IMO), 4 Albert Embankment, London SE1 7SR. I was accompanied by Joseph E. LeBlanc, Jr., of the firm of Nesser, King & LeBlanc in New Orleans, Louisiana, who has served as legal counsel for IAPH at consultative meetings of the Contracting Parties to the LC 1972.

The meeting was attended by delegations from 50 Contracting Parties; one associate member of IMP; 7 observer countries; representatives from the International Atomic Energy Agency (IAEA) and the United Nations Environment Programme (UNEP); observers from 5 inter-governmental organizations; and observers from 9 non-governmental organizations (NGOs). This report will summarize the outcome of the meeting with respect to issues of concern to IAPH members.

1. IAPH Submission to LDC 16

IAPH submitted an information document (Enclosure 1) to the Sixteenth Meeting (LC 16/4/5) which set forth the views of IAPH upon two of three proposed "fast-track" amendments to the Annexes of the Convention that were to be acted upon at the meeting and upon two other proposed amendments upon which action might have been taken. In presenting the IAPH paper to the meeting, I explained the IAPH positions on these issues, as are more fully described below.

2. Action Upon the Fast-Track Issues

(a) Issue 4: Prohibition of Disposal of Radioactive Waste at Sea

IAPH was not directly affected by the proposed ban against the sea disposal of radioactive waste. IAPH's principal interest was in assuring that the ban was not so broad that it could be construed to prevent dredged material disposal because of naturally occurring radioactivity present in all marine sediments. This is not a concern under the current annexes, which use the definition of "radioactivity" established by the International Atomic Energy Agency (IAEA) for purposes of the annex prohibitions. The IAEA definition (IAEA Safety Series 78) contains an exclusion for naturally occurring radioactivity in dredged material. At the request of Contracting Parties, the IAEA is also working upon a definition of additional de minimus levels of radioactivity that are exempt from regulatory control.

I brought to the attention of the Meeting the fact that, in connection with any amendment of the annexes to include a ban against sea disposal of radioactive waste, the current provisions of the annexes relating to the role of the IAEA needed to be retained. This would allow continued use of the IAEA definition of "radioactive waste or other matter" and would recognize the ongoing work of the IAEA to quantify de minimus levels of radioactivity that would be exempt from ban. The establishment of such exempt levels is of importance to IAPH because of the need of some ports to dispose of dredged material from waterways near nuclear power plants and military installations.

A Working Group was established to finalize the text of an amendment on this issue. IAPH did not participate directly in this Working Group because of its involvement in the Working Group dealing with the proposed ban on sea disposal of industrial waste. However, IAPH monitored the progress of the Working Group discussions to assure that appropriate recognition was given to the role of the

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IAEA. The final text of the amendment (Enclosure 2) contained appropriate reference to the IAEA as the competent body to define "radioactive waste or other matter" for purposes of the prohibition, as well as reference to the IAEA's development of a de minimus definition of exempt levels of radioactivity. This satisfied the concerns of IAPH.

Although a majority of delegations were in favor of the ban, a major disagreement developed on the last day of the meeting. The United Kingdom and several other delegations were unwilling to agree to a ban of unlimited duration. The text of the amendment provided for continued study of the sea disposal option and for a report to Contracting Parties in 25 years. The UK did not want the ban to extend beyond this 25-year period. A number of delegations suggested reducing the study period from 25 to 15 years as a compromise. However, there was no willingness to limit the duration of the ban to either specified time period. A vote was finally taken upon the amendment, with the following results:

YES	NO	ABSTAIN
37	0	5 (UK, China, France, Russia and Belgium)

The abstaining countries now have 100 days in which to deposit an instrument of objection to the amendment.

(b) Issue 5: Prohibition of Disposal of Industrial Waste at Sea

IAPH participated in the Working Group established to finalize the text of an amendment to the annexes to prohibit the sea disposal of industrial waste.

Dredged material has never been considered "industrial waste" under the Convention. Nevertheless, in view of the stringent ban proposed against the sea disposal of industrial waste, IAPH supported the proposal made by the United States to specifically identify those substances excluded from the definition of "industrial waste", such as dredged material and sewage sludge. IAPH wanted, in particular, to avoid any later suggestion that contaminated dredged material should be considered "industrial waste" for purposes of the ban. As it turned out, this concern was warranted. During the debate in the Working Group, the French delegate announced that some governmental departments in France consider highly polluted dredged material to be "industrial waste". This is precisely the type of argument IAPH wanted to avoid, and it highlighted the need to specifically exclude dredged material from the definition of "industrial waste."

There was no real disagreement as to the exclusion of dredged material from the definition. Most of the debate centered around other items. It was important to IAPH, however, that consensus be reached on the other exclusions. Without agreement, the text of the prohibition adopted at th Thirteenth Consultative Meeting in Resolution LDC.43(13) would have been presented to the meeting for approval. This more general definition did not contain a specific exclusion for dredged material.

Agreement was ultimately reached upon exclusions from the definition of "industrial waste", which included dredged material. This amendment to the annexes was adopted by consensus. (Enclosure 3)

3. Other Proposed Amendments

No action was taken at the meeting upon the other two proposed amendments addressed in the IAPH submission, i.e., Issue 11 relating to incorporation of the Waste Assessment Framework (WAF) into the Convention and Issue 8 relating to the precautionary approach. The attention of the meeting was devoted entirely to the three fast-track issues.

4. Consideration of the Report of the Scientific Group

The Report of the Scientific Group addressed a number of matters relating to the regulation of dredged material.

In connection with implementation of the Waste Assessment Framework (WAF), the Scientific Group focused its attention on the development of the "Action List" approach, which seeks to establish an objective means of characterizing the content of wastes and the potential environmental effects of substances in these wastes. A decision was made to examine, in the first instance, the development of action levels for a restricted range of "indicative substances":

(a) cadmium as an indicative Annex I substance;
(b) tributyltin oxide as an indicative Annex II substance; and
(c) chlorobenzenes

The Consultative Meeting encouraged Contracting Parties to submit information on these substances in dredged materials, taking into account regional variations and natural background concentrations, as appropriate.

The Consultative Meeting noted that the revision of the Dredged Material Guidelines (DMG) is now planned to commence at the Seventeenth Meeting of the Scientific Group to be convened in 18-22 July 1994. Contracting Parties were urged to submit papers on this subject by 31 January 1994, particularly with regard to the application of the "trace contaminant" provision of Annex I. The Consultative Meeting agreed that the structure of the Waste Assessment Framework would be an appropriate starting point for the review of the DMG.

The Scientific Group report also referred to a number of information documents on beneficial uses of dredged materials and alternative disposal strategies and noted the value of this work to the proposed revision of the DMG.

5. Future Meeting Dates

The meeting agreed upon the following meeting dates during the next year:

(a) The Second Meeting of the Amendment Group from 9-13 May 1994;
(b) The Seventeenth Meeting of the Scientific Group from 18-22 July 1994; and
(c) The Seventeenth Consultative Meeting from 3-7 October 1994.

Contracting Parties also approved a thorough review of the existing provisions of the London Convention 1972 and the proposed amendments thereto, with the convening of a special meeting or conference not later than 1996 with the view to amending the London Convention 1972 through a single instrument.

6. Future Issues of Concern for IAPH

Based upon the extensive work carried out by Contracting Parties at the Sixteenth Consultative Meeting, there are a number of issues which should be addressed by IAPH

in the coming year:

(a) Submission of a technical paper to the Seventeenth Meeting of the Scientific Group relating to revision of the Dredged Material Guidelines, which should address a number of subjects identified at the Fifteenth and Sixteenth Consultative Meetings, including (i) the application to dredged material of the terms "trace contaminants" and "rapidly rendered harmless" in paragraphs 8 and 9 of Annex I and "special care" in Annex II, (ii) the role of the "option of least detriment" in the regulation of dredged material, and (iii) the regulation of side-cast and agitation dredging under the Convention.

(b) Submission of a technical paper to the Scientific Group relating to the development of action levels for the three indicative substances when they are present in dredged material.

(c) Possible submissions to the Second Meeting of the Amendment Group upon a number of core issues in which IAPH has an interest (especially in view of their implications for dredged material as virtually the only substance now regulated under the Convention), including (i) incorporation of the precautionary approach into the Convention, (ii) cross-media impacts of pollution and the implications of this amendment for the "option of least detriment", and (iii) the basis for amendments to the annexes.

(d) In connection with the Scientific Group's decision to use the WAF as a starting point for revision of the Guidelines, it will be important to identify those portions of the WAF that are not appropriate or have limited applicability for dredged material, including (i) the conduct of waste audits, (ii) control of upstream sources of pollution, and (iii) installation of clean production techniques.

7. Conclusion

As a result of the recent action to ban sea disposal of radioactive waste and industrial waste and the incineration at sea of most substances, the London Convention 1972 has become primarily a dredging convention. Attention will now be focused upon the disposal of dredged material at sea, particularly contaminated sediments. Most actions taken by Contracting Parties in the future will impact dredged material as the principal substance subject to regulation. IAPH must continue to take the necessary steps to ensure that dredged material receives the reasonable treatment it has had in the past.

December 1, 1993

Sustainable Development for Ports

(Extracted from the Report by the UNCTAD secretariat: UNCTAD/SDD/PORT/1)

CHAPTER IV
CONCLUSIONS AND RECOMMENDATIONS

The issue of protecting the environment and achieving sustainable development of ports is not a temporary aspect of our present period, nor is it a "luxury" and a point of major concern among only the developed countries. It is an irreversible trend that all involved in port activities should progressively understand and eventually support. We have to take care of environmental health exactly as if we were taking care of our own health. The first straightforward consequence of this attitude is the need for those who understand the nature and extent of the stakes involved to inform and sensitize their colleagues. In this respect, the role of the port manager is crucial. Managers should convince all their staff, through awareness campaigns or similar activities that all port personnel in their day-to-day activities must take care of environmental health. The second issue to be dealt with in this field is the adoption of a policy defining objectives to be reached, identifying and prioritizing of required activities and allocating part of the resources available to the port. Such a policy and its associated strategies have to be coordinated and implemented by the port community as a whole rather than through ad hoc measures taken separately by the various port actors. In this study, guidelines have been provided on how to identify and analyse the environmental issues with specific emphasis on economic aspects. Practical suggestions have been formulated on how to set priorities among the various measures to protect the environment, and consequently on how to define and implement policies and strategies in this field. There is not one single model which can be implemented at every port. However, there are basic principles to be followed in order that environmental protection, efficient operations, harmonized development and a good social climate may be jointly attained.

To assist in the implementation of these principles, the following practical recommendations are worth mentioning:

(a) In all ports, a focal point should be established for environmental protection in order to collect and disseminate information (accidents, data, publications, laws, conference, etc.). Such a focal point should contribute to the formulation of the port environmental policy in such a way that international instruments or recommendations are taken into account as well as national interests and regulations.

(b) Incentives to encourage environment protection should be supported, with the understanding that it is up to the port mananagement to decide in conformity with the decisions taken by the Government on the timing and nature of the incentive, bearing in mind port operations, development and financial requirements. In this respect, the Resolution adopted by IAPH in 1993 in Sydney on Ship's Port fees is an example of a good balance between environmental and economic considerations.

(c) In addition, the focal point should be instrumental to implementation of the adopted policy. A coordination mechanism such as an Environmental Committee should be created to coordinate action, inform all interested parties and give them the opportunity to present their views and obtain their support. This Committee should consist of representatives of relevant national authorities, the port operator, port users, and people living in the vicinity of the port. The Committee should be fully aware of the constraints set by international standards. Environmental statements, codes of conduct, or charters should be adopted as well as environmental management information systems.

(d) Regional cooperation among ports in the field of environmental protection should be encouraged in order to adopt harmonized measures, share costs, experience and expertise.

(e) There should not be any competition between ports based on the lack of protection of the environment. For this purpose, pollution norms, environmental pricing systems, etc., should be harmonized on a subregional basis taking into account the specific and technical/financial capacities of each port. Such an item should be on the agenda of the regional association of ports. On occasion, government support may be indispensable in achieving this kind of harmonization.

CHAPTER V
CASE STUDIES

Case No. 1: Autonomous Port of Abidjan (Cote d'Ivoire)

A. Organization

The Autonomous Port of Abidjan became a government enterprise in accordance with Decree No. 92-940 of 23 December 1992. Article 6 of the Decree states that the territorial limits of the Port of Abidjan are defined by the Port Delimitation Plan. The port and surrounding areas are estimated at 1,950 hectares, composed as follows:

1,000 hectares of water area;
950 hectares of land area, including 800 hectares of industrial area and 26 hectares of open storage yards.

Some 155 of the 240 authorized enterprises identified by the environment services in the city of Abidjan are established in the industrial area of the Port of Abidjan. They discharge 30,000 m3 of wastewater per day.

In view of this situation, the Port of Abidjan set up the Environment Department to protect the port environment from damage resulting from polluting activities of port enterprises. The Department implements and monitors the implementation of the environmental regulations, measures and standards that govern matters such as air and water pollution, waste management and industrial hygiene.

B. Standards

The acceptable standards in the Port of Abidjan are those defined in the National Plan.

(a) Maximum discharge levels for water:

pH	5.5 — 8.5
Temperature (°)	40°C
Suspended matter	30 — 40 mg/l
COD	120 — 150 mg/l
BOD	40 — 80 mg/l
Hydrocarbons	20 mg/l
Phenol compounds	1 mg/l
Cr6+	0.05 mg/l
Pb	0.1 mg/l
Kjedhal N	50 mg/l
Nitrates	0.5 mg/l
Nitrites	30 mg/l
Phosphates	10 mg/l
Fluorides	1.5 mg/l
Cd	0.5 mg/l
Hg	0.001 mg/l
Sulphides	5 mg/l

(b) Air: 150 mg/l of dust

(c) Noise: 60 dB: 7 a.m. — 8 p.m.
60 dB: 10 p.m. — 6 a.m.
55 dB: 8 p.m. — 10 p.m. and 6 a.m. — 7 a.m.

On holidays and Sundays, 50 dB are allowed.

(d) Land use is regulated. Industries are divided into two groups: those requiring an authorization and those requiring a declaration. Industries in the first group are established in the industrial areas and those in the second group are established not far from residential areas.

(e) Waste management depends on the type of waste. Some wastes are allowed in public dumps, while others are specially treated by the producing industry.

C. Regulations

with regard to the environment, the Port of Abidjan has is own legal powers in cases of the pollution of port waters by hydrocarbons. In other cases of environmental pollution, it shares power with other authorities, such as the Service for the Inspection of Classified Installations in the Ministry of the Environment, Building and Urban Management. Cote d'Ivoire is one of the countries of Africa south of the Sahara, apart form south Africa, that is best equipped for environmental protection, for which it has national regulations. Within its territory it also applies the provisions of the conventions to which it is a party. There are local regulations which apply to the Port of Abidjan.

D. Recent problems

The implementation of all this legislation has not prevented cases of pollution and environmental stress in the Port of Abidjan:

Pollution of the lagoon by hydrocarbons in 1985;
Pollution of the lagoon by discharges from canneries;
Unauthorized construction of dwellings in the port area;
Dust discharges by cement factories;
Ammonia fumes from SIVENG vats (hydrochemicals);
Rapid silting up of the base of quays;
Organic pollution.

E. Environment Department

The Environment Department is very young and does not yet have very many resources. It works together with the Service for the Inspection of Classified Installations, which carries out periodic checks of factories and enterprises. It also works to increase environmental awareness.

In 1984, it was urged that industrial pollution should be reduced to an acceptable level by 1995. A recent evaluation shows that this objective is far from having been achieved. It may, however, be said that one enterprise (CAPRAL NOVALIM) has made genuine efforts in connection with waste reclamation and the reduction of air pollution. Two factories, PFCI and SCODI, have also made substantial

progress in reducing waste.

F. Costs

The Autonomous Port of Abidjan has just set up a department to propose improvement to the port environment and combat environmental stress in the port area. This department does not yet have all the data it needs to evaluate the cost of environmental protection. It may, however, be stated that most environmental funding is the responsibility of the Government and local communities. In cases of clearly identified pollution, whether accidental or deliberate, the polluter pays. The free collection of garbage from ships costs the Port about CFA 1,000 million (US$ 350,000) per year.

G. Means

The Port has its own means of combating oil pollution. The analysis of the water to determine the type of pollution is done by CIAPOL, which is also in charge of combating floating plants. The Port has given authorizations to five companies for the free recovery of oil waste from vessels calling at the Port of Abidjan.

Means of pollution control in the Autonomous Port of Abidjan include:

A 200 m oil boom divided into four 50 m sections and two pumps for spreading dispersant;

600 l of second-generation dispersant.

CIAPOL has much more equipment, which has been provided by Denmark:

An oil boom;

A water analysis laboratory;

Dispersants;

A photography laboratory.

Case No. 3: Autonomous Port of Le Havre (France)

A. Organization

A.1 Organization, Authority and Staff

The Autonomous Port of Le Havre (PAH) is a Government enterprise responsible for managing and developing the Port of Le Havre and the industrial area adjacent to the port basins. France has signed the MARPOL and London Conventions and the Autonomous Port of Le Havre implements the provisions of these Conventions. As far as the environment is concerned, PAH is organized and equipped and has defined its short-term and medium-term objectives. A six-person department composed of three engineers and three supervisors works full time on environmental protection problems, including prevention, pollution control and protection of wildlands in the Seine estuary. The following equipment has been available and PAH either helps manage it or manages it directly:

An air quality monitoring and warning system in the event of sulphur dioxide build-up; in this case, industries are requested to burn low-sulphur content fuel;

A dump for non-reclaimable wastes;

A centre for the collection and destruction of solid and liquid industrial wastes;

Collection of wastes from quays and open storage yards; sweeping (MARPOL Convention, annex V);

Equipment to combat accidental water pollution: oil booms, skimming and collection platforms, dispersants and tugs equipped to fight fires and disperse oil slicks. Port industries are also equipped to combat accidental pollution.

Various members of the staff of PAH departments and outside service companies are involved in pollution and nuisance control:

PAH officials: harbour master's office, dredging service;

Staff of outside service companies: beacons and buoys, tugs, pilots, firemen;

Specialized industry staff.

A.2 Responsibilities of PAH

PAH is responsible for monitoring port basin water and managing the port industrial area; it organizes campaigns for the control of water quality and the physical and chemical characteristics of water. Under the MARPOL Convention, PAH also offers desludging services for chemical and oil shipping. It has no authority over the operating procedures adopted by industries, but it is aware of the quality of the liquid waste these industries discharge into port basins.

A.2.2 The port area

PAH manages an area which belongs to the Government and is let out to industries and port clients according to the rules authorizing temporary use. PAH sets the rental rate for plots of land in the port area and occupants are under an obligation to comply with the rules authorizing temporary use set out in the specifications published by PAH.

A.2.3 Industries

Each port industry may organize itself as it wishes in order to comply with the specifications referred to in section A.2 above and the rules adopted by the Regional Industry, Research and Environment Department (DRIRE) relating to means of determining the quality of discharges into the water and air.

B. Environmental quality

PAH has prepared a development plan, as well as an Environment Charter.

B.1 Development plan

The main objective is to develop the Port Industrial Area (ZIP) while guaranteeing the safety of the industrial and urban population and to channel the port's development while maintaining stable options that are compatible with industrial projects:

Absence of dwellings in the ZIP;

Quality of sea, river and land access;

Simplicity of the design of road and rail access.

As a result of the reservation of technical corridors for water, electricity, gas and oil networks, the development plan meets the above requirements. An important role has been assigned to the petrochemical industry and to port activity, which create the most jobs. In addition to the major order-issuing industries, there are plans to expand areas for small and medium-sized sub-contracting enterprises. Labour-intensive activities are kept away from potentially dangerous industries in the north eastern part of the ZIP. These industries which are not very polluting are thus located preferably near the most sensitive sites. The plan also provides for measures to combat industrial nuisances; PAH either adopts these measures on its own or takes part in implementing them:

Monitoring of industrial and port liquid wastes; quality of water areas;

Monitoring of air pollution;

Destruction of liquid wastes;

Operation of the dump for ordinary solid wastes;

Treatment of toxic wastes dumped into the Seine (phosphate gypsum, titanium gypsum).

The plan also describes the major landscaping programme for the ZIP. More than 180 hectares of landscaped areas have been created since 1974 and are being carefully tended. In addition, there are 3,000 hectares of protected wildlands in the southern part of the ZIP. In order to protect the wildlands as long as possible, however, the ZIP will be developed from west to east (except for technical reasons or because of an industrial client's choice). This ecological concern makes economic sense because the most fully serviced plots of land are located in the western part of the ZIP.

B.2 The Environment Charter

While the main objective of the plan is to make economic development compatible with the protection of the population, that of the charter is to protect the local environment. The charter defines the rules of conduct to be followed and the areas to be protected:

Increased attention to the environment in major port development projects through impact studies; strengthening of action to combat and prevent industrial nuisances;

conservation of wildlands;
Improved management of wildlands in the ZIP;
Increased cooperation with ecology associations and scientific experts;
Strengthening of the green-belt policy for the ZIP;
Environmental training for PAH staff members.

In specific terms, the following work is planned or has already been carried out:

Updating of biological studies;
Audit of accidental water pollution;
Quality objectives for port basins;
Expansion of a dump, together with stronger environmental measures;
New dump for building site rubble;
Monitoring network for soil and subsoil quality;
Development of wildlands;
Ecological management of rangeland and marshland;
Landscaped areas for new industries;
Landscape master plan for the ZIP;
Plant screen on the northern edge of the ZIP;

Environmental training for staff members, including lectures, field trips and practical exercises in combating accidental pollution.

This work was carried out in close cooperation with local communities, Stage agencies, industry, management and labour, and associations. When an industry moves in, waste quality objectives are specified in the authorization for its establishment and DRIRE ensures that waste standards are met. The industry has to follow increasingly European rules relating to the quality of liquid and gas discharges and destroy or neutralize wastes which do not meet effluent standards in specialized plants. Depending on its quality, industrial solid waste is either incinerated or dumped in ad hoc installations whose operation is supervised by the Port. Quality objectives are based on national and international objectives. PAH (for water monitoring) and DRIRE (for industry inspection) are working to implement the regulations in force.

C. Administrative powers

The recent problems of this kind were caused by the expansion of the Port in harmony with the protection of wildlands in the Seine estuary:

Phosphate and titanium gypsum discharges into the estuary (a solution is being found);

Fill form dredgings from Port expansion work sites (Paris Convention);

Establishment of a non-toxic industrial waste storage centre and an industrial waste destruction plant.

D. Environmental monitoring

Campaigns to increase the awareness of all persons working in the Port area were launched by PAH as a result of an audit by a specialized office (CEDRE) of risks of accidental water pollution. The Port plays a leading role in the industrial waste collection centre and ensures that Port industries and activities always have the necessary waste collection and destruction facilities. In the event of accidental water pollution, PAH (harbour master's office, dredging services), industries, service companies (tugs, pilots) and urban services (fire department, SAMU) work together to contain the damage and halt the pollution: alarm, setting up oil booms, recovering pollutants, using dispersants, etc. In the event of an accident of this kind, the role of the harbour master's office is to get clean-up operations under way.

E. Environmental protection — costs

PAH and the port industries have invested and continue to invest in environmental protection:

Rubbish bins and waste collection on port quays and storage yards; sweeping; cost to the Port in 1992: FF 5.2 million (MARPOL, annex V);

Equipment to combat water pollution: oil booms, skimming and cleaning platforms, dispersants; FF 5 million purchase plan over two years: oil cleaning platform and anti-pollution booms;

Tug equipment, fire-fighting equipment and use of dispersants; investment: 2 x FF 4 million;

Air quality monitoring and warning system; PAH participation: FF 0.1 million/year;

Establishment of a dump for industrial waste and a centre for the destruction of some of this waste; planned investment: FF 100 million in the first stage;

Desludging station:
FF 0.15 million contribution by the Port of Le Havre for desludging before ship repairs;
FF 5 to 10 million for desludging; service offered by the Industrial Shipping Company;

Landscaped areas in the Port Industrial Area in 1992: FF 2 million invested in 1992; maintenance: FF 2.54 million.

Special efforts have been made by port industries with regard to the treatment of air and water pollution and the prevention of technological risks. The most recent investments and decisions are:

Thann and Mulhouse, sulphuric acid treatment plant; entry into service: May 1993; FF 450 million;

TRD Total France, sulphur gas treatment plant; entry into service: 1993; FF 105 million;

Chevron Chemical, H2S treatment plant; entry into service: 1993; FF 28 million;

Lafarge, improvement of the dust treatment plant, entry into service: July 1993; FF 10 million.

Le Havre is now more and more convinced that environmental protection is necessary for the city and the Port and that everyone must be involved.

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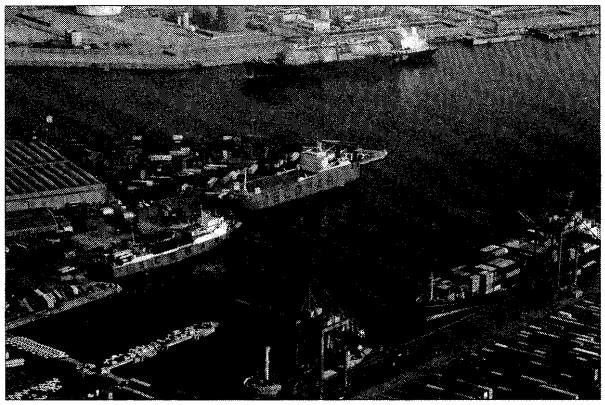

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Resolution A.7457(18) Of IMO Assembly

The eighteenth Assembly (25 October to 5 November 1993) of the International Maritime Organization on 4 November 1993, adopted resolution A.7457(18), Application of Tonnage Measurement of Ballast Spaces in Segregated Ballast Oil Tankers, the text of which is as follows:

Assembly Resolution A.7457(18)
Application of Tonnage Measurement of Segregated Ballast Tanks in Oil Tankers adopted on 4 November 1993

THE ASSEMBLY,

RECALLING Article 15(j) of the Convention on the International Maritime Organization concerning the functions of the Assembly in relation to regulations and guidelines concerning maritime safety and the prevention and control of marine pollution from ships,

RECALLING ALSO Resolution 9 of the International Conference on Marine Pollution, 1973, concerning tonnage measurement of segregated ballast oil tankers,

RECALLING FURTHER Resolution A.722(17) whereby Governments are invited to apply the recommendation concerning the tonnage measurement of ballast spaces in segregated ballast oil tankers set out in the Annex to that resolution,

REALIZING the urgent need for the establishment of principles for the treatment of tonnage resulting from the fitting of segregated ballast tanks in oil tankers provided with an International Tonnage Certificate (1969),

REALIZING ALSO the urgent need for the unified application of tonnage measurement of segregated ballast spaces in oil tankers,

REALIZING FURTHER the need for promoting the use of tankers fulfilling the requirements of regulation 13F in Annex I of MARPOL 73/78, as amended as well as segregated ballast oil tankers,

HAVING NOTED the limited scope of resolution A.722(17) and having considered it appropriate if pilotage authorities were included in the scope of the resolution even if another basis is used for assessing pilotage dues,

HAVING CONSIDERED the recommendations made by the Maritime Safety Committee at its sixty-second session and the Marine Environment Protection Committee at its thirty-fourth session,

1. ADOPTS the Recommendation Concerning Tonnage Measurement of Segregated Ballast Tanks in Oil Tankers, set out in the Annex to the present resolution;
2. INVITES Governments to advise the port and harbour authorities to apply this Recommendation when assessing fees based on the reduced gross tonnage for all tankers with segregated ballast capacity in accordance with regulation 13 of Annex I of MARPOL 73/78;
3. INVITES ALSO Governments to advise pilotage authorities to take action in accordance with this recommendation;
4. REQUESTS the Secretary-General to invite all Governments concerned to provide information on experience gained from the implementation of this resolution;
5. REVOKES resolution A.722(17).

Invitation to 2nd Contest Of Port Memos in 1994

The Second International Contest of Port Memos (Annual Reports) is to take place in 1994, sponsored by the Port of Buenos Aires, Argentina. The aim of the Contest is to highlight the knowledge, support and progress of ports worldwide as represented in their annual reports and to inform organizations and individuals about the progress of a port, its achievements, objectives and goals.

Entries will be judged on originality of design, the usefulness of the report's contents, appearance, the quality and artfulness of the photographs and the wording of the report's message. These standards are then to be evaluated for each report based on the port's size, its importance, geographical location and the traffic it handles.

The First Prize winner will be awarded a cash prize of US$1,000, the Second US$500 and the Third US$300, with an Honor Diploma presented to each. Those entries that are considered remarkable works but short of the top three prizes will be awarded an Honor Diploma in recognition of their achievement.

The First Contest was held in 1992, in which over 100 ports participated. The ports of Barcelona, Spain, Los Angeles and EMPORCHI, Chile took the first three places respectively.

A sum of US$300, being the surplus from the first contest, was contributed in February 1993 to the IAPH's Special Port Development Technical Assistance Fund through the courtesy of Mr. Carlos Armero Sisto, the contest organizer.

IAPH member ports are therefore requested to earnestly participate in the 1994 Contest by submitting their most recent port memos (annual reports).

For details, please contact Mr. Carlos Armero Sisto, Editor/Publisher, The Buenos Aires Port and Maritime Yearbook, at the following address:-

Talcahuano 77 - 2do. 7mo
(1013) Buenos Aires, Argentina
Fax: + 54-01-383-1586

Theme Chosen for '94 Bremen Conference

At the end of the 2nd International Conference on Safety in the Port Environment in October 1992 the participants agreed that the series of conferences should be continued with a 3rd event. Based on opinions voiced in 1992, the theme for the next conference has been chosen as "The Impact of Port Services on Safety and the Environment". Under this heading the mandatory use of port services, control procedures, safety classification of

ports, bunkering, reception facilities and finance and cost recovery for certain port services are to be discussed in plenary and in special groups.

The 3rd Conference is planned for early October 1994 and will be held in Bremen again. The Bremen Senator for Ports, Shipping and Foreign Trade has, as in the years before, the honour to request all experts in port and shipping safety management and pollution control to assemble in Bremen and voice opinions on these important subjects.

Once more the Bremen host will be supported by the International Maritime Organisation (IMO), by the Baltic and International Maritime Council (BIMCO) and by an impressive list of other international and national governmental and non-governmental organisations.

The venue for the Conference will be the splendid Bremen House of Parliament, right in the centre of the old Hanseatic City, bordering the century-old market square and close to the town hall, the merchants' Chamber of Commerce and the cathedral.

For further information contact:

Port and Transport Consulting Bremen GmbH
P.O.Box 107965
28079 Bremen, Germany
Tel +49 421 3983805
Fax +49 421 3983698

BIMCO Statement on Stowaways, Port Security

The Executive Committee of The Baltic and International Maritime Council (BIMCO), met in Copenhagen last November to discuss various industry related matters.

The agenda for the meeting, chaired by Mr. Fridtjof Lorentzen, the President Designate of BIMCO, included the following issues:

Stowaways

The number of illegal immigrants boarding and hiding, some in containers, on board ships sailing from major European ports bound for the USA and Canada, is of major concern to owners operating on this route. In 1992, the United States Immigration Authorities dealt with more than 6,500 cases of illegal immigrants from Europe and other origins.

The problems that the stowaways cause shipowners continue to be substantial and unresolved.

BIMCO urges port authorities to increase security in ports and terminals.

Port Security

BIMCO is concerned by the lack of security in many South American and African ports. More than 50 incidents of armed assault and theft of cargo have been reported to BIMCO this year.

BIMCO has on many occasions contacted the authorities and will continue to press for solutions to the problem.

More Int'l Approach: Europe Dredging Assoc.

What is EuDa?

European dredging companies are amongst the leading companies in global dredging.

The prominent position of the European dredging industry can be measured by its significant involvement in the execution of both small and large infrastructure projects on both a national and an international scale within and without the European Communities.

The continuing integration of the European countries and the trend of a transfer of power from a national level to a supranational level require a more international approach to all aspects regarding the dredging industry.

The individual dredging companies and their national representative organizations more than ever feel it necessary to cooperate in these common fields of interest.

They are convinced that the establishment of a 'European Dredging Association' (EuDa) will contribute to the improvement of these developments.

With their technical expertise and scientific knowledge the European dredging sector will emphasize the important role that EuDA can play in the economic and social environment of the EC and in the quality of life of its citizens.

Objectives

As a non-profit organization EuDA shall have as its objectives the study and eventual solution of all problems of interest to the dredging industry in the widest possible sense, in particular those of a scientific, technical, economic, financial, social, documentation and institutional nature and the research of solutions to these problems.

To that end the activities of EuDA shall include international cooperation and representation, in particular within the framework of the European Community.

EuDA shall inform its members of activities of the dredging and maritime industries, making known the progress achieved in their domains with respect

to infrastructure and energy, environment, export, technical harmonization, research and development, and labour qualifications and conditions.

These objectives are implied in the Articles of Association which will be formally approved on by the Belgian Ministry of Justice by the end of 1993.

ICS/ISF Guidelines on Safety Management

The International Chamber of Shipping (ICS) and the International Shipping Federation (ISF) have produced a set of industry guidelines to assist ship operators in the task of implementing the requirements of the International Safety Management (ISM) Code, which was adopted by IMO.

The ISM Code establishes an international standard for the safe management of ships, requiring a documented safety management system to be established and maintained by companies for their shore operations, as well as their ships at sea.

While the IMO Assembly passed a resolution adopting the Code, discussions are continuing in IMO about amending the SOLAS Convention to make it mandatory internationally, starting from June 1998. However, in the interim, many governments are expected to follow the IMO recommendation to make the Code compulsory on a national basis as a matter of priority, effectively introducing a "licence to operate ships."

To anticipate the inevitable requirement for certification, ICS and ISF have recommended that companies worldwide should establish safety management systems ashore and at sea on a voluntary basis. "We expect the ISM Code will become mandatory for many ship operators shortly" said Chris Horrocks, Secretary General of ICS and Director of ISF. "The industry guidelines are intended to assist operators in the considerable task of implementing the Code's requirements as soon as possible."

ICS and ISF attach great importance to the role of effective management of ship operations, and this is reflected in the wide support the organisations received in producing the guidelines.

"A valuable contribution was made by the International Association of Classification Societies (IACS) and we received support for the guidelines from the Baltic and International Maritime Council (BIMCO), the International Association of Independent Tanker Owners (INTERTANKO), the International Association of Dry Cargo Owners (INTERCARGO) and the Society of International Gas Tanker and Terminal Operators (SIGTTO)," said Mr Horrocks.

Mr Horrocks also highlighted the need to avoid confusion in the industry about the objectives of the ISM Code, which is confined to ship safety and pollution prevention, and the range of quality assurance options being embraced in the industry. "A safety management system may be just one part of a company's quality control programme, or in another company it may stand alone," he said. "The important thing to realise is that the ISM Code will require companies to have an approved documented safety management system in place, whether or not they have chosen to achieve QA certification."

"The message is that ship operators should come to grips with the requirements of the Code now, as the process of establishing an effective safety management system can be lengthy. We hope that the industry guidelines will assist in this process."

New Publications

The IALA Vessel Traffic Services Manual

221 pages; ISBN No 2-910312-01-1; Price to members of IALA, IAPH and IMPA:-FF200.00; Others FF400.00

The publication will be of interest and assistance to all organisations providing or intending to implement a VTS. It will also be of interest to teaching establishments responsible for training VTS personnel and to users of VTS.

The information contained in the publication has been collected from many sources world-wide and it is therefore a truly international document.

The Manual has been prepared by the IALA VTS Committee which includes representatives from many organisations with responsibilities in the VTS field. In particular much of the input has been provided by the International Association of Ports and Harbours (IAPH) and the International Maritime Pilots' Association (IMPA).

Chapters include those on Planning, Structuring and Operating a VTS and the publication is supported by detailed Annexes.

The publication is priced at FF200.00 for members of IALA, IAPH and IMPA and FF400.00 for others.

Copies may be obtained from:-
The IALA Secretariat
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The Americas

Halifax Freezes Tariffs Four Years Running

For the fourth consecutive year the Halifax Port Corporation has frozen all of its major tariffs.

Wharfage and Berthage have been frozen since April 1990, and Habour Dues have been kept at the same rate since July 1989. There are no scheduled increases in Wharfage, Berthage or Harbour Dues for 1994.

David Bellefontaine, President and CEO, commented that the Halifax Port Corporation has been able to maintain current tariffs due to a series of rigid cost-cutting measures. He said, "The move to maintain rates was taken at this time because customers are just beginning to recover from several years of recession." He anticipates that the Halifax Port Corporation's lead will entice other port partners to follow suit with their tariffs.

The Port has handled 11.8 million metric tonnes of cargo during the first ten months of the year, registering a modest increase over last year. The major growth area has been import containers, which have grown 19% over the same period in 1993.

Mr. Bellefontaine explains that, as the recession eases, holding tariffs at 1989/90 levels will give the Port's carriers additional encouragement, thereby enhancing the competitive position of the Port.

Montreal Continues Tariff Freeze in 1994

The Montreal Port Corporation is freezing all its general tariffs for a second consecutive year in 1994 and is keeping intact its tariff incentive program for containerized general cargo.

"The tariff freeze and the maintenance of the incentive program are direct results of the measures the port corporation has taken to rigidly control operating costs so as to continue to contribute to the overall competitiveness of the Port of Montreal System," said Mr. Dominic J. Taddeo, president and chief executive officer of the Montreal Port Corporation.

"The bottom line here is that net wharfage charges on containerized cargo at the Port of Montreal will average $2.10 per tonne in 1994, compared with the rate of $2.25 per tonne which was in effect back in 1984, 10 years ago."

The general tariff freeze for 1994 once again affects harbour dues and charges for berthage and anchorage, wharfage, the railway, as well as grain elevation and storage. In addition, passenger charges remain frozen for a fourth consecutive year.

The Montreal Port Corporation's tariff incentive program for containerized general cargo for 1994 remains "as is" and once again includes an additional bonus to be shared by shipping lines that contribute to increasing the port's total 1994 container cargo throughput.

The bonus for additional throughput is available to container lines trading both internationally and domestically. On top of the base incentive, an additional rebate of $1 per metric tonne will by granted for every tonne in excess of the port's 1993 total volume. The rebate will be paid to shipping lines having registered growth and will be proportional to their contribution to the port's total increase in container traffic in 1994.

The Port of Montreal was the first Canadian port to introduce in 1986 a tariff incentive program to provide incentives to shipping lines to encourage them to move as much container traffic as possible through the port's facilities.

In 1994, landbridge traffic for all containerized cargo between Asia and Europe routed through the Port of Montreal will once again benefit from an additional rebate of $1 per tonne on top of the base incentive. The landbridge rebate, which provides a savings of $14 per 20-foot container and $19 per 40-foot box, capitalizes on the role the Port of Montreal plays as a leader on the North Atlantic and on the excellent rail services available out of the North American West Coast.

In 1994, Montreal Port Corporation's base incentive plan will remain at 74 cents per tonne for the first 175,000 tonnes handled and 84 cents for each additional tonne for international cargo.

For domestic shipments, the 1994 base incentives will again be 58 cents per tonne for the first 175,000 tonnes handled and 68 cents for each additional tonne.

A reduction of a further 17 cents per tonne will continue to apply for all containerized cargo west of Ontario in Canada, and west of Michigan, Indiana, Kentucky, Tennessee, Georgia and Florida in the United States. This incentive translates into a savings of $2 per 20-foot container and $3.40 per 40-foot box.

For Mediterranean traffic, the additional 25 cents per tonne remains in effect.

"Our tariff freeze for 1994 reflects the Port of Montreal's continued commitment to assisting its shipping lines and ensuring that the entire Port of Montreal System becomes even more competitive and productive," Mr. Taddeo said.

Port of Long Beach Opens Offices in China

The Port of Long Beach has become the first port in the United States to open offices in the People's Republic of China, port officials announced.

The two offices, located in Beijing and Shanghai, will allow the port to strengthen its relationships with customers in China, said Alex Bellehumeur, President of the Board of Harbor Commissioners who travelled to China in late October to open the offices.

"Trade between the United States and China is rapidly escalating," Bellehumeur said. "In Long Beach, we are seeing the results of that soaring trade as one of our prime customers — China Ocean Shipping Company (COSCO) — has reported more than a 2,250 percent increase in container traffic through Long Beach since 1986. China now ranks as the Port's fourth largest trading partner. The new offices

in China will improve our communications with COSCO and with other potential Chinese customers."

Captain Eddy Y. H. Chan, Chairman of Asia Transportation Ltd., will oversee the operations of the China offices. Asia Transportation, a full-service shipping company, has more than 200 employees in its offices throughout Asia. Asia Transportation and its subsidiaries have represented the port in Hong Kong, Taiwan, Singapore, Indonesia and Malaysia since the mid-1970s.

Chan is well-known in shipping circles throughout Asia, with a career spanning more than 50 years. After he graduated from the Chinese Customs Maritime College in Shanghai, he joined the Chinese Customs as a marine officer for eight years. Then, Chan worked for the China Merchants Steam Navigation Co., Ltd. in Shanghai, and the Taiwan Navigation Co. in Taipei.

In 1959, Chan was appointed Vice President of Culny, Inc, the New York affiliate of China Union Lines of Taiwan. He co-founded Asia Transportation Ltd. and Hong Kong Maritime Co. Ltd. in 1960, and was elected chairman of both companies in 1985.

In 1978, Chan took part in founding Hong Kong Trident Shipping Agency Co. Ltd. and has since been Chairman of the Board of the company. Under his guidance, the Hong Kong Trident Group has grown from a staff size of less than 10 to more than 200.

The new China offices of the Port of Long Beach may be contacted at:

Port of Long Beach Beijing Office
Room 122, Jianguo Hotel
Jianguomenwai Da jie
Beijing, PRC
Phone: (86-1) 500-2233 Ext. 122
Fax: (86-1) 500-2871 or 501-0539
Ext. 122
Port of Long Beach Shanghai Office
Flat F, 5/F Jin Ming Building
8 Zun Yi Road South
Shanghai, PRC
Phone: (86-21) 219-5753
Fax: (86-21) 219-5753

First 747-400 Freighter Takes Off from Sea-Tac

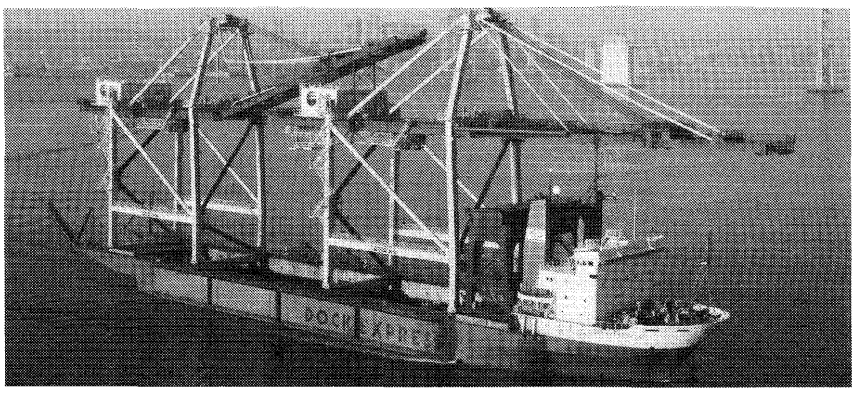
Cargolux Airlines International and the Port of Seattle or November 17, 1993 inaugurated the first commercial flight of a new generation Boeing 747-400 freighter as a high-technology symbol of global trade and one fitting for the start of the Asia-Pacific Economic Cooperation forum.

The quieter, fuel-efficient jumbo jet took off from Seattle-Tacoma International Airport with 116 tons of cargo bound for the Cargolux base in Luxembourg — a record payload for the route — in a demonstration of the Port of Seattle's international prominence as a "sea-air" cargo hub.

"Today, you can see the port in action, doing what we do best — linking the Pacific Rim to markets here and in Europe," said Port Executive Director M.R. Dinsmore. "Our ability to quickly move these goods creates jobs here in Seattle and enhances the port's position as a gateway to Asia, Europe and South America. The port is the linchpin in this transportation connection."

All of the space aboard the new cargo plane was chartered by Nippon Express Inc., USA, a leading international freight forwarder, to fly to Luxembourg high-value computer, video and copying equipment that arrived only hours before from Asia at Port of Seattle marine docks. From Luxembourg, the cargo was to be distributed to several European nations.

The Port of Seattle is an acknowledged leader in the movement of sea-air container cargoes. Sea-air goods typically arrive in Seattle by ship and are quickly trucked to air freight facilities at Seattle-Tacoma International Airport for reconfiguration as air freight. Cargoes frequently are airborne within



New Cranes Delivered to Oakland

A pair of new container cranes was delivered to the Port of Oakland. They were built by Mitsui Paceco in Tamano, Japan and made the Pacific crossing aboard the transporter vessel *Dock Express 12*. The cranes are built to handle fourth generation, post Panamax vessels and can lift up to 40 longtons (89,600 lbs). They will be installed at the Berth 30 container terminal to be occupied in early 1994 by Transpacific Container Service Corporation (TraPac), the terminal operating subsidiary of Mitsui O.S.K. Lines. Berth 30 will be the first new terminal to open at Oakland since 1982. It will have a single, 1100-foot containership berth, supported by 38 acres (15.3 ha) of terminal area, twice the size of the Oakland terminal now used by the Mitsui O.S.K.

hours of their arrival in the Seattle harbor.

Gina Marie Lindsey, managing director of aviation at Sea-Tac, noted the new Boeing plane "is not only the best of its class, but also nearly 40 percent quieter than its jumbo jet predecessors. This plane will further cut noise impacts on communities near the airport," she said.

The Boeing freighter, which will make regular flights between Sea-Tac and Luxembourg, is currently under consideration as a replacement by the U.S. military for its aging fleet of cargo and transport planes. The new Cargolux plane will fly twice a week between Seattle and Luxembourg with cargo from Asia and the United States bound for Europe.

Carriers and freight forwarders at the Port of Seattle support an estimated 5,000 local jobs with sea-air shipments between Asia, Europe and South America. Total air cargo at Sea-Tac in 1993 is nearly 5 percent higher than for the same period of 1992. Sea-air cargo is a growing area of importance at the port, which handles $33 billion in two-way trade in its marine and aviation divisions and supports one in every five jobs in King County.

More than 16,000 people are employed at Sea-Tac airport, and another 20,000 jobs off site are related to Sea-Tac aviation and support activities. More than 50,000 visitor industry jobs also are supported by the airport.

Port Engineering — Building the Future: Port of Charleston

The design and management of a $90-million construction project, spread over more than 82 acres and incorporating many new technologies, requires a first rate engineering team. The fact that the expansion of the Wando Terminal is seven months ahead of schedule is testimony that the Port of Charleston's Engineering Department is one of the best. The expansion project is being financed entirely by the Ports Authority's sale of $65,725,000 worth of revenue bonds and its own internal capital.

"As many as five staff engineers are responsible for different phases of the project," said Randy Bowers, manager engineering. "Our engineers have a wide range of responsibilities including design, bidding of contracts, and management of the project to see that contractors meet their specifications.

"Jerry Hauske has been our lead engineer for the entire expansion. He has been involved from the very beginning. This terminal is one of the best in the world and all our staff are dedicated to keeping it that way," he said.

The Wando Terminal, built in several phases from 1979 to 1985, currently handles about 2.8 million tons of container cargo per year or 45 percent of the container cargo through the Port of Charleston.

The terminal's 2,427-ft. berth, six container cranes, and 167 acres of container handling and backup area have helped make it one of the most efficient container terminals in the world. The final phase of construction, now underway, will add 1,373 feet of berthing, two new post-panamax container cranes, and 75 acres of container handling and backup space. It will boost the terminal's cargo handling capacity by 2 million tons per year.

A change in the orientation of the wharf required a new permit allowing the SPA to fill an area that formerly was to be dredged. It took two years to obtain the amended permit.

The SPA was required to undertake extensive steps to minimize and mitigate the impact on wetlands. "Our original construction was state-of-the-art and we were a leader in controlling storm water run-off," said Larry Setzler, engineering project manager. "The environmental standards have been strengthened further over the years and our new construction reflects the new technology available today.

Setzler was responsible for the coordination and implementation of a mitigation plan acceptable to the permitting agencies.

"First we agreed to pull our construction back 100 feet from our property line to minimize the impact on the wetlands," said Setzler. "We also provided a 100-foot vegetated buffer around the other construction areas."

Fifteen acres of marsh were dredged and filled to provide solid ground for the construction of the container handling area behind the wharf. The SPA restored 15 acres of marsh on Morris Island to replace it. The original Wando construction plan and permit would have filled 18 acres of marsh.

The seven-month Morris Island mitigation project required a new cross-dike and the removal of old dredge disposal material. The contractor graded the area to provide heavy-tidal, light-tidal and no-tidal areas, then planted 60,000 plants. The SPA will monitor and replace any dead plants for the first three years. The cost of the wetlands restoration project is $705,000.

The SPA also agreed to fund a $50,000 study to identify other potential mitigation sites. This study will be made available to any organization which may need wetlands impact mitigation in the future.

Another feature of the plan provides long-term water access to Charleston's Mosquito Fleet. Charleston's small independent fishing boats have had a presence in the harbor for hundreds of years. The contractual agreement between the Port and the fleet will ensure the continued presence by this tradition-rich group of Charleston's waterfront.

Storm water run off is always a major environmental concern in construction projects. Rainwater falling on acres of concrete must be collected and treated for any contaminants it may pick up. "The containment system used for the first part of the terminal was the best technology available then," said Setzler. "Since the standards have changed, we decided to divert some of the run-off from the original construction to the new storm-water detention pond. We will also upgrade the original canal system."

"The 17-acre storm-water detention pond and canal are sized to capture and treat the first inch of rain falling on the entire 220-acre expansion area, plus 34 acres of the older terminal," said Steve Kemp, engineering project manager.

The $3-million project includes an extensive storm water sewer system to get the water to the pond. "We looked at treating the water and letting it flow into Bermuda Creek," said Kemp. "This would be the easiest and most cost effective route. However, we had concerns about lowering the salinity of the creek. We elected to build a retaining wall and canal to carry the outflow to the Wando River which was the normal end-point for that rainwater before construction."

Water in the pond is contained by a weir system at the lower end of the canal. The weir stops any floating debris or contaminants from leaving the system. The bottom of the canal contains a perforated drainage pipe overlaid with a sand filter, much like those used in many swimming pools. Storm-water must pass through the sand filter before being released into the river.

The retaining wall uses the latest technology. "Geotextiles are just beginning to come into their own," said Kemp. "We've made extensive use of them in all our land stabilization work, especially the retaining wall."

The wall is built of interlocking triangular concrete blocks. The blocks are not cemented together. The cracks between them allow ground water to pass through so hydraulic pressure does not build behind the wall. Between every other row of blocks the contractor rolled out a 15-foot-wide layer of polyester grid.

This "geogrid" is secured to the block wall by galvanized steel re-bar running vertically through the layers of block. Covering the geogrid with compacted fill tied the wall to the soil it is retaining. As each row of block and geogrid were laid and covered, the contractor was effectively building a 15-foot-thick wall porous enough for water to pass through.

The 1,500-foot-long wall also has excellent seismic properties. "If we have an earthquake, we may have to replace the concrete cap, but the wall should handle it well," said Kemp.

Soil stabilization was a major part of the construction project. "There were six dredge disposal ponds behind the new berth," said Hauske. "This clay silt material never dries below the surface. We excavated 34 acres of this material, spread it out and dried it. After we mixed it with select fill dirt that was trucked in, we placed it back in the excavated area."

This method of drying is fast and works well if you have a log of space available for drying. The remaining 40 acres of dredge disposal area, those farthest from the berth, were not needed as quickly. So, a slower and more economical method could be used.

"Wick drains have been around a long time," said Kemp. "The old technique was to drill a hole and fill it with sand or stone. Applying pressure, by burying the area under a large pile of overburden, forces the water up the stone columns." The problem with this method is that settling often causes the columns to break, stopping the flow.

"The new geotextiles have solved the problem of broken columns," said Kemp. "As the soil settles, the wicks bend and buckle, but they don't break."

Workers knitted the entire 40-acre area together with 4,200,000 feet of wicks, 23 feet long, placed in a three-foot triangular pattern. A machine, resembling a drilling rig with a mandrill attached, takes the polyester wick material to the desired depth. A length of material is left above ground to lay over a horizontal drain of similar material.

Some 11 feet of overburden applies pressure on the water-bearing soil below. The wicks carry the water up just like the wick in an oil lamp. The horizontal drain then carries the water out of the area.

When the engineers determine that the area is ready for construction, contractors will remove the overburden and concrete will cover the area. The 34 acres that was dried using the faster method has already been paved.

"Paving of Phase 1 required 62,000 cubic yards of concrete poured 13 to 15 inches thick," said David Smith, engineering project manager. "The paving contractors worked 24 hours a day for 28 days to have the area." Approximately 155,000 cubic yards of concrete will be needed for the expansion project.

Construction in the marsh area began immediately upon receipt of the new permit. Another 1,700-foot wall had to be built to separate and protect the marsh to the north which was outside the project area. Hauske designed a steel sheet pile structure because of the different pressures the wall encountered as construction progressed.

"The wall had to protect the marsh and keep it out of the area being dredged to a depth of 25 feet," said Hauske. "Now it will contain the back-fill as it is raised to 22 feet above the ground."

A partial-width gravel dike ties into the steel wall and runs nearly perpendicular to it, along the river, to the existing terminal. The stone dike, brought in by ship, was economical and is designed to withstand seismic activity.

"We looked at several possibilities for stabilizing the soil above the solid marl layer that is the foundation layer," said Hauske. "We decided the most economical method would be a combination of dredging and wick drains. We dredged within 15 feet of the marl, installed 2.5 million feet of wick drains, and backfilled with sand. The wicks will pull the water up into the sand layer where it will drain naturally."

"This was an enormous challenge because of the innovative construction techniques," said Tim Sherman, construction supervisor. Sherman or his assistants are on hand for all phases of construction. The dredging operation went on seven days a week, 24 hours a day. Sherman and his staff supervised the placement of as many as 400 truck loads of select fill each day. Each load had to be inspected and some were rejected for not meeting specifications.

"Project management is a large part of the engineer's job," said Bowers. "We spend a lot of time to make sure we design each phase the right way and specify it the right way. The engineer also works hard to make sure the contractors do everything to specifications. When something is not done according to the contract documents, someone has to tell the contractor to correct it or re-do it. That is not always met with enthusiasm."

The final contract has been let for the construction of the wharf, dredging the new berth and 40 acres of utilities and paving directly behind the wharf.

The contractor has begun driving the first of 1,076 24-inch-square, 90-foot-long, concrete pilings that will support the wharf. The pilings sink approximately 35 feet into the solid marl layer, providing a firm foundation for the elevated wharf, and the cranes, trucks and men who will work in the wharf.

This final construction contract runs 510 days with a bonus for early completion. That makes Oct. 29, 1994 the projected completion date. As construction of the wharf proceeds, the

completed area will be used for assembling the new post-panamax cranes ordered by the port.

Stuart Turner is the engineering project manager in charge of crane specifications. "We save a lot of money purchasing cranes because we do all the work ourselves," said Turner. "We don't use consultants. We have a committee, from engineering, operations and maintenance, who analyze manufacturer's proposals."

"We don't go in for a lot of bells and whistles," said Turner. "We added more advanced diagnostics, and switched to a different boom, but otherwise it's pretty much the manufacturer's standard model. What really makes the difference in productivity is the operator. All the electronics in the world won't change that. Right now our operators are out-performing others, all over the world, using the same equipment."

The first crane is due to be delivered Aug. 1, 1994, with the second delivered one month later. A final decision has not been made to exercise the option for two more cranes. Turner estimates the Ports Authority saved between $500,000 and $1 million on each $5.4 million crane, "by using our own people to make the selection."

The same method was used in choosing the five IHI cranes which were added to the port in 1990; their efficiency and speed have been widely acclaimed by the lines at Charleston. It is this kind of attention to cost containment without sacrificing quality which has made the Port of Charleston one of the most efficient in the world. Port personnel are dedicated to excellence. The ability of the engineering department to take on the big jobs and complete them with the same attention to detail that they apply to their daily work, will be a factor in the port's future success.

(Port News/Port of Charleston)

Tacoma, Fujian to Work For Closer Trade Ties

Port of Tacoma's commissioners signed a letter of intent with the Fujian Economic and Trade Delegation from China's Fujian Province on November 2, 1993.

Top representatives from the Port of Tacoma and the Fujian Economic Commission signed the letter at the World Trade Office at Sea-Tac International Airport just before the trade delegation returned to China.

The letter is not a formal trade agreement, but it does cite mutual benefits of pursuing closer economic and trade ties between Tacoma and China's Fujian Province.

"We certainly hope that this will be the start of a long-term, beneficial relationship between our regions," said Jack Fabulich, president of the Port of Tacoma Commission. China already ranks as Tacoma's second-largest international trading partner behind Japan.

"This takes on special significance because it is the first time an entire Chinese province has sought closer ties to the Port of Tacoma," said Port Commissioner Pat O'Malley. "And this is a province of some 30 million people."

The delegation's visit came just two weeks before the highly publicized Asia-Pacific Economic Cooperation (APEC) meetings, scheduled in Seattle November 13-20.

In preparation for the meetings, Secretary of State Ralph Munro assured the group that APEC organizers would make every effort to accommodate China's trade delegation during the upcoming sessions.

Munro Joined Port of Tacoma commissioners Fabulich and Pat O'Malley in co-signing the letter of intent during a brief ceremony at the airport.

"Please assure your country's leaders that we will do whatever we can to make their upcoming visit productive," said Munro as the group was preparing for its return flight to China.

Signing the letter for the Chinese delegation were Wang Shi Fei, deputy chairman of the Fujian Economic Commission, and Governor Chen Guangyi of the Fujian Province.

Fujian is a 48,400-square-mile coastal region of southeastern China located directly west of Taiwan. The province is designated by China as a free economic zone and boasts a rapidly growing economy. These zones operate under tariff incentives that encourage foreign investment and trade.

The gross national product (GNP) of Fujian Province has grown at an average of 11.6 percent annually since the late 1970s. Key agricultural industries — farming, forestry and fisheries — have expanded, with overall agricultural production rising 11.4 percent in 1992 alone.

The Chinese trade delegation used the three-day tour of Washington state to improve relations with business and political leaders. Top officials from Fujian Province met with Gov. Mike Lowry, toured the Port of Tacoma and met with business leaders from the Boeing Company, the Frank Russell Company, Key Bank and Vancouver Door Company in Puyallup.

The province's leaders hope to attract trade and capital investment to support some $10 billion in infrastructure improvements in the next six years.

The region exports agricultural products, seafood, logs and grain. Principal imports are steel, oil, industrial equipment and chemical products.

Tacoma's two-way trade with China now totals $2.7 billion and more than half a million tons of cargo annually.

Africa/Europe

Actual Situation of Ports In Republic of Croatia

By Bojan Hlaca
Assistant General Manager
Port of Rijeka

War situation in the middle of Europe!

Unfortunately this is a fact: a greater part of the country, for instance, in western part of Republic of Croatia which wasn't included in war doing under all circumstances very well and ports like Port of Rijeka with throughput about five million tons per year without liquid cargo has really intensive handling activity during last period and in the same time prepare for future changes in the port's role in country economy.

The Republic of Croatia is really maritime-oriented country with about one thousand and five hundred kilometers of coast and many islands. Through these ports is shortest distance from the Mediterranean and Adriatic sea to countries of Central Europe. This is the main advantage and this period of time is useful for preparing all necessary points for future expansion.

Through last thirty years ports have

been expanding their activity only by their own financial sources in specific social property which still take place, and without any governmental support in building infrastructure, superstructure and purchase equipment. This is the crucial point and a big mistake in the past and it is almost a miracle that under the circumstances these ports still compete with other western Mediterranean ports.

Fortunately the present government concludes ports as the main points of country developing and already, under all not favorable circumstances, has started high capital investment activities in infrastructure according to the master plan which is still in phase of determination. This high capital investment will provide quicker, reliable and lower whole transport as well as lower port's cost service in future.

Also, the government has been preparing a new port legislation which has the main point in improvement port productivity and efficiency through legal transformation of ownership, that means shift in government policy to privatize port operations and achieve basic objectives as national interests, promotion of trade, social consideration, efficient use of port facilities and lower cost of services.

What will be with port ?

In implementing a new legislation ports will shift from operation and service port to landlord port with privatization of the operational activities.

If we try to check benefit and risk with implementation of the private enterprise in port we know very well that higher probability to success has benefit and it is no doubt about that.

Only the things we can worry about are in process of privatization itself in implementation phase of new legislation, all in reason of social considerations. We know very well the key of success is in the hand of government agencies and their flexible view in process of changing external and internal environment and high level of consideration within the existing stakeholders which are involved in port's activities and dealing with their strength and weaknesses.

It is possible that some mistakes occur in that process but it is necessary to make effort and minimize them on such level to make changes with fluent and reliable operational functions.

Problem of latent unemployment is one of the crucial point in all privatization process and should be properly solved. This problem can occur in reason of extremely lower demand of cargo in some terminals three years ago mainly has been caused by the war in Bosnia and Herzegovina as well as changes in countries of eastern Europe opening a free market economy.

We are aware of the situation mentioned before and know very well that application of private enterprises will increase productivity and efficiency in our ports and in the same time increase demand of cargo in future. This is one of possibility to solve a problem of latent unemployment.

Implementation of new port legislation in the Republic of Croatia will give possibility for quicker port development which is one of the main point of whole country development.

Port of Tallinn in Profile

State Enterprise Port of Tallinn a brief survey as to why it was founded.

State Enterprise Port of Tallinn was established in September 1991 by the Government of the Republic of Estonia, which had recently gained its independence.

Until that time all ports in Estonia were subordinated to various USSR central offices and were directed from Moscow with no regard for the local needs or interests. The previous small ports system of the Estonia Republic was destroyed during World War II.

At present state enterprise comprises three big ports — Tallinn City Port, Kopli Port, both located in Tallinn, Muuga Port in the vicinity of Tallinn and small ports of Roomassaare, Virtsu, Kuivastu, Rohuküla, Heltermaa and Sviby, which maintain connection between the mainland and islands of west-Estonia Saaremaa (Ösel), Hiiumaa (Dagö) and Vormsi (Ormsö).

The objective of State Enterprise Port of Tallinn is effective development of all ports, which considers both the benefit of each port as an independent profit center as well as the overall national interests. Here the favourable location of Port of Tallinn on the tradeway between East and West should be taken into account as well as the good conditions provided by nature and the existing facilities of the ports. In the East-West direction the port's hinterland stretches out to Russia and other republics of CIS, reaching Far East by means of the Trans-Siberian Railway. In the North-South direction the so called via Baltica enables transport of goods via Latvia, Lithuania and Poland to Central Europe.

Port of Tallinn is practically ice-free with depths down to 18.5 metres. Consequently the port is able to receive all the vessels that can sail through the Straits of Denmark. That could be regarded as basis for directing ocean going vessels to Port of Tallinn in the future. By so far the biggest vessel calling at Port of Tallinn has been 150,000 DWT.

Basically, the three big ports are fulfilling different tasks. City port, which is located in the centre of the city, is multifunctional for the time being and will be mainly oriented on passenger services in the future. Muuga and Kopli ports are and will remain in the future as well mainly cargo ports.

In 1992 total cargo turnover of all units in State Enterprise Port of Tallinn was 11 million tons, main types of commodities being grain, coal, oil products, metal, timber, cement, general cargo, cars etc. After the re-establishment of the Estonian Republic the number of passengers using sea transport has considerably increased. The numbers speak for themselves:

In 1989 the port handled 223,000 passengers;
In 1991 this number increased to 936,000
In 1992 this reached 1,339,000.

For over a year Port of Tallinn has been operating in a completely different situation. Transition to independency brought also along a fast shift to market economy and open competition. That in its turn demands fast modernisation of port structures according to Western standards. Rapid privatisation process is in progress and consequently more and more port services are going to be rendered by various companies and joint ventures. Step by step the port organisation is changing into a holding company, providing work for new companies which are being founded. Also quite a large amount of foreign capital is involved. Companies from the Netherlands, Finland, Sweden, Germany and so on are participating

in joint ventures.

In order to be able to plan the future of the port it is necessary to have an updated data base about the present and future situation of the port. For defining the feasibility of port's future's assessment there is a need for a detailed masterplan. Here the government of the Netherlands has offered its help to the Republic of Estonia and the Port of Tallinn. A masterplan study is being financed by the government of the Netherlands and carried out by a Dutch company Logion B.V.

The masterplan was completed in March 1993. During the work connected with compiling the masterplan the key questions of the development of the Port of Tallinn were studied, the masterplan will also become a basis for defining future investments.

The year 1992 could be regarded as starting point for future steps of the Port of Tallinn. The renovation, modernisation and construction of port buildings started that year. The total cost of all the work carried out in the port in 1992 was a bit less than US$10 million. At the same time this was seen also in the improvement of quality of the port facilities and services. Currently quite extensive construction work is taking place. Below, we include brief details of ports united under the Authority of State Enterprises Port of Tallinn. We trust they are of interest.

The history of Estonia has always, from the ancient times, been interrelated with seafaring and sea trading. Favourable natural harbour greatly influenced the founding of Tallinn at its present location. Admission into the Hanseatic League in the late 13th century gave an impulse to the development of the city. After Visby on Gotland was destroyed by the Danes in 1361, Tallin became one of the most important ports in the eastern part of the Baltic. The city retained this position also in the next, 15th century.

18th century brought along a new stage in the development of Tallin. Peter the Great ordered a major port reconstruction and expansion work, which took nearly a century and a half (1710-1856) to complete. Launching the Baltic railway in 1870 gave further impetus to port development. During that period piers and basins roughly received their present layout.

Today Tallinn City Port is the biggest passenger port and at the same time a major coal and general cargo port in the Republic of Estonia. Passengers are entitled to expect a wide range of choices. The City Port services two round-the-year routes: Tallin-Helsinki and Tallinn-Stockholm. At the peak of the season there are up to 11 departures and arrivals daily on the Tallinn-Helsinki route and 1 daily departures for Stockholm. The number of cruise vessels calling at Port of Tallinn is increasing year by year. In order to offer better services a new terminal was built for Tallinn-Stockholm route and an extension of the Finnish terminal now in progress will add another storey to the present establishment.

General Data :

land area		475,000 sq m
water area		339,000 sq m
length of quays		2.7 km
number of berths		17
max depth alongside		8.6
max dimension of vessel	length/breadth/draught	160/30/8.6 m
transhipment facility for bulk and general cargo	per year	up to 3.5 mln tons
quayside cranes	nos/lifting capacity	39/6-40 tons
coal terminal capacity	single/per year	20,000/2.0 mln tons
container terminal capacity	single/per year	600/up to 20,000 TEU
annual turnover in 1992		2.3 mln tons
passenger turnover		1.3 mln

Passengers coming to Tallinn by sea arrive in the very heart of the city, the old town of Tallinn. Berths No 10, 11, 12 and 13 are at present being used for passenger ships.

Cargo handled at Tallinn City Port is coal, timber, metals, installations and other general cargo, as well as containers.

Berth No 1 in the southern part of the port is reserved for loading and unloading containers. The quay is provided with cranes of up to 40 tons capacity and special container trucks.

Berths No 2, 3 and 5 are mainly for general cargo, while berth No 7 is for handling metals and general cargo. Berth No 6 is for ships under repair and floating repairworks. Berth No 8 is reserved for loading and unloading of packed foodstuffs and general cargo. Berth No 9 is for port tugs. Coal handling is carried out on berths No 14, 15 and 16. Berth No 17 is for vessels servicing the port.

Considering the needs of Tallinn's development, the location of port, the centre of the city, and also the growing number of passengers arriving by sea, the role of the port as passenger terminal is going to increase in the future. In order to cope with the task, it is planned to decrease the general volume of cargo, the first commodity to remove according to this plan is coal. Good alternatives are Muuga Port in the vicinity of Tallinn and also Kopli Port, where the main cargo handling can be transferred from tallinn City Port.

In the future it will be possible to widen the port into the area lying to the north of the present port facilities, by creating a new pier with seven or eight new berths, indicated with a dotted line on enclosed chart.

In order to find the most suitable project for reconstructing the City Port so that it would fit into the city line experiences of foreign architects could be used.

Plans for Vuosaari Port Soon Completed

A working team consisting of representatives of the City of Helsinki's administrations has planned the new port in Vuosaari during the past summer and autumn. The report will apparently be completed within this year. The report and the decisions to be based on it will be the Capital's answer to alternative arrangements proposed by the Ministry of Communications for the port of Helsinki region.

The general report includes an overall plan for the actual new Port of Helsinki and an estimate of cost. New uses for freed area in the city centre are proposed and the economic gain, and the benefits in term of urban structure that can be obtained from such exploitation, are explained. Even if the new law concerning assessment of environmental consequences has not yet become efficient, large and many-side environment studies are part of the preparations for the project.

It is possible already to state that a port in Vuosaari will be able to satisfy the needs of future traffic. The lay-out of the port allows for the far-reaching

automatization of harbour work, already to be discerned. The Port of Helsinki has up to now always been able to offer incoming transport good working conditions. The increase in traffic also shows that the clients trust the efficiency of the port. In these circumstances, the public polemic in the media about various harbour alternatives seems irrelevant and unnecessary.

Le Havre Organisation Of Cargo-handling

"The "Union Maritime et Portuaire" (the "Port Employers' Association" grouping together all the shipping and port professionals in Le Havre) and the Port of Le Havre Authority took stock of the implementation of the new organisation of cargo-handling operations in the port of Le Havre. One month after its implementation, on August 23rd, the situation is as follows:

— the law of June 9th, 1992 is in force in Le Havre.

— according to the commitments made : 1,000 dockers were employed on a monthly-paid permanent basis as from August 23rd, 1993, the remaining ones were offered retirement, early retirement or training and retraining schemes.

— Le Havre is thus different by the fact that only "monthly-paid" dockers work in stevedoring companies.

— The stevedoring companies have set up new working conditions aiming at providing services being at least equivalent to those provided by competing ports.

— the undersigned are totally supporting this ambitious move.

— nevertheless, it appears that, despite a slight improvement these days, handling rates have worsened and remain on average lower by 15 to 20% than those recorded before August 23rd.

This situation cannot last any longer, otherwise the objectives of the reform would be endangered, especially the improvement of competitiveness to meet the customers' requirements and then make it possible to recover trades in the Port of Le Havre.

This being stated, the Undersigned, while being fully aware that the results cannot be instant:

— solemnly underline that urgent improvements should be recorded rapidly.

— insist on the great urgency of the situation,

— cannot think that — in the general interest — the new scheme as a whole is not rapidly made operational

— commit themselves to make a public progress report on the situation"

Port Employers' Association
Port of Le Havre Authority

Garden Symbolic of Osaka-Le Havre Ties

For many years, the month of October has been a time for reunion between the ports of Osaka and Le Havre.

This year, the meeting had special glamour for at least two reasons:

— A delegation from the port of Shanghai was also in Le Havre to participate in the working sessions of the Sister Ports Conference,

— A Japanese garden was inaugurated during the stay of the two delegations.

This ceremony took place in the presence of Mr. Yatabe, the Japanese Ambassador to France, Dr. Sasaki, Deputy Mayor of Osaka, the Mayor of Le Havre, the Japanese Council in Le Havre and many personalities from the Le Havre region, without forgetting, of course, Messrs. Semba and Ito from the Port of Osaka and a large delegation of representatives from port companies who had come with them.

All these personalities were welcomed to the Port of Le Havre Authority by Mrs. Ruppa-Pesnel, the Vice-Chairman of the Board of Directors, and the Managing Director, Mr. Smagghe.

Within the scope of strengthened cooperation between the Port of Le Havre Authority and the Port of Osaka, twinning agreements between both ports were actually signed on July 15, 1980. Being an official mark of a bilateral policy of promotion of their respective economic and industrial activities, these agreements also represent a forum likely to foster the implementation of more cultural projects and to witness the steady growth of closer relations between two ports, two ways of life, two cultures.

It is from this viewpoint that the idea of creating a Japanese garden in Le Havre and a wine museum in Osaka was born.

Located at the interface between the city and the port, the Japanese garden is a small island of greenery symbolizing the will for symbiosis between the city of Le Havre and its port.

The main purpose of the creation of a Japanese garden remains the will expressed by the ports of Osaka and

From left to right: Dr. Sasaki, Deputy Mayor of Osaka, and Mr. Yatabe, the Japanese Ambassador to France, tour the newly opened Japanese garden guided by Mr. Smagghe (Managing Director, Port of Le Havre), together with Mr. Monnin (the Port of Le Havre's Representative in Tokyo) and Mr. Craquelin (a French landscape architect), Mr. Duromae (Mayor of Le Havre), Mr. Cai Mei Ye (Vice Director, Port of Shanghai) and Mr. Vatinel (Japanese Consul in Le Havre), as the Port of Le Havre (left) and Osaka flags welcome the visitors.

Le Havre to strengthen, through this symbolic deed, their ever-deepening cooperation. This garden is not only a formal present to which the building of a wine museum in Osaka is the response. Being the fruit of cooperation between the two ports, the Japanese garden is first of all a metaphor for the bond linking the two ports, both in content and form.

The Japanese garden is thus the result of particularly meticulous work jointly carried out by Mr. Craquelin, a French landscape architect, and Ms. Miyamae, a Japanese landscape expert in Japanese gardens, who was assisted by the relevant departments of the ports of Le Havre and Osaka.

The Japanese garden is meant to symbolize the twinning of the two ports in its very design: thus, the two rivers running from the cascade join in the pond, symbolizing the history of both ports merging together. The pond itself evokes, through its form, the union between two oceans, the Atlantic and the Pacific.

Everything in this garden expresses the meeting between both ports, both worlds: from the pebble beach lying near the pond, which very precisely reproduces the shape of the beach at Le Havre, to the stone lanterns, symbolizing the presence of the holy light, which represents the mutual enrichment of both cultures, within a larger scope than the twinning itself.

The various species of flowers used to structure the Japanese garden were scrupulously and carefully chosen. The purpose was to respect the traditional flower arrangements while resorting to species acclimatized to the Le Havre environment.

The stones making the cascade and surrounding the stretch of water were chosen one by one, in the South of France; they were laid out in the garden with special care.

Like the cooperation between the two landscape designers, the cooperation between the two ports to achieve this joint project was also expressed by donations presented by the port of Osaka, comprising most of the features (stone bridges, bamboo fences and gate, Japanese stones, etc.) necessary to create a Japanese garden according to the rule-book

Started in January 1993, the work was completed this summr, thus providing a floral creation novel to Le Havre. Through this Japanese garden, the ports of Le Havre and Osaka are confirming their union: that of two ports united in their economic and industrial efforts and increasingly enriched by their differences.

Hamburg Port Interface In International Trade

Port of Hamburg is an important interface in the international transport chain which stretches from the producer or shipper to the final destination. The Port fulfills a cargo-handling function not only for the Grater Hamburg region (local traffic) but also for its hinterland (German-speaking countries, Central/ Eastern Europe and Scandinavia) and overseas regions (the so-called maritime foreland).

The associated transport function is fulfilled by forwarders and shipping lines by means of various carriers. Hamburg offers a broad spectrum of shipping possibilities for cargoes travelling to and from overseas destinations. Of some 13,000 arrivals each year roughly half are liner ships, the rest tramps. Around 280 liner services, including more than 100 container and numerous ro-ro or round-the-world services, guarantee regular connections between the Port on the Elbe and some 800 overseas destinations. Hamburg is known as the "most easterly Atlantic port" and is thus the last port for big ships to unload, and the first where they load up. It fulfills a Main Port function in the global network of shipping lines.

Traffic to and from Hamburg's continental hinterland is transported by road, rail and inland waterways. These hinterland connections are being constantly improved by expanding the transport infrastructure, a policy outlined in the Federal Traffic Routing Plan (17 transport projects linked to German reunification), so that even a doubling of the Port of Hamburg's current container turnover to 4 million TEUs p.a. could be managed without any problems. Extensions to the range of services available, e.g. through new direct-block train connections linking individual port operators with hinterland terminals, have speeded up access to the Port of Hamburg even further. Thanks to the competition policy introduced by Directorate-General IV of the European Commission it is now possible to ship goods via Hamburg at an optimum price because the cost of carriage now has to take actual costs and the distance covered as the points of reference. In this respect Hamburg has decisive advantages in traffic to and from Scandinavia, Eastern Europe, Southern Germany and Austria since the distances involved are, on average, 37% less than to the ARA ports (cr. table).

Countries on the North Sea and Baltic are increasingly being served by feeder ships. Of every 100 overseas containers that pass through the Port of Hamburg, 25 are, on average, accounted for by transit traffic to and from Scandinavia or Eastern Europe (around 90% of this feeder traffic), 35 by European hinterland traffic (ca. 70% by rail) and 30 by local traffic. The remaining 10 are stuffed or stripped in the Port.

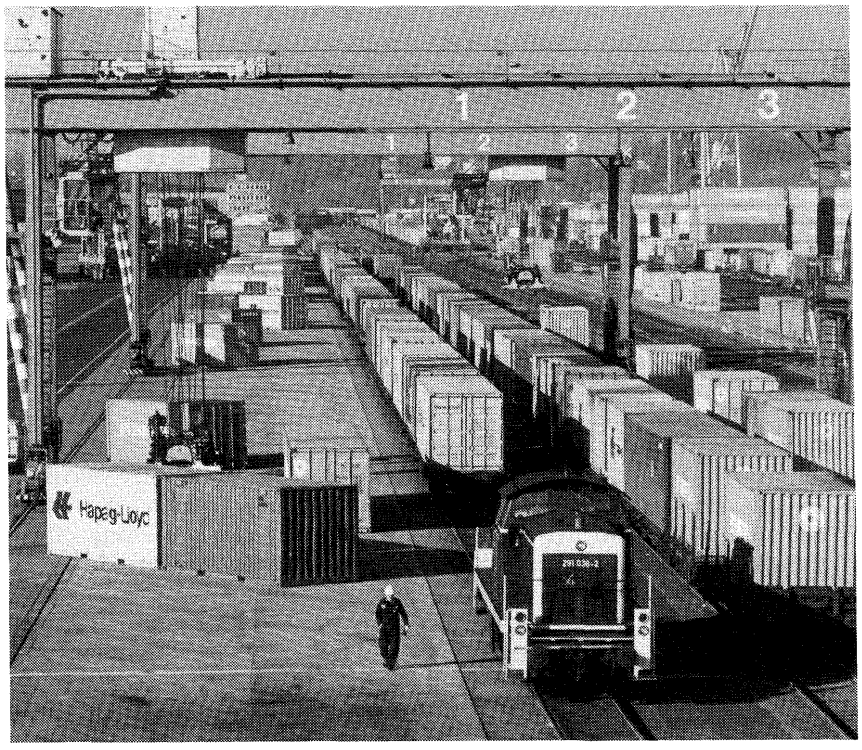
In deciding on the carrier to be used for hinterland transport (modal split), shippers and consignees take a number of aspects into account. However, quality and price are usually the decisive factors. Only a new firms, e.g. Neckermann, give priority to environmental aspects.

Shippers prefer to have contact with a single problem-solving partner for the entire transport chain. As a result of the deregulation of freight rates, the opening up of rail container traffic to the private sector and the desire to have single-source problem solutions (lean production), Hamburg's port operators have become increasingly involved in the transport chain via subsidiaries offering seaworthy packaging (particularly for the project business), warehousing, forwarding services and the organization of intermodal transport.

Modal split

Trucking accounts for a significant proportion of the volume of cargo transported. A 45.6% share of the Port's total cargo turnover in 1992 confirms the significance of local and short-haul traffic for distances of up to 300 km. Hamburg lies at the cross-roads of five autobahns with direct links to the pan-European road network.

Over the years, Hamburg has built up a reputation as an ecologically advanced rail port. Every terminal has its own private sidings within the Port



Port of Hamburg/HJH

Railway network and is thus linked to Europe's largest marshalling yards in Maschen, just south of Hamburg. The industrial centres of Germany as well as Switzerland and Austria are only an overnight train journey away. Further afield, the rail journey to Melnik in the Czech Republic takes 22 hours and to Warsaw 36. The eastern route to Budapest takes 40 hours. Particularly these new direct-block train links have been mainly established by private-sector operators such as Eurokai and Polzug. In 1992 rail transport has a 32.2% of total cargo turnover. If we remove sea-borne transit and local traffic from total cargo turnover, we find that the railways account for nearly 55% of real hinterland traffic. If we only consider containers carried more than 150 km, the proportion taken by rail is likely to be around 75%.

Hamburg has direct links to all the major industrial regions in Germany and the Czech Republic via the River Elbe, the Elbe Lateral Canal and the Mittelland Canal. The main emphasis in inland shipping is on transporting bulk cargoes because it is by far the cheapest means of transport for such goods. But an increasing number of containers are being transported, too. Inland shipping has a 14% share of total cargo turnover in the Port of Hamburg.

Feeder ships and the combination of truck, train and ferry offer the best shipping possibilities to and from European countries all the way from Portugal in the south-west to Russia in the north-east, help bridge the North Sea and Baltic and create the links between Britain, Scandinavia, continental Europe and Hamburg. Such sea-to-sea traffic accounts for 8.1% of the Port of Hamburg's cargo turnover.

All carriers are keenly competing for market shares. But whatever the carrier — rail, inland waterways, feeder shipping or road transport — Hamburg has the best possible connections to overseas shipping. Speed is the Port's trump card and handling onward carriage is no exception. The whole system works like clockwork 24 hours a day, 360 days a year.

More Containers, Less Bulk in Amsterdam

Over the past nine months there were once again more containers and general cargo handled in the Port of Amsterdam than in the same period last year. The figures of the Port Management of Amsterdam (Gemeentelijk Havenbedrijf Amsterdam) show that 748,000 tons of containers were transshipped, a growth of 14.3% over the save period of last year. The transshipment of so-called conventional mixed goods (sacks and baled goods) rose by 11.1 percent to 584,000 tons and of unit loads (large units) by 71.7 percent up to 432,000 tons.

In the bulk goods sector (including coal, oil products, grain, sand and gravel) the influence of the economic headwind was very noticeable. Transshipment dropped by 12.8 percent to a total of 20.2 million tons.

In total, almost 23 million tons of goods were transshipped in the Port of Amsterdam in the period January through to the end of September 1993. The months of August and September in particular did not turn as good a profit as could have been expected from June and July's results. Compared to the same period last year transshipment decreased by 10.9 percent.

The Port of Amsterdam received 3,646 vessels over the past nine months with a total loading capacity of 37.7 million tons (deadweight), as compared with 3,774 ships with a total loading capacity of 39.5 million tons over the same period last year.

Despite this poorer result, Jan Koster, vice-executive director of Port Management of Amsterdam, is not pessimistic. "Although the final result will be somewhat lower than last year's, I would estimate it at about 30 million tons, prospects are good. The transshipment of coal is experiencing difficult times at the moment, but will certainly improve next year when the new coal-fired Hemweg power station starts operating."

He continues: "In addition to that there will eventually be new flows of coal which will be very attractive to the Port of Amsterdam, with its strategic location and good infrastructure. And then there is the growing transshipment of containers and mixed cargo. I would expect this growth to continue, especially considering the development of our so-called inland shuttles. The increasing use of these regular container services on inland waterway vessels in The Netherlands and Germany will strengthen the position of Amsterdam in container transport."

Dry Bulk

The transshipment of dry bulk fell

by 14.2 percent over the last nine months to almost 12.7 million tons. The malaise in the coal sector was especially to blame. Because of the economic recession and the consequent build up of stocks, coal transshipment was halved to 2.4 million tons. The Port Management of Amsterdam, nonetheless, expects that this sector will eventually regain its lost position.

The decreased imports of oil-bearing seeds put pressure on results in the agri-bulk sector (grains, derivatives, feed and oil seeds). In total 5.5 million tons (- 1.8 percent) were transshipped.

Over the past nine months less sand, gravel and minerals were imported into the Port of Amsterdam. As a result total transshipment fell to almost 2.5 million tons (- 6.9 percent).

In contrast, the export of scrap metal doubled, which caused ores and scrap metal to record an increase of 90.2 percent to 1.2 million tons. The problems in the agricultural sector are very apparent in the transshipment of fertilizers. These were halved to a level of 375,000 tons.

Some 696,000 tons of "other dry bulk" were handled.

Liquid Bulk

During the first nine months of this year the transshipment of liquid bulk goods decreased by 10.4 percent, dropping to a total of 7.6 million tons. Within this sector only the transshipment of crude oil increased. With an increase of 4.1 percent, the transshipment of crude reached 801,000 tons.

Although the transshipment of oil products in the month of September rose, calculated over a period of nine months it has fallen by 12.1 percent to 5.6 million tons. In view of the fact that this particular category is recession-sensitive, the Port Management expects no improvement over the short term.

575,000 tons of molasses were handled (—15.1 percent) and 570,000 tons (—9.9 percent) of other liquid bulk products.

General Cargo

The amount of general cargo handled (container, roll-on/roll-off, unit loads and conventional mixed cargo) rose again over the last nine months to a total of 2.3 million tons or by 10.8 percent.

Within this sector, only the roll-on/roll-off traffic did poorly. The fall of 15.8 percent was primarily caused by the poor state of the car industry. Total roll-on/roll-off traffic amounted to 559,000 tons.

Container shipping into Amsterdam actually continued to grow strongly. A growth of 14.3 percent to a total of 748,000 tons was recorded for the past nine months. As an important contributing factor the Port Management cites the expansion of a Latin American container service into Amsterdam as well as the increasing use of the so-called inland waterway shuttles.

Conventional mixed cargo (sacks and bags) has also seen growth in its share of the total transshipment package of the Port of Amsterdam. Due to a rise in the import of cocoa and paper, the transshipment of conventional mixed cargo increased by 11.1 percent to 584,000 tons.

The transshipment of unit loads (large units) also rose sharply over the past nine month period, by 71.7 percent. Both the import of wood and the export of scrap metal increased, pushing transshipment up to 432,000 tons.

Landfarming Project Begins in Amsterdam

On Thursday, October 21st, in Amsterdam's Petroleumhaven, port alderman drs Piet Jonker officially launched the "Petroleumhaven landfarming-project".

The project involves an on-site biological soil cleansing plant, which cleans ground polluted with oil and aromas under optimal conditions.

Biological soil cleansing, also known as landfarming, is based on the principle that bacteria present in the soil break down the oil residue in warm and humid conditions. The unique feature of the Amsterdam Petroleumhaven's landfarming project, is the degree of control over the process in contrast to the traditional set-up which is climate sensitive. A variety of conditions, such as temperature and humidity, can be adjusted in two insulated halls to allow the biological decomposition of the oil products to operate optimally. This allows the cleansing process to continue all year round, regardless of the weather conditions.

The costs of this soil cleansing method are around two-third lower than the costs of other soil cleansing techniques, such as thermal cleansing. By cleaning the soil on-site, transportation costs are also kept to a minimum.

The landfarming project in the Petroleumhaven is being carried out by "Milieutechniek De Vries en van de Wiel" from St. Maartensvlotbrug in the province of Noord-Holland on behalf of Port Management of Amsterdam.

According to Godfried C.G. van den Heuvel, director of Port Management of Amsterdam, this biological soil cleansing plant is the first step in a structural attack on soil pollution in the area, which, because of its historical and present-day function of storage, transshipment and processing of petroleum products, is polluted in several places.

"Discussions are presently underway with local businesses for a joint effort to clean the soil elsewhere in the area within a reasonable time frame. This, however, is not the only project in Amsterdam port that demonstrates how to operate a port in an environmentally responsible fashion.

"Other examples are the stimulation of transportation by water through the recently introduced regular container service by inland barge and the multi-modal transport centre, Westpoint. The aim of both projects is to reduce transport by road. Even the design of the public spaces in the port takes the environment into account, with greenery and an easy to follow street plan. There are also many preventive measures in place to prevent damage to the environment in Amsterdam port. So protection of the environment and improving the quality of life in Am- sterdam port are priorities in our day-to-day policy".

Transshipment Improves In Port of Rotterdam

Transshipment of goods in the Port of Rotterdam in the third quarter of 1993 totalled 71.4 million tons, almost 1% more than in the third quarter of 1992. During the first nine months of the year, transshipment lay at 209.9 million tons, 4.4% below the level of 1992. This represents an improvement compared with the 7% drop in the first half-year. Crude oil, petrochemical products and containers did partic-

ularly well in the third quarter. Other general cargo, coal and chemical products showed a less rosy picture however.

Growth Sectors

Transshipment of crude oil rose in the third quarter by some 5% to 26.1 million tons. Due to the big price difference between crude oil and oil products, it is very attractive to buy and process large quantities of crude oil. This is the reason for the rise in overseas exports of oil products (400,000 tons of which went to Singapore alone).

In the first nine months of the year, container transshipment at 33.6 million tons was 2.2% better than in 1992. this was a consequence of higher exports to countries in the Far East and the rise in feeder traffic to European destinations. In the third quarter exports rose by almost 9%, thereby achieving the best quarterly result ever. The transshipment of ore and scrap metal rose by nearly 6% in the third quarter. This was almost entirely accounted for by scrap metal exports (+77.1%). Due to the continuing high demand for steel by China, the scrap processing furnaces in Taiwan and South Korea are working at full capacity. Ore imports remained more or less stable at 8.8 million tons.

Declining Sectors

Transshipment of coal fell by 15.4% to 4.6 million tons in the third quarter. Imports reached the lowest point of the last three years. In the case of exports, there was an incidental rise of 9% as the result of the export of a stock of coal which had been stored in Rotterdam by English customers.

Other general cargo showed a decline of some 15% in the third quarter. The result during the first nine months amounted to 8.4 million tons, a decline of 8.3%. This is the result of reduced industrial activity and lower consumer spending. Transshipment of other liquid bulk cargo fell in the third quarter by 16.1% due to the structural overcapacity with which the chemical industry is faced worldwide.

Sector Showing No Change

Transshipment of cargo in vehicles — Ro/Ro — showed a slight increase in the third quarter. Due to the recovering British economy, exports were a little higher. Imports tended to slacken as a result of disappointing car sales in Europe.

As anticipated, the transshipment of agribulk (mainly animal feed) declined as a result of the EC reduction in the price of grain which took effect on 1 July. In the first nine months, however, there was a 4.1% increase in transshipment in comparison with 1992. The total quantity of agribulk in Rotterdam is therefore expected to remain approximately the same this year.

Ro-ro Terminal at Hull For Superfreighters

The first riverside ro-ro facility on the Humber, River Terminal 1, was officially inaugurated by the Dutch Ambassador, His Excellency Mr Joop Hoekman, at Associated British Ports' (ABP) Port of Hull on Tuesday, 9 November 1993. The £11-million terminal has been built by ABP for North Sea Ferries' (NSF) new-generation superfreighters, adding extra freight capacity to NSF's Hull-to-Rotterdam service and helping to reinforce the position of the city and the port as the "Northern Gateway to Europe".

The new terminal, which has been built to the west of King George Dock Lock Entrance, has the capacity to generate an extra one million tonnes/year of freight at the port by offering faster turnround for vessels and providing direct access from the deep-water channel to the berth. North Sea Ferries' daily sailings from Hull to Rotterdam and Zeebrugge currently account for 2.5 million tonnes of ro-ro traffic at the port.

Hull is the only major seaport on the North Bank of the Humber, the busiest trading estuary in the UK. The inauguration of the new terminal reflects the port's continuing expansion — the 1992 tonnage figure of 8.7 million tonnes was the best figure for 25 years and trade has increased by 63 percent in the last three years.

To mark the inauguration of River Terminal 1, Sir Keith Stuart, Chairman, Associated British Ports, invited the Dutch Ambassador to unveil a commemorative stone. The unveiling ceremony was followed by luncheon aboard North Sea Ferries' m.v. *Norsun*.

At the inauguration ceremony, ABP Chairman, Sir Keith Stuart, said:

"There is no doubt that, with its excellent geographical position, first-class connections with the rest of the UK, and now this greatly expanded capacity in the River Terminal, Hull is strengthening its claim to be the northern gateway to Europe... We have spent some £35 million on the Port of Hull over the past five years and the development we are inaugurating here today is the largest single investment in that programme." He added:

"River Terminal 1 is designed to ensure that Hull is able to take advantage of the excellent growth prospects which we see in the North Sea trades. In due course, there is scope for further developments on the waterfront at Hull as demand builds up."

Ambassador Hoekman said: "Today's ceremony not only marks a new extension to the existing bond between our two trading nations with a strong maritime background, it also establishes a vital link between both our economies."

River Terminal 1 was constructed by AMEC Civil Engineering Ltd. Facilities include a fixed jetty which extends approximately 80 metres on to the River Humber, a 58-metre adjustable linkspan, a new road approximately 900 metres in length and a container-handling area of 12.3 acres.

ABP, NSF Choose Poster Winners

Associated British Ports (ABP) and North Sea Ferries (NFS) have announced the winners of the "Design-a-Poster" Schools' Competition which was mounted in the run-up to the inauguration on 9 November of "River Terminal 1", the new riverside roll-on/roll-off terminal being built by ABP for NSF's daily Hull-Rotterdam freight service.

Darren Rogers, aged 16, a student of Wilberforce Sixth Form College, was judged the overall winner. Over 600 paintings were submitted by school children in the Hull area on the theme of "Hull — Gateway to Europe".

Darren wins £200 and a return family trip on North Sea Ferries from Hull to either Rotterdam or Zeebrugge. His winning entry will be used for promotional purposes by ABP.

The panel of judges who met at ABP's Port House consisted of the Right

Worshipful the Lord Mayor of Hull, Councillor Len Harvey; Peter Crampton, MEP for Hull; Bob Lough, UK Manager, North Sea Ferries; Mike Wood, Editor, Hull Daily Mail; Andy Dakin, a local artist; David Porter, Arts Officer, Hull City Council; John Lilley, BBC Radio Humberside and Mike Fell, Port Manager, ABP-Hull.

The competition was divided into two categories: primary school children and secondary school children.

Arun Goebells, aged 11, a pupil of Endsleigh Roman Catholic Primary School, won the first prize of £200 in the primary school category; the second prize of £100-worth of art materials went to Authority Bean, aged 10, Sutton Park Primary School, and a joint third prize of a £20-Athena voucher and a family cinema ticket was awarded to both James Wang, aged 10, Endsleigh Roman Catholic Primary School, and Sean Rogers, aged 10, Highlands Primary School. Endsleigh Primary School was also awarded £300 for having the highest standard of entries in the primary school category.

In the senior school children category, Darren Rogers won first prize; Adam Plant, aged 14, Hull Grammar School, was awarded second prize of £100-worth of art materials and Jamie Last, aged 16, Wilberforce Sixth Form College, receives the third prize of a £20-Athena voucher and a cinema family ticket. Wilberfoce Sixth Form College also receives £300 for having the highest standard of entries in this category.

At the judging ceremony, the Lord Mayor commented:

"The standard of entries was fantastic. A tremendous amount of work was put in by the children emphasizing Hull's position as a leading trading centre for Europe."

Mike Fell, Port Manager, ABP-Hull, said:

"The winning posters portray a new European experience for the Port of Hull, reflecting the pioneering spirit of River Terminal 1. ABP and NSF are delighted with the overall response and we express our thanks to all the children and schools involved."

The prizes will be presented to the winners aboard the m.v. "Norbank" by Mike Fell and Bob Lough.

Environmental Study by ABP Southampton

Associated British Ports (ABP) Southampton is sponsoring an environmental study of the River Itchen, which will be carried by the Maritime Division of the Southampton Institute of Higher Education during the next two months.

Forty undergraduates, studying for a BA degree in Leisure Management, will produce an environmental map of the Itchen as part of the Coastal Zone Management unit of the course. The map will show the physical environment of the river, areas of biological and conservation interest, as well as indicate the economic and recreational uses of the river.

Andrew Kent, Port Manager — ABP-Southampton, said:

"This pilot scheme will establish closer links between the port and education in Hampshire, and also increase the students' awareness of the responsibilities of a Harbour Authority."

The project will be assessed by ABP after its completion on 12 January 1994. ABP will donate equipment to the Institute and will award individual prizes for the best examples of work.

Damaged Crane Moved Inland at Felixstowe

Engineering at Felixstowe finished moving 900 tonnes of damaged quayside crane 300 metres inland after they had worked through the weekend in winds rising to gale force.

"With 17 ship-to-shore container cranes in the Port continuing in full operation, reinforced by high-capacity reserve equipment, we are confident of maintaining service levels to our customers," said Peter Bennett, the Port's general manager and executive director.

"Felixstowe investment in total crane capacity means that we can do it in a way that would be impossible for a smaller operation."

Repairs to the crane are reckoned to take six months at a cost estimated in excess of £1 million. An impact dislodged the crane from its carrying bogies, though it remained upright. The accident happened on November 9 while the containership *Mathilde Maersk* was berthing.

The crane is one of nine post-panamax out of 13 ship-to-shore cranes at Trinity Terminal. It travelled on self-propelled, hydraulically-operated platforms to an area behind the container parks.

Asia/Oceania

Dedicated Cruise Terminal for Brisbane

"Brisbane's ability to compete in the multi-billion dollar cruise industry will be enhanced with the decision by the Board of the Port of Brisbane Authority to take the lead role in the creation of a dedicated terminal to serve cruise ships," said chairman, Mr Ian Brusasco.

Mr Brusasco said that the plan called for the refurbishing of an existing structure at Hamilton Wharf No 3 to make it suitable for use by cruise ships, and a funding package to be shared by those agencies most committed to the development and promotion of Brisbane's fledgling cruising industry.

As the first step in the process to develop this much needed facility, the Authority has reached a broad agreement with Conaust Limited, one of the two major stevedoring companies in the port and a subsidiary of the P&O Group.

The agreement calls for the cost of the refurbishment, estimated at approximately $500,000, to be covered initially by Conaust. The capital cost would then be recovered over a period of eight years from participating agencies. Conaust would continue to manage the facilities in accordance with its current leasing arrangements and charge a berthing fee to cruise ships using the berth.

The Port of Brisbane Authority has taken the lead in the funding and has agreed to provide $20,000 annually, provided other agencies are prepared to fund the remaining $60,000 of the annual capital repayment. Mr Brusasco said that a group represented by the Brisbane Visitors and Convention Bureau has agreed to fund $20,000 per annum and discussions are continuing with the Queensland Tourist and Travel Corporation and other agencies. "The economic benefits for Brisbane are enormous," he said.

"It has been estimated by the Brisbane Visitors and Convention Bureau that one ship operating out of Brisbane would generate $64 million per year in new revenue for the region," Mr Brusasco added.

"Even though the Port Authority will not make any money from an increase in cruise ships coming into the port, it is important for us to develop the concept and initiate discussions between the parties.

"We are convinced that the creation of a dedicated terminal will have a positive influence on the number of cruise lines who will wish to consider Brisbane as a home port," Mr Brusasco concluded.

According to the Brisbane Visitors and Convention Bureau three cruise lines have expressed interest in operating out of Brisbane and that number is expected to increase to five or six by the year 2000. *(Brisbane Portrait)*

Fremantle Port Vital To WA Economy

The operations associated with Fremantle Port contribute an estimated $700 million aggregate annual output within the State and local economies.

This was highlighted in a study recently completed by private consultants Economic Research Associates on behalf of the Fremantle Port Authority, the Department of Transport and the Fremantle City Council.

In announcing the results of the study, Western Australian Transport Minister Eric Charlton said the Port was a very significant source of economic activity and had a dramatic impact in economic terms.

The study identified that activity at the Port was directly responsible for the employment of 4,025 people in WA, with annual wages and salaries totalling $130 million.

When multiplier impacts on other sectors are taken into account, the total employment effect increases to around 10,000 jobs involving annual wages and salaries of $270 million.

The number of jobs generated by the Port (mainly private sector) account for around 1.2 per cent of WA's total employment.

"I think Western Australians have always been aware of the influence of the Port on Fremantle, but until this study, we haven't known the enormity of the impact of port operations in hard economic terms," Mr Charlton said.

"The projections are for the Port to have an even greater economic effect in the future."

Mr Charlton also said that current efficiencies being pursued in the operations of the FPA should also encourage trade, and as trade levels grew, so too would the significance of the income and employment generated.

Mr Charlton indicated that container movements were expected to rise to 400,000 per year by 2020, which would create 1,000 additional jobs. By knowing the importance of the Port as a source of economic activity, issues affecting its operations can be better judged.

In addition to economic activity associated with commercial shipping, non-trading vessels such as naval ships and passenger vessels contribute a further $100 million per annum in expenditure within the WA economy.

United States naval personnel are estimated to spend around $60 million each year during visits to Western Australia. *(Fremantle Port News)*

Zone Development Gives Impetus to Nanjing Port

By Wang Jian
Executive Office
Nanjing Port Authority

To meet the need of building Nanjing into an international metropolis, Nanjing Xingang Industrial Development Zone (NXIDZ) started its construction on Sept. 18, 1992. The zone covers an area of 6.53 sq. km, adjacent to the Xinshengwei Terminal in Port of Nanjing, the largest river port on the Yangtze River and a large-size sea-river port. Port of Nanjing has established trading and shipping relations with over 70 countries and regimes throughout the world. Regular container liners direct to Japan and Singapore, making 32 calls per month. The port has provided the zone with exceptional advantages.

NXIDZ enjoys the same preferential treatment as other coastal development zones given by the state besides its excellent natural conditions. Foreign service institutions are complete and provide convenience to investors from abroad. Complete set of infrastructures is provided by the zone. Ample and reliable power are supplied by 2 sets of 110/10Kv. power station. 100,000 tons of water are ensured daily and

provided by a water factory. Sufficient liquefied petroleum gas are supplied through pipes by Jingling Petrochemical Corporation. And 20,000 telephones of computer program control will be available.

NXIDZ has attracted many investors from home and abroad. 42 companies have been approved to settle into the zone, of which 25 are foreign-funded ventures. Contract investments amounts to $300 million. Most of the key project are under negotiation and waiting for approval and some have started construction. NXIDZ has become a new hot point of investment and it would certainly accelerate the booming of the Port of Nanjing.

4th-Phase Construction In Qinhuangdao Starts

The project to start the fourth-phase construction of the coal terminal in Port of Qinhuangdao, which is one of the key projects of the nation's Eighth Five-year Plan, has been approved by the State Council.

Total investment of the project amounts to 1.09 billion yuan, including 2 berths of 35,000-ton class and 1 berth of 100,000-ton class. The annual ship-loading capacity is 30 million tons.

To give full play to the fourth phase of the coal port in our country's transportation of coal as early as possible, the state requires the completion of the project half a year ahead of time. The original schedule of completion was fixed by the end of 1996.

Port of Qinhuangdao will be a big port of energy resource with the ship-loading capacity annually of over 1 billion tons after the key project of the country's infrastructure of energy transportation in the Eighth Five-year Plan is put into operation in 1996.

Technical Assistance Grant to Indonesia

The Asian Development Bank has approved a $600,000 technical assistance grant to Indonesia to prepare the tenth Bank-supported port project in that country. This technical assistance will be financed from the Japan Special Fund.

The technical assistance will assist the Government in identifying port investment priorities to improve international and interisland shipping services in the eastern region of Indonesia.

The technical assistance will assess the feasibility of investments of Surabaya Port and key ports in the eastern region, such as Banjarmasin and Balikpapan, to overcome congestion problems, to encourage greater frequency of direct international shipping links and to help integrate national interisland transport services.

Requirements for institutional strengthening and adjustment in operational policies and practices in the maritime sector to make them more efficient will also be examined.

Twenty-four man-months of consulting services will be required to undertake the technical assistance (18 man-months of international and 6 man-months of local consultants). Consultants with expertise in transport economics, port engineering/planning, port operations, financial analysis, computerization and environmental analysis will be required.

Mauritius Freeport Authority in profile

Set up in 1992, the Mauritius Freeport Authority (MFA) acts as a developer of the Freeport and is the sole authority for the management and control of the freeport zone.

Its main objectives are to ensure maximum operational efficiency and minimum bureaucracy to meet the market needs of international trade.

The functions and duties of the MFA include:

- Issuing licences to operate in the freeport zone
- Allocating areas, spaces, wharves and any other facility or structure available in the freeport zone
- Collecting rents, charges and other duties from licensees
- Working out agreements with third parties to provide additional or backup services to Freeport licence holders
- Promoting and encouraging external trade.

A Regional Warehousing, Distribution and Marketing Centre

The Public of Mauritius became independent in 1968, practices a mixed economy and has contributed to the development of a dynamic private sector.

Based on the sugar, tourism and textile industries, including a highly-efficient export processing zone, the economy has at its disposal an experienced labour-force and a sophisticated network of services.

The import-export sector is serviced by seven offshore banks and some fifteen commercial banks.

A thriving private sector is supported by an active Chamber of Commerce and Industry which is a member of the Federation of Chambers of Commerce and Industry of the Preferential Trade Area.

The island is well-connected globally with a comprehensive and modern telecommunications infrastructure; there are excellent sea and air connections to Asia and Europe.

The Mauritian population which originates from Europe, Africa and Asia have inherited the great cultures of the world.

The people are hardworking, hospitable and tolerant. They speak French, English and Creole as well as a few oriental languages.

Thanks to political and social stability, Mauritius represents an extremely propitious environment for business. It is a country where you feel secure and where life is pleasant.

Freeport Activities

Under the Freeport Act of 1992 the Freeport was established as a customs-free zone for all goods destined for re-export and on all machinery, equipment and materials imported into the freeport zone.

The Act also covers the operations of the following activities:

- Warehousing and storage
- Breaking bulk
- Sorting, grading, cleaning, and mixing
- Labelling, packing, and repacking
- Minor processing
- Simple assembly
- Paper and Commission Trade

The Freeport also seeks to facilitate transshipment which will be underpinned by a sophisticated network of experienced professionals in the areas

of banking, insurance, telecommunications and transport.

In order to become a centre for the distribution of goods and services in the region as well as a transshipment port, the MFA ensures that all Freeport operators are provided with the infrastructure, storage and ancillary facilities they require.

Additional Freeport services that include assembling and processing can help companies qualify for a PTA certificate of origin, which under terms set up by the Preferential Trade Area agreement reduces import duties by 50%.

Our Commitment to S'pore Shipping Industry

By Augustine Png
Marketing Department
Port of Singapore Authority

Volume of container traffic at the Port has managed to sustain a strong pace of growth. In the first half of this year, PSA handled 4.2 million TEUs. In June alone, some one thousand container vessels called at Singapore. They discharged and loaded some 750,000 boxes. We expect continued strong container growth, given the robust economies in the ASEAN region and Singapore's increased shipping links with Southeast Asia, South Asia, Indonesia, the Middle East and Australia.

Long-term Investments

With continued growth in container traffic, any shortfall in PSA's terminal handling capacity would be detrimental to Singapore's shipping industry. Our corporate policy is therefore to build ahead of demand, in order to avoid gridlock and congestion.

Plans to expand our container-handling capacity have already begun. Upgrading and conversion works (costing $500 million) at Tanjong Pagar and Keppel Terminals will boost our capacity by 1.6 million TEU's a year. New feeder berths will be interspersed with main berths to facilitate direct mother-feeder container transfers. When Brani Terminal is fully developed in 1994, it will have five main berths and four feeder berths and a handling capacity of 4.8 million TEUs a year. By 1996, Tanjong Pagar, Keppel and Brani Terminals will be able to handle 13 million TEUs a year collectively.

In addition to these developments, PSA has begun development plans for a mega container terminal to be constructed at Pasir Panjang.

New Technologies

We use the latest port and information technologies to enhance the quality of our customer service. Over the next two years, we will spend more than $600 million in new equipment and systems.

Many of PSA's technological improvements are the first of its kind in the world. These include the transponder system at our gates (for faster clearance), our design of double-stack trailers (to speed up container movement), touch-screen wireless communications on our yard and quay cranes (for real-time information and communications), our use of expert systems in resource allocation, and EDI links with our customers and other ports.

Furthermore we are researching prototypes of an Automated Container Operation Systems (including the Automated Guided Vehicles System, Remote Quay Crane Operations System, Automatic Chassis Alignment System and Automatic Container Number Recognition System). Application of these systems will keep Singapore in the forefront of container-handling technology.

Upgrading of Conventional Terminals

We are also upgrading and introducing computer systems at our conventional terminals. At Pasir Panjang Terminal (presently Singapore's main gateway for non-containerised cargo), we have built additional deep-water, coastal and multi-purpose berths, transit sheds and transit warehouses. PPT now has 7 deepwater berths, 14 coastal berths and 120,000 sqm of covered storage space. With the new facilities, PPT will be able to handle more than 10 million tonnes of conventional cargo annually.

A Computer Integrated Conventional Operation System (CICOS) will be implemented at PPT. The system will allow port users and our staff to have fast access to up-to-date information. Hand-held terminals will be used for vessel operations and for tallying and checking cargo balance. Transponders and self-service terminals will be introduced at PPT's gates. CCTVs will be installed in transit warehouses to monitor operations.

With CICOS, PSA staff will be able to retrieve data such as berthing and status of godown space easily from their PCs, and be better able to foresee bottlenecks in operations. CICOS is expected to be installed at PPT by mid-1994. A similar system will then be installed at Sembawang Terminal.

Better Service Levels

Our investments in facilities and technology enable us to constantly provide you with better service at the Port of Singapore. *(Port View)*

Port Authority of Thailand in Profile

Introduction

The Port Authority of Thailand (PAT) was established in 1951 with the objective of conducting the business pertaining to the port for the interest of the state and public. It is a state enterprise under the general supervision of the Ministry of Transport and Communications.

Policy

PAT's administrative and operational policies laid down by the Board of Port Commissioners are to develop existing ports in the light of the changing internal/external circumstances, to ensure optimum efficiency and fairness in the delivery of port services and to institute measures to properly control and supervise port activities in order to serve the formulated objective.

Services

PAT's major services comprise dredging and installing of navigation aids in the Authority area, facilitating vessel berthing, loading and unloading of cargoes and cargo storing. At present, PAT manages 2 ports: the Bangkok Port and the Laem Chabang Port. Services at the ports are on the round-the-clock basis.

Bangkok Port

Bangkok Port is located on the left side at the lower section of the Chao Phraya River between km. + 26 and km. + 29, Klongtoey sub-district,

Bangkok. It covers an area of about 900 acres.

The approach to the port is made through the bar channel which is 18 km. in length, 100 m. wide in the reaches and 250 m. in the bend.

The channel is dredged and maintained to a depth of 8.5 m. below MSL. Vessels entering the port are limited to maximum length of 172 m. or draught of 8.2 m.

Bangkok Port's berthing facilities comprise the West Quay, East Quay, dolphins and buoys. They can accommodate 35 ships simultaneously. Ships with break bulk cargoes are berthed at the West Quay; whereas, container ships, including combo and feeder ships are berthed at the East Quay. The dolphins and buoys are used to moor ships loading exports or undergoing minor repairs etc.

Bangkok Port is now equipped with 8 gantry cranes and a large number of sophisticated ground equipments. It is served by the back-up area of about 600,000 sq.m.; 500,000 sq.m. of which is for container services and the remainder is for general cargo services.

Laem Chabang Port

Laem Chabang Port is located in Chon Buri Province, about 130 km. from Bangkok. It is designed to render services to large container ships and bulk carriers which cannot enter the Bangkok Port; and be an infrastructure for the Eastern Seaboard Development Program.

Laem Chabang Port, at its initial stage, comprises 1 multi-purpose terminal, 3 container terminals, 2 agri-bulk terminals, 1 coastal ship berth, 1 service craft berth and other port necessities e.g. transit sheds, open storage area, office buildings, roads, railways and other utilities.

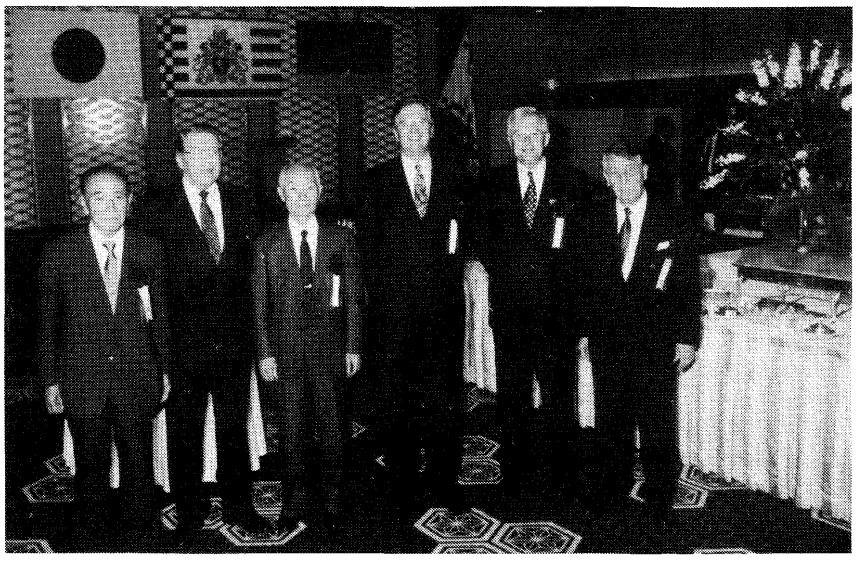
The port is equipped with 6 quay side container cranes, various types of ground handling equipments, 11 service crafts and modern marine control system. Total capacity at its initial stage is about 7.3 million tons a year.

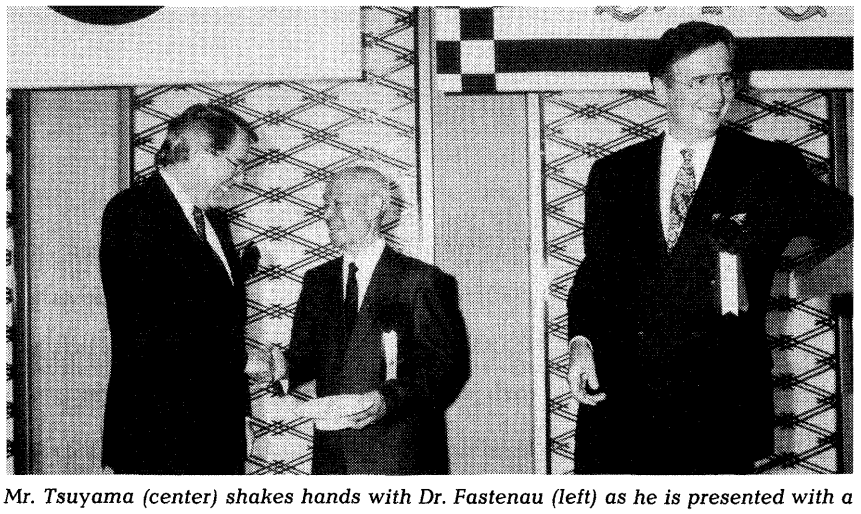
Under the Eastern Seaboard Development Program, the government plans to erect an advanced industrial complex centered on Laem Chabang Port and the adjacent industrial estate. The port, equipped with the latest administrative systems and technology of international standard, will play key role in supporting and sustaining industrial growth by reducing transport costs and promoting export growth. It will also enhance private sector investment in marine transportation, help redistribute income to regional areas, facilitate the future expansion of sea transport and open the gateway to different regions of the world.

Bremen Mission Hosts Reception in Tokyo

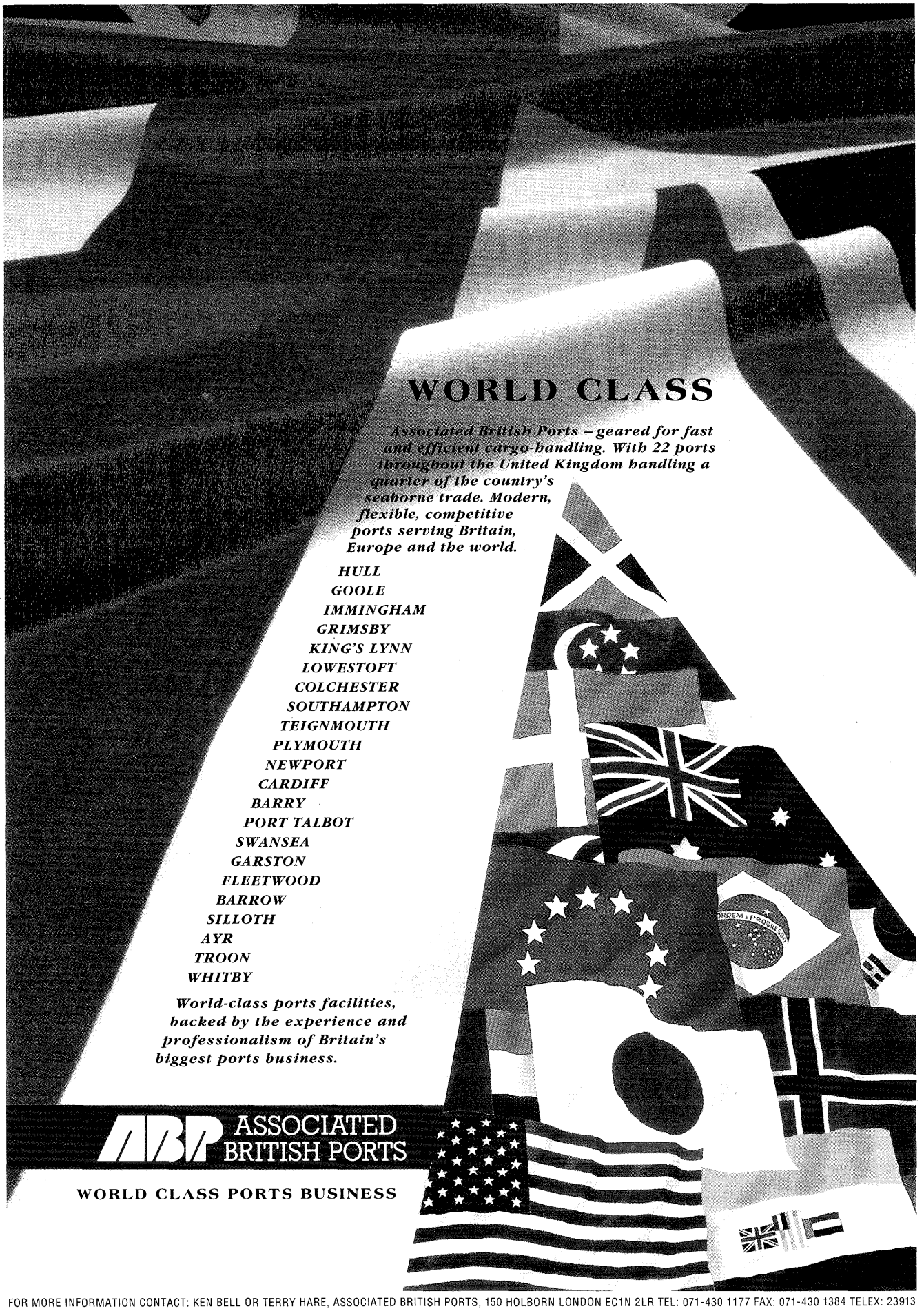
On the evening of November 14, 1993, the Ports of Bremen and Bremerhaven delegation hosted a reception at a Tokyo hotel inviting, some 200 people from Japanese companies which are users of Bremen's two ports and press people. The mission members from Bremen were Dr. Rolf Fastenau, who was retiring from the Bremer Lagerhaus-Gesellschaft (BLG) as Chairman of the Executive Board in December 1993, his successor Dr. Rolf W. Stuchtey, and Lord Mayor Klaus Wedemeier, President of the Senate (Governor) of the Free Hanseatic City of Bremen. The Bremen evening was designed to let Bremen's business associates in Japan say farewell to Dr. Fastenau and Mr. Shigemi Tsuyama, who has recently retired from his post as Bremen's Tokyo Representative after 23 years of service, which coincides with the period Dr. Fastenau served with the BLG.

Succeeding Mr. Tsuyama in Tokyo is Mr. G. Shibayama, a former Executive Director of Mitsui OSK Line. The Bremen delegation members are, pictured, from left to right: Mr. Shibayama, Dr. Fastenau, Mr. Tsuyama, Mayor Klaus Wedemeier, Dr. Stuchtey and Dr. W. Hübnthal, Director-General, Bremen Business International Inc.





Mr. Tsuyama (center) shakes hands with Dr. Fastenau (left) as he is presented with a gift in recognition of his long and dedicated service with the BLG.



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昭和四十四年十一月五日　第三種郵便物認可　[PORTS and HARBORS]　一・一号　第三十九巻第一号　平成六年一月二十日発行（毎月一回二十日発行）　発行所・東京都港区虎ノ門一丁目二の八　〒一〇五　国際港湾協会　価六五〇円