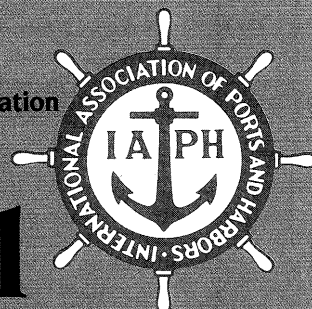


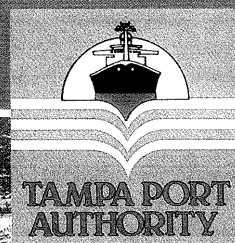
# Ports & Harbors

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The International Association  
of  
Ports and Harbors

January-February 1  
1992 Vol. 37 No.



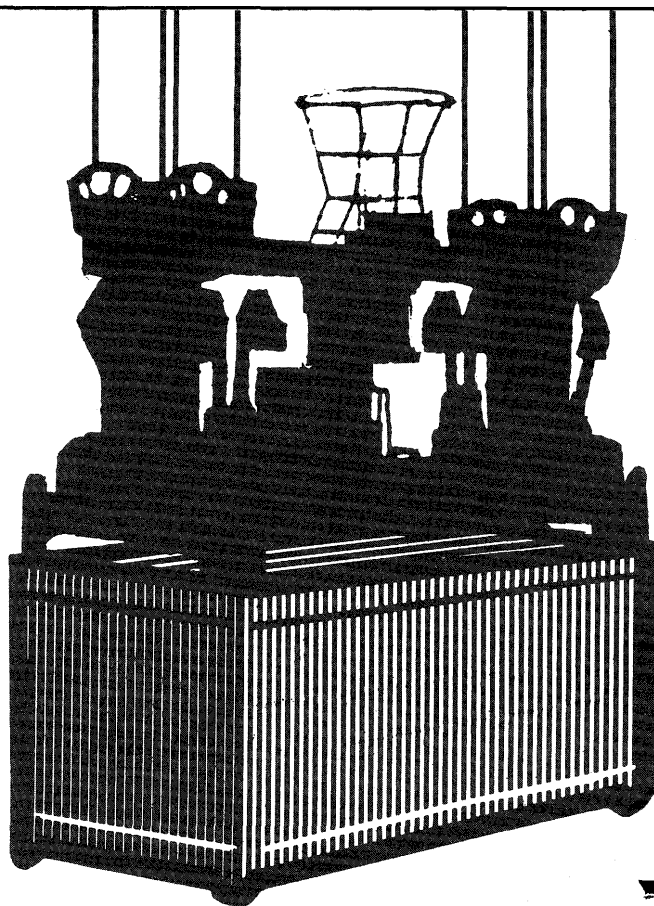
## Port of Tampa



*An overview of recent developments at the Port of Tampa is featured in this issue.*



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Managing Director  
Clyde Port Authority  
U.K.

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

**Second Vice-President:**  
Robert Cooper  
Chief Executive, Ports of  
Auckland Ltd.  
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**Third Vice-President:**  
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General Manager  
Port Automome du Havre,  
France

**Conference Vice-President:**  
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Director-General  
Department of Transport  
New South Wales  
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## Contents

### IAPH ANNOUNCEMENTS AND NEWS

New Year's Messages .....	5
Membership Dues 3% Up for 1992 • Mid-term Exco to Meet in Charleston May 4-8, 1992 .....	6
IPD Fund • CCC MOU Seminar held in Brussels .....	7
CPA Hosts IAPH Africa/Europe Meeting .....	8
2 Translated Versions on Temporary Basis • Publication Sponsored by IAPH Foundation • Membership Notes .....	10
65th Session of IMO Legal Committee 30 Sept.-4 Oct. 1991 .....	11
COPSSEC Crosses the Channel for Its Autumn Meeting .....	13
Visitors to Head Office .....	16

### OPEN FORUM

Developments in Marine Navigation Techniques .....	17
--	----

### INTERNATIONAL MARITIME INFORMATION

#### WORLD PORT NEWS

SingaPort '92 • 7th International Symposium on VTS .....	21
Conference on Safety in Port Environment .....	22
The First Line: Customs and Drugs '90 .....	23
International Congress of Sea Traffic, Port Handling .....	24
28th International Seminar on Port Management • New Publications .....	25

#### The Americas

Halifax: Double-stack Train Service Launched • Montreal: Incentive Plan for Containerized Cargo .....	27
Vancouver's Economic Clout Reconfirmed .....	28
Port of Corpus Christi, Buenos Aires Ink Pact • Long Beach Supports Alameda Corridor Plan • N.C. Ports Enjoy Tonnage Increase • Oakland Lands New Container Crane .....	29
Seattle Container Terminal Expansion OKd • Charleston Named 1991 Quality Port .....	30
US Port Traffic Trend: N. Atlantic Suffers Most .....	31
S.C. State Ports' Bond Issue Well Received .....	32
Port of Tampa in Profile • Global Gateway Through Port of Charleston .....	33

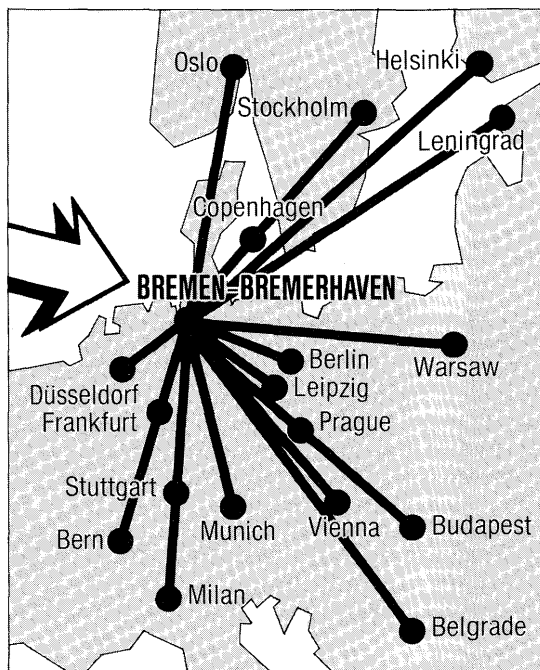
#### Africa/Europe

Shannon Estuary and the Environment .....	34
ALIC to Promote Distribution via Antwerp .....	35
Malaysia-Le Havre Management Programme • New BLG Concept for Better Marketing .....	36
Port of Hamburg: Boom Continues Through 1991 .....	37
Announcing Hazardous Substances via EDI • Port of Gdynia at Glance .....	38
Lisbon Face-lifting in Next 10 Years .....	39
Gothenburg Work Force to Be Cut by 20% .....	40
Towards Brighter Future in Turkish Ports Sector .....	41
Rotterdam: Growth Continues in Cargo .....	42

#### Asia/Oceania

Corporatisation Laws — A Question of Time • Geelong Records Profit for 1990-91 Fiscal Year • Sri Lanka Ports Authority 12 Years in Retrospect .....	43
Brisbane Strategic Plan Shows the Way Ahead .....	44

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# SINGAPORE PORT INSTITUTE

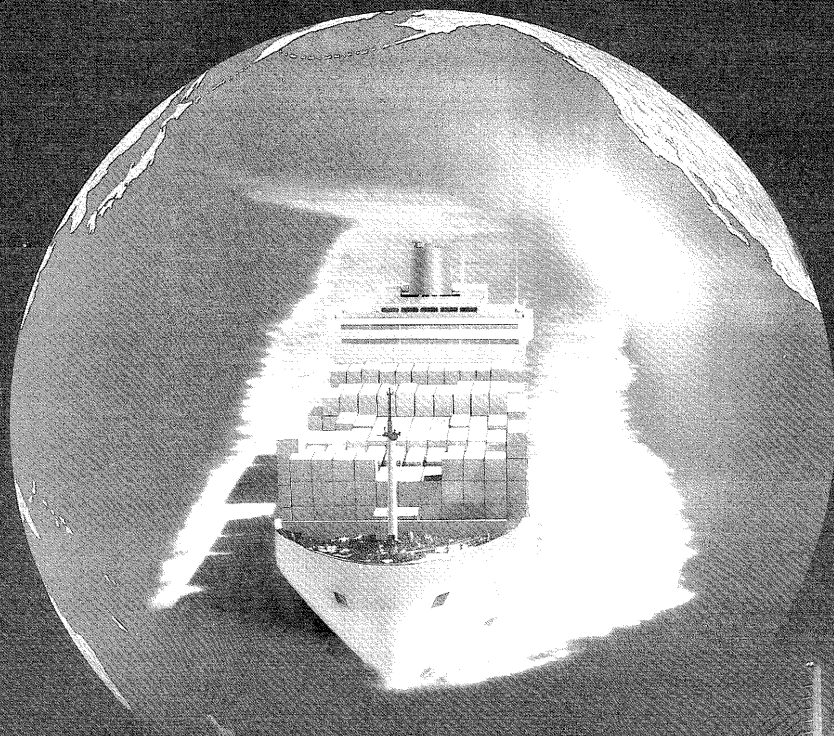
The Singapore Port Institute (SPI), the training arm of the Port of Singapore Authority (PSA), has trained some 3000 personnel from 52 countries through its courses. For 1992, SPI will be offering the following courses for managerial, operations and technical personnel from the port and shipping industries:

<b>COURSE TITLE</b>	<b>DATES</b>	<b>FEES(S\$)</b>
1. Diploma In Shipping & Port Management	2 Mar – 25 Jul	\$5 200
2. Management of a Warehousing & Distribution Centre	4 May – 8 May	\$1 100
3. Management of Port Marine Services	4 May – 15 May	\$1 950
4. Port Management & Operations	15 Jun – 26 Jun	\$1 950
5. Management of Container Operations	6 Jul – 17 Jul	\$1 950
6. Management and Maintenance of Port Equipment	13 Jul – 24 Jul	\$1 950
7. Management & Operations of a Break-Bulk Terminal	27 Jul – 7 Aug	\$1 950
8. Oil, Chemical & Gas Tanker Safety	7 Sep – 18 Sep	\$1 950
9. Port Engineering & Development	7 Sep – 18 Sep	\$1 950
10. Marine, Fire & Oil Spill Control	28 Sep – 9 Oct	\$1 950
11. Management of Port Security	5 Oct – 16 Oct	\$1 950
12. Port Finance Management	12 Oct – 16 Oct	\$1 100
13. Container Ship Stowage Planning	9 Nov – 20 Nov	\$1 950
14. An Overview of Hydrographic Surveying	16 Nov – 27 Nov	\$1 950
15. Handling, Storage & Transportation of Dangerous Goods	23 Nov – 4 Dec	\$1 950
16. Practical Pilotage Attachment	(2 weeks duration on request)	\$2 500

*For course details and application forms, please contact us at Singapore Port Institute; Telex PSATRG RS28676; Telephone 274-7111 (Ext 1825); Telefax (65) 274-0721.*



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# IAPH ANNOUNCEMENTS AND NEWS

## New Year's Messages

**John Mather**  
President



I have been privileged and proud to be your President during the momentous days and months of 1991.

I am realistically aware that within the larger frame of fast moving social, economic and political events on a world-wide scale, the circumstances of our international port transport sector may not have rated highly as attention grabbers for the world at large.

To the discerning observer, however, our general port performance during 1991 has given cause for satisfaction.

We have not stood apart from the world's problems.

We know that the well-being of our nations and their populations depends to a significant extent on effective global maritime transportation networks inclusive on an efficient port interface.

The reception handling and distribution of cargoes is our area of special expertise. In these respects, the attention drawn by IAPH's Technical Committees to new techniques, technologies, changing trends and the like, with pointers to training facilities and opportunities which are available for performance improvement is invaluable to IAPH members.

In 1992, IAPH will take further steps to firm up its global port awareness programme by initiating a strategic planning review, within which objectives can be clarified and targets set for their achievement.

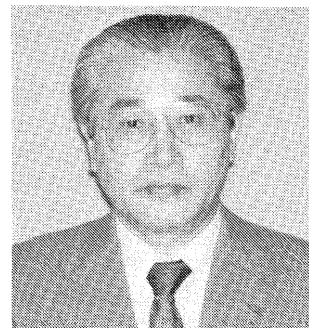
In these respects IAPH will not overlook the international port community's role in securing the health and safety of port and adjacent populations and the protection of the marine environment.

The success of IAPH's endeavours, however, lies in your hands.

Your support for and, most importantly, commitment to the tasks which we have set are absolutely critical. I am confident you will respond positively and enable us to underline 1992 as an outstanding year of inter-port cooperative enterprise.

May I take this opportunity of wishing you, your families and colleagues a very healthy and happy new year. I look forward to meeting you again at the Exco meeting in May of this year in Charleston and then, of course, at the 18th Conference in Sydney in 1993.

**Hiroshi Kusaka**  
Secretary General



To begin with, I would like to send all the members of our Association my sincere wishes for a Happy New Year. I pray that the New Year will bring you and your families ever-increasing happiness and health.

Perhaps by now all members have received from our Head Office the publication recording the proceedings of the 17th World Ports Conference of IAPH, which was successfully concluded with the enthusiastic support of our members. As you will no doubt agree, it is no exaggeration to say that the subjects we discussed at the Conference covered in a well-rounded way the challenges which must be taken up by the world ports and by the respective individuals who work there. I would like to renew my deep gratitude to our Spanish friends, who produced such a valuable forum for us all.

Now as I turn my eyes to the environment surrounding world ports, I am inclined to believe that this year will be pivotal in setting the momentum for sustained development towards the 21st century from the viewpoint of the medium and long term although the international environment will continue to be tantalizingly unpredictable amid moves to establish a new world order now that the Cold War seems to be over.

Under the circumstances, I strongly hope to see real progress made in the GATT Uruguay Round (General Agreement on Tariffs and Trade/Multi Trade Negotiations), so that a climate of free and fair trade can emerge rather than a system of inward-looking economic blocs. Such a result would no doubt meet the interests of our ports, which are basically open to the world.

It must be true to say that a succession of never-ending changes and challenges is waiting for the port industry again in the New Year. The ports will be required to make further efforts to improve their business performance and to rationalize all aspects of port development and operations, reflecting the changes in the international economy and trade patterns as well as the progress of intermodalism and informatization (such as EDI). At the same time, ports are

*(Continued on Page 14)*

# Membership Dues 3% Up for 1992

A circular from the Secretary General with an invoice for the membership dues for 1992 has been sent to all members of the Association. The documents were dated December 10, 1991.

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

The dues for the year are 3% up on last year, as decided at the 17th Conference in Spain last year. At Barcelona, the Finance Committee chaired by Mr. Don Welch (South Carolina State Ports Authority) came up with the recommendation that the Association should prepare for the future by increasing the dues gradually and gently so as to avoid any drastic dues increase at one time.

In this connection, however, the Secretary General points out that the finances of our Association have been under constant pressure from exchange rate fluctuations. In fact, despite the 3% increase, the total anticipated revenues for the year 1992 will be almost at the same level as the previous year due to the decrease in the exchange value of the SDR against the other currencies at the time of the payments made to the Tokyo Head Office by the respective members. In this situation, the Secretary General confirms that his office will continue directing its utmost efforts towards the wise management of the Association's finances under the guidance of the Finance Committee.

## Requests from the Head Office for payment:

Upon receipt of the invoice, each member is requested to quote the exchange rate between the SDR and one of the currencies from the IMF basket listed below, as it was on December 10, 1991. The By-Laws provide that the costs of remittance shall be paid by each member and that payment on or after February 1, 1992 shall be delinquent.

Deutch mark	2.20690	} :1SDR
French franc	7.56183	
Japanese yen	180.164	
Pound sterling	0.775181	
U.S. dollar	1.40424	

The table below shows the SDR value per membership unit for Regular and all classes of Associate Members. The equivalent rates of the dues in US dollars and in Japanese yen for the respective categories are also indicated in the following table.

Regular Unit/s	SDR	Yen	US\$
1	1,010	181,965	1,418
2	2,020	363,931	2,836
3	3,030	545,896	4,254
4	4,040	727,862	5,673
5	5,050	909,828	7,091
6	6,060	1,091,793	8,509
7	7,070	1,273,759	9,927
8	8,080	1,455,725	11,346

## Associate

A-X-1, B & C	850	153,139	1,193
A-X-2	580	104,495	814
A-X-3	290	52,247	407
D	150	27,024	210
E	130	23,421	182

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

In order to save on bank commissions, the Head Office would appreciate members remitting their dues to the IAPH account at one of the following two banks:

**The Fuji Bank Ltd., Marunouchi Branch, Account No. 883953**  
**The Bank of Tokyo Ltd., Uchisaiwaicho Branch, Account No. 526541 (Name of Account: International Association of Ports and Harbors)**

All members' special cooperation in this regard will be sincerely appreciated.

## Mid-Term Exco to Meet in Charleston May 4 - 8, 1992

For the mid-term meetings of the Executive Committee scheduled for May 7 and 8 this year at Charleston, South Carolina, U.S.A., the Secretary General has circulated a letter to all the members of the Executive Committee, the Chairmen of the three Internal and six Technical Committees, Legal Counselors and the Liaison Officers inviting them to participate in the gathering.

Previously President Mather and his three Vice-Presidents, Lunetta, Cooper and Smaghe, had been exchanging views through correspondence or telephonic communications as to whether or not the Technical Committees should be encouraged to meet in Charleston during the Exco meetings. The matter had been discussed with the Tokyo Secretariat and Mr. Don Welch, our host in Charleston. As a result, the officers have agreed to follow the practice that was established a few years ago that the technical people should also take advantage of holding their meetings in conjunction with the mid-term Exco meetings.

By the end of November, COPSSEC, the committee chaired by Mr. Smaghe with the largest number of members serving on it, had announced it was to hold its meeting in Charleston, while the other committees' positions are yet to be decided.

The meetings will take place according to the following time schedule, although we must wait for the next issue to announce the final shape of the programs and the agenda for the Exco meetings.

Day	Morning hours	Afternoon hours
MON (MAY 04)	Technical Committees	Technical Committees
TUE (MAY 05)	Technical Committees	Technical Committees
WED (MAY 06)	Internal Committees (IC)	IC + Strategic Committee
THU (MAY 07)	Exco	Exco
FRI (MAY 08)	Exco	Exco



# Membership Directory '92 Edition Circulated

The 1992 edition of the Membership Directory was completed in late October and was sent to all members from the Tokyo Head Office in the first week of November.

In line with past practice, the shipment of the new edition of the Directory has been arranged to enable our members to receive their first copy airmailed, with the remaining copies dispatched by surface mail.

The Directory features the names and positions of member ports' officials as well as the volume of cargo handled at the respective ports, based on the information reported by the members by the closing date set for the entry return.

As for the members whose updated entry forms failed to be returned to the Head Office by the deadline, it was only possible for the Secretariat staff to continue carrying the information from the previous edition of the Directory, marked with an asterik (\*).

Efforts were made during the proofreading stage to incorporate as many alterations received after the closing date as possible. However, information which it was not possible to include in the Directory will be published in the "Membership Notes" column of the appropriate issue of "Ports and Harbors".

If IAPH members require more copies of the Directory, they can be obtained upon application to the Head Office.

## The IPD Fund: Contribution Report 70% of target yet to be raised

The contributions from members to the Special Port Technical Assistance Fund ("the Special Fund") as of January 10, 1992 are listed in the box below. The amount received in contributions in the 18 months from the start of the campaign totalled US\$24,588, a little over 30% of the targeted amount of US\$70,000.

Over the years, IAPH has been able to sponsor almost 100 selected people from various IAPH member ports in developing countries to receive training and education at various institutions under the Bursary Scheme. In order to sustain our efforts to aid our friends from developing ports, all members' continued support in helping us to achieve the targeted amount of money, which is to be used for training 20 people in the two-year term, is urgently required.

### Contributions to the Special Fund For the Term of 1990 to 1991 (As of Jan. 10, 1992)

Contributors	Amount
<b>Paid:</b>	<b>(US\$)</b>
Associated British Ports, U.K.	3,000
Nagoya Port Authority, Japan	2,748
UPACCIM, France*	1,989
Port of Copenhagen Authority, Denmark	1,000
South Carolina State Ports Authority, U.S.A.	1,000
Vancouver Port Corporation, Canada	1,000
Puerto Autonomo de Valencia, Spain	1,000
Port Authority of New York & New Jersey, U.S.A.	1,000

Niigata Prefecture, Japan	610
Osaka Prefecture, Japan	585
Kobe Port Development Corp., Japan	584
Osaka Port Terminal Development Corp., Japan	584
Nagoya Container Berth Co. Ltd., Japan	554
Penta-Ocean Construction Co., Ltd., Japan	502
Marine Department, Hong Kong	500
Port Authority of Jebel Ali, U.A.E.	500
Port of Montreal, Canada	500
Port Rashid Authority, U.A.E.	500
Stockton Port District, U.S.A.	500
Port of Tauranga, New Zealand	500
Port Autonome de Dakar, Senegal	480
The Japanese Shipowners' Association, Japan	438
Japan Port & Harbor Association, Japan	400
Public Port Corporation II, Indonesia	300
Toyama Prefecture, Japan	291
Japan Cargo Handling Mechanization Assoc., Japan	280
Fraser River Harbour Commission, Canada	250
Port of Melbourne Authority, Australia	250
Port of Palm Beach, U.S.A.	250
Port of Quebec, Canada	250
Saeki Kensetsu Kogoy Co. Ltd., Japan	250
Ghana Ports & Harbours Authority, Ghana	250
Pacific Consultants International, Japan	238
Bintul Port Authority, Malaysia	200
Gambia Ports Authority, the Gambia	200
Nanaimo Harbour Commission, Canada	200
Port of Redwood City, U.S.A.	200
Mauritius Marine Authority, Mauritius	200
City of Muroran, Japan	155
Public Port Corporation I, Indonesia	150
Port Authority of the Cayman Islands, West Indies	100
Port Authority of Thailand, Thailand	100
<b>Total</b>	<b>US\$24,588</b>
<b>Pledged:</b>	
Empresa Nacional de Puertos S.A., Peru	100
Hiroshima Prefecture, Japan	¥80,000
<b>Total</b>	<b>US\$100</b>
	<b>(plus ¥80,000)</b>
<b>Grand Total</b>	<b>US\$24,688</b>
	<b>(plus ¥80,000)</b>

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

## CCC MOU Seminar Held in Brussels

IAPH was invited by the CCC Secretary General to be represented at a Seminar at CCC Headquarters in Brussels on 14 and 15 November 1991.

The purpose of the Seminar, according to Mr. T.P. Hayes, CCC Secretary General, is to discuss Memoranda of Understanding (MOUs) on co-operation between Customs administrations and companies involved in the international

movement of people and goods, aimed at preventing smuggling, particularly drug smuggling.

The CCC's invitation letter was referred to Mr. Fernand Suykens (Port of Antwerp), IAPH Liaison Officer with the CCC and Chairman of the Trade Facilitation Committee, to see if he or anyone else could represent IAPH at the Seminar. Mr. Suykens lacked the time to do so himself so he arranged for Mr. A.J. Smith, our European Representative in London, to cover the CCC meeting. We partly reproduce here the provisional program (Attachment 1) and the CCC Secretary General's invitation letter.

#### (From the CCC letter)

A very high interest has been expressed in MOUs, both by the Customs administrations and trade organizations and the time is now right to organize our first international seminar on this subject. It is important that we have an accurate, up-to-date picture of how trade organizations are progressing the CCC MOUs, how successful these are proving to be, and any difficulties that you have encountered.

The CCC has concluded seven MOUs on drugs with international trade organisations, and one on pirated and counterfeit goods, and details of these are shown in Attachment 2. The need for a Seminar to discuss progress in the MOU initiative, and specifically in relation to drugs, was given additional impetus by the Group of Seven (G7) Heads of Government during their Economic Summit in London in July. In a declaration on drugs, those Governments invited the CCC to promote the strengthening of co-operation between Customs and international traders and carriers, in order to improve the capacity of law enforcement agencies to target illicit drug movements without hindering the legitimate circulation of people and goods.

The Seminar, which will be chaired by Sandy Russel, Director Customs of H.M. Customs and Excise, will provide an opportunity to discuss how such objectives can best be reconciled. It is envisaged that Customs administrations and trade organisations with practical experience of co-operation agreements such as MOUs will explain how agreements were reached, what measures the agreements contain, together with the successes and difficulties they have encountered. I hope that the Seminar will consider it beneficial for the MOU initiative to be thoroughly researched by a Working Group, whose findings would be submitted to the Enforcement Committee for approval and that it would form the basis of the CCC's report on further action to next year's G7 Summit in Munich.

## (Attachment 1) Provisional Seminar Programme

### 14 November

- Session 1 — Welcoming address from Mr. T.P. Hayes, Secretary General, CCC
- Opening remarks from Mr. A.W. Russell, Seminar Chairman
  - Address from Mrs. G. Shephard, Minister responsible for H.M. Customs Excise
  - Update on world drugs scene
  - CCC experience with MOUs to date

- Session 2 — MOU signatories' experience to date
- US Customs' Carrier Initiative Program
  - General discussion of Customs and trade

concerns

### 15 November

- Session 1 — General discussion on the way forward
- Session 2 — Planning future programme of action on the effective implementation of co-operation agreements

## (Attachment 2) Relevant Memoranda of Understanding and Guidelines

### Drugs MOU & Dates

1. ICS, December 1985
2. IATA, June 1986
3. IAPH, August 1987
4. FIATA, September 1987
5. IECC, October 1987
6. IRU, August 1989
7. AACC, August 1990

### Guidelines & Dates

- Doc. 33.895, 18/03/1987
- Incorporated in text of MOU
- Doc. 34.755, 07/07/1988
- Doc. 34.755, 07/07/1988
- Doc. 34.755, 07/07/1988
- Doc. 36.248, 26/09/1990
- (Draft, Doc. 36.332, 03/12/1990)

### Other MOU & Date

8. IFPI, June 1988

### Guidelines & Date

- Doc. 35.318, 23/03/1989

### Legend

1. The International Chamber of Shipping
2. The International Air Transport Association
3. The International Association of Ports and Harbors
4. The International Federation of Freight Forwarders Associations
5. The International Express Carrier Conference
6. The International Road Transport Union
7. The International Associations Co-ordinating Council
8. The International Federation of Phonograms and Videogram Producers

## CPA Hosts IAPH Africa/Europe Meeting

Since 1986, it has been the practice for the IAPH African/European Region's members to have an unofficial meeting to exchange views and ideas concerning the hot issues involving IAPH activities from the viewpoint of the region's ports. The meetings which were initiated by Mr. J. den Toom in his capacity as the IAPH President representing the African/European Region back in early 1987, used to take place in Amsterdam until the 1990 get-together.

Eventually, at the initiative of President Mather, last year's meeting was held in Glasgow on 28 and 29 November 1991, hosted by the Clyde Port Authority.

The meeting was presided over by Mr. Jean Smagghe, the Regional Vice-President of IAPH from the Port of Le Havre, and the discussions took place in accordance with the following agenda.

1. Introduction by President Mather
2. General policy of IAPH:  
The goals and the means  
reorganisation of the Technical Committees



Participants are pictured at close of the meeting (except David Jeffrey who had to leave Glasgow earlier). From left: Keenan, Valls, Roderiques, Mackay, Guessend, Chanley, Mather, Kondoh, Perrot, Smagghe, Takeda, Smith, Watson and Palao.

3. The IAPH in the African/European Region  
The role of the ports of the region in IAPH  
The relations between IAPH and EEC ports  
French and Spanish translations of the IAPH journal
4. Privatisation: consequence of the port privatisations in Europe on the IAPH membership
5. Preparation of the regional contribution to the Mid-Term Executive and other committee meetings in Charleston
6. Preparation of the 18th Conference in Sydney
7. 20th IAPH Conference in 1997 - Suggestions for a venue

The meeting was attended by the following individuals.

John Mather, Clyde Port Authority  
George Mackay, Clyde Port Authority  
Jean Smagghe, Port of Le Havre  
José Perrot, Port of Le Havre  
Y.F. Guessend, Port of Abidjan (on behalf of J.M. Moulod)  
David Jeffery, Port of London Authority  
Patrick Keenan, Cork Harbour Board  
Noel Chanley, Dublin Port and Docks Board  
Fernando Palao, Ministry of Public Works and Transport, Spain  
A.C. Rodrigues, Port of Lisbon  
Pall Valls, Port of Bordeaux  
John J. Watson, Dundee Port Authority  
Alex J. Smith, IAPH European Representative  
Rinnosuke Kondoh, IAPH Head Office  
Kimiko Takeda, IAPH Head Office

(Note: H. Molenaar, Port of Rotterdam, was unable to travel to Glasgow as his flight was cancelled due to fog.)

## **IAPH Head Office Staff in London**

Mr. R. Kondoh, Dy Secretary General, and Ms. Kimiko Takeda, Under Secretary, IAPH Head Office, on behalf of Secretary General Kusaka, participated in the IAPH African/European meeting held in Glasgow on 28 and 29 November 1991. They took the opportunity while in the

UK to visit various organizations, including the resident IAPH members in London.

On 25 November, the two Head Office staff visited the IMO (International Maritime Organization), where they were welcomed by Mr. M.A. O'Neil, Secretary-General, and Capt. Morrison, Director, Maritime Safety Division, with whom the IAPH staff exchanged views and information as to how best IAPH could contribute to the work of the IMO. At the IMO Headquarters they were able to meet Mr. Dwayne Lee, Chairman of the IAPH Dredging Task Force (Dy Executive Director, Development, Port of Los Angeles) and Mr. Joseph E. LeBlanc, Jr. (Attorney at Law, Port of New Orleans), who were representing IAPH at the LDC meeting convening at the IMO.



Mr. O'Neil, IMO Secretary-General (second from right), together with Capt. Morrison (left), welcomes the visitors from the IAPH Head Office.

On 26 November, they visited the Port of London Authority where they were met by Mr. David Jeffery, Chief Executive, who invited the visitors to a river cruise and showed them the waterfront developments on the Thames.

During their stay in London, the two visitors from Tokyo, on most occasions together with Mr. Alex Smith from the IAPH London Office, met Mr. John Sharples, Managing Director, British Ports Federation, Mr. Noel Ordman, PIANC, Mr. P. Wigginton, ICHCA Director, and Sir Keith Stuart, Chairman, Associated British Ports.



Sir Keith Stuart (right) receives R. Kondoh and K. Takeda at his ABP office.

## 2 Translated Versions On Temporary Basis

The matter of the French version of the IAPH news appearing in "Ports and Harbors" has been reviewed by the officers concerned to find out ways to continue the publication so as to respond to the strong wishes voiced by the French-speaking African members, in view of the fact that the Association has decided to cut the budget allocation for the French version effective from 1992.

Meanwhile, production of the Spanish version of the journal has been undertaken by the IAPH Foundation in Japan since 1982 at the request of the IAPH officers at that time.

This matter being closely linked with the production of the French version, the IAPH Secretariat in Tokyo, Mr. Smagghe's office at the Port of Le Havre, representing the French-speaking members, and Mr. Fernando Palao, Ministry of Public Works and Transport, Madrid, representing the Spanish-speaking members, have been exchanging views as to how both the French and Spanish versions can be continued at minimum cost.

It was agreed recently that the Ports of Le Havre and Barcelona will provide the Tokyo Head Office with all possible translation services so that the production costs can be reduced to the level as agreed upon by the IAPH Foundation in order to sustain the projects.

The new arrangements are yet to be finalized by the IAPH Head Office, which is close consultation with the respective ports in France and Spain and thus the first issue of the translated versions has been produced on a temporary basis.

## Publication Sponsored By IAPH Foundation



**Mr. David Jeffery**

The IAPH Foundation, a Japanese Corporation, has recently sponsored the publication of a paper entitled "Metropolis '90: Future City Infrastructure — Bringing the Port to the City" authored by David Jeffery, Chief Executive, Port of London Authority, and has arranged for all IAPH members to receive a copy of it from the Tokyo Head Office.

The IAPH Foundation has been sponsoring a series of publications which the IAPH Secretariat has selected for independent publication from among topical papers presented to IAPH by various individuals or institutions addressing significant trends in port and city planning, management and development or redevelopment and the interrelationships between maritime and inland transport.

## Membership Notes:

### Changes

**Seehafen Rostock AG** [Regular] (Germany)  
Address: 0-2540 Rostock, Überseehafen  
Mailing Addressee: Mr. Harald Morgenstern  
Chairman

### Port of Kobe

[Regular] (Japan)  
The fax number [(078) 332-6120] in the 1992 edition of the Membership Directory on page 207, should be read (078) 322-6120.

### Administracion Nacional de Puertos

[Regular] (Uruguay)  
Mailing Addressee: Ing. Eduardo Alvarez Mazza  
President  
President: Ing. Eduardo Alvarez Mazza  
Gerente General: Mr. Alfredo Balmelli

### Environmental Protection Engineering Ltd.

[Class A-2-3] (Greece)  
Address: 39 Mesologiou  
GR-185 45 Piraeus  
Mailing Addressee: Mr. John Polychronopoulos  
Managing Director  
Telex: 211363 POLY GR  
Tel: (01) 4637 034  
Fax: (01) 4617 423

### National Institute of Port Management

[Class B] (India)  
Mailing Addressee: Shri R. Gopal, Director  
Telex: 041-21082 NIPM IN  
Tel: 416132, 411135  
Director: Shri R. Gopal

tation.

The author, Mr. Jeffery says in his introduction, "This paper will highlight key issues facing those involved in the operation, planning and redevelopment of city ports, by reference to some of the lessons learned from the regeneration of London Docklands." The paper contains the following subjects:

Is there a future for ports in our major cities? An Historical Perspective

Origins  
The Growth and Aging Process  
Responding to Change  
Death or Everlasting Life

The Port of London Today ... and forever?

Relocation  
Investment  
The People  
The Facts  
The Shape of the Future

The Benefits of the Port to the City

City Port and the Environment

...the sins of the father  
...the constraints on the son  
...with the port?  
...whither the port?



Redevelopment of the Dis-used Docklands  
 The Inheritance  
 The Vision  
 The Means  
 The Approach  
 Transport Infrastructure  
 Economic and Social Implications  
 Docklands Regeneration  
 A role for the Dis-used Docks in Docklands  
 The End of the Beginning

## 65th Session of IMO Legal Committee 30 Sept. – 4 Oct. 1991

By **Andre Pages**  
 CLPPI Member, Bordeaux

The IMO Legal Committee held its 65th Session at the organization's headquarters from 30th September to 4th October 1991, under the chairmanship of Mr. R. Cleton (The Netherlands).

The Session was followed by the representatives of:

- 44 States, including Hong Kong, an associate member and the representatives of the International Fund for the Compensation of Oil Pollution Damage, IFPOL; and
- 18 non-governmental organizations, including IAPH which was represented by A. Pages and A. Smith.

The Committee dealt with various subjects, but particularly with the draft Convention on the transport of Hazardous and Noxious Substances by sea (HNS Convention).

### 1. Draft Hazardous and Noxious Substances (HNS) Convention — Continuation of Previous Work

#### 1.1 Resume

In 1977 the IMCO (now IMO) began the examination of a possible draft Convention in order to:

- complete what had been achieved with the 1969 and 1971 "Oil" Conventions relating to damage caused by oil pollution;
- cover certain lacunas (damage by pollution from ship bunkers other than those of oil tankers, by non persistent oils, etc.);
- extend the scope of damage taken into account to cover death or injury, toxicity, fire or explosions, rather than just pollution; and
- extend the scope of goods likely to be the source of damage to cover all hazardous and noxious substances.

A draft convention was drawn up and submitted, without success, to the diplomatic conference in May 1984, that approved the protocols to the 1969 and 1971 Oil Conventions.

IMO's Legal Committee took up its work on this topic again at the October 1987 session when, com-

pared with the 1984 draft, it extended the scope to cover HNS carried as packaged goods.

#### 1.2 Complexity of drawing up the draft text

The 1969 and 1971 "Oil" Conventions were noted for:

- the narrow scope of substances taken into account: crude oil, refined heavy fuels, or heavy oils carried in bulk and the bunkers of tankers carrying such goods; and
- the fact that the oil industry, privately, had already introduced such systems and indemnity funds, known as CRISTAL and TOVALOP, which were the predecessors of IFPOL.

To the contrary, the draft HNS Convention may be noted for:

- the extended range of products to be considered as dangerous;
- the extended nature and gravity of the types of damage that would come within its scope;
- the heterogeneity of packing and transport modes involved, from bulk carried in the tanks of dedicated vessels to simple packages, and covering the "bulk plus" (mobile tanks carried on road vehicles or by rail, and tank-containers); and
- the desire to spread the burden of compensation between the shipowners and, eventually in complement, the resources of a fund fed by the contributions of shippers, as a second tier.

#### 1.3 Progress of Work

Although none of the provisions have yet been retained definitively the following positions were specified:

##### Name of the Convention

Out of fidelity to the work begun in 1977, the name "HNS Convention" is to be retained, even though subsequently other conventions have used dangerous goods to cover both the maritime and land transportation of these substances.

##### Goods to be taken into account

The draft HNS Convention makes reference to classifications that have already been established for other Conventions (1973/78 MARPOL Convention, IMO Dangerous Goods Code, 1983 rules relating to the construction of dedicated carriers for the transport of liquid bulk chemicals or liquefied gases, substances with a flash point of less than 60°C, dry bulks that are already classified for their chemical risks, etc.).

To these can be added residues in holds of substances carried on previous voyages.

In addition are radio-active substances, not covered by the rules contained in the 1963 Vienna Convention relating to civil liability in respect of nuclear damage and the 1960 Paris Convention on civil liability in the domain of nuclear energy and its 1964 Protocol. The adaptation of the draft HNS convention to future modifications of these lists will impose a rapid amendment procedure by tacit agreement.

##### Bunker Fuels

It is considered that the case of bunkers should be covered by the draft HNS Convention rather than

by a protocol to the 1969 and 1971 Oil Conventions or the 1976 Maritime Claims Convention, or even a special future convention.

Ships' bunkers cannot be assimilated to cargo and the shipowner will not be obliged in this respect to contribute to a second-tier fund. But he will be obliged to cover them by insurance, as of a given tonnage, yet to be determined.

#### **Shipowners' Obligations**

The limitations of liability of shipowners for the carriage of HNS (to which bunker fuels are to be attached), will be those that remain to be fixed by the draft HNS Convention, or for the present those fixed by previous Conventions (the 1976 Convention on the limitation of liability for maritime claims, the 1957 Convention on the limitation of liability of the owners of sea-going ships or the 1924 Convention on the limitation of shipowners' liability, depending on which the State involved has ratified.)

Mandatory insurance will be obligatory if HN Substances are being transported, or where bunker fuels exceed the set tonnage limit, as mentioned earlier.

In fact, the affiliation of a shipowner to a P&I Club already gives him this type of insurance.

The funds fed by contributions to the second tier could, exceptionally, be called upon to supply the lack of assets of an insolvent owner or one who remains unknown after an accident.

#### **Shippers' Contributions**

Shippers will not be required to pay contributions to the second tier:

- for bunkers (see above);
- for the residues in holds of cargoes from a previous voyage since they will have already paid their contribution; or
- for authorized dumping at sea (e.g. dredging spoil) covered by the London Dumping Convention which will not be included in the scope of the draft HNS Convention.

On the other hand, IFPOL is to be asked to contribute for persistent oils, which are covered by the 1969 and 1971 Oil Conventions for pollution but not for fire or explosion.

Contributions would be based on a point scale, established in each case according to the factors of quantity and specific risk of cargo lots. In this way modest cargo lots could be exempt from contributions although they benefit from coverage by the Convention.

Very elaborate provisions have been suggested and will be examined during future sessions. But it already appears:

- that an accurate document on previous accidents involving the transport of cargo loads and lots of HNS, highlighting both their nautical and technical data and the financial consequences, would be most useful; and
- that the basis for establishing contributions by the management organization should remain relatively stable so as not to raise commercial or

constitutional problems too frequently.

#### **Collection of Second-tier Contributions**

A management organization similar to FIPOL is to be set up:

- to arrange the collection of contributions and the issuing of corresponding certificates in each port by recognized agents; and
- to centralize and manage the fund collected in this way; together with an eventual, initial sum supplied by the treasuries of the State-Parties.

To avoid all loopholes in the levying system, contributions would be paid in the departure port or, where not so paid, in the arrival port.

But an institutional problem is posed with the diversity of positions of States vis-a-vis the Convention and the coverage of risks for passage through certain territorial waters (such as canals and straits).

The Legal Committee did not accept the proposal by the Chemical Industry whereby:

- the shipowner would incorporate the contributions to the second tier in the freight in order to forward them to the fund organization;
- or even that, to this end, he should levy a distinct charge on the shipper.

The Committee decided to continue work on the draft HNS Convention as a priority in the 1992 sessions.

A diplomatic conference to deal with the draft HNS Convention is scheduled to be held in 1994.

## **2. Other Subjects Raised by the Legal Committee**

### **2.1 Calendar of Events**

The Legal Committee agreed to hold:

- two sessions in 1992: from 16 to 20 March and from 28 September to 2 October
- two sessions in 1993: each of one week with dates not yet fixed 1 Diplomatic Conference in 1993 in cooperation with UNCTAD on Maritime Liens and Mortgages

### **2.2 Programme**

The 1992 sessions will, in addition, be devoted to:

- the eventual revision of the 1976 LLMC Convention (Maritime Claims); and, eventually, to:
- new elements appearing in respect of oil pollution damage compensation.

## **3. Personal Impression of the IAPH Observers**

The elaboration of the draft HNS Convention will no doubt absorb a great deal of time during the four IMO Legal Committee sessions in 1992 and 1993.

However, the allocation of part of these sessions to the revision of the limitation amounts of the 1976 Convention and its successful conclusion would prove very positive for the continuation of work on the draft HNS Convention since.

- it may be supposed that the amounts of the limitation

of liability of shipowners will, for reasons of coherence, be identically set in both conventions;

- with the development of information on the financial consequences of damage occurring during the transport of HNS, it would be easier to assess what would be covered by the shipowners' liability (first tier) and what would be required to be covered by shippers' contributions to a special fund (second tier);
- the revision of Art. 7 of the 1976 Convention (contractual passenger claims), both per passenger head (see the 1990 Protocol to the 1974 Athens Convention), and globally for all passengers on the ship,

would supply a very useful element of reference for the compensation of semi-delict originating claims that occurred in the case mentioned in session

- (that of the presence on board the same ferry of passengers (eventually up to 2,000) and mobile tankers containing chemical products likely to cause serious damage);
- and, in addition, this revision would remedy the very serious reduction in purchasing power caused by monetary erosion which has affected the limitation amounts expressed in the Special Drawing Rights (SDR) of the International Monetary Fund, (IMF).

## **COPSSEC Crosses The Channel for Its Autumn Meeting**

**By José Perrot  
Port of Le Havre**

These last three years COPSSEC has met in Le Havre or Paris, but in 1991 in response to the kind invitation of Alex Smith, Vice-Chairman, it was decided in Barcelona to have a working party meeting in London on November 22.

Thirty two members did not hesitate to cross the Channel — or the Oceans — to attend this important meeting.

In his welcoming address, Jean Smagghe, Chairman, particularly thanked the attendants coming from other continents: Dwayne Lee, André Priso, Allan Hope, Masao Ohno and Yao Guessennd.

He also welcomed the new members of the Committee: Messrs. Muto, Nonaka, Jeffery, Kimoto, Gauthier (represented by Mr. Lannuzel), Kawashima, Traill, Kito, Kurtruss, Iijima and Hamburger (replacing Mr. Mulock-Houwer).

P. Hamburger was introduced by J. A. Mullock-Houwer as his successor. J. A. Mullock-Houwer was attending for the last time before retiring. Jean Smagghe offered his warmest thanks to Mullock-Houwer for the valuable work he has completed over many years in the DTF and welcomed his successor Peter Hamburger.

Regarding the membership, he also expressed his pleasure at seeing so many members appointed to the sub-committees and his disappointment that quite a lot of them were only printed names who never answered letters or took part in the meetings. Therefore, he asked the chairmen of the sub-committees to carry out a review to delete non-active members from the lists. As an example of an active member, he congratulated Per Olson, who recently came back to COPSSEC. A few years ago he was Chairman of the Port Safety Sub-Committee but he resigned as he was not in a position to be active enough.

Jean Smagghe stressed the active part taken by COPSSEC during the 17th Conference in Barcelona, which led to the adoption by the Exco of three resolutions on environmental matters. Following this introduction, the Chairmen of the different sub-committees reported on their activities.

### **All the work planned for this biennium to be ready for presentation in Sydney.**

For the Ship Sub-Committee, Bernard Coloby, Vice-Chairman, represented J.M. Moulod, Chairman of the Sub-Committee, who could not attend the meeting due to other commitments. After his presentation of the work underway, Ove Blydt-Hansen reminded those present that a resolution of the greatest importance was taken in favour of SBT tankers during the last Conference in Barcelona. He wished to underline the advantages of those tankers in terms of the prevention of pollution and expressed the wish that ports change their port dues to avoid unfair surcharge fees for this type of vessel.

For the Marine Safety Sub-Committee, Alex Smith, Vice-Chairman of COPSSEC, presented the apologies of John Watson, Chairman, who had chaired the meeting of the Sub-Committee on the previous day and had to leave due to other urgent commitments. The MSSC set up three working groups working on VTS, recreation and the reception of disabled vessels.

Regarding the VTS Guide, work is being carried out in close cooperation with IALA, IMPA, EMHA and IMO. Fred Weeks reported that Guide folders are on board 2,000 ships from 18 different states. At least 5,000 Guides have been distributed. The VTS Guide received supportive remarks from governments, shipping companies and captains all over the world.

Norman Matthews reported that the editor of the Guide was disappointed as the enterprise was not profitable. The main reason for this is that three main maritime countries (the U.S.A., Japan and Germany) are so far reluctant to adhere to the guidelines. However, good contacts have now been established with the US Coast Guard and the position of the current administration will be made clear very soon.

On the Japanese side, things are moving fast and the MSA is now supportive. Kobe, Tokyo Bay, Yokohama and Bisan Seto are expected to make entries.

Regarding Germany, a lot of German ships are fitted with the Guide but no entry from German ports has so far been recorded.

A resolution to recommend new applicants was taken. President John Mather will be requested to send a letter to all IAPH members to promote the VTS Guide.

Regarding leisure ports, Malcolm Ridge presented the second draft of a survey carried out by EHMA. This survey analyses leisure shipping activities from three reports: registration, licensing and insurance. Obviously this survey is very much centred on European ports. Nevertheless, it will be circulated among COPSSEC members for comments.

Another important point raised was the availability of

qualified marine personnel for ports. The African/European region is concerned by this problem. The MSSC will make a survey on a regional basis and the three IAPH regions will thus have to give their views.

Dwayne Lee, Chairman of the Dredging Task Force, reported on the work carried out since May when he was appointed Chairman of DTF.

Firstly he stressed that one of the duties of the DTF was to represent ports at the London Dumping Convention. To have some value the DTF needs broader international representation. Therefore he encourages ports in the different regions to provide active members.

Regarding the LDC 14th meeting which was scheduled for the last week of November in London, there were two main items on the agenda:

- extended discussion on the precautionary principle
  - report on the New Assessment Procedures (NAP)
- Regarding the last DTF meeting:

A change in the Sub-committee's terms of reference was adopted. Dwayne Lee presented the IMO request for a new survey on the Disposal of Dredged Material. The previous one was issued in November 1989 thanks to IAPH. This survey is very valuable as it is the first such document ever completed, the LDC attempts having failed. COPSSEC will answer his demand positively.

The second request of IMO regards the development of a bibliography of the effect dredging effects on environment. This work could be done in cooperation with CEDA, PIANC and IAPH.

The topic is very broad; consequently, Dwayne Lee proposed that, first of all, a working group be set up to define the terms of reference and the scope that the bibliography will encompass. Due to the location of the different asso-

ciations (CEDA in Delft, IMO in London, PIANC in Brussels) it would be easier if the IAPH representative were be a European member. The attendants supported this approach.

In his report, Peter Fraenkel, Chairman of the Port Planning Sub-Committee, stated that his Sub-Committee had 22 members, half of them "sleeping members" who never answered to any letters. Therefore, membership of the Sub-Committee will be reviewed soon. The Port Planning Sub-Committee has met twice since the Spanish Conference, in Paris and London. Regarding the terms of reference, the Sub-Committee has to deal with:

- 1) updating chapter 3.1 of the COPSSEC Guidelines
- 2) monitoring a working group on access channel characteristics
- 3) ports-and-city relations

Peter Fraenkel proposed reissuing the guidelines in separate sections according to the different sub-committees instead of reissuing the present "fat" book. As for other concerns, Peter Fraenkel asked if it was really necessary to enter considerable details or if broad outlines with a bibliography were sufficient. Leo Visser proposed that COPSSEC should provide every two years a bibliography with all the items regarding the IAPH members (ship characteristics supplied by the Ship Sub-Committee, VTS information by the MSSC, etc.).

Regarding the setting-up of a working group on access channel dimensions in cooperation with PIANC, due to the urgency of this topic it was decided to set up a working group headed by M.J. Hocter and supported by the following members: J. Lapolla, P. Lopinot, F.R. Kalff and I. Dand. Jean Smaghe proposed that a letter be sent to PIANC and that Kees d'Angremond be informed of this decision.

## New Year's Messages—

*(Continued from Page 5)*

required to play ever-increasing roles to help vitalize the regional communities in their hinterlands and to meet the varied needs of the people of the cities where the respective ports are located.

This year has particularly great significance in view of the UN Conference which is to take place in Brazil to discuss environmental issues on a global basis. Whether ports take a global viewpoint or not, they are sure to tackle environmental issues most positively so as to achieve real cooperation with the local communities to which they belong and, of course, to further their own development.

Thanks to the active participation and dedicated work of our members, our Association has succeeded in growing to its present important position among the world's maritime organizations whereby it is recognized as a spokesman for the global port community. I take pride with everyone at IAPH in this achievement. Furthermore, I wholeheartedly hope to maintain this important position for IAPH and, by developing it continuously, to protect the common interests of world ports.

Through its various activities, IAPH has been endeavouring to give all possible assistance towards increasing the overall efficiency of the member ports in developing countries. These efforts have been pursued by our Association on the basis of the determination stood by the entire membership of IAPH. Many of our members from the

developing countries are still in the most difficult situations, in many cases suffering accumulated debts.

In fact, it has always been one of the most fundamental ideals underlying the *raison d'être* of IAPH that the developed ports should help their friends in the developing world in any way possible. In this regard, I would like to thank profoundly all who have made contributions to the IPD Fund in response to the campaign call. I wish to urge all members' increased support of the chosen projects so that we can achieve the targeted amount.

Finally, I would like to call your attention to the mid-term meetings of the Executive and other committees, which I believe will comprise the most important event of this year for our Association. The meetings are scheduled for the first week of May in Charleston, generously hosted by the South Carolina State Ports Authority. The agenda of the meetings will include the issues of how IAPH can increase its capability to cope with the changing situations in the global environment surrounding ports and how to further strengthen the activities of IAPH, while discussion will also focus on the sort of the strategic approach the Association can develop to contribute to the increased benefit of its members, as well as the make-up of the 18th Conference in Sydney in 1993.

I assure you that we will keep you informed of all the details of the activities of IAPH through this journal on a timely basis. I trust that you will be able to give your full support to the work pursued by the Association's members and call for your active participation in our various activities.



Peter van der Kluit, Chairman of the Port Safety and Environment Sub-Committee, stated that membership of his Sub-Committee was well represented. The Sub-Committee is working on the following items:

- 1) updating of the IMO recommendations on the Safe Transport Handling and Storage of Dangerous Substances in Port Area
- 2) updating the COPSSEC Guidelines
- 3) new guidelines on soil pollution and waste

Regarding the updating of IMO's recommendations; a list of items was circulated for comments. Alex Smith proposed sending it a few interested ports in the Far East and also contacting the EHMA for comments.

As for the updating of the COPSSEC Guidelines, adaptation in certain areas will be carried out in cooperation with MSSC on a mutual basis for some chapters. Peter van der Kluit supported the idea to cut big book and he suggested rewriting the different chapters in more general terms. He would appreciate it if somebody from a developing country would participate in or check on the Sub-Committee's contribution in the light of the requirements of ports in developing countries.

As far as the guidelines on waste and soil pollution were concerned, two basic papers had already been produced and discussed. The guidelines will be ready for submission for approval of the Exco at the Sydney Conference.

As regards other matters, Per Olson stated that the National Swedish Maritime Organization was studying the possibility of making substandard ships causing air pollution in ports pay higher port dues.

Jean Smagghe stated that IAPH had to be supportive of everything good for environment. Nevertheless, as a first approach, he stressed the difficulty for a port authority of determining a ship's level of cleanliness. Pieter Struijs said that a global approach had to be adopted, covering the ship herself and the qualifications of her crew.

Regarding air pollution, Dwayne Lee stated that in South California a study on air pollution by ships was underway: on analysis of the exhaust smoke of the different categories of ships calling at the Ports of Los Angeles and Long Beach was being carried out on an annual basis. Moreover, ships calling at Californian ports or steaming off the coasts using diesel oil of a poor quality suffered penalties.

Regarding the COPSSEC Guidelines, agreement was reached to issue the different chapters separately in accordance with which Sub-Committees prepared them. Nevertheless, Jean Smagghe stressed the necessity of homogeneity when detailing the different items. The issue of a biennial bibliography as proposed by Leo Visser had to be considered.

Then Alex Smith reported on relations with international organizations. Due to the lack of time, he briefly outlined the involvement of IAPH in the preparations for the UN Conference which will take place in Brazil. Even if IAPH could not directly take part in the official presentations made on these days, ports could prove their existence by participating in the preparatory meetings. Within the Prepcom the papers submitted by the DTF were accepted. Among the items discussed were reception facilities. Of massive concern on this topic is the lack or inadequacy of such facilities.

Jean Smagghe reported on the preparations for the 18th Conference in Sydney. He received a proposal from the

Australian organizers to allocate a full working session to COPSSEC. The theme of the Conference will be "Ports — The Impacts of Global Economic Changes". It was agreed that COPSSEC could have speakers presenting two main topics:

- The Environment and Port Development in a Changing World
- The consequences of the Changing World on Maritime Trade and Their Impact on Ports

The next point on the agenda concerned the new trends relating to COPSSEC. Jean Smagghe stated that a working group dealing with trends in maritime trade appears to be necessary to provide information on this item to IAPH members. Therefore, as the first phase a new sub-committee will be created to deal with this topic. Jean Smagghe stressed that it will not affect the present sub-committees' organization.

The last point on the agenda was the date of the next meeting. The gathering will be held in Charleston on Wednesday, May 6, with the Sub-Committee meeting on Monday and Tuesday, May 4 and 5, 1992.

Before closing the session, the Chairman expressed his thanks to Alex Smith for organizing the meeting so well and to the BPF for being kind enough to host it. He also expressed his full appreciation to the participants for all the work carried out and, particularly, the chairmen of the sub-committees for their active involvement in all that had been accomplished.

The meeting was attended by:

Jean Smagghe, Chairman, Port of Le Havre  
Alex Smith, Vice-Chairman, IAPH European Representative  
José Perrot, Assistant to the Chairman, Port of Le Havre  
Peter Fraenkel, Port Planning Sub-Com. Chairman, PMF, London  
Dwayne Lee, DTF Chairman, Port of Los Angeles  
Pieter van der Kluit, Port Safety and Environment Sub-Com. Chairman, Port of Rotterdam  
Bernard Coloby, Ship Sub-Com. Vice-Chairman, Port of Le Havre  
Yao-Flavien Guessennd, Port of Abidjan  
Gérard Velter, Port of Le Havre  
F.R. Kalf, Haskoning, The Netherlands  
Leo Visser, DHV, The Netherlands  
Marc Jubel, BCEOM, France  
André Priso, ONPC, Cameroon  
Peter J.A. Hamburger, IADC, The Netherlands  
Masao Ohno, Japan Port Consultants Ltd., Japan  
Allan Hope, Nortrans Consultants, Brisbane, Australia  
J.A. Mulock Houwer, IADC Secretary General  
Ove Blydt-Hansen, INTERTANKO, Oslo  
J.K. Hojbjerg, INTERTANKO, Oslo  
Patrick Keenan, Port of Cork  
M.J. Ridge, Port of Southampton  
Paul Lopinot, IMPA  
Guy Lannuzel, Port of Nates-Saint Nazaire  
Fred Weeks, Plymouth  
Norman Matthews, IALA  
C. Van Meel, Port of Antwerp  
Pieter Struijs, Port of Rotterdam  
Kick Jurriens, Port of Rotterdam  
G.C. van Malland, Smit International  
Eberhard Noelke, EHMA Bremerhaven  
Per H. Olson, Safeports AB, Sweden  
Andrew Traill, BPF, U.K.

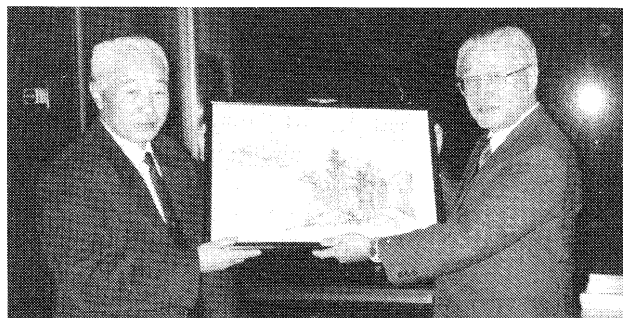
## Visitors to Head Office

A four-member delegation from the China Ports and Harbours Association visited Osaka, Tokyo and Yokohama in late December 1991. The party was composed of Messers. **Li Wei Zhong**, Director-General, **Li Ming Gui**, Secretary General, **Zheng Yixin**, Deputy Director, Research & Investigation Dept., **China Ports and Harbours Association**, and **Cheng Ziqiang**, Deputy Director of the General Office, **Shanghai Harbour Bureau**.

On December 24, Mr. Li Ming Gui and Mr. Cheng Ziqiang, who acted as interpreter, visited the IAPH Head Office where they were welcomed by the Secretariat members with whom they exchanged views and information on the activities of IAPH and on the recent developments at the ports in China. Prior to this meeting, the IAPH Head Office in Tokyo and Mr. Li's office in Shanghai had been in touch with each other and had exchanged numerous letters and fax messages as well as various publications introducing the work of IAPH and its membership requirements, as well as information on who is active in IAPH and in what capacity.

Furthermore, in May 1990 President Mather, the then First Vice-President and Chairman of the Membership Committee, together with Mr. Alex Smith of our London Office, had visited Shanghai where they met key officials of the China Ports and Harbours Association to help answer any questions the Chinese side might have concerning IAPH membership.

Mr. Li indicated that the time is ripe for his Association and the eight major ports, including Shanghai and Tianjin, to join IAPH and that the necessary steps for the membership applications will be taken without delay, since it is the strong wish of the Chinese ports to join the efforts pursued by the IAPH members for the development of world ports and their communities. Thus we will be able to announce their official enrolment in IAPH membership in the near future.



*Mr. Li (left) presents Mr. Kusaka with a Chinese landscape painting.*



*Shown are (from left): Li Ming Gui, Secretary General, China Ports and Harbours Association; Hiroshi Kusaka, IAPH Secretary General; Shingo Fujino, Director-General, Japan Ports and Harbours Association; Mr. R. Kondoh, IAPH Deputy Secretary General; and Mr. Cheng Ziqiang, Deputy Director of the General Office, Shanghai Harbour Bureau.*

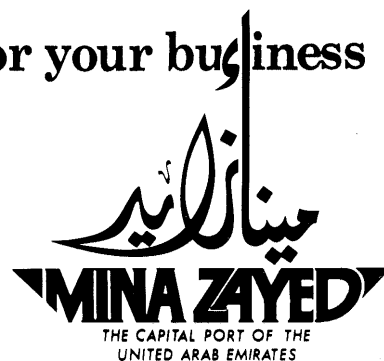


*Dr. Hajime Sato, IAPH Secretary General Emeritus (second from right), joins the Chinese guests for lunch.*

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# OPEN FORUM

## Developments in Marine Navigational Techniques

By Lt. Cdr. E.M. Bradley  
RN Rtd., FRCIS, FNI,  
Haven Master of the Port of Bristol

*(Reproduced from 'British Ports Federation Yearbook 1991')*

### INTRODUCTION

The changes in ship design that accompanied the revolution in cargo handling methods in the 1960's and 1970's were plain for all to see. The impact of these new methods on the port industry has been profound and, in the United Kingdom, their implications in terms of the consequential reduction in the national port labour force have only just been worked through.

Senior port managers may be forgiven for believing that ship design has now entered upon a period of stability and that there will be no major changes for them to respond to in the closing years of this century. On the quay wall this may, indeed, be the case, but in port approaches there will be new demands made of which they will need to take account. These will be against a backdrop of other considerations of which they are already aware — a wide range of new environmental requirements to meet and, in some areas, the pressures created by burgeoning water-borne leisure activities to respond to.

Radical new ship designs are only to be expected where high speed becomes a requirement. Short sea ferries are already appearing in response to the perceived market pressure for a fast crossing. Despite the inevitable early setbacks it seems that the breakthrough has been made and that the advanced designs now being tried will be succeeded by similar larger and more seaworthy vessels which will prove economically viable. There are those who believe that there is also a niche for the fast cargo vessel — that an extension of the "just in time" philosophy would provide for the premium charges necessary to sustain the extra costs of transporting high value cargoes at much greater speeds. Be this as it may

**"one thing is certain and that is that round the clock high speed scheduling must rely on new, automated navigational techniques."**

The various "ship of the future" projects including the Japanese "intelligent ship" concept are all heavily reliant on modern computer technology. In the now traditional trades such vessels will not look markedly different from their present day counterparts. Almost every aspect of ship operation will, however, be benefiting from the new technology. The operation and central monitoring of all machinery, the conduct of the ship's business, the handling of the ship's communications with the outside world, the integrity of the vessel's compartments and structure against

fire, flood and the stresses involved when working cargo or operating in stormy seas — from the investment in equipment to perform these functions the shipowner is looking to achieve both improved safety and reductions in manning down, perhaps, to single figure levels. From the automated navigational package the shipowner is looking for a third dividend — improved passage times through such congested waters as the Dover Straits and the approach channels that lead to the destination ports.

It is therefore worth considering the developments that are taking place in marine navigational equipment and their effect on navigational practice.

### RADAR

When radar was first introduced at sea many imagined that it would make a much greater contribution towards ship safety than, in fact, it did. There were various reasons for this. It was certainly true, for instance, that in low visibility ships which might formerly have anchored remained under way. Some shipmasters were tempted into the folly of proceeding at a speed that the conditions did not sensibly or legally allow. The expression "radar assisted collision" was coined.

Even so it was accepted that the balance of safety lay in favour of radar and, in due course, it became mandatory for it to be fitted in commercial shipping. Operators became aware of its limitations — that it provided present and historical data but that future inferences could only be drawn from processed data and that such assessments were dependent on other vessels behaving predictably.

Whilst technology saw to it that radar became more reliable — and also cheaper — the first major improvement occurred with the "ARPA" — the marriage of the radar set and the computer. It then became really possible for a ship's officer to invite the equipment to monitor automatically and simultaneously a large number of other ship echoes, to warn him in good time of a developing collision risk and even to allow him to test out in advance of his decision a series of possible avoidance manoeuvres so that he could determine which was the best. A by-product of this development was a radar screen that could be viewed clearly in full daylight without the need for shielding. The importance of the ARPA was quickly recognised by the International Maritime Organisation who, with commendable alacrity, developed standards for such sets and initiated a programme for their mandatory installation in commercial shipping, the largest vessels first.

### THE ELECTRONIC CHART

When considering a collision avoidance manoeuvre it is all very well to be guided by an ARPA in circumstances where there is searoom for any manoeuvre — but what happens if a vessel's freedom of choice is also constrained by rocks and shoals? There was a celebrated case of a North Sea ferry that was forced out of the shipping channel whilst attempting to overtake a small vessel — there was no collision but the ferry, in briefly touching the ground, sustained

underwater damage that very nearly proved catastrophic.

The solution is to digitise and present the navigational chart on a parallel or overlay display. The problems surrounding the provision of such a facility are currently being addressed on a joint basis by the International Maritime Organisation and the International Hydrographic Organisation.

If safety is to be maintained these bodies believe that the video chart presentation must be in all respects the equivalent of the paper chart. This view is based on the belief that as soon as a convenient screen presentation becomes available users cannot realistically be expected to continue plotting manually on the paper chart. However the navigational chart is a large document — it contains a mass of fine cartographic details plus a lot of ancillary data to which the user needs to refer. To present so much detail on a much smaller visual display unit is not easy from a technical point of view and could well provide a screen too clutter for practical use. It is therefore necessary to provide layers of data, starting with a mandatory minimum display and superimposing such additional information as may from time to time be needed. On the credit side the screen presentation has a versatility the paper chart could never possess — it can, for instance, be varied in scale at the operator's command. The depth contours can relate to what is dangerous for a vessel of the draught in which it is installed and it would even be possible to take account of the actual height of tide.

In fact the standard equipment envisages three visual displays, two for graphics and one alphanumeric. The principal display will be for real time navigational use whilst the secondary graphical display could be used either in real time to give a "look ahead" on a smaller scale or, during quieter periods, to permit future voyage planning. The alphanumeric display will provide the navigational team with all the relevant navigational information currently held in book form — Sailing Directions, light Lists, Port Entry Guides and the like.

When these presentational complexities have been resolved there will still remain other problems. Navigational paper charts are corrected by Notices to Mariners. How can such corrections be relayed to and incorporated in a computer stored electronic chart? There must be no scope in any such provision for the accidental or wilful distortion or destruction of the basic data. And what about such a simple mishap as a power failure on board? What obligatory fallbacks must be insisted upon? When a ship comes to grief the paper chart, if it is saved, can be most important piece of evidence — what provision in similar circumstances could be made to provide a salvable and portable electronic record of the conduct of the ship?

Modern technology provides solutions to all these problems and the task the two international bodies are addressing is rather that of agreeing and specifying their detailed requirements and the performance standards to be achieved. Industry is ready and waiting to provide systems that will meet their specifications. There is a definable market for the electronic chart — not just "ship of the future" designers and the operators of high speed vessels but companies operating conventional modern ferries, cruise ship owners whose vessels have to meet rigid berth allocation schedules and perhaps the owners of vessels with a high safety profile such as LNG carriers on a shuttle run between a loading and an unloading port.

The international hydrographic community is not currently very responsive to this market. The major national charting authorities view the project in its totality as a long term development. In particular they face the task of creating an international electronic chart data base not by simply digitising the existing published charts but by going back to the vast wealth of source data they hold in their archives, mostly in graphical form. They point out that they face this task as a largely unrewarded extra, over and above the requirement to maintain and service the present outfit of paper charts on, indefinitely, into the future. If the full potential of the development is to be realized they are undoubtedly right.

**"The danger of the all or nothing approach is that industry and the market will grow impatient."**

There are distinct signs that this is already happening. Privately produced electronic charts can be obtained. These cannot be "paper chart equivalent" nor can they be supported by a comprehensive correction service — they pose interesting questions of product liability.

The project has momentum. The Norwegians, who are particularly energetic proponents of the development, currently have prototype chart equivalent equipment at sea in a commercial vessel — the "Nornews Express". Reports from the ship are most encouraging.

## **RADIO POSITION FIXING SYSTEMS**

To the ARPA and the Electronic Chart it is necessary to add a third ingredient — accurate positional data — if a complete navigational package is to be achieved. It so happens that considerable changes are taking place in the availability of Radio Position Fixing Systems and it is therefore necessary to review this situation too.

A present oddity is that the only such equipment a vessel is obliged to carry is the radio direction finding equipment necessary to take bearings of radiobeacons. Nowadays, of course, vessels trading internationally are likely to carry a multiplicity of position fixing receivers. For the last forty-five years the standard such equipment around the British Isles has been the Decca Navigator. This is a ground based position fixing aid of limited range and, in terms of current navigational practice, of acceptable accuracy.

Over the years a patchy but quite extensive Decca Navigator coverage has been established around the world.

A rival, but not dissimilar, equipment of US manufacture — Loran 'C' — has over the last twenty-five years or so been established in other areas. More economical in its requirement for ground stations to achieve a similar coverage, it is otherwise of very similar performance to the Decca Navigator.

Taken together these systems by no means provide world-wide cover. In recent years the gaps between their coverage have been plugged by Transit — a satellite navigational system which provides periodic positional fixing only — and by Omega — a relatively low accuracy ground based system.

For many years Decca funded the maintenance and the operation of the shore stations necessary for the Decca Navigator by the simple expedient of supplying receivers only on rental. However in due course other manufacturers succeeded in breaking in on the market and Racal-Decca (as it had by then become) was obliged in this country to negotiate a transfer of the operating and maintenance costs of the shore equipment to the General Lighthouse Fund.



These costs therefore became an element of UK vessel light dues.

The other systems referred to were, and indeed are, maintained on the US Defense Department vote. No charge is made for the civil use of the radio signals and users are therefore only faced with the purchase or hire cost of the receivers. However the situation is now changing quite dramatically. During the next two years the US will deploy the last satellites of their GPS (Global Positioning System) constellation and for the first time there will be continuous world-wide satellite cover. The other systems will then be progressively phased out although, in the case of overseas Loran 'C' chains, the US is offering them to local operators for civil use.

The GPS satellite system has a potential accuracy of better than 10 metres (which is at least an order of magnitude improvement on Decca Navigator and Loran 'C'). With the intention of limiting this excellent performance to US Defense users a feature called "Selective availability" has been built into the system. When this is switched in other users receive a signal of downgraded accuracy — a reversion, in fact, to the accuracies obtainable with Navigational Decca and Loran 'C'. The effect of this downgrading can, however, be nullified by locating fixed receivers in known positions which can measure the error and retransmit it as a correction to any mobile receivers in the vicinity. It already seems clear that "differential GPS", as it is called, can see GPS restored to a high accuracy by the use of only a few such stations — perhaps only three or four for the whole west European seaboard. Differential GPS, probably relayed via Inmarsat, will certainly be available in UK waters.

This whole exercise must seem slightly pointless — the more so as the Soviet Union, in almost the same time scale, will be deploying a very similar satellite system called "GLONASS" which they promise will be freely available for civil use and will not be downgraded in any way.

Over a rather longer period the British Government has let it be known that it will have to consider phasing out the Decca Navigator system in UK waters. The alternative would be to spend a considerable sum on its modernisation. A consultation took place in which the option was presented as being a straight choice between taking over a redundant Loran 'C' chain and extending it to cover the British Isles on the one hand and Decca modernisation on the other. In financial terms, and given that choice only, there was no contest and the Government has announced that, provided agreement is achieved with partner Atlantic seaboard nations in 1991, the change will be made to Loran 'C'; by about 1997.

This decision has proved particularly unpopular with British fishermen who live and think in terms of Navigational Decca and rely on its excellent repeatability to find their fish and avoid the fasteners. In other parts of the world decisions have been made in some cases to modernise and in other cases to replace the Decca chains.

However it seems clear that for those who already use the system Loran 'C' will enjoy an extended life with an enhanced coverage in its civil role during the years ahead — whether its use can be prolonged until the forecast 2020 date would, however, seem doubtful. In due course users will surely be more impressed by the world wide coverage and superior accuracy (in differential mode if need be) of the new satellite systems. Indeed the likelihood that GPS will be fully available before Loran 'C' in UK waters will

surely tempt many local users to make the one change only. It is not hard to envisage widespread resentment developing by 1997 at the prospect of having to pay, through light dues, for a system which will by then be going to be little used and which can be justified only as a fall back — in case the US military switch off GPS. If that were the sole criteria there are even now other options — funding a navigational package to be included in Inmarsat's third generation satellites would, for instance, provide modern non-military alternative.

Accuracy is, however, the crux of the matter. Neither a modernised Navigational Decca nor Loran 'C' will meet the requirements of those who are seeking to put together a modern ship-borne navigational system. Fortunately the user demand for high accuracy data is more extensive than that. As the world awakens to the benefits to be gained from satellite positional data — on land, at sea and in the air — market forces will build up a strength so overwhelming that it is hard to imagine anything other than the universal availability of the system and its full accuracy potential being achieved in the quite short term.

## VTS SYSTEMS

Having reviewed, at some length, the opportunities presented by the present developments in the field of marine navigation and concluded that achievement of a high accuracy package is inevitable in the quite short term, it is necessary to return to the original thesis and consider the effect of this change on ports. However before doing so it is, perhaps, appropriate to consider briefly the parallel developments that have been made ashore in the equipment available for use by Vessel Traffic Services (VTS).

Many years ago when the first port radars were installed there was an expectation that fog delays in port approaches would quickly become a thing of the past. However it very soon became apparent that the new staff engaged as a radar operators, closeted in a darkened room in front of their screens, had a daunting task just sorting out and keeping track of the myriad of echoes they were confronted with. They were certainly not in a position to even begin to take control of the situation nor, thankfully, were shipmasters disposed to accept instructions to do things with their ships that they could not immediately verify as being safe. Ports very soon recognized the desirability of not compromising the liability situation and gave up any notions of taking ships through dense fog on to their berths. Port radar operators could inform shipping, and could even on occasions advise shipping but only in the event of some extreme emergency should they seek to control shipping.

The bringing together of radar and computer technology brought benefits for port radar in exactly the same way as it improved the usefulness of radar at sea. The functional link between the display and the radar scanner was broken. It became possible to display on separate screens a port approaches, the reaches of a river and a dock area in a sequence and on scales that made the best navigational sense. Artificial signals could be injected so that, for instance, the limits of the navigable channel could be portrayed on the screen. Beyond that, and

**"using colour presentation, almost limitless opportunities unfolded."**

Confusing radar land echoes could be suppressed and in their place, from the computer's memory, the land detail

of the navigational chart of the appropriate part of the port could be thrown up on the screen. Although still not practical at sea, the facility is becoming available ashore to identify a particular echo as a certain vessel and to mark it as such on the screen. Thereafter that vessel, appropriately tagged, could be tracked automatically right on to her berth. If she was carrying a dangerous cargo that too could be flagged and the nature and quantity of the dangerous goods would, at the touch of a key, be available on an alphanumeric screen. Without human intervention a sequence of other desired operations could be triggered by the simple process of making that initial identification — even to the extent of printing out a vessel dues invoice for the visit and addressing it to the correct shipping agency. Other operations became possible — the computer could generate after a few sweeps of the scanner an accurate course and speed of a vessel. Her future position along with those of adjacent vessels could be forecast. Bearings and distances could be measured from the instantaneous position of a vessel to navigational features, other vessels or channel turning point. Guard zones could be placed around vessels at anchor so that if they swung to the tide nothing would happen but if they began to drag their anchor an alarm would sound. A record of events could be preserved by taking digital “snapshots” of the screen at any desired interval and storing them on disc. All this technology, and more that there is not space to describe, is now on the market at increasingly affordable prices. Single set options — in effect adaptations of the ARPA for use ashore — are now available for small and medium ports.

All these developments have not, as yet, given rise to any reappraisal of the diversion of responsibility for marine safety. The individual shipmaster remains entirely responsible for the navigational conduct of his vessel. Guidelines for the conduct of VTS produced by the International Maritime Organisation have not eroded this position. Whilst shipowners and shipmasters are loaded down with regulation the level of provision of VTS and its degree of involvement remain discretionary. There is even no obligation to make official report of a marine casualty that occurs in plain view of the VTS — that responsibility rests with the shipmaster concerned.

The impression must not be given that VTS has no safety role — that its function is merely to observe and ensure that port services are available when required. The passing of navigational information and advice, already referred to, represents a positive contribution to the safety or the regime as a whole. The constant overview of shipping movements is bound to show up those areas where the risk of accident is greatest thus allowing improvements to be made in the alignment of channels, the provision of navigational aids and port procedures generally. In these difficult times financially, ports would not have made the investments in VTS that have been made were they not satisfied of the requirement for the service.

## THE IMPACT ON THE PORT INDUSTRY

In the absence of regulation what is the responsibility of the port for the safety of the visiting ship? The answer appears to be that the port is the “invitor” and the ship is the “invitee” and the port has to discharge its common law obligation to the ship in a reasonable way. Reasonable is a difficult word. It is suggested that reasonable provisions would balance a risk against the measures to be taken to reduce or eliminate that risk and their cost. In this day and age it is possibly necessary to take account of a third

consideration — what expectations does the public have in the matter?

The situation is an interesting one. This article suggests that a growing number of vessels will soon be fitted with automated navigation systems of a quality which carry the potential of allowing them to berth or dock swiftly and unfailingly in all conditions. But to realize at last the dream of the early proponents of port radar it will be necessary for the port to provide a safe regime for this to happen. The commercial pressures will undoubtedly be there and the industry will have to consider whether to respond to them or oppose them.

As stated in the preamble, there are other considerations outside the remit of this article which relate significantly to the risk. In many ports the extent to which the harbour area is used by the recreational boating public will be a potent factor. The mismatch in size which currently exists between the commercial vessel and the pleasure craft may soon be compounded by a similar mismatch in speed. In other ports — ports handling passenger ferries or ports handling dangerous or polluting cargoes — it is the worst case catastrophe that will need to be identified and considered.

In the belief that the march of this technology is irresistible the writer believes that the industry should be supportive of the development. In practice this means urging the Government not to waste resources on Navigational Decca and Loran ‘C’ but, instead, to capitalise on the availability of GPS and support the development of its use in the differential mode. The national charting authority — the Hydrographer of the Navy — should be urged to develop the electronic chart data base selectively, concentrating in the first place on the areas where the demand lies, notably port approaches and other areas of peak traffic density.

Ports will have to consider their procedures. Harbour Masters have a responsibility to bring to the notice of the masters of arriving vessels any navigational dangers of which they may not be aware. Probably the most effective way of fulfilling this obligation is to provide the ship with a well informed pilot. However the electronic chart project offers the possibility of amending the shipboard chart today to reflect the results of a hydrographic survey carried out in the port yesterday. The alphanumeric screen on the bridge of the arriving vessel could equally catalogue all local navigational warnings and provide today’s port status information. These desirable objectives will only be achieved if the industry insists on a voice in the project and co-operates by providing input data in a format that is compatible with the requirements of the national charting authority.

Ultimately the pilotage requirement may have to be reviewed. If the role of the pilot as a provider of local information lapses and if automated navigational systems allow ship’s officers to bring their vessels safely much closer to the port, the skills of the pilot may only be needed to perform the intricacies of the berthing or docking manoeuvre. As ships with minimal manning may also need in the future to be boarded by a berthing gang it would certainly be a convenience if marine pilotage were to become a final stage requirement only.

However it is the role of the VTS that will need the closest examination. In many ports it is possible that this should begin with a fully fledged risk analysis. Such an analysis may well reveal that the port could not safely accommodate the present or future mix of vessel speeds and

*(Continued on Page 21)*

# International Maritime Information

# WORLD PORT NEWS

## **Singapore '92: Global Change and Response**

**International Exhibition and Conference for the Maritime Industry  
25 — 28 March 1992, World Trade Centre, Singapore**

"Maritime Technology: Global Change and Response" is the innovative theme for Singapore '92, the premier event for the world's shipping and maritime communities.

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## **7th Int'l Symposium on Vessel Traffic Services**

**June 8 — 12, 1992  
Vancouver, British Columbia, Canada**

The Seventh International Symposium on Vessel Traffic Services "VTS '92" will take place in Vancouver, Canada, June 8 to 12, 1992. Organized by the Canadian Coast Guard under the direction of an International Organizing Committee, this symposium should be of interest to those involved in any aspect of vessel traffic services or related activities.

## **Symposium Theme**

The theme "Vessel Traffic Services in the Global Environment" recognizes that VTS is a major contributor to reduction of risk to the environment associated with marine transportation. It also reflects recent trends in VTS to expand from port centred operations to systems encompassing world-wide activities such as information sharing.

## **Keynote Address**

The keynote address will be given by Mr. William O'Neil, Secretary General of The International Maritime Organization. The keynote address will trace the growth of VTS from modest beginnings to the vital service it now provides to maritime transportation. It will challenge the symposium to demonstrate how the VTS community can cooperate on global proportions to improve maritime safety and the quality of the marine ecosystem.

## **Symposium Program**

The theme of the symposium will be developed through six sessions each devoted to a specific aspect of VTS. A noted authority will deliver the "topic theme paper" in each session; after which 3 or 4 papers selected from the general call for papers will be presented and discussed. A workshop will also be included where a panel will lead a discussion of operational issues. A General Reporter will summarize the

## **Developments in—**

*(Continued from Page 20)*

sizes unless it was prepared to impose its will more directly on vessel traffic movement.

**"In many ports the existing situation with regard to the freedom enjoyed by pleasure craft in port approaches is tantamount to allowing a gliding club to operate on the main flight path to Heathrow."**

Where traffic levels are high there is a clear requirement for the introduction of the concept of "controlled seaspace". Areas so designated would be open to navigation only by vessels who had sought and obtained clearance from the

VTS. It is suggested that such an arrangement would provide the correct balance — the vessel would remain responsible for her own safety whilst the port was able to fulfil its commitment to a safe regime. At present few, if any, ports have the powers to exert their authority to bring about such an arrangement.

In this context the writer refers to his earlier remarks on risk and in particular to the third consideration — public expectations. The industry may well serve its interests best if it adopts a "before the event" response to the new situation by identifying the risks that are now arising, the measures it would like to adopt to meet those risks and any deficiencies in its powers that prevent it from doing so. The requirement, after all, is that, on a port by port basis, the industry should act "reasonably".

findings and discussion for each topic at a wrap-up session scheduled for the final day.

### **Preliminary Program**

#### **Global Trends in Shipping and Shipping Operations:**

World-wide developments in commercial trade and commodities as well as ship construction, crewing and operations which impact on VTS.

Chairman: J. Prunieras, Secretary General, International Association of Institutes of Navigation (IAIN).

Topic Speaker: C. Horrocks, Secretary General, International Chamber of Shipping (ICS).

#### **The Mariner — VTS Operation Environment:**

Developments in training, communications and cooperation in the ship-shore interface. Relationships between the mariner and ship owner/operator, and the VTS operator/authority.

Chairman: Capt. M. Pouliot, President, International Maritime Pilots Association (IMPA).

Topic Speaker: Capt. N. Cockcroft, Royal Institute of Navigation.

#### **Cooperation Between VTS Centres:**

Developments in international operating agreements, systems and procedures. Relationships between VTS systems operating under different authorities. This will include national as well as international cooperation, where VTS systems in a country operate under different authorities.

Chairman: N. Matthews, Secretary General, International Association of Lighthouse Authorities (IALA).

Topic Speaker: Mr. K. Polderman, Head — Traffic Safety Division, Netherlands Directorate of Shipping.

#### **VTS and Environmental Protection:**

VTS effectiveness, public concerns, legal considerations, environmental sensitivity and planning for a clean environment.

Chairman: Dr. G. Zade, Vice-Rector, World Maritime University.

Topic Speaker: M. Sollosi, Chief VTS United States Coast Guard.

#### **The Global Expansion of VTS:**

Future trends in VTS to expand to new areas of the globe and to move from a port centred function to a world-wide framework. How is the need for a VTS system established? On what basis is a VTS system upgraded? Is there a need

for VTS to develop in a similar way as air traffic control on a global basis?

Chairman: Capt. J. Watson, Chairman, Maritime Safety Committee of the International Association of Ports and Harbours (IAPH).

Topic Speaker: Capt. D. Hunt, former Deputy Director of Hong Kong Marine Department, currently a VTS consultant.

#### **The Rapidly Changing Technological Environment:**

Technology is continuing to improve at a rapid pace. What is new which will have an impact on VTS today and the VTS of the future?

Chairman: M. Turner, Deputy Commissioner, Canadian Coast Guard.

Topic Speaker: B. Borodchak, Director General, Telecommunications and Electronics Directorate, Canadian Coast Guard.

Please contact the Symposium Secretary for further information.

Richard S. Bryant, Secretary  
7th International Symposium on Vessel Traffic Services  
Canadian Coast Guard  
Suite 620 — 800 Burrard Street  
Vancouver, B.C. Canada  
V6Z 2J8

## **Conference on Safety In Port Environment**

### **Emergency Response to Chemical Accidents in Port Areas**

**Bremen/Germany, 5 to 8 October 1992**

As the Bremen Senator of Ports, Shipping and Transport, I should like to recall that, at the closing of the First International Conference on Safety in the Port Environment in September 1990, all participants expressed the wish that a further conference be held within the next two years. They felt that the First Conference had done no more than touch upon many of the subjects and that the problems deserved much deeper investigation, treatment and discussion.

It therefore gives me great pleasure to announce that the Second International Conference on Safety in the Port Environment will be held in Bremen in October 1992 in close co-operation with, and supported by, the German Federal Ministry of Transport and the International Maritime Organization

(IMO).

The Second Conference has been devoted to the present state of the art of Emergency Response to Chemical Accidents in Port Areas and will cover, in particular:

- Accident experience with dangerous chemicals;
- International conventions and activities;
- Recommendations on the safe transport, handling and storage of dangerous substances in port areas;
- Implementation of preventive measures;
- Equipment for emergency response;
- Contingency planning and training;
- Accident mitigation and combating, including financial and economic costs;
- Liability and compensation.

These topics have been selected because IMO has already initiated work to develop an appropriate instrument to expand the scope of the International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC Convention) to apply, in whole or in part, to pollution incidents by hazardous substances other than oil.

During the last day of the Conference, a technical visit will be organised.

A number of international organizations, institutions and companies have already agreed to co-operate and to contribute their expertise and experience.

Those of you who are interested in the Conference and wish to be kept informed are asked to fill in the form given overleaf. Further information on the Conference will be mailed to you as it becomes available.

Organised by: PORT AND TRANSPORT CONSULTING BREMEN GMBH (PTC)

For further information, please contact:

Port and Transport Consulting Bremen GmbH (PTC)  
P.O. Box 107965  
D 2800 Bremen 1  
Attn: Mrs. Brigitte Mühlbrandt  
Phone: 421/398805  
Fax: 421/398902  
Telex: 24484027 BLD

## Guides to Protective Security Measures

The following "Quick Guides to Protective Security Measures Required" as published by the U.K. Department of Transport, were submitted by C/Supt. David Sebire, Port of London Authority Police at Tilbury, United Kingdom, and may be of interest to our seaport members.

### PORT OPERATORS ARE REQUIRED TO:

- appoint a senior person in the company to be responsible for maritime security matters, and to receive legal documents.
- provide to the Department of Transport the names/addresses/phone numbers of 24 hours emergency contacts (and deputies), the senior company

person legally responsible, and other details such as ferry routes, operating, businesses operating in the port "Restricted Zone", and protective security measures in place; notify of any changes.

- appoint a manager to be responsible for port protective security matters.

- write contingency plans for: bomb threat, bomb search, bomb detonation, evacuation of port, increased threat state requiring higher levels of searching of passengers baggage/vehicles/freight, other emergencies; plan to provide for additional staff needed; train staff; exercise plans.

- recommend to the Department of Transport the size/shape number of sensitive parts of the port (passenger berths, linkspans, embarkation area,

terminals, embarkation areas, etc.) to be designated as "Restricted Zone(s)".

- implement a pass system for entry to the "Restricted Zone", and remove from the "Restricted Zone" any unauthorized persons found within it.

- erect effective physical barriers (fences, walls, natural barriers) to prevent unauthorised access to the "Restricted Zone"; ensure gates are manned or locked; use supporting measures (lighting, manning, electronic intruder detection systems, CCTV etc.) as appropriate.

- within the "Restricted Zone", segregate passengers arriving (landing) at the port from those departing (boarding ships), either by physical means or by time.

- strictly control access to ships; prevent unauthorised disembarkation

## The First Line: Customs and Drugs '90

(Extracts from "The First Line: Customs and Drugs 1990" Prepared by Canada Customs for the Customs Co-operation Council)

### Highlights

During 1990, the Customs administrations of CCC Members seized just over 477 tonnes of illicit drugs and more than 23.6 million dosage units of psychotropic substances.

The quantities for all drug types except for hashish and psychotropic substances decreased from the previous year's totals. The following tables show the world trend in seizures over the past five years and give a breakdown by region with comparisons to 1989.

The heroin trade is the current greatest threat as a drug of concern for the world's Customs services as bumper crops of opium and increasing involvement of different trafficking

groups are leading to increasing supplies reaching world markets. It is a threat the Customs services are having trouble coping with, as seizures have dropped for two years in a row.

The opium trade is also declining, but this drug is essentially only a problem for the producing areas in Asia and for the United States.

The well-publicized crackdown on the cocaine trafficking activities of the Medellin Cartel by Colombian government authorities may have had a limited effect on the supply of the drug which could have contributed to the small percentage drop in cocaine seizures by Customs services. This drop was concentrated in the Americas however, as most other areas of the world continued to increase the quantity of cocaine seized.

Cannabis showed a very fluctuating picture. Seizures of marihuana dropped for the fourth year in a row, confirming a major trend away from that form of drug. Hashish rebounded somewhat

from its major drop of the previous year; this was mainly due to substantial increases in Pakistan and the various countries in North Africa and the Middle East. Other areas actually dropped in the amount of hashish seized. Liquid hashish was down, but it was very clear that this was principally a two country problem.

The 1989 Drug Report of the Council found that seizures of psychotropic substances for that year had reached unprecedented levels. 1990 went beyond that with a percentage increase matching that of the previous year, which set a new record level. Particularly important in this result were Africa, Europe and Asia.

There were considerable regional variations, both for individual drug types and looking at the overall picture for each region. There were only three regions — Europe, North Africa/Middle East and Oceania — which could be seen as showing improved enforcement results over the year.

### REGIONAL BREAKDOWN OF SEIZURES AND 1989/1990 COMPARISON

Drug	Africa South of the Sahara		North Africa & Middle East		Asia		Oceania		South America		North America		Europe	
	Qty (kg)	89/90 compar	Qty (kg)	89/90 compar	Qty (kg)	89/90 compar	Qty (kg)	89/90 compar	Qty (kg)	89/90 compar	Qty (kg)	89/90 compar	Qty (kg)	89/90 compar
Heroin	30	-80%	185	+497%	2,070	-50%	65	+18%	—	—	619	-12%	2,649	+103%
Opium	—	—	3	-77%	1,959	-50%	2	-60%	—	—	891	+67%	36	+177%
Cocaine	1	-50%	47	+1,075%	55	+331%	60	+50%	523	-49%	65,606	-6%	5,394	+6%
Marihuana	1,296	-98%	534	+871%	2,363	-94%	1,924	+2,399%	81	-99%	129,011	-44%	12,804	+59%
Hashish	—	—	23,322	+91%	125,817	+168%	151	+18%	—	—	17,581	-29%	80,460	-5%
Liquid Hashish	—	—	—	—	—	—	16	+2,319%	—	—	255	-18%	365	+540%
Psychotropic Substances	1,465,003 d.u.	+234%	1,865,955 d.u.	-70%	15,560,575 d.u.	+227%	69,064 d.u.	-36%	—	—	2,208,030 d.u.	-40%	2,462,532 d.u.	+729%



from vessels; link passengers to their baggage and vehicles; develop procedures to minimise the risk from unaccompanied baggage.

— provide the capability (staff, training, facilities) to search a sample of persons, baggage, vehicles, stores, freight etc. entering the "Restricted Zone", as appropriate according to the Threat Assessment and Guidelines issued by the Department of Transport.

— inform the D.O.T. any threats or other incidents. (IAASP News)

## **Int'l Congress of Sea Traffic, Port Handling**

**25 — 27 March 1992, Cadiz, Spain**

Proposed topics

### **1. Fishing Market and Perishable Goods**

Fishing market sales system. European Community Policy in hygienic & sanitary conditions. Perishable goods traffic. Cold store facilities for preservation.

### **2. Dangerous Goods**

Test of the Spanish Law in force. Traffic of dangerous goods across centres of population. European Community Policy.

### **3. Bulk Traffics**

Special facilities for loading and unloading. Dirty bulks: Pollution control. Dusty bulks traffic and their compatibility with other traffics. European Community Policy.

### **4. Ports and Portuary Free Trade Zones**

Law in force. Community Policy.

### **5. Ports Organization**

Portuary management systems. The Port as an Enterprise. The new Law of the Spanish Ports.

#### **ALTERNATIVES:**

##### **A. — Maritime Stations**

Passenger and tourism facilities. European Community Policy.

##### **B. — Trends Intermodalism**

Ro-Ro terminals. TIR & TIF terminals. European Community Policy.

For further information, please contact:

General Coordinator  
Organization Bureau, Plaza de Espana, 17

11006, CADIZ, Spain

Tel: 220429, 220453

Fax: 220931

## **Where the Environment And the Economy Meet**

### **Globe '92: A Special Project**

#### **Introduction**

Globe offers an opportunity for a public focus on ports and harbours showing rather than saying what sustainable development is and how it can be effected. As such, the inaugural session could launch a continuing evolution of dialogue and demonstration fitting with the process of the Globe series of conferences. It can, given the desires of Globe and the sponsors, be a beginning point for determining what can be done in future sessions based on emergent benefits interests and commitment by the participants. This is an opportunity to discuss, in a public forum, management trends and technologies utilized by managers of ports and harbours in the coastal, urban, development and operation of ports and harbours nationally and internationally. Through information sharing and demonstrating technologies at the trade fair, ports and harbours will demonstrate their role in sustainable development and involve the urban community in a discussion of the relationships between the economic and market forces, the regulatory environment and the social and environmental interests. In addition to integrating the conference and trade fair components of Globe 92, selecting ports as a special project for Globe '92 is based on these criteria.

- there is an opportunity to exemplify advanced or appropriate management and operational practises through a case study approach and by comparing common challenges; different solutions;
- there is potential to transfer technologies or to foster adoption or adaptation of existing practises between ports from around the world;
- the discussion may result in planning and modification of anticipatory and preventative approaches.
- it will promote partnerships building and cooperative activities.

Vancouver is well situated to host not only Globe '92, but also a discussion on ports and harbours. There are three harbour authorities managing the lower and upper arms of the Fraser and the Burrard Inlet. Recognizing that the issues faced by Vancouver's port and

harbour managers are, to a point, common to other ports and harbours, the three harbour authorities have combined forces to organize and plan, in cooperation with others, the Ports component of Globe '92.

#### **Purpose and Objectives**

The purpose of the ports program within Globe '92 is to initiate and stimulate an on-going dialogue between international harbour cities by discussing, in a public forum, issues of common concern, solutions of a policy, strategic, or operational nature, challenges and strategies for dealing with future change.

More specifically, the ports special project will seek:

1. to illustrate through comparative case studies, on a global level, the interrelationships between ports within the urban setting, and the broader economic, social and environmental context.
2. to illustrate the emergence of new environmental technologies, their capabilities and factors affecting their successful application to mitigating the impact of ports and harbours operations on the human, natural and physical environment.

#### **Conference Objective**

1. To conduct an exploratory discussion on ports in terms of their contribution to the local, regional, national economies and their role in sustainable development;
  - explore the trends affecting decision making
  - share strategies and investigate partnerships for addressing cultural, economic, environmental issues.

#### **Trade Fair Objective**

2. To profile key technologies, such as soil remediation techniques, which are proven in their application to alleviating the environmental impact of ports and harbour operations and development.

#### **Proposed Topics**

Session 1: The Challenges Ahead

Moderator: Rick Pearce

An overview of Ports and Harbours and Their Fit within the Global and

National Economies and within the Urban Environment.

**Proposed Speaker:**

Minister of Transportation  
Minister responsible for DFO  
Session 2: The Challenges  
Moderator: Captain Norman Stark

**Presentation Topics:**

Urban Encroachment (Land Use Decisions)  
Dredging and Contaminants  
Soils Remediation

Session 3: Focus on Ports and Urban Transportation Infrastructures  
Moderator (proposed): Tom Dowd

## **28th International Seminar On Port Management**

The 28th International Seminar on Port Management will be held from May 7 till June 18, 1992 at the International Institute for Hydraulic and Environmental Engineering (IHE), Nieuwelaan 76, in Delft, The Netherlands.

Main topic: Intermodal Transport and Logistics.

For more information and application forms, please contact:

International Institute for Hydraulic and Environmental Engineering

Nieuwelaan 76, P.O. Box 3015, 2601 DA Delft, The Netherlands.

Tel.: + 31-15-783404 or 786992.

Fax: + 31-15-122921

Telex: 38099 ihe nl

Cable: interwater

## **New Publications**

### **IMO's "Manual on Chemical Pollution — Section 2: Search and Recovery of Packaged Goods Lost at Sea"**

Sales No. IMO-633E, price £10.00 (English)

In either English, French or Spanish  
English posted October 1991

French available later

Spanish available later

IMO Secretariat,

Publications Section,

4, Albert Embankment,

London SE1 7SR

### **Development and Improvement of Ports: Guidelines for Port Managers on the Use of Computers**

UNCTAD Report No. TD/B/C.4/AC.7/11. Order from: UNCTAD Shipping Division, Chief, Port Section, Palais des Nations, CH-1211 Geneva 10, Switzerland. Price: n/a.

This report briefly describes the revolution in information technology and its significance in trade and the challenges it poses for port managers. It notes that many ports use computers, but most typically for accounting, billing, and pay-roll. However, as the report points out, numerous other applications are possible, including for example container tracking, cargo control, inventory control (spare parts and stores), personnel records, analytical accounting and cost control, pre-arrival preparation of documents for ship discharge, and analysis of hydrographic survey data.

The study describes the main characteristics of these applications, the inputs, outputs, and corresponding costs and benefits. It also describes a computerized system used at the Port of Gdynia, Poland.

It argues that port managers at all levels who do not yet use computers as a management tool should be advised to do so. It also recommends that ports already using computers should consider introducing new systems and improving old one, stressing the nature of the system rather than the size of the port as a key factor. Particular consideration should be given to microcomputers because of their low equipment and software costs, ease of use, reliability, and the standardization of computers and software.

(AAPA Advisory)

### **Tankers: The Outlook to 2005**

According to a new Report\* from the UK-based Ocean Shipping Consultants group, significant increases in tanker freight rates are set to be experienced in the near-future, this after some probable rate weakening over the short-term.

The Report presents a detailed set of analyses on the future outlook for trade, tanker employment, fleet development, capital & operating costs, and break-even freight rate levels, throughout the period to 2005.

The main conclusions of the Report are:-

#### **Oil Trade to 2005**

- World seaborne oil imports are forecast to rise by around 25% in the period to 2005, taking the total to approximately 2165mta by 2005. Imports of oil products are set to increase far more significantly than for crude — the latter set to rise by just 12% overall as against 62% for oil products.

- Around half of the projected overall forward growth will be witnessed in the first half of the 1990s, with average annual trade growth thus equating 2.75% for 1990/95, this against 1.25% for 1995/2000 and around 0.6% for the final half-decade.

- Crude oil exports from the Middle East are expected to increase by around 23% in the forward period overall, this against rises of less than 10% for Africa and C/S America.

- For oil products, exports from the Middle East are expected to more than double over 1990/2005, with similar percentage growth expected to be witnessed for total exports by Far Eastern countries and, on a smaller scale, for those of Africa.

- For world seaborne crude oil movements, overall growth is set to approximate 12% to 1402mt, with growth of 21% and -2% respectively in alternative Low & High Oil Price scenarios.

- For seaborne oil product movements, the annual volume is forecast to increase by almost 300mt or 62% in the forward period to 762mta.

#### **Tanker Demand to 2005**

- In the crude oil trades, total vessel demand is set to rise by around 13% from 6153bn to 6936bn TM (tonne-miles), with this overall growth spread fairly evenly across the forward period. This represents marginally higher growth than for trade, underlining the significance of changing trade patterns — most especially in favour of increased dominance of exports from the Middle East.

- For oil products, the annual demand level is forecast to rise from the 1512bn TM of 1990 to over 2700bn TM by 2000, and further to almost 2910bn TM by the end of the study period. Total forward expansion thus approximates 92%, this against the 62% expected trade volume expansion.

- For total tanker demand development, the forward period is forecast to witness an increase from the 7666bn TM of 1990 to 9844bn TM in 2005 — overall growth of around 28.5%. The fastest growth within this overall development is set to occur in the 1990s, and more specifically within the first half-decade.

- The significance of oil product trades in total tanker employment is set to advance from the 20% of 1990 to 30% by the end of the study period.

#### **Tanker Fleet Development to 2005**

- From the current fleet volume, expansion of around 40m DWT or 16% is projected within the first half of the 1990s, thus taking the total fleet to around 285m DWT. Net fleet expansion thereafter is likely to be far less marked in the face of extensive tonnage scrapping, with total fleet growth limited to around 10% to 314m DWT by 2005.

- Whilst product tankers and crude carriers will record overall net fleet growth, the rate of expansion will be greater for the former, with total overall expansion approximating 39%, as against around 25% for the crude sector. By the end of the study period therefore, the total product tanker fleet is projected at around 58m DWT, with around 257m DWT of crude carriers.

- Tanker newbuilding construction is forecast at a massive 187m DWT over the next 15 years — this the equivalent of 12.5m DWT each year in the 1991/2005 period. Whilst increased demand will play a significant role in this development, the main impetus for such growth will come from the age profile of the crude carrier fleet with associated large volumes of tonnage replacement.

- Of the total tanker newbuildings forecast, crude carriers account for 87%, with deliveries most significant in the early and final stages of the study period. Crude carrier scrapping volumes are expected to increase markedly — from an annual average of 4m DWT in the period to 1995, to over 7m DWT in the second half of the 1990s with a further rise to 11m DWT in the final half-decade period.

- Product tanker scrapping is expected to remain negligible over the first half of the 1990s, increasing to average around 0.5m DWT p.a. in the latter 1990s, and 0.75m DWT p.a.

thereafter, when the volume of 15-20 year old tonnage in the fleet will be significantly greater than at present.

#### **Summary: Forecast Seaborne Oil Movements 1990/2005**

million tonnes

	Crude	Products	TOTAL
1990	1255.9	469.1	1725.0
1995	1401.8	761.3	1975.3
2000	1401.8	761.3	2100.4
2005	1401.8	761.3	2163.1
Index			
1990	100	100	100
2005	112	162	115

Source: Ocean Shipping Consultants

#### **Summary: Forecast Tanker Demand 1990/2005**

billion tonne-miles

	Crude	Products	TOTAL
1990	6153	1512	7665
1995	6406	2326	8732
2000	6682	2726	9407
2005	6936	2909	9844
Index			
1990	100	100	100
2005	112	162	125

Source: Ocean Shipping Consultants

#### **Tanker costs & Freight Rates to 2005**

- For VLCCs, the main influence on newbuilding prices for at least the first half of the study period will be yard availability — this based on the relatively low number of VLCC berths in operation and the potentially massive volume of replacement tonnage that could be required over the next fifteen years.

- In terms of actual price development, the general pattern is one of higher price levels than in the past, this after an expected general price reduction over 1992/93. Later on, significant price escalation is expected, thus taking the single-hull price level up to around \$128m in current terms.

- The development of average newbuilding prices for the 30,000dwt product tanker category is likely to be less volatile, and by the end of the study period, average prices are forecast at \$48m, this representing an increase of 60% on current prices and of more than 100% on the average price of 1988.

- Associated daily capital costs for newbuildings are set to vary from

\$33,000 for a VLCC ordered in 1991 to over \$41,000 for tonnage ordered at the end of the study period (based on 18-year vessel life). For a 30,000dwt product tanker, associated daily capital costs for a newbuilding are forecast to develop from \$10,500 to \$16,700.

- In overall terms, aggregate operating expenses are projected to increase significantly, taking the levels for Convenience-flagged tonnage within a range of \$2.5/5.7m p.a. for the different sectors of the tanker fleet. Within this aggregate development, significant escalation is expected for each major cost category — manning, repair & maintenance, and insurance.

- In total terms, a newbuilding operating under a Convenience flag is likely to face capital and operating costs (in 1991 \$ terms) of around \$45,000 per day by 2000 in the case of a VLCC, and of \$21,000 per day for a 30,000dwt product tanker. By 2005, these respective cost levels will have risen to \$55,500 and \$24,000 — thus respective overall real-term escalation of 41% and 73% from the current levels.

#### **"Tankers: The Outlook to 2005"**

161 pages of text, tables, & graphs

Price: £460 (US\$875)

Available immediately from:

Ocean Shipping Consultants Ltd.

Ocean House

60 Guildford Street

Chertsey, Surrey KT16 9BE

ENGLAND

Telephone: 0932 560332

Telex: 94070113 osci g

Telefax: 0932 567084

#### **Lloyd's Ports of the World 1992**

Published by Lloyd's of London Press

Editor Brian A Pinchin

ISBN 1-85044-438-2

ISSN 0266-6197

(viii) + 864 pp.

Price £125.

North America US\$260

The Latest edition of *Lloyd's Ports of the World*, the tenth to be published by Lloyd's of London Press, catalogues some 22,000 changes that have occurred to the service, facility and personnel data of 2,800 ports worldwide.

The hardback reference directory is divided into continental sections, with ports listed alphabetically within each section. The extensive information on contacts and facilities at each port is

complemented with details of approach and anchorage, hazards and tides. Also given is the port position plus number of the UK Admiralty Chart on which it is to be found and the Admiralty Pilot in which it is described.

In this new edition the previously known Europe, Scandinavia and United Kingdom sections have been divided into just Europe and the European Community. A new section for 1992 is "International Free Trade Zones", formerly published independently, which details some 300 zones worldwide.

*Lloyd's Ports of the World 1992* is available from Roz Thompson, Lloyd's of London Press, Sheepen Place, Colchester, Essex CO3 3LP, England. Tel: (0206) 772277; Fax (0206) 772118.

### **The Reefer Market**

A Lloyd's of London Press Industry Report by Peter Wild, Hugh Fells and John Dearing  
ISBN 1-85044-372-6  
Pp 120 + vi  
Price: £195.

This new industry report gives a thorough overview and analysis of the rapidly expanding worldwide reefer industry, its current state and the scope for future development.

The opening chapter defines the principal characteristics of the market, the historical development of reefer shipping, and concludes with an overview of the present market.

The following four chapters consider the main reefer trades in more detail: the citrus trades; the deciduous, minor fruit and vegetable trades; the banana trades; and the meat, dairy and other market sectors.

The report also examines supply and demand factors, and details new technical advances. It discusses which areas and commodities are set to grow or decline, and the future of the reefer industry as a whole, providing valuable pointers to opportunities for development.

### **Limitation of Liability for Maritime Claims Second Edition**

By Patrick Griggs and Richard Williams

Published by Lloyd's of London Press  
ISBN 1-85044-337-8  
Pp 228 + xxviii  
Price: £45. + P & P £3. per order

This detailed treatment on the 1976 Limitation Convention has been updated to encompass legislative and case law developments which have taken place since the first edition appeared in 1986.

New chapters have been added on the Athens Convention relating to the Carriage of Passengers and Their Luggage by Sea, the Hague/Hague-Visby Rules and the EEC Convention on Jurisdiction and the Enforcement of Judgments in Civil and Commercial Matters.

Important new material on passenger claims has been added in the light of developments to the law arising out of the Zeebrugge and other recent disasters.

In this new edition the authors illustrate how the courts are applying the new law of limitation in practice, using recent cases such as the *Bowbelle/Marchioness* Case. There is now a detailed treatment of the changes made to the Rules of the Supreme Court to accommodate the provisions of the Convention.

## **The Americas**

### **Halifax: Double-Stack Train Service Launched**

Double-stack train service has been launched between the Port of Halifax and Central Canada as a result of an agreement reached between the Province of Nova Scotia and Canadian National. This common-user rail service is seen as a significant step in further strengthening the competitive position of the Port of Halifax as Canada's coast gateway for container traffic.

The new service will be provided with the use of thirty 5-pak double-stack cars on the Port of Halifax-Montreal/Toronto corridor, while a fleet of eight 5-pak, high capacity double stack cars is under construction and will be dedicated to the service. These new state of the art cars, each consisting of 5x 165,000 lb capacity platforms, are designed with the flexibility to carry the complete range of container sizes and payloads. The new service will reduce costs to shipping lines which call at the Port, effective immediately.

The introduction of double-stack

train service follows the announcement of a comprehensive electronic data interchange (EDI) project to begin in October at the Port of Halifax. The EDI project, replacing paper documentation with the computer to computer exchange of cargo and business information, will be the most advanced of its kind in Canada and one of the most comprehensive in North America. Both initiatives are key components of the ongoing strategy to further reduce costs and provide more efficient service to customers of the Port of Halifax. (*Port of Halifax*)

### **Montreal: Incentive Plan For Containerized Cargo**

The Port of Montreal, the first Canadian port to introduce a tariff incentive plan to encourage shipping lines to move as much container traffic as possible through its facilities, has improved the plan for 1992 by adding two new features.

In addition to increasing base incentives for containerized general cargo for both international cargo and domestic shipments, as well as maintaining a rebate for Mediterranean cargo, the Port of Montreal, Canada's number one container port, will offer rebates in 1992 for:

- containerized general cargo west of Ontario in Canada, and west of six states in the U.S.;
- landbridge cargo between the North American West Coast and Montreal.

In 1992, the port's base incentive plan will increase to 74 cents per tonne for the first 175,000 tonnes and 84 cents for each additional tonne for international cargo, up from 59 cents and 69 cents respectively in 1991.

Beginning January 1, 1992, there will be an additional 17 cents per tonne for containerized general cargo west of Ontario in Canada, and west of Michigan, Indiana, Kentucky, Tennessee, Georgia and Florida in the United States. This incentive, which translates into a savings of \$2 per 20-foot container and \$3.40 per 40-foot container, will assist the Port of Montreal's shipping lines in maintaining and increasing their share of western traffic.

For domestic shipments, the 1992 rebates increase to 58 cents and 68 cents

respectively, compared with 49 cents and 59 cents in 1991.

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

In an effort to get the industry interested in trade between Asia and Europe by using existing infrastructures and services between the North American West Coast and Montreal, the Port of Montreal will also provide an additional 50 cents per tonne for landbridge cargo. This incentive provides a savings of \$6 per 20-foot container and \$10 per 40-foot container.

The incentive capitalizes on the role the Port of Montreal plays as a leader on the North American West Coast.

"It is no secret to anyone that today's shipping lines are engaged in a tremendous battle to maintain market share, and our pricing philosophy is in tune with current market conditions," said Mr. Dominic J. Taddeo, president and chief executive officer, in announcing the enhanced tariff incentive plan for 1992.

The Port of Montreal first introduced its incentive program in 1986 and has improved it in each of the subsequent years due mainly to its ongoing commitment to rigidly control operating costs. Between 1985 and 1990, they increased only 8.3 percent, while inflation over the same period increased 23 percent.

## Vancouver's Economic Clout Reconfirmed

A 1990 update of the study measuring the economic impact of the Port of Vancouver reconfirms the port's status as an "economic powerhouse".

The study, prepared for the Vancouver Port Corporation (VPC) by the Coopers and Lybrand consulting group, estimates that the cargo and cruise operations of the Port of Vancouver make a contribution to the local and regional economy totalling \$774 million. Included in the total is a payroll of \$428 million (in wages and benefits) derived from a direct job count of 9,165. Yearly operating expenditures are set at \$196 million, and capital investment by the industry of \$150 million completes the total contribution.

The \$774 million total for 1990 compares with a 1987 figures of \$582 million — the largest increase coming from payroll and capital expenditures.

Tonnage statistics for the two years are comparable, with 1990 posting 66.4 million tonnes, and 1987 showing 63.9 million tonnes.

The dollar value of the 66.4 million tonnes of cargo handled by the port in 1990 was estimated at \$38.75 billion. Containerized cargoes of imported consumer goods and machinery, and exported grain, forest and mineral forest products — were valued at \$13.5 billion. At 34.4% of the total, containerized cargo represented the highest dollar value of any single commodity sector.

The benefits of the Port of Vancouver are also felt across Canada where the direct and indirect jobs associated with the cargo and cruise activities of Canada's port total more than 16,000.

### National Economic Impact (Cumulative)

	Lower Mainland	B.C.	Western Canada	Canada
Employment (person years)	11,992	14,500	14,840	16,055
Labour Income (\$ millions)	612	775	790	829
Gross Domestic Product (\$ millions)	728	923	967	1,029
Industrial Production (\$ millions)	683	1,132	1,208	1,342

(Port News — Vancouver Port Corporation)

## Incentive Rates Aim for Increased Volumes

Two new attractive rate discounts for container lines calling on the Port of Vancouver were introduced by the Vancouver Port Corporation (VPC) July 1, 1991.

"Volume Rebates" will be paid to the container line, and determined by a sliding scale based on the total number of loaded TEUs (containers measured in Twenty-foot Equivalent Units) the line ships through the Port of Vancouver in a calendar year.

For example, a rebate of 5% on container wharfage charges is given for 5,000 TEUs, 10% for 10,000 TEUs, and upwards in 5% increments to 50% for 50,000 TEUs. The maximum volume rebate offered is 50%.

The "First Port of Call" incentive offers a 30% reduction in the total container wharfage charges invoiced to the line. The current route of most transpacific container lines has them calling at Californian and Pacific

Northwest ports before calling at the Port of Vancouver. VPC is seeking to change that rotation in an effort to have more Canadian destined containers off-loaded at the Port of Vancouver. Being "First Port of Call" could also give the Port of Vancouver the opportunity to handle some U.S.-bound container traffic.

Volume Rebates may also be combined with the "First Port of Call" discount. Rebates will be paid quarterly.

The new rate structure is designed to reward those lines currently showing the highest level of commitment to the Port of Vancouver, and to attract others to do more business here.

The introduction of volume rebates and "First Port of Call" discounts represents the completion of the Port's two-phase container rate streamlining programme. Phase one, implemented January 1, 1991, introduced a simplified per-container "box rate".

(Port News — Vancouver Port Corporation)

## Vancouver: 1991 Cruise Record Shattered

The Port of Vancouver posted a 9.2 percent increase in Vancouver-Alaska cruise passenger traffic during 1991, continuing a nine-year upward trend.

Figures released by the Vancouver Port Corporation (VPC) indicate revenue passenger counts through the Port's two cruise ship facilities totalled 423,9238, compared to 388,323 in 1990. At season's end October 8, 22 ships representing 12 lines made 256 voyages, a significant increase over the previous year's total of 228 voyages.

The jump in traffic can be attributed to the increase in popularity cruising has enjoyed internationally, and the aggressive marketing partnership of cruise lines, the local tourism industry and the VPC. This partnership was responsible for the successful Ship-to-Shore conference initiative this September, which showcased the Vancouver-Alaska cruise to over 200 travel agents.

Another factor was the increase in capacity on the Vancouver-Alaska route after several ships were repositioned from the Mediterranean earlier this year.

"With a season like this, everyone wins," commented Mr. David Clarke, VPC's Assistant Port Manager, Busi-



ness Development. Vancouver benefits economically from the tourist trade generated, the Port enjoys more satisfied customers, and the passengers are treated to a world-class cruise experience."

With the 1992 season promising an estimated 19 ships — including vessels with increased capacity — and 221 sailings to date, Clarke sees service as the word of the future. "The cruise lines have demonstrated a strong commitment to the Vancouver-Alaska cruise, and we are responding with a corresponding commitment to service."

### **Port of Corpus Christi, Buenos Aires Ink Pact**

The Port of Corpus Christi Authority and the Ports of the Province of Buenos Aires, Argentina, have signed an agreement establishing sister-port ties between the two entities.

According to Port of Corpus Christi Executive Director Harry G. Plomarity, the purpose of the sister-port agreement is to promote friendship and develop trade and business relationships, while cooperating in an extensive range of port management, technical exchange and personnel development.

The agreement was signed by Dr. Cesar Luis Otero, coordinator of port activities for the Province of Buenos Aires and Port Commissioner Richard Valls, acting on behalf of the Board of Commissioners of the Port of Corpus Christi Authority.

### **Long Beach Supports Alameda Corridor Plan**

Port of Long Beach officials have confirmed their support for a consolidated north-south rail and truck corridor, despite recently released cost estimates which have raised concerns among various industry groups about the viability of the project.

The Alameda Corridor Transportation Authority (ACTA) has completed conceptual designs for the 20-mile railroad and highway corridor to carry cargo to and from the Ports of Long Beach and Los Angeles along Alameda Street.

The initial phase of the highway component, the widening of Alameda Street to six lanes from the Terminal Island Freeway to Route 91 with the

construction of east-west grade separations, was funded with federal grants in 1982 and 1987 as "Port Access Demonstration Projects."

Various alternatives for the highway component have been developed and ranked on the basis of a uniform set of criteria established by the ACTA Joint Powers Authority.

One primary criteria is to improve north-south travel speeds. As originally conceived the highway component did not include "exclusive truck lanes", but did consider one alternative which proposed an elevated "truck only" lane in each direction from Route 91 to Vernon Avenue.

This alternative was dropped when traffic studies did not indicate significantly greater benefits for the exclusive truck lane over the original highway component concept.

The elimination of the "truck lane" alternative should not be interpreted as a deletion of the highway component of the Alameda Corridor, Port officials cautioned. Remaining alternatives include the extension of the federally funded demonstration projects to continue the highway widening to Interstate 10.

"Traffic studies have confirmed that our original concept for the highway component was valid and that future widening of Alameda Street will be consistent in design with the Ports Access Demonstration Projects," said Mr. Steven R. Dillenbeck, executive director of the Port of Long Beach. Alternatives being examined for the highway component could reduce port truck trips on the Long Beach freeway from 15 to 20 percent.

The goal of the railroad component of the Alameda Corridor is to consolidate the movements of the Union Pacific, Santa Fe, and Southern Pacific Railroads onto a single improved right-of-way parallel to Alameda Street. South of Route 91, the railroad improvements will be at-grade with east-west grade separations to segregate road and rail traffic. These same grade separations will facilitate the north-south movements of trucks along the highway component. North of Route 91, two distinct options are being considered: an at-grade railroad with east-west grade separations, and a depressed railway with tracks in a trench 33 feet deep and 47 feet wide.

No date for rail consolidation has been established. A previously reported consolidation date of 2015 represented just one potential way of phasing the project over time. Other accelerated phasing plans are being investigated, stressed port officials.

"While costs are a primary factor in the alternative selection process, the port has not yet agreed to scale back or diminish the project in any way," Mr. Dillenbeck said.

"However, cost reductions have been and will continue to be examined as part of the conceptual design and environmental review process without reducing design criteria and planning goals established by the ACTA Joint Powers Authority."

Possible changes in the slope of the depressed rail wall and redesigned interchanges are just two examples being examined by design consultants. Phasing of project construction to aid in financing the project is also being considered.

### **N.C. Ports Enjoy Tonnage Increase**

Year-to-date tonnage for the North Carolina State Ports Authority has climbed 16 percent over the same period last year. At the end of October 1991, or four months into the 1991-92 fiscal year, Ports Authority tonnage totaled 1,644,000 tons, compared to 1,423,000 tons for the same period last year.

Bulk tonnage posted a 32 percent increase in tonnage over the same period last year, and now accounts for approximately 70 percent of the total State Ports Authority tonnage. Bulk commodities contributing to the increase were liquid chemicals, ore, phosphate and wood chips.

Breakbulk tonnage accounts for 18 percent of the total State Ports Authority tonnage, and container tonnage represents 12 percent of the total tonnage.

### **Oakland Lands New Container Crane**

A new container crane, more than 12 stories tall and weighing 1,700 tons, was delivered to the Port of Oakland, California aboard the heavy-lifter *Dock Express France*.

The crane was designed by Vulkan Kocks GmbH of Bremen, Germany.

Fabricator and prime contractor was IMENOSA of El Ferrol, Spain, with TADARSA of Aviles, Spain acting as subcontractor.

The crane joins two identical units already in operation at Oakland's Seventh Street marine container terminal. The three are the first in the world using sliding booms to handle fourth generation, post-Panamax containerships. Their lifting capacity is 50 long tons.

Oakland now has a total of nine post-Panamax gantries.

The 60-acre (24 ha) Seventh Street terminal is operated by Marine Terminals Corp.

### **Seattle Container Terminal Expansion OKd**

The Port of Seattle Commission voted to approve the amendments to the Harbor Development Strategy (HDS) proposed within the Container Terminal Development Plan (CTDP) issued earlier in 1991. The approval gives general policy direction to the Port's container terminal expansion plans for the next 20 years and "will

ensure that the Port achieves its mandate of economic development for our region," said Port Commission President Jack Block.

"As more boxes cross our docks, more jobs will be created and our community will continue to enjoy the benefits of a working, thriving waterfront," Mr. Block said. Individual projects detailed in the development plan will be driven by cargo demand, which has been forecasted to increase measurably in the coming years.

"This is a monumental policy decision and one that looks to the future needs of our container customers," said Mr. Frank Clark, managing director, Marine Division. "Staff has worked countless hours with customers, community groups, and state and local agencies, to ensure that our proposed plans are beneficial to the region." The CTDP, which could increase container capacity by 235 acres, and create up to 4,200 port-dependent jobs by the year 2000, was publicly introduced in May, 1991.

The HDS was developed in 1986 to establish policy guidelines on the general location and timing of marine facilities development. Port staff has

updated the strategy, incorporating such items as the Port's new Mission and Goals, assessment of additional acreage needs, an updated map which identifies and sets priorities for areas of future container terminal development, and a provision speaking to intermodal facilities requirements.

"The Port Commission is extremely proud of not only staff, but of the entire Port community," said Mr. Block. "The internal analysis and outreach work done by staff, along with the public's input, makes this a model project."

"We must now set in motion and aggressive acquisition and development program. However, it is imperative that we continue to actively work with all of our constituents to ensure that this reflects the values of our community," said Mr. Clark.

Mr. Clark said that the Port will begin development on a project-by-project basis taking into consideration "our financial and environmental obligations to the community."

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

### **Charleston Named 1991 Quality Port**

The Port of Charleston has been recognized as a "1991 Quality Port" by the transportation and logistics trade publication, "Distribution Magazine."

The award is the result of the Quest for Quality program instituted by "Distribution," which annually solicits users of transportation services for their opinions of the transportation services they utilize and purchase. The program has been in existence for eight years, with this being the third year ports were considered. For all three years, the Port of Charleston has been recognized as a "Quality Port."

"It's my pleasure to turn over to the Port of Charleston this Quality Port plaque," said Mr. John Capers III, publisher of "Distribution." "We print what you customers are telling us; you guys earned it."



### **Largest Volume Season for Corpus Christi**

A worker positions a small portion of the record number of bales received by Corpus Christi Public Compress during the 1991 cotton season. Compress officials are experiencing their largest volume season in five years, receiving 99,147 bales as of mid-October. Almost 45,000 bales have been shipped from the facility, which is owned by the Port of Corpus Christi Authority. Two cotton vessels are scheduled to call the port late October or early November to load additional shipments.

"The independence of the survey establishes the integrity and validity of the Quality Carrier Award," said Mr. W. Don Welch, executive director of the South Carolina State Ports Authority. "We strive continually to provide the most efficient and cost-effective port facilitation services to the international shipping community. It is gratifying to know that our customers recognize and appreciate the results of our efforts."

"The shipper today is a decision-maker who can regulate the bottom line of his company," said Mr. Capers, in discussing the importance of logistical considerations in a company's overall fiscal picture.

The areas of consideration in the Quest for Quality are service convenience, value, sales, and — new this year — equipment. Service includes transit times, and routing. Convenience assesses billing, tracing, electronic data interchange, and claims settlement. Value includes rate levels and fairness, contract price levels and terms. The evaluation of sales rests on the sales staff's knowledge of their organizations capabilities and the customers needs, and the equipment category covers a provider's inventory and its suitability for accomplishing the required cargo handling.

### US Port Traffic Trend: N. Atlantic Suffers Most

**U.S. PORT TRAFFIC** — The recession has taken a bite out of U.S. port business, although the primary victims have been the bulk rather than the liner trades. This is the picture that emerges from waterborne import/export data reported by the U.S. Bureau of the Census for the first four months of 1991.

Nationally, import and export cargo for January-April totaled 292.8 million short tons, down 10.1 percent from the preceding year and 5 percent below the corresponding period of 1989. Exports dropped marginally to 139.7 million tons. Imports plunged 17.2 percent, with tanker cargos, which account for roughly 35 to 40 percent of total imports and exports, dropping 22.2 percent. Dry cargo exports fell by 5 percent and dry cargo imports by 10.9 percent. The one plus — tanker cargo exports — finished with a gain of 29 percent. Supporting data are shown below:

### U.S. WATERBORNE FOREIGN COMMERCE

(Millions of Short Tons)

	1989	1990	1991	Change 90/91
<b>DRY CARGO</b>				
Exports	122.1	125.6	119.4	—5.0%
Imports	54.4	50.1	48.5	—10.9%
Total	176.6	175.7	167.9	—4.4%
<b>TANKER CARGO</b>				
Exports	17.8	14.4	20.3	29.0%
Imports	116.3	134.9	104.9	—22.2%
Total	134.1	149.3	125.2	—16.1%

Each of the port ranges fell in the negative column, with the North Atlantic and Great Lakes experiencing the greatest declines. Weak demand for bulk grain and petroleum appear to have been major factors in general decline of waterborne foreign trade in this period.

A brighter picture is presented by the liner trades and an even brighter one by containerized liner cargo. For January-April, liner cargo was up 3.1 percent from the previous year, with exports up 9.3 percent and imports falling by 4.2 percent. For the containerized liner cargo, the comparison shows exports gaining by 13.9 percent, imports down 7 percent, and the total up 3.4 percent.

Containerized exports gained ground (spectacularly so in several instances) and imports lost ground in every port range. Only the North Atlantic (and that by just 1.5 percent) turned up negative in total exports and imports. The liner trade was down by 1.5 percent and 2.0 percent in the North Atlantic and Gulf ranges, respectively, but higher elsewhere, soaring by 17 percent in the North Pacific. (*AAPA Advisory*)

### U.S. CONTAINERIZED LINER TRADES 1989-91

(Millions of Short Tons)

	CY 1988	CY 1989	CY 1990	Jan-Apr. 1989	Jan-Apr. 1990	Jan-Apr. 1990-91	Change 1990/91
<b>EXPORTS</b>							
United States	32.5	39.9	40.5	12.9	12.9	14.7	13.9%
North Atlantic	5.8	7.9	8.2	2.7	2.7	2.9	7.5%
South Atlantic	6.4	7.8	8.0	2.5	2.6	2.8	11.2%
Gulf	3.7	4.2	4.1	1.4	1.3	1.7	24.0%
South Pacific	10.5	13.0	12.9	4.1	4.1	4.7	17.0%
North Pacific	6.0	7.1	7.2	2.2	2.3	2.6	6.4%
<b>IMPORTS</b>							
United States	34.8	40.2	39.2	12.1	12.9	12.0	—7.0%
North Atlantic	11.9	12.8	12.6	4.0	4.0	3.7	—7.5%
South Atlantic	5.3	5.7	5.4	1.8	1.8	1.8	—0.5%
Gulf	2.7	2.8	2.7	0.8	1.0	0.8	—17.1%
South Pacific	12.0	11.4	14.2	4.3	4.6	4.4	—5.3%
North Pacific	3.6	3.9	4.0	1.2	1.3	1.3	2.7%
<b>TOTAL</b>							
United States	67.3	80.1	79.6	25.0	25.8	26.6	3.4%
North Atlantic	17.7	20.7	20.7	6.7	6.7	6.6	—1.5%
South Atlantic	11.7	13.5	13.5	4.3	4.3	4.6	6.5%
Gulf	6.4	7.0	6.8	2.2	2.4	2.5	6.3%
South Pacific	21.9	26.8	27.2	8.4	8.7	9.1	5.2%
North Pacific	9.6	11.0	11.2	3.4	3.5	3.7	4.9%

Source: U.S. Bureau of Census

## U.S. WATERBORNE FOREIGN COMMERCE 1988-91

(Millions of Short Tons)

EXPORTS	CY 1988	CY 1989	CY 1990	Jan-Apr. 1989	Jan-Apr. 1990	Jan-Apr. 1991	Change 1990/91
United States	400.9	422.8	413.5	139.9	140.1	139.7	-0.3%
North Atlantic	73.5	84.1	89.7	29.5	30.3	29.6	-2.4%
South Atlantic	18.3	20.0	21.9	6.7	7.2	8.2	13.3%
Gulf	162.5	167.6	163.8	59.5	60.3	62.3	3.4%
South Pacific	36.9	41.1	39.4	13.6	13.2	14.4	9.1%
North Pacific	73.2	73.0	71.6	24.2	24.9	24.0	-3.6%
Great Lakes	36.6	37.0	28.2	5.6	4.0	1.2	-71.3%
<b>IMPORTS</b>							
United States	516.8	551.6	554.1	170.8	185.0	153.1	-17.2%
North Atlantic	183.1	177.6	166.7	60.9	56.5	45.6	-19.2%
South Atlantic	51.4	55.5	58.6	18.9	19.2	16.6	-13.7%
Gulf	211.5	238.8	249.6	70.3	84.6	72.6	-14.2%
South Pacific	37.7	41.6	41.3	12.4	14.6	10.8	-25.8%
North Pacific	17.6	19.4	19.3	6.0	5.8	5.8	0.1%
Great Lakes	15.9	17.8	17.6	2.3	2.1	2.1	1.5%
<b>TOTAL</b>							
United States	917.7	973.4	967.5	310.7	325.5	292.8	-10.1%
North Atlantic	256.6	261.7	260.6	90.4	86.8	75.2	-16.9%
South Atlantic	69.7	75.4	80.4	25.6	26.5	24.8	-6.3%
Gulf	374.0	406.4	411.2	129.8	144.9	134.9	-6.9%
South Pacific	74.6	82.7	80.7	26.0	27.8	25.3	-9.2%
North Pacific	90.8	92.4	89.9	31.0	30.7	29.8	-2.9%
Great Lakes	52.5	54.8	45.8	7.9	6.1	3.3	-46.6%

Source: U.S. Bureau of Census

### Tacoma: Keeping Clamp On Drug Trafficking

It's no secret that fighting drugs is tough business. The Port of Tacoma's increasing cargo volumes don't make the job any easier.

To cope with about 16 million tons of cargo now moving through Tacoma annually, customs inspectors have had to work not only harder, but smarter.

"There is no way we can look at everything that comes through here, so we have to be very selective," said Mr. Jan Pearson, a Customs inspector who examines everything from stainless steel from India to perfume from the Orient.

One of the best defenses against narcotics is strong cooperation between Customs and the shipping lines, according to Ms. Kathleen Sarten, who directs the federal agency in Tacoma and the Puget Sound region, with the

exception of Seattle.

Carriers and dock workers have learned to increase security and report unusual activities. Customs has developed a system for spotting suspicious manifests and obtaining helpful intelligence.

"We try to look at the best targets we can," said Ms. Sarten. "It's not some sort of telepathy but more a matter of common sense."

Customs inspectors also work with specially trained dogs to screen shipments for narcotics. Mr. Dennis Branick, a canine enforcement officer, has worked for years with Amigo, a six-year-old mixed-breed black Lab with an impressive record of drug busts.

Amigo, who was named while working the Mexican border, was responsible for assisting in the search of the ship "Ondina", an ore ship that was detained in Tacoma last July.

When longshoremen unloaded the ship last July, they spotted several

bright green bags in its cargo of ore. They alerted Customs official, who eventually discovered 45 packages containing 92 pounds of cocaine. Street value was \$4.5 million. Arrests were made, and a trial is pending.

"That cooperation of longshoremen and Customs is a perfect example of what exists here in Tacoma," said Ms. Sarten.

Customs officials also are working with shipping companies to encourage use of container ships with fewer enclosed spaces where smugglers can hide their contraband.

Since severe penalties can now be assessed against carriers (\$1,000 per ounce for cocaine or heroin), shipping companies are recognizing the need to police their own operations.

### S. C. State Ports' Bond Issue Well Received

The South Carolina State Ports Authority sold \$65,725,000 of State Ports Authority revenue bonds on November 19, mainly for use in the completion of the Wando Terminal.

Mr. W. M. Lawrence, the SPA's chief financial officer, in announcing the sale said that the SPA qualified with AM-BAC Indemnity Corporation for insurance of the bonds' interest and principal, and the bonds are rated 'AAA' by Moody's and Standard & Poor's.

Mr. Lawrence said, "The bond issue was very well received by the financial evaluation community, as evidenced by the qualification for bond insurance and the resulting 'AAA' rating." Mr. Lawrence added, "The Authority had been quite prepared to sell the bonds on an uninsured basis, if that had been the more cost-effective way to do so. An uninsured sale, however, would have resulted in an overall interest cost of 1/8 of one percent more."

The bonds will mature from July 1993 to July 2021, with yields from 5% on the short-term bonds to 6.9% on the long bonds. The overall net interest cost to the Authority of the bonds will be 6.85%. The proceeds of the bonds, net of a normal deposit to a Debt Service Reserve Fund and costs of issuance, will be used to finance 75% of the estimated \$81.9 million cost of the completion of the Wando Terminal. The remainder of the construction cost will come from internally-generated



funds.

"Neither the bond principal nor the interest are a debt or obligation of the State or its taxpayers. The bonds are secured solely by the net revenues of the Ports Authority, reflecting the capital market's confidence in both the Ports Authority's strong financial operations, and long-standing and continuing policy of running its operations in a business-like manner," Mr. Lawrence said.

### **The Port of Tampa in Profile**

The Port of Tampa, Florida's largest tonnage seaport and seventh largest in the United States, continues to be one of the most important economic entities in the Tampa Bay area creating over 68,000 jobs in a five-country area and generating nearly \$6 billion in economic impact.

A recent survey of new business at the Port of Tampa over the last year demonstrates the phenomenal growth at the port and its strong impact on the community. Eighteen different companies began business activity at the port last year bringing in an estimated 575,000 tons of cargo, creating over 335 jobs, and generating approximately \$28 million in economic impact.

As cargo projections by these companies increase, new jobs created could rise as high as 500 and the economic impact could increase to over \$50 million. These companies are in Tampa as a direct result of the port.

The installation of a 140-ton capacity mobile crane, the completion of a new cargo wharf, and the announcement of these new business acquisitions including a direct liner service to the Far East demonstrate the vast momentum and growth of the Port of Tampa, said Port Director Joseph L. Valenti.

Mr. Valenti, who assumed the post in July of last year, is pleased with the turn of events at the Port of Tampa and is optimistic about the future.

"This has been a year of transition for us," he said. "But it's been a progressive one as well. Positive strides have been made, new business acquired, completion and initiation of new infrastructure developments, and overall improvements in the way we do business.



### **Global Gateway Through Port of Charleston**

One of seven KCM excavators is driven onboard the Wallenius roll-on/roll-off ship, FAUST, at the Port of Charleston's Union Pier Terminal. The excavators, destined for the U. K., represent the concept of global marketing and economics; KCM's parent company is located in Japan and the equipment is manufactured in Georgia with an eye towards supplying the European market. Mittrans Corp., a non-vessel operating common carrier and freight forwarder, selected the Port of Charleston for moving KCM's equipment to England. Charleston has frequent service by the largest and finest roll-on/roll-off carriers in the shipping industry. Union Pier Terminal is minutes from the open seas and has excellent rail and interstate connections.

"This is just the beginning," Mr. Valenti continued. "It has taken almost a year to get new programs and new personnel in place, and now things are beginning to bear fruit. Our marketing initiatives are showing positive results. We have some new business in place, a couple of new liner services and I think we have improved the business environment for all customers and tenants."

One of the biggest business development announcements occurred in August when Cool Carriers, the world's largest operator of refrigerated vessels, selected the Port of Tampa for its new, unitized year-round service to Japan. And, shortly after that, The Great White Fleet announced it would expand its Far East service from Tampa.

"This is the only direct Far East service offered from any port in the Gulf of Mexico," Mr. Valenti said. These companies offer shippers of perishable products in Florida a direct link to markets in Japan. Cool Carriers will call at the Port of Tampa every three to four weeks and the Great White Fleet will start out with 10-day service but will expand to weekly service in January 1992.

"This has opened up an array of opportunities for marketing in the Far East for the Port of Tampa," he said.

The Port Director also noted that even though last fiscal year, tonnage did not reach the record level recorded in 1989, the port handled over 52 million tons, the second best year ever.

"This is certainly significant when you consider the depressed economic climate which has prevailed in Central Florida over the past year. The Port of Tampa is certainly holding its own and doing better than most ports in the country," he said.

As the country's overall business environment improves, Mr. Valenti expects things to do the same at the Port. "We have already seen dramatic changes in trade with South and Central America, and we are optimistic that when Cuba opens up, Tampa will be a focal point for trade and cruise opportunities with Havana."

During the 1950s, the Port of Tampa handled approximately 12 ships a month to and from Cuba. The port wants to see that trade develop again, Mr. Valenti explained. Regarding present infrastructure improvements,

the port's marketing services department sees these as tremendous tools for marketing the port and establishing it as one of the most competitive in both Florida and the Gulf.

"The crane allows us to pursue new cargo opportunities," says manager of trade development, Mr. John Thornton, Jr. "It's designed for multiple use and can handle steel, lumber, heavy lifts and containers."

The crane works on both wharfs and berths and was purchased from Tex Edwards Co., Pensacola, at a cost of \$258,000.

Stevedoring companies can rent the crane from the Port and thus avoid paying mobilization and demobilization charges.

"This crane reduces our customer's overall cost of doing business at the port and increases our competitive edge," commented the chairman of the TPA Board, Ms. Diana Almeida.

"In the past, rental cranes were available in the area, but costs were incurred each time the crane was moved. Often times there were none available forcing carriers to choose another port."

In addition, state-of-the-art computerized truck scales are now available at the Port. Located on Guy N. Verger Blvd., just south of Maritime Blvd., these scales offer a convenient, accessible, public weight facility. State certified, these scales accommodate any size vehicle.

The Port of Tampa is also in the process of completing its general cargo complex at Berth 201 and 202. The 900-foot berth was completed last year and several acres of hardstand is available. Nearing completion is a new 86,000 square foot warehouse to provide covered storage for all types of cargoes.

The new mobile crane will also be

used in this area and refrigerated plugs for reefer containers are available. When completed, the \$10 million complex will be one of the finest general cargo handling facilities in the Gulf.

Last fall, the Port of Tampa inaugurated Berth 219, a \$4.7 million heavy duty cargo berth. Through primarily dedicated to handling scrap metal shipments, the berth can accommodate other heavy duty cargoes as well.

Berth 273 at the downtown Garrison Cruise facility has also been completed and will be used to handle cruise ships and cargo vessels if necessary. The timbered wharf was demolished and replaced with a new \$3.5 million concrete and steel structure.

Future plans for the Port of Tampa include at least two new berths and another storage warehouse, all to be built over the next three years.

Regarding the marketing efforts, the port has attracted new business in the form of two steamship liner services. Tampa Bay Shipping has started a new roll on/roll off refrigerated container service at Tampa importing produce from Central America. The firm is also seeking return cargoes of lumber and paper products.

Another new liner business is Thompson Shipping Company which has entered into a lease with the Port Authority. Thompson provides bi-weekly container service between the United States and the countries of Costa Rica and the Cayman Islands. By adding Tampa to its schedule, the port has another valuable liner service into the Caribbean and Central America.

The port also has initiated a contract with Vulcan/ICA Distribution Company of Texas and Louisiana which can mean as much as a million tons of cargo a year at the port. The firm imports crushed stone, sand, gravel and aggregate products used in construction.

Independence Excavating Inc. of Cleveland, Ohio, is another firm which has signed a lease with the Tampa Port Authority. The company acquires demolished materials (concrete and asphalt) from various projects in the community then crushes the materials into uniform sizes for resale as construction aggregate material. Though the material will be used locally and not shipped, it is excellent business for the port.

"These types of advances and new business developments at the Port of Tampa supports the new direction and attitude at the Tampa Port Authority," Port Director Valenti said.

"I feel the momentum has just started and we are going to continue to see growth at the port over the next several years," he said.

## Africa/Europe

### Shannon Estuary and the Environment

By Michael J. Hocter  
General Manager, Limerick  
Harbour Commissioners

(Reproduced from "SHANNON SHIPPING NEWS")

As a general principle port and harbour authorities have moved to acceptance of the principle of "sustainable development" as defined in the Brundtland Report of 1987 "Our Common Future".

"Sustainable Development" is defined as "managing environmental resources to ensure both sustainable human progress and human survival".



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The purpose of sustainable development is "to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs".

The environmental effects of activities in harbours principally concern water quality, air quality (including dust, odour and noise) and contamination of soil, sea, river bed or ground water. Sources of pollutants in ports include discharges both in and outside the port area, spillage in normal operations and the effects of wind and rain and accidents. Preventive measures available to port authorities include planning, regulation and enforcement of the relevant directives, standards and regulations laid down by international or national regulatory bodies or by government or local authority.

#### **Powers**

Adequate statutory powers should be conferred on port authorities to make such further detailed regulations as are required to enforce effectively all relevant directives, standards and regulations. Port authorities should also be assisted in providing the necessary infrastructure including satisfactory waste collection and disposal systems. Finally ports must be prepared through adequate contingency planning to deal effectively with accidental spillages.

In the Shannon Estuary comprehensive studies and monitoring of water quality have been in progress for some time initially by An Foras Forbartha and latterly by the Department of the Environment. The original base line study of water quality and subsequent monitoring indicate a clean bill of health to Shannon waters. The local authorities on the Estuary are also very active in pursuing the water quality management plan drawn up subsequent to the studies.

Recently a Shannon/Elbe Study was co-ordinated by the Department of the Marine and carried out by the Marine Biology Departments of U.C.G. and Trinity and their German counterparts. Its purpose was to use the comparatively unpolluted state of the Shannon as a baseline for improvement works in the Elbe. The difference between the vast amount of industrial effluent which has been discharged into the Elbe in the past and still continues and the relatively small amount into the Shannon is expected to yield valuable

information. To-date the Irish study has concentrated on the nutrients in the Shannon mud flats and further studies are pending.

Key issues related to air quality are similar to those for water quality. The major plants in the Estuary such as Aughinish Alumina and Moneypoint are subject to stringent conditions in relation to air pollution which are regularly monitored by the companies themselves and by the appropriate local authority.

Waste arising from the various activities in ports requires the provision of collection, treatment and disposal systems to avoid pollution and contamination. The sources of waste are mainly ships and industry. For ships international guidelines and regulations for the storage and collection of waste have been laid down by Marpol and IMO.

Harmful waste should only be accepted from ships if there are adequate facilities in the harbour for its treatment. Industrial waste may include not only harmless or common pollutants but also toxic substances. The treatment of harmful waste is a job for a specialist and there is a continuing search in Ireland for a site for the disposal of toxic waste.

#### **Works**

Dredging for capital works and maintenance of entrance channels and other areas will produce materials for disposal. When the dredged material is of a suitable nature such as clean granular material, it can be used for reclamation or other engineering purposes. In such instances environmental considerations are relatively easy to assess.

Where dredged material is surplus to needs or unsuitable for use it has frequently to be dumped at sea. In these cases the dumping site must be carefully selected with regard to environmental impact. Such dumping sites are subject to approval by The Department of the Marine and licences are issued on an annual basis to cover specific cases. The material to be dumped is checked for contaminating substances. Disposal at sea is subject to international conventions.

In the case of dealing with accidental spillages of harmful substances immediate reporting and response is necessary to contain and limit damage. An

effective contingency plan backed up by adequate and well maintained equipment, supplies of materials for treatment of "mopping up" and trained personnel is essential.

A contingency plan of this nature was formulated in 1972 under the aegis of the Mid-West Regional development Organisation to combat oil spillage in the Estuary and has been in place since that time. The plan involves the co-operation of Limerick Corporation, Limerick County Council, Kerry County Council, Clare County Council, Limerick Harbour Commissioners, Foynes Harbour Trustees and various owners of private marine terminals in the Estuary. The co-ordinator for the plan is the Limerick Harbour Master, Captain E.K. Donnelly.

To-date there have been no oil spills of any significance in the Estuary. The contingency plan is regularly tested and updated.

It is of vital importance to minimise the likelihood of ship collisions or groundings through the use of vessel traffic systems. In this regard a radar surveillance system has recently been installed in the Estuary to minimise this danger.

In evaluating any harbour project, its impact on the social fabric and ecology of the area has to be economic decisions for "sustainable development" the benefits stemming from the activities proposed have to be balanced against the costs of the environmental impacts so far as they can be quantified. These are complex issues which have to be fully considered in arriving at any development decision.

### **ALIC to Promote Distribution via Antwerp**

The "Antwerp Logistics Information Committee" (A.L.I.C.) will henceforth coordinate the promotion activities of various bodies involved in Antwerp's distribution function.

As the leading European general cargo port Antwerp has developed into one of the most important distribution centres. New logistical concepts and the realization of a liberalized EC-market will enforce the need for overseas exporters to set up a central European distribution point.

On the initiative of the "Society for the Renewal and Promotion of

Antwerp" a committee has been installed to assist companies wishing to centralize the distribution of their products in a European seaport. The committee can provide information in this respect and help them in their search for the most suitable distribution formula.

One of the most important Antwerp assets is its flexible response to the customer's distribution needs. He can build a waterhouse and operate it himself, or leave this to a specialized Antwerp port company. Most distribution activities are set up in cooperation with local firms, offering storage space and a variety of supporting services. Initial investments can be kept to a minimum and the exporter immediately has the disposal of a full service package, not only including warehouse operations but also hinterland transport, customs formalities, packaging, labeling, quality control, inventory management, order processing, invoicing, etc.

Antwerp offers 3.8 million m<sup>2</sup> of covered warehouse space, has most central location in Europe, provides worldwide shipping possibilities, has a flexible customs system and very competitive tariffs.

Collecting and updating information about the Antwerp distribution possibilities and circulating this information among companies, associations or official bodies dealing with the setting up of physical distribution in Europe, is one of A.L.I.C.'s tasks. The committee also draws up "Company Profiles" of the distribution candidates and puts them in contact with Antwerp distribution specialists who can realize an effective follow-up.

By this approach A.L.I.C. is in line with the structure of the Antwerp distribution sector, which is not based on initiatives subsidised by the authorities but on the equipment and know-how made available by private companies. As a result distribution formulae can be elaborated in consultation with the customers which from a commercial viewpoint are more interesting and better serve the mutual interests of the parties concerned.

A.L.I.C. also takes care of the worldwide promotion of Antwerp's distribution assets.

It coordinates all distribution dossiers submitted to the participating

bodies, thus combining efforts deployed by the Antwerp Port Authority, the Regional Development Authority for the Province of Antwerp, the Port of Antwerp Promotion Association and the Antwerp Chamber of Commerce and Industry. It can also count on the cooperation of the Antwerp Port Federation (AGHA), the Studycentre for the Expansion of Antwerp, the Antwerp branches of the National Bank of Belgium and the Belgian Banking Association, as well as the Association of International Traders in Flanders (Intrativ).

### **Malaysia – Le Havre Management Programme**

On 15 October Mr. Y.B. Datin Paduka Zaleha Ismail, Deputy Minister of Transport of Malaysia officially opened the "Advanced Financial Management Programme for Ports" which was jointly organized by the Malaysian Ministry of Transport and the Le Havre Port Trading Institute (IPER). This first joint venture took place at the Awana Golf and Country Club at the reputed resort of Genting Highlands and was attended by 23 participants. These included financial management and corporate planning staff from all the main Malaysian ports (including Port Kelang, Penang, Johor, Kuantan, Kuching, Miri, Rajang, Bintulu, Kota Kinabalu), as well as from the Marine Departments of Sabah and Peninsula Malaysia, the Ministry of Transport and the Royal Customs and Excise Department.

An organizing committee chaired by Mrs. O.C. Phang, Under-Secretary (Finance) of the Ministry of Transport, assisted by Mr. Chang Yu Chun, the Course Coordinator, Mrs. Animah Awang, the treasurer and Mr. Tan Klong Han and Mrs. Roziah Shamsuddin both responsible for the Secretariat, ensured the smooth running of the Seminar, of which the main objective was to train Malaysian port officials in modern financial management techniques and to inform port related organizations on the significance and consequences of sound financial management in ports.

The didactic and instructional responsibility for the seminar was entrusted to the Le Havre Port Training

Institute. Mr. G. De Monie, Course Coordinator at IPER and Mr. G. Willems, MIS Manager of the Le Havre Port Authority lectured on following major subjects:

- Legal and financial aspects of different types of port organization
- Financial, economic and operational objectives for port tariffs
- Traffic forecasting
- Port cost accounting
- Strategies port development and project evaluation
- General principles of port pricing
- Budgetary planning and control
- Comparative analysis of port dues for ships and cargo
- General cargo and container handling tariffs
- Pricing for liquid and solid bulk cargoes
- Leasing contracts for specialised terminals
- Components of a financial MIS and its computerization

Additional to the lecturing, the programme also included the development of several case-studies and a round-table discussion on the subject of "Capital market instruments as financing tools and the establishment of a port investment portfolio".

The seminar was successfully concluded with a presentation by Mrs. O.C. Phang of the certificates to the participants and the presentation of the seminar evaluation by a representative of each of the participating authorities and organizations.

### **New BLG Concept for Better Marketing**

The Bremen Port Operating Company BLG Bremer Lagerhaus-Gesellschaft recently introduced a new marketing system. Dr. Werner Maywald, member of the board responsible for marketing and sales, says that, among other things, important changes in market demands made this step necessary. "If we want not just to hold our position on the market, but to improve our competitiveness and further increase our handling volumes, then we have to go on the offensive in presenting our services and our performance. And not just here, but all



over the world. Demands and expectations here and abroad are no longer the same as five or ten years ago," Dr. Maywald remarked.

The new concept is based on a reorganization of the marketing areas and a devision of responsibilities between the BLG employees in the individual areas. Personal contact with customers is guaranteed by a fixed assignment of a staff member to each customer. In addition, BLG provides every client a customer representative, who can be reached at any time. Thus the client or his colleagues will always finds someone to look after their needs. Permanent contact between BLG and their customers will be ensured.

Dr. Maywald explained the restructuring of marketing areas as follows: "There are now five main departments. They are designated 'Special Commodities' (responsible Heinz Bamberger), 'Eastern Hemisphere' (Manfred Kuhr), 'Western Hemisphere' (Otto van Dyk), Central Europe (Hans-Jürgen Fritsch), and 'Marketing/Logistics' (also Otto van Dyk). The 'Special Commodities' department is responsible above all for cargoes such as automobiles, forest products, cotton, wool, green coffee, cocoa, tobacco, bananas, as well as Nato transports and distribution. The department 'Central Europe' takes care of our European customers, in particular those in Germany, Austria, Switzerland, CSFR, Hungary, and Northern

Italy. Therefore this department co-operates closely with the Bremen Port Promotion Association agencies that are concerned with cargo acquisition in Europe. The 'Eastern Hemisphere' department is responsible for Asia, Australia, New Zealand, the ASEAN states, India, and the Middle East. This department handles both shipping and commodity aspects overseas. The same applies to the 'Western Hemisphere' department, which is responsible for North, Central, and South America as well as Africa and the Mediterranean. This division also deals with those European countries not covered by 'Central Europe'. In addition, it is responsible for inland transports. the 'Marketing/Logistics' department develops marketing and logistics concepts in co-operation with the other branches of marketing and sales."

A major advantage of this system, according to Dr. Maywald, is that full responsibility for taking care of the entire chain of transport in the area of Eastern or Western Hemisphere lies in the hand of the respective regional manager. Thus it can be guaranteed that every phase of transport — incoming as well as outgoing — receives full attention and uninterrupted service. An added benefit is that customers both in Europe and overseas will be visited more regularly than they previously were. In addition, the quality of customer service will reach an even higher level.

## Port of Hamburg: Boom Continues Thru 1991

1991 was an extraordinarily good year for the Port of Hamburg and optimism abounds as Hamburg looks towards the turn of the century.

Between January and October this year the total volume of cargo handled by the Port of Hamburg rose by 10.2 percent, bulk cargo by 13.2 percent and containerized cargo, in terms of TEUs, by 11.8 percent. Thus, the eight-year upswing has continued in 1991.

By 1995 the Port of Hamburg expects the total volume of cargo handled to have grown by 43 percent with bulk cargo up 46 percent, general cargo up 40 percent and containers up 53 percent on the 1990 figures. By the year 2000 Hamburg may well be handling twice as much cargo as this year — a development which would push Hamburg into the elite group of the world's super-ports.

Hamburg enjoys an extremely strong position in the particularly rapidly growing trading routes of the Far East and Scandinavia. Thanks to the revolutionary changes in Central and Eastern Europe and the treaty of association signed between the EFTA member-states and the EC, Hamburg has gained new significance as the major hub of a market whose total population has doubled to 150 million. For the post-1995 period an extra 20 million tons of cargo a year are expected to arrive in Hamburg as a result of a shift away from the Baltic ports of eastern Germany (e.g. Rostock), growth in imports to and exports from the five new states of the Federal Republic and the potential growth of transit traffic to and from Czechoslovakia, Poland, Hungary, Rumania, Bulgaria and the Baltic states. The expected shift in cargo flows from the Baltic ports of eastern Germany (mainly Rostock) to Hamburg has already taken place. With a cargo mix composed of local goods, German exports and imports and transit traffic, Hamburg is an extremely attractive port for international shipping, especially in view of the trend towards reducing the number of ports of call.

In order to maintain the Port's international competitiveness in future, the City of Hamburg and its port operators will be investing DM 2.5 billion in modernization measures in the next



Dr. Werner Maywald, member of the BLG board, and the heads of his five new main departments: (from left to right) Heinz Bamberger, Manfred Kuhr, Dr. Maywald, Hans-Jürgen Fritsch, and Otto van Dyk.

few years. They include the development of new sites for cargo-handling and service centres, the expansion and modernization of existing quay facilities, the modernization of the Port's radar system and the modernization and extension of the Port railway. Plans are also being made for improved links to Hamburg's hinterland, especially the East, and deepening the channel of the Elbe to take post-panamax ships.

1990 had already been a record year for the Port of Hamburg. The total volume of cargo handled rose to 61.4 million tons with incoming goods accounting for 39.4 million tons, outgoing for 21.9 million tons. In the world container-ports' league Hamburg climbed from tenth to eighth place (in terms of TEUs handled). Hamburg was again Europe's second-largest container port behind Rotterdam.

In the general and bagged cargo sector — conventional and containerized cargoes — the Port of Hamburg did extremely well for the eighth year in succession. In 1990 28.6 million tons of general and bagged cargoes were handled, an increase of 10.8 percent or 2.8 million tons on 1989 (25.8 million tons) and 55 percent up on the 1982 figure. This development was in line with Rotterdam's but Hamburg's growth rate was considerably higher than that of Antwerp or Bremen's ports. The increase in the volume of general cargoes passing through the Port of Hamburg was 50 percent greater than that of Germany's foreign trade and 25 percent more than its GNP. Especially during the past three years, Hamburg has increased its share of German sea-borne imports and exports. Of the 28.6 million tons of general cargoes handled by the Port of Hamburg in 1990, nine million were accounted for by transit traffic and 19.6 million tons by German imports and exports. The increase of 10.1 million tons since 1982 was made up of three million tons of transit traffic and 7.1 million tons of foreign trade.

Between 1982 and 1990 Hamburg developed from a port mainly handling bulk goods to a general-cargo port. In 1990 general cargoes accounted for 46.5 percent of all goods handled, up from 29.8 percent in 1982.

In 1990, nine million tons of general cargoes were accounted for by the conventional sector (up from 8.7 million

tons in 1989). In the containerized-cargo sector, the decisive factor for a universal port's status and future, Hamburg handled some two million TEUs and 20 million tons of cargo, up 14 percent and 15 percent respectively on the 1989 figures and 150 percent higher than in 1982 — significantly faster growth than its major rivals along the North Sea coast of Continental Europe (Antwerp up 126 percent, Rotterdam up 102 percent and Bremen's ports up 66 percent). Hamburg's containerization rate rose by 2.4 percentage points to 68.6 percent.

Of the total tonnage handled in 1990 (61.4 million tons), 32.8 million tons were accounted for by bulk cargoes, up from 32.1 million tons in 1989. The overall volume of cargo handled stayed relatively stable despite a shift from suction to liquid cargoes (mainly petroleum products).

## Announcing Hazardous Substances via EDI

On November 1, the Sea-Land shipping company became the first to notify the Rotterdam Municipal Port Management (RMPM) electronically of all hazardous substances entering the port for processing — via EDI (Electronic Data Interchange). The company has concluded an agreement with the RMPM for this purpose.

This form of exchange is the first concrete result of 'Protect', an EDI project involving 5 harbour cities, namely Bremen, Hamburg, Antwerp, Felixstowe and Rotterdam.

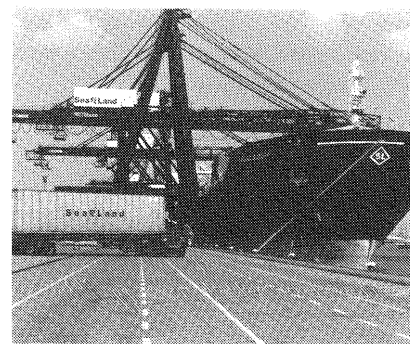
By applying EDI, the admission and monitoring procedures for ships carrying hazardous cargoes can be executed better and more efficiently.

The Port Management expects other large shipping companies and their agents to follow in the near future.

## Electronic Message

For the application of EDI, use is made of the electronic message which is formulated according to the Edifact norm. This is an international standard for EDI messages. This standard is applied to every new agreement made between the RMPM and a shipping company.

Up to now messages have always been sent by fax, post, courier or telex.



## Notification

The captain of a ship entering the port of Rotterdam is legally obliged to announce all hazardous substances. The captain must notify the port authorities, 24 hours prior to arrival, of precisely which substances are on board and, where appropriate, which are to be loaded. In practice, it is usually the agent who provides this information.

The RMPM receives some ten thousand documents per year from the container sector, each giving notification of an average 20 hazardous loads. In addition, five thousand forms are received from the bulk sector, each with an average of two reports of hazardous substances.

70% of all notifications come from 20% of the shipping companies docking in the port of Rotterdam.

## Port of Gdynia at Glance

### PRINCIPAL NOTES ON PORT'S HISTORY

- 1922 23rd September, a Bill on the construction of the seaport of Gdynia was passed by Polish Parliament
- 1923 13th August, the first vessel, French mv Kentucky of 6614 BRT was served at the provisional harbour completed in April
- 1933 The railway (522 km), connecting Silesia with Gdynia was opened. It enabled cheap and prompt forwarding of goods to and from Gdynia, including transit traffic
- 1938 The port of Gdynia gained international importance. Total freight handled reached 9.2 mln tons and ships traffic 6498 ships

- 1938- Poland under German occupa-  
1945 tion. Port was changed into  
naval base.  
Heavy damages done to the  
port's constructions and facili-  
ties by retreating Nazi troops  
in 1945
- 1945 The port was reopened to traffic  
being in heavy damaged state
- 1963 The first "mammoth" ship  
called at the port - mt Man-  
hattan of 106500 DWT
- 1972 Container terminal at the Pol-  
skie Quay came into operation
- 1979 Baltic Container Terminal at the  
Helskie Quay was commis-  
sioned.  
75 million tons of Czechoslo-  
vakian transit sent via Polish  
ports after 2nd World War was  
handled at the Port of Gdynia
- 1983 Hungarian transit served via  
Gdynia in the postwar years  
reached 5700000 tons
- 1985 1st January, the Port of Gdynia  
has joined the International  
Cargo Handling Coordination  
Association
- 1987 The 65th year Jubilee of the Port  
of Gdynia

#### **BALTIC CONTAINER TERMINAL AT HELSKIE QUAY**

Terminal has one ro-ro and two lo-lo  
berths. They are connected to each  
other and operations in both systems  
can be performed at the same time.

**Ro-ro berth:** 100 tons capacity, hy-  
draulically adjustable ro-ro ramp can  
accept vessels up to 24 m beam

**Lo-lo berth:** three container gantry  
cranes manufactured by Paccoco,  
Fruehaf, Spain with max. hoisting ca-  
pacity of 35 tons, outreach 35.5 m,  
back-reach 20.0 m.

**Marshalling equipment:** six 30.5 tons  
Paccoco yard gantry cranes, three 30.5  
tons straddle carriers, one 15 tons  
Lansing Henley forklift truck, fifteen  
up to 15 tons forklift trucks

**Rail facilities:** railway terminal with two  
railway tracks and two 35-ton railway  
Transtainers

**Consolidation:** modern 20000 m<sup>2</sup> shed  
designed for stuffing and stripping  
operations

**Transportation:** containers and general  
cargo can be forwarded to and from  
BCT by the Polish Railways and by road  
transport; terminal's handling capacity  
— up to 170000 TEUS

#### **FACILITIES AND EQUIPMENT AT CUSTOMERS DISPOSAL**

- Commercial harbour area: ab. 975  
ha
- Water area: 244 ha
- Total land area: 631 ha
- Total lineal quayage: 17500 m
- Total lineal commercial quayage:  
10700 m
- Storage space available:  
— sheds and warehouses: 164500  
m<sup>2</sup>  
— open storage space: 262600  
m<sup>2</sup>
- Cranes: 146
- Floating cranes with lifting ca-  
pacity up to 100 tons: 3
- Mobile cranes with lifting capacity  
up to 35 tons: 24
- Forklift trucks: 226
- Tugs: 13
- Floating stores and harbour  
barges: 31

#### **Lisbon Face-lifting In Next 10 Years**

In the course of the next ten years,  
the river front bordering on Lisbon  
may become unrecognisable, provided  
investors can be found to put up the  
money for the various schemes that  
cover the whole area between Vila  
Franca de Xira and Oeiras.

One of the biggest schemes under  
consideration in a marina that will be  
built between the São Bruno Fortress  
and Algés, probably close to Jamor.

With a capacity for over 1,000 vessels,  
it will cost about 20 billion escudos and  
provide new approaches, hotels, shops  
and restaurants. This is not, however,  
the only novelty, because there is an  
even more daring plant for the stretch  
between Santos and Santa Apolonia,  
with special reference to Cais do Sodré.

This is designed by Gravata Filipe,  
the architect, and is expected to cost  
over 25 billion escudos. Buildings for  
offices and shopping centres will com-  
pletely change the appearance of the  
area where only the railway terminal  
and the clock tower will be left.

Mr. Conceição Rodrigues, the Pre-  
sident of the Authority of the Port of  
Lisbon, who is one of the greatest  
enthusiasts for the ideas under con-  
sideration, but which are still in the  
embryonic stage, told the reporters that  
"the main idea was to put up profitable

buildings because we shall have to make  
some money if we are going to handle  
the rest and landscape the whole area  
and this can be a very expensive  
undertaking".

In point of fact, although there are  
initial drawings for the scheme, showing  
both the marina and the Cais do Sodré  
area, to say nothing of the other schemes  
along both banks of the Tagus, and  
some investors have already begun to  
express interest, before a final decision  
can be taken or a public call issued for  
tenders, arrangements will have to be  
made to reconcile the interests of the  
various public and private bodies  
scattered over the area but with  
something to say about the area under  
the jurisdiction of the port of Lisbon.

#### **An Old Idea**

The idea for building a marina in  
Lisbon is at least fifty years old but it  
is only now, after the failure of the call  
for tenders in 1984, that the Authority  
of the Port of Lisbon has decided to  
get the scheme off the ground by sub-  
mitting plans to the Ministry together  
with a draft decree law which would  
outline the basis for the design, building  
and exploitation of the scheme.

"Final approval depends on the  
Ministry for Public Works but really  
involves the whole government because  
it can only be started after the publi-  
cation of a decree law, so that those  
who are interested in bidding for the  
contract have a detailed idea of what  
they are going to build and later  
manage," explained the President of  
the Port of Lisbon, adding that the  
marina alone will cost about 20 billion  
escudos.

"This is doubtless a great deal of  
money," added Mr. Conceição Ro-  
drigues, "but all maritime schemes in-  
volve large sums of money and with  
the two docks that are outlined in the  
marina, it should be able to handle over  
1,000 vessels" similar to that which  
already exists in Vilamoura in the Al-  
garve.

Considering not only the absence  
or restricted size of the existing docks  
("one constantly sees yachts drawn up  
on land"), but also the fact that some  
40,000 yachts sail round the Portuguese  
coast each year, the idea is fully justified.

#### **Situation**

The position of the marina and its

infrastructures has not yet been definitely chosen, but the draft Decree Law drawn up by the Authority of the Port of Lisbon suggests the area between the São Bruno Fortress and Algés as being that which offers the best conditions.

However, the most probable site would be Jamor due to the ease where it could be linked up to the sports facilities that already exist. This would not only benefit the site from the social, touristic and economic point of view but it would also avoid the pollution of the area together with that of Algés, Cruz Quebrada and Lisbon. However, Mr. Conceição Rodrigues pointed out that this was a very valuable site "and we can not sell it off for a song", as has happened in some previous cases, or there will be the risk of deterioration.

There will be a public call for bids and those interested will establish the price.

#### **What Will It Be Called?**

The question of the name of the future marina has not been settled either, but it has already given rise to some heated arguments, because some want it to be named after Lisbon, whereas others prefer Oeiras, or simply Jamor, if this particular site is eventually chosen.

The Mayor of the Oeiras Town Council has no doubts about it. "We don't mind it being called Jamor, but never Lisbon, because the city jurisdiction ends in Algés, and we, on this side, have our own image to look after and we shall not fail in our duty".

Mr. Isaltino de Morais, the Mayor of Oeiras Town Council, is all in favour of the idea and quite optimistic about the final outcome because as he says "it represents an age-old ambition of the Town Council" adding that some of the capitalists interested in the scheme also favour the name of Oeiras.

#### **An Ambitious Project**

However, apart from the Marina, the renovation of the river bank covers various other projects, one most ambitious being that for Cais do Sodré, which has been designed by the architect Luis Gravata Filipe and is expected to cost over 25 billion escudos..

This solution will tear down the whole area except for the railway terminal with its original frontage and the clock tower. These will be incorporated into

new buildings designed for offices, shopping centres and even the underground station. "They will be profitable buildings," says Mr. Conceição Rodrigues "because we shall have to arrange money for building the rest and for landscaping".

"In our opinion it is the best urban-port scheme which was entered under the competition for ideas, because it provides a solution that will involve a large number of people, this being why preliminary studies have been drawn up and subsequently sent to all those concerned with this area".

Mr. Conceição Rodrigues explained that everything looked very simple but this is an illusion. "In this case, the area to be built up would run from Santos to Santa Apolonia and affect the interests of several bodies that will have to be consulted" (he has to deal with no fewer than 40 bodies including 11 town councils) "and we shall need to reach a consensus between all of them, something which can not be done overnight".

#### **Other Ideas**

Ideas tend to a snowball and several schemes have been put forward and then changed in a never ending process — one example being the Olivais marina which already has a proposal covering an area of 500 by 250 yards and provides for a new hotel.

Seixal was also entitled to submit a design which would call for the building of a winter storage marina and the works at Santo Amaro Dock, calculated to handle 300 yachts, have already begun at an estimated cost of 220 million escudos. In what concerns the surrounding warehouses, Mr. Conceição Rodrigues is thinking in turning them into supporting buildings for the yacht clubs.

Another important scheme which is already on the horizon but still in the planning stage to consider its technical and economic feasibility is the dredging of the northern channel around Mouchão da Póvoa region in order to allow large sized vessels to sail up the river to that point.

The President of the Port of Lisbon believes that it will be expensive and at a rough estimate would cost some ten billion escudos.

## **Gothenburg Work Force To Be Cut by 20%**

The Port of Gothenburg has taken on an action program with the aim of reaching long-term profitability. One of the measures is to cut the Port's work force by 20 percent.

The Port has been struggling with non-profitability for several years, and the program is by far the toughest of its kind to be implemented at the Port.

Two hundred of the Port's 1,000 employees are considered redundant and are expected to leave the Port next year, following negotiations between Port management and unions. Three-fourths of the redundant personnel are harbour-workers.

In addition to the cutting of the working-force, the Port will adjust working schedules to better harmonize with liner calls. Other measures include adding value to the Port's real estate sector and maybe, in some cases, selling part of it. Also, the future role and ownership of the Port's speciality arms, like its construction department and its data affiliate, will be considered in depth.

The program now to be implemented is not the result of less traffic through the port. Gothenburg had a record year in 1990, and although figures have fallen some this year, the measures taken are more a result of new working methods. Management also sees possibilities to compress working patterns that in some cases reflect the era of conventional cargo-handling.

## **Port Visions at Gothenburg Harbour Day**

Port of Gothenburg officials gave their visions of port hardware and software by the year 2000 at the annual Gothenburg Harbour Day held recently. As a whole, more changes were envisaged in the structure, organisation and ownership of ports than in cargo handling and equipment.

By 2000, the Port of Gothenburg will handle 25 percent more cargo than today, and there will be a stronger emphasis on European traffic than is the case today. Techniques used will be roughly the same as now, but improved organisation will have made it possible to concentrate activities to a

more confined area.

Port work at Gothenburg will probably be performed at dedicated areas to a larger extent than today. Thus, a special feeder area using lift-on, lift-off methods will be set up within the present Skandia Harbour, and a 'Europe Harbour', on the site of the present Älvsborg facility, will handle the short and medium range ro/ro traffic. Part of the Port will probably be owned by private interests, including employees. All port personnel will be members of the same union, sharing the same goals and thereby achieving more.



*General cargo traffic at the Port of Gothenburg was down six percent after nine months of 1991, compared with the same period in 1990 (oil included, however, the traffic increased by three percent). The slump in general cargo traffic during the first few months of 1991 has to some extent been compensated, but Swedish trade and industry activity is still low.*

## **Towards Brighter Future In Turkish Ports Sector**

**By Adnan Yardimci**

**Director of TCDD Ports Dept.**

*(Extracts from  
"TURK LIMANLARI")*

Today, more than 85% of the world transport is realized through maritime transport. Likewise, marine transportation has the biggest share in the foreign trade of Türkiye reaching to the rate of 85%. Also, with the expansion of Turkish merchant fleet, domestic and international transport of goods is growing rapidly. In this respect, the ports constituting the most important links of transport chain represent a great significance.

It is a well known fact that maritime transport plays a key role in the national

Port officials also envisaged that international competition among ports will be on less unequal terms, following EC harmonization. This will most certainly have an effect on the Port of Gothenburg as a Nordic centre for deep-sea unit-load liner traffic. Gothenburg operates without government subsidies, which is not the case with many of its Continental competitors.

It should be stated that the Port of Gothenburg uses shorter planning scopes than the remaining eight years up to the year 2000, so the visions were just that: visions, not plans.

economic development and the development of ports creates the most favourable conditions for expansion of the regional economies.

As is known, TCDD operates seven major ports of Türkiye. The traffic to and from these ports has shown increases over the years and the total tonnage rose to over 27 million in 1990.

Considering the importance of the maritime transport in the economic development and the growth in the foreign trade of Türkiye, TCDD has focused its attention in a big way to expanding and modernising the ports to increase their efficiency. So the ports had undergone a lot of changes over the years and the infrastructure and technology at the ports have been modernized on a large scale. For further modernization and development, the efforts are being continued. Currently

several projects are well underway in every port and majority of them will be completed in 1991.

Within the scope of the modernization and expansion program, in order not to fall behind the world-wide trend of containerization, beginning from the year 1985, bold steps were taken to push forward the port facilities of Türkiye into the new era of container transport. Finally in the late 80s, major container facilities came on stream in Mersin, Izmir and Haydarpaşa and special container equipment were put into service.

Especially after the establishment of container facilities, Mersin, Izmir and Haydarpaşa have experienced a rapid growth in container traffic. In 1990, they altogether handled a total 347,867 TEU compared to 261,205 TEU in 1989 representing a 32% increase. Also, the figures for the first six months of 1991 clearly indicate that the traffic will continue to grow.

The above project which can be considered as the beginning of container services in the country's ports will be continued and supported by the subjects in order to keep pace with the developing technology. As a result, the service quality of our ports will be brought to the level of modern container ports in the world.

Short term projects cover many improvements ranging from computerization and equipment acquisition to inland container terminals.

In addition to substantial investments noted above and the developments in the region as well as in our economy, the strategic location of our country between Europe and Asia presents golden opportunities for the port sector.

These opportunities can be summarized as follows:

- Steady increases in the volume of foreign trade and a potential market with a population of 57 million,
- Great regional investments and industrialization,
- Transit trade to the Middle East,
- Free trade zones and incentives for foreign capital,
- Container transshipment potential at Mersin and Izmir which have already been identified as the main focus for development as transshipment centres,
- Preparation of the Eastern European countries for transition to the



free market economy,

- Greater economic cooperation with other Black Sea countries,
- Modernization of railways,
- Port infrastructure and super-structure investments and efforts oriented to better service and modern management.

All these opportunities, and the country's economy being one of the fastest growing economies of the Mediterranean as well as the efforts to bring the ports and other transport system up to the western standards are the most important developments and indicators for the future of Turkish port sector and with these prospects in mind we believe that the ports will find their rightful place and will reach to their true potential.

### **Rotterdam: Growth Continues in Cargo**

Cargo handled in the Port of Rotterdam increased further in the third quarter of 1991. The total was 74.3 million tons, compared with 71.2 million tons in 1990. That is an increase of 4.4%. The transshipment of bulk-cargo was 4.8% greater than in the third quarter of 1990. Crude oil and ores increased especially. The movement of 23.8 million tons of oil was one of the best quarterly figures in the last ent years.

General cargo transfers increased by 2.8%. Growth here was mainly in other general cargo.

After the good first quarter (74.1 million tons), the only fair second quarter (70.9 million tons) and once again a good third quarter a total of 219.5 million tons of goods have been handled in 1991 in the Port of Rotterdam. This is a 2.4% increase compared with the first nine months of last year.

#### **Major Increases in Crude Oil**

Transshipment of crude oil increased by 13.8% in the third quarter of 1991. There was a very high demand from Europe and America for crude oil from OPEC countries. Additionally the third quarter is historically the period when the oil companies build up stocks to meet the higher demand in the winter.

In the same liquid bulk group the transshipment of petroleum products and petroleum coke fell from 7.3 million

tons in the third quarter of 1990 to the present level of 6.3 million tons. This was caused by the reduced demand from the principal oil-using European countries.

Transshipment of other liquid bulk (chemicals) were, in comparison with last year, more or less stable.

#### **Ores Rising Rapidly**

Transshipment of ores in Rotterdam rose in the third quarter of 1991 by 24.4% compared with the same period last year. The German steel industry recession was then at its deepest point. Because German steel production has recovered rapidly, the discharge of ores in particular has shown a spectacular growth in the third quarter of 1991.

There has been some decline in coal traffic (-1.3%). The imports of coal are indeed still growing, but exports fell in comparison with the third quarter of 1990 — by more than 50%. It is expected that a catching-up effect will be seen in the fourth quarter.

Transshipment of grain and animal feed in the third quarter of 1991 were 12.8% below the level in 1990. Amongst other reasons were the reductions in the cattle-herds, an increasing use of simpler raw materials for feeding stuffs and the effects on the Netherlands pig industry of the Blue-ear pig disease.

Inward and outward shipments of other dry bulk-cargo (fertilisers, minerals, sand and the like) fell by 29.8%.

#### **General Cargo Stable**

Container transshipment (-0.7%) and Ro-Ro (+0.5%) were stable in the third quarter of 1991 compared with the same period last year. Other general cargo transshipment actually increased by 16.5%. The labour unrest in this sector had fewer disadvantageous effects on the volume of cargo handled than had been feared.

Exports of, in particular, vegetables, iron and steel, and clothing showed a marked increase.



*The one thousandth quayside piggy-back container at Gothenburg's Tor Line terminal carried newsprint from Grycksbo, Sweden to England via Immingham. Quayside piggy-back facilitates transport and takes a load off city air and city streets.*

### **Popular Quay-side Piggy-back Service**

The quay-side piggy-back trailer service introduced earlier in 1991 at Gothenburg's Tor Line terminal is enjoying a growing popularity among shippers and forwarders. Recently, the one thousandth trailer using this service passed the terminal on its way to the UK port of Immingham. It was loaded with printing paper from the STORA group's Grycksbo mill.

Earlier, road trailers on rail-cars had to be shifted from train to road at a central rail terminal in Gothenburg. With the new quayside piggy-back

service, the trailers are forwarded by rail to the Tor Line terminal at the Port's Älvsborg facility. From there, they make use of Tor Line's frequent ro/ro sailings to UK and Continental ports.

To the shipper or forwarder, the service facilitates administration, since an extra local transport leg can be omitted. More generally, air as well as traffic environment benefits from the fact that several trailers can be towed through the city by a locomotive instead of being towed by individual road tractor units.

## Asia/Oceania

### Corporatisation Laws — A Question of Time

By Greg Martin

Port of Brisbane Authority  
Chief General Manager

The release of the State Government's white paper on corporatisation of government owned enterprises (GOE's) is expected to be released within weeks.

In August last year (1990) the government, through Treasury, issued a green paper on GOE's and sought input from all interested parties on the concepts proposed.

The basic proposition is to make government trading organizations operate more in line with normal commercial principles and, hence, more efficiently.

Inherent in the concept is the belief that most, if not all, government trading enterprises could operate more commercially, and more efficiently if clearer separation is made between commercial activities and community service obligations, i.e. activities for the public good but which are not the responsibility of the trading enterprise.

The legislation to corporatise the target GOE's will be based on the principles to be established in the white paper. At this stage, the Queensland Railways, electricity boards and port authorities are thought to be among the government organisations which will be covered by the GOE legislation.

What will corporatisation mean for those organisations destined to be affected by the new legislation?

This is difficult to answer until the full extent of the government's proposal is revealed. Clearly, however, some organisations will be better placed than others to make the transfer to corporatised GOE's.

For organisations such as the Port of Brisbane Authority (PBA), which already has a commercially focused board and full accrual accounting procedures in place, the transition will be less dramatic. It is understood that the GOE legislation will require that certain performance criteria, such as return on assets or the like, be established.

However, the question of whether taxation equivalent to normal company tax and/or dividends to the State Government will be introduced for all types of GOE's is unknown at this stage. The outcome of this issue will be of great significance to the PBA because of its likely impact on the port's funding requirements.

Also, at the recent conference of the Queensland Port Authorities' Association (QPAA), the Minister for Transport (Hon. David Hamill, MLA) discussed a number of principles which will be incorporated in the new Port Management Bill which, when enacted during 1992, will replace the existing Harbours Act.

One of these principles would be the removal of unnecessary regulation and control by port authorities. On this subject during the QPAA conference, Mr. Hamill said:

"Regulation is clearly a role for government. If, however, ports face some unique problems that private enterprise does not face, and that cannot be dealt with in other areas of government, then some justification for regulation may exist."

He also said a port pricing policy and the emerging State Port Strategic Development Plan (SPSDP) were high on the government's agenda.

He foreshadowed that the PSDP would be one of the major pillars of the government's strategic control of the port system. (*Brisbane Portrait*)

### Geelong Records Profit For 1990-91 Fiscal Year

The Port of Geelong Authority has weathered the marked downturn in the Australian economy, recording a net profit of \$5.6 million for the 1990-1991 financial year.

The profit was achieved even after expenditure of \$405,000 on the demolition of Yarra Pier and \$742,000 on non-periodic maintenance dredging, according to PGA Chairman Peter Morgan in the Authority's 1991 annual report. Mr. Morgan said the Authority's sound financial position was reflected in a very strong balance sheet and a debt/equity ratio of five percent.

Petroleum product continued to underpin Port trade, accounting for 55 percent of the just over six million

tonnes of cargo handled through Corio Bay during the 12 months.

Traditional grain cargo remained static and a 50 percent drop in fertilizer raw material imports reflected the continuing depressed state of the Australian agricultural industry.

However, growth in bagged rice, woodchips and refrigerated cargo augured well for the Port's establishment as a leading bulk and specialist handler, according to Mr. Morgan.

Mr. Morgan said the figures confirmed the Port of Geelong as one of the most profitable ports in the country, and one of the first to make substantial commitment to waterfront reform.

"The implementation phase of port and waterfront reform has commenced and with it, ongoing commitment to the essential task of changing workplace culture and attitudes.

"The Authority continues to strengthen its position as a Government Business Enterprise, charged with creating an efficient interface between sea and land modes of transport.

"It is at the top end of the commercialisation spectrum for Government business enterprises and is at the forefront in preparation for eventual corporatisation", Mr. Morgan said. Its community service obligations such as the Associated Ports of Queenscliff, Barwon Heads, Lorne and Apollo Bay, as well as foreshore and recreational jetties are expected to be divested to State and local Government agencies as the move towards corporatisation progresses over the next two years.

(*Portside*)

### Sri Lanka Ports Authority 12 Years in Retrospect

The Sri Lanka Ports Authority administers the commercial ports of the country — Colombo, Galle (South coast) Trincomalee (East coast) and Kankesanthurai (North coast). From the days of sailing craft to that of steam and present-day modern ships, these ports had played a vital role in the economy of Sri Lanka.

Although principally catering to the import/export trade, the advent of coal powered ships in the 19th century established Colombo as a base port for transshipment of coal for the refueling of ships and consequently for the transshipment of goods brought in by

these ships, effecting a more rationalized, efficient and economical movement of cargo underscoring Colombo's geographic locational advantage, even at an earlier stage of its history.

The Port of Colombo was modernized in the early 1950's with the provision of 17 alongside berths with the then up-to-date handling facilities, transit sheds and facilities for handling break bulk cargo. However, since the early 1960's little or nothing was done to develop the Ports to keep pace with the changing technology in shipping and port industry.

The mid 1960's saw the beginning of the extension of Queen Elizabeth Quay, but due to lack of priority, took more than a decade to complete. The early and mid 1970's saw the port sector being relegated to an even lower order of priority, making it barely possible to maintain the essential infrastructure in a minimum state of good repair. The import export activities of the country were handled with the available facilities coping with equipment break-downs, delays and in a climate of industrial problems and surcharges imposed by various shipping Conferences.

Port development activities got a much needed fillip with the formation of the Sri Lanka Ports Authority in August 1979, by the amalgamation of three separate organizations — the Colombo Port Commission, the Port (Cargo) Corporation, and the Port Tally and Protective Services Corporation.

The Sri Lanka Ports Authority streamlined the administrative, operational and maintenance activities of the Port and took a major decision to resuscitate the transshipment trade (break-bulk) through Colombo which had declined from 55,000 tons in 1949 to a meagre 2,000 tons in 1959.

A Master Plan for re-development of the Port of Colombo was drawn up in 1980 with assistance from the Government of Japan. The first phase of development consisting of the provision of two fully equipped container berths capable of handling fourth generation container vessels was completed in 1987.

The dividends paid by the move to exploit the geographic advantage of Colombo and measures taken, early on, to gear the port to handle containers have been well exemplified by the position achieved by Colombo among the

container ports of the world and its status as a major transshipment base in South Asia.

### **Looking Ahead**

Container transport required hub and spoke type transportation and the Port of Colombo has fulfilled this role and will continue to be a hub for much of the Indian Subcontinent in maritime container transportation in the future. Improvements in infrastructure and facilities for handling containerised cargo has reflected significant increases in container traffic, indicating the hidden demand for the use of container handling facilities in the Port of Colombo. The statistical projections now available indicate an enhancement of container volumes in 1995 and beyond. It is in this context that the SLPA has launched the construction of the Third and Fourth berths at the Jaye Container Terminal and the development of the Port of Galle to function as a nucleus for the development of the Southern Region.

Considering the geographic advantage of Sri Lanka Ports in providing a minimum deviation from economical shipping routes, it is the endeavor of the Sri Lanka Ports Authority to provide a service that would attract greater volumes of transshipment container traffic. Towards this end, the provision of quicker dispatch by guaranteeing berths, increasing productivity and improving efficiency of yard operations, and the provision of competitive port and cargo handling charges will be our objectives in our panache and commitment to the development of trade within the Region.

*(Sri Lanka Ports)*

### **Brisbane Strategic Plan Shows the Way Ahead**

The Port of Brisbane Strategic Development Plan is progressing well, with the port planning study undertaken by local consultants, Maunsell Pty. Ltd. nearing completion.

Trade forecasts developed by the Port of Brisbane Authority and Coopers and Lybrand in 1990 predict steady growth over the next 15 years. These forecasts were among the key factors used by Maunsell to produce plans for the port's future infrastructure requirements. The plans focus not only on ship/shore interface, but also on intermodal aspects

of land-based operations on Fisherman Islands.

The completed Maunsell study will be presented to the Authority's board in November.

The PBA's strategic planning team is currently finalising studies on dredging, channel development, reclamation strategies and the port's economic impacts on the region. The team is also keeping close track of land transport and environmental issues, ensuring port development planning is coordinated with projects like the proposed standard gauge rail link and Queensland Government environmental initiatives, such as the Moreton Bay Strategic Plan.

Chairman of the National Rail Corporation (NRC), Mr. Ted Butcher, in a speech to a conference on rail and road government and industry reform in Sydney in late October, named the standard gauge rail link to Fisherman Islands as one of the projects the NRC will be considering.

The NRC is expected to assume responsibility for operation of the national standard gauge rail freight network in 1992.

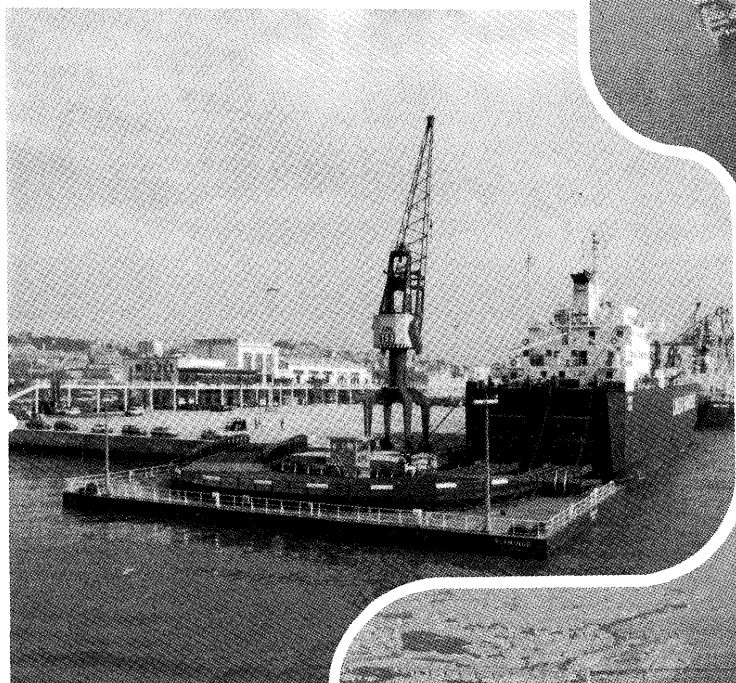
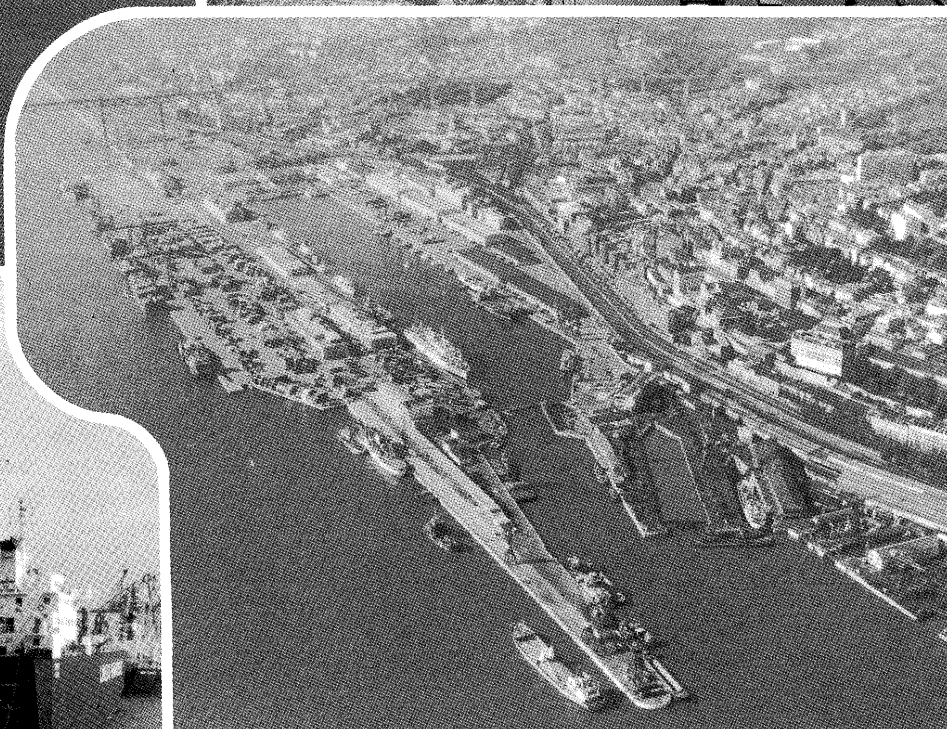
Management of the nation's rail freight task by a single entity, rather than by individual state rail systems, will contribute to improved efficiencies in land transport. Linking the Port of Brisbane with the national rail freight network via a standard gauge connection would open up new land-bridging possibilities and enable the port to further enhance its role in the national transport task. Strategic planning is taking these potential developments into consideration.

The Authority also is undertaking a series of environmental studies, including an examination of the seagrass and mangrove populations in the Fisherman Islands area. This, and other studies, will establish a solid environmental database to assist strategic planning for port development and also to provide useful information to other users of Moreton Bay.

The Port of Brisbane Strategic Development Plan is expected to be completed in preliminary draft form by the end of the year. Following discussions with port users and key stakeholders, the preliminary draft will be revised and a public document will be available in 1992.

*(Brisbane Portrait)*





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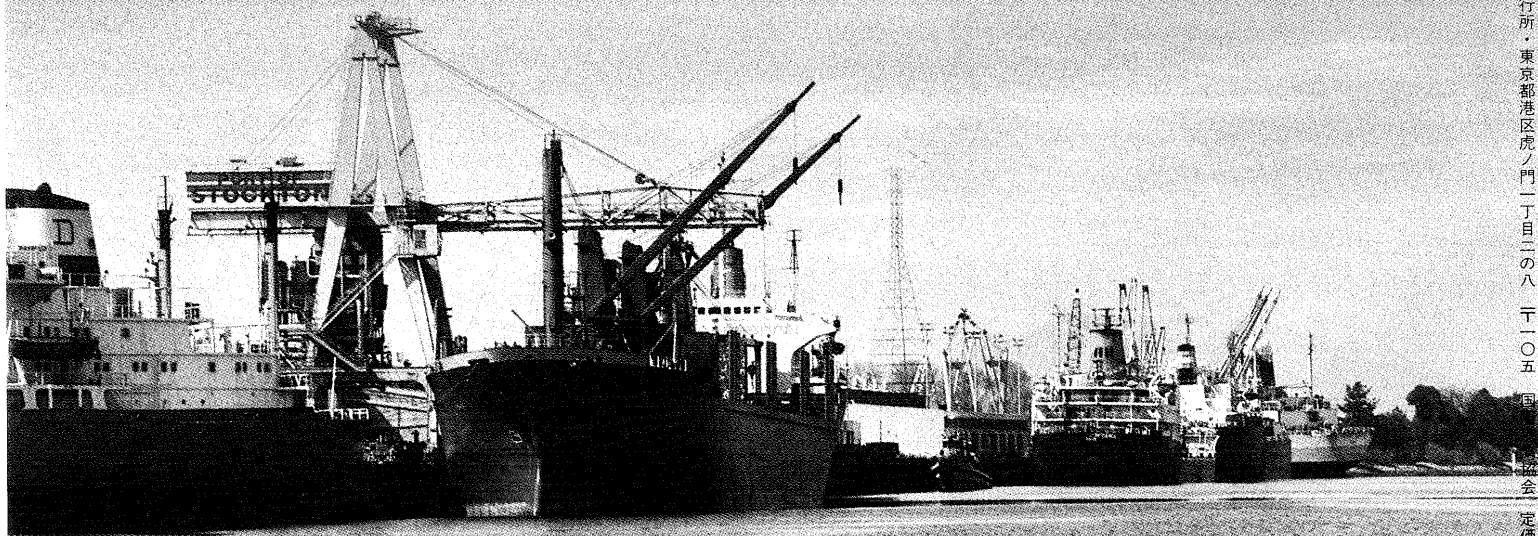
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