昭和44年11月15日 第三種郵便物認可 平成4年10月号 平成4年9月20日発行 第37卷 第8号(毎月1回20日発行) ISSN 0554-7555

17-23 APRIL 19 9 9 3 SYDNEY

The Publisher
The International Association
of
Ports and Harbors

October 992 Vol.37 No.



Port Kembla. New South Wales Australia





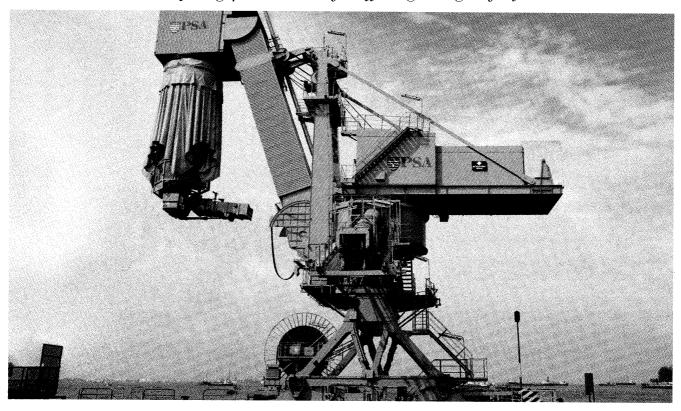
Ship Entering the Port of Newcastle New South Wales Australia

Per Cofsydiney

Sydney Port With Botany Bay in the Background New South Wales Australia.

## SALE OF CARGOVEYER

The Port of Singapore Authority is offering a cargoveyer for sale.



Commissioned by the Port of Singapore Authority in April 1991, the cargoveyer is a rail-mounted gantry structure which transfers bagged or boxed cargo from the ship's holds to the warehouse by conveyer belt systems and vice versa.

#### **SPECIFICATIONS**

Prime manufacturer : Sumitomo Heavy Industries Ltd - Japan

Rated Capacity (per hour) : 1,650 bags/boxes of 50kg

Weight of bags/boxes : 20 to 100kg
Maximum size of bags/boxes : 120 x 66 x 51cm
Rail span : 10.6 metres
Wheel Base : 8 metres
Slewing radius : 26.75 metres

Slewing angle : 50 degrees right/90 degrees left

Electricity supply : 6600V, 3 phase, 50Hz

Tender documents can be obtained from PSA's Supplies Department, 5th storey, PSA Building, 460 Alexandra Road, Singapore 0511.

#### **ENQUIRIES**

Those interested can write to Mr Tsin Yeong Mao from PSA's Supplies Department, PSA Building, 460, Alexandra Road, Singapore 0511, for the tender document and any further information.

DID : (65) 321 1225 FAX NO : (65) 274 4677

#### **CLOSING DATE FOR OFFERS**

31 December 92



PORT OF SINGAPORE AUTHORITY

**Ports & Harbors** October, 1992 Vol. 37 No. 8

## Ports Harbors

Published by
The International Association of
Ports and Harbors
NGO Consultative Status, United Nations
(ECOSOC, UNCTAD, CCC, IMO) (ECOSOC, UNCTAD, CCC, IMO)

Secretary General:
Hiroshi Kusaka

Head Office:
Kotohira-Kaikan Bldg., 2-8, Toranomon
1-chome, Minato-ku, Tokyo 105, Japan
Tel: TOKYO (3591) 4261
Cable: "IAPHCENTRAL TOKYO"
Telex: 2222516 IAPH J
Favr. 03, 3580,0364 Fax: 03-3580-0364

**IAPH Officers** 

President: John Mather, **Managing Director** 

Clydeport Limited
U.K.
First Vice-President: C.J. Lunetta
Port Director, Port of Miami U.S.A.

Second Vice-President:

Robert Cooper Chief Executive, Ports of Auckland Ltd. New Zealand
Third Vice-President:

Jean Smagghe General Manager Port Automome du Havre, France

**Conference Vice-President:** 

Max Moore-Wilton Director-General Department of Transport New South Wales Australia

#### **Contents**

	_
IAPH ANNOUNCEMENTS AND NEWS	_
New Appointment: Mr. Jeffery Chairs Trade Facilitation ● IPD Fund	3
88 Ports Respond to IMO/IAPH Survey ● Sea Trade Works on Cargo	
Definition • Reports Sent to ECE on Nonstandard Containers	4
Mr. Kusaka Addresses at IMO/ESCAP Seminar	
Membership Notes ● VTS Guides: Listing Updated ● Joint	
Customs/Business Program to Suppress Drug Smuggling	6
Papers to the Sydney Conference	
OPEN FORUM	•
Keynote Address to the IMO/ESCAP Seminar on Environmentally Sound Port	
Development and Management	9
INTERNATIONAL MARITIME INFORMATION	_
WORLD PORT NEWS	
Management Program in New Orleans in 1993 • Port Institute of	
Studies and cooperation (Puerto Autonomo de Valencia)	4
New Publications	
The Americas	′
Vancouver: Port 2010 Phase Two Goes Public   ◆ VPC Container	
Proposal Enters Formal Process	7
Ballantyne Terminal to Retain Heritage Features • Savannah: 13% Increase	'
in Container Tonnage • Houston to Speed Processing of Trucks	Q
Port of Long Beach Sets Two Fiscal Year Records • MPA Systems	0
Enhance Customers Efficiency 1	Q
US Port Traffic 1992: Imports Offset Exports	
North Carolina Ports Show Solid Growth2	
Floating School House from Tacoma to Alaska2	
Charleston Alone Meets US Customs Mandate • Locomotives to	_
Africa through Charleston	4
Africa/Europe	
Antwerp Most Productive Container Port in Europe • Bremen/Bremerhaven	
Satisfied with Volumes	5
Austria Foreign Trade: Hamburg Most Important	_
Upswing Slackening at Port of Hamburg2	
Record Half Year at Port of Cork • Address by Mr. Doyle on Tivoli	'
Terminal Opening	R
Mr. Scholten New Head of Rotterdam Port   ■ Best Second Quarter for	0
Rotterdam Since 1973	9
Delta 2000-8 Project by Rotterdam, ECT	
Strategic Planning and Research: Rotterdam	
Asia/Oceania	
Comment Sought for Gladstone Strategic Plan • This is Port Klang	
New Container Terminal in Making at Port Klang	3
PSA Signs Contracts for Prime Movers • Singapore Cruise Traffic	_
Continues to Grow • Container Industry Sees Growth of 17% for	
1992	5
Scoresheet 1991 ● PAT Invites Tenders for LCP Terminal Lease	_
Computer Installation at Bangkok Almost Complete ●	
Channel Expansion in Chao Phraya River	6



## WORLD CLASS NETWORK.

With the right connections, you can locate anything - quickly! That's why shippers and receivers alike depend on the Port of Houston's computerized network for instant, 24-hour access to their containerized freight.

It takes just seconds to pinpoint any container in our spacious Barbours Cut Container Terminal. Ship turnaround time is fast and trucks with proper documentation are usually on the road within an hour. The terminal's connections to major highways and rail systems also help to speed delivery to distribution networks.



# IAPH ANNOUNCEMENTS AND NEWS

#### **New Appointment:**

## D. Jeffery Chairs Trade Facilitation

Following the resignation of Mr. Fernand Suykens from the Port of Antwerp, the Trade Facilitation Committee Chairman's position became vacant. To fill this vacancy,

President Mather has recently appointed Mr. David J. Jeffery, Chief Executive, River, Port of London Authority. The new Chairman in his letter to President Mather confirming his willingness to accept the role says, "I would be happy to take on the job and am able to put in place some backup from within the PLA to try to ensure that it is revitalised as a Committee.



David J. Jeffery

Mr. Jeffery has started to dust off the terms of reference of the Committee and has set out some initial thoughts as to the way it could be activated so as to cover specific areas of work that it might do. As is the case with all the other committees, Mr. Jeffery believes that his Committee needs to look at how it can draw active people into the net. One prerequisite must be that it builds on and uses the people who have been promoting work on the information systems/EDI front in the Canadian and US ports. Thus Mr. Jeffery's initial efforts will be directed to collecting the right people who can work together in his Committee.

Mr. Jeffery has taken over from Mr. Suykens as the IAPH Liaison Officer with CCC.

Furthermore, President Mather has also appointed him to serve as Chairman of IAPH's Working Group to deal with IMO's Strategey for Port Interface.

## The IPD Fund: Smooth Takeoff For the New Campaign

Promptly answering to the call for voluntary contributions to the IPD Fund which the Secretary General circulated to all IAPH members and related organizations several weeks ago, the following members have made fresh contributions or pledges to the Fund.

Furthermore, Mr. Alan Condron, Publisher of the Lloyd's of London Press Limited has offered to have a full-page advertisement aimed at promoting our fund-raising campaign appear in one of LLP's publications. It was of course with our sincere thanks that we accepted the kind offer for this free advertizement in the next edition of "Lloyd's Ports of the World Directory", which normaly costs advertizers £1,290.

As has been the case with previous terms, we will keep reporting on all developments in the new campaign which will last until June 1994, or until we can successfully raise the targeted amount of US\$70,000.

The Head Office looks forward to the support of as many people as possible, both repeaters and newcomers in coming up with voluntary contributions to the Fund.

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

(As of Sep. 10, 1992)	
Contributors (in alphabetical order)	Amount
Paid:	(US\$)
ABP (Associated British Ports), U.K.	3,000
Akatsuka, Dr. Yuzo, Univ. of Tokyo, Japan	n 100
Akiyama Toru, Japan	1,000
Barcelona, Puerto Autonomo de, Spain	1,000
Copenhagen Authority, Port of, Denmark	1,000
Cyprus Ports Authority, Cyprus	1,000
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
Ghana Ports and Harbors Authority, Ghan	a 250
Halifax, Port of, Canada	250
Japan Cargo Handling Mechanization	
Association, Japan	259
Klang Port Authority, Malaysia	200
Marine Department, Hong Kong	500
Maritime Services Board of New South	
Wales, Australia	367
Mauritius Marine Authority, Mauritius	200
Montreal, Port of, Canada	500
Nagoya Container Berth, Co., Ltd., Japan	518
Pacific Consultants International, Japan	243
Penta Ocean Construction Co., Ltd., Japan	ı 500
Québec, Port of, Canada	250
Shipping Guides Limited, U.K.	500
South Carolina State Ports Authority,	
U.S.A.	1,000
Tauranga, Port of, New Zealand	500
Toyama Prefecture, Japan	254
Vancouver, Port of, Canada	500
Total: US	\$\$14,991
Pledged:	
Delfzijl/Eemshaven, Port, Authority of,	
the Netherlands	350
UPACCIM, France*	2,000
Grand Total: US	5\$17,341

<sup>\*</sup> Union of Autonomous Ports & Industrial & Maritime Chamber of Commerce (the Association of French ports) on behalf of the Ports of Le Havre, Bordeaux, Dunkerque, Marseille, Nantes-St. Nazaire, Paris and Rouen

## 88 Ports Respond to IMO/IAPH Survey

In February this year, the IAPH Secretary General circulated a questionnaire among IAPH members seeking their cooperation in providing data on the disposal of dredged material at sea.

This was the second survey conducted by IAPH jointly with IMO following the one completed in November 1989.

The IAPH Head Office secretariat compiled an interim report of the survey results and submitted it to the Dredging Task Force's meeting in Charleston in May 1992. In accordance with the advice of Mr.



Dwayne Lee

Dwayne G. Lee, Chairman of the Task Force, the Head Office secretariat waited for the replies from more members until the end of July so that the final report listing and sorting all the information obtained from 88 ports in 36 countries could be completed in time for the deadline for its submission to the IMO's office for the LDC Convention, Marine Environment Division.

As he reviewed a draft of the Report the Head Office staff had prepared before final printing, Dredging Task Force Chairman Dwayne Lee comments, "Based upon the extreme difficulties which IMO has had in obtaining information from its members, I know all the LDC participants deeply appreciate IAPH's efforts in these dredging surveys."

IAPH members will receive a copy of the Report from the Head Office in due course.

## Sea Trade Works on Cargo Definition

Following its inanugural meeting in Charleston in May this year, Mrs. Lillian C. Liburdi (Director, Port Department, the Port Authority of New York & New Jersey), Chairman

of the Sea Trade Sub-Committee, has communicated with her Committee's members concerning the work schedule. Chairman Liburdi noted that in Charleston the Sub-Committee identified a number of tasks which need to be completed by the working group on definition of types of cargo.



Lilian Liburdi

The Chairman says that she would like to ensure that the group

addresses the matter of cargo definition before it moves on to the use of these definitions in cargo forecasting and port capacity comparisons.

As for the work program for the term leading up to the Sydney Conference, the Chairman comments as follows:

If the task of working group on definitions can proceed to agreement on standard definitions, i.e. how we segment the cargo flows in an appropriate manner to serve those needing and using that information, I believe we will be able to achieve a product that will assist us in addressing how to ensure appropriate collection of the data in a timely and accurate fashion. The next step will then be for the working group to address the use of data for cargo forecasting and in port capacity determination.

Chairman Liburdi has already assigned the key working group members to conduct the initial work on cargo definition, which includes preparation of a draft of some thoughts on cargo definition issues to begin an idea exchange process, and she anticipates having the first phase completed by late September. The Chairman has been soliciting additional participation by other members of the Sub-Committee to assist in the task force work.

#### Report Sent to ECE on Nonstandard Containers

The IAPH Head Office in Tokyo at the initiative of Mr. Robert Cooper (Chief Executive, Ports of Auckland Ltd.), Chairman of the Committee on Cargo Handling

Operations (CHO) conducted a survey on the penetration of non-ISO standard containers by circulating a questionnaire form to the IAPH member ports in March 1992. The IAPH secretariat has recently compiled the survey findings into a report and submitted the report to the ECE (United Nations Economic Commission for Europe) Seminar on the Impact of Increasing Dimensions of



Robert Cooper

Loading Units on Combined Transport meeting in Geneva from 1 to 4 September 1992.

Mr. Cooper flew to Geneva to participate in the Seminar, where he was to make pesentations on the result of the IAPH survey. While a copy of the final report on the survey results will be made available to all IAPH members in the near future, we introduce below the CHO Chairman's introductory remarks and a summary of the major findings.

#### Introduction

Over the past several years, the Committee on Cargo Handling Operations (CHO) chaired by Mr. Robert Cooper, Chief Executive, Ports of Auckland Ltd., New Zealand, has been in the forefront of activities to monitor various aspects of the ongoing container evolution in international sea trade.

In accordance with a decision made by the CHO that met in Barcelona, Spain in May 1991, the questionnaire drafted by the Committee was mailed to some 230 IAPH member ports, plus some non-member ports, early in March 1992. The survey was the second one; the first had been conducted in June 1989, focusing on the implications of changed dimensions and ratings of ISO containers and their impact on ports.

In a follow-up to the first survey, a general analysis of which revealed considerable concern about the introduction of new dimensions for containers, the survey this time asked IAPH member ports the world over a series of questions specifically centering on the practical experience of handling non-ISO standard containers in fiscal 1991, with a view to gauging the extent of penetration of non-ISO standard containers among them.

The results were extremely encouraging, to say the least, as 154 ports (67.2%) from fifty-one (51) nations and territories participated, indicating a keen interest in the subject

among the ports concerned.

Collectively, the responding ports were responsible for handling 50,912,798 TEUs in 1991, which accounted for over 60 percent of the world total for container traffic of 84,223,778 TEUs as reported in the 1992 edition of "Containerisation International Yearbook".

The responses are summarized in the following pages, accompanied by analytical tables and figures. Copies of the questions, along with a listing of the responding ports are presented in the Appendices.

#### **Summary of Major Findings**

Of the total of 154 responding ports, a little less than a third of them -49 ports (31.8%) — reported having handled Non-ISO Standard Containers during fiscal 1991.

The aggregate number of Non-ISO standard containers reported -1,541,039 — constituted only a fraction (3.8%) of the total number of containers reported (40,849, 311).

Taking account of the twenty one (21) respondents who, as container handling ports, were not able to turn in the relevant data and figures due to the non-availability of official records, it may still be said that the handling of non-ISO standard containers is a relatively new phenomenon, which has not yet been identified as an immediate global issue to be tackled as a whole by the world port community, and is thus confined to a certain limited number of ports. Some respondents even went on to say that a small number of non-ISO standard containers handled simply does not justify systematic quantification on the part of the port authority.

Furthermore, the percentage of non-ISO standard containers handled is quite small, even among the 49 ports reporting that they handled them, except for several ports with an exceptionally high percentage ratio, as evidenced by some respondents commenting that while the number of oversized containers is increasing, the percentage still remains very small.

As proof of the above phenomenon, it was clearly observed that, of the above total of 49 ports, 26 ports (53.1%) handled less than 1%, 15 ports (30.6%) between 1% and 10%, and 8 ports (16.4%) between 10% and 100%. As a result, the percentage rate among nearly 90% of the ports involved was lower than 10%.

In terms of geographical distribution, a great majority of the non-ISO standard containers filed in the survey (54.8%) are heavily concentrated in the North American region, followed by the Asian region (28.5%) and the European region (16.4%).

As far as the dimensional composition of the non-ISO standard containers is concerned, over-height containers account for approximately 56% of the total number of oversized containers filed, over-width 31% and over-length 13%.

With regard to the specific measurements of the three respective dimensions of height, width and length, the results of the analysis are interesting and clearly show a conspicuous and dominant trend prevailing among the ports handling them, as follows:

- 99.7% of over-height containers measure 9 feet 6 inches:
- 99.4% of over-width containers measure 8 feet 6 inches; and
- 93.3% of over-length containers measure 45 feet.

## Mr. Kusaka Addresses at IMO/ESCAP Seminar

IAPH was one of the co-sponsors for the IMO/ESCAP Seminar on Environmentally Sound Port Development which was scheduled for the week beginning 31 August 1992 in Yokohama, hosted by the City of Yokohama under the auspices of the Ministry of Transport of Japan. Secretary General Kusaka addressed the Seminar participants at the opening ceremony on August 31.

Address by Hiroshi Kusaka,
IAPH Secretary General
To the IMO/ESCAP Seminar on
Environmentally Sound Port Development
and Management
31 Aug. — 04 Sept. 1992, Yokohama

Honorable officers of the IMO and ESCAP, distinguished guests, ladies and gentlemen, it is my great pleasure and honor to address the audience gathered here in Yokohama on the occasion of the IMO/ESCAP Seminar on Environmentally Sound Port Development and Management.

It is our privilege and pleasure to have the honor of acting as a co-sponsor of this meaningful event. It is the second time for us to perform such a role following the IMO

International Seminar on Environmental Impact Assessment of Port Development, held in Baltimore, Maryland, U.S.A. in November 1988.

We feel most obliged to all the IMO and ESCAP officials for their untiring efforts for making this Seminar a reality. We are also grateful to the officials of the Port of Yokohama for their generous support of the holding of this Semi-



Hiroshi Kusaka

nar. Moreover, we are very pleased to know that a small recommendation made by this office as to the venue of this important Seminar finally resulted in it taking place here.

The issues related to the environmentally sound port development and management are of paramount concern to any body involved in any type of development, clearly inclusive of port development and management. Certainly, such issues have been placed at the heart of the target areas of the technical committees of this Association.

IAPH, mainly through its activities conducted by the Committee on Port & Ship Safety, Environment and Construction, has also been keenly involved in introducing such practical guidelines as:

- \* Guidelines on Port Safety and Environmental Protection
- \* Guidelines for Environmental Planning and Management in Ports and Coastal Area Developments
- \* Practical Guidelines for ports and environmental issues Water Pollution A concern for port authorities
- \* Practical Guidelines for ports and environmental issues Dangerous Goods and the Port Environment.

For the benefit of the forthcoming future generations,

IAPH is sincerely keen about and interested in working together with you for the advancement of technology and engineering as well as for promoting concepts geared towards environmentally sound development by amalgamating the experience and expertise held by both national and international institutions.

I am convinced that the enthusiasm and the wisdom of the experts gathered in this IMO/ESCAP Yokohama Seminar will prove productive and beneficial for constructing yet another practical and viable basis for our commonly held goals of environmentally sound port development and management.

Thank you very much for your attention.

#### **Membership Notes:**

#### **New Member**

Regular Member

Port of Felixstowe Limited (U.K.)

Address:

Tomline House

The Dock, Felixstowe,

Suffolk 1P11 8SY

Mailing Addressee:

Mr. Derek Harrington

Managing Director

Telex:

98277

Tel: Fax: 44-394-604500 44-394-604949

Managing Director:

Mr. Derek Harrington

Head of Business Development:

Ms. Anita Hamilton

#### Changes

Yemen Ports Authority [Regular] (Yemen) Director General: Mr. Mohamed Ahmed Ali \* He is serving as Director of the IAPH from Yemen.

#### VTS Guides: Listing Updated

According to Captain F. Weeks, Maritime Consultant in Plymouth, who is in charge of producing the World VTS Guides for IALA, IAPH and IMPA, as of August 1992, the Guides for the ports in the following lists are now available or in production.

#### **Guides Currently Available:**

Via IALA

Tarifa, Spain Bermuda

Via the Ports direct: (or from IALA by special order)

Australia Sydney, Port Hedland (also available in

Japanese), Melbourne

Canada Nordreg, Ecareg, Bay of Fundy, Halifax,

> Placentia Bay, Port aux Basques, St. Johns Newfoundland, Saint Lawrence River, Westreg, Pricne Rupert, Tofino, Van-

couver (Englsih & French)

France Bordeaux, Le Havre, Antifer, Nantes-St.

Nazaire, Marseille, Sete, Rouen

Ireland Dublin

Japan Tokyo Bay, Bisan Seto, Nagoya, Yoko-

The Netherlands Rotterdam, River Western Scheldt,

**Brevik** 

Norway

Gothenburg

Ymuiden

Sweden United Kingdon Forth Ports, Tees & Hartlepool, Thames

Navigation Service (London)

#### **Currently in Production:**

Hong Kong

Hong Kong and Approaches

Japan

Fedie

Norway

The Netherlands Scheveningen

USA

New York, San Francisco, Houston,

Galveston, Puget Sound, Prince William

Sound

UK USSR Dover

Nakhodka

## **The Joint Customs/ Business Program To Suppress Drug Smuggling**

#### **Background Paper for the Third Working Group Meeting** 28/29 September, 1992

#### I Background

1. The CCC has, since 1985, been developing voluntary co-operation agreements (called Memoranda of Understanding - MOUs) with international trade organizations with a view to increasing co-operation to combat Customs fraud (particularly drug smuggling) more effectively.

Virtually every stage in the international movement of people and goods is now covered by these MOUs.

2. This initiative was recently given a significant boost following an invitation from last year's Group of Seven (G7) Economic Summit for the CCC to strengthen its co-operation with associations of international traders and carriers, to improve the targeting of illicit drug movements.

The CCC's subsequent Report was welcomed by this year's G7 Summit, which endorsed the work the CCC has done and plans to do in its joint Customs/business programme to suppress drug smuggling.

#### **II International Commitment**

- 3. The MOU programme is within the scope of the United Nations Convention against illicit traffic in narcotic drugs and phychotropic substances (the 1988 Vienna Convention). Article 15 of this Convention requires Contracting Parties to take specific measures to improve co-operation between commercial carriers and Customs.
- 4. Of the 56 Parties to this Convention, 43 are Members of the CCC, but at present only 7 of these States have introduced MOUs at the national level. Indeed, only 12 of the CCC's 117 Member Customs administrations have implemented MOUs.

#### **III Council Declaration**

5. In a Declaration issued by the CCC at its Council Sessions in June this year, the principle of achieving increased co-operation between Customs authorities and traders, carriers, port and airport authorities and others involved in the international supply chain, through MOUs, was supported. This Declaration recognises that the MOU programme is a particularly effective way of indicating compliance with and support for Article 15 of the Vienna Convention, and urges Members to give consideration to concluding MOUs at the national level.

6. The CCC Secretariat, Regional Intelligence Liaison Offices (RILOs), individual Members and the trading community all have an important role to play in developing effective co-operation.

Co-operation is vital at all levels: internationally, regionally, nationally and at the local ports of entry.

#### **IV CCC Action Plan**

7. Together with the trade, the CCC has issued a joint declaration of common, unreserved resolve to open up and pursue a wide range of actions to suppress drug smuggling. The immediate task is identified as the extension, improvement and promotion of MOUs.

8. Through a joint Customs/trade Working Group, the action plan contained in the Working Group's Report (Doc. 37.548), as endorsed by the Council and by G7, will be carried forward. This will include a review of the Guidelines attached to existing MOUs, utilisation of the existing CIS drug database for carrier risk assessment purposes, and the provision of a training framework for use in training both Customs personnel and company staff.

#### **V** Regional Activities

9. At the RILO level, a five-step action plan is suggested, designed to make Members more aware of the MOUs programme and to encourage and monitor national progress. The regional action plan should be seen as being complementary to, and a very important part of, the activities undertaken at CCC Headquarters.

#### Step 1: Making contact

10. A representative from the RILO will attend the Regional annual administrative meetings of enforcement contact points and the training contact point meetings. The agenda for these meetings should provide for delegates to give short presentations on their approach to adopting the CCC MOUs and for the selection of national MOU contact points in participating administrations. The RILO might find it beneficial to liaise with international trade organizations (e.g. ICS, IATA, IAPH) and ask to be put on their publication mailing list. In this way, the RILO will be aware of any trade conference or seminar which is being planned in the region.

Details about conferences and seminars should be made available to Members in the region through Periodic Bulletins issued by the RILO (see step 4). In addition, the RILO will need to maintain contact with the office of the United Nations International Drug Control Programme (UNDCP) Regional Field Adviser.

#### Step 2: Awareness and encouragement

11. The RILO could play an important role in the region by advising Members of the contents of the CCC MOUs and associated Guidelines, and the benefits to be derived

from their implementation.

The RILO should assist in the exchange of views on MOU implementation in the region. This would also include maintaining a list of MOUs concluded by each country reporting to the RILO. The RILO could usefully remind Members that:

- the CCC MOUs are not exclusive to drugs,
- such co-operation agreements have a significant role to play in combating other forms of commercial fraud and illicit trafficking,
- the CCC Guidelines contain a "menu" of measures from which individual Customs services and trade signatories can select those they consider to be most appropriate,
- real benefits will be achieved by both Customs and trade via formal MOUs. At regional meetings, presentations from Customs and trade should be encouraged, with the theme "what we achieve through formal co-operation via MOUs".

The RILO should advise national MOU contact points of trade meetings or seminars in their countries and encourage them to attend. Any problems encountered by contact points in this regard should be reported to the RILO and any subsequent exchange of views should take place at the annual administrative meetings of contact points.

The RILO should encourage Members to introduce voluntary MOUs — not just with commercial carriers as required by Article 15 of the Vienna Convention, but also with port ad airport authorities and with others in the international supply chain.

The RILO should stress that MOUs may be concluded with individual companies and/or trade associations. But in deciding with whom to conclude MOUs, Members will have to prioritise the work according to their needs.

At regional contact point meetings, representatives should describe what they have done and what they plan to do. Where action is planned for the future, approximate time-scales should be given.

#### Step 3: Role of national MOU contact point

12. The RILO should support the activities of the MOU contact points and should encourage them to:

- attend trade meetings and seminars, promoting MOUs and the need for them,
- identify the companies/associations which are top priorities for concluding MOUs,
- regularly pass to the RILO information about companies' commitment to co-operation,
- establish a procedure for receiving any trade complaints regarding non co-operation on the part of Customs at local ports of entry,
- provide the RILO with a periodic report of progress on the MOU programme in their country.

#### Step 4: Role of RILO in supporting national MOU contact points

13. The CCC will offer practical advice to all Members on how to introduce an MOU programme in their countries. Once a Customs administration takes the policy decision to introduce such a programme, it may need advice from the RILO on:

- names of companies in that country which are Members of international organizations, such as the International Chamber of Shipping, and how to contact them.
- the appropriate form for the approach to potential signatories (e.g. by model letter, telephone or by holding a seminar),
- the appropriate method for training Customs and trade personnel.

The RILO should be represented, if possible, at seminars organized by any of the regional Members.

CCC Headquarters will supply a training framework, which the RILO may need to adapt and to promote in recognition of regional needs. It is suggested that any training is given jointly to Customs and company staff, thereby creating the ideal co-operative climate. It will be apparent to company personnel that Customs are not withholding any "trade secrets". The training should cover practical issues such as:

- how to increase security of facilities, cargo, baggage and personnel;
- search of means of transport;
- risk assessment; and
- passenger observation.

The use of slides and videos should be considered, as the visual image will leave a far longer-lasting impression on the trainees. The RILO should encourage Members to publicise the conclusion of every new MOU within the region. The RILO might find that a regular RILO bulletin would be an ideal medium — news of MOUs signed, details of successful co-operation, carriers who are showing little signs of co-operation, etc.

The RILO might usefully agree a procedure by which information on companies' commitment to co-operation can be received from national MOU contact points, stored and disseminated. The information from such a regional database will affect Customs' assessment of the risk of a particular company. The RILO should keep in regular contact with the CCC Secretariat in order to update both the regional database and the central CIS database at CCC Headquarters; the latter will be expanded to allow carriers to be identified.

#### **Step 5: Monitoring of progress**

14. The RILO should encourage Members to be proactive in implementing the Council Declaration (see paragraph 5). It may be necessary to periodically monitor progress in the region; this might be achieved by telephone, questionnaire or by asking at regional contact point meetings for Members to state what they have done.

The RILO will need to keep the CCC Secretariat informed of progress in his region and to report any cases of difficulty.

#### VI Central Support

15. The CCC Secretariat is always able and willing to offer advice and expertise, including acting as broker between a Customs administration and a company/trade association, in order to secure the conclusion of an MOU.

### Papers to the Sydney Conference

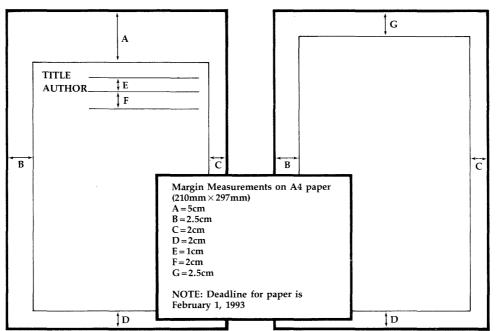
#### A: Session Papers to be submitted by the designated speakers

The Organzing Committee will be publishing for distribution to all delegates at the Conference the papers received prior to 1 February 1993.

It is intended that the reproduction of the papers will

be directly from the originals received and therefore, to assist in the general level of presentation, it would be appreciated if all authors could adhere to the following: -

(Continued on Page 9)



## OPEN FORUM

**Keynote Address** 

# To the IMO/ESCAP Seminar on Environmentally Sound Port Development and Management

(on 31 August 1992 in Yokohama)

By Manfred K. Nauke
Chief for the London
Dumping Convention
International Maritime
Organization (IMO)

It is a very great honour for me to be with you today at the beginning of this seminar on Environmentally Sound Port Development and Management. I bring to you the greetings and best wishes from the Secretary-General of the International Maritime Organization, Mr. W.A. O'Neill. The Secretary-General has asked me to convey to you his regret that he is not able to be with you today in person, as he would have wished. This is due to other pressing commitments at IMO Headquarters. He has also requested me to extend to the City of Yokohama, our host for the seminar, his profound gratitude for their kind co-operation and support and their most generous hospitality.

As I am sure you are all aware, this seminar has been arranged as an important part of IMO's Global Programme for the Protection of the Marine Environment, but very effective organizational efforts have been made by the main sponsor, the United Nations Economic and Social Commission for Asia and the Pacific, and I wish to express my deep gratitude to Mr. David L. Turner of ESCAP, and his staff, for their involvement in this joint undertaking. The seminar is also sponsored, and actively supported, by the United Nations Environment Programme (UNEP), the Swedish International Development Authority (SIDA), the International Association of Ports and Harbors (IAPH), the Ministry of Transport of Japan, and the Overseas Coastal Area Development Institute of Japan. It is, therefore, an event of great interest both nationally and internationally.

In keeping with the importance of the issues to be discussed, the programme includes lectures by many experts from ports and government agencies, national institutions and international associations, covering the wide range of issues related to port development and management. All

#### Papers to the Sydney-

(Continued from Page 8)

- the text to be exclusively in English,
- paper size (Din/A4) 21 cm x 29.7 cm
- text to be within the spaces shown in Figures on the previous page.
- illustrations, figures, drawings, etc to be a size suitable for reproduceion and,
- where practical use Times Roman 12 point/pitch for printing.

The final text should be forwarded to: The Maritime Services Board of NSW IAPH World Ports Conference Organising Committee

Box 32 GPO SYDNEY NSW 2001 Australia

Fax: 61 2 364 2033 61 2 364 2034

## B: Contribution Papers from IAPH volunteers

At each biennial confference of IAPH, besides the

various technical papers presented by selected individuals at the working sessions, those papers contributed by IAPH volunteers have been separately printed by the organizer and distributed to the conference participants, as long as such papers met the conditions for entry as specified by the organizer.

While it has been necessary for conference hosts to limit the number of papers for actual presentations at the working sessions due to the limited time available, it has generally been arranged by the organizer that those papers voluntarily contributed be printed and distributed to the participants.

In line with past practice, our host in Sydney is prepared to accept any contribution papers from IAPH members for distribution at the 18th Conference. Thus, the organizer is prepared to compile and publish in a separate document any contribution papers they receive from IAPH members. As for the format, the same conditions as apply to Speakers' papers outlined above would apply to all contribution papers, while it should be noted that papers need not necessarily related to the Conference Theme or the Working Session Topics. As for the length of the paper, there is no particular limit.

"The organiser has confirmed that Authors of contribution papers will not be allocated time for presentation at any of the six Working Sessions as the speakers for these sessions have already been determined."

of these specialists have agreed to give their very precious time to come and share their extensive knowledge and expertise with us. To them we express our sincere thanks and warm appreciation.

The efficient operations of ports and the environmental impact of port development are of direct and continuing relevance to the aims and objectives of IMO; they also are highly topical today as crucial issues on the current agenda of the international community. The recently held United Nations Conference on Environment and Development (UNCED) adopted Agenda 21 which addresses the pressing problems of today, aiming at preparing the world for the challenges of the next century. Agenda 21 in its very first chapter emphasizes:

"Humanity stands at a defining moment in history. We are confronted with a perpetuation of disparities between and within nations, a worsening of poverty, hunger, ill health and illiteracy, and the continuing deterioration of the ecosystems on which we depend for our well-being. However, integration of environment and development concerns and greater attention to them will lead to the fulfilment of basic needs, improved living standards for all, better protected and managed ecosystems and a safer, more prosperous future. No nation can achieve this on its own; but together we can — in a global partnership for sustainable development."

We know that more than the world's population lives within 60 km of the shorelines, and it has been estimated that this would rise to three quarters by the year 2020. Coastal resources are vital for these people and it seems crucial that programmes for the integrated management and sustainable development of coastal and marine areas and resources be developed. In the maritime context this means that a number of major initiatives have to be taken, and endeavours have to be made, if the twin objectives of real development and ecological health are to be achieved. IMO, as an organization with a global mandate, and as the specialized agency of the United Nations whose responsibilities are entirely maritime, recognizes that it has a key role to play in the utilization and management of oceans for maximum benefit to all peoples, and with minimum damage to the environment.

The Organization and its Member States are keen and anxious to play their appropriate role in this vital global effort and IMO is fully competent constitutionally, and especially equipped in terms of experience and expertise, to discharge this role. The Organization's constitution empowers and requires it to provide the machinery for co-operation among Governments in the field of governmental regulation and practices relating to technical matters of all kinds affecting shipping engaged in international trade, to encourage and facilitate the general adoption of the highest practicable standards in matters concerning maritime safety, efficiency of navigation and the prevention and control of marine pollution from ships and to deal with related administrative and legal matters. The Organization is also mandated to provide for the consideration of any matters concerning shipping and the effect of shipping on the marine environment that may be referred to it.

The Organization has further accepted to provide services as the Secretariat for the Convention on the Prevention of Marine Pollution by Dumpinng of Wastes and Other Matter, 1972, the London Dumping Convention. It therewith administers the two existing global conventions on the

protection of the marine environment from the introduction of wastes and other matter: the MARPOL 73/78 Convention and the London Dumping Convention. The London Dumping Convention among other things regulates the disposal at sea of dredged material, and therefore plays a vital role in port management and development. It is, therefore, fitting and proper, and indeed imperative, that IMO should be concerned not only with the safe and efficient operation and management of ports, but also with measures to ensure that ports — and the ships which use the ports — do not pose avoidable risks to the marine environment in particular, and the human environment in general.

Many of the factors that led IMO to adopt its strategy vis-a-vis maritime safety also affect ports' operating environment; specifically, increased ship speed and size, reduced time at ports and concentration of trade routes. The changing shipping environment not only has increased the complexity of this trade for vessel owners/operators and seafarers, but have also created new dimensions for port safety and operations. Shipping accidents, for instance, may have a direct impact on ports. Maritime safety, therefore, is not limited in scope to the seas, it must equally be observed in the port area.

Ports are considered as "nodes" of transport, that is the iterface point between marine and surface modes of transport. As such, ports play a pivotal role in ensuring safe and efficient shipping.

As a majority of world trade is carried by sea, ports' role has steadily gained in importance. Today, ports are key components of the national transport infrastructure, through which most of a country's imports and exports pass. As the management of world trade gains in complexity, so does the role of port as an integral part of the world shipping equation.

A number of IMO's key activities have direct impact on ports, the principal areas being:

- protection of the Marine Environment, including disposal of ship-generated wastes and of dredged spoils from port maintenance and development operations;
- transport, handling and storage of dangerous substances in port areas;
- facilitation of international maritime traffic;
- maritime training; and
- provision of courses on port operations and management.

In carrying out its mandate in the above areas which require regular interface with ports, IMO's scope of activities overlap with a number of other United Nations' agencies, notably those of UNCTAD and ILO. IMO therefore considers it essential to encourage close co-operation with these organizations in its plans to develop a strategy for port interface. The ultimate aim of these new IMO activities is to develop guidelines for port authorities concerned with the improvement of port safety and security and protection of the marine environment. These could form part of a comprehensive port development and management scheme, hence the significance and relevance of this seminar to IMO and its mandate.

A key element in IMO's programme for maritime safety and pollution prevention is the development and implementation of a global regulatory framework designed to prevent, and eventually eliminate completely, intentional pollution of the marine environment by ship-borne substances, the reduction of accidental pollution and the mitigation of the effects of pollution incidents which may occur in spite of all preventive efforts. It is generally accepted that vessel-source pollution does not present the greatest threat to the oceans. Maritime transportation does indeed contribute only with about 12% of all pollutants entering the sea, and dumping at sea provides not more than 10%. Nevertheless the world maritime community has recognized that the release of oil and other harmful substances from ships, and the disposal of wastes and other matter at sea, constitute a source of pollution which can and should be prevented through co-ordinated international action.

The nations of the world have also agreed that the International Maritime Organization provides the most suitable forum and machinery for the development and implementation of a technically sound strategy for preventing and reducing pollution of the seas and oceans which results from maritime transportation and other shipping activities at sea. For its part, IMO has accepted this remit and has, from its very inception, formulated a step-by-step and deliberately pragmatic strategy for making shipping safer and the oceans cleaner.

The basic components of this strategy have been the provision of an effective machinery for co-operation among Governments and other interested maritime operators in the adoption of technically sound and internationally accepted standards for safety in maritime operations and for the prevention and control of marine pollution from those activities. Further, in the development of suitable measures to encourage the widest possible acceptance and effective implementation of these standards by Governments and all concerned, and finally the establishment of appropriate arrangements to strengthen the capacity of all States for national and regional action to prevent, control, combat and mitigate marine pollution.

The major thrust of the Organization's activities for the prevention and control of marine pollution from ships was, at the beginning, naturally focussed on ships and activities at sea, and the international rules and regulations were conceived and designed largely with a view to regulate such activities at sea. However, it was only a matter of time before the need for equal concern with ports and port areas became clearer and more necessary. That concern is now no longer in doubt; and this seminar is further strong evidence of IMO's willingness and readiness to address the problem in all its aspects.

At a time when increasing efforts are being made to stimulate economic growth, and when international trade in goods and services is on the increase, the ports and their neighbourhoods are being subjected to greater and more complex pressures. Larger and busier ports, ever increasing demands for tourism, resources exploitation, including offshore oil exploration and production, inshore fisheries and mariculture and many other activities, have significant effects on the sea and on adjacent coastal areas. Port expansion, involving dredging and land reclamation, and increased handling, storage and processing of hazardous substances in ports can pose significant environmental hazards to the marine and coastal environment and to the health and safety of sizeable proportions of the national population. As an integral and crucial part of the maritime transport chain, the port must provide space and facilities where numerous hazardous substances, some of them incompatible with each other, are received for shipment, accepted from ships, stored or otherwise handled. These activities involve large numbers of workers, and the effects of accidents or carelessness can have serious effects not only on the workers and ships concerned, but also neighbouring countries, neighbouring coasts and related waterways. Where ports are used for the loading, receipt or handling of ship-generated wastes, or industrial wastes, further and more serious problems may be posed to land and sea areas.

But while ports can present hazards, they are an essential component of the transport infrastructure in all coastal States, and hence indispensable for economic development and trade. It is, therefore, vital to have ports which are efficient and adequate for the needs of the country and which are at the same time environmentally sound.

The main objectives of this week's seminar are to provide an opportunity for participants to present information on the problems related to port management, port development and hopefully coastal zone management, and to learn from the experience in particular from invited experts in determining the environmental and health impacts of port development and operations and to discuss suitable mechanisms and procedures which will enable Governments and port authorities to take due account of such impacts in the planning, operational and review stages, as may be necessary. And here, as in many areas, it appears to me that greater emphasis should be placed on the capacity of the port to react to new and unforeseen developments. The port is both the master and the servant of its new environment, and sometimes it has to deal with problems for which it is not responsible. In an ideal world, it may be possible to assess environmental impacts in planning a port and to construct the port and its facilities accordingly. However, in many cases the technological developments and plans of its users which were not foreseen may make it necessary for the port to devise new procedures or to have to comply with new requirements. Examples of such unanticipated requirements on port development and operations were those arising from the impact of containerization and the provision of waste reception facilities in ports required under the MARPOL 73/78 regime. In these cases, the ports were required to respond to changing circumstances which the planners could hardly have thought possible a few years back.

There was a time when enforcement of international regulations relating to maritime safety and the protection of the marine environment from pollution from ships fell largely within the jurisdiction of the 'flag state" or the country in which the ship was registered. In that era the ports and the Governments of the port States were sometimes expected to be mere passive recipients of the ship and what it contained. But that era is now well past and gone. With the worldwide recognition of the role and obligations of the port State in controlling ships, and the increasing co-operation between Governments for this purpose, the port States are playing a greater role in ensuring that ships comply with international standards for preventing pollution from ships. Recent stories in the press and other media have highlighted the serious problem of the dumping of hazardous waste in the ports of developing countries; and the plight of ships and crew searching vainly for ports in countries which are able and willing to accept hazardous cargoes. The Basel Convention on the Control of Transboundary Movement of Hazardous Wastes and their Disposal is now in force, and the requirements of that Convention have been the subject of considerable discussions within all the main IMO bodies with a view to adjust their provisions to the new regime, in

particular with regard to dumping at sea, carriage of dangerous goods, certificates and documents required to be carried on board ships, liability questions, and so on.

It is thus clear that the role of ports in the global struggle to save the environment will increase rather than decrease in the coming decade and the next millenium. The seminar could not, therefore, have been convened at a better time or chosen a more appropriate and pertinent topic.

Looking over the seminar programme, I am struck by the great diversity of the issues to be covered, recognizing the complex nature of some of the problems and how they may be solved. For example, dredging and its environmental impact emerges as a problem which is common to most ports and for which there appears to be no realistic escape in the foreseeable future. The evaluation of options for the disposal of dredged material is often compounded by environmental considerations, where the dredged material contains contaminated sediments. Thus, failure to prevent pollution of port waters may, at a later stage, present insuperable obstacles for dredging activities without which the safe and efficient operation of the port may be placed in serious jeopardy. This shows, once again, the close link between the imperatives of environmentally sound management and the requirements of efficiency and safety in maritime operations.

This seminar is breaking important ground in focusing on the port and the environment in the context of international co-operation. As I stated earlier, the environmental concerns of the maritime community have related more to the maritime area and the coastal interests than to the port as such. Thus this is for us in IMO a pilot project, but a very important pilot project indeed. For we have sought to provide an opportunity for working together in one seminar on different environmental issues which are usually dealt with in different fora or in different contexts. It is our hope that your lectures and discussions will help to point the way ahead, and assist in drawing appropriate conclusions from the material before you. We also trust that you will be able to make some recommendations on action which may be taken by IMO, in co-operation with the co-sponsors of this seminar or other interested organizations, as may be appropriate, for encouraging action by all concerned in all relevant situations.

We in IMO have always been willing to listen to the views of interested and knowledgeable parties, both governmental and non-governmental. We shall on this occasion be grateful for your ideas and your suggestions. We shall welcome your experience, your assistance and your co-operation in helping to devise the means by which all States will be able to review their port programmes and take the necessary action to harmonize the demands of sustainable development with the imperatives of a safe and hospitable environments, also taking into account economic considerations.

And now, on behalf of the Secretary-General of the International Maritime Organization and the Organization itself, I wish to renew my thanks to our hosts and to the co-sponsors of the seminar for helping to bring us all together to discuss a subject matter of undoubted importance for now and the future. I hope that your deliberations will be fruitful and I wish you all a pleasant stay in this beautiful setting.

■ Mr. Manfred K. Nauke of IMO (right), Mr. D.L. Turner (center) and Mr. B. Cable from ESCAP (left) at the opening session on August 31.





The Seminar was attended by 150 people, including experts and observers, from 20 countries.

## 1993 Diploma Programme In Shipping & Port Management

## JOINTLY OFFERED BY SINGAPORE PORT INSTITUTE AND THE UNIVERSITY OF DELAWARE, USA

Applications are invited for enrolment in the 1993 Diploma Programme in Shipping and Port Management from those employed in the shipping and port-related industries. The objective of the Programme is to provide participants with an industrially relevant and academically sound educational programme on shipping and port management.

#### **COVERAGE**

The Programme comprises 5 modules of intensive lectures spread over 5 months from March to July 1993. The modules are: Trade and Marketing Functions; Structure and Technological Changes; Governance, Planning and Design; Accounting and Financial Considerations; and Maritime Law and Policy.

#### **ELIGIBILITY**

Candidates with a minimum of 5 GCE "O" levels or equivalent qualifications may apply for admission into the Programme. Working experience in the port and shipping industries will be an advantage.

#### AWARD OF DIPLOMA

Students who successfully complete the required course of study and who pass the end-of-module examinations in accordance with the standards set by the University of Delaware will be awarded a Diploma jointly issued by the Singapore Port Institute (SPI) and the University of Delaware. Diploma holders who possess a degree may apply for admission to the University of Delaware's Graduate College of Marine Studies for matriculation for the Marine Policy degree.

#### FEE

The fee is S\$5,200 per participant.

#### CLOSING DATE FOR APPLICATION

Applications for enrolment to the Programme will close on <u>5 December 1992</u>.

#### **ENQUIRIES**

For further details, please call (65) 321-1825/321-1826/321-1831 (International fax: (65) 274-0721, Telex: RS 28676), or write to The Training Manager, Singapore Port Institute, No. 2 Maritime Square, Telok Blangah Road, Singapore 0409. Singapore.





#### **International Maritime Information**

## WORLD PORT NEWS

## Management Program In New Orleans in 1993

Senior port officials and maritime industry executives interested in learning the latest port operation, planning and management techniques can participate in the ninth annual International Program for Port Planning and Management (IPPPM), to be held in New Orleans, La., March 15 — March 26, 1993.

This intensive training program offers maritime industry leaders a unique opportunity for further professional education and personal enrichment. IPPPM is sponsored by the Board of Louisiana State University National Ports and Waterways Institute, and the University of New Orleans.

"Two weeks of lectures, group discussions, and field investigations sharpen participants' practical skills and strengthen their conceptual understanding of all facets of port planning and management," says IPPPM Director Richard O. Baumbach, Jr. "And the Port of New Orleans serves as an ideal laboratory for this training program."

Over 25 courses are offered, including:

- Trends in World Economics
- Ship Types, Sizes, and Characteristics
- Labor Relations
- Port Administrator Functions
- Marketing
- Accounting and Finance
- Port Planning and Development
- Environmental Considerations
- Port Engineering and Maintenance
- Computerization
- Working With Governing Boards
- Preparing for Port Investments
- Personal Behavioral Management
- Container Terminal Equipment, Maintenance, and Management

"This general curriculum is supplemented by site visits to Port of New Orleans terminal facilities and riverfront development projects," says Baumbach. "And after a long day of

classes, participants can enjoy the city of New Orleans — one of the united States' most interesting and colorful cities."

All courses are taught in English by a distinguished faculty composed of public and private sector maritime officials from the United States; international experts from the World Bank in Washington; personnel from the Port of New Orleans, the University of New Orleans, and Lousiana State University National Ports and Waterways Institute; and practitioners from the local maritime industry.

This program is truly international in scope: Over the past eight years, 203 participants from 54 countries have graduated from IPPPM. According to Baumbach, "IPPPM fosters closer ties between the United States and other countries, facilitates international trade between Lousiana and world ports, increases maritime expertise around the world, builds a network of international problem-solvers, and contributes to world peace and understanding."

Tuition: \$1,850 U.S. dollars. Accommodations: Radisson Suite Hotel; \$88 (plus tax) per room, per night, single or double occupancy. Financial assistance for foreign participants may be available from the U.S. Agency for International Development (AID), the United Nations Development Programme (UNDP), and the International Association of Ports and Harbors (IAPH).

For an application or more information, contact: Richard O. Baumbach, Jr.; Director, IPPPM; CUPA/LUTAC; University of New Orleans; New Orleans, LA 70148; U.S. A. Or Call: (504) 286-6519; (504) 286-6272 fax. Telex: 58-7496. Cable: CENTROPORT.

## Port Institute of Studies and Cooperation

(Puerto Autonomo de Valencia)

**Introduction:** The Instituto Portuario de Estudios y Cooperatión (IPEC) has been created on the initiative

of the Automonous Port Valencia (PAV) in its keenness to be of service to productive sectors using port installations as well as to all operators and auxiliary companies exploiting them. Seconded by the State Port Administration, it will endeavour to fill a gap which has been felt for a long time, that is, to have a centre where studies may be made on the sector's problems so enabling it and its human assets to be technologically renovated.

The challenges which the overall port community face up to — radically changing markets, growing competition, fast technological innovations, institutional changes, obsolete productive structures — require imaginative efforts from its managing staff who must be well prepared with a wide knowledge of company management techniques and of the specific problems in their field of activity in order to cope with them successfully. In this context, IPEC's activity turns in three directions; educational, research and international cooperation.

So, IPEC has been born as yet another service offered by the Autonomous Port of Valencia, its role being that of a meeting place, a training and information centre for the port community where professionals both from the public and private sectors may put forward, examine and discuss effective management formulas appropriate for today's dynamic international trade and its demands as well as for the physical distribution of goods.

#### The Aims of IPEC

- To provide specialised training to professionals involved in portactivity.
- To further links between professionals, organisms, institutions and both productive and service companies in different geographical regions.
- To keep up a constant challenge of updating and recycling staff and professionals related with Port Administrations and operator, user and auxiliary companies working in ports.
- To feed the talent of future

- managers of the sector.
- To form a data bank of statistical, macroeconomic and sectorial information.
- To process and publish monographic studies and documents on matters of interest for professionals in the sector.
- To become an effective instrument to help ports and their specialised companies to get involved in trade both in Spain and overseas.

#### **Educational Activity**

Teaching in the Institute will take two different but complementary lines of action:

- a) The Master Programmes, long term courses leading up to the corresponding qualification. These will begin with the Master in Port management and Intermodal Transport.
- b) The Programmes for Executive Improvement, with short term courses and seminaries including lectures and talks which will address specific issues or those of relevant interest.

These programmes will preferably be given in the institute's headquarters and, on occasions, on the premises of collaborating entities.

Besides, the Institute will offer made to measure training schemes which will be given on the premises of the entities of companies applying for them and in accordance with the agreements established to this effect.

#### **Collaborations**

IPEC commits itself to offering quality training with great attention being paid to identifying the needs of the sector and to organising courses that may respond to such needs in their content, methodology, teaching staff and timetable. In order to do this it is able to rely on:

- The institutional, technical and promotional services of the Autonomous Port of Valencia.
- Institutional backing from the State Port Administration office of the Ministry of Public Works and Transport and from other entities belonging to Central and Local Administration.
- The collaboration of the most reputable Universities or Educational Entities experienced in areas of port interest, such the University Institute of Administration and Company Manage-

ment (ICADE) of the Pontifical University of Comillas. The Institute of Transport and Communications Studies of the MOPT, the Spanish Maritime Institute (IME), the Foundation for Company Development (FUNDESEM), Institute of the Small and Medium Valencian Industry (IMPIVA) or the United Nations Conference on Trade and Development (UNCTAD).

#### Master in Port Management and Intermodal Transport

The growing internationalisation of economy on a world scale is reinforcing the role of foreign trade as an essential element to ensure the economic development of all nations. Thence the importance of seat transport—the main good transport mode— and of ports—hubs for the modal sea-land interchange.

Consequently, port services and seat transport play a vitally important role in the economy of many countries as they are trading activities which significantly influence their balance of payments and greatly condition the siting of industry and other economic activities.

An inadequate management of such activities generates a series of negative effects which not only lead to a lower profitability rate of productive investments but also to a price rise in imports and exports, detrimental to producers and consumers and to national economic development projects.

On the other hand, the constant technological progress and changes experienced in world markets are prompting new ideas as to the way of carrying out the physical distribution of goods, striving to optimise the transport flow from origin to destination at a minimal cost and at the same time ensuring a maximum service quality as regards reliability.

In view of these new demands, directed towards an integrated supply of logistic services, ports and their specialised companies are called on to play a foremost role.

Because of this, it is essential to reach a high degree of efficiency, security and reliability in all port services, both maritime and intermodal, being necessary for all companies in the sector to have highly specialised human assets in their management staff, capable of successfully coping with the changes and growing competition they have to face up to.

The Master in Port Management and Intermodal Transport given jointly by the Autonomous Port of Valencial and the University Institute of Administration and Company Management (ICADE) is a new, unique instrument to obtain the highest levels of professionality in the sector.

#### **Advantages of the Course**

The course is designed to provide participants with both a general training in company management common to everybody in the company and also with a specific training orientated towards the execution of management functions in private and public companies operating in and using the port sector, maritime and intermodal transport.

To this end, the course places emphasis on understanding the functions of the various characters involved in transporting the goods from the door of the shipper up to that of the receiver in the maritime and land environment, the fundamentals and conditions under which international trade is developed and the role and obligations of company executive staff as regards financial, legal, human and environmental issues.

The course also underlines the importance of the maritime and port sector in the national economy, the conditions and peculiarities surrounding its management as well as the interrelations existing between different transport modes.

One aspect that may be highlighted is the opportunity implied by the joint training of port, maritime and overland transport and foreign trade managers, each one benefitting from getting a thorough knowledge and understanding of the peculiarities of the main facets of their respective businesses and from the enriching mutual exchange of experiences. In this way, shippers/receivers can run the supply or distribution of their goods much better whilst port, transport and auxiliary company managers will be more capable of anticipating their respective demands and of making the service supply they must give much more adequate and efficient.

The teaching method will combine theory classes followed by exercises and

practical cases, masterly lectures, talks with distinguished professionals and visits to companies and organisms in the sector, so enabling participants to acquire a whole bag of basic knowledge and contrasting opinions qualifying them to cope successfully with the challenges of the future.

#### Features of the Programme

Objectives: The basic aim of the course is to give its participants a precise training directed towards management, deepening and widening their capacity to analyse and take decisions in the national and international environment where they have to carry out their executive functions.

The contents of the subjects to be dealt with are grouped into five basic areas of knowledge:

- Company Management and Administration
- Foreign Trade
- Sea Transport
- Overland Transport
- Port Management

On developing these subjects, it is intended that the pupils will:

- Obtain an appropriate degree of knowledge as regards the basic principles of planning, organisation and company management; management of human resources: strategies for marketing services; systems for accounts, finance, information and company control applied to small and medium companies in general and, more to those in the port, maritime/overland transport
- Recognise foreign trade as the basic prop giving sense to port and transport activities and achieve a solid base of knowledge on the aspects delimiting foreign trade activities from various angles (theoretical, institutional, legal, strategical, practical, etc...) in order to thereby anticipate the challenges they will have to face
- Distinguish the economic importance of transport and obtain an overall view of it by considering it as a unit regardless of the mode by which it is carried out.
- Get to know the main aspects

related with ships and goods transport by sea from different points of view — technical, commercial, legal, economic, political — and so be able to have not only an adequate perspective of maritime transport but also useful knowledge to follow up and understand other areas of the programme in which the ship has quite an important influence.

- Get sufficiently familiarised with overland transport - rail and road - viewing its various aspects globally (legal, administrative, economic, technical and operative), bearing in mind, amongst other things, that ports are the breaking point between this mode and sea transport.
- Lastly, realise the role played by ports, set in the logistic transport cycle, and get thorough knowledge both in theory and in practice of their particularities as regards organisation, planning, economy, commerce and exploitation.

#### For Whom the Course is Intended

The profile of the candidates for the Master in Port Management and Intermodal Transport is as follows:

- Executive and management staff belonging to private or public firms, entities or company units linked with the port, sea-land transport or foreign trade sectors.
- Unexperienced people who wish to develop their professional career in companies or entities in the sectors already mentioned.

#### **Teaching Method**

Teaching methods on the Master course in Port Management and Intermodal Transport combine theoretical expositions by the teacher with the intense participation of the pupils, individually or as a team, in the matters dealt with. Ordinary class sessions are complemented with monographic sessions, lectures and talks with well-known people from the world of enterprise and administration.

The class sessions follow a uniform pattern of exposing statement respecting the particularities of each subject. The development of these sessions begins by defining their objectives which is then followed by explanations on the subject, in accordance with a pre-es-

tablished, synoptic outline, based on exact documentary, audiovisual and computer means.

The exposition of each subject is rounded off by means of a bibliography that may help the participants to go deeper into the studied matter and, if necessary, by practical cases, exercises or group work which will show the benefit obtained and the assimilation of the problems that have been analysed. Overall, by way of the most appropriate teaching techniques in each subject (case method, simulation techniques, etc...), the methodology used in the Masters course offers the pupil a wide range of theoretical knowledge and tools for analysis which he can apply individually or in a team. In this way the future manager can get used to the patterns in which he will develop his professional work later on.

#### **Programme Contents**

#### Area I: Company Management and Administration

Environment analysis; Management administration; Marketing of service; Administration of human resources: Accounting bases; Financial analysis and planning; Treasury management; Means of finance; Management control.

#### Area II: Foreign Trade

International trade: Theory and policy; International contracting; Economic Customs techniques and systems; International financing and means of payment in international trade; Basic geography of Spanish and international trade; International management.

#### Area III: Sea Transport

Technology; Traffics; Freights and shipping terms; Operation; Law and insurances; Maritime policy.

#### Area IV: Overland Transport

Legal aspects of overland transport; Transport economy; Road transport; Rail transport.

#### Area V: Port Management

Transport and logistics: An intermodal approach; Functions and port policy; Port operations; Port economy; Port marketing; The port and its planning; Prospects.

#### Application forms and inscriptions must be delivered to:

Secretariat of Masters Programme Instituto Portuario de Esudios y Cooperación

Edificio del Reloj del Puerto Autónomo de Valencia

#### Muelle del Grao, s/n 46024 VALENCIA

For any complementary information regarding the course, grants and possible financial aid you can contact the following numbers:

Telph. (96) 323 09 92 Ext. 490 Fax (96) 323 17 43 or 323 32 72

#### New Publications

## 7th Terminal Operations Conference • Volume VII June 1992 • Genoa

The very latest thinking in terminal operations, application of technology and future business prospects are highlighted in the proceedings of Cargo Systems' Terminal Operations Conference held in Genoa in June.

61 industry experts from 17 countries (including 11 of the world's major carriers) provided detailed, factual presentations of value to terminal operators and users worldwide. Subject areas include:

- global trade forecasts, containerised volumes and carrier strategies
- fewer big ships and big ports versus small ships and small ports
- definitive argumentation
- the health of the carrier industry analysed, overtonnage, low freight rates and stark predictions on profitability
- terminal automation and information handling — feasibility of new technologies such as automated guided vehicles
- economics of pallet handing and fruit handling logistics
- North/South European terminal and port productivity compared
- carrier-terminal relationship reaching critical mass — bigger vessels, increasing stress on improving gate throughput
- forest products sophisticated logistics cut transport costs from distant markets
- port privatisation and industrial relations — South American, Far East and New Zealand perspective.

The views, opinions and operational approaches of the worlds' top operators

and users is now available in A4 book format, and contains over 220 pages of text, photographs, diagrams and tables. This book can be obtained for £85 from the following address:

The Technical Library, CS Publications Ltd, McMillan House, 54 Cheam Common Road, Worcester Park, Surrey KT4 8RJ, UK. Tel: 081-330 3911. Fax: 081-330 5112.

## Papers presented at the Container Operations Conference 1992

#### February 1992 ● San Francisco

Following a most successful convention in San Francisco earlier this year, Cargo Systems is pleased to announce that the written papers presented at the Container Operations Conference are now available for purchase. Subject areas include:

Keynote issues: • container transportation — the myth of 'customer-driven' service • managing the supply of container assets

Area focus: • South/Central America
— trade forecasts, infrastructure developments, plus terminal and depot operations • the Panama landbridge
• the Chilean perspective • containerisation in Brazil, Uruguay and Argentina

Port and depot policy: • the land use question • the environmental challenge • depots — the environment, standardisation and certification

Terminal operations: • technology in practice • voice technology for container operations

Technical workshop: • does fixed cost repair and damage insurance work? • hardwood floors — are they a thing of the past? • CRC — container repair and control.

This book is now available in A4 book format and contains over 100 pages of essential reading for all container steamship operators, third parties, container ports and stevedores, lessors, depot operators and all those concerned with the profitability and efficiency of containerisation. It can be obtained for £45 from the following address:

The Technical Library, CS Publications Ltd, McMillan House, 54 Cheam Common Road, Worcester Park, Surrey KT4 8RJ, UK. Tel: 081-330 3911. Fax: 081-330 5112.

#### The Americas

## Vancouver: Port 2010 Phase Two Goes Public

The Vancouver Port Corporation (VPC) recently invited local community members to comment on its proposed PORT 2010 development processes.

Approximately 150 people attended a series of four public meetings in March to find out more about VPC's development Priorities and Options, Land Use Designations, Permitting Process and Environmental Appraisal Procedures.

Feedback was mixed, and varied from region to region. In Port Moody, concerns were mainly of an environmental nature, while City of Vancouver residents focused on jurisdictional control, the nature of port/city council relationships and the port's business performance.

In North Vancouver, residents looked for specifics about land use designations along the North Shore waterfront, and Burnaby called for greater community participation in port planning.

Consultation with municipalities and other stakeholders regarding the processes advanced in PORT 2010 Phase Two will continue, and will contribute to a final Phase Three blueprint scheduled to be complete by the end of 1992.

(Port News)

#### VPC Container Proposal Enters Formal Process

Earlier this year, the Vancouver Port Corporation (VPC) revealed plans to construct a state-of-the-art container terminal facility at Roberts Bank. Immediately following the announcement, the proposal entered a formal Project Review Process and is currently proceeding through its various stages.

Under the guidelines of the Port's Environmental Appraisal Procedures, the terminal proposal is undergoing comprehensive examination with input from a variety of sectors. As is the requirement for most major port developments, the project proponent — in this case the VPC — must produce a detailed Environmental Assessment Document (EAD). Included in the EAD will be a thorough assessment

of the project's anticipated impact on wildlife and marine habitat, as well as "quality of life" issues such as traffic and agricultural land. The EAD is being produced independently by local consulting firm Gartner Lee Ltd. and is expected to be completed in July.

Concurrently, the VPC has been active in keeping the public and various levels of government informed about the project and its progress. Individual meetings have been held with local business, agricultural, environmental and community interests, and an open Public Information Meeting was held in Delta May 14 with a second slated for September. Consultation with the Municipality of Delta has been ongoing, and plans have been discussed with the provincial government in Victoria. This extensive consultation has produced a range of input and views which will be considered throughout the process.

The Process will culminate with formal panel hearings directed by an independent Project Review Panel. A panel chairman is expected to be appointed by the VPC Board of Directors in July, with full membership in place later in the summer. It is anticipated that the panel will convene hearings in September.

The Project Review Process for the Roberts Bank container terminal is scheduled to be concluded before the end of 1992. If approved, construction could conceivably begin in early 1993 - on target for completion by 1995 and in time to meet forecasted customer (Port News)

#### **Ballantyne Terminal to Retain Heritage Features**

A proposal to redevelop Ballantyne Terminal into a modern, multi-use facility will retain heritage features, the Vancouver Port Corporation (VPC) announced. As proposed, Ballantyne will become a combined cruise passenger and general cargo facility, with historic features of the 69-year-old card terminal included in the design.

Ballantyne Terminal, which opened in 1923, is nearing the end of its operational life: the aging pier structure is deteriorating and does not comply with current earthquake standards; the four existing freight sheds are functionally obsolete and cannot accommodate today's cargo handling methods and equipment. Additionally,

Ballantyne's role as an alternate cruise facility, in its present form, does not satisfy the Port's objective of providing first-class services and facilities for cruise passengers.

The redevelopment would include a single large warehouse, designed for efficient handling of general cargoes; specifically forest products requiring covered storage, such as wood pulp. VPC forecasts an increasing demand for wood pulp and a corresponding rise in demand for suitable port facilities.

Attached but separated from the warehouse would be an attractive, efficient new cruise passenger terminal which would enable Ballantyne to continue serving as an alternate to Canada Place.

To retain the heritage character of Ballantyne, the facade from shed No. 1 would be retained and refurbished to serve as the main entrance to the new passenger facility, and the facades at the north ends of sheds No. 2 and 3 would be replicated.

VPC will initiate the redevelopment process for Ballantyne by submitting a proposal for review by the City of Vancouver, and at the same time conducting its own review, which includes public information and consultation. The proposed construction start date is early 1993 with completion slated for mid-1994. Total project cost is estimated at close to \$40 million.

#### Savannah: 13% Increase **In Container Tonnage**

The Georgia Ports Authority's (GPA) Port of Savannah Deepwater terminals experienced a 13 percent increase in containerized cargo to 3,849,601 tons during the fiscal year ending June 30, 1992.

The gains in container volume to 498,432 TEUs (twenty-foot equivalent units) equated to a 12.1% increase over the previous fiscal year.

This increase in container traffic was attributed to the addition of nine new lines and service expansions since July 1991 as well as the growth of the port's existing ocean carriers. The new levels of trade through Georgia's ports resulted from new export opportunities available to U.S. companies. Nearly 50 ocean carriers serve northern Europe, the Mediterranean, the Middle East, Asia, Central and South America. Africa and Australia from GPA's

Garden City and Ocean Terminals.

Container vessels are handled at the six-berth Containerport located within the Port of Savannah's 856-acre Garden City Terminal.

Combined container, breakbulk, dry and liquid bulk tonnage for GPA's Savannah terminals rose 5.4 percent to 6,792,095 tons. Breakbulk and bulk cargoes experienced only slight decreases of 2.9 percent and 3.5 percent respectively.

Figures for GPA's deepwater facilities at the Port of Brunswick reached 1,671,488 tons. This 8.7 percent decrease from the previous fiscal year was attributed to the general marketing conditions of bulk commodities.

The overall reduction at Brunswick, however, was offset by tonnage increases in automobile movement at Colonel's Island and forest products handled at Mayor's Point Terminal. resulting in an 8.1 percent growth in breakbulk cargoes at this port.

Total tonnage for all GPA deepwater and barge facilities advanced 2.3 percent to 8,544,405 tons.

GPA operates deepwater terminals at Savannah and Brunswick as well as barge facilities at Bainbridge and Columbus and maintains trade development offices at Savannah, Brunswick, Atlanta, New York, Athens, Oslo and Tokyo.

#### **Houston to Speed Processing of Trucks**

In recent months, the Port of Houston Authority has been working with trucking and freight forwarding interests to speed processing of trucks at its facilities.

The Port Authority's efforts complement an initiative led by the Texas Intermodal Truckers Association (TITA). The Association of Freight Forwarders and Customs Brokers and the operators of container yards are also participating in the effort.

According to a recent TITA newsletter, the initiative is designed to increase profitability for truck owners without increasing customer costs. Educational programs are being combined with procedural changes to enhance productivity and eliminate delays.

#### **PHA Participation**

The Port Authority has participated

in the educational program in several instances. A "Truckers Guide" to PHA facilities was published in both English and Spanish and distributed to motor freight companies. Port Authority officials met with the representatives of major trucking firms to discuss problems and possible solutions.

At the Fentress Bracewell Barbours Cut Container Terminal, dispatchers attended a special seminar and drivers participated in tours which explained the organization of the terminal and how documentation is handled.

#### **Changes at Barbours Cut**

Procedural changes have been instituted at Barbours Cut to provide additional service to the trucking industry. The terminal now operates two express lanes for trucks with empty containers and an additional lane for loaded containers on a regular basis. An additional inventory clerk has been added to improve wheeled unit locations.

An extra radio channel is now available for road operations, and more pay phones have been installed for drivers who need to call their offices.

To further relieve congestion at the main gate, the bobtail lane (for truck tractors without chassis) has been moved to the chassis yard, and a fax machine at the new location allows drivers to pick up work orders before proceeding to the main gate.

In August, the customer service and booking operations will be moved away from the terminal. "This measure will result in less waiting time for drivers who do not have procedural problems," explained Jimmy Jamison, Barbours But Terminal manager. "Already, truck turn times have improved 10-15 minutes for drivers with proper documentation."

#### **Private Firms Cooperate**

Private firms have also made changes to better serve the trucking industry. Sea-Land, which operates its own terminal within Barbours Cut, will open a new automated interchange soon. Telephones will be installed at the scales and the bobtail lane so drivers will not have to leave their trucks to check out.

Other changes made by private firms include the following:

 Fairway terminal has extended its hours to 6 p.m. to allow drivers to return chassis after Barbours Cut closes its gates.

- Container Care replaced its interchange procedure with a receipt on off-hire equipment.
- Winners Container Yard (W.W. Rowland) is re-routing its trucks through a separate gate to relieve congestion at the main gate.

#### **Forwarder Efforts**

The Houston Customhouse Brokers and Freight Forwarders Association is also cooperating to improve truck turnaround time. The organization recently distributed information to its members to improve the documentation given to truckers. The forwarders are also considering development of a uniform truck order format.

All parties have increased usage of the CONICS system at Barbours Cut Terminal. CONICS is a computer system which tracks cargo and provides information on the location and status of containers and RO/RO cargo at the terminal.

#### **Documentation Crucial**

"Delays most frequently occur because of improper documentation. The trucking companies, freight forwarders, customs brokers and cargo interests are working with us to eliminate that kind of delay," said John Horan, PHA "Trucks with operations director. proper documentation should already be experiencing better turnaround times. We hope to see a decrease in document problems soon. Our primary goal right now is to educate and guide those who have to prepare the documentation so these problems can be solved as quickly as possible."

(Port of Houston)

#### Port of Long Beach Sets Two Fiscal Year Records

The Port of Long Beach ended the 1991-92 fiscal year by setting records in both tonnage and containers moved across the docks. A record 75.1 million metric revenue tons of cargo, a 3.8% increase over last year, were moved during 1991-92 placing Long Beach as the West Coast cargo tonnage leader for the 13th consecutive year.

Containerized cargo showed a dramatic increase of 13.7% in 1991-92. A new high of 1.838,236 twenty-foot equivalent units (TEUs) were moved compared to the 1,616,511 TEUs recorded in fiscal year 90-91.

Despite the recessionary year, loaded inbound containers showed a 12% increase, from 834,197 TEUs to 934,367 TEUs. Export boxes also rose from 521,162 TEUS to 565,637 TEUs, a rise of 8.5%. Movements of empty containers rose nearly 30%, 338,232 TEUs versus 261,152 TEUs last year.

Port officials suggest that the strong increase of containerized cargo can be attributed to continued outsourcing by American companies, last-minute Christmas orders and shipments, plus the introduction of larger capacity vessels into service.

The coming year will see more new, large containerships calling at Long Beach with Hyundai Merchant Marine's 4,400 TEU vessels, Hanjin Shipping Company's 4,000 TEU ships and K-Line's 3,500 TEU ships making increased calls to the U.S. West Coast.

The new 107-acre Maersk Line terminal also will come on line in the early part of 1993, thereby adding even more capacity to Long Beach's container operations.

#### MPA Systems Enhance Customers Efficiency

Governor William Donald Schaefer announced that the Maryland Port Administration continues to be on the cutting edge of implementing Electronic Data Interchange (EDI) systems to benefit Port of Baltimore customers.

According to the Annual Report to the Maryland Port Commission on Information Services presented recently, the MPA's Information Services Department has made substantial progress in providing value-added services to port customers, particularly those using the Seagirt Marine Terminal.

In Fiscal Year 1992, the MPA initiated a number of new systems enhancements, including a Steamship Line Booking EDI, Equipment Reservation System, and Equipment Marriage System.

"We are pleased with the progress we have made in the past year in improving the technology and systems we can provide to our customers," said Governor Schaefer. "But we are not finished. There are still some important enhancements we can provide to make doing business in the port even easier for our customers."

The MPA helps port customers to

operate more quickly and efficiently by utilizing emerging information systems and technologies.

Opened in September 1990, the Seagirt Marine Terminal and its computerized gate complex places the Port of Baltimore in the forefront of the technological revolution taking place today in United States ports.

Four steamship lines — Evergreen Marine Corp., Mediterranean Shipping Company, Puerto Rico Maritime Chipping Authority and Orient Overseas Container Line (OOCL) — call at Seagirt, and have been pleased with the EDI advantages it provides them.

"In Baltimore, we are almost 100 percent electronic where other ports are not," said John Fick, Operations Manager for OOCL's Baltimore office. "The paperwork is reduced, which gives us an edge on the competition. It gives you better market position when you're paperless. This is one of the best systems on the East Coast."

The MPA is working to improve on its reputation by implementing a number of new enhancement systems. The Steamship Line Booking EDI has greatly decreased the amount of paperwork that would have been performed by the steamship lines.

Every empty and loaded container coming into a port for exporting needs a booking in order for the steamship line to track its location and destination. At most other ports, these bookings are input manually by clerks at the piers, then delivered by courier to the steamship line offices where they are typed in again. At Seagirt, the clerks input the information directly into the computer system, which automatically sends it to the steamship line.

The Equipment Reservation System helps steamship lines allocate their equipment on a priority basis, which is especially important when there are occasional shortages. Instead of allocating equipment on a first-come, first-served basis, this system matches shippers with the steamship line's schedule, ensuring that containers are available to meet the vessel's arrival.

The Equipment Marriage System improves the tracking of equipment on the terminal. It allows customers to manage their equipment better by informing them of the status of the equipment, such as whether a chassis is available or has a container on it.

The MPA also has added a number

of other system enhancements such as Steamship Line Freight Release EDI and the Empty Equipment Automatic Dispatch System. The Steamship Line Freight Release EDI allows steamship lines to send release orders electronically rather than manually. The Empty Equipment Automatic Dispatch System automatically selects a container for dispatch to a shipper, based on predefined guidelines such as type, size and status.

"We continue to focus on system enhancements that will expedite the flow of cargo and will result in more timely and diverse information being exchanged between the terminal operator, Maryland International Terminals (MIT), and our customers," said Adrian G. Teel, Executive Director of the Maryland Port Administration.

A department of the MPA's Financial Services Division, the 8-person Information Services Department (ISD) provides support for automation and computer technologies at the port agency. ISD has responsibility for the ACROSS Customs Release system and the ACCESS Seagirt Terminal Gate and Processing Control System.

#### US Port Traffic 1992: Imports Offset Exports

Imports staged a strong comeback during the first quarter of 1992, increasing 8.0 percent compared to a year ago. That gain wan more than sufficient to offset a lackluster performance by exports (which were down 1.0 percent), resulting in 3.6 percent in total U.S. waterborne foreign commerce for the January-March quarter.

TABLE I
U.S. Waterborne Foreign Commerce 1986-1991
(Millions of Short Tons)

EXPORTS	CY 1988	CY 1989	CY 1990	CY 1991	JanMar. 1991	JanMar. 1992	Change 1991/92
United States	400.9	422.8	413.5	435.0	107.4	106.4	1.0%
North Atlantic	73.5	84.1	89.7	92.3	22.5	22.4	-0.3%
South Atlantic	18.3	20.0	21.9	25.1	6.1	6.1	0.8%
Gulf	162.5	167.6	163.8	184.4	48.6	48.8	0.5%
South Pacific	36.9	41.1	39.4	44.1	11.4	10.8	-5.3%
North Pacific	73.2	73.0	71.6	69.2	18.7	17.0	-9.2%
Great Lakes	36.6	37.0	28.2	20.0	.2	1.2	422.9%
IMPORTS							
United States	516.8	551.6	554.1	502.8	111.6	120.6	8.0%
North Atlantic	183.1	177.6	155.0	144.7	33.4	36.2	8.5%
South Atlantic	51.4	55.5	52.1	49.6	12.2	12.3	0.5%
Gulf	211.5	238.8	224.6	239.1	53.7	57.8	7.7%
South Pacific	37.7	41.6	41.3	34.0	7.8	8.7	11.3%
North Pacific	17.6	19.4	19.3	18.8	4.1	3.9	-5.6%
Great Lakes	15.9	17.8	17.6	12,8	.3	1.1	243.1%
TOTAL							
United States	917.7	973.4	967.5	937.9	219.1	226.9	3.6%
North Atlantic	256.6	261.7	244.7	237.0	55.9	58.7	5.0%
South Atlantic	69.4	75.4	74.0	74.7	18.3	18.4	0.6%
Gulf	374.0	406.4	388.4	423.4	102.3	106.6	4.3%
South Pacific	74.6	82.7	80.7	78.0	19.2	19.4	1.4%
North Pacific	90.8	92.4	89.9	87.9	22.8	20.9	-8.6%
Great Lakes	52.5	54.8	45.8	32.8	.6	2.3	319.7%

## TABLE II U.S. Liner Trades 1988-1992 (Millions of Short Tons)

EXPORTS	CY 1988	CY 1989	CY 1990	CY 1991	JanMar. 1991	JanMar. 1992	Change 1991/92
United States	47.2	52.3	52.7	58.8	14.5	15.5	7.1%

North Atlantic	8.2	9.9	10.0	10.9	2.7	2.9	8.3%
South Atlantic	8.7	9.7	10.2	11.6	2.8	3.1	10.7%
Gulf	9.2	9.2	9.1	9.9	2.6	2.9	14.1%
South Pacific	12.5	14.4	14.3	15.7	3.9	4.1	4.8%
North Pacific	8.4	8.9	9.1	10.4	2.6	2.5	1.3%
IMPORTS							
United States	43.1	45.9	45.7	46.2	10.8	12.2	12.1%
North Atlantic	14.4	14.8	14.5	13.6	3.3	3.6	9.0%
South Atlantic	6.2	6.5	6.4	6.2	1.5	1.7	14.4%
Gulf	4.8	4.5	4.4	4.2	1.1	1.1	0.7%
South Pacific	13.4	16.4	15.2	16.3	3.7	4.3	18.6%
North Pacific	3.9	4.4	4.4	5.1	1.2	1.3	8.6%
TOTAL							
United States	90.3	98.2	98.4	105.0	25.3	27.7	9.3%
North Atlantic	22.6	24.7	24.5	24.5	5.9	6.5	8.7%
South Atlantic	14.9	16.2	16.6	17.8	4.3	4.8	12.0%
Gulf	14.0	13.7	13.5	14.1	3.7	4.0	9.6%
South Pacific	25.9	30.8	29.5	32.1	7.6	8.5	11.8%
North Pacific	12.3	13.3	13.5	15.6	3.7	3.8	3.0%

TABLE III
U.S. Containerized Liner Trades 1988-1992
(Millions of Short tons)

EXPORTS	CY 1988	CY 1989	CY 1990Y	1991 tp a	idlanMar. 1991	JanMar. 1992	Change 1991/92
United States	32.5	39.9	40.5	44.6	11.5	12.2	5.7%
North Atlantic	5.8	7.9	8.2	8.9	2.3	2.4	7.3%
South Atlantic	6.4	7.8	8.0	9.1	2.2	2.5	10.2%
Gulf	3.7	4.2	4.1	4.6	1.3	1.2	6.6%
South Pacific	10.5	13.0	12.9	14.5	3.7	4.0	7.1%
North Pacific	6.0	7.1	7.2	7.9	2.0	2.1	4.0%
IMPORTS							
United States	34.8	40.2	39.2	38.6	8.9	10.3	15.5%
North Atlantic	11.9	12.8	12.6	11.7	2.8	2.9	3.0%
South Atlantic	5.3	5.7	5.4	5.4	1.3	1.5	14.9%
Gulf	2.7	2.8	2.7	2.4	.6	.7	17.2%
South Pacific	12.0	11.4	14.2	14.7	3.2	4.0	24.7%
North Pacific	3.6	3.9	4.0	4.4	1.0	1.2	20.9%
TOTAL							
United States	67.3	80.1	79.6	83.2	20.4	22.4	10.0%
North Atlantic	17.7	20.7	20.7	20.6	5.0	5.3	4.9%
South Atlantic	11.7	13.5	13.5	14.2	3.5	4.0	12.0%
Gulf	6.4	7.0	6.8	7.0	1.9	1.9	0.9%
South Pacific	21.9	26.8	27.2	29.2	6.9	. 8.0	15.3%
North Pacific	9.6	11.0	11.2	12.3	3.0	3.3	9.6%

Inbound tanker cargo accounted for much of the tonnage increase. However, the liner cargo sector, exports and imports alike, also experienced an outstanding first quarter, with a gain overall of 9.3 percent. Containerized liner cargo performed even better, jumping 10 percent from last year's level.

In detail, exports amounted to 106.4 million tons, with dry cargo up 2.3 percent and tanker cargo down 18.4 percent from the first quarter of 1991. Exports overall, though down from last year, were, nevertheless higher than in the 1990 first quarter — by 1.2 percent.

First quarter imports of almost 121 million tons included tanker cargo amounting to 85.2 million tons (+11.3 percent from last year) and dry cargo totaling 35.2 million tons (-0.3 percent). Despite the improvement from last year, total import tonnage lagged that of the 1990 first quarter by 14.9 percent.

For general cargo ports, continuing gains in liner and containerized liner cargo are reassuring signs, indeed. Liner exports for the quarter were ahead by 7.1 percent compared to last year and 15.1 percent compared to 1990. For liner imports the gains were 12.1 percent and 6.6 percent, respectively. In the containerized liner trades, the changes were as follows:

#### Containerized Liner Cargo Calendar Year First Quarter Change

	1992 vs. 1991	1992 vs. 1990
Imports	+ 15.5%	+6.5%
Exports	+5.7%	+29.9%
Total	+ 10.0%	+ 18.0%

While each of the coastal port ranges recorded first quarter gains in containerized cargo, the biggest beneficiaries were the South Pacific (+15.3 percent), South Atlantic (+12.0 percent), and the North Pacific (+9.6 percent).

Table I summarizes U.S. waterborne foreign commerce generally, while Table II focuses on the liner trades and Table III on the containerized liner trades.

(AAPA Advisory)

#### North Carolina Ports Show Solid Growth

Total tonnage handled by the North Carolina State Ports Authority continued the double digit increases posted throughout Fiscal Year 1992 and ended the year on June 30, 1992 with a 17 percent increase over the previous fiscal year. Tonnage for Fiscal Year 1992 totaled 5.1 million tons, compared to 4.3 million tons for all of Fiscal Year 1991.

"Our tonnage gains illustrate just one of the successes we've enjoyed this year," said Mr. James J. Scott, Jr., Executive Director of the North Carolina State Ports Authority.

"Additional highlights for the year include growth in forest products at our Morehead City Terminal, and new cargoes of steel billets and frozen poultry," he said. "The addition of two new container lines at the Wilmington Terminal is also good news."

"We can attribute most of our tonnage growth to increases in bulk cargo that is shipped by private companies using State Ports Authority facilities," Mr. Scott continued. "These cargoes include liquid chemicals, phosphate and wood chips."

"But we are especially encouraged by the continued growth of tonnage in our leading commodities such as wood pulp, tobacco and general articles," he said.

At the Wilmington Terminal, woodpulp shipments set another record for the third year in a row. Nearly 600,000 tons of woodpulp were exported from Wilmington during FY '92, up 7 percent. Breakbulk forest products including woodpulp, linerboard and newsprint increased 10 percent. Over 200,000 tons of general articles moved over the Wilmington docks at the same time, up 54 percent over the previous fiscal year.

At the Morehead City Terminal, wood chips tonnage rose 38 percent over Fiscal Year 1991 and exceeded a projection of 600,000 annual tons. Also at Morehead City, forest products tonnage showed a 37 percent increase.

The North Carolina State Ports Authority also exceeded financial goals set forth in the agency's Strategic Plan. For example, net income came in at 4 percent of gross revenues, while the Strategic Plan called for net income of 3 percent of gross revenues.

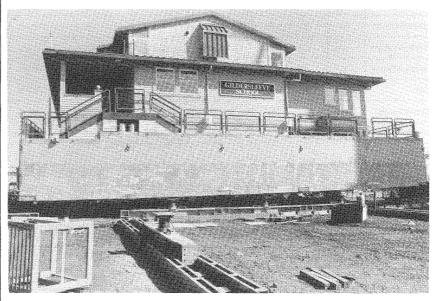
For Fiscal Year 1992, net income exceeded the budgeted goal of \$804,000 by approximately \$200,000 for a total of \$1,034,000.

"What is especially encouraging about our financial growth is our commercial success," Mr. Scott said.

"When we exclude the net income and revenue realized in Fiscal Year 1991 by military cargo from Operation Desert Storm/Desert Shield, in Fiscal Year 1992, the North Carolina State Ports Authority realized a six percent growth

in revenue and a 21 percent growth in net income," he added.

"The balance sheet shows the North Carolina State Ports Authority to be in a very strong position," Mr. Scott concluded.



Contractors prepared to move the J.R. Gildersleeve School toward the waters of Puget Sound. The permanently floating school will be towed to Alaska, where it will serve a community in a logging camp. (Port of Tacoma photo/Chris Phillips)

#### Floating School House from Tacoma to Alaska

One of the more unusual and technologically advanced school buildings ever created moved from its building site at the Port of Tacoma to the waters of Puget Sound. During August, this floating school will be towed more than 800 miles from Tacoma to its new home in Alaskan waters.

But don't expect to see a barge operation. The 5,000-square-foot floating school is built on a massive concrete foundation that doubles as a carefully engineered flotation pontoon. The permanently floating school is bound for Southeast Alaska where it will join a logging camp operated by the J.R. Gildersleeve Company off the coast of Ketchikan.

The camp consists of a network of floating homes and other buildings, all built on log booms and floats. The camp is positioned in new logging locations whenever necessary. The school building, complete with a second-story apartment for a teacher and family, will become the newest and most sophisticated addition to the community.

The thick concrete pontoon also

houses a water purification system, a sewage treatment system, an emergency generator and even a system for monitoring the salinity of the water in which the school is floating.

The school building and its three-bedroom apartment are designed to be entirely self-sufficient, according to Mr. John Bardi, design engineer for ABAM Engineers, a member of the Berger Group, in Federal Way, Washington.

"Rainwater is collected from the roof and sent into a collection system where it is treated and used for drinking and other uses," said Mr. Bardi.

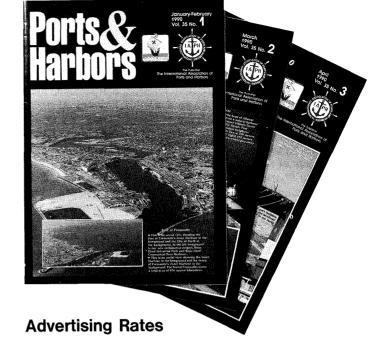
The school, which includes four classrooms and a science lab, is being built for the Southeast Island School District. It is scheduled to open its doors to a mix or kindergarten, elementary and high school students this fall. Cost of the building is about \$1.5 million.

Southeast Island School District consists of 17 tiny schools spread out over 18,000 square miles of Alaska's island region. Mr. Bob Weinstein, superintendent for the district, said the

## AN ADVERTISING OPPORTUNITY TO TALK TO THE WORLD'S PORTS

## **"Ports and Harbors"**

The official journal of IAPH, "Ports & Harbors" provides a forum for ports to exchange ideas, opinions and information. Published ten times a year as a magazine by ports, about ports and for ports, "Ports & Harbors" includes inside reports before they become news to the rest of the world. This insiders' magazine is indispensable for port officials who make decisions that affect their industry. If your business requires you to talk to the people building and guiding activity at today's ports, you should be advertising in this journal.



#### Effective January 1992

#### **General Information**

#### Format:

Trim size 296mm × 210mm, normally 52 pages

#### Language:

English

#### **Closing Dates:**

#### **Order Closing:**

One month preceding publication date (January 20 for the March Issue)

#### **Material Closing:**

3 weeks preceding publication date (January 31 for the March Issue)

#### **Agency Commission:**

15% to accredited advertising agency

#### Advertising Material:

Black & White - Positive film right reading emulsion side down; full color films same as black & white; progressive proofs to be supplied. Screen: B/W 133; color 133. Camera ready layout or repro proof accepted; film production costs to be borne by advertiser.

All advertising materials to be sent to:

The International Association of Ports and Harbors (IAPH) Kotohira-Kaikan Building, 2-8, Toranomon 1-chome, Minato-ku, Tokyo 105, Japan Tel: (03) 3591-4261 Fax: (03) 3580-0364 Enective January is

#### Black & White Rates (In Japanese Yen)

	One time	Three times	Six times	Ten times
Full page	100,000	97,000	95,000	90,000
1/2 page	60,000	58,200	57,000	54,000
1/3 page *	35,000	33,900	33,200	31,500
1/4 page	27,000	26,200	25,700	24,300
Cover 2	143,000	138,700	135,800	128,700
Cover 3	117,000	113,500	111,200	105,300
*1/3 page	accepted o	nly in WORI	LD PORT	NEWS Sec-
tion.	_			

#### **Full Color Rates for Covers**

Cover 2	263,000	255,100	249,800	236,700
Cover 3	237,000	229,800	225,200	213,300
Cover 4	270,000	261,900	256,500	243,000

#### **Color Charges:**

 $\text{$\frac{40,000}$ per standard color per page. Four Colors:}}$ 

#### **Special Position:**

10% surcharge.

#### Bleed:

20% surcharge.

#### IAPH Membership Discount:

10% discount of total insertion costs to IAPH Members.

#### **Mechanical Data**

 $\begin{array}{ll} \text{Trim size} & 296 \, \times \, 210\text{mm} \\ \text{Full page} & 250 \, \times \, 175\text{mm} \end{array}$ 

Half page  $120 \times 175 \text{mm}(H)$  or  $250 \times 84 \text{mm}(V)$  1/3 page  $88 \times 175 \text{mm}(H)$  or  $244 \times 56 \text{mm}(V)$ 1/4 page  $60 \times 175 \text{mm}(H)$  or  $120 \times 84 \text{mm}(V)$ 

Bleed size:  $302 \times 215$ mm

school for the J.R. Gildersleeve logging camp is the first of its type. It offers the district great flexibility and an attractive living situation for teachers, he said.

"We're certainly interested to see how this will work, although I don't see us building five or six more of them right away," he said.

"We've provided building sites for a variety of Alaska-bound projects but never a floating school building," said Mr. Philip Lelli, Port of Tacoma commissioner. "We're seeing top-quality construction projects and hundreds of jobs at the Port's Industrial Yard. That's what the Port is all about."

Warehouse space in the Port's Industrial Yard is used for everything from clothing manufacturing to boatbuilding and repair.

General contractor for the school building project was McClure and sons, of Mill Creek, Washington. Architecture was done by the BJSS Group Architecture and Planning, of Olympia, Washington.

Mr. Todd Tovani, project manager with the architecture firm, said the design is a modernized version of a one-room schoolhouse, with separate rooms arranged around a central hub. The building also was designed to weather high winds and extreme cold, he said.

The school house was launched at the Port of Tacoma's Industrial Yard on July 28. Final work was completed with the structure moored to a Port pier. Sailing time to Alaska will be about eight days, according to contractors.

#### Charleston Alone Meets US Customs Mandate

Demonstrating its leadership in port automation, the port of Charleston was the only port to meet a recent U.S. Customs Service mandate for transmitting cargo and hazardous material information.

On July 13, 1992, the Port of Charleston, through its ORION computer/electronic data interchange network, began transmitting and receiving cargo marks and numbers, and hazardous material information with U.S. Customs headquarters in Washington. Customs had mandated that all AMS carriers, service centers, and ports authorities be set up to send and receive the information by July 13.

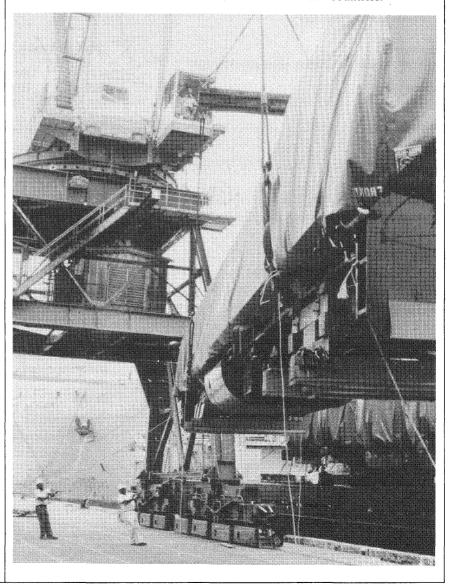
On that date, only the Port of Charleston was in total compliance.

"The sophistication of the ORION system makes it readily adaptable to advanced applications," said Mr. John Christensen, manager of Information Services at the Port of Charleston. "ORION's flexible nature keeps it responsive to the changing needs of government, private industry, and the Port environment."

In addition to meeting Customs' compliance mandate, the Port of Charleston, by virtue of the ORION system, is also the pilot location for testing Customs' Automated Export System (AES). AES will allow the electronic filing of export declarations and is due to premier in October 1992. Sea-Land Service, the largest American-flag container line and a major user of the Port of Charleston, is also participating in the pilot program.

#### Locomotives to Africa Through Charleston

One of 13 diesel locomotives destined for use by the National Railways of Zimbabwe is loaded onboard the Ashley Lykes at the Port of Charleston's Columbus Street Terminal. The 16-cylinder, 3,000-horsepower locomotives were built Electro-Motive Division of General Motors Corporation in Illinois. The trucks were built in Ontario, Canada, and shipped to the Port separately. All the units arrived by rail. Upon off-loading at Durban, South Africa. the trucks will be installed on the locomotive car bodies and the units will be hauled to Bulawayo, Zimbabwe. The "GT26CU-2" model locomotive is built for export and meets the narrow gauge, narrow clearance requirements of several African countries.



#### Africa/Europe

#### **Antwerp Most Productive Container Port in Europe**

(Reproduced from "Hinterland")

For years now, the port of Antwerp has had the reputation of being one of the most productive ports in the world. This reputation is largely supported by studies carried out by foreign transport institutes and universities of. for instance, Great Britain, Germany and the Netherlands. The latest in the series comes from Italy, i.e. the study and consultancy agency Marconsult, whose study "European Container Terminals - Structure and Performances - Report 1991" reveals a comparison of the major European container ports in terms of handling speed, price, etc(1).

Antwerp emerged as the most productive and most cost friendly across the board.

With a mix of 80/20 full/empty containers, Antwerp is the only European port which stavs below US\$100 in handling costs with US\$98. The most expensive ports, and thus at the bottom of the list, are located in Italy: La Spezia (US\$199) and Genua (US\$200) (see

Table 1: Total container handling costs comparison 1991 (in \$US) - Import/ export cargo

Fu	II Containers	Empties	Mix (1)
Antwerp	98	98	98
Zeebrugge	106	99	104
Bremen	128	127	128
Rotterdam	135	135	135
Le Havre	141	141	141
Felixstowe	143	142	143
Thamesport	147	139	145
Hamburg	150	150	150
Ravenna	159	119	151
Salerno	161	128	154
Naples	167	133	160
Piraeus	171	115	160
Valencia	167	143	162
Algeciras	178	139	170
Livorno	193	102	175
Venice	192	158	186
Trieste	203	156	193
Barcelona	188	158	182
Marseilles	199	193	198
La Spezia	205	175	199
Genoa	217	135	200

(1) Container-mix definition: 68% 20 ft, 32% 40ft, 80% full, 20% empties

Antwerp is also a leader when it comes to speed; an Antwerp crane operator handles an average of 30 containers an hour, i.e. 210 container moves per shift. In other ports, this

table 1).

varies from 14 to 27 moves per crane/hr

Table 2: Average container handling productivity - 1991

	Moves per hour/crane	Moves per shift/crane	Average shift time (hours)	Number of shifts in 24 hours
Hamburg	27	190	7.6	3
Bremen	25	180	7.3	3
Rotterdam	25	190	7.7	3
Antwerp	30	210	7.3	3
Zeebrugge	25	175	7.8	3
Le Havre	25	150	6.0	4
Felixstowe	18	140	8.0	3
Thamesport	21	165	8.0	3
Algeciras	18	140	8.0	3
Valencia	24	140	6.0	4
Barcelona	24	140	6.0	4
Marseilles F	OS 25	150	7.0	3
Genoa	15	100	6.0	4
La Spezia	22	130	6.0	4
Livorno	16	90	6.0	4
Naples	14	90	6.5	4
Salerno	15	80	6.5	3
Palermo	20	140	7.0	2
Ravenna	20	120	6.5	4
Venice	20	140	7.0	3
Trieste	16	90	7.0	3
Piraeus	20	140	7.2	3
Limassol	18	120	7.7	2
Malta	14	110	8.0	3

or from 90 to 190 moves per shift (see table 2).

With US\$32 ship's costs per box and the level of the handling costs combined with the speed at which everything is done, Antwerp again heads the list in terms of the total cost per container with US\$130, as opposed to US\$142 for Zeebrugge. Bremen and Rotterdam are next with US\$165 and US\$174, respectively, with Genoa (US\$250) and Trieste (US\$267) being located at the bottom of the list (see table 3).

(1) «Major European Container Terminals - Structure and Performances -Report 1991» - Marconsult SpA. 46/7 Via Assoritti — I-16122 Genova.

As far as transhipment is concerned. Antwerp is by far the cheapest with US\$124 per box. The other ports that manage to keep prices below US\$200 are: Piraeus (US\$147), Rotterdam (US\$180), Thamesport (US\$194), Palemo (US\$195) and Malta (US\$190). The most expensive port for these kinds of operations is Marseille, with US\$300 per box.

Table 3: Container handling costs and productivity comparison — Import/export cargo

	Total handling cost (US\$/box)	Output boxes per shift	Output boxes per 24hrs	Ship's cost US\$ per box	Total cost US\$ per box				
Antwerp	98	210	630	32	130				
Zeebrugge	104	175	525	32	142				
Bremen	128	180	540	37	165				
Rotterdam	135	190	570	35	174				
Le Havre	148	150	600	33	185				
Hamburg	150	190	570	35	186				
Thamesport	145	165	495	40	186				
Felixstowe	143	140	420	46	190				
Ravenna	151	120	480	42	193				
Valencia	162	140	560	36	198				
Piraeus	160	140	420	48	207				
Naples	160	90	360	56	216				
Algeciras	170	140	420	48	218				
Barcelona	182	140	560	36	218				
Livorno	175	90	360	56	230				
Venice	186	140	420	48	234				
La Spezia	199	130	520	38	237				
Salerno	154	80	240	83	238				
Marseilles	198	150	450	44	242				
Genoa	200	100	400	50	250				
Trieste	193	90	270	74	267				

#### Bremen/Bremerhaven **Satisfied With Volumes**

First Six Months Brought Gains

During the first six months of 1992. the total volume of cargo handled in the ports of Bremen and Bremerhaven increased by almost five percent and

reached 15.5 million metric tons. Containerized cargo, which increased 6.5 percent, and bulk cargo, which went up all of 15 percent, were the most important areas of growth.

These positive results are particularly welcome considering the generally poor state of the economy, particularly in the U.S., which is one of Bremen's most important trade partners. However, this economic situation explains why exports increased only slightly, while imports via Bremen and Bremerhaven showed clear gains, rising 7 percent.

Among bulk cargoes, grain played the most important role; volumes tripled, reaching approximately 500,000 tons. Livestock feed gained about twenty percent, while ore went up at an even higher rate of around 25 percent.

Forest products were another area of rising cargo volumes. Considerably higher volumes of wood and paper (in each case increases of 15 percent to 20,000 tons) as well as wood pulp were handled in Bremen and Bremenrhaven. These figures do not include containerized cargo, so the Port Operating Company BLG Bremer Lagerhaus-Gesellschaft and Bremen's Senator for Ports, Transport and Foreign Trade, Mr. Uwe Beckmeyer, assume that the

total volume of forest products in fact rose even higher.

Car handling in the BLG car terminal also increased significantly. The number of export cars went up 15 percent in comparison to last year. At the BLG Container Terminals 640,000 TEU were handled in the first six months, which is an increase of 3.7 percent.

The results of the first six months of 1992 for the ports of Bremen and Bremerhaven in statistics:

Total cargo volume: 15.5 million metric tons (+4.8%); General cargo: 9.9 million metric tons (-0.2%); Container loads: 6.4 million metric tons (+6.5%); Conventional general cargo: 3.6 million metric tons (-12.3%); Bulk cargo: 5.5 million metric tons (+15.1%).

However, some types of cargo did show losses. Conventional general cargo volumes fell at a rate of 12 percent, mostly as a result of the financial problems the CIS countries are encountering. Iron and steel also dropped slightly (—2.9 percent).

On the basis of the first half of 1992, BLG sees good reason for optimism. The volumes handled in the ports of Bremen and Bremerhaven can certainly be expected to retain or exceed last year's levels.



Foreground: The extended BLG Distribution Center, offering an area of 140,000 square meters (35 acres), borders directly on the Naustädter Harbor.

Left: GVZ, a private cargo traffic center, offers ideal facilities for combined cargo traffic.

#### Austria Foreign Trade: Hamburg Most Important

On June 23 and 24 the new Chairman of the Port of Hamburg Marketing and Public Relations Board, Dr. Hans Ludwig Beth, met representatives of Austria's trading, manufacturing and transport sectors in Vienna and Linz. Dr. Beth's decades of experience in the world's port and sea-transport economy and his recent period as a top manager at a Hamburg port operator mean he is already well known in the trade. The new Chairman is concerned to extend and intensify the tried-and-tested partnership between Germany's largest seaport and the Austrian transport market.

The Alpine republic is the most important transit country for the Port of Hamburg (followed by Denmark, Czechoslovakia and Sweden). In 1990 a total of 1.321 m t of cargo, including a wide variety of goods, were handled on Austria's account (up 28% in 1989). Of this sum 940,749 t were accounted for by imports, 379,956 t by export.

Hamburg is also the most important general-cargo port for its transit partner even though the routes to and from Hamburg are much longer than to Southern European ports.

In Austria's seaport balance sheet Hamburg was second only to the Slovenian port of Koper in 1990. Last year it was an extremely close-run race with Hamburg the probable winner — by a short head. The No. 1 spot looks to be back with the port on the Elbe. The final figures for 1991 and 1992 have not yet been published. However, one thing is certain. Despite keener competition Hamburg has increased its share of Austria's total overseas transit traffic. In the first quarter of this year overseas trade via Hamburg was again increasing.

The main export goods are paper and cardboard, magnesite, building materials, steel metal, iron and steel, chemicals, machinery, plant, electrical goods and synthetic fibres. Imports are mainly ores, coal, copper, chemicals, tropical and semi-tropical fruits, tinned produce and cellulose. However, rubber, logs, coffee and tobacco are also among the commodities imported in great quantities.

General cargo accounts for over 50% of goods passing through Hamburg. The goods handled by the Port of Koper

are mainly bulk cargoes (some 90%). Thus, if you switch your terms of comparison to the value of the goods handled, Hamburg is more important than the current port-handling figures would seem to indicate.

Austria's foreign trade developed well in the first quarter of this year with imports and exports rising. Boosted by an upswing in the Far Eastern, Iranian and South African markets, exports grew faster than imports. The port on the Elbe, Europe's No. 1 in East Asian traffic, benefited from this development.

With the support of Austria's forwarders, the Port of Hamburg has great hopes for the further development of the Hungarian and Czechoslovakian markets, Hamburg's traditional hiterland.

The total volume of cargoes handled in the Port of Hamburg continues to rise. In the first four months of this year 22.4 m t of goods passed through Hamburg's Port, 3.2% more than in the comparable period of 1991. These good results are mainly due to the strong growth in bulk cargoes (up 5.2%) and container traffic (up 6.8%). There was above average growth in exports of gain (up 229%!), fertilizers (up 37%), other grab cargoes (up 124.5%) and imports of liquid cargoes excl. crude oil (up 8%) and tropical/semi-tropical fruits (up 15%). Exports of loaded containers rose by 14.5%. The total volume of container traffic in the first four months of 1992 was 721,528 TEUs (up 4.1%).

For 1992 as a whole the Port of Hamburg expects a favourable development with further growth in the volume of cargo handled. However, the growth rate is likely to be lower than in recent years. In the medium to long term, the prospects are very favourable thanks to the imminent completion of the Single European Market, the creation of a European Economic Region and the increasing integration of Central and Eastern Europe into the international economy.

Each year since 1987, the growth rates for the Port of Hamburg's container traffic (in TEU terms) have been higher than the global average. Hamburg is planning for 4 m TEUs by the year 2000. In 1991 the Port on the Elbe had reached 2,188,953 TEUs—seventh place in the world container ports' league.

The Port of Hamburg's activities are

based on the competitive climate generated by a number of companies whose specialist fields of operation guarantee a great depth of services and high performance standards. At the same time, the Port of Hamburg is part of a transport chain made up of cooperating partners all over the world. Port of Hamburg Marketing and Public Relations carries out a wide variety of marketing activities on behalf of the Port.

The Port of Hamburg's representative office in Vienna led by Dr. Pochlatko (Rennweg 17, 1030 Vienna, Tel. 7125484, Fax 757197) is responsible for the whole of Austria. The Vienna office can look back on over 40 years of successful operations in the Austrian market. Its work not only includes providing a comprehensive but independent advisory service for customers in trade and industry, foreign trade, forwarding, transport and shipping but also involves cultivating contacts to the German Embassy, Austrian ministries, public authorities, other official institutions and of course representatives of foreign carriers in the Alpine re-

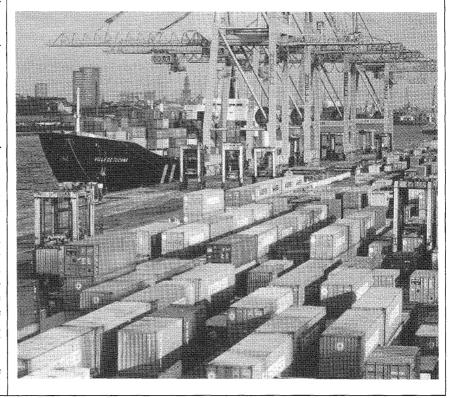
## **Upswing Slackening At Port of Hamburg**

The world economy in the doldrums, the dollar weak and world trade merely chugging along — all three factors have left their mark on the Port of Hamburg's performance figures. Yet despite such negative influences, Hamburg's port operators are satisfied with results in the first half of this year: total cargohandling volume up 1.9%, bulk cargo up 2.1%, general and bagged cargo up 1.6% in January-June 1991. Exports did particularly well.

The total volume of cargo handled in the first half of 1992 rose to 33.106 m t. Bulk accounted for 18.075 m t, general and bagged cargo for 15.032 m t. Above-average growth was recorded in suction cargoes (up 8.2%), grabber cargoes (up 10.1%) and containerized cargoes (up 6.8%).

Exports of suction cargoes rose to 1.4 m t, 71% up on the first half of 1991. Unusually large deliveries of grain to the CIS meant exports of grain increased by 134.4% in the first quarter of this year. Imports, in contrast, fell heavily with no repeat of last year's extra deliveries to eastern Germany and transit destinations. Exports of grabber cargoes also rose strongly with potash and fertilizer exports up 45.9% and exports of other grabber cargoes (mainly scrap) up 81.8%. This growth was mainly accounted for by shipments from eastern Germany.

The increase in container traffic (up 6.8%) was accompanied by a significant fall in conventional cargoes (down



10.1%). This increased the containerization rate in the Port of Hamburg by 3.5 percentage points to 73%. In the first six months of this year the Port of Hamburg handled 1,100,453 TEUs or 4.2% more than in the comparable period last year. The increase in the volume of loaded containers handled was 6.2% (in TEU terms). Exports increased even faster — by 12.5%.

The general-cargo import statistics reveal two "star performers": automobiles (up 90%) and tropical/semitropical fruits (up 16.4%).

If the Port of Hamburg's container traffic is divided up by trading routes, considerable growth is evident in trade with Europe (up 16.2%) and Scandinavia in particular (up 24.1%). Hamburg considerably strengthened its position as the feeder hub for the countries around the Baltic.

The growth on the routes to and from North Africa (up 52.5%), Israel (up 42.6%) and the Gulf/Red Sea (up 29.2%) reflects the upswing in trade from the relatively low levels of the Gulf War period. There was also considerable growth on the routes to and from South America-West Coast (up 29-9%), South America-East Coast (up 15.9%) and India/Pakistan (up 10.2%).

These increases compensated for the fall in trade on the East Asia-North route brought about by the extremely weak state of the Japanese economy. However, the planned introduction of a new joint service run by the Korean line Hyundai and the US line Sea-Land should boost Hamburg's container trade with the Far East.

During the first half of this year Hamburg was included as an additional port of call by a number of liner services. This increased the number of departures to South America and North Africa in particular but also the feeder services to and from Scandinavia. 18 of the world's 20 largest container lines now serve the Port of Hamburg.

In the second half of 1992 the Port of Hamburg expects this growth to steady out. An annual growth rate of 2% seems probable. Container traffic, however, is expected to increase by 5% with the target figure 2.3 m TEUs.

#### Record Half Year At Port of Cork

Cargo throughput at the Port of Cork for the first six months of 1992 exceeded

all previous records for that period. Total traffic amounted to 3.32 million tonnes, an increase of 487,000 tonnes or 17.2%. Imports totalled 1.99 million tonnes and increased by 207,000 tonnes or 11.6% while exports reached 1.34 million tonnes, an increase of 280,000 tonnes or 26.5%.

This impressive growth is further evidence of the growing confidence of port users in the Port of Cork and it marks a further increase in the port's share of national seaborne trade.

The Port of Cork is one of two Irish ports which handles all five shipping modes i.e. lift-on lift-off, roll-on rolloff, liquid bulk, dry bulk and break bulk and the increased traffic came from right across these sectors. Oil traffic increased by 290,000 tonnes or 19.2% to 1.8 million tonnes, container traffic registered impressive growth of 126% in reaching 38,000 t.e.u.'s (20 ft. equivalent units) while imports of trade vehicles recorded unprecedented growth of 201% to 40,000 units. While the increase of 10% in passenger traffic to 78,000 passengers was largely attributable to Swansea Cork Ferries, both Brittany Ferries and Irish Ferries have also performed very strongly. While weak demand for steel on the European market led to a downturn in Irish Steel traffic and problems in the agri sector led to reduced imports of cereals and animal feedstuffs, exports of dairy produce and pulpwood/ woodchips increased significantly.

The exemplary industrial relations reputation enjoyed by the Port of Cork over the past decade, the ongoing Capital Development Programme — investment of over £10 million in new port facilities over the past eighteen months — and the determination on the part of all port agencies to provide efficient competitive services on a round the clock basis should ensure further growth in the second half of the year.

## Address by Mr. Doyle on Tivoli Terminal Opening

24 April 1992

As chairman of Cork Harbour Commissioners I wish to extend a sincere welcome to all our guests on this very special occasion marking the official opening of the extended Tivoli Container Terminal. We are very honored to have Lord Mayor, Cllr. Denis

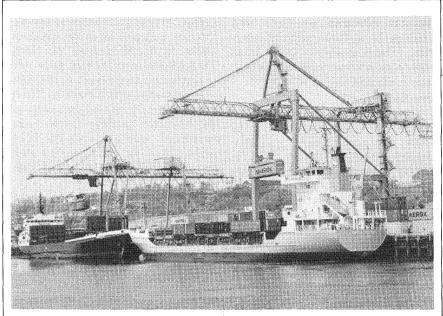
Cregan, Minister for the Marine, Dr. Michael Woods and the Chairman of Cork County Council, Mr. John Cal McCarthy among us as well as many other dignitaries including Mr. Myles McSwiney of DG 16 in Brussels. It is particularly appropriate that we have our major container customers present to celebrate with us the completion of a development which puts the Port of Cork firmly in the forefront of Irish container ports.

The Port of Cork has, of course, a distinguished history both in terms of historic events associated with it and the volume of shipping it has traditionally handled. However, past glories do not guarantee ongoing success and, to ensure our continued prosperity, we strive to be at the leading edge of ever evolving shipping and port technology. The Port can justifiably claim to be Ireland's Europort — as well as offering the shortest crossing times, we are the only Irish port which offers direct lift-on lift-off and roll-on roll-off services to continental Europe.

Today we celebrate our involvement in containerisation, a shipping mode which has revolutionised transport worldwide. Since early last year we have invested £4 million in the Tivoli Container Terminal, £2 million of which was obtained from E.C. Structural Funds with much appreciated assistance from the Department of the Marine and the remaining £2 million was provided from the Harbour Commissioners' reserves.

This major investment included the provision of a second gantry container crane built by Liebherr at Killarney and a fourth rubber tyred gantry, supplied by FEL of Oldham. The Tivoli Container Terminal is now the only terminal in the Republic capable of handling two container vessels simultaneously while, at the same time, servicing the requirements of road and rail transport. This ensures that average port transit time is superior to that at competing ports.

The Port enjoys a very favourable geographical location vis a vis mainland E.C., Ireland's premier export market and offers a choice of five container lines i.e. Bugsier, Seawheel, B & I Line, Holland Ireland Line and Rheintainer Line who provide daily sailing to ports such as Le Havre, Rotterdam, Antwerp, Zeebrugge and Hamburg. This choice of operator is a vital element in ob-



taining keen door to door rates and in assisting Ireland's export effort. It is significant that door to door rates reduced by over 30% in the course of the past three years as a direct result of increased competition between container lines.

A further key factor is that the Port of Cork is very much a "user friendly" port. At the Tivoli Container Terminal, 24 hour working, seven days per week is a regular feature while essential administrative functions such as customs clearance are kept to an absolute minimum. Undoubtedly one of our most telling sales points has been our enviable industrial relations stability and here I wish to pay tribute to the dock labour force and the commissioners' employees together with their trade union S.I.P.T.U. for their wholehearted commitment to providing an exemplary level of service for our many port users.

In the Port of Cork our policy is to provide a first class, flexible service at competitive rates. The success of this policy can be measured in the container growth experienced in the port in recent years. Last year alone, the port recorded a 22% increase in container traffic to 41,000 t.e.u.'s and we are happy to announce an unprecedented increase of 94% to 15,000 t.e.u.s for the first quarter of 1992. While a significant contributory factor has been the stevedoring problems experienced in Dublin port, there is ample evidence of substantial growth in our base business.

We would like to feel that growth of this magnitude is a massive vote of

confidence in the port and for that I wish to thank the container lines, importers, exporters and forwarding agents who entrust their traffic to us. With your help the Port of Cork will play an increasingly important role in Ireland's trading with our E.C. partners.

To enable us to maximise the utilisation of our excellent facilities I would respectfully urge government, through Minister Woods to give a higher priority to upgrading to dual carriage standard, where feasible, the Cork - Dublin national primary roadway which is already designated a Euroroute. With the willing co-operation of Cork Corporation and Cork County Council the local road system is being systematically upgraded in accordance with the L.U.T.S. Plan and I would appeal to government to give favourable consideration to this request.

Minister, I wish to take this opportunity to congratulate you on the tremendous interest you have shown in marine affairs since your recent appointment and I wish you every success in bringing before Dail Eireann the proposed new Harbours and Pilotage legislation. This new legislation is very much overdue and no doubt it will encourage Irish ports to adopt a more commercial approach in the new Europe which is opening up before us.

Lord Mayor, we are also very pleased that you have graced us with your presence on this auspicious day. We are fully aware of your commitment, not alone to the city of Cork, but equally to the Port of Cork.

#### Mr. Scholten New Head Of Rotterdam Port

On September 1st, 1992 Mr. Scholten will succeed Mr. H. Morenaar as chairman of the management board of the Rotterdam Municipal Port Management.

In 1964 he completed his study at the nautical college in Amsterdam. From 1964-1971 he was navigating officer for the



"Rotterdamse Lloyd". In the years 1971-1975 he went back to school, to study Law at the Erasmus University in Rotterdam. After gaining his Law degree Mr. Scholten went back to sea, as first mate with the Smit Lloyd company.

In 1976 he began his life ashore as marketing manager with the fore mentioned company. Three years later (1979) he became deputy director of Smit International Seatowage and Salvage company. Mr. Scholten first joined the ranks of the Rotterdam Municipal Port Management in the year 1981, as commercial director. The following year he went back to his former employer Smit, as director. In 1985 he joined the general management of Smit International as managing director of Smit Internationale Rotterdam.

Five years later, 1990 he decided to accept the position of executive director commercial development with ... the Rotterdam Municipal Port Management. Which recently led to his appointment, starting September 1st, 1992 as chairman of the management board.

## Best Second Quarter for Rotterdam Since 1973

Transshipment in the Port of Rotterdam in the second quarter of 1992 was more than 76 million tons. This is the best second quarter since the record year of 1973. Transshipment grew, compared with the second quarter of last year, by 7.1% or five million tons. In particular, imports of crude oil and coal and transshipment of containers increased sharply. The total transshipment in the first six months of 1992 amounted to 149.1 million tons. An increase, compared with first half of 1991, of 3.8 million tons or 2.6%. Based on the half year result the

transshipment in the Port of Rotterdam can be expected this year to be rather more than 295 million tons.

#### **General Cargo**

The transshipment of containers compared with last year rose in the second quarter by 20% to 11.6 million tons (mt). This increase was due partly to the industrial unrest in France. At 22.2 mt the container transshipment was 11.5% higher in the first half of 1992 than in the same period last year.

The transshipment of Roll-on/Roll-off goods increased by 2.9% to 1.9 million tons. Import was somewhat less than in the second quarter of 1991. The Ro/Ro export increased by 6% to 1 million tons. Ro/Ro transshipment in the first six months of 1992 increased by 2.7% to 3.7 mt.

Because of, in particular, the large import of aluminium from Russia the transshipment of other general cargo rose in the second quarter by 2% to 3.2 million tons. The half-year result for other general cargo showed a fall of 2.4% to 6.2 mt.

#### Liquid Bulk Cargo

Transfers of crude oil remain high. Import rose in comparison with the second quarter of last year by 16% to 25 million tons. There is heavy demand, with increased production, for OPEC oil, while Russian oil production remains at a low level. Export of crude oil showed a spectacular increase of 92.5% to 1.5 million tons. The most important destinations were Poland and Finland. These countries appear to have become important markets. Compared with the first six months of 1991, transshipment of crude oil in 1992 rose by 8.3% to 51.6 mt.

Transshipment of mineral oil products and petcokes fell in the second quarter by 18.5% to under 5 million tons. The demand for diesel, gasoline and kerosene is low. Also the demand for petcokes by the aluminium industry is low, because of the Russian aluminium dumped on the market. On a half-year basis the transshipment of mineral oil products and petcokes fell by 23% to 9.9 mt.

The transshipment of other liquid bulk cargo (mainly bulk chemicals) increased compared with the second quarter of 1991 by 11% to 4.6 million tons. This is due entirely to an increase in imports from the United States. Export of other liquid bulk cargo fell. The European chemical and petro-

chemical industries are faced with overcapacity and a low dollar exchange rate. Transshipment of other liquid bulk cargo at 9.4 mt were 9.5% greater than in the first half of 1991.

#### **Dry Bulk Cargo**

Transshipment of ore and scrap increased in the second quarter to 2.5% above the second quarter of 1991. Despite this, export fell by 12.7% to 752,000 tons. The demand for scrap from important destination countries (Taiwan, Turkey) has fallen. Both because of improved internal collection and the cheaper scrap exports from Japan and Vietnam. Transshipment of ores and scrap in the first half of 1992 fell by 0.5% to 21.3 mt.

The import of coal is a growth market. This quarter imports rose by 11% to 5.7 mt. Short-term forecasts for Western European coal imports remain favourable. Coal exports actually fell by 46% to 780,000 tons. The cause is the ending of the expensive German coal exports to Italy via Rotterdam. Compared with 1991 coal transshipment increased in the first six months by 8% to 13 mt.

Transshipment of cereals and animal feed in Rotterdam is in a downward spiral. The causes of this are severe competition and the declining market. In the first half of 1992 import was almost 11% below the level of last year. The half-year result was 8.2 mt and 10.4% below last year's level.

Transshipment of other dry bulk cargo (fertilisers, minerals) in the second quarter remained below last year's level (-9.6%). In particular, exports of minerals intended for the steel industry and of phosphates have fallen. In addition to the structurally poor market for fertilisers, the disappointing investments in the European building industry played a role. In the first half of 1992 transshipment in this segment fell by 2.4% to 3.6 mt.

#### Delta 2000-8 Project By Rotterdam, ECT

In the year 2010, the Rotterdam Municipal Port management and Europe Combined Terminals (ECT) expect that a total amount of 6 million containers (9 million TEUs) will be handled in Rotterdam. Together, the Port Management and ECT are preparing for the further expansion of Rotterdam as a mainport. The Maa-

svlakte, with its direct access to the sea, will play a major role in this developments. At the Maasvlakte, the Delta Terminal was specially built to be able to accommodate the latest generations of container vessels efficiently. Here, the first steps in automating parts of the container handling-process were introduced, such as the double hoist gantry crane, the multi trailer system and systems for computer aided shipplanning.

At this moment, the next major terminal is under construction: the ECT/Sea-land Delta Terminal. At this terminal the next phase of terminal automation will take place. Some fifty robot-cars, Automated Guided Vehicles of AGV's, will be used for the transportation of containers between the quay cranes and the stacks. The stacks will be equipped with Automated Stacking Cranes, ASC's, used for the automated and random storage and retrieval of containers.

An impressive Process Control System co-ordinates and controls the instructions for the container movements. These features, together with all the other new elements that are being developed here, make the ECT/Sea-Land Delta Terminal a unique terminal with state-of-the-art technology for the 21st century.

#### **Delta Mega Hub Center**

In the year 2010, an estimated 3.3 million containers will be handled on the Maasvlakte. That is almost 60% of all containers loaded or discharged in Rotterdam.

This increase in volume causes a need for further expansion of container activities on the Maasvlakte, using all the operational state-of-the-art techniques that recently have been developed. In order to stay ahead of the growth in volume, the Rotterdam Municipal Port Management and ECT are now jointly developing a master project called Delta 2000-8. The name indicates, that in the year 2000 - or better still: before the year 2000 - Port Management and ECT plan to operate a Delta Mega Hub Center, including next to the existing facilities, an additional eight dedicated terminals on the Maasvlakte.

A new dock, 2,400 metres long and 250 metres wide, will be dredged. The waterdepth will be 13.65 metres MLW, which can be further increased to 17 metres.

The project includes the construction of eight terminals, each measuring 300 meters of quay wall and approximatily 35 acres of apron and stacking area. Delta 2000-8 is an integrated network of terminals, including a central rail service center and a central barge center for optimal hinterland connections without any interchange at shunting areas. Delta 2000-8 will also include office buildings, central container gates, automated transport systems between different terminals and state-of-the-art process control and EDI-facilities.

Directly connected to the terminal complex, by means of a fly over, a distripark of 500 acres will be built for physical distribution activities.

#### **Dedicated Terminals**

Within this sophisticated terminal complex, the Port Management and ECT offer the largest container carriers the possibility to join them in developing their own 'dedicated' terminal, serving the European continent, Scandinavia, Great Britain and even the Northern part of Africa.

The dedicated terminals will offer international carriers the possibility to carry out their own identity. The ter-

minals will be equipped with two ultra-modern high speed gantry cranes, which can be installed with the successful double trolley-system.

The landside equipment and the supporting systems will be compatible to the Delta Terminal's current state-of-the-art technology. The dedicated terminal, its equipment and labour are guaranteed to be available whenever deep-sea vessels call in Rotterdam. Of course, in some cases additional berthing capacity or gantry cranes and equipment exceeding the potential of a dedicated terminal may be required. The concept of Delta 2000-8 makes it possible to simply add adjacent terminal-capacity to the operations at any given moment.

In this way, maximum flexibility to handle even two deep-sea vessels and their feeder connections at the same time is ensured, for instance when the vessels' calls are off schedule.

Delta 2000-8 enables 'on the hour' surface transport of containers to connecting carriers, the dedicated rail service and barge service centers or the physical distribution center, using the most advanced computer-controlled systems.

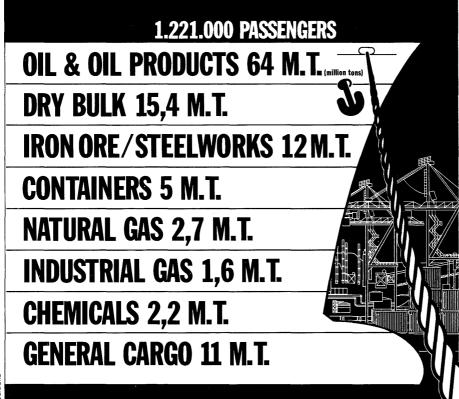
## Strategic Planning and Research: Rotterdam

(Reproduced from the 'Annual Report 1991, Port of Rotterdam')

Strategic Planning and Research is playing an increasingly important role in the Municipal Port Management. The Port Plan 2010 is a very good example of this. The tasks of the Strategic Planning and Research sector centre around 'strategic renewal' and 'research and information'. As always, the underlying principle is the promotion of activity in the port. The work of this sector concerns field such as port infrastructure, links with the hinterland, human resources, environment and safety, information technology and port information.

#### Port Infrastructure

In 1991 attention was focussed on the presentation of the Draft Port Plan 2010. This plan furnishes a vision of how the position of mainport Rotterdam can be strengthened in the future. One of the starting points is the most optimistic scenario of the Goods Flow



#### Marseilles-Fos The Multi-Purpose Port

- . Ships of every type and size
- All kinds of goods from all over the world
- Quayside industry
- Experienced and specialist professionals
- Shiprepair facilities

Marseilles-Fos, Europort South First port of France-Third port of Europe



23 place de la Joliette-BP 1965 13226 Marseilles Cedex 02 *(France)* **Tel. 91.39.40.00** Fax 91.39.45.00-Telex 440746 *Inmercial Direction - Tel. 91.39.41.20* 

Atelier Paul Bertra

Model 6 (GSM 6). These predictions forecast a considerable growth of transshipment in the Port of Rotterdam: from almost 300 million tons today to around 400 million tons in the year 2010. In addition, the Port Plan also opts for the strengthening of trade and industry in the port area. Preconditions necessary to achieve this are: growth of employment, growth of added value, sufficient space available, good links with the hinterland and a healthy environment.

The most striking elements in the Port Plan are the construction of a second Maasvlakte, the construction of a logistic distribution centre on the north bank of the New Waterway and numerous infrastructural improvements in and outside the Port of Rotterdam. Following the presentation of the plan in October 1991, all those concerned (government, trade and industry, interest organizations, general public) were asked to give their reactions. These consultations are currently being incorporated in a definitive plan. The Municipal Council or Rotterdam aims to approve the Port Plan in the autumn of 1992.

Within the framework of structural plans for the Maasvlakte and the Eem/Waalhaven area, a start was made in 1991 on preparations for sections of the Port Plan. The Strategic Planning and Research sector also made an important contribution to further elaboration of the Delta 2000-8 plan already referred to. The plan is a response to the need for large-scale container facilities on the Maasvlakte. According to the Port Plan 2010, cooperation with other regions is one of the possible ways of finding sufficient space for the future. Within this framework, the Strategic Planning and Research sector contributed to the design of Seaport Moerdijk in 1991.

In 1992 the Port management signed an agreement with Moerdijk concerning concrete cooperation.

The predictions for goods flow through Rotterdam (GSM 6) took no account of the rapid developments in Eastern Europe. During the year under review, additional information was provided by the study "Better, More, Further Eastwards?' The report indicates what extra goods flows the Port of Rotterdam could transport to Eastern Europe in the next twenty years. In the most optimistic variant,

this will involve 12 million tons of transshipment in the year 2010. This is in addition to the original prediction of 394 million tons of transshipment in Rotterdam in that year.

#### Links with the Hinterland

Rotterdam's links with the hinterland are good. The port can more than live up to its position as European mainport. Considerable attention needs to be paid, however, to railways connections from Rotterdam. Goods transport by train will play an increasingly important role in the future; certainly within a European context. Stricter environment regulations play an important role in this

A great deal of work was done in 1991 on railways policy. This project will be completed in 1992. In the meantime there has been intensive lobbying during the past year for the construction of the Betuwe Line, a separate railway link for goods transport between Rotterdam and Germany. The Minister of Transport is expected to make a final decision this year.

The Rotterdam Internal Logistics project (RIL) made a successful start in 1991. A large number of organizations cooperate in RIL: Dutch Railways Goods Transport, the Port Industries Association, Dutch Road Transport (NOB), the Central Bureau for Rhine and Inland Shipping, the trade unions, INTIS, ECT, Unitcentre and the Municipal Port management. Its aim is to achieve better organization of logistic within the Port of Rotterdam area. A number of different projects were realized during the year under review. A few examples which should be mentioned are the round-the-clock service at container terminals, the introduction of an advanced reporting systém for road transport at container terminals and cooperation between Rhine operators.

In 1991 it was finally decided to remove the Beerdam. This will allow inland vessels direct access to the Maasvlakte. It is now possible to remove the Beerdam due to the construction of the storm surge barrier in the New Waterway and the Hartel barrier in the Hartelkanaal. It is planned for the opening for inland vessels to be ready in 1995. Once the Beerdam is open, part of the Hartelkanaal can be filled in. This will create land for new activities.

#### **Human Resources**

The establishment of a maritime simulator centre in Rotterdam was assured in 1991. Government policy had left no room for this. The Government preferred Wageningen and Terschell-

The Municipal Port Management, however, considers Rotterdam to be the ideal place to integrate theory and practice. An agreement was therefore signed in November 1991 with Marine Safety. The American company will start running a maritime simulator centre in Rotterdam at the beginning of 1993. This guarantees the quality of nautical services in Rotterdam in the

During the year under review, the Port Management also devoted a great deal of energy to training facilities for information technology. During afternoon training sessions, companies could first do business without EDI (Electronic Data Interchange), then with EDI. The differences were immediately clear. In 1991 a first step was taken towards establishing training requirements in (the chemical) industry. Strengthening industry is an important objective for the future. In order to be able to grow, a sufficient number of qualified employees are needed. It is hoped that the study will shed light on this situation.

In cooperation with a number of transshipment companies, pilot projects were started with the aim of applying new organization concepts. This includes job descriptions linked with job evaluation systems.

#### **Environment**

The environment necessitates an approach right across the company. As in the case of the Shipping and Commercial Development sectors, the Strategic Planning and Research sector also focussed attention last year on the role of the environment in port innovation. In 1991 a start was made on the project 'Environment without frontiers'. The basic principle of the Port Management is that the environment should not form an element in the competitive struggle. The aim of the project is twofold. On the one hand the Port Management wishes to find solutions to the environment problems of both the Port of Rotterdam and other European ports. On the other hand the differences should be established between European ports with respect to environmental policy and protection of the environment.

The Strategic Planning and Research sector also played an important role in developing the Green Award System for shipping. This system could be expanded at some time in the future thereby creating further possibilities of developing Rotterdam's image as a 'clean' port with a 'green' approach.

Within the framework of the Port Management's soil pollution policy, research was carried out into how soil pollution can be better and more quickly discovered and where necessary removed. In 1992 this will hopefully lead to a generally accepted approach.

As a result of changes in the Noise Pollution Act, the port can develop in better harmony with the environment. The Lower House of Parliament has in the meantime taken a positive decision, This allows more possibilities for the restructuring of old port areas (Waal/Eemhaven area, Vierhavens/Merwehaven area, Botlek).

#### Safety

During the past year, work was carried out on establishing conditions to be able to determine the safety risks of transport by inland vessels. A start was also made on establishing safety policy for environment risks in the case of road and rail transport.

#### **Telematics**

Telematics is becoming increasingly important for a port. It is an important element in the quality of services. In Rotterdam many initiatives are in progress aimed at expanding telematics. In 1991 the Port management began formulating new telematics policy. A policy which is intended to support the further development of Rotterdam as a mainport. This policy proposal will be presented this year.

#### **Port Information**

The function of the Port Management as a supplier of port information was further expanded in 1991. Through collaboration with the Port Industries Association and the Foundation for Shipping and Transport Education, LogIport was set up. This combines all possible information concerning the port in one databank. By becoming a subscriber, any interested party can consult LogIport electronically.

#### Asia/Oceania

#### Comment Sought for Gladstone Strategic Plan

"The Gladstone region is destined to become the major industrial centre in Australia in the 21st century."

So proclaimed the Minister for Transport, the Hon. David Hamill, MLA as he officially launched the Draft Strategic Plan for the Port of Gladstone for public comment and consideration, while visiting the Port City recently.

"The draft plan provides the basis for strategic planning by the Authority and the State Government. The Queensland Government is seeking a co-ordinated approach to port development across the State, to ensure that appropriate levels of facilities are provided at each port."

Mr. Hamill spoke of the plan as being a document of confidence — confidence based on impressive performances in the past and exciting prospects for the future.

"Gladstone currently handles the export of substantial quantities of coal from the vast Bowen Basin, the export of Central Queensland grains and the import of bauxite from Weipa."

"In 1990/91 the port handled record tonnages, reaching almost 32 million tonnes. Export of commodities and goods was worth \$2.09 billion, almost 20% of the State's total export revenue."

"In addition to this trade, the region is attracting a wide range of value-added, export-oriented or import-replacement industries, based on alumina, coal and chemicals, with possibilities for other trades including magnesium, mineral sand, special steel and shale oil."

"I believe the deep-water, natural harbour at Gladstone is the key to the future creation of thousands of jobs for Queenslanders."

Following this release of the draft document the Authority will consult widely with industry and the community. The public is invited to make comment and have until 31 August to lodge written comments with the Authority.

The Minister stressed that this draft plan was not a commitment by the Government, the Authority or industry that the projects shown would be carried out.

Rather, it was a forecast of what is expected to be needed and the likely timing for such developments. This will contribute to the rational development of the port.

 $(Gladstone\ Port-Talk)$ 

## This is Port Klang

Port Operator: Klang Port Authority, a statutory corporation reporting to the Ministry of Transport. The port's container terminal is privatised and run by Kelang Container Terminal (KCT) in which the port authority has a 49% stake

Location: On the west coast of Peninsular Malaysia, about 40 km from the federal capital, Kuala Lumpur. Port Klang is Malaysia's biggest port in terms of tonnage. Its hinterland include the Klang Valley (the country's most populous and highly industrialised area), the southern state of Negeri Sembilan, parts of the east coast state of Pahang and Trengganu and the southern part of the central state of Perak

Facilities: The port has two gatewaysNorth Port and South Port.

South Port, the original port commissioned in 1901, handles largely domestic trade and bulk liquid cargo. The port has a total wharf length of 1078m divided into 8 berths — two berths for bulk liquid cargo, four for coastal and one each for bulk liquid/general cargo and bulk dry/bulk liquid cargo.

North Port handles the bulk of the port's trade. Located here are the container, bulk liquid and bulk dry terminals. There are two timber terminals run by private companies. North Port covers an area of 248 ha and has a total wharf length of 3944m divided into 11 berths for breakbulk cargo, two for liquid bulk, two for dry bulk, and three for containers.

**Major Commodities:** Exports — timber and plywood, rubber, palm oil. Imports — petroleum, fertilizer, machinery, paper, iron and steel.

(Port Klang)

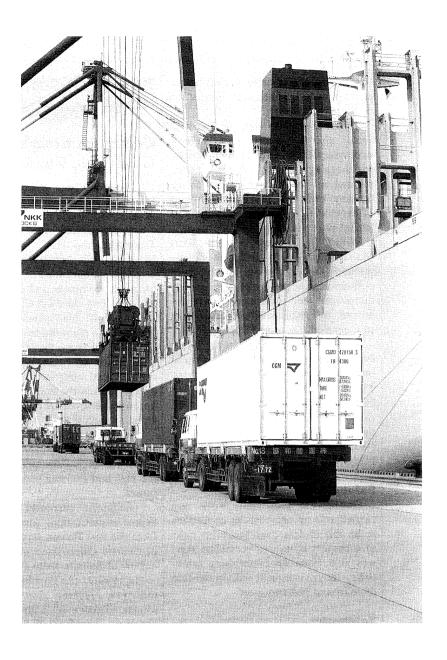
#### New Container Terminal In Making at Port Klang

Part of the second container terminal

2 %

OF THE WORLD'S

# GNP



The Port of Nagoya plays a key role in the economy of the surrounding Chubu region which alone accounts for 2% of the world's GNP.

YOUR EASIEST ACCESS TO THIS VIBRANT ECONOMY IS THROUGH...

## PORT OF NAGOYA



NAGOYA PORT AUTHORITY

8-21 Irifune I-chome Minato-ku Nagoya 455 JAPAN Tel:81-52-654-7840 Fax:81-52-654-7990

in the making — a 26 ha container yard now under construction. The yard is supplemented by a 4 ha, yard for empty containers nearby. Eventually the container yard will cover 34 ha.

KPA is investing about M\$135 million on a second container terminal in North Port to meet the consistently strong increase in box traffic over the last few years. The annual average growth rate for the last few years has been around 20 percent. With about 65% of locally manufactured goods now containerised and expected to grow to 85% by the year 2000, Port Klang has to prepare itself for the continuing growth to ensure adequate facilities are available.

Ultimately, there will be four container berths able to handle an annual throughput of up to 500,000 TEUs.

The first phase of the development which involves the conversion of three general cargo berths to two container berths is underway and scheduled for completion by October 1992. Further development of the terminal will be undertaken by the new operator when the rest of the port's services are privatised. KPA has bought three quay cranes for the terminal. The terminal is expected to have eight cranes eventually.

To ensure that facilities provided will meet new developments in the container trade, the cranes are of post-Panamax specifications capable of servicing even ultimate container carriers. The cranes have a leg span of 100 ft. and can handle boxes of over 45ft in length. They are able to handle cellular vessels with boxes stacked 6 high and 13 rows across.

The new terminal can accommodate vessels of up to 60,000 tonnes displacement.

Port Klang handles over 55 per cent of the country's container traffic. In 1991 it handled over 607,000 TEUs and this is expected to increase to 700,000 TEUs in 1992. (Port Klang)

#### PSA Signs Contracts For Prime Movers

PSA has signed contracts for \$22 million with UMW Equipment Systems Pte Ltd and with Tractors Singapore Ltd for the design, fabrication, delivery, testing and commissioning of a total of 40 standard and 132 heavy duty prime movers.

The contracts were signed by Mr.

Philip Ng, Director of Engineering, PSA, and Mr. Chong Kon Huoo, Director of UMW Equipment Systems Pte Ltd as well as Mr. Chang Siew Man, Managing Director of Tractors Singapore Ltd, at PSA Building on 30 Jul 92 at 12.30 pm.

UMW Equipment Systems Pte Ltd will deliver 40 standard prime movers and 86 heavy duty prime movers. The total sum of the contract is \$\$15,466,120.00. Tractors Singapore Ltd will deliver 46 heavy duty prime movers. The total contract sum is \$\$6,432,762.00.

These new prime movers will be progressively delivered in 1993 and will help boost productivity in the port. They will be used at PSA's container terminals. Currently, there are 303 prime movers in operation at these 3 terminals. The 40 standard prime movers can haul 2 twenty-foot containers or 1 forty-foot container, with a maximum payload of 50 tonnes. The 132 heavy-duty prime movers can each handle twice the payload (100 tonnes) and are used with a double-stack trailer which can take 4 twenty-foot containers.

The prime movers are fitted with air-conditioning in the cabins. The noise level inside the cabin will also be lower due to better insulation of the cabin. This will provide a more conducive work environment for PSA drivers.

With these new prime movers, PSA hopes to achieve a more dynamic deployment of prime movers to vessels. This should then improve the overall productivity of vessels.

#### Singapore Cruise Traffic Continues to Grow

The Singapore Cruise Centre (SCC) continues to register a steady growth in international and regional cruise traffic for the first half of this year.

From January to June 92 a total of 29 ships made 221 calls at the SCC's International Passenger Terminal (IPT) and a total of 121,070 cruise passengers passed through the IPT. In the first half of 1991, there were 130 ship calls and 57,288 cruise passengers. These represent increases of 70% and 111%, respectively. The IPT started operations on 1 Dec 91 to serve as the cruise gateway for the Asia Pacific region.

During the first half of this year, 75% of the cruise passengers were from the

ASEAN countries. 8.5% were from Europe, 6.3% from Australia, 5.3% from the USA and 2.9% from Japan, with 1.9% from the other countries. These statistics show that there is an increasing number of ASEAN cruise travellers, and confirm that there is a vast potential source market in the Asia Pacific region.

The regional ferry services were relocated from Finger Pier to the SCC's Regional Ferry Terminal (RFT) on 20 May 92. The number of passengers travelling to the Indonesian Riau Islands and to Malaysia has also increased for the first six months of 1992. There were 1,060,989 passengers compared to 875,690 passengers for the corresponding period in 1991. This represents an increase of 21%. In 1991, there was a total of 1.8 million regional ferry passengers.

The Singapore Cruise Centre was developed by the Port of Singapore Authority (PSA) at a cost of S\$50 million. It comprises three terminals—the IPT, RFT and the Domestic Ferry Terminal which cater for domestic, regional & international seaborne travelling.

## Container Industry Sees Growth of 17% for 1992

By Goh Kheng Wee
Marketing Department
Port of Singapore Authority

In Dec 91, the PSA conducted a survey to gather information from individual container shipping lines on their throughput forecast for 1992. Sixty-two container shipping lines contributing more than 80% of PSA's throughput responded to the survey. The industry forecasted an average growth rate of 17% for 1992.

About halfway through the year, the throughput growth has been keeping with the bullish forecast. Indeed from January to April 92, PSA handled over 2.36 million TEUs (twenty-foot equivalent units) or a 23% growth over the same period in 1991.

The growth in container traffic has come from West Asia, Indian Sub-continent, S.E. Asia, Australia to Europe and North America.

Regional feeder services in particular have benefitted from the increased trade between S.E. Asia and Europe and the USA. This perhaps accounts for the robust growth projection of 27% by

major feeder operators.

The industry's inputs will be used by the PSA in planning its expansion programmes. We wish to thank the respondents for taking time to complete the survey forms, and look forward to your continued feedback on such port related matters. (Port View)

#### **Scoresheet 1991**

- 1. Singapore retained its status as the world's Number One container port, handling a total of 6.35 million TEUs, a significant growth of 22 per cent over 1990
- **2.** Singapore remained the world's busiest port, with a 9.2 per cent increase in shipping tonnage\* to 537 million gross registered tons. It has been the world's busiest port since 1986.
- **3.** As the top bunkering centre in the world, SPA supplied a total of 12.5 million tonnes of bunker, an increase of 14 per cent over 1990.
- **4.** The port's total seaborne cargo tonnage grew by 10 per cent to 206 million tonnes.
- **5.** Total cargo throughout at PSA's terminal and Jurong Terminal rose by 15 per cent to 112 million tonnes, of which 91 million tonnes were containerised cargo.
- **6.** Operating revenue of the PSA Group rose by 19 per cent to \$1,192 million and operating surplus grew by 24 per cent to \$467 million.
- **7.** The value-added per employee for 1991 rose by 17 per cent to \$163,270.
- **8.** PSA's value-added per dollar of employment cost rose by 9.1 per cent to \$4.80.
- **9.** Singapore's first cruise facility, the Singapore Cruise Centre with three passenger berths, commenced operations in December.
- **10.** The first berth of PSA's newest container terminal, the Brani Terminal, was commissioned in December.

(Port View)

\* Includes all sea-going vessels and regional ferries above 75 GRT.

#### **PAT Invites Tenders for LCP Terminal Lease**

The Port Authority of Thailand (PAT) invites tenders for the lease of container terminal No. 2 at Laem Chabang Port, Thailand's new deep-sea port at about 100 kms. to the southeast of Bangkok. Tender documents are

available at Laem Chabang Port and at the PAT until August 14, 1992. Interested and qualified firms are to submit their proposals to the PAT on September 11, and the evaluation committee will take about a month to select the successful tenderer.

Vice Admiral Somnuk Debaval, PAT's Director General, said the tendering process will not take a long time as the terms and conditions are not much different from those prescribed in the bids for operation of container terminals No. 3 and No. 4 called two years ago.

Bidders must be a Thai company or have a joint venture registered in Thailand with certain experiences in transportation. The current terminal operators are not allowed to attend this bidding. Successful tenderer will hold the leasing period of 12 years and the contract can be renewed for five consecutive years. The leaseholder will be allowed to use the terminal and equipment which have been provided by PAT and to offer the services and facilities of the port and to charge port users for the use of those services and facilities of the port and to charge port users for the use of those services and

Revenue shares are divided into two parts: the annual leasing fee set by PAT and the additional fee offered by the bidder according to the container throughput. In the first year, however, the PAT will not collect the additional fee from the first 95,000 TEUs. The number will decrease by 5,000 units in the second and third year and will be constant at 80,000 TEUs from the fourth year until the expiry date of the contract.

Meanwhile, in order to maximize the terminal utilization, if the annual container throughput surpass 120,000 TEUs and 150,000 TEUs, the PAT will reduce the additional fee by 50% and 70% respectively.

#### **Computer Installation at B'kok Almost Complete**

Computer installation and system conversion at the Bangkok Port is 80% advanced, a few months ahead of its schedule.

According to Vice Admiral Somnuk Debaval, R.T.N., Director General of the Port Authority of Thailand, the 96-million-Baht computer system being installed at Bangkok Port will comprise an IBM ES/9000 model 190 mainframe of 64 MB CPU, a 7.5 GB magnetic disk, two tapes drives, one of high speed printers and 110 IBM PS/2s, remote terminals, etc. The system installation is scheduled to be completed within this month. Upon completion, it will be introduced to both operation and supporting systems such as container movement control, billing, accounting, personnel, etc.

Vice Adm. Somnuk added that PAT also has plans to exchange data with shipping lines, port users and neighboring ports which has already begun with Singapore Port Authority in order to enhance efficiency in the port services.

#### **Channel Expansion** In Chao Phraya River

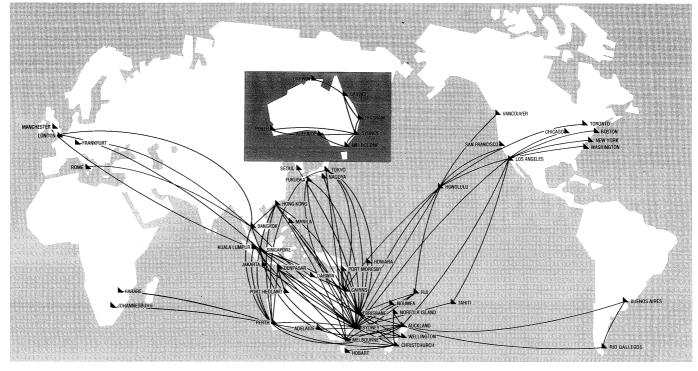
The Port Authority of Thailand will call bid for contractor of water channel expansion to cope with the increasing number of ships sailing through the Authority area in the Chao Phraya River. Tender documents will be available at the Marine Department, Port Authority of Thailand from August 13-27, 1992.

According to Vice Adm. Somnuk Debaval PAT's Director General, bidders must be Thai companies or a joint venture of Thai and foreign partners with at least 10 years experience in dredging work. Interested and qualified firms are to propose their document by this October.

The dredging work will start from the mouth of the Chao Phraya River to kilometre 18 in the Gulf of Thailand. The project is divided into two phases: phase I is to get rid of the accumulated backlog, and phase II is to widen the access channel from 100-135 kilometres conforming with PIANC's standard. (PIANC: Permanent International Association of Navigation Congress) The entire project will be completed within a year.

Vice Adm. Somnuk added that the expansion of the Bangkok bar channel will ensure safety of ships sailing through the channel under the port responsibilities; reducing number of accidents and pollution problems in the Gulf. It also helps boost PAT's efficiency in vessel service in line with the rapid increasing number of ships calling at the port.





Qantas, Australia's international airline, has more services to
Australia and the South Pacific than any other airline. Qantas will make you truly welcome en route and show you more than a little Australian hospitality on the way.

Qantas has offices and representatives in over 135 cities around the world. Call your nearest Qantas office today for schedules and the most attractive fares.

Please quote JJGJ34



#### Qantas Worldwide Reservations

•					
		Doha	43 3120	Miri	41 0717
All cities in:		Dubai	22 8151	Muscat	70 6381
USA	800 227 4500*	Dublin	01 747 747	Nadi	72 2888
UK	0345 747 767	Durban	304 6235	Nassau	2 8600
Germany	0130 7470*	Geneva	732 0450	Nicosia	44 4666
Japan (except		Genoa	2 8591	Norfolk Island	2195
Tokyo)	0120 207020	Guam	477 7250	Noumea	28 6546
		Harare	70 3494	Nukualofa	2 1422
M DI 1:	24.447/	Helsinki	9044 7522	Papeete (Tahiti)	43 0665
Abu Dhabi	34 4476	Hobart	008 11 2121*	Paris	42 66 53 05
Adelaide	237 8541	Rest of		Rest of France	78 42 21 62
Rest of South	000 4005 405	Tasmania	008 11 2121*	Patras	27 2698
Australia	008 188540*	Hong Kong	5 24 2101	Penang	63 4428
Al Khobar	898 2829	Honiara	2 0031	Perth	225 2222
Amman	64 1430	Ipoh	539 136	Rest of Western	ı
Amsterdam	683 8081	Islamabad	82 7301	Australia	008 19 9177*
Apia	21 261	Istanbul	140 5032	Phuket	321 253
Athens	323 9063	Jakarta	32 7707	Port Vila	3848
Auckland	379 0306	Jeddah	660 2332	Port Moresby	21 1200
Bahrain	25 4081	Johannesburg	886 7270	Rarotonga	
Bali (Denpasar) 88331		Johor	330 061	(Cook Islands)	2 6300
Bandar Seri Begawan 22 8845		Kaohsiung	282 3758	Reykjavik	(91) 69 0300
Bangkok	236 9193-5	Karachi	51 3636	Rio de Janeiro	511 0045
Barcelona	215 8486	Kathmandu	41 8637	Riyadh	477 2228x288
Beijing	500 2481	Khartoum	7 5641	Rome	48 6451
Beirut (West)	80 0237	Kuala Belait	335 103	Sanaa	23 2389
Beirut (East)	89 6690	Kuala Lumpur	238 9133	Santiago	72 7339
Belgrade	63 6875	Kuching	24 1401	Seoul	777 6871
Bogota	215 6326	Kuwait	43 2106	Singapore	737 3744
Bombay Brisbane	202 9297	Lae	42 1288	Stockholm	23 1635
risbane Rest of	234 3747	Lahore	30 1029	Suva	31 3888
Cest of Queensland	000 1777/75	La Paz	37 6001	Sydney	957 0111
•	008 177767*	Lima	41 5966	Rest of New	
Buenos Aires Cairo	313 3237	Lisbon	57 5020	South Wales	008 11 2121*
Lairo Canberra	76 0306 275 5518	Lyon	78 42 21 62	Taipei	507 3171
		Madrid	542 1572	Tehran	67 0106
Capetown	21 1310	Malta	33 2559	Tel Aviv - Yafo	517 2164
Caracas Christchurch	71 3893 0800 80 8767	Manila	815 9491	Tokyo	3 593 7000
Colombo	2 0551	Mauritius	208 6801	Toronto	800 663 3423*
Copenhagen	33 118911	Medan	51 9333	Tripoli	60 6835
Jopennagen Damascus		Melbourne	805 0111	Vancouver	604 684 8231
Damascus Dar-es-salaam	22 0700 7 4577	Rest of		Vienna	581 452
Dar-es-saiaam Darwin	008 80 2710*	Victoria	008 11 2121*	Wellington	0800 808767
Darwin Delhi	332 9027	Mexico City	5230235	Zurich	211 4411
Dhaka	25 9594	Milan	8 645 0168	*Toll free calls	

# DECLARE WAR ON THE ILLEGAL TRAFFICKING OF DRUGS THROUGH THE WORLD SEAPORTS

OUR WEAPONS INCLUDE:

VIGILANCE

ENHANCEMENT OF SECURITY

COORDINATION, COOPERATION & COMMUNICATION
WITH THE FIGHTING MEMBERS OF PORT COMMUNITY AND

**AWARENESS OF RESPONSIBILITY TO THE WORLD COMMUNITY** 



IAPH (The International Association of Ports and Harbors)
supports the initiative of
CCC (The Customs Co-operation Council)
for their fight against the illegal trafficking of drugs