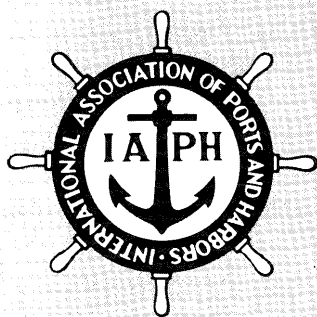


# Ports & Harbors

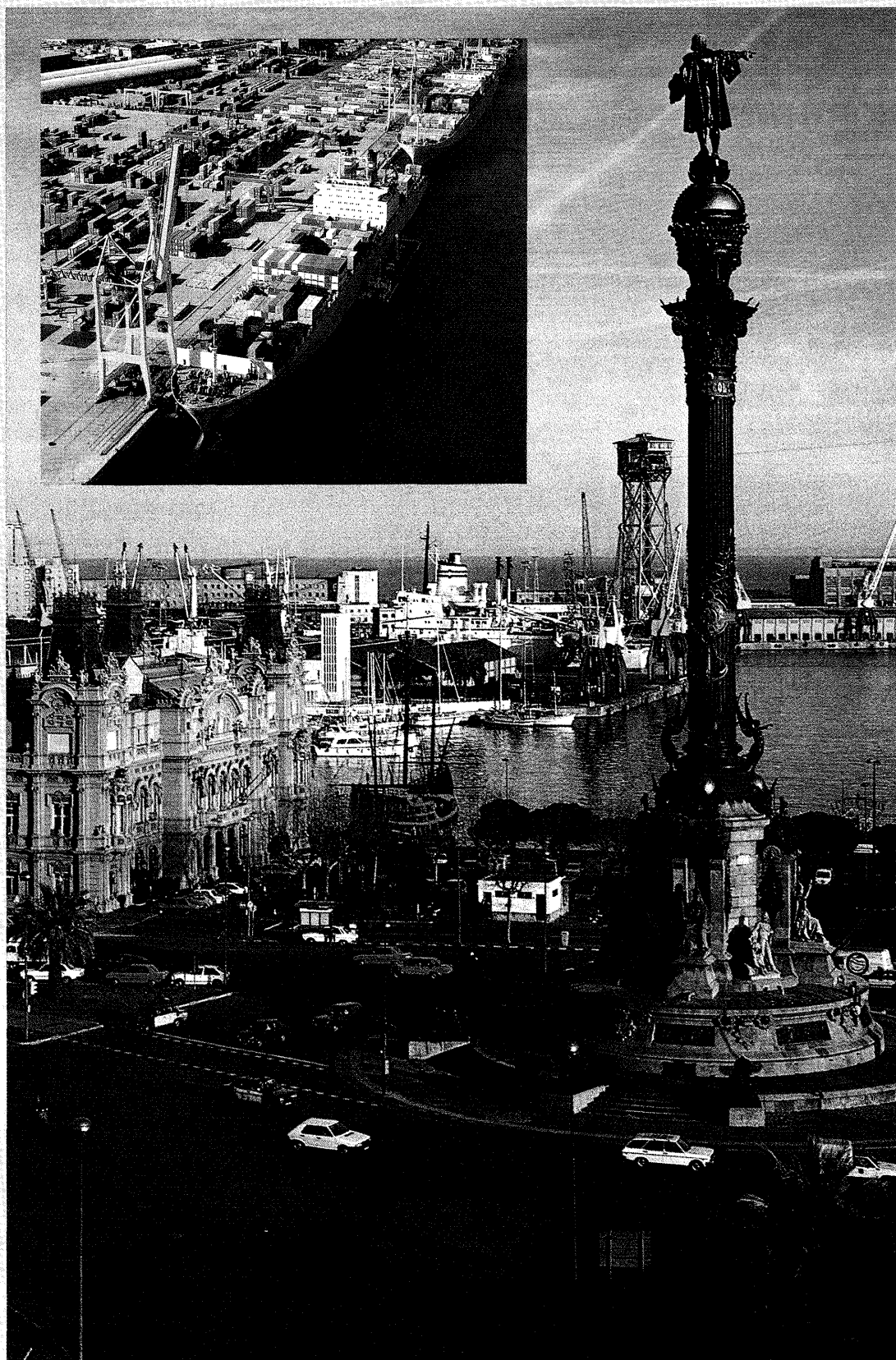
April 1988  
Vol. 33, No. 3



*The Publisher*  
**The International  
Association of  
Ports and Harbors**

## **Port of Barcelona**

**Situated on the northeastern Mediterranean coast of Spain, the Port of Barcelona is an important gateway to Europe. It is the leading Spanish port in the movement of general cargo and containers. Inset is one of the container terminals of the port.**



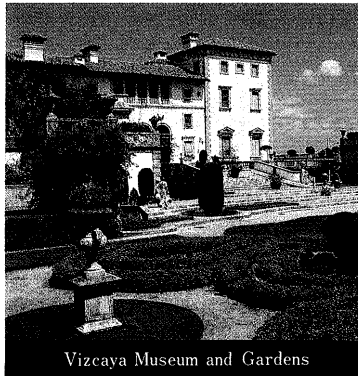
# PORT OF MIAMI HOSTS THE 16TH CONFERENCE OF IAPH IN APRIL, 1989



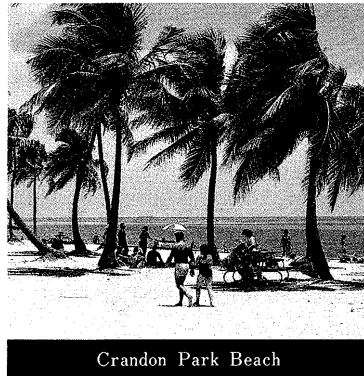
**NORTHWEST**

Official Carrier for  
the IAPH Conference '89

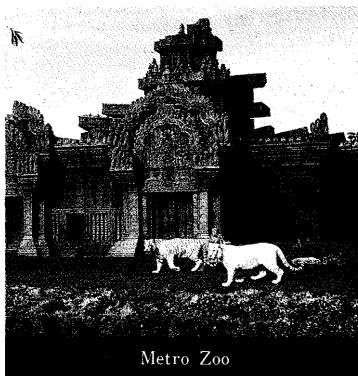
Ms. Lori Goodman, PR and Marketing Assistant, Port of Miami,  
Promotes her port as venue for the IAPH Conference in 1989.



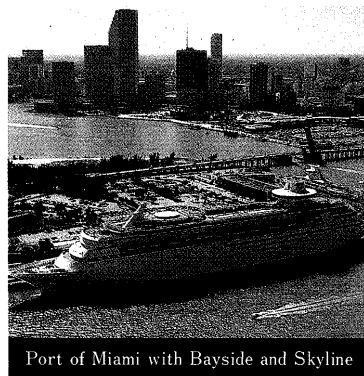
Vizcaya Museum and Gardens



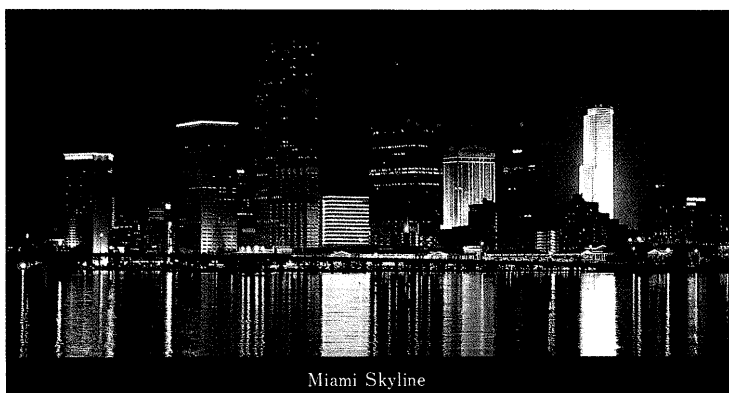
Crandon Park Beach



Metro Zoo



Port of Miami with Bayside and Skyline



Miami Skyline

## HIGHLIGHTS OF THE CONFERENCE

**From the invitation address delivered by  
Mr. C.J. Lunetta, Director, Port of Miami,  
at the IAPH Conference in Seoul (May 1, 1987)**

- (A) A five-hour "Cruise to Nowhere" aboard one of the beautiful cruiseships based at the Port of Miami. The evening will include open bars, a full dinner, shows, dancing and casino action! We promise smooth seas and balmy weather.
- (B) A trip to the Florida Everglades complete with naturalist-guides, where you will see alligators, exotic birds and other wildlife in their natural habitat. This trip will feature an airboat ride through and on the "River of Grass", which we call the Everglades.
- (C) A wild hog barbecue at the Miami Seaquarium: this particular attraction features marine life, shows, great food, country & western style music and dancing.
- (D) A complete program for the spouses featuring a visit to the beautiful Vizcaya Museum and gardens.
- (E) A two-day tournament for our friendly golfers in IAPH who have been drooling to golf at the beautiful Doral Country Club.

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**Mark in your calendars April 22-29, 1989!  
You can be assured that your visit will be  
a memorable one.**

Ports & Harbors  
April, 1988  
Vol. 33  
No. 3

# Ports & Harbors

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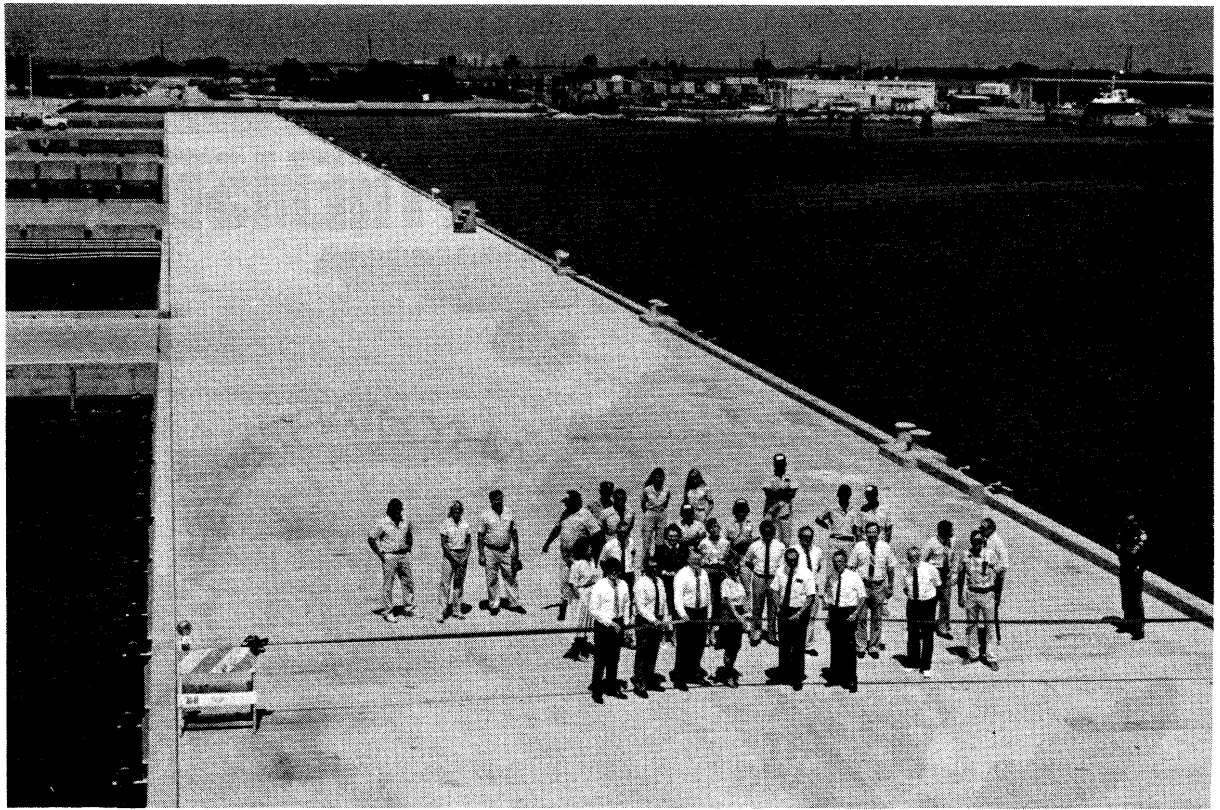
For further information contact:  
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CLYDE PORT AUTHORITY  
16 Robertson Street  
GLASGOW G2 8DS  
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Telephone: 041-221 8733

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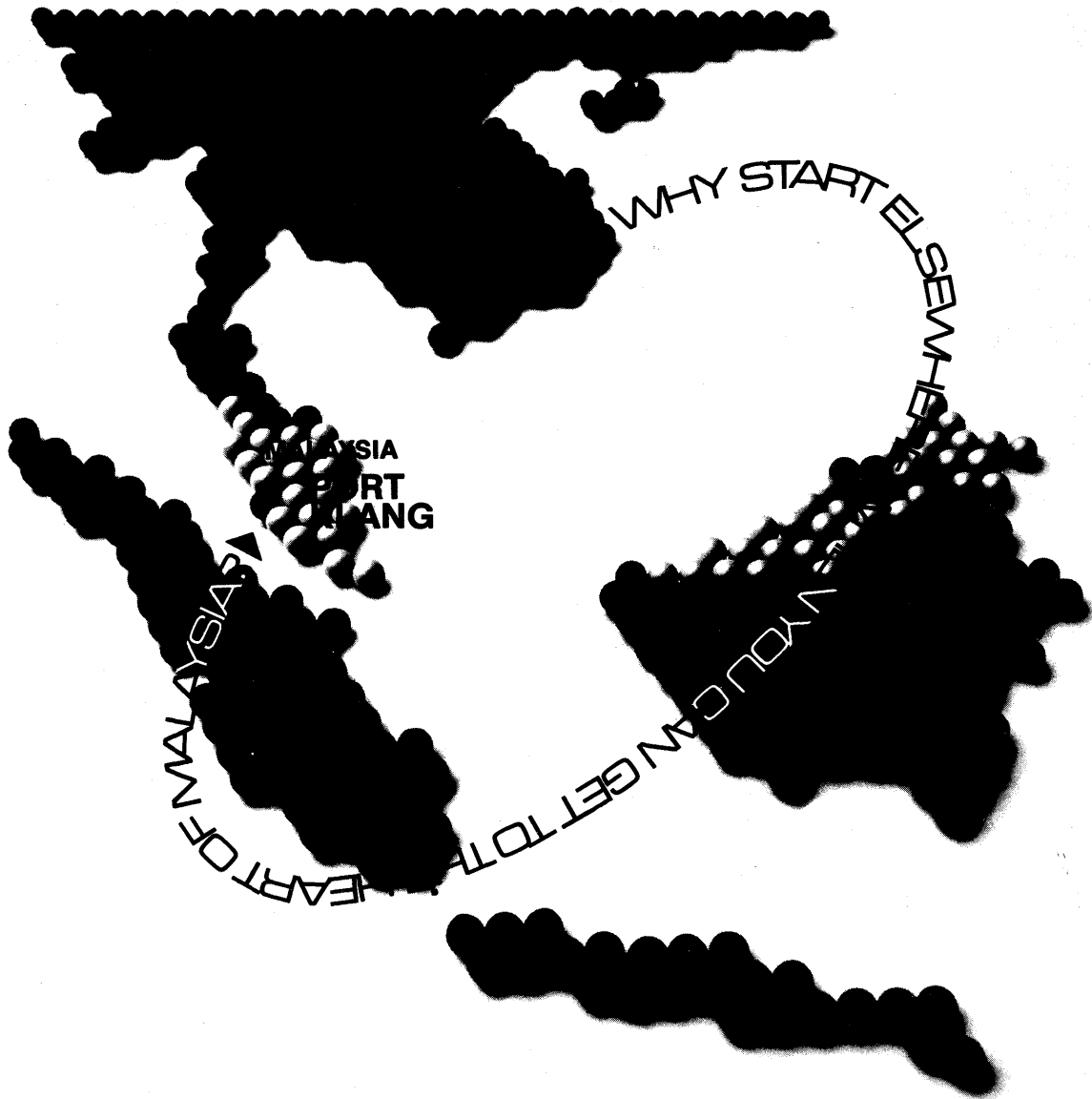
It's our "pier 3 and 4 complex," and we at Port Canaveral built it for the same reasons we build anything: to make your fastest turnaround port even faster! To keep this port-of-call your most profitable stop!

For additional information contact Louis Perez director of marketing and trade development.



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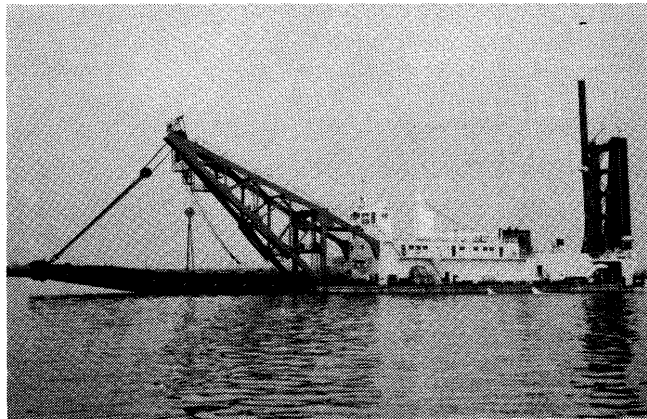
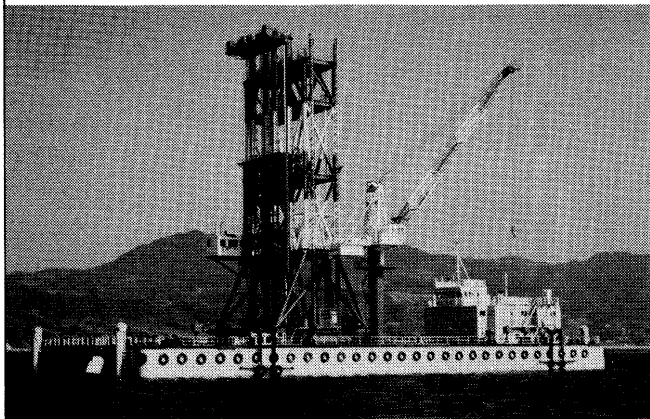
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**Name of ship:**

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**Date:**



\* Represented in IMTA are: KNRV (Royal Netherlands Ship-owners Association); MARIN (Maritime Research Institute Netherlands); NOORDER HAAKS, Den Helder (Nautical Technical College); Higher Port and Transport College, Rotterdam.



# IAPH ANNOUNCEMENTS AND NEWS

## Memorandum on Revision Of '26 & '67 Conventions Sent to IMO, UNCTAD

### Maritime Liens and Mortgages

On February 3, 1988, IAPH sent IMO and UNCTAD respectively a Memorandum on the Revision of the 1926 & 1967 Conventions concerning Maritime Liens and Mortgages prior to the 4th Joint IMO/UNCTAD Session of the Group of Experts which will be held in London in May this year.

At the same time Secretary General Kusaka wrote to the Board and Exco members inviting their attention to the prevailing trends of thought at the United Nations agencies involved, on the basis of the report on the 3rd Joint IMO/UNCTAD Session held in Geneva last year, which was prepared jointly by Messrs. André Pagès and Alex Smith. In his covering letter, Secretary General Kusaka stated, "Our efforts which have been directed to disseminating IAPH's position to the authorities concerned, have generated far from satisfactory results. Thus we find ourselves having to continue all-out efforts to best promote our position." Secretary General Kusaka stressed to both the IAPH Board members and non-member ports in developing countries the importance of the campaign, which he recognized has to be conducted within the limits of what is permitted by their own circumstances.

*The report on the 3rd Session, which was prepared by the CLPPI team, is reproduced in this issue for the reference of all members of IAPH and readers of this journal. (See Page 13)*

## Memorandum on Revision Of '26 & '67 Conventions Sent to IMO, UNCTAD

### *Paper prepared for Members of the International Association of Ports and Harbors*

Ports are, throughout the world, the essential link in the transport chain for those involved in the business of international shipping.

They hope that the new provisions to be decided for

covering maritime liens and mortgages will facilitate:

- both the daily operating lives of merchant ships, as well as their initial acquisition.
- a well balanced coordination between all activities related to the maritime community.

1. In as much as Ports are directly concerned, they feel it essential to stress the following points:—

1.1. Whatever their status, whether public or private, the majority of Ports are, in the present economic circumstances, a long way from being in a comfortable financial situation. Nor do they, always or even necessarily, have the solid backing of Government or of local Public Services that would permit them to withstand the serious consequences that could be brought about by the non-payment of moneys due to them.

The interests which they represent to the joint meeting extend far beyond those that concern each individual Port Authority.

They include:—

- those of all ships calling at the Port, who enjoy modern and efficient services for which, between them, they must equitably share the costs.
- those of Governments, who often devote a large part of their national resources or capital raised by loans to the heavy investments required by Ports to keep pace with the rapid evolution in shipping technology.
- those of numerous partners in local industry or shipping in port towns, where the smooth running of economic activity depends upon the regular flow of port traffic.

1.2 The stakes involved in the smooth flow of port trade can sometimes extend to a country's whole economy, since this economy may be based on massive exports of local surplus production and imports of numerous other products.

In certain cases a single port, which may well be operating at near saturation level, may serve the whole country's economy, or at least a major part of it, without there being any readily accessible alternative transport routes via other ports.

The economy of land-locked countries can also depend on the smooth running of Ports in neighbouring countries.

Again, in many States the customs duties levied on goods passing through the Ports account for a major part of the nation's revenue.

2. IAPH would stress, therefore, that in these circumstances its representations involve not only its Ports but are also vital for the collective interest of whole communities.

2.1. In the first instance, port and canal dues and taxes, as well as pilotage fees and, indeed, all the other levies made for services rendered in the port, should be

honoured.

Here it is a question of solidarity and equity between all the Port users.

2.2 Wreck removal can be mentioned next since a wreck may block a main access channel or those leading to docks or quays.

The rapid removal of wrecks generally implies immediate and heavy expenditure. But it conditions the return to normal working order in a Port.

2.3. Compensation for damage caused to Port works is similar in nature. Certain types of damage, for example damaged caused to swing bridges or lock gates, can have severe consequences for the operations of Ports. In these circumstances the damage has to be urgently repaired and Ports must be compensated for the costs incurred.

2.4. Finally, mention must be made of the unfortunately increasing number of cases of ships being immobilized in ports for technical, commercial, social, financial or legal reasons. Frequently, such vessels are abandoned by their owners and their agents abdicate from the responsibility of assisting the ship.

Ports have to devote major and costly care, often over long periods of time, to the preservation of such ships before their case is settled by sale or removal.

3. In all the various circumstances mentioned above, Port claims must be guaranteed, in the common interest, by high ranking liens.

That is the situation obtained with the 10th April 1926 International Convention, which is currently in force. The International Association of Ports and Harbors respectfully represents that its Port related provisions should be maintained.

For ease of reference, the joint meeting will recall that the 1926 Convention provides top ranking liens in respect of Port dues and for the cost of preservation of the ship, and a 4th ranking lien for the reparation of damage.

In addition, the Protocol of signature to this Convention contains a provision allowing each State the possibility to confer on their Port Authorities, if they have caused a wreck or other obstruction to navigation to be removed or if they are creditors in respect of harbor dues, or for damage caused by the fault of the vessel, wreck or other property, the right to sell the same and to indemnify themselves out of the proceeds in priority to other claimants.

This same Convention stipulates in its Art 2. that law costs due to the State and expenses incurred in the common interest of creditors in order to preserve the vessel or to procure its sale shall have a top ranking lien (Art 2.1). This latter provision should figure explicitly in the text of any new Convention.

4. It would be regrettable if a new Convention which was less concerned with the Rights of Ports were to be adopted and entered into force:

It would certainly be regrettable for Ports themselves, and their immediate communities or towns, as well as for the whole economy of the Country which each serves.

But it would also be highly regrettable for the economy of international shipping and for the regular flow of maritime trade.

Finding themselves in a precarious situation because of the reduction in ranking of their liens, Port Authorities, with the support of their Governments, would find themselves obliged to seek out alternative means of guaranteeing payment for their dues and services. For instance:

— by insisting, prior to a ship entering their waters, that a suitable sum of money were deposited, or that a warranty or guarantee in some other form were provided.

— by suspending all authorisations to sail without proof that any outstanding debts had been paid in full and, where they had not, by arresting the ship,

— by obtaining local regulations or bye-laws which would enable them to proceed rapidly with the sale of a ship, without seizure and retention procedures beforehand, in order to cover their claims, as is already provided by the Protocol of signature to the 1926 Convention and as is currently the practice in certain ports.

There is no doubt that these measures, which would be taken by Ports as a simple precaution, would not accord with the objectives of a harmonious development of maritime transport throughout the world. It is, therefore, most sincerely to be hoped that the conclusions of the joint meeting so far as the interests of ports are concerned are fully in accordance with the provisions of the 1926 International Convention.

## UNCTAD Responds to IAPH Letter on Revision

Mr. A. Bouyard, Director, Shipping Division, UNCTAD, in his letter dated 19 February 1988, acknowledged the receipt of an IAPH letter and a memorandum on the Revision of the 1926 and 1969 Conventions — Maritime Liens and Mortgages. It was indicated in the letter from UNCTAD that the IAPH paper will be circulated by the IMO Secretariat as they will be servicing the 4th session of the Joint Inter-governmental Group of Experts, which will be held at IMO Headquarters in London.

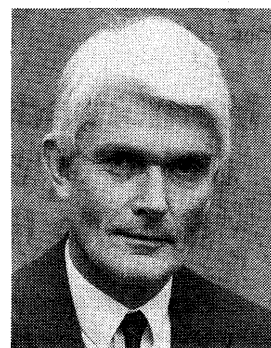
## Mr. Wennergren Appointed Finance Comm. Member

Mr. Göran Wennergren, President of the Port of Gothenburg AB, Sweden, since March 1, 1988, has recently been appointed a member of the IAPH Finance Committee succeeding Mr. Per O. Bjurström, who left the Port to take a new post in private industry.

The official appointment has been made by the Secretary General at the authorization of President Wong and the endorsement of Mr. Robert Steiner, Chairman of the Finance Committee.

According to the Press Officer of the Port of Gothenburg,

Mr. Per O. Bjurström has become **Mr. Göran Wennergren** president and part owner of the Sapia Group of Stockholm, Sweden, which is recently-formed group of companies, active in the fields of electronic data processing, finance and technology.



# Abidjan Exco Meetings Agenda Circulated

On February 29, 1988, Secretary General Kusaka submitted the provisional agenda for the meetings of the Executive Committee to President Wong for his approval, prior to its circulation to all members concerned for their preliminary review of the items to be discussed. As of the end of February, 40 members (Exco and Committee Members) not including the spouses who will accompany the delegates, have already completed their applications, while the Secretary General in his recent communication to Mr. Moulod, our host in Abidjan, has requested him to give special treatment to those whose applications are somewhat late, as some members may need a fairly long time to go through the required steps for obtaining their visas to the Côte d'Ivoire.

The Agenda as announced by the Secretary General is as follows.

## (PROVISIONAL)

### AGENDA OF THE EXCO MEETING IN ABIDJAN, APRIL 28 & 29, 1988

At Hotel Ivoire Inter-Continental, Abidjan, Côte d'Ivoire  
Hosted by the Port Autonome d'Abidjan

#### DAY ONE: Thursday, April 28, 1988

#### INTERNAL COMMITTEE MATTERS

##### Finance Committee

- Report on Settlement of Accounts for 1987
- Consideration of financial prospects, including implications for dues revision

##### Membership Committee

Status report and consideration of membership campaign

##### Constitution and By-Laws Committee

Consideration of the suggested guidelines on the "Utterance of IAPH Delegates at international Meetings", and other items yet to be known

#### TECHNICAL COMMITTEE MATTERS

##### International Port Development

Status report on

- Regional Port Cooperation Scheme
- IAPH Bursary Scheme
- IAPH Award Scheme (Essay Contest)
- 57 + Program

##### UNCTAD/IAPH Monograph Scheme

Report on and consideration of the CIPD Fund and consideration of the special dues for the Fund

##### Port Safety, Environment and Construction

- Status report on the sub-committees
- Report on and consideration of the IAPH Study on the Impact of Port Development and participation in the scheduled IMO/IAPH Seminar

##### Trade Facilitation

Status report on and consideration of the CCC liaison activities and joint activities with CCC

##### Public Affairs

Status report on and consideration of

— Economic Impact Analysis

— IAPH Coloring book

#### Cargo Handling Operations

Status report on and consideration of

- Non-ISO standard containers
- Increased containership size
- Automated Interport Data Communications
- Container statistical returns

#### Legal Protection of Port Interests

Status report on

- MARPOL Reception Facilities
- Maritime Incident/Accident Reporting
- Maritime Liens and Mortgages
- Legal implications concerning the IALA/IAPH/IMPA VTS, if any

#### London Office

- Status report
- Suggested work areas to be tackled by the respective IAPH Technical Committees

#### DAY TWO: Friday, April 29, 1988

#### THE 16TH CONFERENCE IN MIAMI, APRIL 1989

- Conference Venue\*
- Conference Dates
- Conference Host
- Conference Chairman\*
- Overall Program
- Conference Theme
- Registration fees\*
- Keynote speakers
- Working Sessions

Manner/type of sessions, selection of themes of sessions, speakers, panelists, grouping or non-grouping, language services, collection and advance distribution of papers

\*: This item needs to be submitted to the Board for endorsement.

## Revised Program

(As of March 3, 1988)

#### Sunday, April 24

08:00-18:00 Pre-Conference Tour

#### Monday, April 25

14:00-17:00 Open for any committee meetings

#### Tuesday, April 26

09:00-12:00 Finance  
PACOM  
COPSEC (Sub-Committees)  
14:00-17:00 COPSEC (Sub-Committees)  
CIPD  
Constitution & By-Laws

#### Wednesday, April 27

09:00-12:00 Membership  
COPSEC (Whole Committee)  
10:00-12:00 CLPPI (Reserve)  
14:00-16:00 COPSEC (Committee if necessary)  
CLPPI  
16:30 Official Opening Ceremony  
18:30 Welcome Cocktail Party hosted by Abidjan Port

#### Thursday, April 28

09:00-12:00 EXCO

12:00 Luncheon hosted by Abidjan Port  
 14:00-17:00 EXCO  
 18:30 IAPH Reception  
**Friday, April 29**  
 09:00-11:00 EXCO  
 11:00 Official Closing Ceremony  
 12:00 Luncheon hosted by Abidjan Port  
 15:00-17:00 Visit to Abidjan Port  
 20:30 Farewell Dinner hosted by Abidjan Port  
**Saturday, April 30**  
 08:30 Departure for Post-Conference Tour  
**Sunday, May 1**  
 18:30 Return from Post-Conference Tour

18:30 IAPH Reception\*  
**Friday, April 29**  
 08:30-12:00 Visit to Aboisso's SOS Village (an orphan center)  
 12:30 Luncheon  
 15:00-17:00 Visit to Abidjan Port\*  
 20:30 Farewell Dinner and Dance hosted by Abidjan Port\*  
**Saturday, April 30**  
 08:30 Departure for Post-Conference Tour\*  
**Sunday, May 1**  
 18:30 Return to Abidjan from Tour\*

\* Combined activities with the delegates.

#### Note:

Any committee meetings other than those already scheduled can be arranged at the request of the chairmen concerned.

## Ladies Program

(As of March 3, 1988)

**Sunday, April 24**  
 07:30-18:00 Pre-Conference Tour\*  
**Monday, April 25**  
 Morning Free  
 15:00-17:00 Visit to the Abidjan Zoo  
**Tuesday, April 26**  
 08:30-12:00 Visit to Grand-Bassam  
 Afternoon Free  
**Wednesday, April 27**  
 08:30-12:00 Tour of Abidjan City with stops at the Abidjan Museum, Cathedral, Holy Mary's Sanctuary, etc.  
 16:30 Official Opening Ceremony of the EXCO meeting\*  
 18:30 Cocktail Party hosted by Abidjan Port\*  
**Thursday, April 28**  
 08:00-12:00 Visit to Plateau's and Treichville's Markets  
 12:30 Luncheon

## Dr. Pequegnat Reports On LDC Meeting

Mr. Herbert R. Haar, Jr., Deputy Executive Port Director, Port of New Orleans, and Chairman of the IAPH Dredging Task Force, has recently sent the Secretary General a report which was prepared by Dr. Willis E. Pequegnat on the meeting of the Ad Hoc Group of Experts on the Annexes to the London Dumping Convention held in London from 25 to 29 January 1988.

Prior to the above meeting, IAPH, through the office of Chairman Haar, submitted to the IMO a Discussion Paper on the Expansion of the LDC Annexes. This paper was prepared by Dr. Pequegnat and was sent to Dr. Manfred K. Nauke, Head, Marine Science Section, Marine Environment Division, IMO, for the Deliberations of the Intersessional Meeting of the LDC Scientific Group on Dumping.

This issue carries both the discussion paper (See Page 25) and a report on the meeting itself (See Page 15) inviting our members' continued attention to the issue and to the endeavours of our Dredging Task Force team—in particular, those of Dr. Pequegnat, who has been serving as our consultant in dealing with this issue of highly professional significance.

## World VTS Port Entry Guides

— Contract for production concluded —

On 15 January, 1988, at the IMO Headquarters in London, in the presence of the IMO officials and representatives of IMO Member States, a contract for the publication of the World VTS Port Entry Guides was signed between, Mr. Alan Steel of Pergamon Books Limited, and the representatives of IALA, IAPH and IMPA. IALA was represented by Mr. Norman Matthews, Dy. Secretary General, IMPA by Mr. Edgar Eden, Secretary General, and IAPH was represented by Mr. A.J. Smith, IAPH London Office. The contract for the "World VTS Port Entry Guides" reads:

WHEREAS IMO has recognized that the safety and efficiency of maritime traffic would be improved if vessel traffic services were established where needed and operated in accordance with internationally approved guidelines, and

WHEREAS the IMO Assembly adopted Resolution A.578(14) "Guidelines for Vessel Traffic Services" as an internationally approved safety measure, and

WHEREAS the IMO Guidelines for VTS state in paragraph 2.1.1 that "The authority establishing a VTS should delineate its area of coverage, declare it a VTS area and disseminate to mariners full details concerning the area



(Front row, from left) Mr. A. Steel, Managing Director, Pergamon Press; Mr. N. Matthews, Deputy Secretary General, IALA; Mr. A.J. Smith, IAPH; and Mr. E. Eden, Secretary General, IMPA.



of operation, including the limits of the areas where participation of vessels is required or recommended, the services provided and the procedures to be followed (see Section 5). It should also state the classes of ship which are required or recommended to participate and indicate the VTS centres responsible for the VTS tasks" and in paragraph 7.2 "The publication should be convenient for use by mariners and should, where possible, included chartlets showing the area and sector boundaries, general navigational information about the area together with procedures, radio frequencies or channels, reporting lines and reporting points. Where the VTS operates beyond the territorial sea, the limit of the territorial sea should be clearly indicated on the chartlets" and

WHEREAS it has been decided that a Worldwide VTS Guide be promoted jointly by IALA, IAPH and IMPA, to be financed by participating VTS Centres on the terms outlined in the attached Appendix and

WHEREAS the IALA, IAPH, IMPA Technical Working Group on VTS support and have contributed to the specification of the World VTS Guides in print or in any other media [hereafter referred to as the Guides]

IT IS HEREBY AGREED between IALA, IAPH AND IMPA [hereafter referred to as the Associations] and Pergamon Books Ltd [hereafter referred to as Pergamon] or their assigns as follows:

1. Pergamon shall appoint in consultation with the Associations a Co-ordinating Editor of the Guides to liaise with the Association's Technical Working Group on VTS.
2. Pergamon has appointed Captain F. Weeks to act as Co-ordinating Editor of the Guides and is funding the "Pergamon Maritime Unit" as Plymouth Polytechnic for use in part for this project.
3. The Associations have agreed to use their best endeavours to encourage the relevant authorities in the main maritime countries to provide technical details in the English language relating to the Guides for this project and, if these authorities are satisfied with the content and form of the Guide, the Associations would encourage its eventual worldwide adoption as the official Guides under the aegis of the Associations.
4. Pergamon has agreed to apply the funds obtained from participating VTS Centres towards the cost involved in producing the Guides and will meet from its own resources all costs of compilation from materials received, preparation of artwork, and all costs of production, marketing,

publication and distribution of the Guides and any updating supplements at its own risk and expense.

5. In the event that a VTS centre requires an extra edition of one or more of the Guides in a language other than English, the VTS centre will be responsible for providing all wording in the required language and Pergamon will provide the required quantity at cost.
6. Pergamon undertakes to consult VTS Centres annually about amendments to the Guides and furthermore to use its best endeavours to disseminate within 3 months of being notified by VTS Centres any substantial changes involving safety.
7. Copyright of the published Guides will be protected by its registration in the name of Pergamon, and on expiry of this Agreement will revert to the Associations.
8. Pergamon will pay to the Associations a royalty of 3 per cent in equal shares of the income from all copies of the Guides sold throughout the world.
9. Pergamon are authorized to promote the sale of foreign language rights, the proceeds of which shall be divided 25% to the Associations in equal shares and 75% to Pergamon.
10. Pergamon agree to provide each of the Associations with 5 free copies of each section of the Guides as completed and with any subsequent amendments.
11. The publication and distribution rights are hereby granted to Pergamon for a period of 10 years from the date of this Agreement and will be automatically renewed for further periods of 5 years thereafter, subject to either party giving 12 months notice of termination following

(Continued on Page 12, Col. 1;  
more information on Page 32)

## Report by the Port Working Group

Mr. F. Suykens, General Manager, Port of Antwerp, and Chairman of the IAPH Trade Facilitation Committee, who also serves as our Liaison Officer with CCC, has recently sent the Tokyo Head Office a copy of the report by the Port Working Group which has been established with the E.E.C. Commission in Brussels. For the benefit of our members the report is reproduced in this issue. (See Page 18)

# Report on "Port Economics and Pricing" Seminar

(Le Havre, France; Sept. 1 - 11, 1987)

By Ram Pratap

Financial Accountant

Ports Authority of Fiji

A Recipient of an IAPH Bursary

The seminar was organized by IPER in association with UNCTAD and ENPC. The course was co-ordinated by Professor Baudelaire and was attended by 24 delegates from 11 countries.

During the early stages of the seminar broad considerations were defined. Such topics as "The Port and the Public Sector", "Regulatory and Financial Aspects of the Various Systems of Port Organisation" presented by Professor Baudelaire and "Financial and Economic Objectives of Port Organisations" and "the Concept of Profitability: Economic and Financial", presented by M. Velter, were discussed.

Gradually specific tariffs were considered with particular reference to various services provided by the Port Authorities

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## VTS Port Entry Guides

(Continued from Page 11, Col. 2)

the expiry of the first 10 year period.

12. If any differences shall arise between the parties to this Agreement these shall be referred to an independent arbitrator upon the application of either party to the President for the time being of the UK Institute of Arbitrators in accordance with the provisions of the UK Arbitration Act 1979 or any statute for the time being replacing, extending or modifying the same.

for the Associations IALA, IAPH and IMPA

for Pergamon Books Ltd Date 15/1/88

## Appendix

1. Each VTS Centre will use its best endeavours to arrange that the relevant authorities within its area will participate by providing relevant information in English with appropriate diagrams as requested by Captain F. Weeks with the authority of the Associations;
2. Upon approval by the VTS Centre of outline drafts of their entry in the Guide, the VTS Centre will be asked to confirm that it agrees to make payment on the basis of 1250 for the first printed double page of data and 1000 for each subsequent printed double page, as previously announced by the Association.
3. Each participating VTS Centre will receive up to 2000 free sets of the Entry relating to its area. Further quantities and/or up-dated versions will be provided at cost.

and with reference to the Port of Le Havre, whose executives responsible for the operational aspects as well as administration of the various tariffs discussed in detail their respective tariffs and how they were formulated.

It was obvious from the discussions and papers presented that different Port Authorities had varied levels of involvement in the port activities. Many ports, including French ports, provided the basic infrastructure whilst cargo handling and ancillary activities were carried out by private enterprise. There were very few ports which came under the classification of "service ports", i.e. the port provides all the types of facilities and a majority of the services — our Fiji ports are one such example.

It therefore followed that tariff levels and the type of port dues imposed by the various services varied from port to port.

Generally the objective of port pricing was to achieve a level of revenue sufficient to cover all the operating and other expenses including maintenance, depreciation, interest on loans and repayment of long-term indebtedness, and to finance a reasonable proportion of future capital expenditure.

It was therefore important that the Port Authorities had a clear understanding with the Government that a reasonable revenue level for the ports needed to be met. Adequate levels of charges would mean:-

- \* less external interference, because charges are reviewed regularly
- \* a reduction in government deficits
- \* a stronger bargaining position for the Port Authority with the lending agencies.

The following subjects were of particular interest to me:

## TARIFF LIFE

The Ports Authority of Fiji (PAF) tariff life is for one year. The last major revision was in 1983, and five years later we are still struggling to obtain a further revision.

It came out clearly from the seminar that most ports faced difficulties (as is the case in Fiji) in the enforcement of tariffs due to Government regulatory constraints and the power of various groups within the local shipping fraternity.

A much longer tariff life therefore needed serious consideration, in addition to consensus on a tariff policy between the Port Authority and the Government.

## PORT COST

A study by UNCTAD revealed that freight generally constituted 10% of product cost. A significant cost component of freight was the cost of ships' time in port and not port charges.

It therefore followed that even a 10% increase in port charges would not significantly affect the price of commodities.

## CARGO HANDLING CHARGE

It was noted that, with the Authorities which were engaged in cargo handling work, or even "Tools Ports" where this was undertaken by the private sector, a composite tonnage rate was applied for the stevedorage work.

This was contrary to the PAF system, whereby each man and piece of equipment were charged on a per hour basis. Separate recoveries had to be made for overtime, allowances, etc.

It was apparent that the cargo handling tariff needed

(Continued on Page 13, Col. 1)

# Maritime Liens and Mortgages

## Joint Meeting of the IMO/UNCTAD Experts

3rd Session — Geneva,  
30 November — 11 December 1987

UNCTAD and IMO held their 3rd Joint Session from the 30th November to 11th December 1988, on the subject of Maritime Liens and Mortgages.

This session was followed for IAPH by Mr. A. Pagès and Mr. A. Smith. They have the honour to submit the following report to you.

### 1. Revision of the Question of Maritime Liens and Mortgages

It was explained at the end of the first Session (Geneva, 1 — 12 December 1986), as well as the 2nd Session (London, 11 — 15 May 1987), that the question of Maritime Liens and Mortgages had already been dealt with by:

- the International Convention of the 10th April 1926, which is currently in force but which is only adhered to by some 20 countries; and

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### "Port Economics" Seminar

*(Continued from Page 12, Col. 2)*

urgent review.

#### EXCHANGE LOSSES

The experts' views were that exchange losses could be built into tariff calculations so long as the port did not outprice itself.

The subject was discussed in the light of very substantial exchange losses incurred by PAF in the past few years in respect of its loan with the Asian Development Bank.

#### WHARFAGE COLLECTION

Currently PAF collects from individual consignees. Apart from being a cumbersome method, this means a considerable burden on the part of the consignee when trying to take delivery of his cargo as he has to be running amongst the ship's agent, the Customs and the PAF.

A simple and logical system would be to hand over the wharfage collection function to the Customs. As with the Port of Le Havre, the Customs would collect and remit the dues to the PAF at regular intervals. Such a procedure would take considerable strain off the consignee and also reduce the duplication of work.

#### CONCLUSION

My attendance at the seminar provided me with considerable exposure and, more importantly, it accorded me the opportunity to speak to and gain first-hand knowledge from experts as well as participants, all of whom held positions of responsibility in their port organisations.

I am grateful to IAPH for having made my participation possible.

— the International Convention of the 27th May 1967, which came into force this year, 1987, having been ratified as required by 5 States.

These two Conventions have only had limited success. But without having ratified them, many States have taken various provisions from them and incorporated them into their domestic legislation, and completed these with specific local provisions.

This subject is now being reconsidered at the request of the developing countries (the Group of 77), because:

- These countries are desirous of establishing their own Merchant Navies.
- However, the purchase of their ships is usually financed by capital borrowed from establishments who require that the guarantee for these loans be by mortgage.
- Moreover, these same establishments are concerned about the numerous maritime liens which, in the case of an arrest and forced sale, have priority over their mortgages.
- Consequently, a new Convention, where the scope of liens taking precedence over mortgages is as limited as possible, is needed to replace the 1926 & 1967 Conventions.

These concerns were accepted by UNCTAD, the traditional supporter of the Developing Countries, and by IMO, which is that of the maritime nations.

The Comité Maritime International (CMI) has drawn up a draft convention for consideration.

UNCTAD and IMO decided to examine the question jointly. They have made it the subject of working sessions held alternately in Geneva and London, until such time as a Diplomatic Conference is convened.

### 2. Report of the 1st Session — Geneva, December 1986

During the first Session the following questions were settled or raised:

- Sessions held in Geneva were to follow the UNCTAD rules of procedure (with preparatory meetings by the Group of 77). Those held in London were to follow IMO rules.
- A first stage in the work involved listing the various situations existing in different countries faced with the 1926 and 1967 Conventions, what provisions had been extracted without the Conventions being ratified and what local provisions had been added.
- The objective was to arrive at a Convention which could be accepted by the maximum possible number of States, with the minimum possible number of local additives or variants.
- The question of arrests was to be dealt with by a separate new Convention, if it proved necessary to revise that of 10th May, 1952.
- Although it may have been desirable, the registration of liens did not appear to be possible in practice.
- Certain participants, from among the national delegations and observer non-governmental organizations (NGOs), questioned the necessity of reforming the present regime in favour of vessel acquisitions. They stressed the necessity of also giving consideration to ship operations and the relationship between vessels and their various partners, amongst which ports are to be found.
- The majority of delegates nevertheless remained in favour of the reduction in the number of liens taking

priority over mortgages, so as to give better protection to mortgages and to encourage ship financing.

### 3. Review of the 2nd Session — London, May 1987

The debates were based on a report which was prepared, following the first Session, by the Secretariats of IMO and UNCTAD. The 1967 Convention and the CMI draft, which is similar, were accepted as references. The 1926 Convention, much more favourable to the interests of Ports, was to all intents and purposes set aside.

As was the case during the 1st Session, numerous questions were raised:

- Were the amounts guaranteed by mortgages to be inscribed in the register?
- How could the transcription of mortgages from one register to another be correctly assured when a ship changed her flag?
- How were the regimes governing maritime liens and mortgages throughout the world to be unified, whilst still leaving a margin for each State to adapt the regime into its domestic legislation?
- What claims should be guaranteed by a maritime lien:
  - Social contributions and wages due to the crew?
  - Loss of life or injury?
  - Salvage and contribution to general average?
  - Wreck removal?
  - Shiphandling, container leasing, the services of classification societies?
  - Damage covered by mandatory insurance (oil pollution, nuclear damage)?
  - etc.

The seeming disinterest shown towards port claims in the proposed draft articles — with the proposition that they be relegated to the lowest ranking or maritime liens — gave rise to a number of remarks:

- from certain delegates who maintained that these liens were not relevant, given that the amounts involved were not enormous and that port dues were normally paid in advance;
- from others, who stressed that the Public nature of their administrations did not justify — indeed, to the contrary — the declassification of their claims; and
- from the Observer for the IAPH, who stressed that the importance of the provisions of the 1926 and 1967 Conventions remained valid, given the heavy burden of costs which States assumed to equip and operate their ports to cater for shipping.

### 4. 3rd Session — Geneva, November/December 1987

4.1. The delegates first addressed the definitions and modalities of registering mortgages, and raised the following questions:

- Rather than simply listing “mortgages, hypothecs and registerable charges of the same nature,” is it possible to be more specific in Art. 1, in spite of the variety of national legislation in this respect?
- Should judicial and legal hypothecs as well as those of private origins be taken into consideration?
- How can permanence of mortgage register be maintained:
  - in cases of a change of flag, whether or not accompanied by a change in the owner?
  - in cases of bareboat charter under a new flag?
  - by accepting short periods of double registry during a change in registration?

— or by accepting short transitory periods for the transfer from one register to another?

— In this context, how is it possible to add to the new convention provisions which are in accord with those provided by the 1982 Convention on the Law of the Sea and that of the 7th February 1986 on the Registration of Ships?

4.2. Another lengthy debate centered on the means of classifying the rights and facts which exist in the support of claims:

The draft ranks maritime liens taking precedence over mortgages (Art. 4), then the mortgages themselves, and then the ranking of other liens is, eventually, to be left to the initiative of the States (Art. 6).

It mentions, in Art. 11.2, the costs and expenses incurred by arrest or seizure and subsequent sale and their priority reimbursement out of the proceeds of the sale. Is this therefore a maritime lien with absolute priority over all the others?

Mention is made in Art. 6 of the possible introduction by States of rights of retention, in favour of certain claimants such as a ship repairer or builder, in case of non settlement of their claim which, through this provision, is provided with a lien.

4.3. Among others, certain claims seem to merit protection by a high ranking lien:

- wages due to the crew or personnel on board, and their social contributions;
- expenses incurred in the common interest of all claimants: salvage and assistance, contribution to general average, the preservation of the ship prior to a forced sale, and wreck removal offering a recuperative value.

4.4. Discussions also centered on liens which, in the case of a forced sale, are for amounts that may be more or less predictable and whose presence may, to a greater or lesser degree, perturb the mortgage holder:

- Wages due to the crew, port and other waterway dues do not amount to considerable sums.
- On the other hand, injury or damage, the costs of salvage or assistance, contribution to general average, can reach very high figures. But these risks are normally insured by the P & I Clubs.

4.5. The representatives of IAPH were invited to make observations on several occasions. These observations were as follows:

- The working life of a vessel, across the seas and in ports all over the world, would seem to merit as much attention as her acquisition and entry into the world fleet.
- A Port concentrates a considerable mass of interests, both maritime and terrestrial, public and private, national and international (serving landlocked countries), on a major scale.

The Ports must be supported in the accomplishment of their tasks, which are of major Public interest, by high ranking liens, reinforced by rights of retention, as provided under the 1926 Convention, and in the protocol of signature.

- These liens and rights of retention should cover port, canal and other waterway dues, pilotage fees, repair of damage caused to port works, the removal of wrecks which cause obstructions and the care and preservation of ships, when immobilized for long periods in ports prior to their forced sale.

4.6. Ports, at the end of this 3rd Session, may draw the following impressions from the debates:



— The reduction in the number of liens which take precedence over mortgages remains the accepted priority of this revision. The Group of 77 is looking at the conditions for the development of their merchant navies. The maritime nations and shipping interests dominate those of Ports or shippers and their expressed concerns.

— Awareness of the interests at stake from a port and national economy standpoint is by no means absent from all delegations, whether they represent the industrialized or the developing countries.

— Ports after all are, on the whole, either Public or State owned companies. For certain delegations, this suggests that they should retain an understanding attitude towards the dangers faced by shipowners. For other delegations, the Public Service nature of ports should not, however, be abused.

— From various observations made by delegations there is the presumption that the following possible actions by Ports are usual or frequent:

— insistence on payment of port dues and taxes prior to entry into port,

— legal recourse to rights of retention, or — in practice

— to technical means of preventing the departure of a vessel which has not settled its dues, so as to facilitate arrest.

IAPH members should therefore advise whether the presumption is valid, and if not, whether it should be!

— Does the habitual observation that the insurance companies (P & I Clubs) are there, as far as the insurance coverage of various port related liabilities are concerned, justify that the corresponding claims should be removed from those to which a high ranking lien is attached? And if so, should not the production of a valid insurance certificate prior to a ship's entry become mandatory, as in the case of oil tankers, under the 1969 Oil Convention?

## CONCLUSION

It is the continuing hope that the Joint Intergovernmental Group of Experts will manage to balance and reconcile the interests arising in connection with the operation of the vessel during its existence and the interests of maritime nations in the development of their merchant fleets, their ports and their economies.

There is an evident intention of delegations to give further consideration to their positions prior to the next (fourth) Session. They will wish to establish their views, in particular on the redrafting of draft articles 4, 5, 6 and 11, as regards liens to be determined and the priority to be awarded to them. In so doing, IAPH earnestly hopes that they will take full account of the extensive public and private interests involved, both in a national and an international context.

Ports' concerns have not materially changed over the years since States affirmed their acceptance of the 1926 Convention. It was then, and remains still, the position that States, in their various ways, confirmed their need to protect by lien port costs incurred in the provision of services to the vessel in question, including costs associated with its preservation to secure its value until circumstances were altered by its sale or removal from the port.

It would therefore be regrettable if a new Convention were to be less concerned with the rights of Ports. The

implications of such an approach are serious and would adversely affect not only the Ports but their communities and, in the case of single port States, the economy of such States as a whole.

The effect, in short, would be seen to be unacceptable and would almost certainly entail the implementation of damage limitation measures by Ports. These might include an insistence on pre-payment of dues, production of valid certificates of insurance and vessel retention pending payment on outstanding debts.

Such protective measures most certainly act against the smooth flow of maritime traffic and are necessarily implemented only as a last resort. It should therefore be the resolve and intention of IAPH members to explain clearly their positions — documented at length in the Ports and Harbors journal — to their respective delegations to the Fourth Session of the Joint Intergovernmental Group of Experts, to be held at IMO in London from the 16th to 20th May, 1988.

## Report on Meeting on Annexes to LDC

*Submitted to Herbert R. Haar, Jr.  
Prepared by Willis E. Pequegnat  
January 31, 1988*

### INTRODUCTION

The meeting of the ad hoc Group of Experts on the Annexes to the London Dumping Convention was held at the headquarters of the International Maritime Organization (IMO), London, from 25 to 29 January 1988. The meeting was chaired by R.G. Boelens of Ireland, and was recorded and monitored by Manfred Nauke, Head, Marine Science Section of IMO. Other invited participants (permitted to come only if a paper had been submitted), representing their respective governments, were

John H. Karau, Head — Marine Programs, Canada  
Kjeld F. Jorgensen, Ministry of Environmental Protection, Denmark  
Rolf Wasserthal, Deutsches Hydrographisches Institute, FRG  
Klaus-Richard Sperling, Biologische Anstalt Helgoland, FRG  
Romano Pagnotta, Italy  
Silverio Mittiga, First Secretary, Italian Embassy, London  
Hans R. Bos, North Sea Directorate, Netherlands  
Jens H. Koefoed, Senior Engineer, Norway  
Sven K. Lange, Scientist, Norway  
John Campbell, Head, Dumping at Sea, Ministry of Agriculture, Fisheries and Food, United Kingdom  
Chris M.G. Vivian, Licensing Section, Dumping at Sea Group, Ministry of Agriculture, Fisheries and Food, UK  
Alan B. Sielen, Director, Multilateral Staff, Office of International Activities, U.S. Environmental Protection Agency  
Doug A. Wolfe, Chief Scientist, Ocean Assessment Division, NOAA  
Tom D. Wright, Research Ecologist, U.S. Army Engineer Waterways Experiment Station

## OBJECTIVES OF THE MEETING

The ad hoc Group was invited to review the operational procedures of the London Dumping Convention and to submit recommendations on alternative procedures for the classification and assessment of wastes to be dumped at sea. In so doing, it was advised to ensure that the operational procedures of the Convention would clearly reflect good waste management practices taking account of the environmental consequences of alternative disposal options.

Some of the possible advantages that might evolve as a result of the re-structuring of the annexes would include

- (1) Clarification of LDC control requirements for the benefit of regulatory authorities;
- (2) Removal of at least some non-defined terminology;
- (3) Provision for a clearer distinction between substance and waste;
- (4) Clarification of the relationships among the requirements of Annex I ("black list" of substances) and Annex II ("grey list" of substances) on the one hand, and Annex III on the other; and
- (5) Increase of confidence in the control and enforcement procedures of the Convention.

## EXPRESSIONS OF CONCERN

One heard frequently in the meeting that there was a continuing need for a more cautious approach to the disposal of wastes at sea than heretofore. It was recommended that Contracting Parties document that their permit applicants are required to include details of the proposed compliance monitoring to be undertaken. Also, it was noted that monitoring should involve the constriction and logical testing of predictive hypotheses with attention being given to a reduction of unnecessary work and costs.

The Group delineated some of the reasons underlying the current difficulties experienced by regulatory agencies in assessing the suitability of wastes for disposal at sea. Accordingly, it was agreed that a new assessment scheme should be crafted that would seek to reduce the amount of repetitive guidance which was provided and should clearly describe the interrelationships between the various requirements and associated guidelines, including the new guidelines for dredged material. Mindful of these considerations, an outline for a new assessment scheme was devised which provides for a more systematic approach to the evaluation of wastes with different characteristics and impact potentials. Much of the emphasis of the scheme is on industrial waste disposal, but dredged material is certainly included as an integral but unique part.

Although the proposed scheme includes a new category of **wastes** for which disposal at sea would be prohibited, e.g. high-level radioactive waste, it is not anticipated that the category poses a particular problem for disposal of most dredged material in the sea. Still, one must remain alert to the possibility that overly zealous environmental managers attending the next meeting of the Scientific Group might think and act otherwise. This meeting will be held at IMO from April 25 to 29, 1988.

The scheme also includes a listing of **substances** (more inclusive than the lists in Annexes I and II) which comprise an "action list." It is anticipated that this list may contain

guidelines on limit values (possibly numerical) that would indicate the degree of caution to be exercised when a waste contains a listed substance in an amount above the specified limit (see Table 1). Note should be taken, however, that the action list will have concentration limits that are **waste-type specific**. Hence consideration in all cases will be given to a dredged material's pollutant-sequestering characteristics.

Table 1. The table contains the format of the upper and lower numerical threshold values which would constitute a basis for decisions on proposed dumping operations. Chemical characteristics, compared to the numerical criteria in the Action List, would indicate appropriate actions, as follows:

Result	Initial action	Next steps
Upper criterion exceeded for one or more substance	No dumping allowed	1. Reconsider alternatives in detail 2. If ultimate dumping, prior notification of nations required
One or more substance exceeds lower criterion; none exceed upper criterion	Rigorous testing required Should be tiered	Go next to flux consideration, i.e., the local and regional levels of the substance
Several substances are below but close to the lower criterion, suggesting potential cumulative effects	Rigorous, tiered testing may be required	Go next to flux considerations
All substances less than lower criterion	Minimal appropriate testing only	Proceed with dumpsite characterization and impact assessment

Should the information available be inadequate for any substance, appropriate testing would be required.

The Group recognized that separate guidelines (upper and lower criteria, and testing procedures) would be appropriate for different categories.

## NEEDED CHANGES TO THE CONVENTION TO ADOPT THE NEW SCHEME

With regard to the changes which would be needed to adopt the proposed new assessment procedure, the Group considered that apart from revising the contents of the Annexes (I, II, and III) and consolidating the associated technical guidelines, the scheme might be brought into effect without alteration of the Articles of the Convention. The target date for completion of the scheme is well into 1989; hence there is ample time for further examination of all of its provisions. As noted above, the first such study will begin on April 25, at the next meeting of the Scientific Group on Dumping in IMO Headquarters.

## FURTHER CONSIDERATIONS ON THE ACTION LIST

It was agreed that all substances or materials listed in the present Annexes I and II should be included on the list, unless they had been pre-empted by prior inclusion on the list for absolute prohibition. This would be supplemented by other substances with recognized hazard potential.

Although there will be an attempt to provide numerical values, these will be viewed as guidelines and the concentration limit drawn will be appropriate for different categories of waste.

## SUMMARY POINT

At this point, one can say that the implicit emphasis

in the present meeting was upon the dumping of liquid industrial wastes, so that dredged material was not placed in further jeopardy. Nevertheless, close scrutiny must be taken of future papers submitted for meetings and of the direction of the discussion of criteria (especially numerical criteria) to be used in assessing the impacts of dredged material upon the welfare of the sea and its amenities.

## Membership Notes:

### New Members

#### Regular Member

##### Port Autonome de Dakar (Senegal)

Address: B.P. 3195, Dakar

Mailing Addressee: Mr. Souleye Sall, Director General

Telex Number: 21404 PADKR SG

#### Associate Member

##### Humberside College, Centre for Maritime Transport and Operations [Class D] (U.K.)

Address: Queens Gardens, Hull HU1 3DH, England

Mailing Addressee: Mr. Derek Chadburn, Senior Lecturer

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Phone Number: (0482) 224121

### Changes:

#### Administracion General de Puertos, Sociedad del Estado [Regular] (Argentina)

##### Board of Directors

President: Sr. Antonio F. Francia

\* He is serving as Director of the IAPH from Argentina.

Vice President: Sr. Jose M. Lastiri

Directors: Ing. Ricardo N. Gastaldi

Ing. Juan Ospital

Lic. Eduardo Garcia Saenz

Lic. Rene L. Troise

##### Gerencia Tecnica

Gerente: Ing. Fernando Hollrigl

Jefe Departamento Obras Civiles:

Ing. Omar Jiacontini

#### Port of Brisbane Authority [Regular] (Australia)

Fax Number: (07) 839 3591

\* The "229" exchange has been replaced by the "839" exchange recently. The other four digits remain the same.

## Visitors to the Head Office

— On 2nd February, 1988, **Mr. Ng Kiat Chong**, Executive Director, Port of Singapore Authority, accompanied by **Mr. Philip Ng Fook Wah**, Director (Engineering), **Mr. Ng Chee Keong**, Dy. Director (Operations), **Mr. Tan Eow Huang**, Senior Engineer (Container Terminal) and **Mr. Tan Hong Chuan**, Assistant Secretary, visited the Head Office and were received by Mr. Hiroshi Kusaka, Secretary General, and his staff. Mr. Ng and his party were visiting Japan on a "PSA Study cum Promotion" mission to Hong Kong, the U.S. West Coast, Japan and Taiwan during the period between 23 January and 6 February.

— On 10 February, 1988, **Mr. Nick Elliot**, Publisher, and **Mr. R. Peter Rolston**, Advertising Manager, Maritime Asia [Lloyd's of London Press, (Far East) Ltd.], visited the Head Office where they met Mr. R. Kondoh, Dy. Secretary General, with whom they exchanged comments on the current port and shipping situation in Japan, including the development of intermodal transport networks and related areas of concern, which were extensively featured in their magazine.

— On 12 February, 1988, **Mr. Antonio Francisco Francia**, President, **Mr. Ricardo N. Gastaldi**, Director, and **Ing. Omar Jiacontini**, Chief, Planning Department, Administracion General de Puertos, Argentina, visited the Head Office. There they met Mr. R. Kondoh, Dy. Secretary General, and exchanged views with him on port development in both countries. The party was visiting Japan for the purpose of concluding an Argentina - Japan bilateral agreement concerning the development of fishing port and related industries in the southern part of Argentina.



*Mr. Ng Kiat Chong (3rd from L) at the meeting*



*(L to R): Mr. Gastaldi, Mr. Jiacontini, Mr. Kondoh and Mr. Francia*

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# OPEN FORUM

## MARPOL Port Facilities

### REPORT BY THE PORT WORKING GROUP established with the EEC Commission in Brussels

Reception facilities permitting vessels to wash out tanks without causing environmental pollution were required under the Marpol 73/78 convention to be in place by 6 April 1987. Concern was expressed in 1985 that not all community ports would be prepared in time, and also that if facilities were totally or partially state aided in some Member States but not others that there would be distortion of competition.

A questionnaire was circulated to members of the Port Working Group in September 1985 which asked separately about the provision of reception facilities for hydrocarbon residues and chemical wastes (Annex I). Information was sought on the body financing the initial investment, charging for the facilities, fixing charges and receiving profits or bearing losses for the service. In addition plans for expansion were requested.

The coverage of the response varies between Member States and includes no ports in Greece. However, about 75 % of goods traffic, including the bulk of petroleum products, is handled by private ports in Greece who are responsible for the provision of their own facilities.

An initial point that the Group would wish to emphasise is the distinction to be made between reception facilities and the means of disposal for the waste in an environmentally acceptable way. Waste may be pumped with relative ease, for example into tanker lorries, but disposal can be a difficult and costly problem. The organisation of both reception and disposal needs full consideration by all the interested parties.

#### MAIN FINDINGS

##### ADEQUACY OF FACILITIES

###### (a) Hydrocarbon Residues

The British Ports Association commented that it was satisfied that reception facilities for hydrocarbon resi-

dues in UK ports were adequate and allegations by shippers about such facilities had proved ill founded. Sometimes there was bad liaison between ship master and agent as to what was available and required and on other occasions unrealistic expectations about the facilities including the level of charges. This view was shared by other members of the Group.

In Spain there are plans to expand facilities in a number of ports mainly by the extended use of tanker lorries. Some developments are planned also in Denmark. There may be some smaller or even medium sized ports not covered by the replies where facilities remain inadequate but no major problem areas were known to the Group.

###### (b) Chemical Wastes

This is a more difficult problem because of the range of chemicals which could be involved. It must be stressed again that there is not simply a need to provide reception facilities but also to recycle or dispose of the chemicals. In some ports chemical companies are major port users and can handle their own waste but may not deal with other chemicals. In Hamburg two companies handle chemical wastes: one takes only 5 chemicals and the other about 150. In France there is a recommendation that ships send their waste to chemical factories and specialised companies. Although in Denmark there is the legal possibility for the National Agency of Environmental Protection to require a chemical company to provide its own facilities the Agency has not made use of the contingency except for private ports. In recently issued regulations the Agency has left the ports responsible for the provision of facilities.

In the Netherlands ports have worked out together a regulation whereby port authorities can designate firms willing to receive the waste. Once designated the firm



providing the facilities is obliged to receive those substances for which it was designated. This regulation includes hydrocarbon residues and chemical waste. The obligation applies only to the extent that a ship cannot legally discharge the substance at sea.

The development of "efficient stripping" (the unloading of liquid chemical products in such a way that almost no residues is left in the product tanks) gives rise to the expectation that amounts of chemical waste are going to be far less than originally forecast.

There remains considerable uncertainty therefore in ports about the extent of demand for the provision of facilities for handling chemical waste. Mobile collection facilities, whether tanker lorry or barge, are the main form of service which could be offered in the majority of ports. In general, however, facilities for the reception and disposal of chemical wastes are not available to the extent considered necessary by the Marpol 73/78 convention.

#### STATE OR PUBLIC AUTHORITY AID

##### (a) Hydrocarbon Residues

The Portuguese Government, which is responsible for pollution control, financed the provision of facilities at Sines. The private provision of facilities was supported by the Dutch Government at Amsterdam and the Land at Hamburg. No expansion of facilities was planned at these ports.

In Hamburg, Antwerp, Sines and a number of Spanish ports the private company operating the reception facilities has to obtain approval from a public authority in fixing charges. No form of operating subsidy was reported in any case.

##### (b) Chemical wastes

The Dutch government has granted a one-off investment subsidy to two firms in Rotterdam to enable the installation of the necessary treatment capacity. However, this grant is to enable the plants to treat chemical waste from sources other than those arising under the MARPOL Convention and it is estimated that well over 90 % of their capacity will be used to treat waste from these other sources. No similar aid is planned in other Dutch ports. The possibility of Federal Government or other public authority aid in Hamburg remains to be determined. It has been announced that the Federal Government in Germany would fund for a three year period 50 % of the investment and operating expenses up to an amount of 13.5 million DM.

#### CONCLUSIONS

The environmental importance of providing appropriate facilities for the reception of hydrocarbon residues and chemical wastes and for their disposal is recognized by port authorities. There remain doubts, however, about the extent of demand for new facilities especially for chemical wastes. This has been a restraint upon investment by private companies, port authorities or other public authorities.

Normally where deficiencies exist in facilities either for handling chemical wastes or hydrocarbon residues port authorities have expected that facilities would be made available by private companies on commercial terms. This is consistent with the "polluter pays" principle.

If Member States consider that the use of reception facilities should be encouraged by some form of subsidy a uniform approach to such aid is preferable to avoid the possibility of any distortion of competition.

## MARPOL RECEPTION FACILITIES QUESTIONNAIRE

## ANNEX 1

### COUNTRY

### PORT

1. Does the port have facilities for the disposal of hydrocarbon residues? (MARPOL Annex I) YES/NO If so please complete the following:

	Specify Type of Facility	Who financed the initial installation?	Who charges for the use of facilities?	Who fixes the charges?	Who bears the loss or receives the profits, if any?
EXISTING					
PLANNED		Who will finance the installation?	Who will charge for use?	Who will fix the charges?	

2. Does the port have facilities for the disposal of chemical wastes? (MARPOL Annex II) YES/NO If so please complete the following:

	Specify Type of Facility	Who financed the initial installation?	Who charges for the use of facilities?	Who fixes the charges?	Who bears the loss or receives the profits, if any?
EXISTING					
PLANNED		Who will finance the installation?	Who will charge for use?	Who will fix the charges?	

## ANALYSIS OF MARPOL PORT FACILITIES QUESTIONNAIRES

### PART 1: HYDROCARBON RESIDUES (p.c.: private companies)

	Type of facility	Financing body	Who charges?	Who fixes the charges?	Who makes the loss on the project?	Notes
<b>NETHERLANDS</b>						
Rotterdam	Oil terminal reception facilities and barges	p.c.	p.c.	p.c.	p.c.	One-off subsidy to two firms. Fully operational mid-1988
Terneuzen	Ship and pontoon facilities	p.c.	p.c.	p.c.	p.c.	
Vlissingen	Shore reception and barge and mobile cleaners	p.c.	p.c.	p.c.	p.c.	Appointed by the Port Authority
Amsterdam	Shore reception and barges and tanker lorries	Private enterprise aided by state	p.c.	p.c.	p.c.	No expansion planned at present
Delfzijl/Eemshaven	Shore reception and barge and mobile cleaners	p.c.	p.c.	p.c.	p.c.	"
<b>GERMANY</b>						
Hamburg (4 firms)	Oil sediments, ballast, tank washings	One firm p.c + Land Hamburg	p.c.	2 companies need Land Hamburg approval	p.c.	No expansion planned
Bremen/Bremerhaven	Oil sediments, ballast and tank washings	p.c.	p.c.	p.c.	p.c.	"
Schleswig-Holstein Ports	Oil sediments, ballast and tank washings: mobile or fixed installations	p.c.	p.c.	p.c.	p.c.	"
Leer, Emden	Mobile and stationary installations	p.c.	p.c.	p.c.	p.c.	"
Lower Saxony Ports	for tank washings and	p.c.	p.c.	p.c.	p.c.	
Wilhelmshaven Cuxhaven	oil sediments	p.c.	p.c.	p.c.	p.c.	
<b>ITALY</b>						
Naples	Facility — no details given	p.c.	p.c.	p.c.	p.c.	No expansion planned
<b>IRELAND</b>						
Cork	Oil refinery terminal facility tanker lorries	p.c.	p.c.	p.c.	p.c.	"
		p.c.	p.c.	p.c.	p.c.	"
Dublin	"	p.c.	p.c.	p.c.	p.c.	"
Limerick	"	p.c.	p.c.	p.c.	p.c.	"
Waterford	"	p.c.	p.c.	p.c.	p.c.	"
Galway	"	p.c.	p.c.	p.c.	p.c.	"
New Ross	"	p.c.	p.c.	p.c.	p.c.	"

	Type of facility	Financing body	Who charges?	Who fixes the charges?	Who makes the loss on the project?	Notes
<b>BELGIUM</b>						
Antwerp	No details given	p.c.	p.c.	p.c. but approved by the Port Authority	p.c.	No expansion planned
Ghent	Oil co-terminal facilities	p.c. p.c.	p.c. p.c.	"	p.c. p.c.	" "
<b>PORTUGAL</b>						
Lisbon	No details given	p.c.	p.c.	"	p.c.	"
Sines	Terminal facility	Government	Port Authority	Port Authority with government approval	Port Authority	No expansion planned
Leixoes	Tanks and oil separator	Port Authority	Port Authority	Port Authority	Port Authority	"
<b>DENMARK</b>						
Copenhagen	Gravity separator for Class III products	Port Authority	No charge except outside normal working hours	(Port Authority)	Port Authority	Expansion planned for Class I and Class II products
Aalborg	—	Port Authority	"	"	Port Authority	Oily water separator planned
Aarhus	Reception tanks	Port Authority	"	"	Port Authority	No expansion planned
Esbjerg (state port)	Tank system, oil extractor and mud absorbers	Port Authority	"	"	Port Authority	"
Helsingor (state port)	No details given	Port Authority	"	"	Port Authority	"
Frederikshavn	Tanks and mobile separators	Port Authority	No charge except outside normal working hours	(Port Authority)	Port Authority	No expansion planned
Skagen						
Hirthals and Hanstholm (state port)						
<b>UNITED KINGDOM</b>						
Bristol	Tanks and mobile equipment	p.c.	p.c.	p.c.	p.c.	Budgetary provision for expansion if necessary
Aberdeen	Tanker lorries	p.c.	p.c.	p.c.	p.c.	No expansion planned
Peterhead						
Forth						
Manchester	Ballast line and tanks	p.c. and Port Authority jointly	p.c.	p.c.	p.c.	Not yet decided
London	Mobile tank barges and tanker lorries	p.c.	p.c.	p.c.	p.c.	No expansion planned
Mersey	Oil co. terminal facilities	p.c. and Port Authority	p.c. and Port Authority	p.c.	p.c.	"
Tees + Hartlepool	No details given	p.c.	p.c.	p.c.	p.c.	"
Lerwick	Rotary kiln and cyclonic	p.c.	p.c.	p.c.	p.c.	No expansion planned

	Type of facility	Financing body	Who charges?	Who fixes the charges?	Who makes the loss on the project?	Notes
Clyde	Mobile terminals	p.c.	p.c.	p.c.	p.c.	No expansion planned
Sunderland	Tank washing, processing and distillation	p.c.	p.c.	p.c.	p.c.	"
Milford Haven	Oil co. terminal	p.c.	No charge	—	—	"
Falmouth	Slop reception, oily water separator	p.c.	p.c.	p.c.	p.c.	"
Scapa Flow	Tanker ballast reception	p.c.	p.c.	p.c.	p.c.	"
Portsmouth	Oil reclamation plant	p.c.	p.c.	p.c.	p.c.	"
Sharpness	Reception tank	p.c.	p.c.	p.c.	p.c.	"
Poole	Mobile capacity	No fixed installation	p.c.	p.c.	p.c.	"
Cromarty Firth	Ballast reception waste oil facility	p.c.	Only available to ships of the p.c. concerned	p.c.	p.c.	"
<b>FRANCE</b>						
Le Havre	No details given	Port Authority	Port Authority	Port Authority	Port Authority	"
Marseille						
Other Ports	Refinery and other specialised private services	p.c.	p.c.	p.c.	—	No details given
<b>SPAIN</b>						
Pasajes	Tanker lorries	p.c.	No charge	—	p.c.	Expansion planned with treatment plant in port area
Bilbao	Tanker lorries	p.c.	p.c.	p.c. with approval of Port Authority	p.c.	—
Santander	No facilities	—	—	—	—	Planned to establish the Service with tank lorries by private company
Gijon	No facilities	—	—	—	—	Planned to establish the service with tank lorries
Aviles	No facilities	—	—	—	—	Planned to establish the service with tank lorries
Ferrol	Tank washings service	p.c.	p.c.	p.c. with approval of Port Authority	p.c.	
La Coruña	Tanker lorries	p.c.	p.c.	p.c. with approval of Port Authority	p.c.	—
Vilagarcia	No facilities	—	—	—	—	—
Pontevedra	No facilities	—	—	—	—	—
Vigo	Barge and tanker lorries	p.c.	p.c.	p.c. with approval of Port Authority	p.c.	—



	Type of facility	Financing body	Who charges?	Who fixes the charges?	Who makes the loss on the project?	Notes
Huelva	Oil terminal reception facilities	p.c.	p.c.	p.c. with approval of Port Authority	p.c.	—
Sevilla	No facilities	—	—	—	—	—
Cadiz	Tank washings service and tanker lorries	p.c.	p.c.	p.c. with approval of Port Authority	p.c.	—
Algeciras	Oil terminal reception facilities	p.c.	p.c.	p.c. with approval of Port Authority	p.c.	—
Malaga	Tanker lorries	p.c.	p.c.	p.c. with approval of Port Authority	p.c.	—
Almeria	No facilities	—	—	—	—	Establishment of a service with tanker lorries planned
Cartagena	Tanker lorries and oil terminal reception facilities at Escombreras	p.c.	p.c.	p.c. with approval of Port Authority	p.c.	—
Alicante	No facilities	—	—	—	—	—
Valencia	Tanker lorries and barge	p.c.	p.c.	p.c. with approval of Port Authority	p.c.	—
Castellon	Oil terminal reception facilities and tanker lorries	p.c.	p.c.	p.c. with approval of Port Authority	p.c.	—
Tarragona	Oil terminal reception facilities and tanker lorries	p.c.	p.c.	p.c. with approval of Port Authority	p.c.	—
Barcelona	Tanker lorries and barge	p.c.	p.c.	p.c. with approval of Port Authority	p.c.	—
Ceuta	No facilities	—	—	—	—	—
Melilla	No facilities	—	—	—	—	Establishment of a service with tanker lorries by a private company planned
Palma de Mallorca	Tanker lorries	p.c.	p.c.	p.c. with approval of Port Authority	p.c.	—
Santa Cruz De Tenerife	Oil terminal reception facilities and tanker lorries	p.c.	p.c.	p.c. with approval of Port Authority	p.c.	—
La Luz y las Palmas	Tanker lorries	p.c.	p.c.	p.c. with approval of Port Authority	p.c.	—

# ANALYSIS OF MARPOL PORT FACILITIES QUESTIONNAIRES

## PART 2: CHEMICAL WASTES

	Type of facility	Financing body	Who charges?	Who fixes the charges?	Who makes the loss on the project?	Notes
<b>NETHERLANDS</b>						
Rotterdam	Reception of concentrated wastes	p.c.	p.c.	p.c.	p.c.	Expansion expected, especially for water treatment: application for government funds being planned
Vlissingen	—	—	—	—	—	—
Amsterdam	Barges + trucks	p.c.	p.c.	p.c.	p.c.	Any new installations will probably be state aided
Delfzijl-Eemshaven	No facilities					
<b>GERMANY</b>						
Schleswig-Holstein Ports	Mobile collection	p.c.	p.c.	p.c.	p.c.	No further expansion at present
Hamburg (2 companies)	One deals with only 5 types of chemical, the other with around 150	p.c.	p.c.	p.c.	p.c.	No further expansion at present
<b>BELGIUM</b>						
Antwerp	Special facilities planned - private companies and regional authority	p.c. intended to be self-supporting	p.c.	p.c.	p.c.	
<b>PORTUGAL</b>						
Sines	Refinery provides CO <sub>2</sub> for burning of residues	p.c.	p.c.	p.c.	Generally no profits	
<b>DENMARK</b>						
Copenhagen	—	Port Authority	—	—	Port Authority	Plans for disposal via road tankers to a publicly owned incinerator works
Frederikshavn	No details given	Port Authority	—	—	Port Authority	
<b>UNITED KINGDOM</b>						
Bristol	—	—	—	—	—	Budgetary provision if needed
Peterhead	Tanker lorries	p.c.	p.c.	p.c.	p.c.	
Manchester	—	—	—	—	—	Discussions going on with chemical companies
London	Limited fixed and mobile facilities	p.c.	p.c.	p.c.	p.c.	
Liverpool	Shore tanks	p.c.	p.c.	p.c.	p.c.	
Tees + Hartlepool	Chemical slops and ballast reception	p.c.	p.c.	p.c.	p.c.	

	Type of facility	Financing body	Who charges?	Who fixes the charges?	Who makes the loss on the project?	Notes
Clydeport	Mobile installations	p.c.	p.c.	p.c.	p.c.	
Sunderland	Tank washing, processing and distillation	p.c.	p.c.	p.c.	p.c.	
Whitehaven	Vacuum tankers	p.c.	Port Authority	Port Authority	Unknown	
Montrose	Mobile tanker for drilling mud	p.c.	p.c.	p.c.	—	
<b>FRANCE</b> No details of ports given	General practice is to recommend ships to send wastes to chemical factories and specialised companies	p.c.	p.c.	p.c.	—	
<b>SPAIN</b>	It is planned to establish a service by private companies operating chemical terminals in the following ports: BILBAO, SANTANDER, HUELVA, ALGECIRAS, CARTAGENA, VALENCIA, TARRAGONA AND BARCELONA					
<b>IRELAND</b>	No facilities					

# A Discussion Paper on Expansion of the LDC Annexes

## For Deliberation of Intersessional Meeting of LDC Scientific Group on Dumping

January 25, 1988

Prepared by Willis E. Pequegnat, Consultant - IAPH, December 1987

### Expansion of the LDC Annexes

#### Introduction

During the past few decades the human influence on marine ecosystems has been intensified by pollution beyond the age-old practice of removal of seafood products from the World Ocean (Patin 1982). Both by plan and by accident most pollutants that have escaped from man's control find their way into the ocean where they interface with and modify the foodweb processes on local, regional, and global bases. And, as we shall attempt to demonstrate later, because of

the large scale circulation patterns in the World Ocean, any regional impacts must affect the viability of the ecosystem in neighboring regions and eventually in the entire system. Evidence is now accumulating that the worldwide transport of pollutants in the ocean occurs on a shorter scale of time than was believed only a few years ago. It is clear, however, that this critical problem has an international scope which must be dealt with through the aegis of an international institution. It has occurred to some of us who are dealing

with the problem that the London Dumping Convention can admirably serve this important function.

Further, it is believed that an appropriate expansion of the scope of the annexes to the Convention will assist in ensuring the welfare of the World Ocean and will thus serve the related interests of societies throughout the world. The modifications of the present annexes envisioned here, although less than complete, will coincide with the opinion of some ocean scientists that pollution of the World Ocean can only be controlled when we treat it as an ecosystem and bring to bear unified worldwide approaches to its management. Not all of the scientific data are in hand to produce the ideal plan, but we have enough to make a serious start, and more awaits discovery in the literature, as is discussed in the GESAMP report on An Oceanographic Model for the Dispersions of Wastes Disposed in the Deep Sea (GESAMP 1983). For its part, the International Association of Ports and Harbors is aware that its member ports should support worldwide efforts to control atmospheric inputs of pollutants into their waters, and deal very aggressively with appropriate measures to curtail riverine inputs of pollutants that will be deposited in their estuarine sediments causing problems when they need to be dredged. In fact, effective control of pollution of the atmosphere and of the major rivers of the world is the key to the future health of the World Ocean.

### **Objectives of the Paper**

Accordingly, this paper has three primary objectives. First, it is a direct appeal to the Scientific Group on Dumping of LDC to provide some of the leadership that will be required to ensure that the environmental integrity of the World Ocean will be maintained into the 21st century and beyond. That leadership role may involve serving as a depository for scientific data beyond its present efforts, and it may involve calling upon appropriate agencies in member countries, through proper channels, to support mission-oriented research. Second, it calls upon those officials in member nations who are entrusted with protecting the welfare of the ocean to begin wrestling with the problem dealing with a global ecosystem and at least make a start toward formulating an integrated approach to ocean management. For those who are daunted by the magnitude of the task, we hope to demonstrate that new relevant data are coming on stream every day — data that will let us begin to flesh out a conceptual model of the ocean system. Finally, this paper ventures to suggest some potential controls that LDC will have to explore if it is to counsel its member states as to what they may have to do in years to come if the harvest of the ocean is to be maintained. In this regard, the author believes that what he has to suggest parallels closely the hopes expressed by the framers of the Convention both in the Introduction and in the text of Articles I and II.

### **Framers of LDC Had Global Perceptions**

It seems likely that the framers of LDC were moving toward creation of an international forum to deal with the ocean as an ecosystem when they wrote in paragraph 5 of the Introduction: "Noting that marine pollution originates in many sources such as dumping and discharges through the atmosphere, rivers, outfalls and pipelines —," and in paragraph 6, "Being convinced that international action to control the pollution of the sea by dumping can and must be taken without delay, but that this action should not preclude discussion of measures to control other sources

of marine pollution as soon as possible." Realizing that coordinated action would be required if pollution control was to deal with an ecosystem, they advised Contracting Parties in Articles I and II to act not only individually but also collectively to promote the "effective control of all sources of pollution of the marine environment." Perhaps by placing emphasis on collective action they meant to encourage formation of regional agreements, such as the Oslo and Paris Commissions, but the need for a broader scope has grown considerably in the last decade. These regional institutions have played (and should continue to play) effective roles in protecting the oceans in their respective parts of the globe, but water movements in the World Ocean do not respect national or even regional boundaries, and the regional conventions do not have plans in place to deal with farflung situations. In a way, the World Ocean resembles a huge living creature with a dynamic system of reflexes, in which the stimulus of waste inputs at one point can cause debilitating responses throughout the system. It will be advantageous therefore if LDC can create the coordinating instrumentality to deal with global problems, noting that the present annexes have too narrow a focus to accomplish the task.

### **Data Generation and Integration**

There is little argument with the opinion that environmental management of the World Ocean must be based upon scientific data, which must eventually be fed into computer models, especially as they evolve from the conceptual to the quantitative mode. Also, it is easy to agree with Walker (1987) when he notes that politicians must heed the results of scientific endeavors when they begin to formulate management plans. Unfortunately, there seems to be a general attitude that the scientific data needed to create an effective global management plan are deficient. This feeling is difficult to evaluate because one wonders who knows just what data are to be needed and just what people have made a concerted effort to uncover both new and old data germane to the undertaking. Aside from GESAMP deliberations and the inputs from some member nations, the Scientific Group appears to receive very little relevant data that will be useful for a global approach. LDC needs to be given the resources to develop the mechanism for keeping abreast of new findings and fitting them into a management plan. For example, new approaches to marine circulation are now in place, and the data that they promise to generate are exciting and relevant to the issue at hand.

### **Toward Understanding Circulation of the World Ocean**

One of the prime needs of a global plan to assess, manage, and control pollution of the World Ocean is an understanding of its circulation patterns. We need this information to demonstrate that all nations, coastal and inland, will influence the whole system when they fail to enforce pollution controls. At present some important strides are being made in this field of ocean circulation. For years oceanographers have studied global circulation with current meters and chemical analyses for salinity, dissolved oxygen, and radioactive carbon. But just as the present LDC annexes were not structured for ecosystem application, those tools gave insight into local circulation patterns but required supreme efforts to integrate the pieces. Today, however, the World Ocean Circulation Experiment (WOCE) is examining the large-scale integrated mean circulation of the oceans through use of chemical tracers which can establish circulation movements

and also provide data on the time parameter (WOCE 1987). Among these tracers are Argon-39, Silicon-32, Radium-228, Strontium-90, Radon-222, Tritium and Helium-3, Krypton-85, and the chlorofluorocarbons, particularly CFC F-11 and F-12, and to a lesser extent CFC F-113. This very important development was apparently anticipated by the authors of the GESAMP report cited above. Relative to future work, Recommendation 5 on page 8 of that report reads, "Information on tracers with natural bottom sources is particularly valuable since they perhaps more closely resemble the release of a contaminant (pollutant) from deep-sea waste disposal." Helium-3 fits that description perfectly since it is primarily released from the hot-water vents of the deep Pacific Ocean from which it is carried southward into the Antarctic Ocean at a determinable rate.

It is difficult to overemphasize the importance of the large-scale mean circulation to our understanding of biogeochemical cycles and the spread of pollution. Tracers that do not enter into biological systems and which do not adsorb to particulates are critical to this study. By their natures some of the above tracers can reveal the interrelationships between major regions of the ocean, such as the surface to the abyss, and the deepest depths of the Antarctic Ocean to the deep Atlantic and deep Pacific, and the latter to each other. Thus, their distributions reflect the average effects of advection and mixing over many years, decades, and even centuries (WOCE Workshop 1987). For reasons of space, let us limit our discussion here to the chlorofluoromethane gases (CFMs), which we use in refrigerators and automobile air conditioners. The CFMs are relatively new anthropogenic (there are not natural sources), chemically stable, non-bioactive gases that enter the oceans by gas exchange at the air-sea interface (Sarmiento et al. 1987). This means that unlike some other tracers, such as radiocarbon, the CFMs do not enter into biological processes nor do they adsorb to clays or humus, both of which actions would modify their distribution. The atmospheric concentrations of the useful CFMs are well documented and have increased exponentially since their first introduction into the atmosphere in the mid-1940s. The two most abundant of the CFMs, F-11 and F-12, were released into the atmosphere at different rates from 1945 until about 1975. Today they are widely distributed in the World Ocean from surface to abyss and in all oceans. During the thirty years from introduction to 1975 the ratio of F-11 to F-12 was changing continuously through time from near 0.0 to 0.6 in 1975; hence changes in the ratio could be used to calculate the rate of water circulation (see Figures 1 and 2). For example, CFMs from the Denmark Straits have been traced to the base of the continental slope off the coast of New England with F-11/F-12 ratios, which indicate a transport time of less than a decade. Also, water from the Labrador Sea has been traced along the South American coast at a depth of 1.6 km to about 9 degrees south latitude with a transport time of about 15 years (Weiss 1986). Curtailment of release of CFMs since 1975 resulted in a nearly constant ratio so that timing could not be calculated (see top curve of Figure 2). But another inert gas, Krypton-85, can be used for this purpose (Smethie 1985). After a water parcel leaves the surface, the behavior of Kr-85 is different from that of F-11 and F-12 due to its normal radioactive decay. Thus, because of this decay, the F-11:Kr-85 and F-12:Kr-85 ratios increase (see the middle and bottom curves of Figure 2) and dates can be calculated. Unfortunately, analysis of sea water for Kr-85 requires samples of large volume and presently there are not many

laboratories that can carry out these analyses. For this reason Tritium and Helium-3 tracers, which can be analysed at sea, are more useful at this time; however, improvements in equipment and techniques for Kr-85 analysis are under active study in several laboratories.

To reiterate, these data will be useful in several ways. One way of course is to establish clearly that pollutants are being transported from the coastal zone to other parts of the ocean so that ecological deterioration in the coastal zone of one nation might be expected to impact other nations if not the entire global system. This would apply in particular to radioactive wastes. Further, when the transport system of the World Ocean is perceived throughout the water column, it will be feasible to construct models that will achieve ecosystem predictability.

### The Search for Other Data Sets

It is believed that more of the data that are needed to begin crafting a global plan of ocean pollution management exist in the scientific and technical literature of the world. Perhaps a discussion is needed of the role that the LDC Scientific Group on Dumping should play in encouraging signatory nations to support such ad hoc literature searches and reviews. Pursuantly we need to discuss to what extent the LDC Scientific Groups should delineate important research objectives and request that Contracting Parties consider encouraging granting organizations to support designated research objectives. All this action would indicate in general is that we recognize that environmental policy guiding public action in pollution control must be based upon the results of scientific research and, most importantly, upon valid interpretations of the facts. Clearly, an international institution is needed to lead the way today — not tomorrow.

### A Few Comments on Some Extant Environmental Policy Systems

At present, aside from complete prohibition, which is sometimes called the prevention or anticipation principle, there are two major policy systems that are guiding environmental controls on pollution of the oceans in various countries of the world. The first involves the establishing of environmental quality objectives (EQOs) which apply primarily to Annex II substances, although it appears that some countries attempt to apply the system to Annex I as well (Weizsacker 1986). The second system attempts to establish uniform emission standards (UESs) to direct inputs of pollutants; hence it is not useful in regard to atmospheric no-point source pollutants in general. At first glance the policy of UESs does not lend itself to an ecosystem approach to the preservation of the welfare of the World Ocean for several reasons. First, standards can only be set for pollutants entering the ecosystem from point sources, such as pipelines. Further, although individual pipeline discharges may meet the standards, the aggregate of lines probably will not; hence the cumulative effect is continuing degradation of the environment. Setting such standards and the necessary division of the assimilative capacity of the water or air envelope are always difficult tasks, but particularly so on rivers. Second, the UESs cannot easily deal with problems of runoff from urban or agricultural areas, which can be important sources of pollutants that will impact the biosystems in the coastal waters. It should be pointed out, however, that in the context of the World Ocean, one can treat major rivers as point sources to calculate the loading of ocean waters, but this will not regulate the inputs of pollutants into the river itself.

The latter problem is complicated by the fact that many of the target rivers are international. This situation, however, points up the need for an annex that will provide guidance toward solving problems of this kind.

The policy of environmental quality objectives more nearly approaches an ecosystem management tool (Downing 1986). It recognizes that the quality objectives need not be applied uniformly to water or sediment parameters, but may vary appropriately according to the use to which the environmental factor (e.g. water) is to be put. I find this difficult to accept in regard to the air envelope of the earth. In fact, I believe that the atmosphere is the least acceptable environment into which we should dispose of many wastes. EQOs also recognize that standards need not be applied uniformly among countries or parts of the same country that have different ecological characteristics. However, EQOs require a large body of information as to levels at which pollutants become harmful to the biosystem. All of us are aware that most disposal operations simply reposition wastes from one medium to another. Ideally the final receiving environment will be impacted to a lesser extent than the source environment, or at least that an acceptable solution to the problem has been found. But this is not always the case. For instance, we require that ports have facilities into which ships can pump their contaminated bilges — all well and good, except that the ports may not be able to find an acceptable way to dispose of the pollutants, at least economically. This indicates that there must be some consideration given to economic issues connected with media alternatives.

So risk is balanced against cost and the principle of the best practicable environment option is introduced in the decision process. Some member nations of LDC may find it helpful to study the nature and value of the EIA process, in which one evaluates disposal alternatives and assesses environmental risks connected with each alternative. This again can lead to the best practicable environmental option. Moreover, lest the wrong impression has been given above, it should be emphasized that environmental quality objectives and limiting emission standards are not mutually exclusive in that EQOs can be used to help in setting emission standards. The real problem for all of us to help solve is how one can relate environmental quality standards to the health of the ecosystem.

### What Do We Need To Do

It should be presumptuous indeed to believe that one can set forth in a paper such as this the approach that one should take to protect the World Ocean from continuing severe indignities. When we comprehend the magnitude of polluting loads from all sources, perhaps then a model can be applied which will show the quality of the environment at all points from a given pattern of loading inputs. At that time perhaps an agreement could be reached as to the water quality objectives that should be sought in all areas, but this leaves the final decision to the politicians, namely, what proportion of the assimilative capacity of the World Ocean should be apportioned to the various nations.

Before we can ever reach that stage there are two things that must be done, viz. we must read the literature and carry out relevant research to fill the gaps. Having done these things, the time will have arrived when an annex can be formulated that will guide us to ecosystem protection. Surely it will be more like the broad scope of Annex II than the narrow focus of Annex I, and surely it will be ecological in

the broadest and best sense of the word. Meanwhile, LDC might well suggest to member nations that

1. There is a need for bringing together scattered data that apply to ecological investigations of areas under their purview.
2. We need to know what important pollutants and in what amounts are being poured into the World Ocean by the 20 largest rivers of the world.
3. We need to know what pollutants in the river plume exceed background levels and how far downstream.
4. We need to know how many pollutants exceed the maximum permissible concentrations, which means that we must carry on some research in regard to dose-effect relationships.
5. We need to investigate and tabulate the size of mixing zones at river mouths beyond the perimeter of which the pollutants of concern do not exceed the limiting concentrations. Using target pollutants as the reference, the assimilative capacity of the adjacent ecosystem should be calculated. This and other questions may require joint research programs among nations.

All of the above effort is justified in part by the relief that there are enough environmental problems that are common to widely separated parts of the marine environment as to permit formulation of uniform prevention measures.

Finally, if we are to achieve the goal of perpetuating a healthy World Ocean through the aegis of the International Maritime Organization and LDC, we need, in addition to an effective Annex to LDC, a standing committee composed of scientists, governmental representatives, and affected interests such as ports to consider appropriate elements of an overall plan for worldwide pollution control.

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# International Maritime Information

# WORLD PORT NEWS

## Port of Singapore Training Courses For 1988/1989

Singapore is one of the world's busiest ports in terms of shipping tonnage. There were 33,352 vessel arrivals totalling 324.6 million gross registered tons in 1986. On any day, about 600 ships are in Port.

Singapore's reputation as a trans-shipment port and a major warehouse and distribution centre is attributed to her strategic location and well-developed infrastructure including efficient communications, good banking and financial services, a disciplined workforce and a politically stable climate.

The Port is administered by the Port of Singapore Authority (PSA), a statutory board under the Ministry of Communications and Information. It is responsible for the provision and maintenance of port facilities and services and for the control of sea traffic and navigation in Singapore.

PSA operates five terminals with about 15 kilometres of berths to accommodate container ships, bulk carriers, freighters, coasters, lighters and passenger liners. The terminals are Tanjong Pagar Terminal, Keppel Wharves, Pasir Panjang Wharves, Sembawang Wharves and Jurong Port which is owned by Jurong Town Corporation, but managed by PSA on its behalf. In 1986, the total cargo handled at the five gateways was 44 million tonnes.

### Training in PSA

Training activities in the PSA were organised as early as 1959 to upgrade the skills of the Port's stevedoring workforce. With increasing sophistication in port management and operations, the training function was enlarged to include management, supervisory, clerical and technical training.

The PSA's Training Department comprises the Operations, Technical and Management Training Sections. The Department is staffed with competent training personnel and training activities are supported by excellent library and audio-visual facilities. Other training facilities include well-equipped lecture rooms, language and computer training rooms and high quality off-set printing capabilities.

### Courses for Overseas Port Personnel

As a means of sharing information and experiences on port management and operations, the PSA has been offering a range of formal courses for officers from the ports of other countries.

Some 1,800 officers from ports of ASEAN, South Asia, Middle East, Africa, Australia, New Zealand and the Pacific Islands have participated in one or more of these courses over the last 10 years. Some of these participants were sponsored through the ASEAN and Colombo Plan Training Award Programme, Commonwealth Fund for Technical Cooperation, International Association of Ports and Harbors, International Labour Organisation, United Nations Development Pro-

gramme and International Maritime Organisation.

The courses which will be offered in 1988/89 are as follows:

### Management & Administration Courses

- 1) Port Management & Operations
- 2) Port Safety & Security Management
- 3) Improving Port Productivity through Quality Circle Activities

### Port Operations Courses

- 4) Managing Container Operations
- 5) Cargo Operations at Conventional Wharves
- 6) Harbour Pilotage Operations

### Port Engineering Courses

- 7) Civil Engineering & Project Management
- 8) Container Terminal Equipment Maintenance
- 9) Conventional Cargo Handling Equipment Maintenance

### Safety Courses

- 10) Oil, Chemical & Liquefied Gas Tanker Familiarisation

### Application Procedures

- \* Applications for courses must be made in the prescribed forms enclosed with the brochure.
- \* Application for more than one course should be made on separate forms.
- \* Application forms should be signed by an authorised officer of the sponsoring organisation and duly stamped with the Company/Organisation Stamp.
- \* Applications must be accompanied by a cheque or bank draft for the total amount of course fees in Singapore dollars and submitted to reach PSA not less than one

month before course commencement dates.

- \* Participants are advised to take up relevant travel and accident insurance policies to cover them for the duration of training in Singapore.

#### Course Fees

Fees quoted are only for 1988. Fees for 1989 courses may be subject to revision. No official receipt will be issued for the payment of course fees.

#### Refund of Fees

If notice of withdrawal is given in writing two weeks before the commencement date of the course 80% refund of the course fee will be made. No refunds will be made if notice of withdrawal is given after this period.

#### Cancellation

The Authority reserves the right to cancel or postpone any course if necessary.

#### Sponsorship

Participants are normally sponsored by their ports/organisations for PSA courses. However, some participants have been sponsored to attend PSA courses under the ASEAN and Colombo Plan Training Award Programmes, Commonwealth Fund for Technical Cooperation, International Association of Ports and Harbors, International Labour Organisation, United Nations Development Programme and International Maritime Organisation. More information can be obtained from these organisations.

#### Medium of Instruction

The medium of instruction is English. As such, participants are expected to have a good working knowledge of the language.

#### Certificate of Attendance

Certificates of Attendance will be issued to participants who maintain full attendance at training sessions.

#### Visas and Travel Arrangement

Participants will be responsible for their own visas and travel arrangements to and from Singapore.

On arrival at Singapore Changi Airport, participants should present their passports or internationally recognised travel documents to the immigration officials and obtain the required approval to stay in Singapore for the duration of the training.

#### Accommodation

Singapore has numerous hotels to meet the accommodation requirements of participants. The Authority can arrange for hotel accommodation and to meet participants at the airport. When applying for courses, please indicate whether you require the Authority to arrange for hotel accommodation and for participants to be met at the Singapore Changi Airport.

#### Living Allowance

Sponsoring organisations should ensure that their personnel have adequate funds before leaving for Singapore to cover all accommodation, meals, transport, medical and other expenses.

Fur further enquiries, please contact:  
Training Manager  
Training Department  
Port of Singapore Authority  
7, Keppel Road  
#02-28, Tanjong Pagar Complex  
Singapore 0208  
Republic of Singapore  
Telex: RS21507  
Cable: "TANJONG" Singapore  
Telephone: 321-1822  
Telefax: (65)321-1416

#### Courses for 1988/89

S/No	Course Title	Dates	Duration	Frequency	Fees
1	Port Management & Operations	6-17/6/88 5-16/6/89	2 weeks	Once a year	SS\$1600
2	Port Safety & Security Management	5-16/9/88 4-15/9/89	2 weeks	Once a year	SS\$1600
3	Improving Port Productivity through QC Activities	20/6-1/7/88 19-30/6/89	2 weeks	Once a year	SS\$1600
4	Managing Container Operations	23/5-4/6/88 29/5-9/6/89	2 weeks	Once a year	SS\$1600
5	Cargo Operations at Conventional Wharves	4-15/4/88 15-27/5/89	2 weeks	Once a year	SS\$1300
6	Harbour Pilotage Operations	21/3-2/4/88 11-22/7/88 19-30/9/88 20-31/3/89 19-30/6/89 18-29/9/89	2 weeks	Three times a year	SS\$1600
7	Civil Engineering & Project Management	7-18/3/88 6-17/3/89	2 weeks	Once a year	SS\$1600
8	Container Terminal Equipment Maintenance	1-13/8/88 17-28/7/89	2 weeks	Once a year	SS\$1300
9	Conventional Cargo Handling Equipment Maintenance	15-26/8/88 3-14/7/89	2 weeks	Once a year	SS\$1300
10	Oil, Chemical & Liquefied Gas Tanker Safety Familiarisation	22/8-2/9/88 21/8-1/9/89	2 weeks	Once a year	SS\$1300

#### INMARSAT: Communications to Shipping, Aviation

The International Maritime Satellite Organization (INMARSAT) operates a system of satellites to provide telephone, telex, data and facsimile, as well as distress and safety communications services, to the shipping, aviation and offshore industries.

Headquartered in London, INMARSAT began operations on 1 February, 1982. Users of its system include oil tankers, liquid natural gas carriers, offshore drilling rigs, seismic survey ships, fishing boats, cargo and container vessels, passenger liners, ice-breakers,

tugs and cable-laying ships, among others. The system is also used to provide emergency transportable communications at times of human disaster and natural catastrophe. As of beginning January 1988 almost 6,400 ship earth stations or transportable versions were commissioned for use with the INMARSAT system.

INMARSAT is now developing systems and equipment to enable it to begin providing satellite communications to aircraft and the aeronautical community in 1988. These systems are compatible with the requirements of the Airlines Electronic Engineering

Committee and the International Civil Aviation Organization's Special Committee on Future Air Navigation Systems (FANS). Services will include operational flight data and passenger telephone facilities.

INMARSAT leases the MARECS A and B2 satellites from the European Space Agency, maritime communications subsystems (MCS) on several INTELSAT V satellites from the International Telecommunications Satellite Organization and contingency capacity on three MARISAT satellites from COMSAT General of the United States. The system is currently configured as follows:

Ocean Region	Atlantic	Indian	Pacific
Operational Location:	MARECS B2 26W	INTELSAT MCS-A 63E	INTELSAT MCS-D 180E
Spare Location:	INTELSAT MCS-B 18.5W	INTELSAT MCS-C 66E	MARECS A 178E

INMARSAT is now in the process of procuring a second generation of satellites. The INMARSAT-2 spacecraft, the first of which is scheduled to be delivered in mid-1988, will have approximately three times more capacity than the most powerful satellite in the present INMARSAT system.

Another component of the INMARSAT system is the coast earth stations, which provide the link between the satellites and the international telecommunications networks. Coast earth stations are generally owned and operated by the Signatories — organizations nominated by their countries to invest in, and work with, INMARSAT — of the countries in which they are located.

There are now 20 coast earth stations: Tangua (Brazil), Maadi (Egypt), Pleumeur Bodou (France), Thermopylae (Greece), Fucino (Italy), Ibaraki and Yamaguchi (Japan), Umm-al-Aish (Kuwait), Eik (Norway), two stations at Psary (Poland), Jeddah (Saudi Arabia), Singapore (Singapore), Goonhilly (UK), Southbury and Santa Paula (USA), two stations at Odessa and two stations at Nakhodka (USSR). Several of these are being equipped to provide aeronautical services.

INMARSAT comprises three bodies: The Assembly is composed of representatives of all member countries, each of which has one vote. It meets once every two years to review the activities and objectives of INMARSAT and to

make recommendations to the Council.

The Council functions in a similar fashion to the Board of a company. It consists of representatives of the 18 Signatories with the largest investment shares and four others elected by the Assembly on the principle of a just geographical representation and with due regard for the interests of developing countries. It meets at least three times a year and each member has a voting power equal to its investment share. It oversees the activities of the Directorate, the permanent staff of INMARSAT. Comprising 207 people of 35 different nationalities and working under the Director General, the Directorate carries out the day-to-day tasks of INMARSAT.

#### Standard-C

Standard-C is a new type of lightweight, low-cost satellite communications terminal, capable of receiving and/or transmitting data or text communications anywhere within the worldwide coverage of the INMARSAT satellite system.

INMARSAT has developed an operating Standard-C prototype and, during the past year, conducted many trials and demonstrations using its Atlantic Ocean region satellite.

A draft performance specification has been issued to prospective manufacturers and other interested organizations and several manufacturers now

have their own development programmes under way. Standard-C terminals are expected to cost US\$5,000 or less at today's prices. Pre-operational services will start later this year with full operational service in 1988.

Standard-C communications are message-based. Communications originating from a Standard-C terminal will be transmitted in bursts, via satellite, to a coast earth station. At the coast earth station, the messages will be stored and, if necessary, reassembled before being retransmitted to their destination — in the form that has been nominated by the sender: telex, teletext, voice band data, electronic mail etc. — via the normal national and international telecommunications networks. Standard-C transmissions will be digital with data being transmitted and received between the ship and coast earth station at an information rate of 600 bits/sec. The terminal will operate at low power through a non-stabilized omnidirectional antenna anywhere within the coverage of INMARSAT's satellites.

The engineering prototype Standard-C terminal fits inside a shoe-box sized case and weighs about six kilos. It has an integral, omnidirectional antenna about 10cm in diameter and 6cm high. For test and demonstration purposes, the prototype has a separate battery supply.

Production models may be battery powered — for hand portability and for applications such as lifeboat emergency communications — or use external power sources. The prototype has an RS232 connection to a small keyboard with an LCD display. Alternatively a computer can be interfaced to generate and receive messages.

## New Publications

### SEASPEAK Training Manual

F F Weeks, A Glover, E Johnson & P Strevens

SEASPEAK addresses the requirement for simple and precise communication at sea in an internationally agreed language — English. SEASPEAK is therefore essential to mariners

of all nations. Recently, the SEASPEAK maritime communication procedures have been adopted by the International Maritime Organisation (IMO) and recommended by the International Association of Lighthouse Authorities (IALA). SEASPEAK is to become standard for VHF communication at sea and adopted worldwide.

The recently published *SEASPEAK Training Manual* incorporates the full official recommendations for maritime communication as adopted by IMO and recommended by IALA, together with additional explanations and examples, and with exercises at the end of crucial sections. The *Training Manual* details recommended VHF radio procedures and conventions for initiating, maintaining and terminating conversations with rules for message structure and checking. The theory of SEASPEAK is illustrated through a series of full conversations typical of maritime communications, which are structured for analysis. Finally, a maritime vocabulary and a full Glossary provide the definitions of words and expressions.

ISBN 0 08 031555 0 (Flexicover)  
£7.95/US\$13.50

#### **SEASPEAK Training Manual Cassette**

**F F Weeks, A Glover, E Johnson & P Stevens**

SEASPEAK is, by definition, spoken language and many of the examples in the text of the *SEASPEAK Training Manual* are supported and enhanced by recordings. This additional training material is available as an audio cassette and is especially valuable for self-study. The recordings were made in the Simulation Suite of the Institute of Marine Studies, Plymouth Polytechnic, Plymouth, UK, by staff and nautical students from sixteen nations. Live VHF is used throughout, and varying levels of background noise, volume and squelch are employed. The *Training Manual* can be used with or without these "model" recordings, but the use of a tape recorder for personal recording and playback is highly recommended as an aid to learning.

ISBN 0 08 035861 6 (Audio Cassette)  
90 mins £5.95/US\$10.95

#### **VTS Port Entry Guides**

In association with IALA, IAPH and IMPA, Pergamon Press is to publish a series of *Port Entry Guides* with Vessel Traffic Service information.

Individual *Guides* consist of printed charts and tabulated information essential to seafarers navigating sea areas controlled by Vessel Traffic Services. Port entry information is also included for ports within a VTS controlled sea area. Charts and tables have been compiled by experts in the field from information supplied by Port and VTS authorities. All material conforms to standard criteria developed by IALA, IAPH and IMPA in association with Pergamon.

Sea areas controlled by VTS require most vessels to report their nature and intentions and to adopt a defined and regulated passage through and within the controlled area. All mariners

seeking passage through a sea area are controlled in this way need concise, well presented information concerning the type of VTS, the geographical limit of the VTS, the reporting structure and related details. The Pergamon *VTS Port Entry Guides* provide this information in an easy to use format and are to be distributed free to visiting vessels. Individual *Guides* will accumulate to provide an invaluable on-board source of reference.

For Further Information Please Contact:

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Telephone: 0752 267788

A Wheaton, Pergamon Press, Headington Hill Hall, Oxford OX3 0BW, UK

Telephone: 0865 64881 Extn 3396

#### **Ship to Ship Transfer Guide (Petroleum)**

International Chamber of Shipping (ICS) and the Oil Companies International Marine Forum (OCIMF) have produced a new and improved edition of their *Ship to Ship Transfer Guide*.

Oil transfers between tankers at sea have become commonplace, with an estimated 500 operations around the world each year. These transfers pose no threat to safety or the environment as long as they are conducted in accordance with sound operating practices, and the purpose of the guide is to ensure that all those responsible for transfer operations know and understand the relevant procedures.

The first edition of the guide appeared in 1975 and became widely used not only by the industry but as the basis for many national regulations. This new edition, in an improved layout, updates the earlier guidance and builds on a decade of operating experience.

The guide includes sections on safety, communications, operational procedures, manoeuvring and mooring, transfer and equipment, as well as general operating advice. Various check lists are provided to complement the text.

Copies are available from Witherby & Co. Ltd., (Marine Publishing), Book Dept., 2nd Floor, 32-36 Aylesbury Street, London EC1R 0ET at £7.50, inclusive of postage (surface mail).

For further information please contact:

Witherby & Co. Ltd., Book Department, 2nd Floor, 32-36 Aylesbury Street, LONDON EC1R 0ET, England  
Telephone:

International: +44 1 251 5341;

National: 01 251 5341

#### **1988 Edition of BIMCO Holiday Calendar**

"Is the day in question a general or local holiday?", "What are the ordinary working hours of a particular port?", "When can overtime be worked?" These and similar questions will be easily answered by quick reference to the new *1988 edition of the BIMCO Holiday Calendar*, which is now available.

Price for member of BIMCO is DKK 247.00/USD 38.00. For non-members, who must pay in advance, the price is DKK 429.00/USD 66.00. Danish customers pay the price plus V.A.T. in DKK.

The above prices include packing, airmail postage worldwide and one supplement updating the Calendar, issued in May. Danish customers receive the Calendar and Supplement by surface mail.

Copies may be ordered from BIMCO Publications A/S, Kristianiagade 19, DK-2100 Copenhagen, Denmark.

Telephone: + 451 26 30 30; Telex: 19086; bimco dk; Telegrams: Bimco-ship; Telefax: + 451 26 33 35.

## The Americas

### Agency to Promote Fraser Port in Orient

Fraser Port announced that it has appointed World-Link Group Shipping Agencies Inc. of Taiwan, to promote the interests of the Port in the Orient and the Pacific Rim.

"This is part of our expanded marketing program in the Far East to promote shipping interest through Fraser Port's facilities," stated Mr. Bill Vogel, Chairman of the Fraser River Harbour Commission, in making the announcement.

"In addition to contacting potential shippers, World-Link will also be marketing Fraser Port as an ideal industrial location for new industry to other business interests," Mr. Rick Pearce, Port Manager and CEO, commented.

Initially, the Agency will concentrate on promoting the Port and its facilities in Taiwan, Hong Kong, Korea and Japan.

### Halifax: Record Cargo Volumes Ever in 1987

The Port of Halifax experienced its best cargo volumes ever in 1987. According to Port statistics, over 2.79 million tonnes of containerized cargo, an increase of 23.2%, was handled at the Port. This container throughput translates into 331,766 TEUs, up by 61,000 TEUs from 1986. The increase reflects growth for the Port's regular customers as well as business from the nine new container lines which have begun calling at the Port of Halifax since 1986.

The amount of grain handled showed an impressive 28.2% increase over 1986 with a 1987 volume of 659,000 metric tonnes. Break-bulk cargo amounted to approximately 363,000 tonnes, a 20.6% increase over '86 figures. In fact, figures for every cargo category showed an increase for 1987 with total cargo throughput at a record 15.8 million metric tonnes, up by 11.9% from 1986.

*(Port of Halifax)*

### Halifax Port Corp. Board Members Named

Dartmouth businessman Donald A. Parker has been appointed the new Chairman of the Halifax Port Corporation, replacing Raymond Beck who has held the position for four years.

Transport Minister John Crosbie announced the appointment of Mr. Parker and three other members to the seven-member board in early January. The new Vice-Chairman is Paul Murphy, of Halifax, and new Directors are Lois Anne Glibbery, Dartmouth, and Harold A. Norve, Halifax.

*(Port of Halifax)*

### Montreal Marks 5th Record Year in a Row

While 1986 was a good year for the Port of Montreal, its overall performance in 1987 was even better, port officials disclosed.

"The Port of Montreal has done better than ever in the very competitive market of containerized cargo traffic," said Port General Manager and Chief Executive Officer Mr. Dominic J. Taddeo.

In fact, the Port marked its fifth consecutive record year in container-handling, and total traffic rose by 300,000 metric tonnes to 21.9 million tonnes of highly-diversified cargo.

Here are the highlights of last year's results as presented by Mr. Taddeo at a press conference:

- A record 5.5 million tonnes of containerized cargo handled, an increase of 11.9 percent over the previous year;
- A record 574,522 containers handled in a single year, almost 43,000 more than in 1986;
- A record 6.7 million tonnes of general cargo handled, a 10.8-percent increase;
- An increase of 2.6 percent or 100,000 tonnes in grain traffic, which totalled 4.1 million tonnes;
- A 7.3-percent increase in petroleum-products traffic, which climbed to 6.1 million tonnes;
- A 15.5-percent decrease in other solid and liquid bulk traffic, down to five million tonnes;
- For the eighth consecutive year,

positive financial results that showed a net income of \$15.4 million for 1987.

The only category in which traffic declined in 1987 was that of other solid and liquid bulk. This drop can be attributed to several foreseeable factors that affected shipments of iron ore, potash, and salt and sugar.

The General Manager stressed the Port's excellent results in general cargo traffic, and consequently the "phenomenal" increase in containerized goods.

In 1960, seven years before the dawn of containerization in Montreal, our general cargo traffic totalled a modest 3.4 million tonnes. It has almost doubled since!" Mr. Taddeo said.

"We are especially proud to announce once again that Montreal remains by far Canada's Number One Container Port. We have succeeded in capturing an enviable share of the containerized traffic on the North Atlantic despite fierce competition."

Mr. Taddeo added that Montreal, now more than ever, ranks as a major world port because of containerization and its highly-diversified traffic.

Commenting on last year's results, Port of Montreal Chairman Mr. Ronald Corey said the figures were "satisfying and inspiring," particularly the unprecedented heights reached in container-handling and general cargo.

"Containerization is the wave of the future for the Port of Montreal because of our unique geographical location in the industrial heartland of North America and our strength in intermodal transport," Mr. Corey said.

"Our containerized traffic closely reflects the economic mix of our leading markets on both sides of the North Atlantic. It is also the best gauge of our competitive strength."

Both Mr. Corey and Mr. Taddeo expressed confidence in the future of the Port of Montreal, whose administration plans to invest some \$120 million between now and 1992 in improving and enlarging its various facilities.

### 1987 Best Year Ever For Port of Québec

The Port of Québec had its best year ever in 1987, establishing a new record for overall tonnage.

Year-end statistics published recently

indicate that 18.3 million tonnes of cargo were handled at the Port in 1987, surpassing the previous record of 18.1 million tonnes set in 1981.

The 1987 figures also show a 46% increase over the 12.5 million tonnes of cargo handled in 1986, when a lock-out declared September 16th closed the Port for the last quarter of the year. In commenting the 1987 statistics, Port of Québec General Manager and Chief Executive Officer Ross Gaudreault praised the port community for rebounding vigorously following the settlement of the difficult labour dispute in February 1987.

"Maritime employers and long-shoremen have worked together to attain a common goal and provide quality service to shippers," he stated.

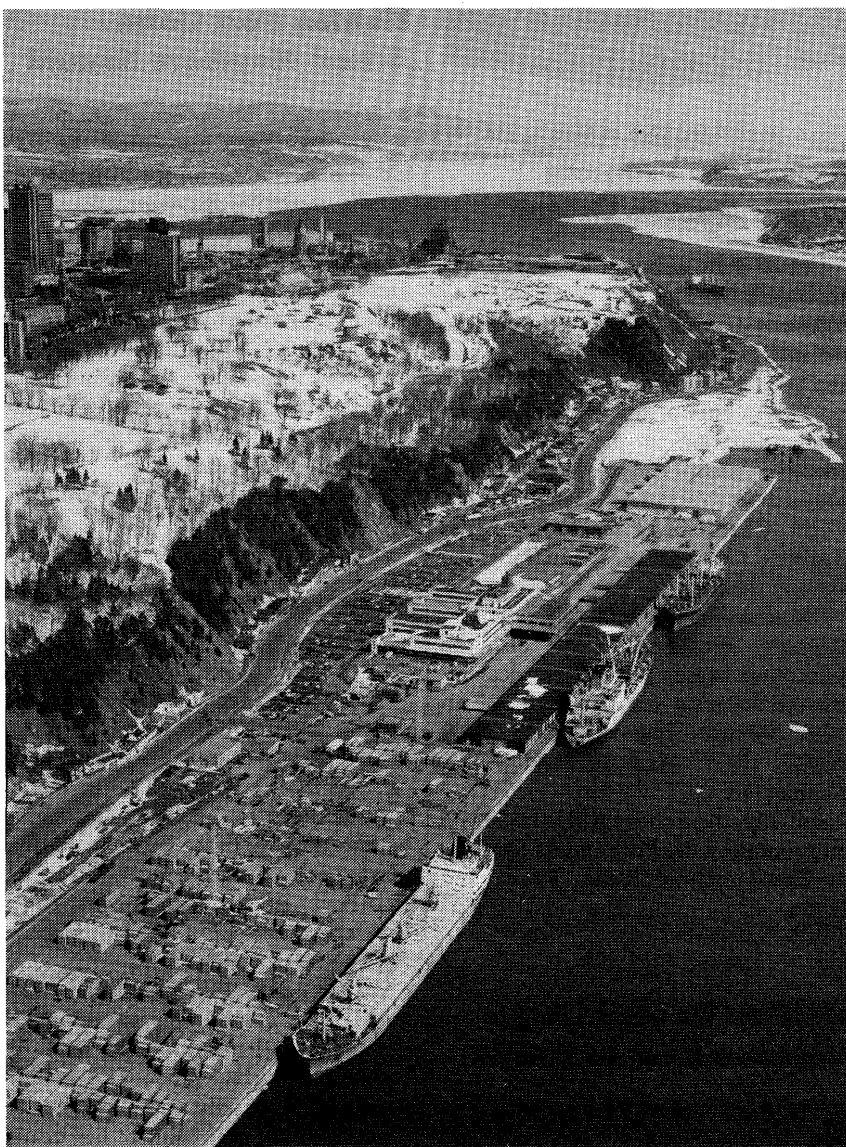
From 1982 to 1985, an average 16 million tonnes of cargo were handled annually at the Port of Québec.

The Port's vocation as a bulk transshipment centre was once again highlighted in 1987. Shipments of all major bulk commodities were on the rise including grain (6.3 million tonnes for 1987 compared to 3.1 million tonnes in 1986) and minerals (3.2 million tonnes, up from 1.5 million). The Port of Québec offers excellent geographic location for cargo moving to or from the Great Lakes region, such as grain shipped from western Canada for export principally to eastern Europe and iron ore arriving from overseas for shipment to U.S. steel mills.

Two other records were broken at the Port of Québec in 1987. When the South Korean ore carrier *Daeyang Honey* called, it established a record 15.65 metre draft, while the Polish tanker *Zawrat* unloaded 140,000 tonnes of crude oil, the largest single cargo in the history of the Port.

"Our deep water advantage is essential to the port's growth. Most vessels of 50,000 deadweight tonnes and more are unable to navigate fully loaded on the St. Lawrence River upstream from Québec City," pointed out Mr. Gaudreault. "The Port of Québec can handle ships three times that size, while offering direct access to the CN and CP rail systems. No other port on the St. Lawrence can receive 150,000 deadweight tonne ships and provide complete intermodal transportation service."

More than 80 percent of bulk cargoes



The Port of Québec

such as iron ore, coal and grain are carried by vessels in the 100,000 deadweight tonne range. With berths offering 15 meters of water at low tide, Québec is obviously well positioned to capitalize on the growing use of deep draft ships in maritime trade.

The Port of Québec welcomed 100 calls by cruise ships in 1987, which brought a record 33,500 passengers to the city. The Port welcomed 14,500 passengers in 1986.

The Port of Québec offers excellent facilities for luxury liners, which dock at a scenic boardwalk located below the landmark Château Frontenac Hotel and near such attractions as Place Royale and the historic walled city. The international market for cruise shipping is rapidly growing at an annual

rate of 10 to 15%. Reservations to date point to another excellent season for cruise activity at the Port of Québec in 1988.

"We believe that given the port's deep water advantage, maritime trade will continue to grow at Québec."

### **IAGLP Opposed to Increasing Tolls on St. Lawrence Seaway**

Increasing tolls on the St. Lawrence Seaway for the purpose of cost recovery in a diminishing market will lead to self-destruction if allowed to continue, the president of the International As-



sociation of Great Lakes Ports (IAGLP) warned Members of Parliament and senior government officials gathered in the nation's capital recently.

"Tolls, pilotage and harbour costs have become a factor of commerce," Mr. Jim Hill, Manager of Port Development for the Thunder Bay Harbour Commission, told more than 75 Members of Parliament and port representatives at a special reception held at the Holiday Inn. "Legislation put into place to assist communities and transportation systems which were negatively affected by the birth of the Seaway now is negatively affecting the Seaway."

Mr. Hill stressed that legislation controlling the handling of products to either seaboard, seemingly in its initiation fair and just, has become an unfair burden — a concern that prompted the IAGLP to take its case to Canada's legislators.

The backbone of the Seaway, the president said, was grain moving off the prairies eastward with an offsetting backhaul of iron ore from Labrador into the "mid-lakes". Today about 35 per cent of the cargo moving through the Seaway system is eastward grain.

"Without this base, and with the cost recovery emphasis, the system will not survive unless other commodities are found to replace these traditional cargoes that have vanished from the system," said Mr. Hill, pointing to the Western Grain Transportation Act as one example of legislation which has led to the decline of cargo through the system.

Mr. Hill said there are several concerns with the Act as it now stands, one being the government paying a subsidy to the railways instead of the farmers.

"But the most discriminatory feature, in my view, is compensation for moving grain from the Prairies to Thunder Bay and Vancouver being based on distance rather than actual cost," he said.

Noting that more than 50 per cent of Canada's labour force is employed within the Great Lakes basin, contributing about 50 per cent to this country's Gross National Product, Mr. Hill said the Great Lakes Maritime Industry looks forward to fair and equitable competition for cargoes moving into and/or out of our countries.

*(Port of Toronto News)*

## **Intermodal Expo '88 April 19-21 in Atlanta**

The International Intermodal Expo '88 is scheduled for April 19-21, 1988 at the World Congress Center in Atlanta, Georgia.

The fifth annual gathering of shippers, shippers' agents, equipment manufacturers, port authorities, and rail, steamship, and motor carriers promises the biggest turnout ever, with 2,500 registrants anticipated. Expo registration has increased in four years from 700 to 1,200 to 1,700 to 2,375, announced Mr. Nat Welch, Expo Chairman. The Georgia Freight Bureau is the presenter of the Expo.

The theme of Expo '88 is "Intermodalism Benefits Shippers." The three-day program will feature 48 authorities on intermodalism, including CEOs and senior officials from railroads, motor carriers, steamship lines, and third party principals, with a special emphasis on key shipper participation in most panels.

Four railroad chief executives will speak on the theme, followed by questions from shippers and the press. Panel topics for the Expo will include:

"Intermodal Challenges in Global Trade"

"Intermodalism in Europe"

"Choosing Your Piggyback Partner"

"Status Report on the Intermodal Industry"

"New Multimodal Concepts"

"Motor Carriers—Intermodal's First and Last Link"

"Just-in-Time and Intermodalism"

"Moving Toward a Paperless Environment"

"Proper Handling for Damage Prevention"

With only a few months left before the '88 Expo, 181 companies have booked exhibit space in the vast World Congress Center. Compared with 136 in 1987, 117 in 1986, and fewer than 50 in 1984 and 1985, "This is a good barometer of the momentum of what has become the foremost intermodal exhibition in the world," said Mr. Welch. Less than 15% of the total exhibit space is now available.

For the '88 Expo, all exhibitors will be positioned in one mammoth hall in the Congress Center, with trailers and containers displayed just outside. The rail rolling stock will include 20 posi-

tions on the tracks immediately in front of the building. All exhibit space will be within a 150-yard radius. "To our knowledge, the Georgia World Congress Center is the only facility in the western hemisphere where rail, container, and booth space can be accommodated in such a tight configuration," said Mr. Welch.

*(Georgia Anchorage)*

## **Georgia Ports Authority To Begin Electronic Data Interchange**

Mr. George J. Nichols, Executive Director of the Georgia Ports Authority, announced that within 60 days, the Georgia Ports Authority will have the technical capability in place to begin Electronic Data Interchange.

Mr. Nichols, in New York to participate in the Containerization and Intermodal Institute Conference, "Communication and Transportation in the Global Economy," made the announcement during a panel session focusing on port automation. "We have recently been informed by one of the major shippers in the United States that Savannah has been chosen as a consolidating port, not only because of our favorable geography and facilities, but because of our advanced automated port systems," said Mr. Nichols. "We have made a commitment to bring on-line our first phase of EDI as soon as possible."

Electronic Data Interchange involves computer-to-computer data exchange for use by industry and government. The objective of the EDI program is to develop and maintain standards for Electronic Data Interchange so that they are generally usable by all sizes and types of companies.

With EDI, improvements in operations timing, data handling, and associated costs not readily achieved in paper-based systems are facilitated through the electronic interchange of data between manufacturers, wholesalers, distributors, retailers, brokers, shippers, consignees, carriers, forwarders, banks, and government.

Electronic Data Interchange is being actively developed in North America, Europe, and the Far East. Many trade

groups and committees, both nationally and internationally, are now developing EDI standards. In North America, development is proceeding under the direction of the American National Standards Institute (ANSI) X.12 Committee, and the Transportation Data Coordinating Committee (TDCC). ANSI is servicing the grocery and warehouse industries, as well as general business applications. TDCC is developing standards for the air, motor, rail, government, and ocean industries, under various committee headings.

The Georgia Ports Authority is actively participating on a subcommittee of the Ocean Standards Maintenance Committee called TOPAS (Terminal Operators and Port Authority Subcommittee). This group has recently completed an ocean manifest transaction set for EDI transmission. Other sets for gate activity, stow plans, and vessel schedules are under development.

Initially, steamship lines calling the port will be transmitting manifest data in standard EDI form directly to the GPA computer, saving the labor cost of keying this data into the computer. Shippers and importers will be offered this capability to exchange information concerning their cargoes. As EDI standards are developed, they will become available to customers of the Georgia Ports Authority.

An acknowledged leader in systems development for the port industry, Georgia Ports Authority instituted an on-line container tracking system in 1977, featuring vessel scheduling, receiving, equipment control, cargo status and departure information available electronically to authorized users.

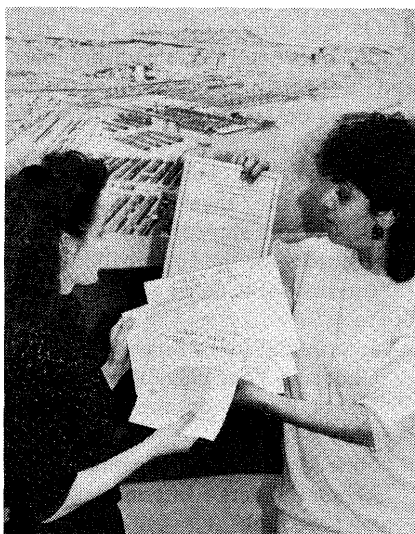
Since that time, new data base technologies have been applied, and with the assistance of an Automation Advisory Committee comprised of representatives from U.S. Customs, U.S. Department of Agriculture, Customs brokers, freight forwarders, agents, steamship lines, and truckers, the COBRA (Customs On-Line with Brokers for Rapid Action) System was developed. Improving operational efficiency by reducing paperwork and minimizing time from vessel discharge to gate departure, the COBRA System provides paperless 3461 Customs entries, manifest data in advance of vessel arrival, electronic entry rejection, and

complete cargo activity and status information.

Electronic Data Interchange will allow the Georgia Ports Authority to provide a natural progression in state-of-the-art systems development for its customers, while utilizing existing systems. "It is the intention of GPA to not only provide modern, efficient terminal facilities, but to act as a center for the exchange of information with our international trading partners," says Mr. Nichols. "EDI is the wave of the future, and the future is here."

## **Houston Transportation Festival May 20 - 22**

The fifth annual International Transportation Festival has been set



*Marine Exchange Photograph*

**CONTINUED PROSPERITY** — 1987 Golden Gate ship traffic reflected the continued prosperity of Northern California world commerce, a new statistical report by the Marine Exchange reveals. Staffers Lisa Moro (left) and Wanda Caliz examine some of the detailed reports produced by the Exchange's new ship tracking database, which tallied 3,662 arrivals last year plus 1,720 intra-system shifts between the many ports and terminals of the bay and river system. While U.S. vessels — totalling 1,071 of all traffic — decreased 4.4%, foreign flag activity rose to 2,591 vessel arrivals. Ships carrying containerized cargoes increased to over 35% of all Golden Gate arrivals last year.

for May 20-22 at the Port of Houston's Turning Basin Terminal. The event is part of National Transportation Week (NTW) which is scheduled for May 16-22.

National Transportation Week activities include the Ms. Transportation Contest to be held on April 8; a children's poster contest to be judged on April 23; a student essay contest, a Fun Run to be held on May 14; a soft ball tournament to be held on May 14-15; an industry luncheon to be held on May 17; NTW night at the Astrodome on May 18; and concludes with the festival on May 20-22.

The festival is a combination of an educational exhibition, TRANSEXPO, and a benefit festival for the Houston International Seamen's Center. Attractions at the festival include an industry barbecue cook-off, games, international foods, educational displays, continuous boat rides and other activities.

## **Jaxport Statistics: Cargo Tonnage Up**

The Jacksonville Port Authority (Jaxport) financials for the quarter ending December 31, 1987 show a dramatic increase in containerized cargo tonnage and dry bulk cargo.

Cargo tonnage at the Blount Island and Talleyrand Docks and Terminals facilities increased 42% in the first quarter of the authority's 1987-88 fiscal year, compared with the same period last year, according to data released recently.

The overall increase is primarily due to a 44% jump in container cargo tonnage and a 425% increase in dry bulk cargo.

In addition, imported steel, coffee, tractors and other products were all up. Paper exports showed a strong improvement, due to increased foreign demand for paper products.

## **Sea-Land Expands Jacksonville Operations; Econ. Impact \$80 Mil.**

Sea-Land Service, Inc., Jacksonville Mayor Thomas L. Hazouri and the

Jacksonville Port Authority (Jaxport) announced that a major development at Jaxport will have a total economic impact on the Jacksonville area economy of \$80 million.

According to the announcement Sea-Land's containership operations will be moving from the Authority's Talleyrand Docks & Terminals to Blount Island Terminal, effective February 28, 1988.

The development is a key element of a history-making agreement between Sea-Land Service, P & O Containers (Trans Freight Lines) Limited, and Nedlloyd Lijnen B.V. in which the three major ocean carriers will share space aboard 12 of the world's largest container ships.

Based on projections, the new arrangements at Jacksonville should increase Sea-Land's cargo tonnage over Jaxport by approximately 40%, bringing Sea-Land's total Direct Economic Impact on Jacksonville Port District to \$50 million. Using the UNF model multiplier for indirect (or "ripple") effect on the community, the new service arrangement will result in benefits of \$80 million in inter-industry purchases for supplies, machinery, services, labor and other activities or factors utilized in support of primary cargo flow activities.

Sea-Land has been an anchor tenant in the Port of Jacksonville since 1959. The line operates direct service to Europe, Puerto Rico, Caribbean, and Central America from Jacksonville, with transshipment from points in these trades to anywhere in the world. The newly rationalized service will give Jaxport two new ship services in TFL and Nedlloyd, and increased service to the United Kingdom and Northern Europe.

The decision by Sea-Land comes as a result of aggressive marketing techniques employed by Jaxport over the past four years and will re-position the Port of Jacksonville as a major maritime partner in world trade and commerce.

"This is a banner day for not only Sea-Land and the Jacksonville Port Authority, but also for all of the businesses and citizens of our region," commented Mr. Paul D. deMariano, managing director of Jaxport. "The investment of Port Authority funds in capital improvements for Sea-Land facilities will provide the basis for dramatic increase in business oppor-

tunities for all segments of the thriving northeast Florida economy."

#### FACT SHEET

##### Sea-Land/Jaxport

Current Sea-Land tonnage	613,729
(Fiscal 86/87)	
Containers	36,817
<b>Effect of New Development</b>	
Tonnage increases 40%	860,000
Container count	
increase 40%	51,543
<b>Economic Impact</b>	
New tonnage only:	
246,000 x \$58/ton direct impact x	
1.67 (ripple multiplier)	\$23,827,560
<b>Total New Operation</b>	
860,000 tons x \$58/ton direct impact	
x 1.67 (ripple multiplier)	\$83,312,960

#### Paperless Wharfage System at Los Angeles

A new paperless wharfage reporting and billing system became fully operational with the arrival of American President Lines' "President Lincoln." The system is designed to improve productivity, speed billing and cut costs for both the Port and its customers. The Port of Los Angeles hopes to eventually involve all Port customers with the system to truly automate wharfage reporting.

#### Gov. Realigns Maryland Port Administration

Governor William Donald Schaefer announced a major realignment of management positions at the Maryland Port Administration and said the changes will help the agency operate more like a private business.

The Governor said his plan, which involves creating several new positions and combining or abolishing others, will improve the agency's competitive posture as it works to attract additional cargo for the ports of Baltimore and Cambridge.

"These changes will eliminate redundancies, clarify reporting relationships, and put MPA's management in a better position to address key issues," the Governor said. "The changes will

also position the MPA to carry out the port initiatives that were recommended to me by a blue-ribbon committee and for which I am seeking the legislature's approval."

The Governor's plan creates two new high-level positions at the MPA: a chief operating officer and a chief financial officer. Both of these positions are expected to be filled from the private sector.

The chief operating officer, who will report to Maryland Port Administrator David A. Wagner, will be responsible for the internal activities and day to day operations of the MPA. Mr. Wagner, who will assume the additional title of executive director, will continue as the chief executive officer of the MPA and will now concentrate on external activities, including current and potential port customers as well as long range planning and major policy issues.

The other new position, director of finance, is intended to improve the MPA's systems for budgeting, accounting, and fiscal analysis. This post is one of five top level positions that will report to the chief operating officer, who will be known as deputy executive director. The other four such positions are the directors of development, operations, marketing and administration.

#### MPA Crane Downtime Falls to a Record Low

Crane downtime at marine terminals controlled by the Maryland Port Administration fell to a record low in 1987 and, for the first time, dropped below 1 percent.

The Port of Baltimore's Dundalk and North Locust Point marine terminals reported crane downtime of just 0.95 percent. Crane downtime is calculated as a percent of total operating minutes and reflects the operational readiness of the equipment.

The 570-acre Dundalk Marine Terminal, the port's largest cargo handling facility, reported a crane downtime of 1.01 percent in 1987 compared to 1.69 percent for the previous year. The North Locust Point Marine Terminal's crane downtime in 1987 was .31 percent compared to .83 in 1986.

The low crane downtime will mean

faster and more efficient service through the Port of Baltimore, according to Anthony Chiarello, the MPA's director of operations. "Steamship lines are saving time and money in the Port of Baltimore because of these improvements," Mr. Chiarello says.

The record low crane downtime, Mr. Chiarello says, resulted from a series of MPA initiatives begun last year to improve crane efficiency. Crane maintenance functions at the Dundalk and North Locust Point terminals were reorganized, additional training was provided to crane workers at the facilities and an MPA-ILA Crane Operators Task Force was formed to establish a better working relationship between MPA crane maintenance workers and crane operators who belong to the International Longshoremen's Association.

The downtime figures cover 9 container cranes and 6 revolving gantry cranes. The Port of Baltimore has a total of eight new container cranes on order with two scheduled to go into operation this year and the other six in 1989.

## **2 New Baltimore Routes For Container Transport**

The Port of Baltimore has added two new routes to its network of highways where overweight containers of international cargo are allowed to travel.

The new routes are Interstate-95 west of the Fort McHenry Tunnel to Interstate-695 south of Baltimore, and Interstate-83 from the Maryland-Pennsylvania Line to Interstate-695 around the port's east side, connecting to I-95 north of Baltimore.

These highways, which were approved for overweight container transport by a state legislative committee under emergency regulations, join the following routes currently being used by truckers to move this freight to and from the Port of Baltimore: Interstate-70 from the Maryland-Pennsylvania Line, Interstate-95 from the Maryland-Delaware Line and roads connecting marine terminals to the CSX Transportation and Conrail intermodal yards. Use of additional routes is effective immediately, with final approval of the regulations anticipated by the committee before April 15, 1988.

"We are pleased to be able to offer truckers additional highway access for hauling overweight containers to or from our port," said Mr. David A. Wagner, Executive Director, Maryland Port Administration. These routes will increase flexibility for shippers, steamship lines and truckers that do business in Baltimore.

## **Waterfront Aquarium, Park Project Begins In New Orleans**

Mayor Sidney Barthelemy recently lowered the boom on Bienville Street Wharf. The symbolic shattering of a window in the wharfshed marked the beginning of the Aquarium of the Americas project. "This is one of those moments in history that few people see," said Mayor Barthelemy. "Yet it will turn the economy around."

For over a year, the Port of New Orleans, the Audubon Park Commission and the City of New Orleans huddled over details of the proposed \$40 million aquarium and riverfront park project. Executive Port Director-General Manager J. Ron Brinson executed the historic contract with the Park Commission and City one week before the demolition ceremony took place.

Local voters approved a millage increase that would generate \$25 million for construction. Another \$5 million has already been committed to the project by oil companies, Jax Brewery Corp., Canal Place and Freepport McMoran, with another \$10 million still being raised through private sources.

The Port will receive nine percent of admission revenues to the Aquarium as compensation for use of its wharf structure, on which the Aquarium and Park will be built. The City of New Orleans actually owns the land beneath the wharf, but the Port has had use of the property for decades under a state servitude agreement. The City will lease the site to the Park Commission for a token \$1 a year for 50 years. An option was also granted for an additional 49 year period, with rent to be set at fair market value.

Mr. R. Ron Forman, director of Audubon Park's world-renowned zoo

and the primary force behind the Aquarium project, says the riverfront park will be finished in 18 months and the aquarium a year later. This project and the expansion of the New Orleans Convention Center will complete the nontraditional waterfront developments that extend from the Greater New Orleans Mississippi River Bridge to Governor Nicholls Street Wharf.

Port leaders recognized several years ago that the maritime community would ultimately benefit from converting waterfront property along the Central Business District and French Quarter to non-cargo uses. Because this stretch of riverfront is a natural building bank of the Mississippi, the Port faced chronically high dredging expenses each year. The financial burden from these cost inefficient wharves had to be passed on to all shippers. A creative plan was developed to encourage non-traditional use of this strip of waterfront land and bring in new revenues to the Port.

Port operating costs will be lowered by cutting dredging expenses and gaining rental funds. Presently, Port funds come from wharfage and other port user fees. *(Port Record)*

## **1988 Edition of Cruises From New York Available**

The 1988 edition of "Cruises from New York" has been published by The Port Authority of New York and New Jersey and is available from the bi-state agency to travelers and travel agents without charge.

The comprehensive guide lists 230 sailings from the New York City Passenger Ship Terminal, located at 55th Street and the Hudson River, during the 1988 season. Popular ports of call for cruise vessels operating from this Port include Bermuda, the Caribbean and Eastern Canada.

Copies of "Cruises from New York" may be obtained by writing "Cruise Schedules," The Port Authority of New York and New Jersey, Room 64E, One World Trade Center, New York, New York 10048.

Eight cruise lines will operate 12 vessels from the New York-New Jersey Port during the 1988 season. Last year, more than 400,000 passengers embarked from the Passenger Ship Terminal.

## **NY&NJ Port Authority's Orientation Program**

The Port Authority of New York and New Jersey's Port Department is offering a Port Orientation Program beginning April 20, 1988. The program, which will be repeated on June 15, September 21 and November 16, features presentations on port operations, documentation used in international commerce and import/export practices. Useful information is provided to avoid undue delays and needless expense caused by improper paperwork or procedures.

The Port Orientation Program is offered free of charge and is designed to assist management and staff members of organizations in the international trade community. Its sessions are held at either One World Trade Center in Manhattan or at the Port Newark/Elizabeth Administration Building in New Jersey.

Guest speakers include knowledgeable representatives from U.S. Customs, the Waterfront Commission, the shipping industry and the U.S. Coast Guard, as well as Port Authority personnel. Pertinent topics include insurance, banking, hazardous and oversized cargo handling via tunnels and bridges, automated clearance, port security and export development.

Further information is available from Program Coordinator Edward Stout of the Port Sales Division, Port Authority of New York and New Jersey, One World Trade Center — 64E, New York, New York 10048 or call (212) 466-8336.

*(Via Port of New York-New Jersey)*

## **Port of Oakland Studies Ship-Rail Interface**

Reacting to forecasts that transpacific trade will more than double by the year 2000, the Port of Oakland has launched a \$145,000, six-month study to assure that truck and train operations within the harbor area achieve maximal efficiency in supporting transfers of seagoing cargoes.

The goals of the study—to be performed by Vickerman-Zachary-Miller, an Oakland-based maritime consulting firm, together with subcontractors

Manalytics, Inc., of San Francisco, and DKS Associates and Baseline Environmental, both of Oakland — are threefold: to ensure that all current Port projects promote efficient ship-to-rail and ship-to-highway movement; to identify opportunities for improving the Port's competitiveness; and to assess the impact of new technology on harbor road, rail and terminal operations.

Among factors to be weighed in formulating the plan will be the amount of cargo moving locally, the volume of shipments carried by rail and by truck, and the relative merits of alternative rail loading systems to maximize efficiency of operations.

"The ports with the fastest, most cost-effective system for moving cargo between ships and trains will benefit most from future growth," notes Oakland Board of Port Commissioners President G. William Hunter. "This study will help identify that system for the Port of Oakland."

*(Trade & Transport Briefs)*

## **Record Tonnage Year For Port of Charleston**

Calendar 1987 was another record-shattering tonnage year for the Port of Charleston as total volume of cargo reached 5,824,727 tons, up 18 percent from the 1986 total.

"It was a gratifying year," said Ports Authority Executive Director W. Don Welch. "We attained healthy increases in our breakbulk cargo tonnage, and our container volume continued to rise all year. Through a tremendous effort of the Port staff and the entire Charleston waterfront community, we have accomplished many previously targeted goals despite shakey world economic conditions."

Containerized cargoes through Charleston reached 4,506,588 tons for an increase of 817,927 tons, or 22 percent, over the 1986 total of 3,687,661 tons.

Breakbulk cargoes in 1987 totaled 1,063,956 tons, up 7 percent from the year-earlier level of 990,858 tons, as several breakbulk commodities scored healthy increases after having been on a decline in recent years.

Mr. L. Duane Grantham, the Port's director of marketing and sales, ex-

pressed particular pleasure in the attainment of significant improvement in Charleston's breakbulk tonnage. "Near the end of 1986, we targeted a number of areas in which we felt we were weak. Breakbulk cargo was the area which needed the most attention. Our sales staff worked hard on breakbulk cargo development throughout the year, giving it almost half their working time.

## **1987 Record Year for Port of Georgetown**

The Port of Georgetown scored record gains in Calendar 1987, handling 788,592 tons of bulk and breakbulk cargoes.

The new figures surpassed the Port's previous record calendar year, 1986, by 120,744 tons, or 18 percent.

"This performance exceeded our expectations for 1987 by nearly 200,000 tons," said Port Director D. Claude Baker. "It shows what hard work and a total cooperative effort by our Port and the Georgetown waterfront community can accomplish."

Mr. Baker estimated that the Port's primary commodities, iron ore, woodpulp and lumber, accounted for more than 400,000 tons of cargo crossing Georgetown's docks in 1987.

The year's activity also included a record number of ships calling at Georgetown's docks. In 1987, there were 67 vessels calling at Georgetown Terminal, International Paper Company and Georgetown Steel facilities, compared to 39 in 1986.

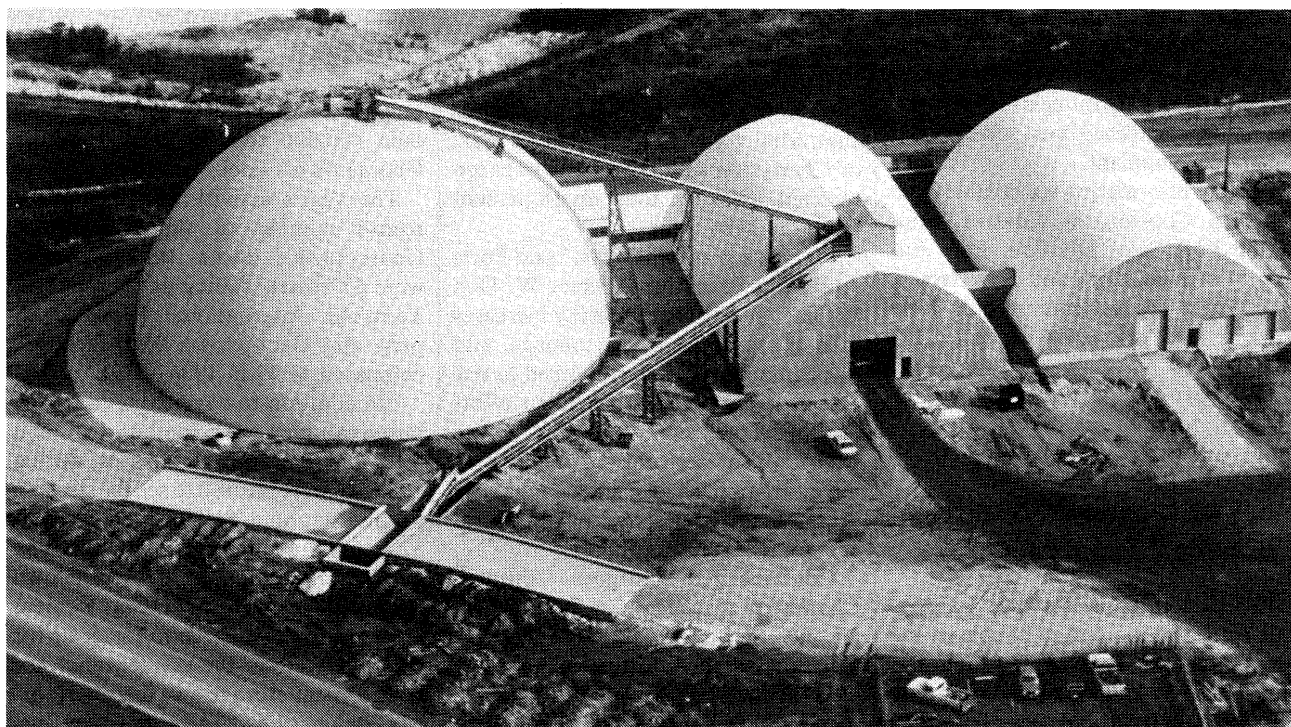
"In addition to developing new Port business among the lumber, iron and steel and woodpulp industries, during 1987, we were pleased to see the start-up of International Salt Company's new \$2.8 million salt receiving, processing and storage complex at Georgetown Terminal as well as Delta Cement Corporation's construction start-up for its new state-of-the-art terminal for bulk cement storage and distribution," Mr. Baker said. "These are two fine, environmentally clean industries which will enhance the area's industrial base and add significantly to the Port and community's overall growth.

"We look forward to continued progress at Georgetown during 1988," Mr. Baker concluded.





*The 1988 business outlook is highly optimistic at the Port of Georgetown. With all its warehouses, lumber sheds and new 700-foot-long Pier 31-B fully operational, Port officials look forward to improving upon a record Calendar 1987 in which 788,592 tons of bulk and breakbulk cargo were handled across Georgetown's docks.*



*International Salt Company (ISCO) recently handled its first full shipload of salt (11,000 metric tons) at Georgetown Terminal following test loads processed earlier last year. This \$2.8 million salt receiving, processing and storage complex at the terminal will handle both table grade and solar salt. Expected to be fully operational by March 1, the ISCO facility at Georgetown will process some 100,000 tons of salt annually and will be the primary U.S. South Atlantic receiving station for the importation of the firm's salt.*



## Stockton in Profile

The Port of Stockton is a quasi-public agency which operates as a business in a competitive market. Earned revenues are used to modify and replace outdated equipment and facilities and to construct new ones. Unlike most public entities, the Stockton Port District does not receive taxes in support of its operations.

The Stockton Deepwater Ship Channel is thirty-seven feet deep at average low tide. Panamax-sized vessels can transit the Channel fully loaded at high tide. Facilities and equipment are available to handle all types of cargoes either by vessel or transshipped by truck and rail.

Warehousing distribution facilities are available either on a lease basis whereby the tenant operates or the Port can operate for tenant. All warehouse complexes are served by three transcontinental rail lines with staging areas for truck loading and unloading.

The Stockton Board of Port Commissioners is comprised of seven members. Three appointments are made by the San Joaquin County Board of Supervisors and four by the Stockton City Council.

The Board sets policy, approves contracts, long-term lease agreements, major purchases and budgets and is responsible for hiring a Port Director to operate the Port on a day-to-day basis. A Chairman and Vice Chairman are elected annually by the Commission members.

The Board presently meets twice monthly and the meetings are open to the public.

Alexander Krygsman has served as Port Director since 1977. Under his direction, the Port of Stockton has realized the deepening of the ship channel, privately financed industrial complexes have been constructed and are operating on Port property; new equipment has been purchased to increase production and facilities have been constructed or streamlined to capture new cargoes and to more efficiently handle existing ones.

The Port of Stockton has more than 2.5 million square feet of Class "A" Warehouses, which are either operated by the Port or leased to tenants who provide their own labor.

Just one mile from Interstate 5, these facilities are served by three transcontinental railroads. Six rail cars can be received simultaneously.

The warehouses are complemented by covered staging areas for easy truck and container unloading and warehouse/distribution operations can be tied into the Ports Sperry System 80, Model 8, mainframe computer for complete transcontinental distribution services.

*(1987 Annual Report,  
Port of Stockton)*

## Load Centers Change Shipping Games

*(Reprinted from Port News, Port of Charleston)*

**By Dr. Paul Nelson**

If you were a manufacturer in Jacksonville, Fla., and you sold regularly to customers in South America, why might you routinely ship your product by way of the Port of Charleston? And, in the same vein, why might a Charleston shipper regularly route his shipments bound for Puerto Rico through the Port of Jacksonville?

The answer to both of these questions is probably: load centering.

Load centering is the relatively recent practice of steamship lines, particularly container lines, of greatly reducing the number of ports called in order to offer faster and more regular service. Anyone wanting to ship on that line has to get his shipment to the port which the line has designated as its load center. The destination port also will be a load center.

In the examples cited, the steamship line which the Jacksonville manufacturer uses to get to South America has decided that it will call only one port in the Southeastern United States and that port is Charleston. Charleston is that line's load center, and any cargo leaving or arriving in the U.S. will move through the Port of Charleston. Likewise, the Charleston shipper has found that the best steamship service for him calls only Jacksonville. That is his load center.

This isn't the way it used to be. In the "old days," a steamship arriving from Europe, for example, would stop first in Boston to unload and then stop

at every port along the East Coast and Gulf Coast for which it had cargo consigned. Then, it would turn around and call each port from which it, or its agents, had been able to secure bookings for the return voyage — extremely time-consuming and difficult to keep schedule.

**HINTERLANDS:** In those days, each port was considered to have its own natural market area, its "hinterland." Each shipper used his nearest or most convenient port, and the steamship line which wanted the business was expected to call that port. Clearly, such a routing took a long time. And, since this was in the days before containers, all cargo was breakbulk and each port call took a long time to complete offloading and loading. It was just understood that surface freight means a slow boat to wherever.

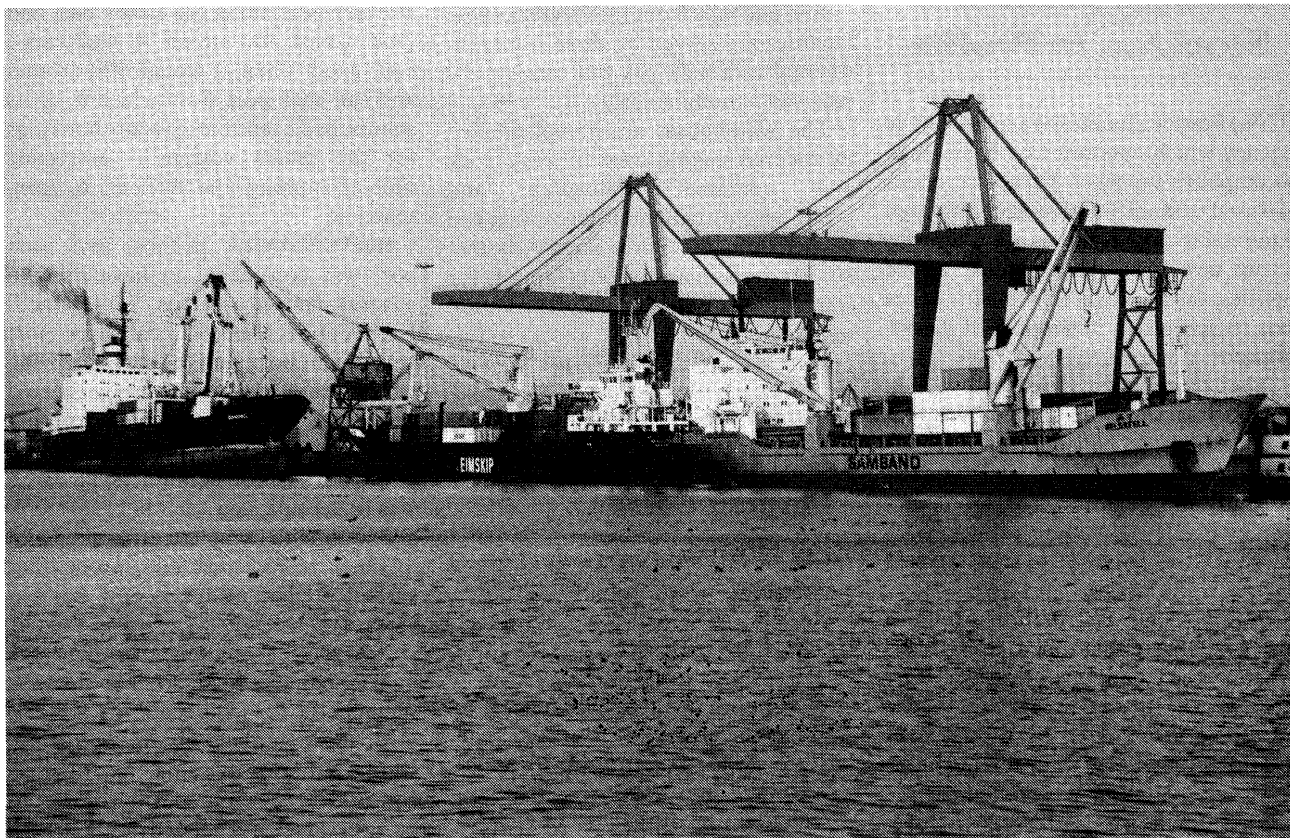
Just as the container brought the intermodal age, the container also was the impetus for load centering. In fact, once the container became a reality, load centering became an obvious conclusion. When an entire ship could be offloaded and loaded for a return trip in a day or two, it became obvious that numerous port calls were very inefficient. Furthermore, containerizable cargo is much more valuable than most other ocean-borne cargo.

**TIME AND CARGO VALUABLE:** Only 3-1/2 percent of all ocean cargo is capable of being carried in containers, but it accounts for 41 percent of the value of all cargo shipped. The more valuable the cargo, the more valuable time becomes. When the container lines realized how important fast, dependable schedules would be to their customers, load centering for the heavily traveled cargo lanes rapidly became a reality.

Quite a few containership and breakbulk operators still are not yet using the load center concept as their basic structure, but the concept is growing. Actually, it is similar to the hub operations of all the major airlines, the air freight and parcel carriers, and the LTL truck lines; now even the rails are developing hubs. Whistle stops by air, road and rail are a thing of the past, and soon they probably will be for ocean transport as well.

Load centering also means that no longer does any port have a geographic

*(Continued on Page 43, Col. 1)*



## Africa/Europe

### Antwerp, Portobras Sign Cooperation Agreement

In Antwerp, a technical and scientific cooperation agreement was signed between A.P.E.C. and a Brazilian delegation led by Communications Minister Carneiro Tavares and Portobras President T. de Souza e Mello. A.P.E.C.-signatory was President Derkinderen.

The purpose of the agreement is to promote the exchange of port technology between Portobras and Antwerp. It covers all themes related to the port and its operation, including planning, projects, operations, civil engineering techniques, electrical and mechanical construction, dredging, purchasing methods and acquisition techniques for equipment, loading and unloading, handling and storage for goods of all kinds, types of packaging, management of human resources, material and financial subjects, and transport problems in relation to ports.

The four-year cooperation agreement aims at training and instructing

Free Port of Copenhagen Orient Pier (January 1988). From left: "Dekabrist," "Shogafloss," and "Helfafell".

### Copenhagen Takes Lead in Container Growth

1987 was another banner year for the Port of Copenhagen. With more than a 21% jump in container traffic over the year before — some 14,500 added units — it became Scandinavia's fastest growing container port.

An intensive marketing effort, challenging Sweden's Gothenburg for marked leadership, is credited with the feat. With the number of incoming and outgoing containers now in the 100,000-a-year range, the port is, according to the port authority, "firmly positioned as a major factor in the container business, well able to handle further volume increases due to an efficient redistribution network to all points in Scandinavia, the Baltic, and the northern part of the Continent."

The added container traffic reflects an overall increase in the freight volume handled by the port in 1987. Exports surged ahead with a 52% increase and imports climbed 14% — adding up to 9.3 million tons which is more than the 1986 record. This is the fourth year in succession the port has exceeded the previous year's tonnage.

The increased port activity comes at a time when stringent new tax measures are responsible for sagging car imports, and the demand for coal and heating oil is down due to the Danish capital growing reliance on natural gas, brought in by pipeline.

At current levels, the Port of Copenhagen is run by about 15,000 vessels a year. According to the port authority, however, this total is expected to increase, and further investment in cargo handling as well as passenger facilities is planned to meet the growth.

port specialists, as well as providing them with in-service training, in order to promote the exchange of experience

and information on the operation and the peculiarities of the port systems of Brazil and Belgium. (*Hinterland*)



## Load Centers Change

*(Continued from Page 41, Col. 3)*

market area. A container shipment originating in Pittsburgh may move just as easily through the Port of Charleston as through Baltimore. As a result, fierce competition has broken out among ports. Each port wants to be chosen by the container line as its load center.

**CHARLESTON DOES WELL:** Anyone looking around can see immediately that the Port of Charleston has done well in the competition. It has the necessary prerequisites to merit a line's selection as a load center: excellent container handling facilities, smooth intermodal connections for rail and truck, a top-notch U.S. Customs operation, many professional brokers and forwarders, an excellent labor environment, and a truly marketing-oriented Ports Authority.

Two facts, however, are clear:

1. The shipper and the consignee really do not care which port is the load center — as long as the shipment arrives safely and on time, at a competitive cost and with the best service.

## Hamburg No. 2 Container Port in Europe

The container revolution in sea-borne cargo traffic is far from over. Worldwide, more and more goods are being loaded into containers and sent to the consignees by road, rail or sea. Although a mere 20 years old, the container has conquered the world of transport.

A trend that has also been profitably exploited by those German seaports that adapted early to the growth of container traffic. In the Port of Hamburg alone, Germany's biggest port, some 1,451,351 TEUs were handled in 1987, an increase of 16.5% on 1986 (1,245,961 TEUs). Incoming traffic accounted for 743,822 TEUs and outgoing containers for 707,529 TEUs.

In tonnage terms the increase amounted to 18.1% (14,399 m). The containerization rate (share of containerized goods in all general and bagged cargo) rose from 56.5% to 60.7%. According to the statistics available, these Hamburg figures mean that the Elbe port has now claimed second place in the European container port league.

A very noticeable increase was in 40' containers — 27.9% up on 1986 reaching 271,783 units. The number of 20' containers rose to 661,972, an increase of 12.8%.

The Port of Hamburg continues to lead Europe in container traffic with the Far East. An increase of 33.2% in 1987 to 587,166 TEUs meant it was actually able to strengthen this lead considerably. Incoming containers accounted for 323,278 TEUs, outgoing containers for 263,888 TEUs.

2. In practically all cases, it is the steamship line that ultimately decides which port or ports will be its load centers; if the line doesn't get the service which it should get, it can easily find another port.

Therefore, everyone at the intermodal interface of the Port of Charleston is absolutely critical in making sure that the port continues to earn its reputation as one of the best load centers on the East Coast.

## Le Havre Preparing For 1992 Deadline

At a recent board meeting Director-General, Mr. Smagghe, presented an important document entitled "The Port of Le Havre and the 1992 Deadline — The Next Five Years: 1987-1992," which is designed to make more generally known the great assets possessed by the Port of Le Havre, the extent of its role as an economic driving force and the general strategy he has chosen for the run-up to the universal European market in 1992.

The port has many strengths, among others an exceptional geographical position and all the qualities of a deepwater harbour right down on the coast, immediately accessible from the sea, with all the accumulated know-how that has made it the leading French port for goods in terms of value and the leading French container port. Yet despite this it is currently going through a difficult phase.

One difficulty is the dramatic drop in the fuel trade, as nuclear power provides more and more energy;

Another difficulty is the world economic crisis, which directly affects the port's customers, whether shippers, owners or businessmen;

Yet a further difficulty is the strong competition provided by the ports of North Europe.

The situation is one that the Port has decided to react hard against, so as to hold both its place and its competitive position, in the service of the region and of the nation as a whole.

### The port's contribution to the regional and national economy

Le Havre's national and international role is well known, but this is not so true of the part it plays in the foreign trade of its home area, Upper Normandy. Compared with other parts of France, the economy of its particular region is turned firmly outwards and the fact that the port of Le Havre handles 3/5ths of the region's external trade makes it the principal vector of external trade for all Upper Normandy.

Le Havre's port/industry complex is a major source of activity, employment and wealth. The port itself injects over 800 MF into the local economy every year, in the form of work, purchases and salaries. In value added

terms, the port community is worth 1 1/2 bn francs for the economy of the region. At the national level the figure rises to 5 bn francs. In employment terms, one person in four in the Havre employment area is related in some way to the port, which creates work for local trade, small craftsmen, banks and the medical professions. Indirectly, moreover, through rates and professional taxes the local authorities collect some 500 MF of revenue annually from the very fact of the port's existence. Which gives the measure of its importance as a pillar of the region's economic development.

### The competition from abroad

In an international shipping context marked by over-capacity, with consequently fierce competition between owners and direct comparison possible between Le Havre and its main rivals at the tonnage level (Antwerp 90 MT, including 36 MT of general cargo; Rotterdam 255.5 MT, including 46 MT of general cargo), the port of Le Havre plans to step up its general cargo and food traffics, these being the sectors that produce the most added value and the greatest number of jobs. This is the assignment given to the plan for improving the overall competitiveness of the port, which has been in effect for some months now.

### Policy guidelines

The ways in which it has been decided to develop the port of Le Havre to face the competition from Antwerp and Rotterdam, as we approach the opening up of the European Community's transport market in 1992, concern:

- road haulage to and from the port, with action already taken at port level to reduce waiting time in the docks, but with further action needed to put road transport to Havre docks on a par with international transport;

- rail transport, with the introduction of shuttle trains and charter trains in collaboration with French Rail and the CNC;

- river transport, which is important for bulk traffics in Le Havre but is hard to develop, particularly for the movement of containers, whereas it plays a major role in Benelux ports;

- infrastructures, with a road-building programme for Upper Normandy and Le Havre, i.e. motorways to the North and East, across Upper Nor-

mandy and Picardy (Le Havre/Amiens/Saint-Quentin), and to the West and South-West (Alençon/Le Mans/Tours), the opening of the Normandy Bridge across the Seine, the addition to the motorway programme of a through route from Calais to Bayonne and Spain, and a link road to the Channel Tunnel;

- improved clearance on the Havre-Rouen-Paris railway line, prior to the arrival of maxi-containers;

- improvements to the waterway network towards eastern France to make it accessible to giant barges.

### Cargo handling

The elaboration and introduction by the dockers and stevedores, in close concertation with the port authority's top management, of a "mobility plan" for dockers, resulting in new and more efficient working conditions, with a less rigid gang system and new working hours, is a further decisive element in making the port more competitive, since it reduces handling costs and therefore the overall cost of transiting goods through the port.

### Other major points

- the simplification of administrative and Customs formalities through the introduction of the ADEMAR data system and, in close collaboration with the Board of Customs, the introduction and improvement of the free zones;

- commercial and industrial promotion with the collaboration of all concerned, either through "Port Alliance", in which the Port Employers Association, the Chamber of Commerce & Industry and the Port Authority prove their determination to work together as a single entity for the commercial promotion of the port, or in "Havre Promotion", set up jointly by the Havre City Council, the Chamber of Commerce, the Employers' Federation and the Port Authority to further the economic and industrial development of the Havre area as a whole.

### New facilities programme

The last part of the plan to make the port more competitive is the new equipment programme approved by the Board of Directors, including the creation of a combi-terminal at the Florida Wharf for mixed containerised, conventional or single load cargoes, and the provision of a Rapid Turnaround



Port (RTP) on the north and south sides of the René Coty Dock, indispensable complement to the Atlantic, Europe and Bougainville container terminals. The plan is to offer vessels the shortest possible deviation from their normal route along the Channel and so attract new container traffics, particularly where international transit is involved or transshipment from one line to another. The new facility will provide Le Havre with an international switching point for containers, as good as any in Europe. Moreover the entire programme is based on a new form of management philosophy which leans heavily on the private sector.

*(Port of Le Havre Flashes)*

### **Dublin Port Marketing Customer-oriented**

Dublin Port is to embark on a new marketing campaign in 1988. The campaign comes as a direct result of a major piece of research on customer attitudes which was commissioned by the Port. The research indicated a number of areas where improvements could be made in the Port's facilities and services.

Port Chairman Bill Lynch said that such improvements had been made in a number of areas and that 1988 would see the start of a new customer-oriented business policy. He said that the Port Board was now confident that the problems of recent years are behind them and that 1988 would see Dublin consolidate its position as Ireland's leading Port.

He noted that Dublin had facilities second to none. "It is sobering to think that if we had to replace Dublin Port and its facilities today it would cost between £800 and £1,000 million to do so. That is the kind of investment that has been made in the Port — an investment that has been made by the Board and one that is free of State assistance and is, in overall terms, virtually debt free.

"We have the facilities — better than any Port in the country. We appreciate only too well, however, that we have no divine right to business or to success. We must compete not alone with our fellow ports in the South but also with the ports of Northern Ireland. And let

us be very clear, there is competition from across the border where ports are grant-aided and customs clearance at the land frontier is perceived to be more effective.

"We now need to prove to customers both old and new, that we can offer them the service that their business requires in the late 1980s. And this is why we have committed ourselves to a new marketing plan in 1988 to ensure that Dublin Port consolidates its position as the key link in our vital import/export transport chain — Ireland's number one port."

He pointed out that among the initiatives being undertaken in 1988 would be closer liaison with all Port users both through sales calls and print; a corporate advertising campaign; greater use of computerisation; and speedier documentation handling. *(Port Jimes)*

### **Dublin, Oslo to Form Sister Port Affiliation**

Dublin Port is to twin with the Port of Oslo, Norway, as part of the 1988 Dublin Millennium celebrations. Given the many links between Ireland and the Scandinavian countries, the Port believes that it is appropriate to formalise the links between two of Europe's oldest ports. It is particularly appropriate in Millennium year to twin Dublin, one of the earliest Viking settlements in Ireland, with Oslo, one of the birthplaces of Viking culture.

In 1986 Dublin Port handled 7.7 million tonnes of traffic while the Port of Oslo handled 5.7 million tonnes. The population of Greater Dublin is currently about 1 million persons, while Oslo has a population of just under half a million. This leaves both ports and cities in the medium league bracket and indicates that the local and environmental issues facing both ports are on the same scale.

A full programme for the initial twinning ceremonies and for subsequent co-operation between the two ports has yet to be developed. It is hoped, however, to increase direct trading links and to establish relationships which will foster and develop appropriate levels of co-operation and exchanges of expertise between two

ports each of which has spawned capital cities. *(Port Jimes)*

### **Goods Traffic Stable In Amsterdam in 1987**

Goods traffic in the Port of Amsterdam stabilised at 29.6 mln. tonnes in 1987 compared to 1986, due to a good fourth quarter. Last year 14.8 mln. tonnes of liquid bulk cargoes were handled, an increase of 4.2%, while dry bulk cargoes declined by 8% to 10.7 mln. tonnes, despite a sharp increase in the transit of animal feeds/oil seeds.

The labour-intensive general cargo sector fell back by 4.8% compared with 1986. With a growth in container traffic and in the import of cars, the total general cargo package totalled 2.5 mln. tonnes.

There was a sharp 59.6% increase in "other sea-going traffic" (which includes fertilizers, sand and gravel) to 1.6 mln. tonnes. The number of sea-going vessels handled in the Port of Amsterdam in 1987 rose by 1% to 4,284. After decades of increases in the average ship size, there was a decline in total tonnage which came out at 29,765,000 (30,110,000) gross registered tonnes. In the coming years, Amsterdam Port Management expects the annual transit cargo to remain at around 30 mln. tonnes.

### **Dragon Line Service Links Swansea, Belfast**

Dragon Line's new container service linking Swansea and Belfast has now become firmly established at Swansea following the signing of a 21-year agreement between Dragon Line and Associated British Ports.

The service, which began in February last year, was designed primarily for containerized Welsh anthracite household coal for the Northern Ireland market; but it is now handling substantial amounts of other unit load traffic as well.

Dragon Line (a wholly owned subsidiary of the Coastal Group) will be investing at least £250,000 in improvements to the Swansea terminal over the next few months and is also considering expanding the terminal in the future.

### Poor Waterfront Productivity Hit

HARSH criticism alleging poor waterfront productivity in the eastern states has prompted a unanimous South Australian reaction pointing to the Port of Adelaide's competitive edge over the nation's other major ports.

The local comments are in response to a verbal lashing from Dr. Peter Catts, NSW president of the Australian Small Business Association, who has challenged the Federal Government to attack the "disgraceful lack of productivity on Australia's waterfront."

Dr. Catts claimed that it was taking six to eight weeks to clear containers from choked eastern states' wharves.

His comments brought a "What's new?" reaction from local business chiefs who told SPJ that:

- \* many SA importers remain inconvenienced by interstate loading delays,
- \* such comments back up the growing SA lobby for more frequent services, and
- \* bordering regions are preferring to use Port Adelaide, rather than taking 'pot luck' in Melbourne.

In his tough call urging Prime Minister Hawke to tackle the waterfront problem head on, Dr. Catts said thousands of small businesses dependent on raw material imports will go bankrupt if the port delays are not fixed soon. (*Shipping & Ports Journal*)

### New Equipment for Sydney Port Safety

The safety and control of shipping movements in Sydney will be improved by a program to upgrade communications systems in the Port Operations and Communications Centre at Millers Point.

The Minister for Transport, Mr. Terry Sheahan, said the Maritime Services Board would spend \$600,000 installing the most modern and efficient communications equipment.

"The Millers Point tower controls all shipping movements in Sydney

Harbour and Botany Bay as well as communicating with vessels approaching the port," Mr. Sheahan said.

"It plays an essential role in maintaining safety for all vessels using the waterways and provides emergency radio circuits.

"It also boosts the efficiency of the commercial port operations by minimising the delays for ships entering or leaving port."

Mr. Sheahan said the existing marine and domestic communications systems, installed when the tower was built in the early 1970s, has reached the end of its useful life. The new communications system would serve into the next century.

The upgrading, which would be funded by the MSB from its own resources, would also involve improvements in working conditions and efficiency for the communications officers working in the tower.

Mr. Sheahan said the project was part of a drive to increase the efficiency of the NSW ports system.

"The NSW ports handle more than 90 million tonnes of cargo a year, and their efficiency is a major factor in our trading performance," he said.

"The Maritime Services Board is mounting a two-pronged campaign to increase its productivity and reduce costs by improving its management and work practices and by upgrading outmoded or inefficient plant."

### Auckland Princes Wharf Redevelopment Afoot

Downtown Auckland will have a lively new focus by 1990 with the \$190 million redevelopment of Princes Wharf into a hotel, market and entertainment complex.

The Auckland Harbour Board has selected the Mace Development Corporation Ltd. as its preferred developer for the wharf, following close evaluation of their scheme plan proposals.

The Mace proposal features a four-storey 225-room hotel, a 100-berth marina and national yachting and boating centre, a modernised international passenger terminal, a maritime museum, a quayside marketplace featuring restaurants and retail areas; an entertainment and cultural centre with two theatres and a cinema; an art gal-

lery; and car parking for some 700 cars.

The development has placed special emphasis on public spaces, with a public promenade around the full perimeter of the development. Semicircular steps and balconies at the northern end of the wharf also provide a public grandstand area for entertainment and public activity.

The development will be linked to the city by overhead walkways across Quay Street, and moving footpaths will help pedestrians as they travel around the complex.

The Chairman of the Board, Mr. R.W. Carr, said that the Mace proposal was selected because it contained a good mix of facilities within the area, and the company had conducted extensive financial and volume research to justify its recommendations.

The Mace proposal also gave greatest attention to public space, and opportunities for Aucklanders to use this facility, and enjoy their harbour.

A hotel was seen as a key to the successful development as it provided 24-hour patronage and use, and this was also reflected in the high emphasis on food and entertainment facilities.

The Board is now seeking the legislation to allow the wharf to be developed for other than port purposes, and the developers are expected to make an early start once this has been passed in Parliament.

The Board has targeting the marina for the next Whitbread Round the World yacht race boats, due to call at Auckland in 1989, and the wharf development in time for the 1990 Commonwealth Games.

Still to be finalised is the exterior design, and the developers are working on a new facade and the structure, which will become a major part of the Princes basin.

"This is a superb opportunity to create a unique symbol of Auckland, and we plan to do it right," Mr. Mace said.

Features of the Mace plan for Princes Wharf include:-

- \* Public areas, quality design and landscaping — spacious public areas with public access extending the full perimeter of the wharf and to balconies, the marina breakwater and a rooftop observation area. The dramatic Waitemata steps are a central feature of the public area.



The overall design will give a strong, distinctive, timeless maritime image.

\* A Maritime Centre incorporating: a modernised international passenger arrival terminal; a Maritime Museum; a 100 berth marina and national yachting and boating centre (it will be capable of being a base for international yachting and boating events on the scale of the Americas Cup, Whitbread Around the World Race, and World Power Boat championships).

\* Quayside Marketplace — an exciting specialised restaurant and retail area with the emphasis on fun and entertainment.

\* Entertainment and Cultural Centre — offering a 600-seat theatre, a 250-seat studio theatre restaurant and a Showscan/Imax Cinema. The studio theatre will provide a versatile much needed rehearsal and performance space for smaller organisations such as Auckland's internationally acclaimed Limbs Dance Company and the Public Works Group.

\* Art Gallery.

\* Hotel — an international 225-room hotel offering top facilities and cuisine.

\* Parking traffic circulation and pedestrian access — a carpark capable of offering space for 700 cars, a roading system allowing bus access to international passenger terminal and hotel without interrupting pedestrian flow and a pedestrian overbridge linking the wharf complex with downtown Auckland.

*(Port of Auckland)*

## **New Zealand Port Company Program Making Progress**

The Government is pressing ahead with its plan for corporatisation of the port industry, and has set a deadline of 1 October, 1988, for the establishment of port companies.

The Auckland Harbour Board has progressed its own thinking in respect of port companies, and has recently held discussions with the Minister of Transport, Mr. Jeffries, regarding aspects of the proposals.

The Government has amended its original contention that 50% of the

shareholding should be held by local authorities, and it now recognises the importance of the port company holding 100 percent of its ownership, at least in the formative years.

The Board has clearly identified the commercial and the noncommercial aspects of its operations, and this has now been agreed. The Board management team are now finalising the exact nature of the port company or companies as it may be given the wider interests of property, and engineering services for instance.

The Board has no difficulty with the concept of commercial operations. Indeed this has been the attitude of the Board for many years, but the Board is concerned that it has the freedom to be able to act commercially, and not be saddled with restrictions, legislation or industrial agreements which may shackle its ability to be competitive.

The Board's discussions with the Government have embraced this concern, as well as covering the sensitive grounds of asset valuation, directorship criteria, financial structures, and the legal framework and timetable.

The Wellington Harbour Board has attracted considerable publicity, and Government opposition in forming its port company, and seeking to have it operate immediately. Auckland has made considerably more progress, without attracting the publicity, but simply taking advantage of this unique opportunity to reshape the port industry in New Zealand.

*(Port of Auckland)*

## **Southland Board Ready for Changes**

The Southland Harbour Board's result for the year ending September 1987 once again proved the Board as a fore-runner for the future. Last year the much criticised joint venture into stevedoring was announced — now it's the common quest of many Boards.

This year the Chairman, Mr. Tom Shirley, in his Annual Review, announced a modest profit from port operations of \$362,843 but more importantly, as the Chairman pointed out, few Harbour Boards have consistently emulated this feat as the viability of most is dependant on revenues generated from property and investment activities.

In Southland's case, 95% of income is derived from shipping and cargo-handling charges and hence the charges levied reflect the true cost of providing services to shipping companies and/or port users.

This shows the Port is already well on the way to operating as a legitimate commercial entity. Mr. Shirley praised his management team and recorded the receipt of the co-operation of the Board's workforce.

The re-organisation of the Board's operations and retrenchment in staffing levels has given the Board a stable workforce with flexibility and variety of work to both the Board's and individual's benefit.

Whilst the Board remains committed to the restructuring of the Waterfront Industry to achieve optimum cost savings within wharf gates, Mr. Shirley expressed his fear that the Government's partial privatisation plan will not embrace sufficient incentives to encourage port companies to act commercially and efficiently.

The accountability and monitoring systems within the public sector could severely inhibit the future performance of port companies.

*(The Bluff Port Sider)*

## **KPA Introduces Port Operations To Journalists**

19 journalists from Radio Malaysia, newspapers and trade journals attended a one-day *Port Familiarisation Programme for Journalists* at the Klang Port Authority headquarters. The Programme, the second to be organised by the KPA, was declared open by the Chairman Dato' Michael Chen.

The programme is aimed at fostering closer rapport between the mass media and the various sectors involved in port operations.

Extracts from Dato' Michael Chen's address to the participants:

"We want to get better acquainted with the people from the mass media so that the people from the mass media would, in turn, be better acquainted with us. In short, we are opening our doors to you and saying: 'we are available to assist you in your assignments; are creating openings for closer rapport between the management and the mass media; and through this we

hope the mass media would better appreciate our role as the administrator of Malaysia's premier port as well as the roles of the various public and private agencies involved in this rather complex yet so vital sector of the economy.

"We have introduced many incentives for importers and exporters to use our port. To name just a few: there is a special rate for imported fruits, maize in bulk, cargo in bags and a special rate for long-term rental of warehouses at the dry bulk terminal. We also offer rebates for transshipment bulk liquid cargo. Just recently we reduced the rental rates of the warehouses in South Port in order to assist our existing tenants tide over the recession as well as to make South Port attractive as a consolidation and transshipment point, particularly for East Malaysia traffic. In short, we are responsive to the needs of our clients. The management will respond positively to requests for incentive rates, particularly in relation to new traffic, high volume and transshipment traffic. Our doors are open for negotiations.

"The KPA is the first port authority in this country and probably in the ASEAN region to advertise on TV. A lot of eyebrows were raised when the commercial was first proposed but it has proven its effectiveness as evidenced by the greater number of inquiries we have received after it came on the air. However, that commercial is only the first step towards promoting Port Klang. We have already completed the first phase of a port marketing study which was devised by a marketing consultant recommended by the World Bank. The final phase is in the pipeline.

"We have not forgotten about facilitating trade documentation and procedures. From August, the KPA became the first port in Malaysia to drastically simplify documentation and procedures and movements of imports and exports through the port .... Consequently, the procedural steps for delivery or shipping of goods have been reduced substantially. In other words, cargo owners will find it much simpler to clear or ship their goods through Port Klang.

"In our efforts to promote the port, we have often been asked: why does the KPA bother with expensive port promotion exercises when privatisation is imminent? The answer is: even if all

our services are privatised, the KPA would remain an entity albeit in a reduced form. As landlord and co-ordinator of port activities, the KPA has macroeconomic and social obligations for the country as a whole, and a socio-economic responsibility for the urban area of Klang in particular.

"It has been estimated that over 40,000 people are depending on the port for employment, directly or indirectly. Of these, about 10,000 are directly employed by the KPA, KCT and the shipping and forwarding sectors. In other words, at least 10,000 people are directly dependent on the port for their livelihood. Therefore the macro-economic, investment and planning and socioeconomic obligations cannot be delegated to the private sector which will be more concerned with profit-and-loss and day-to-day running of the business. The port promotion function of the KPA will, therefore, be an important factor in a privatised port environment. Therefore, the



Mr. Colin Mitchell (right), Managing Director of London-based freight forwarders Hill & Delamain, presents Mr. Ng Kiat Chong with award for Best Seaport: Asia.

## Port of Singapore Voted Best Seaport in Asia

The Port of Singapore has been voted the Best Seaport in Asia in the Second Asian Freight Industry Awards, organised by *Cargonews Asia*, Asia's leading multi-modal publication.

The Port of Singapore Authority (PSA) also won 2 other Awards — Best Warehouse Operator and Best Terminal Operator: Seaport.

This is an independent assessment of ports in the region by the freight industry. It is fitting recognition of Singapore's pre-eminent position among ports, by virtue of our fast and efficient service. Voting was done by readers of *Cargonews Asia*.

KPA's port promotion function must be co-ordinated with those of the private operators' with the latter concentrating on marketing specifically to promote their own area of activities while the KPA concentrates on corporate marketing or promotion."

(WARTA LPK)

## More Expert Systems For PSA Operations

By Shamimah Begum

Cargo Systems Dept.

PSA and the Information Technology Institute (ITI) are jointly developing the Ship Planning expert system to plan ships faster and to improve the quality of the ship plans. To facilitate implementation, PSA will be purchasing another eight SUN workstations, peripherals and system software costing \$500,000. The entire system is expected to be operational by late 1988.

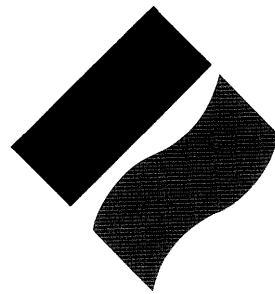
PSA is looking into the development of two more expert systems for berth allocation and yard planning. It is sponsoring four officers working on this project for a full-time 10-week course at ITI's Knowledge Engineering Research Centre (KERC). At the end of the course, they will be assigned to develop the prototypes of these two expert systems. The prototyping period is expected to take about nine months. Another 18 to 24 months are needed before the system is ready for operational use.

The Berth Allocation expert system will be used to maximise berth and crane utilisation and minimise ship waiting time taking into consideration ship arrival times, channel traffic, ship departure times as well as operational and physical considerations like tide and draft requirements. It will try to berth ships so as to facilitate close connections of containers between mother and feeder vessels. The system will also take into consideration the positions of containers in the yard to achieve a quick vessel turnaround and forecast vessel departure time.

The Yard Planning expert system will be used to plan the overall yard to achieve high productivity during ship operations, ensure efficient usage of yard space and schedule the transtainer times for receiving export containers.

(PSA News)

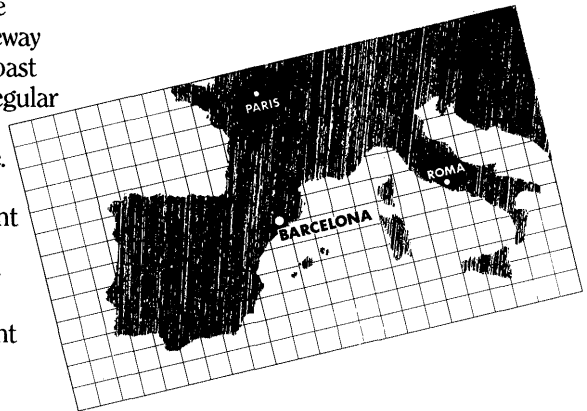
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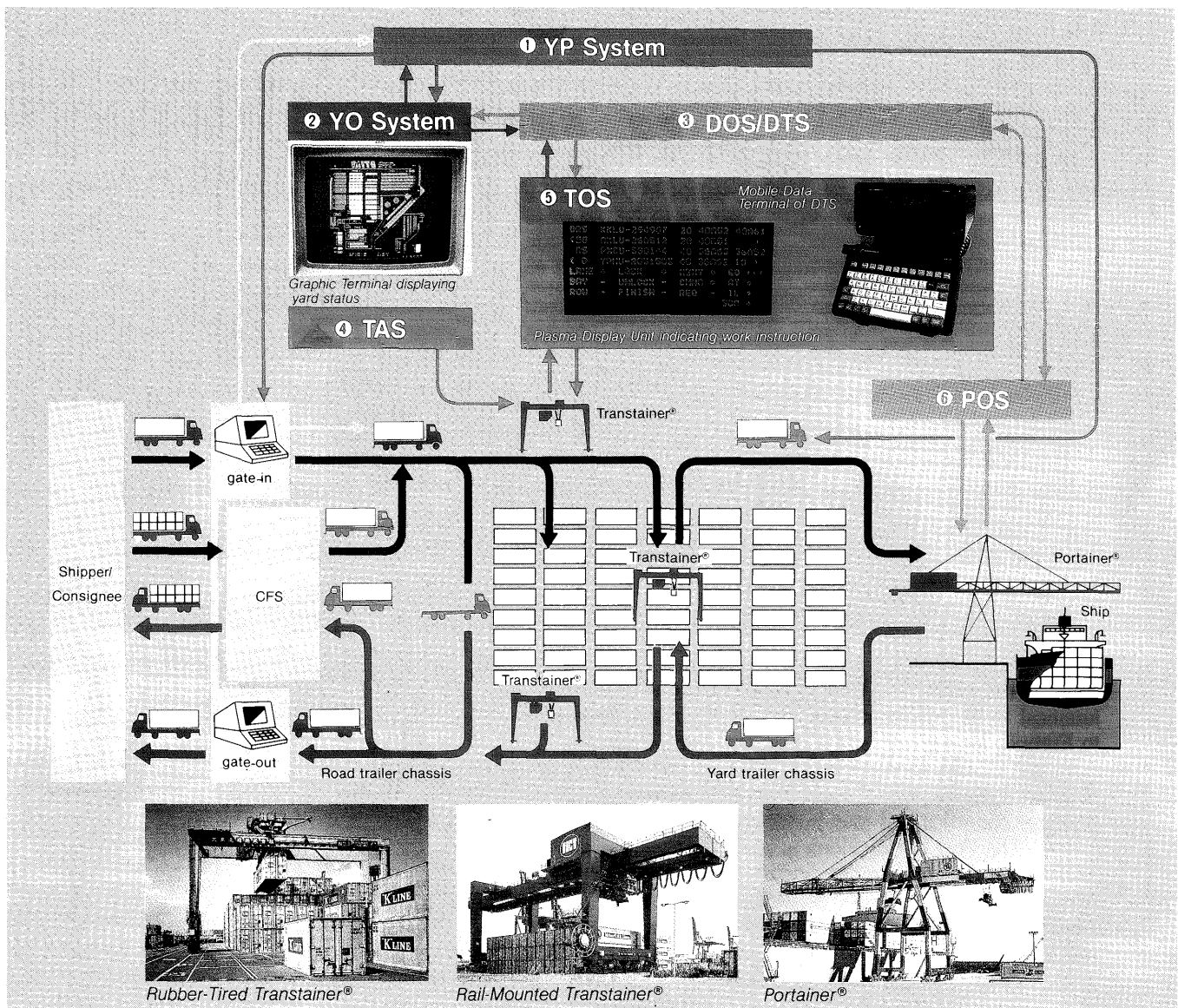


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- ② YO System: Yard Operation Computer System
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DTS: Data Transmission System (Radio)
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- ⑤ TOS: Transtainer® Operation Supervising System
- ⑥ POS: Portainer® Operation Supervising System



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