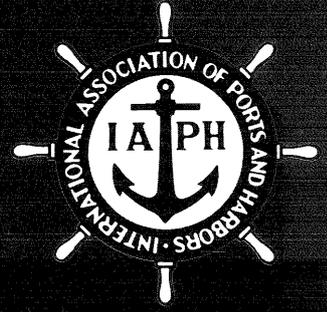


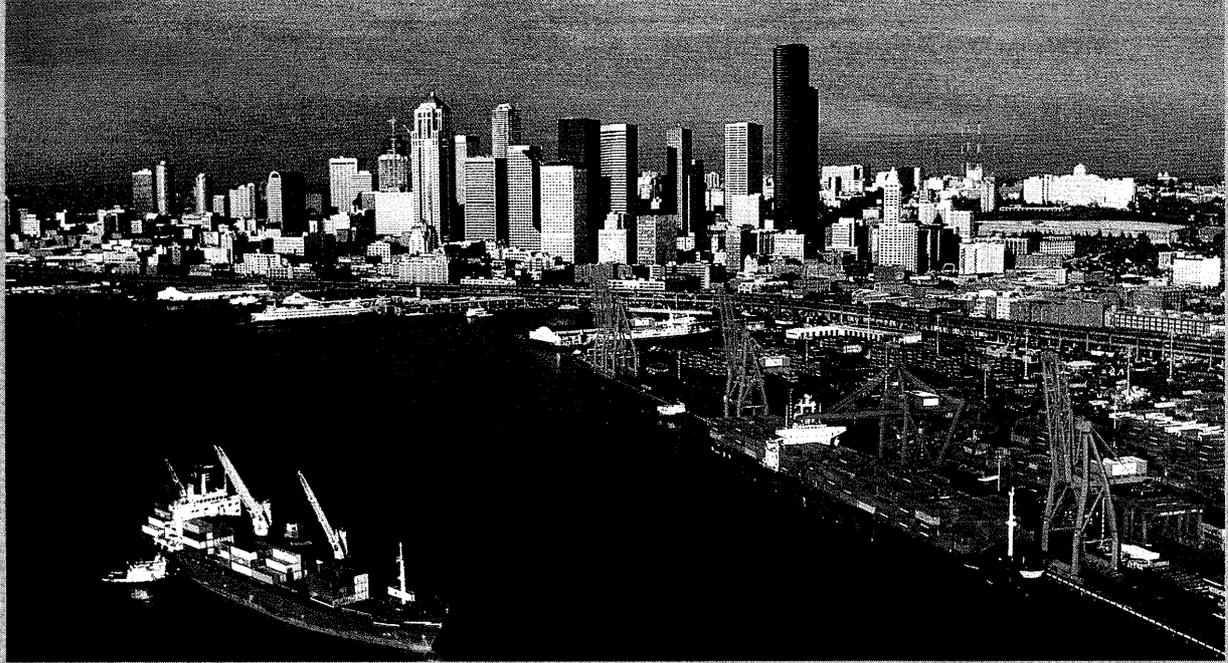
Ports & Harbors

June
1990
Vol. 35 No. 5

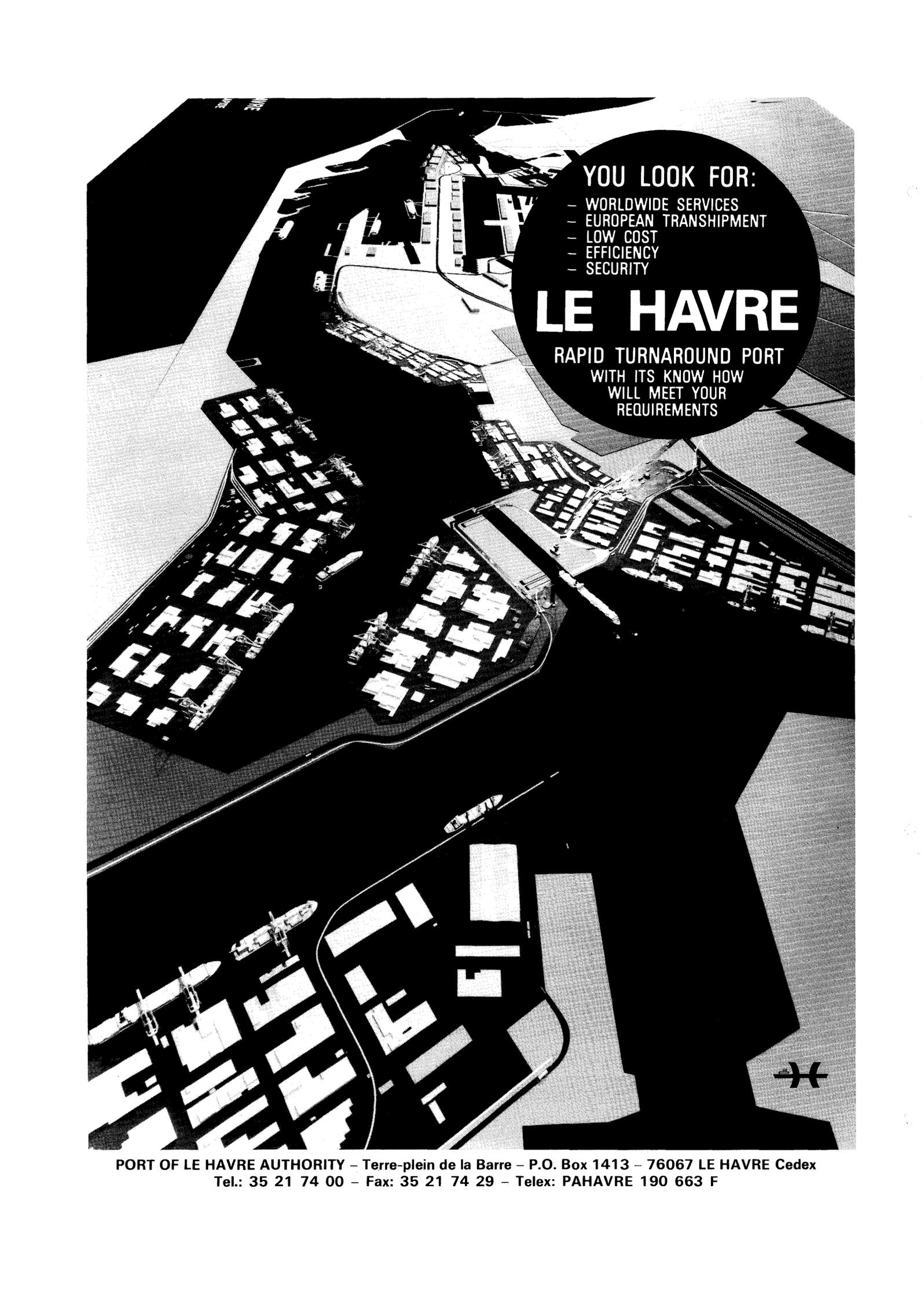


The Publisher
The International Association of
Ports and Harbors

Port of Seattle



Photographs by Don Wilson, Port of Seattle, Photographer

An aerial, high-angle photograph of the Port of Le Havre, showing a complex network of piers, quays, and shipping lanes. Several large cargo ships are docked at the piers. The image is in black and white with a halftone dot pattern. A large black circle is superimposed on the right side of the image, containing white text.

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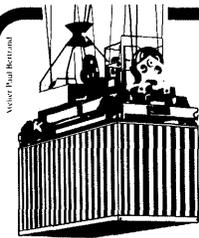
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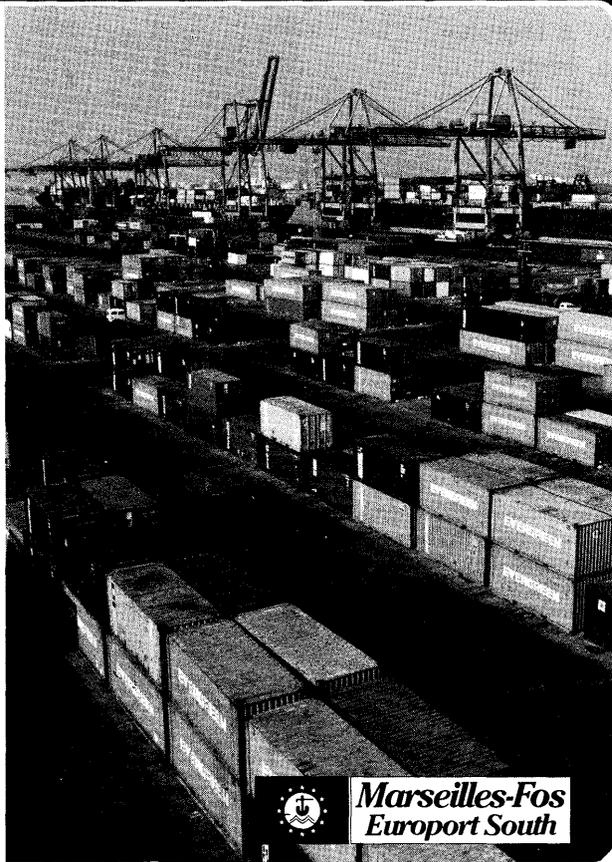
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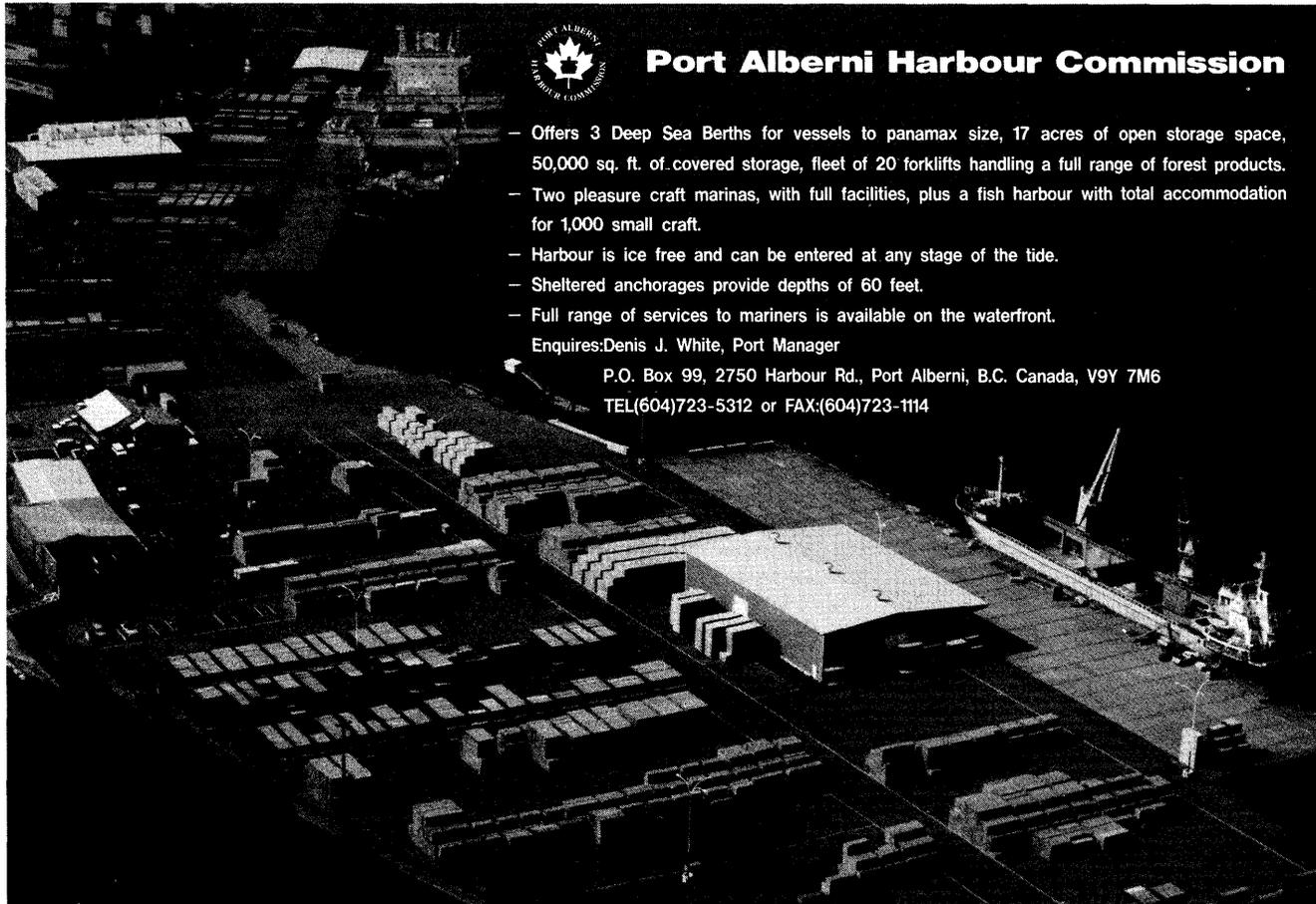
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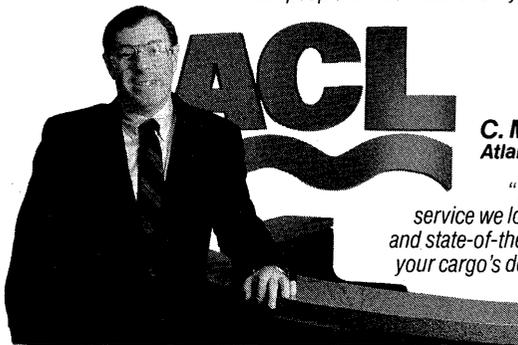
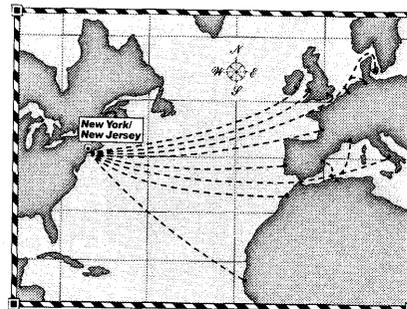
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makes us first.
Our people make
us fast. Together
that makes us...**



Lillian C. Liburdi,
Director
Port Department

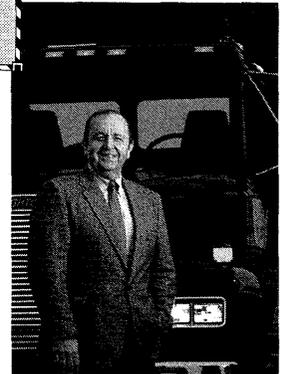
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IAPH ANNOUNCEMENTS AND NEWS

Secretary General's Report to EXCO

The Secretary General's Report, for submission to the mid-term meeting of the Executive Committee, was completed by the Head Office Secretariat in Tokyo and advance copies of it were dispatched to the Officers concerned to enable them to review the issues which are to be dealt with at the meetings in Fremantle on May 7-11, 1990.

In the Report, which summarizes the current position of the Association, Secretary General Kusaka appeals to the EXCO members for their initiative in helping to develop clear-cut policies which will further enrich IAPH's activities and reinforce the Association's working relationship with other international organizations for our common interests.

The Secretary General's introductory remarks to this Report were as follows:

Introduction

In submitting this Report to the EXCO meeting at Fremantle, I would like to begin by expressing the deep appreciation of IAPH to all the officials and staff at the Port of Fremantle Authority for the excellent arrangements they made for hosting this year's mid-term EXCO and other committee meetings of our Association in Fremantle, Western Australia.

IAPH Activities

As for the details of the Association's activities during the months that have passed since the Miami Conference — which no doubt was the most highly successful event recorded in the history of IAPH — we have kept our members informed of all developments through "Ports and Harbors" or by other forms of communication.

The numerous achievements we have been able to report to IAPH's worldwide membership have been due to the generous guidance we received from the officers and the leadership displayed by the committee chairmen, as well as the devoted service they gave us. Of course we cannot forget the fact that our chairmen's efforts have been consistently backed by the port organizations they represent and the enthusiastic committee members who energetically participated in their respective committee activities.

I would also like to reiterate our earnest thanks to the

IAPH European Representative, the other Liaison Officers — including those who served in their capacities as IAPH consultants — and the British Ports Federation for their wonderful performance in representing our Association at the various meetings of UN agencies or at other international maritime forums.

In 1989, IAPH succeeded in expanding its affiliation with other international organizations at the initiative of President McJunkin. Under the new arrangements an agreement was reached between IAPH and WTCA (World Trade Center Association), WTA (World Teleport Association) and AOCI (Airport Operators Council International) respectively, each of which is playing a vital role in the fields of world trade, telecommunications and transport, aiming at the exchange of expertise and information among each other for the benefit and common interests of the four organizations.

It has become increasingly necessary for the wide-ranging work covered by our Technical Committees, which have formed the backbone of IAPH's activities, to be tackled with from a global perspective, so that the Committees could cope with the changes in the needs of the customers surrounding ports, technological innovations in transport, and in those elements of the ports' activities concerning the environmental or the local communities. Under the circumstances, I earnestly hope that the EXCO will be able to come up with clear-cut policies which will further enhance the committees' important missions.

Membership

Our membership campaign efforts, headed by the Membership Committee Chairman, have been supported by innumerable IAPH officers and other individuals, who have taken all opportunities to convince non-members of the merits of joining our ranks. Of course, our Head Office has been centrally involved in these endeavours, wherever possible following up our members' efforts to achieve the successful completion of new membership applications. However, as outlined in my Report, the total increase in the number of Regular Members we were able to record during 1989 was only two. I must point out, though, that behind this figure there were 9 Regular Members who had to leave our Association for various reasons.

Nevertheless, if we look at the membership dues unit figures, as a result of last year's tonnage report by the Regular Members, there was an increase of 27 units in the figures for 1990 in comparison to those for 1989. I wish to express

my sincere thanks for the great efforts made by our members in contributing to the growth in the membership dues.

Finance

The report on the IAPH's Settlement of Accounts for 1989 is presented in this Report, together with a copy of the auditor's statement. As for the General Accounts, the total revenues exceeded the budget. The increase in the revenues can be attributable to the 5% dues increase effective from January 1989 (based on the 1988 decision of the Board and EXCO), the timely payments of dues by our members and the maximum efforts made on the part of the Head Office in materializing the various projects while minimizing expenditure.

Thus, I think I can say that the finances of IAPH are workable from a short-term viewpoint. However, the expenses which are necessary to maintain the current level of activities have already exceeded the total of our annual income. Therefore, in order to balance the revenues and expenses on a yearly basis, some steps should be taken to increase the dues. However, I think this should be done gradually and gently, while making careful use of the money carried over.

As for the financial performance of IAPH, the revenues are strongly affected by the movements in the SDR or SDR/Yen values. During the early part of 1990, the Yen has been moving to a lower level and this trend is affecting our revenue side favourably. Nevertheless, I must say that the future is indeed uncertain. Our Head Office is determined to continue to direct its utmost efforts towards the wise management of the Association's finances, under the guidance which we receive from the Finance Committee.

IPD Fund

IAPH members representing developed ports have long supported the idea of assisting their counterparts in developing ports towards the goal of increasing the efficiency of their ports.

As a manifestation of IAPH's spirit in the various activities of the Association, it is incumbent upon our members to work together for the betterment of ports and harbors all over the world. To this end, the CIPD has played a vitally important role in bringing our cooperation programs to reality.

In line with the CIPD's activities, we are operating the Bursary Scheme, under which selected people from our member ports in developing countries have received assistance for training at advanced IAPH member ports and training institutions overseas. As a result of the continuing operation of the Scheme, however, the IPD Fund — which is the source of the bursary money — has decreased to the point where it can hardly sustain the current level of disbursements.

In accordance with the decision reached by EXCO's Abidjan meeting in 1988, we conducted a fund-raising campaign by asking all IAPH members for voluntary contributions in an effort to raise US\$70,000.

As the list of donors included in my Report shows, we have been receiving most generous contributions from many member organizations and individuals, to whom I wish to express my sincere thanks. As of April 10, 1990, 22 months after the campaign started, we have so far been able to raise 80% of the targetted amount.

As I involve myself anew in this CIPD initiative, I must appeal to the Executive Committee concerning the urgent

need of setting up a new system to replenish the fund so as to secure the necessary resources for this program.

Ports and Harbors

In accordance with the guidelines adopted by the EXCO in 1987, our efforts have been constantly directed to increasing the readability of "Ports and Harbors" and to making it as attractive and informative as possible for the Association's members and readers at large. The staff at the Head Office secretariat in charge of the magazine production have enjoyed the great support of all members and committees in ensuring that the journal maintains a good profile, and wish to renew their appeal for the continued cooperation of our members in sending the Head Office various news, articles and photographs displaying the latest developments occurring at their ports. In particular we would like to encourage our members in developing ports to increase their supply of information for this purpose.

In order to minimize the production costs, the 1988 meeting of EXCO recommended that each member should positively support the journal by running advertisements of at least one page a year. Our Head Office has been canvassing all members to support the EXCO's recommendation. As shown in the list of the names of advertisers in this Report, we have enjoyed the good cooperation of our members in these endeavours. Nevertheless, we are still far from our goal — a one-page ad from each port every year — and it is our earnest aspiration to achieve the targetted level through the future campaigns of the Association's members.

In connection with our advertising business, through the good office of the host port of the Miami Conference arrangements have been made between the IAPH Head Office and Seatrade — the organizer of the exhibition combined with our Conference in Miami — whereby all the 20 exhibitors will be given the privilege of running a full-page ad in "Ports and Harbors" at the expense of the organizer. We will run these ads as they reach us in the future issues of the journal. We are grateful for the most generous cooperation our friends at the Port of Miami have afforded us in this arrangement.

The 1991 IAPH Conference in Spain

The preparations for the 1991 Conference in Spain have been undertaken by Spain's Ministry of Public Works in close contact with our Head Office in Tokyo. I am grateful for the efforts and enthusiasm exhibited by our hosts in making the necessary preparations for the event. I am convinced that EXCO will be able to give effective guidance in further refining the programs which our host will come up with for the discussions at Fremantle.

In summary and conclusion, I would like to ask for your advice and recommendations to help the Association achieve the following goals:

1. The further enrichment of IAPH's activities and the protection of common interests of world ports from a global standpoint.
2. The further reinforcement of IAPH's working relationship with other international organizations for their common interests.
3. The sustenance of the CIPD's activities.
4. The establishment of a sound financial foundation for IAPH.
5. The identification of the basic policies and programs for the 1991 Conference in Spain. (April 1990)

2 IAPH Officers to Attend LDC Meeting

Mr. Herbert R. Haar, Jr. (Port of New Orleans), Chairman of the IAPH Dredging Task Force, has recently sent a letter to Dr. Manfred K. Nauke, head, Marine Science Section, Marine Environment Division, IMO, informing that Mr. Haar and Dr. Willis Pequegnat, a scientific consultant to IAPH, plan to attend the Thirteenth Meeting of the Scientific Group of the London Dumping Convention on 23-27 April 1990 as observers representing IAPH.

Chairman Haar's letter to the IMO contained two copies of an information document for submission to the Thirteenth Meeting and for appropriate distribution of it to the attendees at the meeting. The IAPH Head Office in Tokyo has also received a copy of the document which is reproduced in this issue.

1991 IAPH Directory: Entries to Start Soon

An entry form to the 1991 edition of the IAPH Membership Directory will be sent out to all IAPH members from the Tokyo Head Office towards the end of May, 1990.

Upon receipt of the form, all members are requested to check the attached information and to make the necessary corrections and changes. The completed form should be returned to the Head Office by the end of July, 1990. Members are also invited to run their advertisements in the Directory at reasonable rates: ¥72,000 for a full page (152 mm x 75mm) and ¥44,000 for a half-page (75mm x 75mm).

In previous editions, some entries were listed with an asterisk to identify those members whose updated details had not been received by the deadline. We urge all members to make the latest situation concerning members' organizations available to the Head Office in time for insertion in the new edition of the Directory, which is recognized as one of the most convenient and accurate reference books for identifying "who's who" in world ports.

VTS Subgroup to Study Legal Aspects

According to Mr. A.J. Smith, IAPH European Representative, a joint IAPH/IALA/IMPA/IMLA meeting on Vessel Traffic Services was held in Paris, where the group members, including Mr. Smith himself, collectively considered their future work programme. Details of the proposals resulting from this meeting are to be put to the relevant committees of the various organizations — in IAPH's case, both COPSSEC and CLPPI.

Mr. Smith has been asked by the joint group to chair a subgroup dealing with the legal aspects of VTS. In this connection, he has succeeded in involving Dr. Corbet, Extra Master Mariner, Department of Maritime Studies, University of Wales College of Cardiff, U.K. to be a party to this subgroup's discussions, following the introduction of

Dr. Corbet's paper on the subject: "Development of Vessel Traffic Services: Legal Considerations" in the previous issue of "Ports and Harbors" (page 23).

Mr. Smith indicates that more details on the foregoing joint group meeting will be made available to this office after the forthcoming COPSSEC and CLPPI meetings in Fremantle.

IALA IAPH IMPA World VTS Guide Status of Entries

GUIDES CURRENTLY AVAILABLE:

Australia	Sydney
Bermuda	
France	Bordeaux, Le Havre, Nantes St. Nazaire, Marseille, Sete
Rep. of Ireland	Dublin
The Netherlands	Rotterdam, River Western Scheldt, Ymuiden
Norway	Brevik
Spain	Tarifa
Sweden	Gothenburg
United Kingdom	Forth Ports, Tees & Hartlepool

CURRENTLY IN PRINT (delivery imminent):

Australia	Port Hedland and Melbourne
Canada	12 VTS Centres countywide

CURRENTLY IN PRODUCTION (delivery within three months):

France	Rouen and Paris
United Kingdom	Thames Navigation Service

Background

The IALA IAPH IMPA World Vessel Traffic Service Guide (World VTS Guide) originated from the identification by major international maritime organizations of the need for a clear and concise presentation of the services offered by VTS Centres and the information required by vessels navigating sea areas controlled in this way.

In 1986 discussions commenced between representatives of IALA, IAPH and IMPA, which resulted in the setting-up of a dedicated sub-committee of the IALA Technical Committee. The sub-committee established the standards used in this World VTS Guide.

At IMO Headquarters, London during January 1988, IALA, IAPH and IMPA signed an agreement for the Seaspeak Project (a division of Pergamon Press) to produce the World VTS Guide, and work commenced.

Purpose and Scope of the Guide

The World VTS Guide has been designed to give Masters of ships, navigators, and interested persons, clear and concise diagrammatic and written information regarding the navigational requirements of the VTS Centres of the world. Particular attention has been paid to communications requirements, the World VTS Guide being designed to be used in close proximity to the on-board VHF set.

VTS systems operated by participating Authorities are described in near uniform format, whether the systems are

coastal, harbour or riverine. Associated services are also described, but only so far as they concern communications and procedural requirements.

Commercial considerations are not described in detail.

Authenticity

The information contained in the World VTS Guide has been supplied by the VTS Centres, or by their operating Authority. Prior to publication, every item is checked by the VTS Centre concerned, and every effort is made to ensure that it is faithfully reproduced. The publisher cannot be held responsible for any inaccuracies or omissions.

Coastline detail is shown in diagrammatic form, and is NOT for navigational use. Original coastlines have been taken from the appropriate official charts, with the authority of the appropriate Hydrographic Offices, to whom acknowledgement is made.

Continuous Updating Service

A policy of continuous updating is in operation. At appropriate intervals, minor modifications will be notified to VTS-registered vessels. This updating service is free to VTS-registered vessels. Major changes to a VTS Guide may result in a new edition being issued.

Information on the World VTS Guide may be obtained from:

Capt. F.F. Weeks M.A., Ph. D., F.N.I.
Seaspeak Project
Institute of Marine Studies
Plymouth Polytechnic, Drake Circus
Plymouth PL4 8AA, U.K.

IPD Fund: Contribution Report 20% short of targeted amount

In the fund-raising campaign which started two years ago, only 80% of the targeted amount has been secured as of May 10, 1990. The result is due to be reported to the Executive Committee meeting in Fremantle, where ways and means to secure the necessary resources for the program on a long term basis will be decided.

In the meantime, the Secretary General appeals to all IAPH member organizations and individuals to give their generous support to this important project.

(List of donors as of May 10, 1990)

Contributions to the Special Fund (As of May 10, 1990)

Contributors Paid	Amount Paid: (US\$)
Associated British Ports, UK	3,000
South Carolina State Ports Authority, USA	1,000
Cyprus Ports Authority, Cyprus	700
Japan Port & Harbor Association, Japan	450
Toyo Construction Co., Ltd., Japan	234
Toa Corporation, Japan	500
Port Alberni Harbour Commission, Canada	200
Korea Dredging Corporation, Korea	300
Port Authority of New York & New Jersey, USA	1,000
Vancouver Port Corporation, Canada	1,000
Klang Port Authority, Malaysia	200
Saeki Kensetsu Kogyo Co., Ltd., Japan	250
Penta-Ocean Construction Co., Ltd., Japan	1,000
All French Ports by UPACCIM*	1,560
Shimizu Construction Co., Ltd., Japan	390

Taisei Corporation, Japan	390
Japanese Shipowners' Association, Japan	390
Port of Redwood City, USA	100
Puerto Autonomo de Barcelona, Spain	991
Port Authority of Thailand	100
Port Rashid Authority, UAE	500
Japan Cargo Handling Mechanization Association	390
Obayashi Corporation, Japan	400
Port of Copenhagen Authority, Denmark	1,000
Clyde Port Authority, UK	1,000
Public Port Corporation II, Indonesia	150
Toyama Prefecture, Japan	420
Georgia Ports Authority, USA	1,000
Port of Oakland, USA	350
Kuantan Port Authority, Malaysia	200
Port of Seattle, USA	1,000
Kajima Corporation, Japan	420
Port of Reykjavik, Iceland	500
Canada Ports Corporation, Canada	250
Nigerian Ports Authority, Nigeria	250
Port of Montreal, Canada	1,000
Ports Public Authority, Kuwait	1,000
Tanzania Harbours Authority	200
Junta del Puerto de Gijon, Spain	500
Sharjah Ports Authority, U.A.E.	500
Port of Yokohama, Japan	4,950
Port of Long Beach, USA	1,000
Mauritius Marine Authority	200
Chiba Prefecture, Japan	403
Dr. Frederik K. DeVos, Canada	100
Tokyo Metropolitan Government, Japan	3,941
IAPH members in the Netherlands**	3,209
Mr. Robert W. Innes, Canada	250
Autorite Portuaire Nationale (APN), Haiti	100
Hiroshima Prefecture, Japan	666
City of Kobe, Japan	4,438
Port of Houston, USA	1,000
Port Authority of Fiji, Fiji	300
Osaka Port Terminal Development Corp., Japan	697
Port of Halifax, Canada	300
Nagoya Port Authority, Japan	3,033
Kawasaki City, Japan	1,444
Port of Nanaimo, Canada	200
Niigata Prefecture, Japan	362
Maritime Services Board, N.S.W., Australia	390
Kobe Port Development Corp., Japan	698
Solomon Islands Ports Autho., Solomon Islands	100
Gambia Ports Authority, Gambia	100
7 Ports of New Zealand***	1,000
Cyprus Ports Authority, Cyprus ****	700
Daito Kogyo Co., Ltd., Japan	1,000
Port of Hakata, Japan	985
Johor Port Authority, Malaysia	200
Total:	US\$ 56,551
Pledged: Nil	

* *Union of Autonomous Ports & Industrial & Maritime Chamber of Commerce*

** *Directorate-General of Shipping & Maritime Affairs, Port Management of Rotterdam, Port of Vlissingen, Port of Delfzijl/Eemshaven, Port Management of Amsterdam*

*** *Ports of Auckland, Port of Napier, Northland Port Corporation, Southport (NZ), Port Taranaki, Port of Tauranga, Port of Wellington*

**** *Contribution made for the second time in this fund raising term*

Visitors to Head Office

On the morning of April 20, 1990, Mr. Ronald W. Brady, President, Board of Port Commissioners, and Mr. Nolan R. Gimpel, Chief Executive Officer of the Port of Oakland, accompanied by Mr. Kazumi Nagao, Director, Far East, from the Port's Tokyo Office, visited the IAPH Head Office and were welcomed by Secretary General Kusaka and his senior staff.

The previous evening a press conference and buffet reception was given by the Port of Oakland Trade Mission, led by Mr. Brady, the Board President, with some 200 leading shipping and port executives present, at "Kaiun Kaikan" in Tokyo. The trade mission was visiting here on the first leg of its 10-day tour to Japan, Korea, Taiwan and Hong Kong, the four largest trading partners of the Port of Oakland.

The other members of the Mission visiting Tokyo were: Messrs. R. Zachary Wasserman, Commissioner, James B. Lockhart, Commissioner, Frank Ogawa, City Councilman and Special Rep. to assist the Port and Christopher C. Marshall, Secretary of the Board.

On the afternoon of April 24, 1990, Mr. A.J. Hope, Director, Nortrans Consultants Pty. Ltd., Queensland, Australia, together his Tokyo agent, Mr. B.I. Kawakita, visited the Head Office and was received by Mr. Kondoh and Ms. Takeda. Mr. Hope, who is one of the rare members whose association with IAPH ranges over the two decades, and is currently a member of the Dredging Task Force, was visiting Tokyo on his way to Europe.

Membership Notes:

New Members

Regular Member

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(Ir. K. d'Angremond, Professor of Coastal Engineering)

Report by Bursary Recipient

PACT: Practical Approach Concept in Training Course on Multipurpose and Container Terminal Operations Organized by the Port of Rotterdam from 12/3/90 to 6/4/90

**By Maksah Bin Ali
Training Assistant
Kelang Container Terminal Sdn. Bhd.**

The PACT course started on Monday 12/3/90 as scheduled and finished on Friday 6/4/90, under the arrangement and help of the Rotterdam Municipal Port Management.

The course has reached the objectives for developing ports in the world, especially Kelang Container Terminal Sdn. Bhd., Malaysia.

These are:

1. Trained and exposed participants in the various fields of operations and management at Multipurpose and Container Terminals in respect of planning, equipments, manpower utilisation and arrangements, training and manpower development and safety with respect to operations and handling of dangerous goods under the IMO regulation and requirements.
2. Exposed the participants to various applications of computers required for the efficient handling of containers and distribution at the container terminal.
3. Trained participants to the practical approach with regards to the efficient handling and operations of the container terminal (less people — more throughput concept).

The course programme was designed in such a way that every participant was enriched with the knowledge and experience towards improving the efficiency of the developing ports.

The practical aspect of the programme gives the opportunity to every participant to meet the experienced terminal operators and the top management to share their knowledge and expertise with participants.

The visit to the respective companies and institutions also gave the opportunity to the participants to observe and update the theories to the reality of the terminal operations and management with respect that Rotterdam is one of the biggest ports in the world.

The participants were also exposed to the practical approach of negotiation, planning of equipment, strategy and logistics. This gave inside knowledge towards the efficient terminal operations.

Most of the people who gave the presentations were very dedicated and subject matter experts. They were able to deliver their information with keen interest. The handouts given were very useful as reference and guidance in the implementation of the concept and systems, taking into

(Continued on Page 10, Col. 1)

Marine Environment Protection

By **A.J. Smith**

**IAPH European Representative
London, U.K.**

IAPH was represented at the 29th Session of the Marine Environment Protection Committee (MEPC) held in London from 12 to 16 March 1990 under the Chairmanship of Rear Admiral S A Wallace (USA)

Delegations from 54 Member States, other UN Agencies, inter-governmental organisations and non-governmental international organisations warmly welcomed IMO's new Secretary-General, Mr William O'Neil to his first MEPC meeting in that capacity.

The Session agenda, and the commitment of delegations, make it perfectly plain that environmental issues are no longer incidentals, to be dealt with in isolation. They are increasingly to the forefront of maritime operations and demand that they be recognized as an integral element of related activity.

IMO's sensitivity and awareness is all the more acute

Bursary Recipient Report—

(Continued from Page 9, Col. 2)

consideration the local environment and constraints.

The course participants came from various developing ports of the world, including a student from the World Maritime University (WMU) in Malmö, Sweden and it was wonderful and unbelievable that a very high level of social interaction arose amongst participants. It was like a family affair as there was no question of races and religion. Our relationship was very close even though we met only a few days ago. Wherever we went, we discussed the port problems even during lunch and in the bus on the way to and from the course we shared the knowledge and ideas.

To me, I can say I have gained in depth knowledge and experience from this course. Especially since I am from the training department, I should adequately train professionally to perform the job effectively. The greatest advantage I attended the PACT Course is that I will share the knowledge I gained with the other workers in my organisation.

Last but not least I must thank TEMPO, Port of Rotterdam, for organising such an intensive course for the developing ports of the world. Obviously I said this is a very well organised course. I also thank Mr. C.B. Kruk who is also the chairman of the CIPD for granting me the IAPH Bursary to enable me to attend the PACT Course. I also thank Mrs. Fieneke de Groot for the transport and hotel arrangements.

My special thanks go to the Chief Executive of KCT, En. Abdul Samad Mohamed for granting me the approval to attend the above course and for his great interest in the training of personnel of his organisation.

I thank the Personnel Manager and the Training Officer of KTC for their encouragement and support for me to undergo the training course.

Lastly I say 'Thank you' to the staff of the Rotterdam Municipal Port Management, the bus driver and the people of Rotterdam for the hospitality.

in the light of recent highly publicised accidents involving VLCC's such as the Exxon Valdez off Alaska and Kharg off Morocco, coupled with pronouncements by prominent personalities on life-threatening pollution damage to the world's atmosphere. As at all MEPC meetings, many of the matters discussed are only of general interest to IAPH members. Some, however, do have a particular significance for port operations and development planning and are referred to in some detail below.

A proposed ILO Convention and Recommendations concerning Safety in the Use of Chemicals at Work

IMO's concern, and certainly IAPH's, is that for the purposes of the Convention, which is expected to be adopted in June 1990, the term "use of chemicals at work" is taken to cover, apparently, all maritime transport operations. The scope for conflict with existing Conventions and Agreements is therefore great. The ILO Conference in June will no doubt be informed of that fact and asked to exclude such operations from the definition.

Information on dangerous or noxious cargoes on board ships and their location

The question is one of how best to ensure that relevant information is conveyed to ports before the ships departure to allow effective records to be kept on the movement, handling and storage of dangerous goods.

Various proposals put to the meeting will be reviewed and commented on by IMO's Sub-Committee on the Carriage of Dangerous Goods.

Adequacy of Shore Reception Facilities

MARPOL 73/78 Annex V: Garbage reception facilities, are either not available, it seems at many ports or inadequately promoted. In some cases where they do exist, it is said that there are too many disincentives to use them.

The International Chamber of Shipping (ICS) which is conducting its third enquiry into alleged inadequacies of reception facilities at ports, has been asked to allow IAPH the opportunity of checking out allegations before submission of the enquiry's findings to the next Session of MEPC.

Development of a new Annex VI of MARPOL 73/78 to deal with Noxious Solid Substances

There was general agreement that it was first necessary to identify the substances which might be hazardous. A Group of Experts will therefore establish a hazard profile for solid bulk substances to allow evaluation to proceed.

A Proposed Convention on International Cooperation on Oil Pollution Preparedness and Response

IMO Assembly Resolution A674 (16) was a direct effect of the Exxon Valdez accident. MEPC was asked to prepare a convention which would provide the framework for international cooperation for combating major oil pollution incidents.

To that end, the US Government has agreed to fund a Preparatory Meeting from 14 to 18 May 1990 and a Conference from 19 to 23 November 1990.

A Working Group of MEPC, on this occasion, prepared

a draft text of the Convention for consideration at the Preparatory Meeting. The IMO Secretariat was also asked to prepare a paper on the modalities for the establishment of an international oil pollution information centre within IMO.

Recommendation concerning tonnage measurement of segregated ballast tanks (SBT) on port dues

IMO Resolution A388 (x) dealt with tonnage measurement of SBT in oil tankers in relation to the gross tonnage of a ship for assessing port dues.

IAPH members had been made aware of the Resolution and of IMO's request that its implementation be given sympathetic consideration.

In the event, it has been reported to MEPC that for various reasons the spirit of the resolution has not been followed by ports. Consequently, therefore, and in an effort to establish a uniform approach to its interpretation, it has been agreed that a new draft Assembly resolution should be prepared under the leadership of the Netherlands. Member States were asked to send their comments and suggestions to the Netherlands accordingly.

IAPH will no doubt consider its course of action, in this regard, for recommendation to members.

Prevention of Air Pollution from Ships

There is no doubt that this subject will be given high priority on the agendas of the next and future sessions of the MEPC.

Three main problem areas have been recognized:

1. depletion of the ozone layer by CFC's and halons;
2. problems caused by certain exhaust gases;
3. pollution caused by the content of ships' fuels.

Many papers were presented to this session. These will be examined in detail by Member States, together with any other relevant material, so that ideas can be sent into IMO well in advance of the next session in November 1990.

IAPH's COPSSEC is aware, generally, of the problems and will be considering their port related aspects at forthcoming meetings.

Designation of Special Areas under MARPOL 73/78 Annexes I, II and V

Revised criteria were agreed for designation purposes. Information on these can be obtained from the Secretariat on request.

The subject matter has a particular relevance and importance to port operations.

Its main thrust is against marine pollution from ships, with the application of more stringent restrictions on the disposal of harmful substances. It also has a clear relevance to pollution from land-based sources including dumping of wastes and dredged materials.

Distortions of competition arising from the implementation of the MARPOL 73/78

MEPC took note of a resolution forwarded to IMO by the European Parliament which called on the European Commission to draw up suitable Community measures to prevent distortions of competition occurring to the detriment of Community ports or shipping by the obligatory application of MARPOL 73/78 by Community Member States. European IAPH members particularly, and IAPH members generally, will be interested in any developments arising from

this communication.

Reception Facilities

States bordering the Baltic Sea have informed IMO that they would ensure the provision of facilities called for by Annexes I, II, IV and V of MRPOL 73/78 and had agreed to apply general requirements for the use of these facilities by ships. These include 24 hour advance notification of their intended usage.

IAPH member ports in the Baltic Area should make a point of becoming familiar with these general requirements where they have not already done so.

IMO's Technical Assistance Programme

All UN Agencies, including IMO, have been asked by the UN General Assembly to review their work programmes in the light of the Brundtland Report of the World Commission on Environment and Development.

For IMO, this has led to an evaluation of its technical assistance programme in the environmental field. One result has been the identification of the provision reception facilities by developing countries as an outstanding environmental problem. The suggestion has been made that an appropriate fund should be set up to ameliorate the problem. A related study on mechanisms for financing reception facilities is nearing completion.

IMO Assembly Resolution A677 (16) invited IMO's Secretary-General, in his formulation of long-term objectives for the technical assistance programme in the field of marine environment protection, to cooperate with Member States and other interested organisations in an evaluation of problems associated with the implementation of relevant Conventions, including such matters as:

- changing trade patterns;
- evolving transport modes;
- technological trends;
- port development.

The Secretary-General therefore intends to convene a meeting of an Advisory Group to help him on this matter. IAPH, in my view, should indicate its support in tackling A677 (16)'s objectives and offer its expertise as a contribution to the work of the Advisory Group.

Ministerial Conference on the Protection of the North Sea

A Report on the Third Ministerial Conference held in the Hague from 7 to 8 March 1990 was made to MEPC by the Netherlands Delegation.

The Common Action areas set out in the Final Declaration of the Conference are to be progressed through IMO. In that regard, MEPC noted a range of intentions relating to inputs of hazardous substances; phasing out of PCB's; inputs of nutrients; dumping and incineration at sea, including dredged materials; pollution from ships; pollution from offshore installations; discharges and disposal of radioactive wastes; airborne surveillance; Wadden Sea; enhancement of scientific knowledge; coastal state jurisdiction; salvage of sunken ships and/or their cargoes; protection of habitats and species; fisheries; information and consultation.

The Third Conference has also accepted the implications of the concepts of sustained use and sustainable development, and the integrated ecosystem approach which has been elaborated in the Report of the World Commission on Environment and Development (the Brundtland Report).

The implications of dealing with these common action areas through IMO should not be lost on IAPH. Results will not only be implemented by the North Sea countries, but on a world-wide basis, where applicable. IAPH Technical Committees should therefore not only familiarise themselves with the developing situation but should take steps to make direct contributions to these developments.

As it happens, the Netherlands delegation has undertaken to provide concrete proposals to give effect to these intentions well in advance of the next session of MEPC.

UN Conference on Environment and Development

MEPC noted the UN General Assembly Resolution 44/228 which contained, inter alia, a decision to convene the Conference, of two weeks duration, to coincide with World Environment Day, 5 June 1992, in Brazil.

IMO's particular contributions will relate to:

- protection of the atmosphere by combating climate change, depletion of the ozone layer, and transboundary air pollution;
- protection of the oceans and all kinds of seas, including enclosed and semi-enclosed seas, and of coastal areas and the protection, rational use and development of their living resources;
- environmentally sound management of wastes, particularly hazardous wastes, and of toxic chemicals as well

as prevention of illegal international traffic in toxic and dangerous products and wastes.

Preparations for the Conference are underway. A Preparatory Meeting in New York during the week of 5 March 1990 considered a report by the UN Secretary-General setting out Conference objectives.

Substantive meetings will be held in Nairobi (August/September 1990), Geneva (March/April 1991 and September 1991) and New York (January 1992) to assemble Conference material. Additionally, signatories to the London Dumping Convention will prepare an appropriate submission to the 1992 United Nations Conference.

MEPC will give all possible support to further the Conference's objectives.

Work Programme and Next Meeting

IAPH's Technical Committees will have regard to the substantive items included in MEPC's work programme and will no doubt contribute their expertise wherever possible. The importance and urgency of so doing cannot be overstressed.

Details of the work programme can be made available by the IAPH Secretariat, on request.

The next and 30th Session of MEPC will be held from 12-16 November 1990. The 31st Session has been provisionally set for mid-1991.

IMO REPORTS

International Conference on the Revision of the 1974 Athens Convention

By A.J. Smith, IAPH European Representative

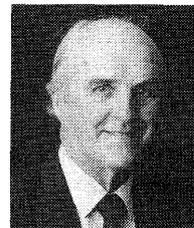
IAPH has a continuing interest, on behalf of member ports, in the principle of the limitation of liability generally; and a particular interest in both the establishment and amendment of limitations amounts.

An IAPH Information Note on the subject, prepared by CLPPI, was submitted to an International Conference held in London under the aegis of IMO, from 26-30 March 1990.

The Conference, under the chairmanship of H.E. The Honorable Tomas T Syquia (Philippines) was committed to amending the Athens Convention which provides for compensation to ship passengers who suffer damage or injury, or loss to their luggage, if the damage or loss was due to the fault or neglect of the carrier.

Public concern following the tragic accident to the passenger ferry, the *Herald of Free Enterprise*, in 1987, had demanded reconsideration of actual limits of compensation; acknowledging, at the same time, the need for balance between the legitimate interests of passengers and carriers.

Forty-six (46) States participated in the Conference together with observers from 5 other States and Hong Kong, various inter-governmental organisations and non-governmental international organisations, including IAPH.



Mr. Smith

The revisionary process was undoubtedly a success. Forty-two (42) of the participating States felt able to sign an agreed Protocol at the conclusion of the Conference.

IAPH members will be particularly interested to note that, amongst other things, the limit of compensation is now set at 175,000 units of account (Special Drawing Rights of the International Monetary Fund). The process of updating limitation amounts has been vested in IMO's Legal Committee after certain procedures have been followed by a prescribed number of States Parties to the Protocol.

Not less than one half, at least six, of these States may propose to amend the limits in a submission to the Secretary-General, IMO. He will circulate that fact and put the proposal to a meeting of the Legal Committee not less than 6 months after circulation.

Amendments shall be adopted by a two-thirds majority of the Contracting States present and voting in the Legal Committee.

A number of constraints were put on the Legal Committee when acting on any proposal to amend the limits. Details of these, and the full text of the 1990 Protocol to the 1974 Athens Convention can be made available on request from the IAPH Secretariat.

OPEN FORUM

Matters Relating to the Disposal at Sea of Dredged Material

Submitted by the International Association of Ports and Harbors (IAPH)

I. Introduction

1.1 The International Association of Ports and Harbors (IAPH) wishes to express its appreciation for the invitation extended to it to participate in this Thirteenth Meeting of the Scientific Group on Dumping with regard to agenda items relating to the ocean disposal of dredged material. IAPH has been an active participant in the meetings of the Scientific Group in the past, and IAPH is pleased to offer its continuing assistance to the Scientific Group in its consideration of matters affecting dredged material.

2. Agenda Item 2 — Consideration of the Report of the ad hoc Group of Experts on the Annexes to the London Dumping Convention

2.1 The ad hoc Group of Experts on the Annexes to the London Dumping Convention met on 15-19 January 1990 to consider a new assessment procedure for determining the suitability of materials for disposal at sea. IAPH has supported the work of the Scientific Group in this area, including the development of an Action List of substances considered for sea disposal and the specification of procedures to determine their acceptability for disposal at sea.

2.2 In the case of dredged material, a comprehensive set of assessment criteria has already been approved by Contracting Parties in the form of the Special Guidelines for Dredged Material adopted at the Tenth Consultative Meeting (LDC 10/15 Annex II). These guidelines include recognition of the known mitigative properties of marine sediments that bind contaminants so that they are not bioavailable, as well as the demonstrated effectiveness of certain special care measures in further isolating contaminants in dredged material from the marine biota. The adoption of the special guidelines by Contracting Parties was based upon the determination of the Scientific Group that application of the guidelines would assure that the disposal of dredged material at sea could be carried out safely and without harm to the marine environment.

2.3 In its submission to the Twelfth Meeting of the Scientific Group last year, IAPH expressed its concern about the interest shown by some delegations in the use of fixed numerical criteria in assessing the suitability of dredged material for disposal at sea. (LDC/SG.12/INF.10). IAPH expressed its opposition to two methods under consideration: the Apparent Effects Threshold (AET) and the Sediment Quality Triad. IAPH noted that these methods do not take into account the special features that distinguish dredged

material from other waste matrices and which make a universal application of numerical criteria inappropriate. IAPH is particularly concerned that these methodologies might be used to establish certain critical concentrations of contaminants of concern for one geographic region and then attempt to apply these same values in a more universal realm. This practice would result in a disregard of the mitigative properties of many components of dredged materials — properties that tend to render it innocuous as a source of chemical impacts.

2.4 IAPH invites the Scientific Group to take note of the severe limitations in attempting to apply numerical criteria alone to the assessment of dredged material and to recognize the importance of applying the dredged material guidelines under the new assessment procedure.

3. Agenda Item 8 — The precautionary approach — technical and scientific considerations and their application

3.1 At the Twelfth Consultative Meeting of Contracting Parties, there was extensive debate about how the “precautionary principle” should be applied in the context of the London Dumping Convention. Some delegations take the position that this calls for the eventual prohibition of all dumping at sea. Other countries believe that the concept is consistent with an “equal consideration” of all disposal options and use of the option of “least detriment” to the environment as a whole. IAPH expressed the view that sea disposal of dredged material is an acceptable and essential disposal option that should receive equal consideration in a total waste management approach. (LDC 12/16, para 12.4).

3.2 In IAPH's view, use of Annex III and the special guidelines for dredged material, as they are presently applied and in conjunction with the new assessment procedure under consideration to implement Annexes I and II, is fully consistent with the precautionary principle. The guidelines include an assessment of all relevant factors and are designed to assure that disposal at sea of dredged material can be carried out without unacceptable adverse impacts upon the marine environment. Because the special guidelines allow dredged material to be disposed safely at sea, there is no need to eliminate all ocean dumping of dredged material. In many cases, after an equal consideration of all disposal options, disposal at sea may prove to be the option of least detriment. Sea disposal under such circumstances is fully

(Continued on Page 16, Col. 1)

PORT ADMINISTRATION AND ORGANIZATION

A Noteworthy Experiment in Morocco

By Jean Chapon

Ingenieur General Honoraire des Ponts et Chaussees (France)
on Behalf of the UNCTAD Secretariat

(UNCTAD Document: UNCTAD/SHIP/627)

Introduction

The subject of this study — port administration and organization, is a topical one. It was included by the UNCTAD Intergovernmental Group of Port Experts, at its session held from 25 February to 5 March 1986, in the list of themes to be studied by UNCTAD secretariat whenever sufficient resources were available. In resolution 60 (XII) the UNCTAD Committee on Shipping took note of the report of the Ad Hoc Intergovernmental Group of Port Experts and requested the secretariat to adapt its work programme in the light of the Group's recommendations.

During a visit to UNCTAD in 1983, the Moroccan Minister of Works, who was preparing a new phase in the development of his country's port sector, met with officials of the Shipping Division. Following to that visit, close links developed in the field of co-operation, a fact-finding visit was made to Morocco by an UNCTAD official and a technical co-operation programme was developed. As part of the programme, which was initially financed by Morocco and subsequently jointly financed by Morocco and UNDP, an examination was made of the main operational problems faced by ports and training measures were defined and implemented, with a focus on the establishment of a ports training centre associated with the TRAINMAR network. A large number of support and supervisory visits were organized to the Casablanca Port Lighterage Authority (RAPC) which later became the Ports Operating Board (ODEP). The visits confirmed the considerable progress achieved by the Moroccan ports sector. In his most recent mission report drawn up in August 1988, Mr. J. Cambon, current Chief of the Ports Section, suggested to the Moroccan authorities and to UNDP that a study should be prepared that would evaluate the activities undertaken and the progress achieved, as they were highly instructive for the international ports community, in particular in the developing countries. The Moroccan authorities selected Mr. J. Chapon to carry out the study, examine the results obtained and identify the main lessons of interest to other ports.

The ports situation in Morocco has its own specific features attributable to historical, economic, geographic and other factors. It is certainly not possible to transfer Moroccan experience elsewhere without some adjustment. We believe, however, that the major guidelines of Morocco's current ports policy and the approaches, principles, and organiza-

tional and operational structures adopted for its implementation in the country's ports will be of interest to other developing countries. They are based on a concern to manage the port as a modern dynamic enterprise and also to have it play a key and innovative role in the development of the country and of its external trade, by serving as a rapid, efficient and reliable transit point.

I should like to take this opportunity to stress the importance which the UNCTAD secretariat attaches to promoting, with the support of UNDP, the transfer of know-how and experience among developing countries.

A. Bouayad
Director, Shipping Division
UNCTAD

Preface by the Minister of Public Works and Vocational and Management Training of the Kingdom of Morocco

The Kingdom of Morocco enjoys an exceptional geographic position because of its location at one of the world's major communication crossroads.

Foreign trade is one of the cornerstones of the country's economy.

Morocco has therefore always had a particular interest in the transport sector. Its network of ports is complemented by a modern road and rail network, designed to tie in with the major axes of communication between Europe, on the one hand, Africa and the Middle East on the other.

In the sphere of maritime transport, Morocco has access to and is accessible from both the Atlantic and the Mediterranean.

With a coastline of over 3,000 km, the country can be justly proud of its long maritime tradition. Ports such as Essaouira (formerly Mogador), Rabat and Mehdiya possess a long maritime history.

More recently, until 1970, Casablanca was the principal port, handling over three quarters of the country's maritime trade.

Towards the mid-1970s, Morocco began to implement a deliberate policy of regional development. As part of that policy, a new master plan for port development was drawn up, focusing on the development and construction of new ports along the whole length of the seaboard from the

Mediterranean in the north-east to the southern most part of the country, on the Atlantic.

Thus, since 1975 major investment of approximately 5 billion dirhams has been channeled into the development of new ports (Nador, Jorf-Lasfar, ...).

However, construction of the basic infrastructure was not by itself sufficient to guarantee the required level of efficiency in the ports sector. Even ancient ports such as Casablanca were experiencing major difficulties. A catalyst was required.

Studies were carried out, several possible scenarios contemplated and a wide range of options presented.

Efforts to modernize ports were undertaken. However, it rapidly became apparent that unsatisfactory port management was attributable to problems inherent in the existing structures.

The possibility of introducing the private sector was also studied, but it was found wiser to proceed by stages, and to set up a flexible body capable of reconciling public service with a concern for profitability and productivity and of pursuing efforts to ensure decentralization of and encourage competition among ports, with an optimum distribution of traffic under an overall regional development policy.

The possibility of providing each port with an autonomous management body was considered, and then discarded in favour of a single entity, a commercial and industrial public agency, the Ports Operating Board (ODEP), which was set up on 1 January 1985.

The Board's results during its first years of existence confirm the wisdom of the Government's choice.

Thanks to the dynamic generated by the new structures that were set up, and also because of the scale of investment undertaken, the ports underwent a far-reaching transformation accompanied by marked improvements.

After an initial report in 1979 on the congestion prevailing in the port of Casablanca, the UNCTAD experts were able to follow closely the various reforms carried out in the sector, and in particular the upheaval that took place in early 1985. During a recent visit to Morocco, they suggested that a study be made of Morocco's ports sector experience, in order to analyse the organization set up and the results it had achieved.

Mr. Chapon, a well-known international expert, was UNCTAD's wise choice for this task.

The analyses and interpretations presented by Mr. Chapon in his study are the views of a distinguished expert on the method and approach adopted, to which ODEP's success during its first years of existence is attributable.

The progress which the Kingdom of Morocco has made in the ports sector should not be considered a reason for proceeding no further. Further progress is, on the contrary, continuing to be made, with development, improvement and performance as the constant objectives.

The strategy adopted for the future is based on a gradual liberalization offering the private sector and increasingly important role in port operation, with, as its counterpart, an enhanced role for ODEP in planning and channeling investment in shipping and ports.

The reader will undoubtedly draw valuable lessons and considerable benefit from the pertinent analyses made by Mr. Chapon.

To conclude, I should like to stress two factors which, in my view, are essential for the success of an experiment

such as that analyzed in this study:

1. The crucial importance of choosing the right men to take responsibility of operating the ports. It is the qualities of these front-line managers and their capacity to motivate the staff placed under their authority that will largely determine the undertaking's success.

2. A policy that lacks "resources" is a policy that has every likelihood of ending in failure. Consequently, appropriate changes for the services provided are the best guarantee of port efficiency, which gives the port users benefits far exceeding the fair charges they pay.

Thanks to a combination of these two factors, the right men and appropriate port charges, success will undoubtedly lie at the end of the road.

Mohamed Kabbaj
Minister of Public Works and Vocational and
Management Training

Foreword

I have endeavoured to ensure that this study of the Ports Operating Authority (ODEP) provides as objective as possible a view of the Kingdom of Morocco's ports policy and of the agency that country has established to assist in the implementation of the policy. It is based on many interviews during two missions in the first half of 1989 and the wealth of documents with which I was provided.

In describing the rationale behind Morocco's ports policy, the organization of ODEP, the methods adopted for its establishment and operation and the results obtained, I have endeavoured to draw lessons that may be of use to other countries. The study therefore contains an analysis of the constituent instruments of ODEP and a fairly detailed description of the course followed by those responsible, that has led to the present situation — which all the users of Morocco's ports recognize as constituting a marked improvement. The study does not attempt to provide an exhaustive description, as the size of the task performed by the ODEP authorities would have required too lengthy an analysis; likewise, the activities described are not all of equal importance, although each of them has undoubtedly contributed to the final result. The size of the investment or expenditure committed for the implementation of the measures should not be seen as indicative of the financial effort required to carry out a similar project in other countries, although it reveals that an operation of this nature requires a certain "outlay," which in the case of Morocco, although not excessive, was far from negligible, and which was more than justified by the results.

I should like to express my sincere thanks to His Excellency, Mr. Mohamed Kabbaj, Minister of Public Works and Vocational and Management Training, who kindly entrusted me with the preparation of this study and who spared time to describe to me his country's policy, which he initiated and implemented. I should also like to thank all the officials in the Ministry, in ODEP and in Morocco's maritime and ports sector, in particular Mr. A. Mezianne, Secretary-General of the Ministry, Mr. M. Layachi, Director of Ports at the Ministry, and Mr. M. Hassad, Director-General of ODEP.

I should also like to thank all the UNCTAD and UNDP officials for their support in preparing and carrying out my mission.

Jean Chapon
Paris, 17 May 1989

NOTE

This views expressed in this report are those of the author and do not necessarily reflect those of the UNCTAD secretariat.

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The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

SUMMARY

This study aims to provide an **objective** view of the Ports Operating Board (ODEP) of the Kingdom of Morocco, and to describe the Board's aims and achievements. It does not, of course, signify that the present ports system has achieved perfection. Moroccan government officials and ODEP's management are well aware that the constant competition faced by all countries makes daily progress necessary. The current planning effort bears witness to a determination to enable Morocco's ports to play their role and to ensure that the country's place in that competition is a good one and that rapid domestic development can be pursued.

Nevertheless, a lesson may be drawn by all countries from the present study of ODEP, whether they be industrialized or developing nations. The aim of this summary is to focus on that lesson, briefly reviewing the various steps taken to establish and start up ODEP.

Despite the organizational difficulties which emerging young nations encounter, Morocco appreciated the importance of ports for its economy and has consequently always focused considerable attention on the sector and accepted

Disposal of Dredged Material

(Continued from Page 13, Col. 2)

consistent with the precautionary approach.

3.3 IAPH also wishes to express its concern about a view expressed by one delegation that ports should have responsibility for eliminating upstream sources of pollution before being granted a permit for sea disposal. This would place an impossible burden upon IAPH members. Ports are not in a position to exercise management or operational control over separate and independent sources of pollution and can not impose legal or regulatory requirements of this nature. The critical need of many IAPH ports to dispose of dredged material at sea should not be subject to actions against other sources that are beyond the authority of ports and must be taken by national authorities. IAPH wishes to express its opposition to any such limitations upon the disposal at sea of dredged material that can be carried out safely in accordance with the special guidelines.

4. Conclusion

4.1 IAPH invites the Scientific Group to consider the views expressed by IAPH in this submission.

Herbert R. Haar, Jr.
Special Assistant to the
President — Port of New Orleans
IAPH Observer

a considerable financial outlay for development of the infrastructure needed for its external trade.

In 1984, it decided to adopt a genuine ports policy, with the following objectives:

To pursue measures designed to ensure a balance in the activity of the different ports;

To prevent saturation of the port of Casablanca and to allow other ports to become development poles for the regional economies;

To improve the operation of port facilities (these facilities were considerably strengthened by the construction of new ports and the installation of heavy equipment).

With a view to achieving these objectives, Morocco decided, after a careful assessment of its human resources potential and the behaviour of its enterprises:

To entrust its Administration with the tasks that fell within the sphere of the authorities;

To set up a public-sector agency (ODEP) to carry out the tasks to be performed in the commercial sphere.

It simultaneously adopted a flexible attitude towards the private sector, respecting existing practices, while leaving open the possibility of subsequent evolution in either direction.

As its role was to be essentially a commercial one, ODEP had to be established and to operate "along the lines of an enterprise." This has been the achievement of its managers, within the framework of the constituent instruments.

By establishing the Authority on the basis of the former Port of Casablanca Lighterage Authority, and incorporating certain segments of the administration, the Moroccan authorities strove to solve the most pressing problems:

By giving priority to personnel issues (in particular status and remuneration);

By providing it with a Port Training Centre from the very beginning;

By launching a programme for execution of the most urgent works that were essential if the port personnel were to perform their role satisfactorily.

In order to determine the organization and resources of the Board, an extensive survey was carried out, using external consultants, as well as many of the Board's own staff, which was closely and structurally involved in the survey.

On this basis, a plan for 1986-1987 was drawn up. This plan covered three aspects:

Use of human resources;

Improvement of port facilities;

Implementation of a policy focusing on quality of service and relations with port users. Particular attention was devoted to training, with a focus on motivation of the personnel of the enterprise. The aim was to complete the task as soon as possible, but nevertheless allowing adequate time to consider options before taking decisions.

By late 1987, the new organization was set up, based on the decentralization of operational functions to units close to the port users (the autonomous production centres) and the attribution of financial responsibility to the port operating authorities, which were set up as profit-making entities.

The central authority of ODEP performs no operational functions but is responsible for defining the enterprise's policy and strategy, for ensuring co-ordination between the port managements and striking the necessary balance among the

(Continued on Page 17)

International Maritime Information

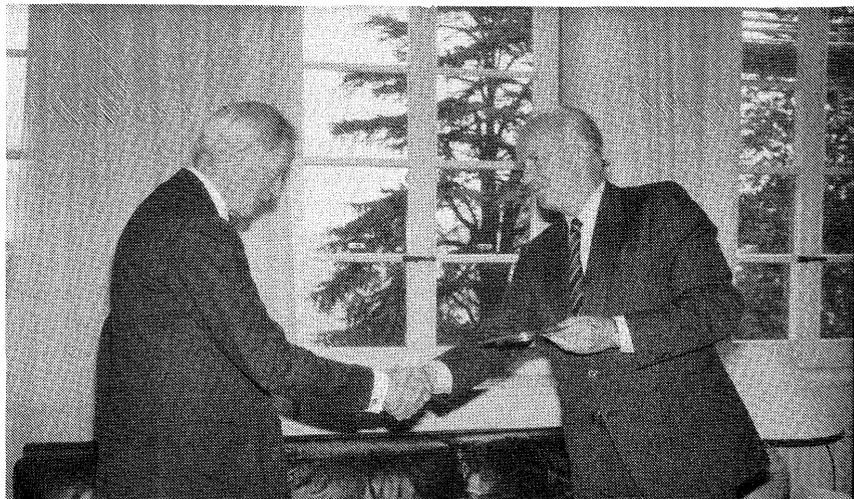
WORLD PORT NEWS

Rescue: A Maritime Tradition to Be Upheld

In Geneva today the United Nations High Commissioner for Refugees, Mr. Thorvald Stoltenberg, presented an award to the Danish shipping company, Maersk Line. The Award, which took the form of a commemorative plaque, was made in recognition of the outstanding humanitarian record of the Maersk Line in rescuing Vietnamese asylum-seekers at sea over the last fifteen years. It was received by Mr. M.M. Moller, Chairman of the Company, who travelled to Geneva for the presentation ceremony.

Since 1975, over three quarters of a million Vietnamese asylum-seekers have set out in small, overcrowded boats across the South China Sea. For all the risks have been great as they have confronted perilous seas hoping to begin new lives elsewhere. Some have never reached their destination, succumbing to piracy, shipwreck or starvation on the high seas. Tragically, a considerable number have had their pleas for assistance ignored by passing vessels.

But, of the luckier ones, over 67,000 have been rescued by merchant ships, naval vessels and fishing boats in accordance with the time-honoured maritime tradition of aiding persons



Mr. T. Stoltenberg (right) presents a commemorative plaque to Mr. M.M. Moller, Chairman of the Maersk Line. (UNHCR Photo by A. Hollman)

in distress at sea.

In recognition of the difficulties that operations of this sort can impose on rescuing vessels, UNHCR has co-operated closely with shipping companies and the authorities of coastal states to facilitate the disembarkation of rescued asylum-seekers in the next port of call and to offset costs incurred by shipping lines in coming to their assistance.

The performance of the Maersk Line in coming to the aid of Vietnamese asylum-seekers at sea has been exemplary. In the last fifteen years, this company alone has been responsible

for the rescue of some 7,000 boat people in distress, a figure which UNHCR believes to be significantly higher than any other individual commercial company.

In presenting the award to the Maersk Line, the United Nations High Commissioner for Refugees wishes to recognize this outstanding humanitarian record and to underline the importance of upholding the maritime tradition of rescue at sea which has led to so many lives being saved on the South China Sea.

(HCR/MSC/3196, April 13, 1990)

Port Administration

(Continued from Page 16)

ports by reassigning resources as necessary during the growth phase of the new or newly-equipped ports.

As it has done since its establishment, ODEP is continuing to give priority to the question of human resources, with a particular focus on developing motivation and a sense of responsibility, while promoting dialogue among the various levels of authority, with a two-way flow of information in order to create closer bonds among the personnel and promote a harmonious and trouble-free working environment. It has maintained a major training effort, and made maximum use of the valuable instrument it possesses in its Ports Training Centre, both for its own personnel and for that of other port operators.

Finally, pragmatic solutions have been adopted for problems connected with the allocation of functions among

bodies having different legal status, all of which nevertheless co-operate in the operation of the ports: this is illustrated by the daily meeting to assign ships to berths and prepare works, at which the measures taken by the harbour master's office, the shipping agents and ODEP are co-ordinated. It is also illustrated by the role played by ODEP's ships foreman, which makes it possible to centralize responsibility for handling operations, by co-ordinating the on-board stevedore operations with the on-shore operations of ODEP's shore gang.

The efforts ODEP has made since its establishment have led to a genuine improvement in the operation of Moroccan ports, as is shown not only by ODEP's own assessments, but above all by the views of port users and even more by the growth of traffic and the Board's financial results. These have been so good that ODEP is now planning a major \$162 million investment programme for the next five years, during which a further phase of modernization of Morocco's port infrastructure will be carried out.

Ro-Ro Safety Research Programme

Submission by the U.K.

(IMO Document: MSC 58/3/8)

Following the loss of the "Herald of Free Enterprise," a Court of Inquiry was set up to examine the causes of the casualty and make recommendations to ensure that such a tragedy shall not recur.

Amongst the recommendations, the Court urged that detailed investigations should be made, including model tests, with a view to enhancing the stability of ro-ro passenger ferries and additionally to study the implications of providing bulkheads on the vehicle decks of such ferries.

Research was initiated by the U.K. Secretary of State for Transport in response to these recommendations.

The research programme comprised a series of specific studies and investigations, the principal aim of which was to attempt to enhance the survivability and stability standards of ro-ro passenger ferries. In particular, it was intended to identify the standard of stability needed to enable a ro-ro ferry to successfully withstand the effects of flooding when in realistic sea-going conditions.

The most likely cause for the entry of substantial quantities of sea water onto the vehicle deck is that resulting from side damage following collision with another ship or contact with some fixed object. Therefore the stability standards referred to above relate to assumed side damage.

The entire research programme was divided into seven main elements; these may be summarised as follows:

1 An assessment of the residual stability standards for 'existing' U.K. ro-ro passenger ferries

A mathematical exercise was carried out to compare the residual stability standards of existing U.K. registered ro-ro passenger ferries with new standards which were being proposed at the time (1988) by IMO.

A slightly modified version of these proposals was subsequently adopted by IMO and enters into force internationally for all new passenger ships including ro-ro ferries in April 1990.

2 An assessment of the risks involved in a typical cross-Channel operation by a U.K. ro-ro passenger ferry

This study commenced with an analysis, based on casualty records and transport statistics, of the safety of ro-ro ferries as compared to other modes of transport.

This was followed by the identification and evaluation of the hazards involved in ro-ro ferry operations, the corresponding risks, and the probable effects of various measures and devices in reducing those risks. These results lead to assessments of the influence of design standards and regulations in reducing risks, and to some recommendations for change, particularly in the area of operational procedures.

3 An assessment of the collision resistance of the side structure of a ferry

The primary aim of this study was to investigate whether changes in the design of ships' side structures might increase significantly the amount of energy which could be absorbed in a typical collision. This in turn should help to reduce the extent by which the hull may be breached, thereby restricting the rate of flooding which might ensue, and hence increase a ship's ability to survive collisions.

4 The use of internal arrangements and devices to improve safety standards

In this study a detailed examination was made of various arrangements and devices which had been suggested for restricting or rapidly discharging floodwater and improving the ship's stability when in a damaged condition. Many of these suggestions had been made by individuals and organisations who were anxious to assist the Department and improve safety standards.

5 The design of hull form and superstructures for ferries to enhance their survivability characteristics

This exercise was a study to consider how the hull could be designed and shaped and the superstructures constructed and located to improve the survivability characteristics of future ferries.

6 A series of 'damaged' ship model tests

This part of the programme was devoted to the scientific evaluation of the behaviour of two scale model ferries,

of typical current design, when subjected to waves (representative of southern North Sea conditions) in accredited testing tanks.

Each model was assumed to be damaged amidships, both below and above the bulkhead deck, and was tested for various loadings and sea states to establish the zones of probable capsizing. During each test the stability of each model ferry in both the 'intact' and 'damaged' conditions was evaluated systematically.

7 A summary report of all research to date entitled the Overview

An Overview Report of the entire research programme was prepared to give a synopsis of each research project and also the costs and conclusions provided by the individual contractor. Additionally the designated contractor for the Overview was asked to propose and include a ranking procedure which could then be used to evaluate the merits of the various devices/arrangements which had been proposed to enhance the survivability of ro-ro passenger ferries. Some 17 devices/arrangements were considered.

Because of the scope and complexity of the work to be undertaken the Secretary of State decided to appoint a Steering Committee to assist the Marine Directorate in the preparation and execution of the research programme and also in the examination of the results obtained.

The Steering Committee has examined the reports of each project undertaken in the Research Programme and the Overview Report. Its report and the Overview Report will be made available as an information document.

General conclusions and recommendations for new and existing ships are in sections 6, 7 and 8 of the Steering Committee report and are annexed.

It is proposed that the Committee should consider the adoption of a standard of residual stability for existing ro-ro ferries higher than that now required by the Convention. Such a standard should have regard to the U.K. model tests described in the above-referenced reports.

ANNEX

Sections 6, 7 and 8 of the Steering Committee's Report.

6 General Conclusions Arising From the Research Programme

6.1 The results of each of the studies have produced valuable information which may be used by designers and operators for the benefit of the general public. Consequently, the Committee supports the decision of the Department of Transport to sponsor an international symposium, in conjunction with the Royal Institution of Naval Architects and other learned societies, at which details of all the research undertaken will be presented in a series of technical papers.

6.2 Whilst much valuable information has been produced and many significant findings made, those resulting from the model testing (see para. 3.1 Part V) are particularly noteworthy. The results obtained so far appear to indicate that the residual stability standards to be introduced by IMO in April this year—'SOLAS 1990 Residual Stability Standard (SOLAS '90)' should provide an adequate standard of protection against capsize up to sea state 3, ie, in moderate seas having a significant wave height* up to 1.5 m. This is a very important finding, and one which appears to validate SOLAS '90 as a standard that should enable ro-ro ferries and any other conventional design of passenger ship to survive the effects of damage of the prescribed extent in such seas.

6.3 The HERALD Report drew specific attention to the possible use of watertight bulkheads on the vehicle (bulkhead) deck and to other devices. Many bulkhead arrangements and enhancing devices were investigated in the Research Programme. In general the findings were that the provision of bulkheads could lead to an improvement in the survivability standards of most ro-ro ferries; although in

* The height of Waves

Wave height is the vertical distance between the crest and the trough of the wave. As the wave heights in a given sea state are subject to considerable variation it is the recognised practice to refer to their apparent height as being the "significant wave height." The significant wave height is defined as the average of the third highest observed wave heights over a given period. Significant wave height tends to correspond to the value an experienced observer would estimate as the average wave height of a given sea state.

many cases it was found that other devices could prove equally or more effective. It is the view of the Steering Committee however that the primary objective of naval architects and ferry operators should be to design and operate their ferries in a manner which will achieve an adequate standard of residual stability, eg SOLAS '90. In consequence, the Committee considers that it should not attempt to specify the use of any particular devices or arrangements. The research has demonstrated the advantages, as well as the problems, associated with these devices and arrangements. Wing compartments, particularly with flare, sponsors, high stability hull forms, bulkheads on the vehicle (bulkhead) deck, etc., can all contribute to achieving higher safety standards; the choice of which to use can be properly left to the designer and operator.

The model tests indicate that survivability may be significantly improved if the damage is on the lee-side or if the ship is heeled away from the damage. This should be studied further and the results published as operational guidance for Masters whose ships suffer damage and flooding (see also paragraph 9.2(a)).

7 Recommendations in Respect of "New" Ro-Ro Passenger Ferries

7.1 As regards future designs of ro-ro passenger ferries it is recommended that the Department of Transport should present a paper to IMO stating that recent studies suggest;

7.1.1 that model testing appears to confirm that SOLAS '90 will provide protection against capsize in sea state 3 (depending on the level of residual freeboard) and could therefore form the basis of a survivability standard for any conventional design of passenger ship. However, two sets of model tests do not provide sufficient evidence to validate fully SOLAS '90, and IMO should be encouraged to promote additional model tests or theoretical work to provide such validation. In particular, the tests carried out suggest that residual freeboard is an important criterion and one which should be considered further in association with the SOLAS '90 standard.

7.1.2 that a variety of devices and arrangements (in combination or

separately) could be adopted to further improve the survivability characteristics of ro-ro passenger ferries.

7.2 The Committee is concerned to note that a significant proportion of major collisions result in penetration beyond the statutory maximum (B/5). It therefore proposes that IMO should be invited as a matter of urgency to examine casualty data over the last 15 years, together with any such data available from Classification Societies, and then consider whether the B/5 standard should be changed. Additionally, the Committee considers that particular thought needs to be given to the general setting of survivability standards. Such action is necessary because recent investigations have shown that in the case of some current designs of passenger ferry, and some devices proposed for them, the effects of damage can be made considerably worse if the damage received is only slightly in excess of that which had been prescribed. In other words, whilst a ship may be able to survive damage of a prescribed extent, it may not be able to do so if the damage received is only slightly in excess of that prescribed.

7.3 The Committee has also noted that there is a clear and significant difference in the risk to safety for those on ships designed to a 'one compartment' standard of watertight subdivision compared with those on ships designed to a 'two compartment' standard. The Committee was made aware of the paper which the U.K. has recently submitted to IMO seeking to have this topic re-evaluated, and it fully supports the action taken.

8 Recommendations in Respect of 'Existing' Ro-Ro Passenger Ferries

8.1 The Steering Committee fully supports the action which has already been taken in respect of existing U.K. ferries. In particular it has noted that the damage stability standard of these ferries has been raised to a level (the "U.K. 1980 standard") which is well above the current IMO standards, ie 'pre' SOLAS '90. Their standard of survivability is therefore higher than that required for existing foreign ro-ro ferries. Even so the Committee notes that, to the extent that the model tests are fully representative of realistic operating conditions, capsize may still

<p>be a possibility if damage of the prescribed extent is received in the most vulnerable regions of the ship whilst operating in a moderate sea. It therefore takes the view that all existing ferries which operate in and out of U.K. ports should be required to comply with a higher standard of damage stability.</p> <p>8.2 To achieve international application and because foreign ferries are free to operate from U.K. ports the Committee believes that any future changes to the stability standards for existing ferries should be discussed and agreed at IMO with a view to amending the International Convention on Safety of Life at Sea.</p> <p>8.3 The Committee therefore rec-</p>	<p>ommends that the Department presents a further Paper to IMO requesting urgent consideration of the application of a revised standard of damaged stability to all existing ro-ro passenger ships. It is also recommended that such a standard should have regard to the results of the model tests which have just been conducted.</p> <p>8.4 If agreement cannot be obtained at IMO within a reasonable period, the U.K. should consider making an approach to other European Marine Administrations. Should that approach fail then the U.K. should consider applying such a requirement unilaterally, that is to all ro-ro ferries trading in and out of U.K. ports, regardless of flag.</p>	<p>Moreover, the Committee is of the view that it would be ineffective to enforce such a requirement on U.K. vessels only since this would not enhance safety generally because a large proportion (perhaps as much as 40%) of British ferry passengers travel on foreign vessels.</p> <p>8.5 It would be appropriate for the Department to advise IMO (and if necessary the other European Marine Administrations) of the various devices and arrangements which have been considered within the Research Programme. Such devices/arrangements might be used with advantage to improve the damage survivability standards of many existing ferries.</p>
<p style="text-align: center;">Subcommittee on Oversight of the Committee on Ways and Means U.S. House of Representatives</p> <p style="text-align: center;">REPORT on Abuses, Mismanagement in U.S. Customs Service Commercial Operations</p> <p style="text-align: center;">February 8, 1990 Prepared for the use of the Committee on Ways and Means by Its Staff</p> <p>Summary of Findings and Recommendations</p> <p>1. The relationship between the international trade community and the U.S. Customs Service has deteriorated substantially in recent years. The report includes a number of recommendations aimed at improving this relationship. Among them are requirements for notice to the trade community of policy or procedural changes, the establishment of an ombudsman's office, and a requirement for a more active exchange of information between Customs and the trade community.</p> <p>2. The U.S. Customs Service allowed essential commercial services to deteriorate over the past decade, while its drug enforcement role was expanded. The Subcommittee proposes to create, as a remedy, a funding floor for commercial operations. Such a floor would prevent Customs from spending funds appropriated for commercial services for other uses. The Subcommittee also recommends that Customs reallocate</p>	<p>its resources to overcome paper-work backlogs and service gaps discovered by the Subcommittee. Customs has an important and difficult role in narcotics enforcement. However, this cannot be funded at the expense of Customs basic mission, the facilitation of international trade and enforcement of U.S. trade laws. The subcommittee asserts that both functions must be adequately funded.</p> <p>3. Most U.S. Customs Service management decisions are made without supporting data or analysis. The Subcommittee recommends that Customs create management information systems to collect key information for analysis and use by Customs managers and those responsible for Customs oversight. The Subcommittee also proposes that Customs create a new office of quality assurance to perform regular reviews of all Customs field offices and ensure uniform and consistent application of all Customs laws.</p> <p>4. The U.S. Customs Service has violated Federal spending laws. The Subcommittee recommends that the Department of the Treasury remove all those Customs officials who knowingly violated the law and establish new checks and balances to prevent any reoccurrence. The Subcommittee also recommends that Treasury start actively and effectively overseeing Customs spending practices. Treasury virtually ignored reports of violations made by the Customs chief financial officer to Treasury officials.</p> <p>5. The U.S. Customs Service Automated Commercial System has serious flaws. Because the system was hastily</p>	<p>assembled and rushed into service without adequate documentation and testing, the Automated Commercial System is in constant need of corrective reprogramming. In addition, numerous manual processes continue to be required to augment the system. In many cases, manpower and system limitations combine to create service gaps. The Subcommittee recommends that Customs completely review the design of the system to avoid potentially catastrophic situations in the future.</p> <p>6. The U.S. Customs Service accounting controls were neglected for years and are in total disarray. Millions of dollars in revenue collected by Customs has been embezzled by Customs employees and contractors over the past several years using relatively unsophisticated schemes. These embezzlements went undetected by Customs because of a lack of both manual and automated accounting controls. As a result of the Subcommittee's hearing, Customs initiated a number of corrective actions. However, internal Customs memoranda obtained by the Subcommittee indicate that top level Customs officials may have been less than candid with the Subcommittee in describing the magnitude of the problem.</p> <p>7. The U.S. Customs Service Cargo Examination Program is misdirected and inefficient. The Subcommittee makes several recommendations aimed at improving the benefits that could be realized from this \$200 million program, including changing Customs enforcement strategy and reprogramming Customs automated high-risk-</p>

cargo targeting system. The Subcommittee also recommends purging the inaccurate historical, importer-specific data currently maintained by Customs automated systems.

8. The U.S. Customs Service Centralized Examination Station program is poorly managed and vulnerable to fraud. The Subcommittee recommends that Customs establish uniform and equitable procedures for the selection of Centralized Examination Stations and control the costs charged to importers by Central Examination Station operators. In addition, the Subcommittee recommends that Customs regularly evaluate the overall program, as well as the individual operators. To avoid conflicts of interest, Customs should accept only those free facilities from operators which are essential to the performance of Customs mission.

9. The U.S. Customs Service abused its authority to seize commercial merchandise. Following the Subcommittee's investigation of commercial seizures, Customs changed its national policies. Nonetheless, the Subcommittee recommends that Customs initiate routine reviews of field office seizure practices to insure uniform and consistent implementation of the new policies. The Subcommittee also recommends that Customs discontinue its practice of using seizure statistics to measure individual and field office performance.

10. The U.S. Customs Service methods for processing airline passengers are inefficient. The Subcommittee recommends that Customs and the Immigration and Naturalization Service continue their recent moves to join forces and eliminate the need for passengers to stop at two checkpoints, once for each agency when entering the U.S. The Subcommittee also recommends that Customs improve its high-risk passenger targeting techniques to speed processing of low-risk passengers.

11. The U.S. Customs Service has little or no incentive to avoid damaging cargo during examinations. The Subcommittee recommends that Customs develop more efficient and less destructive methods for examining international cargo and, to the extent appropriate, use whatever are the least destructive methods available when performing examinations. The Subcommittee also recommends that leg-

islation be enacted to provide recourse or compensation to importers for merchandise unnecessarily damaged during the course of an examination by Customs.

12. The U.S. Customs Service seized property program loses money and is mismanaged. The Subcommittee makes a number of specific recommendations to Customs to improve the profitability of the seized property program relating to the use of contractor support, auctioning methods, and seizure policies. The Subcommittee recommendations also urge improvements in customs recordkeeping and reporting techniques to enable better oversight.

13. The U.S. Customs Service cannot ensure that it is properly enforcing antidumping and countervailing duty orders issued by the Department of Commerce. The Subcommittee recommends improving Customs data collection and automated tracking methods to make it possible to completely and accurately report duties collected pursuant to each antidumping and countervailing duty order. The Subcommittee also recommends that the Departments of the Treasury and Commerce establish better formal and informal channels for exchange of information regarding enforcement of orders issued by the Department of Commerce.

14. The costs of the U.S. Customs Service cargo examination program are distributed inequitably. The Subcommittee recommends that Customs contract and pay for the operation of its Centralized Examination Stations, the sites where the most costly examinations are performed. It is expected that these costs would be collected from the international trade community at large, rather than falling only on the individual importers examined.

15. The U.S. Customs Service has neglected its rights under customs surety bonds. The Subcommittee recommends that Customs take steps to improve the timeliness and the accuracy of claims notices sent to customs sureties to better facilitate Customs collection of claims under the bonds. The Subcommittee also recommends that Customs study of the bond program to identify any legal or practical impediments to collecting claims under customs bonds.

16. The U.S. Customs Service has

failed to encourage the cooperation of the trade community in its commercial narcotics enforcement program. The Subcommittee recommends that the present law "care and diligence" requirement be amended to establish more realistic and clearly defined smuggling prevention standards for commercial carriers of international passengers and cargo. The Subcommittee also recommends that Customs use one standard to measure smuggling prevention efforts when determining carrier liability for penalties and fines related to narcotics smuggled on board their conveyances.

Latin American Ports Conference in Argentina

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Marine Officers Training In June in Madras

The National Institute of Port Management (NIPM), an institution under the Ministry of Surface Transport, Government of India will be organising and managing the following programmes for seafarers from June 1990 at the NIPM campus at Madras.

1. Pre-sea cadet
2. Ship Master's medicare course
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NIPM campus is situated at about 28 km from Parrys corner on the East Coast Road, occupying an area of 21 acres of land. The total built-in area of the campus is of the order of 1,500,000 sq. ft.

The Institute is managed by a Governing Council with the Secretary, Ministry of Surface Transport as its Chairman and Chairmen of a few ports and representatives from the Indian National Ship Owners Association (INSA), the All India Shippers Council, the Shipping Corporation of India, the Indian Institute of Management, Bangalore and the full-time Director of the Institute as its members.

For further information, please write to.

National Institute of Port Management

East Coast Road, Utthandi, Madras, 600 096, India

Phone: 411135, 411657, 411809, 416132

Telex: 041-21082-NIPM + IN

Armouring Elements for Cheaper Breakwater Cost

Since 1984 prominent Dutch laboratories concerned with hydraulic and civil engineering issues have carried out joint research on breakwater armouring elements. This has resulted in a better design for concrete elements used in the construction of deep-water breakwaters.

Due to this improvement the chance of failure of these concrete elements is now considerably reduced leading to cheaper breakwater maintenance. The new design also allows large concrete elements of more than 15 tonnes to be used, which, in turn, will require limited annual maintenance.

The three laboratories involved are Delft Hydraulics, TNO-IBBC and the Stevin Laboratory of Delft University of Technology. The laboratories received technical and financial support for this research work from Rijkswaterstaat (Ministry of Public Works), three large contracting companies (Hollandsche Beton Groep nv, Royal Volker Stevin nv and Ballast Nedam bv) and two firms of consulting engineers (Frederic R. Harris nv and F.C. de Weger bv). Financial help was also

given by the Ministry of Economic Affairs.

Since 1988, the research has been carried out within a CUR-context. The CUR is the centre for civil engineering research and codes in the Netherlands.

Fracture of concrete elements, such as dolosses and tetrapods, has, in particular cases, caused significant damage in, for example, the harbours of Sines, Portugal; Arzew, Algeria and San Ciprian in Spain. When designing these elements it was assumed that the use of larger armouring elements would give the breakwater greater stability. In practice, however, the concrete strength of the elements has proved to be critical.

Rocking or displacement of these elements can occur due to waves, introducing high impact forces, which subsequently often leads to breakage. Following the above failures in an attempt to avoid damage, the elements were made heavier or constructed in reinforced concrete. This indeed caused less fractures but also involved higher costs.

The research by the laboratories was focused on increasing the impact resistance of the elements. This has been achieved by lowering the impact rigidity of the concrete surface. For this purpose sawtooth profiles have been applied on or in the concrete surface. Alternatively, strips of stud-patterned hardwood or synthetic material can be used. Patent has been applied for.

This research has considerably contributed to a better understanding regarding the movement of the concrete elements caused by waves, as well as the forces occurring under the impact.

This improved perception served as a basis for a simulation model, which can be used to calculate the damages caused by displaced or broken elements. It is now also possible to calculate the effects of any modifications regarding weight increase, reinforcement and surface structure and also to estimate the costs involved. This simulation model is now operational and runs on a powerful PC.

All rights with respect to the new designs and the simulation model are reserved for the above mentioned contractors and consulting engineers.

For further information, please contact Mr. G.J. van Someren, Public Relations HBG, Tel. +31 70 3152119.

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IMDG Labels and Placards Brochure is now available. Sales No. 250 89.11.M, Price £5.00.

IMO Secretariat,
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ISBN 1 85044 253 3: ISSN 0268 327X.

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Port Management Textbook

For more than ten years the Institute of Shipping Economics and Logistics, Bremen, has been organizing and performing port management and shipping management seminars in cooperation with other partners either in Bremen or in developing countries. Based on this experience the institute has published a "Port Management Textbook" already in 1978 and another volume with the main focus on containerization in 1985. Due to the dynamic development in intermodal transport the information contained is now, to a large extent, outdated. For this reason the institute has been asked to deal with the whole subject of port management

(Continued on Page 25)

The Americas

Cruise Passengers: Canadian and U.S. Ports

CRUISE PASSENGERS -- Cruise passenger activity in 1989 continued its decade-long expansion at U.S. ports. Last year's total of 10.2 million revenue passengers exceeded that of 1988 by 14.7 percent and more than doubled the 1980 count. For Canada, 1989 activity dipped slightly, from 412,000 revenue passengers in 1988 to 396,000, but was nevertheless more than twice the number recorded in 1980.

While the trade remained largely concentrated in Florida, it was also vibrant and growing elsewhere, particularly in British Columbia, California, and Hawaii. The year also marked the debut into the cruise arena of the ports of Portland (Marine), Manatee, and Gulfport. Since 1985, St. Petersburg (Florida) has emerged as a significant player as well. Cruises out of Galveston began in December.

Prince Rupert Eelgrass Compensation Program

The Prince Rupert Port Corporation announced details of the eelgrass transplant program. This program, developed in close consultation with the Department of Fisheries and Oceans, complies with the requirement to provide compensation for eelgrass areas lost during construction of the Fairview Terminal expansion.

The DFO "no let loss" policy required that the Port create an area twice the size of the destroyed site as a receptor site and to plant eelgrass covering an area 50% greater than the area that was destroyed.

The donor site was identified as Pillsbury Cove with the receptor site at Philips Point on nearby Digby Island within the Port's harbour limits. The receptor site was constructed by Dillingham Construction Co. as part of the main terminal expansion contract.

The transplanting program is being undertaken by the Port's in-house staff supplemented by aquaculture students from the local North West Community

Revenue Cruise Passengers -- Canadian and U.S. Ports*

	1989	1988	1987	1986	1985
CANADA					
Halifax	17,152	15,837	24,407	15,441	10,645
Montreal	21,493	26,239	36,555	24,509	20,428
Prince Rupert	2,083	9,466	9,118	4,468	20,621
Quebec	22,163	36,003	35,500	18,000	12,000
Vancouver	333,189	324,261	313,881	313,385	262,472
UNITED STATES					
Baltimore	6,293	7,567	4,096	4,906	4,423
Boston	9,200	20,502	21,597	18,836	11,836
Charleston	12,353	7,286	14,096	13,000	8,293
Guam (fy)	8,570	9,959	9,636	7,597	10,184
Gulfport	101,404	—	—	—	—
Hampton Roads	2,819	4,160	2,058	3,303	7,484
Honolulu (fy)	95,065	80,355	78,585	90,282	78,791
Los Angeles (fy)	583,165	443,863	404,275	452,087	408,907
Manatee	27,251	—	—	—	—
Miami (fy)	3,100,055	2,502,411	2,633,041	2,520,571	2,326,685
New Orleans	26,601	19,321	13,585	16,634	10,595
New York	331,762	403,153	398,686	404,000	441,334
Palm Beach (fy)	279,556	239,798	210,135	163,244	1,991
Philadelphia	30,000	34,000	70-75,000	40-50,000	—
Port Everglades	1,953,071	1,699,844	1,079,611	560,588	227,018
Port Canaveral (fy)	912,794	633,739	728,886	586,253	178,613
Portland (ME)	8,000	—	—	—	—
St. Croix (fy)	101,690	160,133	134,755	99,817	35,373
St. Petersburg	393,636	283,842	22,612	29,550	41,079
St. Thomas (fy)	1,013,201	1,089,471	1,041,553	806,159	627,887
San Diego	102,348	181,255	92,322	62,961	169,569
San Francisco	39,610	36,705	54,786	93,275	102,688
San Juan	800,160	766,555	666,393	484,586	428,894
Tampa	205,648	223,506	548,266	477,705	445,278
Wilmington (NC)	2,175	2,060	5,472	3,352	3,600

(fy) = fiscal year

* Includes port calls as well as passenger traffic generated by homeported cruise ships. Includes day cruises as well as cruises of longer duration.

Source: AAPA telephone survey and port statistical records.

College and by casual labour employed locally.

Mr. Bronson Chung, Port Engineer, will be the Project Manager responsible for cost control and verification of compliance with the Agreement reached with DFO.

Mr. David Fisher, the Port's Maintenance Superintendent, will be the Site Superintendent responsible for logistics, labour management and production.

Mr. Ron Kistriz, a Habitat Biologist, is acting as the compensation program consultant responsible for quality control.

The labour force will consist of 20 students and casual workers who will be split into two crews, one for harvesting and the other planting. These two operations will be performed simultaneously.

Crews will be working within a very narrow tidal timeframe. Work will commence on April 23 with completion slated for April 30. The Port Corporation will monitor the receptor site for a period of three years following the transplant.

Port of Halifax: Record Cargo Tonnages

For the fourth straight year the Port of Halifax has achieved record cargo tonnages. Containerized cargo rose to 3.9 million tonnes (456,331 TEUs) in 1989, an increase of 10% over 1988 levels. This follows increases in container handlings of 27% in 1988 and 23% in 1987, such that the Port of Halifax moves more Canadian originating and destined container cargo

than any other port. In fact, container traffic at the Port has doubled over the past five years.

The addition of Compagnie Generale Maritime (CGM), Italia di Navigazione (Italian Line) (joining Evergreen and Costa in their Med-Atlantic service) and Maersk Line's new Mediterranean/Africa service in 1989 brings the total to 14 container lines which have initiated service at the Port of Halifax since 1986.

The Port's close proximity to major shipping lanes, ice free status, deep water and minimal tides combined with a skilled, stable work force and excellent intermodal connections have enabled it to achieve the status of having more sailings to more world ports than any other port in Canada.

Total cargo handled at the Port of Halifax rose to 16.8 million tonnes in 1989, which included 12.4 million tonnes of bulk commodities.

Other important developments at the Port of Halifax in 1989 included:

Opening of the redeveloped Pier "B" in September resulted in the Port's third container handling facility. Halterm Ltd., which celebrated its 20th anniversary in 1989, operates the new facility along with the adjacent Pier "C" Container Terminal. Halterm, which upgraded one of its existing gantry cranes in 1989, has ordered another crane for exchange between Piers "B" and "C," as well as additional terminal handling equipment to support this fourth crane which is scheduled to be operational by the spring of 1991.

Cerescorp Inc., operators of the Fairview Cove Container Terminal have also ordered a new gantry crane which is scheduled for delivery in 1990 along with new transtainers and yard tractors.

These new investments reflect the Port's determination to continue to provide a high level of productivity and fast vessel turnarounds for its customers. A consultant's report examining the feasibility for development of additional container handling facilities is expected soon.

The Port of Halifax continued to develop its status as a load centre for regional cargoes in 1989. Atlantic Searoute Ltd. purchased a new vessel in 1989, *ASL Cygnus*, which operates with its sistership, *ASL Sanderling*, on a twice weekly service to the ports of

St. John's and Corner Brook in Newfoundland.

In an effort to support the development and implementation of electronic data interchange at the Port of Halifax, EDI-PORT Atlantic Inc. as formed in 1989 and is working with a consultant on a study of documentation flows and user requirements with the intention of implementing an EDI pilot project.

(Port of Halifax)

Port of Houston 1989 Tonnage Sets Record

An estimated 126 million tons of cargo moving through the Port of Houston has set a record for a second year. The estimated total is based on projected U.S. Army Corps of Engineers figures.

In 1988 the Port of Houston broke the 1979 record of 117 million tons by handling 125 million tons, according to the U.S. Army Corps of Engineers. The total for 1988 was previously estimated at 118 million tons.

A REBOUND: "Port activity reflects locally transacted business and this total certainly indicates the Houston area economy has rebounded," said Mr. Ned S. Holmes, Chairman of the Port of Houston Authority Commission.

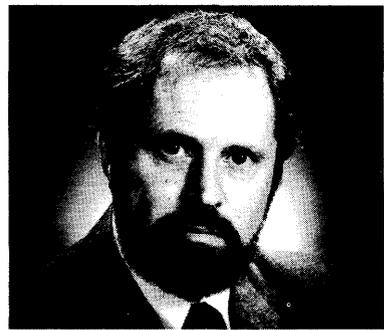
The Port Authority operates the port's public facilities, which account for about 13 percent of the tonnage handled. More than 85 percent of the 126 million tons recorded in 1989 was handled by privately owned terminals along the channel.

In 1988 the Port of Houston led the nation in foreign tonnage and was ranked third in total tonnage. Port activity directly affects 28,000 local jobs and adds \$3 billion to the economy each year.

IMPROVEMENTS NEEDED: "As business at the Port of Houston continues to increase, the need to improve the Houston Ship Channel becomes even more apparent," Mr. Holmes continued.

Last fall, Harris Country voters passed a measure that will fund a project to improve the waterway by deepening it from 40 to 45 feet and widening it from 400 to 530 feet. The project is now in the Federal Office of Management and Budget for review and will then go to Congress for authorization and funding.

(Port of Houston)



CAPT. RANDALL SHERMAN

Mr. David Bellefontaine, President and Chief Executive Officer of the Halifax Port Corporation, is pleased to announce the appointment of **Captain Randall M. Sherman** to the position of Harbour Master effective February 5, 1990.

Captain Sherman, a certified Master Mariner, brings to this position a broad range of marine-related experience, including several years acting in various capacities at sea. Reporting to Captain Claude L. Ball, Senior Vice-President and Chief Operating Officer, Captain Sherman will be responsible for the direction, co-ordination, and control of the operational activities of the Halifax Port Corporation.

The Halifax Port Corporation is a federal Crown Corporation responsible for the administration, management, and control of Halifax Harbour. The Port of Halifax is one of North America's fastest growing container ports.



**Halifax Port Corporation
Société du Port de Halifax**

Brunswick Report: Director 'Ecstatic'

At a recent breakfast meeting co-sponsored by the Brunswick-Golden Isles Chamber of Commerce and the Glynn County Development Authority, Georgia Ports Authority Executive Director George Nichols described the outstanding five-year record of the GPA's four Brunswick terminals. Mr. Nichols said, "I'm not excited by our performance in Brunswick, I'm ecstatic!" A 1.5 million-ton increase over that period in cargo handled at Brunswick, with a 24 percent increase posted during 1989 alone, fueled Mr. Nichols' enthusiasm.

In a speech before approximately 200 Brunswick-area business leaders, Mr. Nichols singled out Mayor's Point Terminal as "the most successful cargo-handling operation in the 45-year history of the Georgia Ports Authority," revealing an \$8 million expansion plan for the facility. Plans call for ex-

panding the existing transit shed to a full 75,000 square feet, plus dock renovation to add berthing space. Twelve forest-products companies are presently exporting through Mayor's Point Terminal, which in 1989 posted an 83 percent increase over 1988 tonnages.

Operations of the GPA's East River and Lanier Docks facilities have rebounded, according to Mr. Nichols, and are now moving large quantities of cargo. Mr. Nichols announced the acquisition of 16 acres of waterfront property adjacent to those terminals, paving the way for further expansion during the next decade.

The multi-product bulk export facility on Colonel's Island is receiving a boost through an aggressive worldwide marketing program, said Mr. Nichols, which hopefully will pay off in regular shipments of bulk cargoes through that terminal.

Mr. Nichols noted that the auto import/export operation on Colonel's Island is feeling the effects of a signif-

icant downturn in the worldwide automobile market, but felt optimistic that more business may be generated for the terminal as importers look to initiate load centering to reduce costs. Enumerating the amenities in place on Colonel's Island which were tailored for the import and export of rolling stock, especially the terminal's direct-rail capability, Mr. Nichols was confident that the GPA's Ro-Ro facility in Brunswick would "wind up in the win column."

Key to Development

Mr. Nichols cited the replacement of the Sidney Lanier Bridge as "the key to the continued development of the Port of Brunswick as a world competitor." He expressed disappointment that the Georgia Department of Transportation had been denied design funds for replacement of the "antiquated, unsafe bridge," noting that in the past 18 years the bridge has been the site of two ship collisions, one

New Publications—

(Continued from Page 22, Col. 3)

in a new frame. For practical reasons the institute cooperates in this matter with the Port & Transport Consulting Bremen GmbH. This consulting company has extensive practical experience in port planning, port operation, technical assistance and general port management, overseas as well as in Europe.

Each volume of the new *Port Management Textbook* focuses on one main subject and may be used as the basis of a two weeks' management seminar. It was possible to find a team of experts with practical experience in container industry and the field of research and administration, who made valuable contributions to the series.

The first volume, edited by Prof. Dr. Rolf W. Stuchtay and published in March 1990, deals mainly with the general aspects of port management. Especially the events in the ports of many underdeveloped countries are insufficiently organized. Consequently the growing of their economies and their international trade is restricted. This book and the following seminars have to show solutions.

General contributions like "The Economics of Land/Sea Logistics" and

"The Port in the Chain of Transport" introduce into the facts. The following essays demonstrate the organizational structure, the role and the functions of seaports, not only in microeconomic but also in macroeconomic view. "Operation Planning" represents the structuring of operations of a fictive port management. Particularly the principals of management and the necessity of a comprehensive planning are shown. Furthermore the aspects and the actual trends of general cargo handling resp. container handling are described. The different cargoes imply special staff, storage facilities and equipment. The characteristics of some special trades like Inter Island Trade, Short Sea Trade and Ro-Ro Traffic for the particular port management are subsequently demonstrated.

Some further important aspects in this context are themes like "Performance Indicators," "Training of Port Staff" as well as "Port Safety and Environment Protection." The book finishes with the contribution "Maintenance of Port Handling Equipment."

It may be said that the objectives of the first volume are to examine and analyse all general aspects and problems of port management and to evaluate future prospects for people in responsible post, who are acting in the ports.

In the context of this first Port Management Textbook a clear distinction has been made between liquid/dry bulk transport and container transport. Based on the practical and theoretical background of the study group the first book will concentrate on container transport only.

All contributions in this publication are complete and will not be repeated in future volumes. The target group of the entire series are participants of the management seminars, public and private port operators, port users, transport research institutes etc. and in general any person who is involved in maritime logistics and transport problems.

The ISL/PTC-Team plan to publish three additional volumes in 1990/91, which focus mainly on the aspects of "Intermodal Transport, Marketing, Port Planning, and Port Logistics." On their completion the series will be preliminary closed. In the long run it is the idea to continue this series by adding additional important sectors out of the field of port management."

The price for the first volume is DM 79 (incl. packing and postage, for air-mail add DM12). The address of order is: Institute of Shipping Economics and Logistics, Universitätsallee, GW 1 Block A, D-2800 Bremen 33.

of which cost the lives of ten people in 1972. With ship calls at Brunswick having nearly quadrupled — from 108 to 395 — over a five-year period, “it presents an ominous statistical projection,” warned Mr. Nichols. The restrictive height and width offered by the bridge, plus the insufficient channel depth which cannot be altered under the present bridge, add up to “a three-dimensional problem” for Brunswick, said Mr. Nichols. The loss of millions of dollars of direct and indirect benefit to the economy of the area should serve as an incentive for Brunswick and Glynn County to call for action, said Mr. Nichols. “The longer we delay, the more inroads in our business will be made by ports with less restrictive access.”

The Bottom Line

With “thousands of jobs, millions of dollars in state and local taxes and billions of dollars in business activity” tied to the fortunes of the Georgia Ports Authority, Mr. Nichols concluded by emphasizing the need for the GPA to remain competitive with other ports receiving financial subsidies from state and local governments.

Although the State of Georgia issues general obligation bonds to fund port development, the GPA is pledged to service the debt, both principal and

interest, from operating revenues, Mr. Nichols said. And while Nichols is proud of the GPA’s ability to generate sufficient operating revenues to make \$100 million in capital investments while repaying the state, he feels that “the time has come for us to rethink our role in the economy of Georgia.”

Mr. Nichols requested the continued support of the Brunswick/Glynn County business community as the GPA campaigns for assistance from the Georgia legislature “to ensure that Georgia will measure up to the challenges of competing in the new global economy of the 1990s and beyond.”

(Georgia AnchorAge)

Commissioner Langslet Joins Hills Committee

Long Beach Harbor Commissioner C. Robert Langslet has been appointed to join a select group of governors lieutenant governors, state representatives and mayors on the Intergovernmental Policy Advisory Committee to the United States Trade Representative, Ambassador Carla Hills.

The committee plays a key role in providing U.S. Government senior officials with trade advice from the state and local government perspective. Commissioner Langslet is one of only

two port representatives from throughout the United States who have been asked by Ambassador Hills to serve on the board.

“It is an honor to represent the Port of Long Beach and the State of California on such a prestigious and influential board,” Commissioner Langslet said of his appointment. “Obviously, as the leading port on the West Coast, the Port of Long Beach is acutely interested in our Federal Administration’s trade policies, and it is a privilege to be given a opportunity to influence those policies on a national level.”

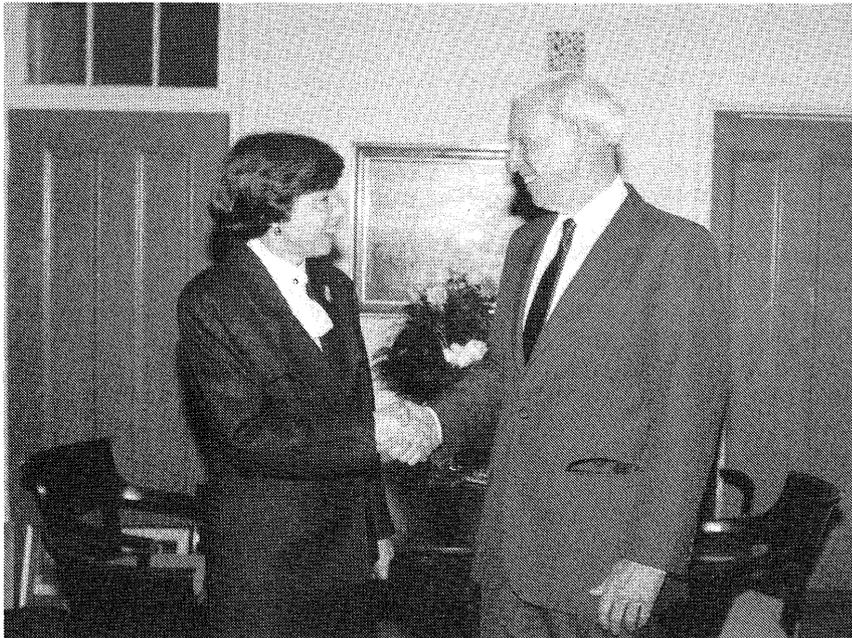
The Intergovernmental Policy Advisory Committee is the key committee within the private and public sector advisory committee system created by Congress in the Trade Act of 1974. It is the only committee within the system which provides advice from the state and local government perspective on trade issues affecting agriculture, investment, services, government procurement and subsidies.

Commissioner Langslet has served on the Long Beach Board of Harbor Commissioners since 1979. He has twice served as president of the board, and will become president again in July. In addition, he serves as a commissioner to the California State World Trade Commission and is on the board of directors of the Economic Development Corporation of Los Angeles County.

Other members of the 35-member Intergovernmental Advisory Committee include California Governor George Deukmejian and New York Mayor William J. Althaus. The only other port official asked to serve on the committee is Mr. Stephen Berger, Executive Director of the Port Authority of New York and New Jersey.

Gov. OKs Plan for Seagirt Operation

Governor William Donald Schaefer approved a plan recommended by the Maryland Port Commission to create Maryland International Terminals (MIT), a non-profit subsidiary of the Maryland Port Administration. The subsidiary corporation, authorized by legislation signed recently by the governor, will have the authority to operate public port facilities in the state and to enter into labor negotiations.



United States Trade Representative Ambassador Carla Hills (left) welcomes Long Beach Harbor Commissioner C. Robert Langslet to the Intergovernmental Policy Advisory Committee.

Governor Schaefer said, "I believe that the plan presented by the commission is the vehicle we need to move the port ahead. The plan allows us to begin the important process of healing the wounds which have so long prevented us from achieving our goal of returning profitability to the port."

The plan was proposed to the governor in a meeting attended by representatives from the Maryland Port Commission. According to the proposal, Maryland International Terminals will contract with a terminal operator to provide equipment and labor for Baltimore's newest container facility, Seagirt Marine Terminal. The terminal operator would oversee operations, however, MIT will have the authority to set rates for Seagirt and to operate the terminal directly.

Maryland Port Commission Chairman Richard Trainor said, "The commission members and port administration staff have carefully examined the options. We are confident that this is the best way to ensure that the Seagirt facility is run as cost-effectively and as efficiently as possible. We are extremely pleased that Governor Schaefer has endorsed this approach."

According to Chairman Trainor, MIT will participate in bargaining sessions between the terminal operator and the International Longshoremen's Association. MIT will be directed by a board comprised of members of the Maryland Port Commission. Under the plan, MIT will appoint a manager with the authority to hire an agent to operate the terminal. The agent will be selected through a bidding procedure.

Mr. Trainor said, "We believe there will be lively competition for the position of agent at the Seagirt facility. We expect to issue the request for proposal for the agent in the immediate future."

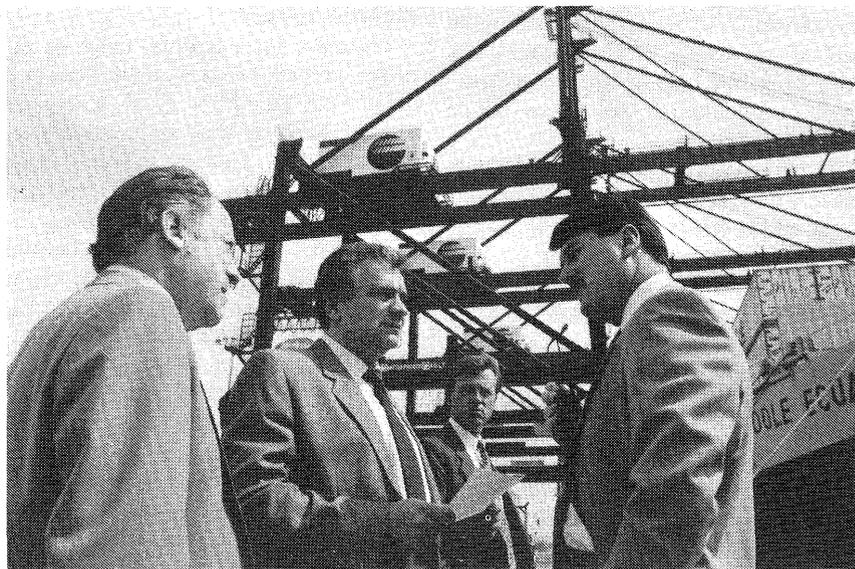
Mr. Trainor also said that the Office of the Attorney General had already been asked to prepare the legal documents necessary to establish the MIT as a non-profit corporation.

The Seagirt Marine Terminal is a 262-acre automated cargo handling center equipped with dual hoist cranes and a computerized gate. The \$250 million terminal is designed to handle more than 150,000 containers a year, increasing the port's container capacity by 50 percent.



Pier J Dredge-and-Fill 70 Percent Complete

The Port of Long Beach's 147-acre addition to Pier J is now 70 percent complete, with most of the massive rock work in place and dry ground appearing where 50 to 60 feet of water existed before. This recent aerial photo of the outer harbor graphically outlines the \$76 million Pier J land expansion, which will be the site for an entirely new container terminal and permit expansion of two others. An additional \$70 million will be invested for surface improvements, with completion expected in early 1993. Wharf construction along the 2,700-foot slip seen in right foreground, to be served by eight container cranes capable of working four large container vessels simultaneously, starts this summer.



WELCOME TO WORLDPORT LA: (left to right) Dr. George Levikov of the Soviet Union and his colleague Dr. Felix Arakelov join John Cushing of WORLDPORT LA's Marketing Division and Marketing Director Al Fierstine during a recent tour of the TRAPAC Terminal at the Port of Los Angeles. The two distinguished Soviet visitors were briefed on engineering and environmental issues as well as general Port operations. The visit was in line with Soviet goals to increase their ability to compete in the world marketplace.

Port Planners Open Windows to the Future

Port planners have encompassing jobs in the Port of New Orleans. Their portfolio includes virtually every activity of the Port. Their goal is to make the most efficient use of the physical, fiscal and human resources of the Port. As they do, they open windows on the Port's future.

While every manager in the Port makes plans to meet goals, the Planning Department has a different mission. The planners' job is to fill in the blanks between a concept and the hard blue lines of an engineering drawing.

The task of port planning has changed dramatically in the last few years. Not only must planners consider the logistics of a marine terminal, they must find a way to integrate the terminal into the community that surrounds it. Truck and rail access are critical issues.

Riverfront Redevelopment

For example, under the leadership of Ms. Alma H. Young, chair of the Board of Commissioners of the Port of New Orleans and professor of Urban and Regional Planning at the University of New Orleans, the Board recently initiated a study to examine the options for redevelopment along 4.7 miles of riverfront from Jackson Avenue to the Industrial Canal. Port planners are playing a key role in that study, analyzing information gained in public hearings.

Some of the wharves in that reach have already been put to non-traditional uses. While the Poydras Street Wharf harbors terminals for international and harbor cruises, it also supports the Riverwalk Festival Shopping Center and the New Orleans Hilton Riverside and Towers Hotel. On the Bienville Street Wharf, the Aquarium of the Americas is rising next to Woldenberg Park, a new band of green along the riverfront from the aquarium to the Toulouse Street Wharf in the French Quarter. When construction on the aquarium is complete, display ships will dock at the wharf.

Port planners are already gathering information about what other kinds of redevelopment ideas may work along the strip. The urban setting of the wharves makes the job more complex. Upriver, the wharves are backed by

an industrial area. Downriver from the Bienville Street Wharf, industry is mixed with residential areas. Planners must consider how each idea for redevelopment will affect the maritime and community needs of the area.

Bulging Portfolio

Yet new facilities and their surroundings are not the only folder in the port planners' bulging portfolio. In 1986, the department was intimately involved in the Port's strategic plan, working closely with the consultants. Besides facilities, the plan examined the economic and marketing aspects of the Port in the light of a deregulated domestic transportation system and made specific recommendations for improvements.

Planning Permitting

Planners can't be omniscient, but it would help ease their work. That is why the present mix of disciplines in the department is so effective. Mr. Charles Apffel is an architect by training. Mr. Harold Wilbert holds a degree in urban studies, and Mr. Brenton T. Morse Jr. is an engineer. During a major project, such as the upriver terminal project in the Port's \$200 million capital improvement program, they bring all their varied expertise to bear.

Planners, for example, must be familiar with all the laws, regulations and rules from all of the local, state and federal agencies that apply to a particular project. They must know which permits are required and what technical information is needed to get them.

A project including an old industrial site near a wetland, for example, might require coordination with the U.S. Army Corps of Engineers, the Louisiana Department of Wildlife and Fisheries, the Louisiana Department of Environmental Quality, the U.S. Environmental Protection Agency, the city of New Orleans and the Orleans Parish Levee Board. Often, neighborhoods and businesses will be affected by Port plans, so they must be informed and consulted.

Railroad Tracking

Planners are involved in selecting outside consultants, too. They decide on the scope of the work, gather information about the job to be done and

monitor the work of the consultant selected.

One such consultation project involves a study of the seven railroads in the Port area. The goals are to capture more cargo for the Port that could be moved by rail and realize the full potential of the Port's six trunk line railroads — without diverting cargo from other inland modes.

The project is being funded by the Port, some of the trunk lines serving the Port, and the New Orleans Public Belt Railroad. During the study, the consultants will analyze the financial, institutional, operational and physical factors affecting rail transportation in the Port. Shippers will benefit because the results of the study will be used to guide changes that will help the railroads give better service.

Planners are also responsible for monitoring other governmental agencies whose actions affect the Port. Mr. Morse, for example, is on the New Orleans Planning Advisory Committee to keep abreast of new projects in the city that may affect the Port.

In addition, Mr. Morse reviews all permit applications required by the Board of Commissioners of the Port of New Orleans. A critical part of that process is to make certain that granting the permit doesn't conflict with other activities in the Port.

In all, the Port Planning Department helps make Port facilities as useful and efficient as they can be. For Port customers, better planning translates into lower overall shipping costs at the Port of New Orleans.

(Port of New Orleans RECORD)

Incentives Boosting Traffic at Bistate Port

Port Authority Chairman Philip D. Kaltenbacher has announced that the container incentive program, which reduces the cost for transporting containers by rail to and from midwest points, has been highly successful in attracting cargo to the New York — New Jersey Port. The incentive program was inaugurated in September 1988 and, as a result of its effectiveness, will be extended at least through 1990.

The program offers incentives of \$25 per import container and \$50 per export container to steamship lines and shippers, reductions designed to offset the

cost of drayage or transport of these containers between local terminals and regional rail ramps. The reductions are applied only to containerized cargo shipped by rail to or from points more than 260 miles from the Port of New York and New Jersey.

Chairman Kaltenbacher reported, "The Port Authority incentive program, part of a cooperative effort with other maritime interests, has been successful in attracting additional midwestern containerized cargo from the steamship lines and shippers who control the routing of rail cargo, and it has increased the use of rail/water intermodal facilities in this port."

He stated, "The cost to the Port Authority from the inception of the incentive program to the end of 1989 will be approximately \$1.3 million. The amount of midwestern containers that moved by rail to and from this port in that short space of time has doubled.

"The program has successfully increased the volume of import/export containers handled from 20,000 containers in 1988 to 40,000 containers moved last year under the program. An additional increase of 10 percent is expected during 1990 with an estimated annual cost of \$1.5 million."

It should also be noted that in July 1988 the New York Shipping Association and the International Longshoremen's Association jointly announced an average reduction of \$90 per container in the tonnage assessment paid by steamship lines on containerized cargo moving more than 260 miles to and from this port. Assessments have been slashed another 17 to 35 percent in 1990.

Meanwhile, Conrail has completed a \$2.1 million capital improvement program at its Portside Yard in Elizabeth, New Jersey. The improved terminal will better serve import/export container rail traffic via the bistate port.

"As a result of these cooperative programs," stated Chairman Kaltenbacher, "the New York - New Jersey Port has established itself firmly with the international shipping community as a competitive intermodal marketer for cargo not only to and from this port but through the port and beyond."

The Port Authority anticipates an estimated 44,000 containers will be handled under the program during 1990, more than double the 1988 volume. *(Via New York - New Jersey)*

Keidanren Group Visits New York - New Jersey

Keidanren (the Japan Federation of Economic Organizations) recently dispatched a Study Mission on Transportation to the Port of New York and New Jersey. Operating as a private, non-profit economic organization, Keidanren has 916 corporate and 119 association members in Japan, who are collectively pressing for the relaxation or elimination of that government's regulations as a means of lessening problems with Japan's trading partners. Keidanren has also been working to change the Japanese regulatory framework to bring it more into line with international norms. The eleven-member Transportation Study Mission, which was headed by Keidanren's Managing Director Kozo Uchida, has been gathering facts on the effects of deregulation in America and elsewhere and how it has impacted on costs, services, productivity and other business activities.

Port Department Director Lillian Liburdi of The Port Authority of New York and New Jersey moderated a panel discussion on deregulation in the transportation industry with panel members Hugh B. O'Neill, Assistant Executive Director of the Port Authority; Hugh H. Welsh, New Jersey Solicitor of the Port Authority's Law Department; Robert F. McKeon, Region Director of the U.S. Maritime Administration (MARAD); and Sam Cunningham, Executive Director of the New Jersey Motor Truck Association.

The group was provided with an overview of deregulation's myriad effects on airport, seaport and ground transportation facilities at the New York - New Jersey Port. Infrastructural improvements, modernization and expansion of facilities were also discussed, along with how funding for such improvements has been made.

The group solicited information on the growth of high-frequency, low-volume transportation services and just-in-time distribution services as another important trend in the industry. Comparisons were also made in labor and distribution costs in Japan versus the United States.

A helicopter tour of the New York - New Jersey Port facilities was also

provided, followed by a reception at Windows on the World, where Mr. Keiichi Ashida, acting on behalf of Mr. Uchida and the study mission, was presented with a commemorative plaque by Port Authority Executive Director Stephen Berger. Also seen is Port Department Director Lillian Liburdi and Robert McKeon of MARAD.

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

NY&NJ Projects: More Fund Needed

Testifying in the nation's capital, officials of the Port Authority, the State of New Jersey and the City of New York jointly urged Congress to provide a minimum of \$55.1 million for the design, construction and maintenance of essential navigation projects in the New York - New Jersey Port for Fiscal Year 1991.

The request to increase the available funds for these projects by \$2.75 million above the \$52.39 million already allocated in the Federal Budget for this work was made by Ms. Lillian Liburdi, Port Department Director for the Port Authority; Mr. George R. Zoffinger, Commissioner of Commerce, Energy and Economic Development of the State of New Jersey; and Ms. Patricia Zedalis, Deputy Commissioner of Ports and Trade of the City of New York; acting as spokespersons for the New York - New Jersey Port.

In a unified effort, their testimony before the House and Senate Appropriations Subcommittee on Energy and Water Development was endorsed by 28 other civic, business, labor, trade and maritime organizations of the bistate region.

Included in their recommendations were two construction, three study and 28 operation and maintenance projects to be carried out under the civil works program of the U.S. Army Corps of Engineers.

They noted that their recommendations will help the Port maintain its position as the premier gateway on the East Coast for the movement of goods in and out of the United States and provide substantial transportation benefits to the nation.

"The magnitude of these programs comes at a most opportune time," said

Ms. Liburdi. "Our foreign oceanborne general cargo trade rebounded significantly in 1989 from the depressed level of the previous year. Volume rose 9.8 percent, or almost 1.2 million long tons, for a total trade of 13,250,000 long tons. This is the third highest level of general cargo in the history of our Port."

General Cargo Volume Via NY&NJ Recovers

Following two consecutive years of losses, the volume of oceanborne general cargo moving through the Port of New York — New Jersey recovered significantly last year, matching tonnage levels of the early 1980s, reported Port Authority Chairman Philip D. Kaltenbacher in an analysis of foreign trade for 1989.

"Foreign oceanborne general cargo volume rose 9.8 percent to 13,261,608 long tons, an increase of almost 1.2 million long tons. In our history, this volume of general cargo was surpassed only in 1985 and 1986. The value of this cargo was \$44.3 billion, up 1.8 percent from the \$43.5 billion handled in 1988," said Chairman Kaltenbacher.

"The New York — New Jersey Port's tonnage gain was led by general cargo exports, which surged 31.1 percent to 3,965,229 long tons. In contrast, general cargo imports edged up 2.6 percent to 9,296,379 long tons reflecting the slowdown in growth of the national economy. For 1989, this Port's import/export ratio was 70.1 percent to 29.9 percent compared to the 75-25 percent ratio of the previous year," he stated.

Competitively, the New York — New Jersey Port's 9.8 percent gain in general cargo tonnage outperformed both the North Atlantic ports' 6.8 percent increase and the 9.2 percent increase recorded by all U.S. ports. As a result, the New York — New Jersey Port's share of North Atlantic trade rose to 39.3 percent in 1989 from 38.3 percent for the previous year, while its United States share increased to 8.20 percent from 8.16 percent in 1988.

Chairman Kaltenbacher further noted the New York — New Jersey Port handled a total of 55.4 million long tons of oceanborne foreign trade, general cargo and bulk, down 3.1 percent from 57.2 million long tons the previous year, due primarily to an 8.4



Georgetown: Highest One-month Tonnage

The Port of Georgetown, in Georgetown, South Carolina, reported the highest one-month tonnage total in its history.

The Port, which supports bulk and breakbulk operations, handled over 118 thousand tons of cargo in February 1990. Each of the Port's major commodity types — iron ore, salt, cement, woodpulp, and general breakbulk cargo — were represented in the record-setting total.

"In February we handled more vessels than any other month since the Port was revitalized," said Mr. D. Claude Baker, port director at Georgetown. "We're looking for this solid activity to continue in the coming months."

In 1986, the South Carolina State Ports Authority began a \$4 million program to upgrade Georgetown's facilities. The program has created 25 acres of paved storage, added covered storage and transit sheds, and constructed a 700-foot bulkhead-style berth. International Salt Company and Santee Cement Company both operate bulk distribution facilities at the Port. The Port of Georgetown is served by major highway and rail connections.

"We're looking good," said Mr. David Schronce, manager of trade development. "Salt, cement, gypsum, and mobile cranes are scheduled to come through Georgetown. We're also assembling a shipment of shredded scrap steel for export."

percent drop in imported petroleum products. The value of all cargo, general and bulk, reached \$50.2 billion, an increase of 2.0 percent over the \$49.2 billion recorded in 1988.

New Ad Campaign at North Carolina Ports

The North Carolina Ports kicked off the new decade with a new and very different advertising campaign. A simple, straightforward theme, "We've Got News For You," emphasizes the advantages, benefits and recent expansion of the Ports.

Continuing the "news" analogy, each

ad is designated a "Ports Page" and numbered to indicate that it is part of a series. The first ad in the campaign, headlined "Read The Ports Page First," was produced in four versions showing actual publication covers.

A fresh approach to media strategy was also part of the new plan. In addition to regular schedules in leading national and international trade publications, the Ports message is being carried in in-state business publications as well as in eight N.C. newspapers. Ads spotlighting specific commodities including steel, tobacco and forest products are also running in publications aimed at these specific industries.

(North Carolina Cargo)

Cranes Assembled at Port of Wilmington

Assembly of the first 50-L ton container crane began as soon as it was offloaded on January 17, 1990. Under the supervision of Liebherr Container Cranes, Ltd., who manufactured both cranes, men and equipment from Atlantic Industrial Constructors of Richmond, Virginia positioned each piece of crane on Berth 9 as it came off the ship. Careful placement of the crane parts was planned to speed up the assembly.

In all, 15 pieces of container crane made the two-week transatlantic voyage from Killarney, Ireland. Each piece weighted over 30 tons. The 120-foot outreach boom weighed 110 tons and was the first piece off the ship.

The N.C. State Ports Authority ordered both cranes in October 1988. They cost \$8 million, and are part of the \$36 million, two-year expansion project for the Port of Wilmington. Included in that project as well was the construction of the new 900-foot berth, Berth 9. Paving the 12 acres of hardstand for Berth 9 should begin in March. Ports Authority Executive Director James J. Scott, Jr. looks for the entire project to be completed in May. The new cranes will bring the total number of container cranes at the Port of Wilmington to five.

(North Carolina Cargo)

Redwood City Tonnage Highest in 8 Years

The Port of Redwood City reported that tonnage for the fiscal year ended June 30, 1989 was the highest in eight years, reflecting a continuing upswing.

Commission Chairman Jack Castle said that import/export tonnage passing through the Port was up 81 percent to 437,000 metric tons for the 1988-89 fiscal year; the previous year tonnage increased 71 percent.

The tonnage is the highest since 539,000 metric tons in 1980-81.

The fiscal year featured significant tonnage increases in cement (92,545 tons, up 298 percent), lumber (114,765 tons, up 26 percent), and oil products (63,319 tons, up 43 percent). Export petroleum was 37,692 metric tons, compared with no shipments for the

previous fiscal year. Scrap metal export was 117,842 metric tons, up 43 percent.

Mr. Castle said that the Port received 36 cargo vessels, up 13 percent. Non-cargo vessels also were up, from 72 to 76.

Total dockage days were 529, up 15 percent from the previous period's 459.

Port Executive Director Floyd Shelton credits the continued upswing to improved relations and economic environment at the Port.

"Service is the key element in the port's marketing strategy and must come first," Mr. Shelton said, noting that over the last year, providing quality services and better communications with existing tenants and prospective clients has led to economic growth for the port.

For instance, Mr. Shelton noted that the Port worked with LMC Metals to improve their inventory of scrap metal by providing additional space; the company will shut shown for a few months in order to expand, an action that will double its capacity.

Mr. Shelton also noted that Redwood City Services is now selling processed oil worldwide.

A combination of a strong market and cooperative tenant/landlord arrangements boosted business for LoneStar and Kaiser Cement and Pope & Talbot's lumber importing, Mr. Shelton said.

"We're optimistic about tonnage increases, however, we must be cautious about the future — percentage increases of this magnitude should not be anticipated each year," Mr. Shelton said.

(Currents)

Port Makes Contribution To Redwood City

The Port of Redwood City, unique among ports in the nation, recently made a \$100,000 contribution to Redwood City.

"While most ports in the nation receive subsidies from their local governments, the Port of Redwood City is self-supporting and self-sustaining," Port Chairman Jack Castle said. "We receive no tax dollars. This is in contrast to many ports in California and elsewhere which do get subsidies.

"For instance, in the state of Washington, ports get 45 cents per \$1,000 from property tax, which re-

presents 6 percent of the total budgets in ports such as Vancouver. The Port of New Orleans requested \$100 million in tax dollars. The Port of Astoria in Oregon, a port similar in size to our, gets \$200,000 from local taxes."

Seattle, Singapore Agree on EDI Link

The Port of Seattle reached an agreement recently with the Port of Singapore to establish an electronic data interchange (EDI) link that will enhance the exchange of shipping information between the two ports. Trade between Seattle and Singapore has been increasing rapidly in the last two years.

"The EDI link with the Port of Singapore is the Port of Seattle's first step in the development of a teleport," said Mr. Zeger van Asch van Wijck, executive director of the Port of Seattle. "The establishment of this important link-up with Singapore will help enhance the Port of Seattle's international communications exchange," he added.

Months ago, the Port of Seattle began to study the development of a teleport, which would serve the entire region in facilitating the flow of information on an international basis.

The Seattle-Singapore EDI link will initially enable the two ports to exchange information on ship arrivals and departures and container loading. As the system is further developed, additional information exchange capabilities will be negotiated by both ports.

The agreement is outlined in a memorandum of understanding that was negotiated between Goon Kok Loon, the Port of Singapore's deputy executive director, and van Asch van Wijck, who traveled to Singapore recently to meet with port officials.

2 Firms to Design Pier 69 of Seattle

The Port of Seattle announced its selection of the architectural/interiors firms of Hewitt/Isley of Seattle and Gensler and Associates of San Francisco to provide schematic design services for the renovation of Pier 69. The Port Commission is considering moving Port offices to Pier 69, pending the schematic design and companion cost estimate to determine the scope and

cost of the necessary renovations.

The finalist was selected from a field of five highly qualified teams that were narrowed down from an original base of 15 responding to the Request For Proposal. The unanimous decision was made by a five-person Selection Committee, chaired by Development Manager Karen Waltz.

The Selection Committee was looking for a dynamic team that could capture the needs and character of the Port in the plans for a new headquarters, should the Commission decide to move ahead with the project. "The finalists exhibited a unified vision of the project and a unique approach to working with the Port," said Development Director Dan Dingfield. "The project represents a particular challenge in terms of designing for a client that is both a public agency and also competes in the national and international trade arena," he added.

Work on the project will begin May 1, 1990, with the scope of work expected to be complete by July, 1990. In February, the Commission authorized \$420,000 to cover consultant services and staff costs for this phase of the work.

Seattle Waterfront Project Recommended

Background

Port of Seattle officials decided in 1985 to chart the redevelopment of Pier 66, taking the first step in planning for what would evolve into the Central Waterfront Project we are considering today. In 1986, the Port bought five acres across from its Piers 64, 65, and 66. That purchase gave the public ownership of a contiguous waterfront parcel totalling almost 17 acres.

Planning, including extensive public

involvement, is now coming to a close for this area of derelict cargo sheds and decaying piers. The Port staff last December published a Draft Environmental Impact Statement that contained four development alternatives. Since then, the staff has received the recommendation of the Port's Development Panel and has heard extensive written and oral comment, including testimony at a special Port Commission meeting February 28.

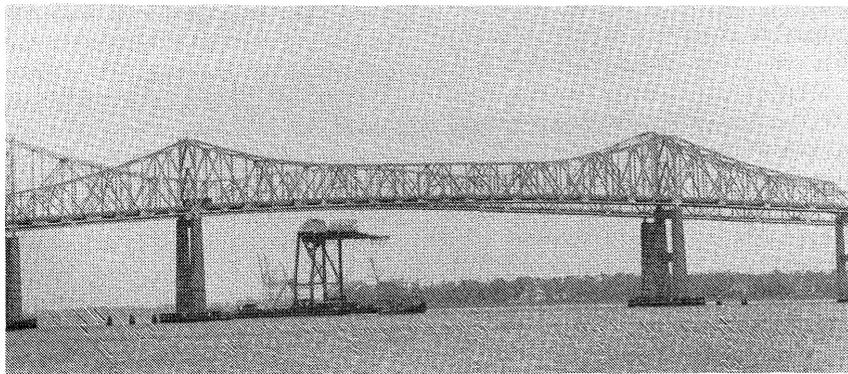
Recommendation

The staff recommendation is designed to transform this run-down area into a "World Trade Campus" of public spaces, civic character and high-image architecture perched on the Pacific Rim. A World Trade Center and an International Conference Center would be two fixtures in a complex that also would have a first-class hotel, public education facilities, small boat moorage, and berth space for fishing trawlers and cruise ships. Here, in summary, is how that would be achieved.

Pier 66: We propose building the World Trade Center and International Conference Center here, with ground floor retail and restaurant uses. To enhance maritime uses, we recommend building a multi-use transit shed/cruise ship services building on the pier while reserving space for future construction of cruise ship passenger facilities. We also propose a new building that would house a maritime museum, and we recommend leaving open spaces throughout the pier, including a large space incorporating a pavilion-like enclosure at the south end of the pier.

To accomplish this plan for Pier 66, we would demolish the existing buildings and pier structure, rebuild the bulkhead, and construct a new pier and 50-foot-wide concrete working apron, doubling the size of the existing apron. The aim is to have a central waterfront facility for fishing boats and visiting international ships, while leaving open the option of cruise ship terminal development.

Short-Stay Moorage Area: The Pier 66 apron would be extended about 640 feet to the south and equipped as a breakwater. A breakwater also would be built along the perimeter of Piers 62 and 63 to enclose transient moorage facilities. Moorage floats would be built and equipped in cooperation with the



A container crane from the Port of Charleston's North Charleston Terminal passes under the Cooper River Bridges in Charleston, S.C. Container cranes at the Port's Wando Terminal are visible in the background.

Container Crane Transferred at Charleston

The Port of Charleston has successfully transferred a container crane from its North Charleston Terminal to its Columbus Street Terminal in Charleston.

When Hurricane Hugo struck in September 1989, it left behind a disabled container crane at Columbus Street Terminal. Container operations resumed within four days, however, using the two undamaged cranes.

The replacement crane is an IHI model from the Port's North Charleston Terminal. Construction crews from Williams Enterprises, Inc., of Falls Church, Virginia, removed the crane's boom and apex, then loaded the pieces and remaining structure on to a barge. On March 9, the crane was moved along the Cooper River to Columbus Street and placed in position. The contractor utilized a 700-ton capacity barge crane to perform the lifts.

The crane, which stands at 177 feet, stood at 145 feet after the removal of the apex. The reduced height and low tide allowed a ten-foot clearance under the Cooper River Bridges. The crane weighs 580 tons and has a replacement value of \$4.5 million.

A new, third-generation crane has been placed on order for use at North Charleston Terminal. The crane is expected to be operational later this year. Currently, the Port of Charleston has an inventory of fourteen container cranes.

City of Seattle and the Washington Department of Natural Resources.

Uplands: The Port would pursue private development of a hotel on the north side of Lenora Street and of a residential apartment project on the south side of Lenora. Parking would be built below both, and a pedestrian/bicycle pathway would be built along the western edge of the site. A hill climb incorporating an elevator and public viewing features would link the Pike Place Market with the waterfront.

Alaskan Way: We would widen the west sidewalk to 20 feet and landscape both sides of the street with special pavers, street furniture, planting and lighting.

Economic Impact

We forecast that construction of revenue-generating portions of the project will cost \$61.2 million, and public features will cost \$11.3 million for a total of \$72.5 million. Over the 50-year projected life of the project, we estimate that it will accumulate a deficit of \$3.2 million in 1990 dollars.

The Port staff initially aimed to have the Central Waterfront project break even, not including the cost of rebuilding the Pier 66 underdock. This goal, however, proved elusive when balanced with our recommendations.

In particular, we believed the residential development should be apartments, rather than condominiums, because condominiums would require the sale of land that we believe should remain a public asset. That subtracted about \$3.4 million from revenue. We have taken the position that public access and recreation features should be incorporated.

We believe that our economic model strikes a balance in approach, sets realistic and defensible targets, and still represents a project with net positive cash flows to our King Country constituents when other jurisdictions' tax revenues from the project are considered. We also believe the project will create a broad range of permanent new jobs. We believe the project will be a benefit to the Port's core business activities.

The staff estimates that about 1,400 construction jobs and nearly 750 permanent jobs will be created by the project. Tax receipts generated over

Africa/Europe

THE PORT OF ANTWERP IN 1989

Shipping and Goods Traffic

In 1989, 16,817 ships called at the port of Antwerp. This represents a 2.5% rise over 1988, when 16,403 ships were recorded. The corresponding total gross tonnage, however, revealed a slight decline from 135,339,541 to 134,683,796 GRT.

The overall maritime goods traffic came to 95,400,469 tonnes. This is the second best result ever achieved and is only 1.5 million tonnes below the

50 years will be about \$94.5 million collected by the City of Seattle, METRO, King County and the Convention Center.

Not included in these estimates are the projected economic benefits of an International Conference Center. When it matures (50 conferences a year and 300 people at each conference) such a facility could generate an additional 500 off-site jobs in the community and an additional \$1.9 million a year in tax revenues for local government.

The Staff recommendation would facilitate international trade, travel and communication. It also would encourage regional economic development and would enhance a valuable waterfront asset.

Our recommendation expands waterfront facilities for marine commerce. We are recommending bigger and stronger docks and 100 percent more apron, all of it with structural capabilities for the largest vessels and the heaviest loads. These facilities would be capable of supporting the large-vessel fishing fleet, cruise ships, visiting government vessels, large load barges, and practically any type of itinerant vessel, large or small.

The recommendation meets these specific Port Commission policies: furthering water-dependent and water-related uses of Pier 66; maximizing public access; seeking commercial development of upland properties; emphasizing 24-hour-a-day activity; and providing public short-stay moorage on central waterfront.

1988 record year.

59,926,562 tonnes (-1.57%) were discharged and 38,473,907 tonnes (-1.54%) were loaded.

The overall traffic can be broken down into 30,022,096 tonnes of dry bulk (+0.58%), 23,214,770 tonnes of liquid bulk (-4.26%) and 42,163,603 tonnes of general cargo (-1.51%).

Container traffic came to 15,073,731 tonnes (+3.01%). Ro/Ro-traffic leaped by 15.46% (3,472,975 tonnes against 3,008,055 tonnes).

General cargo showed a rise in non-ferrous metals (+13.75%), begged fertilizers (+27.28%), wood (+12.27%), wood pulp and paper (+25.70%) and fruit (+6.05%). There was a decline in iron and steel (-7.71%), cereals (-33.17%) and cattle feed (-43.72%).

Turning to bulk goods, 1989 saw a 3.68% increase in crude oil, a 19.90% rise in coal and a rise of 36.73% in cattle feed. Against these, falls must be placed in ores (-9.64%), grains (-26.47%) and fertilizers (-2.14%).

Port Computerization

APICS, the computer system operated by the city of Antwerp for shipping traffic control in the port, officially started operations on the 3rd of April 1989. The system's central computers stand in the control tower of the Zandvliet-Berendrecht lock complex. They are connected to the various services responsible for shipping planning and follow-up in the Port, and inland shipping movements are also incorporated into the system. The head office of the Harbourmaster's Service, the towage service, the dock and lockmasters, the control station in the Stransbourg Dock, and the Port's Financial Service are all connected up to the system. There is also a computer link with the Information Service of the Pilotage Service (LIS).

Private enterprise connected to the system includes the Brabo Dock Pilots' Association, and the Unie van Redding en Sleepdienst (River tugs). It is anticipated that the Kreekrak Locks, the Scheldt Radar chain and the Shipping & Signaling Services will be connected to the system as well.

SEAGHA, the data communications system for private enterprise in the port, grew steadily in 1989.

The two key elements of SEAGHA

are SEAGHA BRIDGE and SEAGHA CLEARING. SEAGHA BRIDGE is an interface, which is installed at the user, and which converts the information to be exchanged into a shared language called EDIFACT. Messages are then sent over an ordinary telephone line to SEAGHA CLEARING, the clearing house which all participating firms are connected to. The electronic messages are then received by the various destinees, using their own SEAGHA BRIDGE.

By the end of 1989, SEAGHA had arrived at an advanced test phase. The first bilateral exchange of test data via SEAGHA CLEARING took place in mid-October. Since then SEAGHA CLEARING has been regularly used by the pilot companies for test purposes. In early December SEAGHA BRIDGE had been installed at 14 of the 40 pilot firms, including 6 shipping agents, 3 container terminals, and 5 forwarders. A start was also made with the installation of the SADBEL package, which gives access to the central customs computer in Brussels. It is anticipated that the SEAGHA system will be ready for start-up by the end of the first quarter of 1990.

Global Trends in Logistics Management

The following trends in logistics management are of key importance to the development of the distribution function:

1. The relative share of production costs compared to distribution and research costs in industrial processes is falling.
2. The range of any one sort of consumer goods is growing as purchasers insist on greater individual variety.
3. The number of shipments with different final destinations is growing because the weight and size of goods are declining.
4. Products change much more rapidly thus amplifying the trend towards smaller inventories.
5. Inventory financing continues to become increasingly expensive.

The above has led to the development and the need for so-called "Just in Time" or JIT system of delivery.

(Hinterland)

Antwerp: SEAGHA Keeps on Growing

SEAGHA is the Dutch acronym of the "System for electronically adapted data interchange in the port of Antwerp" and is a cooperative association of various private firms in Antwerp's port. Incorporated in 1986, the system offers members, who must also be shareholders in the cooperative, the ability to exchange information about all their transport operations electronically and in doing so cut down on the enormous mountains of paper they currently have to cope with.

SEAGHA offers users both hardware and software for the system and is specially designed to make the various common systems accessible to one another. The two key ideas in the concept are SEAGHA-BRIDGE and SEAGHA-CLEARING.

SEAGHA-BRIDGE is an interface installed in the user's offices which converts the information to be exchanged into a common language, EDIFACT. The messages are then sent to SEAGHA-CLEARING by ordinary

telephone line. This is the clearing centre which all the participants are connected to. The electronic messages are then received by the respective addressees on their own SEAGHA-BRIDGE installation.

SEAGHA is currently in the advanced testing phase. The first data interchange took place in mid-October 1989. The potential market for SEAGHA stands at about four hundred firms, but for practical reasons only 40 of these were chosen for the pilot phase.

In early December 1989 SEAGHA-BRIDGES were installed at 14 of these 40 firms. They are all large companies whose participation will without a doubt tend to speed up the growth of SEAGHA. The participants include 6 shipping agents: ACSA 92, AMT, Deckers & Wirtz, Fena, Grisar & Velge, and Maersk Line; 3 container terminals: Antwerp Combined Terminals, Hessenatie-Gylsen, and Noord Natie; and 5 forwarders: Multiforwarding, Omya, Solvay, Somef and Transaf.

(Hinterland)

Antwerp Cultural Capital Of Europe for 1993

Antwerp has been selected as Cultural Capital of Europe for 1993. The Cultural Capital scheme is an initiative of Europe's Ministers of Culture. The first city to be so selected was Athens, which was cultural capital in 1985, succeeded by Florence in 1986. Amsterdam was so honoured in 1987, Berlin in 1988, and Paris in 1989. This year it is Glasgow's turn, while in 1991 it will be Dublin, followed by Madrid in 1992.

The cultural capital must according to the EC's definition be "the expression of a culture with shared elements in its historical awakening and modern development and which possesses a wealth born of this variety." The idea of course is to draw the people of the various member states closer together.

That Antwerp has been selected can be explained by the fact that the city was not only one of the leading centers of 16th Century Europe but that even today it continues to be one of the main centres of the European transport in-

dustry and as such continues to enjoy a widespread reputation on the world's shipping routes. 1993 is significant for Antwerp for other reasons as well, because with the creation of the single European market it will become the foremost gateway to Europe, the more so in view of the proximity of Brussels, the administrative capital of Europe.

Antwerp, nowadays Europe's second largest port and centre of the world's diamond trade, is, however, also universally associated with the flowering of baroque art. The year 1993 indeed coincides with the 400th anniversary of the birth of Jacob Jordaens, giving the city an excellent reason to organize an unprecedented exhibition around the work of the artist, one of the most famous painters of the baroque period.

This exhibition will, however, be but a single facet of the sparkling jewels in a programme of events of European interest which will be organized in 1993 in Antwerp. 1993 will be the year in which Antwerp extends a warm welcome to all for a European cultural rendezvous on the banks of the river Scheldt.

(Hinterland)

Port of Bordeaux, Le Verdon in Profile

From Bordeaux to Le Verdon

Nature has offered Bordeaux the largest estuary in Europe. It is normal that man should try to exploit to the maximum, the geographical advantages it has to offer.

So it was that, after having been encircled within the heart of the town, in the famous Port of the Moon, for centuries, the Port of Bordeaux, at the beginning of the 20th century, started to expand down river along the banks of the 100 km long channel separating the town from the ocean. Progressively, as industry settled in the region, the port built, developed and modernized facilities as Bassens, Ambes, Blaye and Pauillac. The final step "down to the seas" was taken in 1976 with the opening of the container terminal at Le Verdon. Today, the Port of Bordeaux resembles a true "port complex" with facilities dedicated to different trades according to their geographical location and nautical potential.

A Company at the Service of Companies

The Port of Bordeaux is a public corporation; it has the status of a person in civil law and financial autonomy. Its task, within the framework of the established general policy is to ensure the administration of the different port sites located along the Garonne and the Gironde (150 kms in length, with a surface area covering 1,500 km²).

At the service of the shippers from its region, whether importers or exporters, the Port of Bordeaux places at their disposal, the facilities required by specific commodities, such as oil, of course, but above all, agricultural products, general cargo and industrial supplies.

The most significant aspect of the Port of Bordeaux — the one which best serves the regional economy — is its role in the transport of general cargo.

Whether import or export cargo, the conditions under which these goods transit through the Port continue to improve thanks to the constant modernization of its equipment.

The services provided by the Port of Bordeaux are instrumental in en-

sureing the commercial success of the region's companies and in this way, favour the development of Greater South West France.

A Port Community

The Port of Bordeaux generates numerous activities and encompasses specialists in the different branches of port related business, who together compose what is known as the Port Community.

In addition to the staff of the Port Authority itself, other professional bodies and services are involved: sea and river pilotage, stevedores, dock workers, shipowners, brokers, ships agents, forwarders as well as the Customs and Police service, for example.

The Port Authority's operational policies are closely coordinated with those of the Local and Regional Public Services, with whom the port liaises permanently, in order to expand regional economic activity. In this way, the setting up of the International Freight Centre at Bruges, (on the outskirts of Bordeaux), by the Bordeaux Chamber of Commerce and Industry, provided an intermodal transport centre, for exporters and importers in South West France, which is directly linked to the Verdon Container Terminal.

As far as traffic flows are concerned, the Port Authority's efforts are backed up by those of the Maritime Federation, a body which gathers together the different port user syndicates.

Together they strive to improve its services and make the port more competitive. The future of a vast community depends on it, since more than 30,000 jobs are directly or indirectly involved.

Links to All Continents

Regular line services represent a commercial port's greatest advantage. Bordeaux-Le Verdon has some thirty such services linking it to 150 ports scattered across all the continents of the earth and caters for 80% of the regular line services calling in on the French Atlantic seaboard. They are a major attraction to the shipper since he can ship or receive goods in smaller quantities, without having to seek out complicated routes through far distant ports.

By using Bordeaux, shippers can

reduce their transport costs very considerably, both on the overland leg, to or from the port, as well as on the maritime stretch. Bordeaux is, in fact, the closest French Port to West Africa and to the Americas.

It is the last port of call in Europe for vessels outbound for Dakar, (5 day voyage), Fort de France, (7 day voyage) or Los Angeles, (11 day voyage), for example.

A Container Port

Unique on the French Atlantic seaboard, the Verdon Terminal was conceived and designed to cater for containerships and the largest ro-ro vessels in the world fleet. Access is direct with no restrictions from the tide or locks. Le Verdon is also one of the rare ports of the world to operate 24 hours a day, every day of the year.

In order to handle two third generation, (300 m long), containerships at the same time, the terminal was recently extended: its berthing front is now 600 m while the storage areas now cover 10 hectares (and are provided with 100 sockets from temperature controlled containers).

A third gantry crane was also added. Like the others, it can handle up to 30 boxes per hour, i.e. a container every 2 minutes.

An Industrial Port

Located along the largest estuary in Europe, (825 km²), the Port of Bordeaux Authority has developed industrial zones at each of its ports sites. It therefore offers a complete range of sites for plant location, suited to all types of industry. In total nearly 6,000 hectares are available on the Alfred Daney warehousing zone, or the Bassens, Ambes, Blaye, Pauillac and Le Verdon industrial zones.

The companies currently located on these sites generate some 5,000 jobs. They involve very varied industries including agro-foods, fertilizer manufacturing, timber processing, boiler making and petrochemicals.

A Free Zone Estuary

The most important regular line service port on the French Atlantic seaboard, Bordeaux provides the competent manpower, for which it is famous, to handle all types of general cargo. It has recently added yet a

further attraction: bonded warehouses.

The new Customs regime, which applies to the whole of the estuary, strengthens the Port's role as an international transit centre and facilitates industrial or commercial plant location. Bonded warehouses enable storage and simple handling to be carried out, before customs duties and taxes are paid.

They are offered, (for a maximum of 5 years), to companies who wish, with the minimum of formalities, to store or distribute goods, waiting to come onto the national market, or to be redispached to Europe or elsewhere.

Know-how

The Bordeaux Port Community has gained a world-wide reputation for its competence. However, what is often forgotten or unknown, is that the improvement and maintenance of the Port of Bordeaux's access channel — the largest in Europe — has enabled the Authority's engineers to acquire expert knowledge which they have been able to sell abroad.

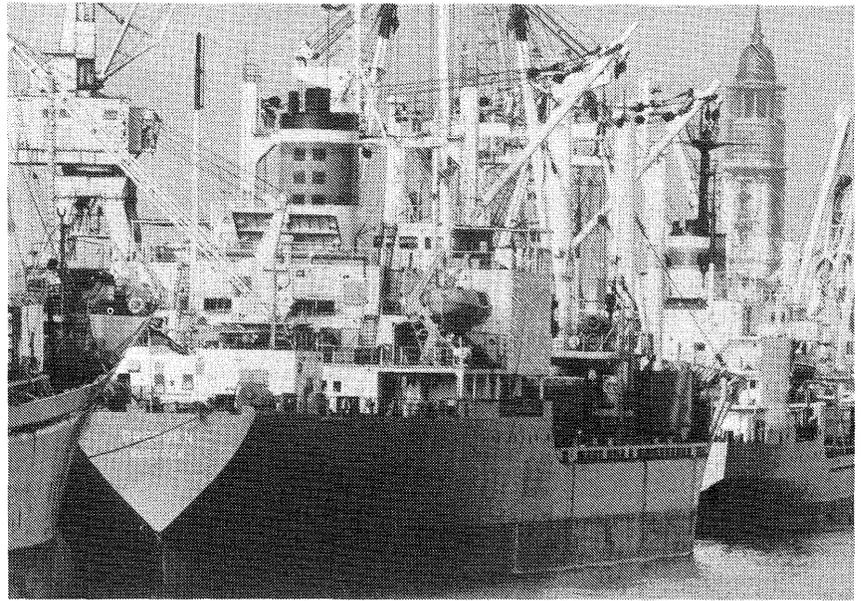
This new domain of civil engineering consultancy covers a very varied range of activities: automated collection and processing of sounding data, optimal dredging productivity, vocational training in hydrography and in port design and construction.

The Port of Bordeaux's curriculum vitae has been enlarged. It now contains numerous references from countries abroad.

Port of Hamburg: Further Improvement in Competitive Position

Recent developments in the Comecon countries have triggered off an intensive discussion on the effects the socio-economic changes in these countries will have on Hamburg — and thus on the volume of cargo handled by the Port. The radical changes in Eastern Europe have dramatically altered the somewhat isolated geo-political and economic position Hamburg had occupied on the fringe of Western Europe since 1945. Now the city is once again the hub of Central Europe.

When discussing Hamburg's future role, it is crucial to remember that these Comecon countries have always been very important for Hamburg. By the



The Port of Hamburg

late 1940s, ties had been established to the states of Eastern and South-Eastern Europe — a move that proved successful, thanks to the so-called "Elbe Policy," as far as the GDR and USSR were concerned.

Unfortunately, there are no definite figures available yet for last year so we have to fall back on the 1988 statistics. For East Germany's foreign trade account the Port of Hamburg handled 1.42 million tonnes of general and bagged cargoes and 1.17 million tonnes of bulk cargoes — a total of no less than 2.6 million tonnes. In the same year Hamburg handled 634,000 tonnes of bulk cargo and over 550,000 tonnes of general and bagged cargoes for Czechoslovakia's account. Hungary transported 163,000 tonnes of general and bagged cargoes and slightly more than 100,000 tonnes of bulk cargoes via Germany's largest seaport.

The democratization, liberalization and replacement of socialist planned economies by competitively-oriented market economies will almost certainly have a positive impact on production and consequently the Eastern Block's foreign-trade volume.

However, the chairman of the Port of Hamburg — Marketing and Public Relations board, Mr. Helmut F.H. Hansen, does not expect any immediate increase in the total Eastern European tonnage passing through the Port of Hamburg's facilities. In his opinion, this is primarily due to the current economic problems facing the countries of East-

ern Europe. Furthermore, there have, as yet, been no changes in transport policies so that in the near future we cannot expect any major quantitative growth in transit traffic with Comecon countries — with the exception of East Germany.

The forecast is, however, for growth of East German overseas trade via Hamburg. For example when the Rostock-based 'Deutsche Seereederei' decides to apply strictly commercial principles and diverts its container traffic away from its "national" port in the Baltic to Hamburg as the more favourably located transit centre. Past experience provides conclusive evidence of the experience of such a move. Scandinavian shipping companies have concentrated, in the course of increasing containerization, on just a few ports of call. As Hansen points out, such commercially-oriented thinking would be of great significance for the Port of Hamburg.

Of some 25 million tonnes of cargoes handled by East German ports annually, some 20 millions are accounted for by Rostock alone. The total volume of general and bagged cargo handled amounts to 8 million tonnes a year. Sooner or later a decision will have to be made about a transit port. Then Hamburg will have an excellent chance to take a large slice of this cake.

Mr. Hansen also expects a positive impact on container traffic. The degree of general-cargo containerization in Rostock is only around 20% whereas

Hamburg is approaching the 70% mark.

Whether or not there will be any shift in the shipping of bulk cargoes (ores, grain, coal and liquid cargoes) will depend on an increase in the cargo-carrying capacity of the River Elbe. Particularly in the case of bulk cargoes, the use of high-capacity inland waterways is generally cheaper than transporting them by road and, to some extent, even by rail.

However, East Germany's Baltic Sea ports will not decline into insignificance. They will attract more and more of the traffic between Scandinavian or Finnish ports and Continental Europe, thus significantly strengthening their position in ferry and ro-ro traffic.

New Container Crane For Port of Cork

On 4 April, 1990 the Port of Cork signed a contract for the provision of a new container crane at the Tivoli Container Terminal. The contract, following a competitive international tender process, was awarded to Liebherr Container Cranes Limited. The crane will be built at the company's works in Killarney.

Costing £2.8 million, the crane is due to be delivered in June 1991. It will be funded by means of a 50% grant from the European Regional Development Fund with the balance coming from the Commissioners' own resources.

While the 40-tonne crane will be used primarily for the port's European traffic, it has been designed to service deep sea container vessels and will be capable of handling up to 36 containers per hour. It will be equipped with telescopic spreaders with the ability to handle containers up to 50 ft. in length. The new crane will supplement the port's existing Liebherr container crane and will enable the Tivoli Terminal to handle two container vessels simultaneously.

In recent years the Port of Cork has experienced dramatic growth in container traffic to mainland Europe. Container traffic has now reached 33,000 TEUs which represents a doubling of units over the past four years. The Port's share of national lift-on lift-off traffic to mainland Europe has



Pictured at the contract signing area:

Front Row (left to right): Mr. P. J. Keenan, General Manager, Cork Harbour Commissioners; Mr. D. Daly, Chairman, Cork Harbour Commissioners; Mr. R. Geiler, Sales Director, Liebherr Container Cranes Ltd.; Mr. A. Power, Chief Structural Engineer, Liebherr Container Cranes Ltd.

Back Row (left to right): Mr. B. O'Sullivan, Harbour Engineer, Cork Harbour Commissioners; Mr. A. Feehely, Secretary, Cork Harbour Commissioners; Mr. C. Doyle, Vice-Chairman, Cork Harbour Commissioners; Mr. S. Geary, Marketing Manager, Cork Harbour Commissioners; Mr. D. Healy, Senior Engineer (Development), Cork Harbour Commissioners.

increased from 6% in 1983 to an estimated 16% in 1989. Cork's market share is expected to grow still further in the nineties particularly in the post-1992 period.

At the present time shippers have a choice of six sailings per week provided by four different container lines namely Bugsier, B & I, Holland Ireland Line and Seawheel to Rotterdam, Antwerp, Hamburg and Le Havre. In addition, there are regular sailings to Mediterranean ports. With the commissioning of the second crane the Port of Cork is confident that further lines will be attracted to the port.

Liebherr is the largest container crane manufacturer in Europe and employs 320 people in Killarney. The company enjoys a healthy order book at present and current projects include cranes for Wilmington (North Carolina), Hamburg, Rotterdam, Halifax (Canada), Dublin and Tees and Hartlepool. The Cork crane represents for Liebherr "Order No. 7" for this particular high performance crane model.

Port of Cork 1989: Major Traffic Growth

The Port of Cork experienced major traffic growth in 1989 when combined imports and exports totalled 5.7 million tonnes, an increase of 400,000 tonnes or 7.1% over the 1988 figures. This was the largest increase experienced by any Irish port in 1989. Imports totalled 3.66 million tonnes, an increase of 350,000 tonnes or 10.4% while exports at a little over 2 million tonnes improved by 30,000 tonnes or 1.5%. Significantly non-oil traffic reached a record level for the fifth successive year and showed an increase of 140,000 tonnes or 5% over 1988.

Two particularly important aspects of the traffic handled were the growth in container traffic and animal feed-stuffs. Daily container services are operated to mainland European ports and traffic handled on these services grew by 10% to 33,000 TEUs. The expansion of the port's container traffic

in recent years has led to a decision to invest in a new container crane and an order will be placed in a matter of weeks. The increased container traffic taken together with Brittany Ferries' and Irish Ferries' decision to increase car ferry capacity to Roscoff and Le Havre respectively in 1990 highlight the importance of the Port of Cork in a European context.

Imports of animal feedstuffs/cereals grew by 44,000 tonnes or 7.9% to 600,000 tonnes and this was largely attributable to the huge success of the Ringaskiddy Deepwater Berth. This is the largest public facility in Ireland and can accommodate fully laden vessels of 60,000 DWT. The berth is being fitted with 2 x 12.5T grab cranes at present and both will be operational by mid-March. The two major feed importers in Ireland, R. & H. Hall PLC and Unigrain International have made substantial investments in storage facilities at Ringaskiddy. As a result of the increased demand for berthage at Ringaskiddy a decision has been taken to extend the Deepwater Berth by 120m. To this end site investigations have been completed and a contract will be awarded during the year. Work will be completed by end 1991.

The resumption of both the Cork-Swansea car ferry service and offshore exploration off the south coast together with increased confidence in the port following the successful completion of the second phase of the Docks Rationalisation Scheme last year, should ensure another successful year for the Port of Cork in 1990.

Haven Amsterdam: IJ-Oever Development

The Amsterdam city council has given approval to the ambitious 'IJ-Oever' waterfront reconstruction plan. Designed to once again open the city's waterfront, the three billion guilder project calls for 'impressive' new complexes along the old port known as the IJ containing 'mixed' housing for 4,000 families, 400,000 square metres of office space, shopping galleries and vast user-friendly public areas.

The IJ-Oever project will be a public-private partnership involving the municipality of Amsterdam (which will

provide the land, the transport infrastructure and, most important, the zoning codes for the project) as well as several private sector project developers, led by NMB Postbank and the civil servants' pension fund ABP.

The city council has approved the broad outlines of the project which were developed by the city's planning department in close cooperation with the developers. The next step is approval of the zoning and provisions for the infrastructure, all expected by the summer of 1991.

Trend

Waterfront development projects have been completed in Baltimore, Boston and New York and are underway in London where the vast Docklands project serves as a model for the IJ-Oever in that it is a public private partnership involving offices, housing, shops and recreation.

In recent years, Amsterdam has favoured this sort of partnership in its many redevelopment schemes. Typically, the municipality provides the plans, the infrastructure, the zoning and the inspiration, while private project developers carry on.

Amsterdam — indeed all of Holland — leads the world in town planning projects. As with other projects in the Dutch Capital, the IJ-Oever plan contains a mixture of public and luxury sector private housing. The first will overlook the Museumhaven, Amsterdam's original waterfront, which contains many 17th Century architectural marvels.

The second residential section is now a railway marshaling yard, facing the Westerdijk. Other residential areas will follow along the Western waterfront and in the former timber port, known as the Houthaven.

Hotels

The first part of the project to be completed will be a 200 room, two-star hotel combined with an office complex adjoining the Central Railway Station, operated by Wagon-Lits Cook. The hotel/office structure has already been given the green light by the city council.

Zoning plans must be settled before the main parts of the IJ-Oever project can start, but several other hotels are in the works. One will be in the Indonesia House complex which will

adjoin Passenger Terminal Amsterdam, another international hotel will be located nearby. A leading American hotel group is planning large tower building in the same neighbourhood.

Multinationals

Amsterdam has been successful in attracting multinational companies, many of which make the city their European headquarters. Some have settled near the World Trade Center, more in Amsterdam Zuidoost, others near the airport. But as space fills up, the IJ-Oever offers practically the only prestige space left in the city for European headquarters operations. This is as it is meant to be: the key to the waterfront project is quality. The developers plan a prestige area, with dramatic 21st Century architecture to at least equal aesthetically that of the 17th Century city centre.

A major shopping mall is projected

Cruise Business Set to Increase at Southampton

P&O Cruises has announced the return of *Sea Princess* to Southampton next year to operate a UK-based cruise programme alongside *Canberra*.

Commencing June 1991 *Sea Princess* will operate 11 European cruises from Southampton, Britain's leading deep-sea passenger port.

Southampton's Port Manager, Mr. Andrew Kent said:

"We strongly believe that Southampton offers a level of service, facilities and communications unmatched elsewhere in the UK and the return of P&O Cruise *Sea Princess* provides further evidence that Southampton is the country's number one cruise port.

"Southampton's strategic central south-coast location, deep-water facilities and fine transport links provide port users with a very attractive package."

Around 60 liner calls are made annually at Southampton and continued investment in the highest standard of facilities ensures the port maintains its long association with the deep-sea passenger business through the increasingly popular cruise holiday market. Southampton is, for example, the home-base for Cunard's famous *QE2* and P&O Cruises equally renowned *Canberra*.

for the Central Station, with shops, cafes and restaurants sprinkled throughout. The ground floor level of the entire plan is given over to user-friendly public areas, with a spectacular 'balcony' behind the railway station overlooking the IJ.

High-rise (up to 100 metres) buildings are planned to accentuate the key points of the development, with low-rise structures in between. There are to be two yacht basins, several town squares and many public attractions including a science museum and look-out towers.

Lively

The entire project is meant to be lively. It is designed to re-present the waterfront in a mixed-use development. A promenade along the waterfront is a key feature, with roads and fast tram connections out of sight.

The waterfront has excellent public transport facilities. The Central Railway Station is the hub of the present train, tram, metro and bus network. There is a frequent, fast and 24-hour a day train connection to Amsterdam Airport Schiphol. New roads are planned to connect with the ringroad, and parking garages are set for the area.

Stevedoring Firm Begins Southampton Operations

Southampton Cargo Handling PLC (SCH), a new independent stevedoring business, will commence cargo handling services at the port of Southampton on 28th April 1990.

The new company, a workers co-operative, signals the start of a new era at Southampton following ABP's decision to withdraw from the provision of stevedoring services at the port.

SCH's Managing Director, Mr. Peter Doble, commented:

"SCH will employ former ABP dock workers experienced in cargo handling and with a significant financial stake in the new venture. The men will be working for themselves for the first time. I am confident that there will be a new, dedicated, attitude to customer demands and commitment to the success of the port."

Southampton's Port Manager, Mr. Andrew Kent, added:

"ABP's objective following the abolition of the National Dock Labour

Scheme last July is to ensure that an efficient and consistently reliable standard of service is provided to our customers. ABP is satisfied that SCH will provide this high level of service.

"ABP will continue to promote the port of Southampton in the market place whilst independent stevedoring companies will be able to concentrate on the specific operational needs of customers. Commitment on both sides will be of benefit to customers and the port."

River Humber Radar System Inaugurated

The River Humber's new radar surveillance system was formally inaugurated by Mr. Stuart Bradley, Managing Director of Associated British Ports.

Associated British Ports provides port services at Hull, Grimsby, Immingham and Goole, and is the conservancy and navigation authority for the Humber.

The radar system is located at the Vessel Traffic Services Centre, Queen Elizabeth Dock, Hull and gives surveillance coverage over the lower Humber, from Hull to seawards of the Spurn Peninsular at the mouth of the estuary.

The River Humber is a rapidly expanding UK trade route with some 37,000 vessel movements per annum carrying 55 million tonnes of cargo.

Commenting on the new system, Mr. Bradley said:

"The new radar facility will serve to augment existing communication and information services and considerably improve the regulation and monitoring of traffic movements in the estuary. The radar system has been designed specifically to meet the increasing demands of shipowners on this very busy commercial waterway."

The system was installed at a cost of £0.5 million by Electro Magnetic Systems Limited of Yeovil, Somerset.

Vessel Traffic Services (Call sign - VTS Humber) is controlled by the Harbour Master, Humber and is manned 24 hours a day, 7 days a week. The Centre gives a continuous service to all river users monitoring vessel movements and providing a wide range of navigational, weather and tidal information.

ADB Loan to India For 2nd Ports Project

The Asian Development Bank approved a \$129 million loan and has agreed to provide two technical assistance grants totalling \$1 million to India for the Second Ports Project. The grants will be financed by the Japan Special Fund.

The loan is drawn from the Bank's ordinary capital resources. It is repayable over 25 years, including a grace period of five years, at an interest rate to be determined in accordance with the Bank's pool-based variable lending rate system.

The main objectives of the Project are to improve the efficiency and productivity of the selected port and ship repair facilities and to develop additional capacity to cater to the expected growth in the economy.

Accordingly, the Project provides for modernization of port and repair facilities at Bombay, which is the premier port of the country; and for the construction of deepwater port facilities at Kakinada, which is one of the largest intermediate ports located on the east coast in the State of Andhra Pradesh.

The Project consists of four parts: Part A - modernization of the Bombay Port Trust's (BPT) port facilities including improvement of container-handling facilities; replacement of Pir Pau Oil Pier; replacement of outer lock-gate for Indira Dock and ancillary works; replacement of a fire-fighting vessel; and provision of a computer-based management information system; Part B - modernization of the BPT ship repair facilities; Part C - strengthening of the Ministry of Surface Transport's (MOST) project implementation monitoring activities; and Part D - Development of Kakinada Port.

In addition, the Bank will carry out two advisory technical assistance grants in the amounts of \$600,000 for a study to help BPT improve its operational and financial performance and to establish a computer-based management information system; and \$400,000 for a study on the development of ship

repair facilities.

The Project will support industrial development of the hinterlands served by project ports. It will result in a number of direct benefits which comprise cost savings of vessel turnaround time; cargo handling; additional ship sailing time relating to inland transport. Improved container-handling efficiency at Bombay Port will result in lower service time costs and savings in ship waiting time costs.

Queensland Port System Under Review

The entire structure of the Queensland port system and its operational standards are under review.

The probe, initiated by the State Government, will include the role of all state port authorities.

Announcing the inquiry, the Premier (Hon. Wayne Goss, M.L.A.) said:

"The recent Inter-State Commission's investigation of the waterfront industry clearly identified the need for reform.

"We accept the major thrusts of the I.S.C.'s recommendations.

"The port system is the life blood of our capacity to generate vital overseas export income.

"What we are trying to achieve is a port system which will maximise our foreign earning capacity and generate income development throughout the regional areas.

"To do this, Queensland needs a port system which is appropriately structured and efficiently operated to meet the needs of importers, exporters, ship owners and industry in general."

Mr. Goss said that in light of the gathering nation-wide support for waterfront reform, the state review was appropriate.

Feed-back he had received suggested that there was widespread support for such a review.

Extensive consultation would take place with local authorities, employee, industry and user groups to ensure all had a voice in contributing to any recommendations which might flow from the review.

Savings arising from the implementation of findings would be passed on to port user through increased operating efficiencies and improved work practices, he added.

The review will be carried out by a top-level Government committee, comprising senior departmental officers. *(Brisbane Portrait)*

Beating the Paper War In Australia's Ports

Tradegate, and its electronic data exchange network, is up and running in Australia, providing an electronic communications service linking import, export and transport organisations.

Its official launch in Sydney late last year, under the hand of the Federal Minister for Transport and Communications (Hon. R. Willis, M.H.R.), attracted predictions that the system will save Australian industry millions of dollars every year.

Implementation of the concept means that all trading transactions, currently carried out on paper, now will be completed electronically.

Tradegate Australia Ltd. is a non-profit consortium of public and private industry. The technology is supplied by the Paxus Corporation.

The Federal Government views Tradegate as a key element in its waterfront reform ambitions.

Australian Customs Service is prominently involved in Tradegate, as are all port authorities through a national body, (the Association of Australian Port and Marine Authorities), as well as a number of other major organisations.

According to Tradegate's Chief Executive (Mr. Andrew Robertson):

"Thus, supporters of Tradegate will be able to obtain cargo clearances, and pay duty, much more simply and far quicker than by the old paper-based method of transaction."

General Manager of Paxus (Mr. D. Glavonjic) said:

"We're not talking about a mere EDI service, although EDI is the core of Tradegate.

"Also available will be a complete range of value-added services such as electronic funds transfer, cargo booking and tracking, and customs functions.

"The greater the range of services, the greater is the potential for savings in time and money for Australian industry."

On February 5, EDI was the subject of an industry update presentation, held at the headquarters of the Port of

Brisbane Authority, and chaired by the P.B.A.'s Mr. Ken Hoggett. Two senior port authorities' officers, Mr. Andrew Ferguson (Melbourne) and Mr. Tim McGrath (Fremantle) were the principal speakers. They looked at the evolution of the system, its likely progress, and the benefits possible to the users.

(Brisbane Portrait)

Fremantle Hopes for Container Traffic Boost

The Port of Fremantle's international marketing programme to increase its share of Australia's container trade was boosted in March when 150 influential South-East Asian shippers, freight forwarders/consolidators and cargo owners attended its landbridging seminar in Singapore.

The seminar was designed to show how Fremantle and the national rail system could be used to move cargo to and from eastern Australia more efficiently and effectively than using east coastal ports.

Port of Singapore Authority Deputy Executive Director Goon Kok Loon opened the seminar, which Authority General Manager Trevor Poustie, Marketing Director Miles Larsen and Senior Projects Manager Murray Rann attended.

"Over the next two or three years, we expect to gain an additional 4 or 5 percent of the national container traffic," Mr. Larsen said.

"The 123,500 containers we now handle is 8 to 9 percent of Australia's total and we aim to increase our share to about 14 percent.

"Some of the traffic which we hope to gain is that which is actually destined for Western Australia but is landed in eastern Australia and then railed to Perth.

"The Singapore Seminar, which was supported by Westrail and Australian National Rail, showed us that there were many South-East Asian transport interests who were disenchanted by shipping delays and cargo congestion in eastern Australia.

"We were able to show them an alternative means of servicing their Australian cargo needs and their response indicated that there was a potential market of significant size which Fremantle could tap."

Mr. Larsen said that a significant

part of the seminar was the signing of a Memorandum of Closer Co-operation between the Fremantle Port Authority and the Port of Singapore Authority.

He said that this would produce a closer working relationship between Fremantle and one of the world's busiest and most influential ports.

It would also assist in the development of joint strategies and projects to capitalise on the potential for increased cargo traffic between Singapore and Fremantle.

"Most importantly, the Memorandum will result in promotion of the Singapore-Fremantle shipping link and the Australian transcontinental land-bridge for cargo movement through Fremantle to and from the eastern seaboard," Mr. Larsen said.

"Better and more frequent shipping services from Fremantle to the Singapore hub will benefit Western Australian and Australian exporters because it will improve their access to world trade."

Sands to Help Promote Fremantle's Trade

Beginning in early April, mineral sands products will be exported through the Port of Fremantle from the Cooljarloo mine, 170 km north of Perth.

According to Minproc Holding's Executive Projects Manager Rod Unwin, the mine and dry mill portion of the Cooljarloo Mineral Sands Project began production in January this year.

The Cooljarloo mine located in Catby and the dry mill located in Muchea are the first of a three-stage investment by joint ventures Minproc Chemical Company and the United States-based Kerr-McGee Corporation.

A 120,000-tonne-a-year synthetic rutile plant will begin production at Muchea by September this year and the titanium dioxide pigment plant, which uses Kerr-McGee's technology, is being constructed at Kwinana and is scheduled for completion in early 1991.

When all plants become fully operational, 352,000 tonnes of mineral sands will be exported in bulk while 54,000 tonnes of titanium dioxide pigment will be bagged and the majority shipped overseas in containers.

The 352,000 tonnes of mineral sands comprises 35,000 tonnes of rutile,

60,000 tonnes of zircon, 9,000 tonnes of leucoxene, 180,000 tonnes of ilmenite and 68,000 tonnes of synthetic rutile.

Except for leucoxene, which will be bagged and sent in containers from the Fremantle Container Terminal, the mineral sands will be exported in bulk from the AIS jetty.

In addition, 20,000 tonnes of petroleum coke will be imported in bulk and will be used in the pigment manufacturing process.

It is estimated that the project will add \$233 million a year to Australia's export income.

The project is creating employment for over 400 people, maintaining these for the life of the project, which is

estimated to be at least 20 years.

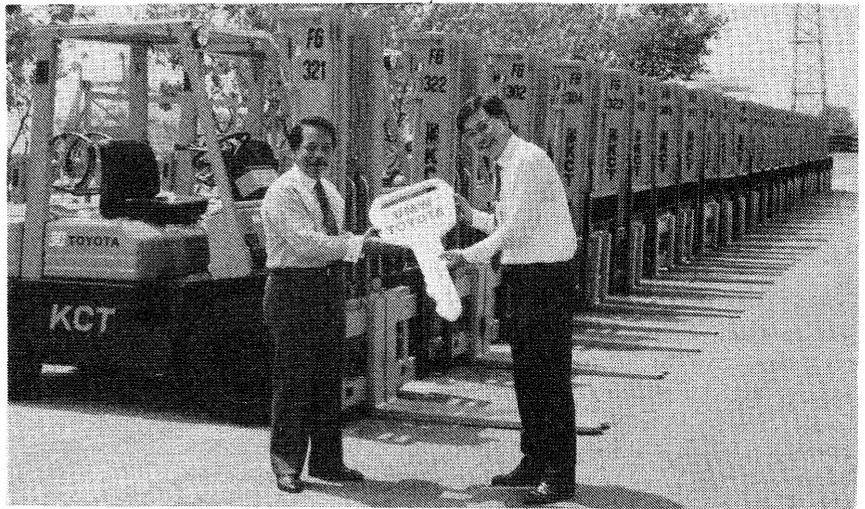
Mr. Unwin said the \$400 million Cooljarloo Development is the first in the world to process mineral sands through synthetic rutile to titanium dioxide pigment as a fully integrated project.

The secondary processing increases the value of mined ilmenite by six times as synthetic rutile and by over 30 times as pigment.

The pigment is produced as white powder, which is used world-wide in the production of toothpaste, paint, paper and plastics.

South-East Asia will import about 60 percent of Kwinana's total output.

(Port of Fremantle)



New Forklifts at Kelang Upgrade Service Quality

Kelang Container Terminal (KCT) recently purchased 23 units of brand new forklifts costing \$1.3 m. The acquisition of these forklifts signifies KCT's commitment to continually upgrade the quality of service to the terminal users.

The new forklifts were commissioned on 3 April, 1990. In a brief ceremony held at the Engineering Department, UMW General Sales Manager, Mr. Chua Ah Chai handed over the keys to the vehicles to KCT Chief Executive En. Abdul Samad Mohamed.

The new machines are expected to further boost cargo handling operations at the Container Freight Station (CFS). The volume of cargo moving through the CFS has increased by 38.5% from 42,252 TEUs in 1986 to 58,536 TEUs

in 1989. This figure is expected to breach the 65,000-TEU mark in 1990.

The 3-ton capacity machine houses an advanced engine which allows easy maintenance. The machine incorporates features that improve maneuverability and driver's all round visibility and is designed towards operator's comfort.

Based on the Techno-Comfort design the machine reduces operator's fatigue caused by engine vibration. The new design isolates the engine from the frame via cushions of rubber.

The machine is versatile as it is equipped with free masts which will facilitate stuffing and unstuffing of containers as well as stacking of goods at the sheds. Its maximum lift of 4.3 metres enables the storage of goods in the racks at the sheds.

As the machines are driven by LPG fuel, exhaust fumes are non-existent ensuring a pollution-free working en-

vironment.

The new acquisition is expected to enhance the productivity levels at the CFS as KCT gears itself to meet the expected increase in cargoes through the terminal.

Driving Down the Prices! — Ports of Auckland

Ports of Auckland has continued with its objectives of reducing prices, and during 1989, made four downward adjustments to prices in both the container terminal and the conventional port.

Reductions occurred twice as a result of land tax adjustments, which were achieved by the company in negotiations with Valuation New Zealand.

Further reductions were achieved from July 1 when all prices were frozen at May 1988 levels, and a reduction of 2 percent was made for pilotage and goods wharfage.

Additional reductions in overall tariffs were achieved in the container terminal from December 1, with a re-organisation of prices associated with container handling, separating the crane and straddle charges, but more importantly, introducing a major reduction in LCL unpacking charges, down more than 30 percent per container.

This reduction has been introduced as a result of successful negotiations with the unions as far as manpower numbers are concerned, and also to attract additional business to the Monash St container base. The base throughput during 1988 was compared with 1987, and the reduced tariff is

Hong Kong Opens VTS

A \$20 million vessel tracking system has been opened at the Port of Hong Kong. The system will be used to track ship movements, which totalled 131,000 in 1989. That excludes another 4,000 daily moves by lighters, barges and ferries.

The new system will record the history of a ship in Hong Kong waters for the creation of a bill for port charges. The system becomes mandatory in early 1991.

(Port of New Orleans RECORD)

expected to encourage more business back to the container base.

Port Services have been developing a simplified and reduced price structure for several months. This is now nearing completion, and shows further reductions, and although some individual charges may increase, others are reduced significantly.

In the conventional port, there has been a strong demand for simpler billing system, and new procedures, particularly the removal of the "bonds" which shipping companies have been required to provide under the previous harbour board administration. These bonds have now been released and discontinued, and new straightforward and simple "commercial" arrangements have been entered into by Ports of Auckland individually with clients.

Ports of Auckland has a published objective of reducing port charges by 10 percent in real terms during the first two years of operation. Chief Executive Robert Cooper said that the company was well on track to achieving that objective.

"We recognise that the company has to perform, and this target was set by the Establishment Unit back in the first half of 1988. Our determination to achieve this goal is absolute, and with the reductions made to date we are heading towards that goal with real confidence," he said.

Auckland: New Coolstore On Queen's Wharf

A new 2,000 sq m coolstore is to be built at the Ports of Auckland to provide improved export facilities for kiwifruit growers and other fresh fruit and vegetable exporters.

The \$600,000 coolstore is to be built in a converted wharf shed on Queen's Wharf, and will be operated in a joint venture arrangement between Ports of Auckland Ltd., and Hortifresh Ltd., a Kumeu coolstore operator company.

The coolstore proposal has been negotiated over the past three months, and will provide increased marketing opportunities for the port.

Ports of Auckland Ltd. handled eleven kiwifruit charter shipments during the past season, totalling some 4.9 million trays. It is expected there will be further growth in this area, and the coolstore facility will provide service

for growers, holding kiwifruit under temperature controlled conditions on the wharf awaiting shipment.

The Chief Executive of Ports of Auckland, Mr. Robert Cooper said that the port has a policy of meeting the needs of clients, and providing facilities and service where new market potential was identified.

"This joint venture with the kiwifruit industry is a demonstration of our commitment, and we are confident that it will be well supported by this industry, and others in the fresh fruit and vegetable markets who require export coolstore facilities."

The coolstore will be built during the new two months, and will be commissioned and become operational from April 1. *(Ports of Auckland)*

EDI Network Links Singapore With NSW

By Goh Mia Hock
Secretariat, PSA

During the recent study-cum-promotion mission to Australia, the Port of Singapore Authority (PSA) signed a Memorandum of Understanding with the Maritime Services Board (MSB) in New South Wales on the establishing of an EDI link. MSB is the authority responsible for management and control of all commercial ports in New South Wales. Signing the Memorandum for MSB was Mr. Max Moore-Wilton, Chief Executive. Mr. Ng Kiat Chong, Executive Director, signed for PSA.

In the Memorandum, the two organisations agreed to provide specific shipping information for vessels calling at the ports in New South Wales and in Singapore through EDI link. In the initial phases, MSB has requested for the following information:

- Vessels departing from Singapore which will be calling at New South Wales ports;

- Container and cargo loaded in Singapore for these ports.

PSA has asked for the following information:

- Vessels departing for New South Wales ports which will be calling at Singapore;

- Container and cargo to be handled at Singapore from vessels de-

parting from New South Wales ports.

There was provision in the Memorandum for establishment of other telecommunication links, including Teleport Services in future.

The signing of this Memorandum heralds that PSA's increasing EDI network with other ports has reached the ports in the southern hemisphere. PSA already has EDI links with Hong Kong and Bremen.

Port users will benefit from the speedier and more accurate transmission of shipping information made possible by establishing EDI links among ports. The establishment of EDI links among ports will enable these ports to cater for Just-In-Time Shipping. *(Port View)*

Endorsement Through PORTNET Developed

By Johari M Sainee
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For many years, hauliers and forwarders handling exports used a set of manually raised Shipping Notes for their export documentation. Multiple copies of Shipping Notes were prepared either by the haulier or obtained from the shipper. Each set requires the agent's endorsement, prior to submission to PSA. The haulier then had to make several trips between his office, the shipper's premises, the agent's office and Tanjong Pagar Terminal Documentation Room. Upon submission of the Shipping Note at the Documentation Room the Equipment Interchange Receipt (EIR) is issued, and only with the EIR he can truck the container into the Port. This procedure meant spending many man-hours on transport, waiting and processing.

When PORTNET was implemented in January 89, manual preparation of Shipping Notes and 'running around' to the various locations became obsolete. Hauliers and agents who are PORTNET subscribers are able to complete the whole process from the comfort of their own offices. Shipment records can be created on-line through the haulier's PORTNET PC terminal, after which the agent endorses his approval from his PORTNET terminal. The haulier then generates the EIR

through his own printer for his driver to submit to PSA, for the container to be trucked into the Port.

This electronic process means real savings to the community. However, regular dialogue and feedback sessions among PSA, hauliers and agents show that they are very keen on electronic processing but faced certain difficulties and constraints. PSA then developed 'auto-endorsement' — endorsement through PORTNET according to a fixed set of criteria determined by the agent.

In April 90, the Automatic Endorsement for the Electronic Shipping Notes will be implemented. This is how the Automatic Endorsement works. Subscribing shipping agents submit their local export container booking details to PORTNET in advance before the hauliers create the shipment records. When the shipment records are subsequently created, a matching would be done with the booking records. If the records match, PORTNET accepts the shipment records as having been (automatically) endorsed by the agent and the haulier proceeds to print his EIR or do his pre-gate processing (the EIR will be done away with sometime this year). This results in substantial reduction of time for the agent, who no longer needs to vet and endorse most of the shipment records, whether during or after office hours. Hauliers enjoy an almost immediate endorsement available round-the-clock, seven days a week. Hauliers are freed of many anxious hours of rushing and waiting for records to be endorsed by the agent.

Shipment records that are created without a matching booking record would not be 'automatically' endorsed by PORTNET and the normal procedure in which the agent vets and endorses the record should be followed. *(Port View)*

Air Cargo Operation Off to Fine Start

One year ago, the Port of Yokohama entered the air cargo age when three container-trucks sped out of a city-owned shed on Shinko Pier and headed for Narita International Airport. Thus was the Yokohama Air Cargo Terminal (YAT) inaugurated. Yokohama became the first port

without an airport to go into air cargo.

The step became inevitable when Japan's air cargo volume zoomed at an average annual rate of 12%. As emphasis shifted to high value-added products, as companies became global, Yokohama chose to set up its own air cargo terminal.

Ordinarily, air cargo is cleared through customs at the airport. But because of Narita's distance from Tokyo and its limited space, the Tokyo Air Cargo Terminal (TACT) was located at Baraki, in Chiba near Tokyo. However, air cargo increased so rapidly that TACT, too, began bursting at the seams.

During the past year, YAT has been operating out of a shed on Shinko Pier. Now that new facilities are ready on Yamashita Pier, YAT will move there. But this also is temporary. When the Minami Honmoku island complex is completed in the year 2000, YAT will make that its permanent home. YAT's quarters at Yamashita will consist of a 4-storey ferroconcrete building with 8,000 square meters of floor space on 6,172 square meters of land.

In April, its first month of operation, YAT handled 8.7 tons of cargo. This increased to a peak of 488 tons (468 tons in exports, 20 tons of imports) in February, more than the pre-Christmas peak of November. Port & Harbor Bureau officials estimate the potential demand for YAT is as much as 15.8% of the total volume of exports going through Narita and 6.7% of all imports. *(Yokohama Port News)*

Container Chassis Stackers at Honmoku

An improved model marine container chassis stacking rack, completed last September at Honmoku's D Jetty, has increased available chassis storage space by seven times.

Specially designed elevators accept both 20 and 40-foot container chassis, empty as well as loaded, permitting each elevator gate to accommodate 10 chassis, or a total of 400 container chassis. Moreover, the operator can drive his own chassis into the tower.

The facility at Honmoku is only the second of its type in Japan, and since it is an improvement on the Port of Tokyo version, it is rated the most

advanced container chassis parking tower now in operation.

(Yokohama Port News)

Jebel Ali Surges Ahead With Best-ever Results

Total tonnage handled by Jebel Ali Port in 1989 more than doubled over the previous year to set a new record of 9,966,696 tonnes, up 123 percent from the 4,475,175 tonnes achieved in 1988.

These results are the best ever for Jebel Ali, which completed its first decade of operations in 1989.

"We are obviously delighted with the year's performance which reflects the increasing strength of Dubai's economy and the success of our staff in attracting new business," said Sultan bin Sulayem, chairman of Jebel Ali Port Corporation (JAPCO).

New records were set in many areas of the port's activities. The most dramatic increase was in container traffic which leaped by 162 percent, from 69,771 TEUs (twenty-foot equivalent units) in 1988 to 183,165 TEUs last year. Of this, imports and exports both more than doubled, while transshipments outstripped 1988 results by 355 percent.

The increase in traffic was reflected in total container tonnage figures which grew by 158 percent during the year, from 505,437 tonnes to 1,306,359 tonnes.

There were also more container vessels calling at the port; 242 vessels in 1989 compared to 122 vessels in 1988.

Container traffic will continue to be an important area of operations, explains Sultan bin Sulayem. "With more and more multinational companies choosing Dubai as their Middle East base and with an increasing number using Jebel Ali Free Zone as a distribution centre, we anticipated that container traffic will continue to have strong growth in 1990."

In 1989, 463 tankers called at Jebel Ali compared to 270 the previous year.

General cargo tonnage registered a 42 percent growth during 1989, with bulk cargo performing particularly well. "We hope to see stronger growth rates in this area in 1990 as more operators become aware of the productivity offered by our port," comments Sultan bin Sulayem.

In the ten years the port has been operating, the overall trend has been one of sustained growth," says bin Sulayem. "As we enter the new decade there is every reason for optimism. Oil prices are stable, Gulf economies are entering a new era of greater economic diversification and the political situation in the region is stable.

"Jebel Ali is well-placed to capitalise on these conditions and I believe that will help Dubai spearhead a new era of economic prosperity for the region."

(Gray Mackenzie News)

Mina Zayed Growing; Turnaround Faster

The past few years have seen rapid growth at Abu Dhabi's Mina Zayed container terminal, as shipping lines throughout the world come to recognise the advantages offered by the strategic location and smooth service of this major Gulf port.

In 1986, total throughput of TEUs was only 21,226, but a streamlining of operations during that year reaped quick benefits. In 1987, business jumped by over forty percent, with a total throughput of 29,901 TEUs, followed by a further 43 percent growth in 1988, to 42,693 TEUs, more than double the 1986 figures.

During the course of 1989, the growth continued, albeit at a lesser rate of around seven percent and total throughput during the year reached 45,788 TEUs.

Part of the growth has come as a result of the reviving local economy, with imports rising sharply in line with market demand. There was also healthy growth in exports of goods manufactured in the Emirate. At the same time, however, the doubling of business between 1986 and 1988 owed much to the success of Mina Zayed in winning a share of the re-export trade to other states further north in the Arabian Gulf.

Goods arriving at Mina Zayed by sea can now be re-shipped either by sea or by land to destinations such as Saudi Arabia, Qatar, Bahrain, Kuwait and Iraq, and it is no coincidence that Saudi Arabia and Qatar now consistently occupy the top two places as destinations for exports and re-exports from Abu Dhabi, either by sea or overland.

Changing patterns of inter-Gulf trade in the eighteen months since the ending of the Iraq-Iran conflict have, of course, had their effect upon the growth of business, and the re-export trade fell back substantially during the course of 1989 as shippers sent goods direct to their ports of destination, but continued growth in exports and imports will ensure that the prospects for further expansion of total container throughput remain rosy in the years ahead.

The two new berths at the container terminal, each of which has a draught of 13 metres, will enable Mina Zayed to accommodate the most modern container vessels, and will provide the terminal with a total quay length of 920 metres. An additional 40-tonne rail-mounted gantry crane has also been acquired, the port's third, while four new straddle carriers are also being obtained to speed up container handling and stacking.

Other new facilities at the port include a container repair workshop, nearing completion, while a new container freight station with a capacity of 13,000 square metres is also part of the modernisation and upgrading programme. The 39 hectares of the container terminal also has open storage space, while ample cold storage facilities for perishable cargo are also available.

With trends in international shipping suggesting a continuing shift towards containerisation and the use of Ro-Ro, (roll-on/roll-off), vessels, one of the container berths has also been equipped with a Ro-Ro ramp, so that multi-purpose container/Ro-Ro vessels may discharge both types of cargo at the same time.

Another important aspect of the modernisation of Mina Zayed has been the introduction of computerisation in a wide range of its activities. Faced with the need to maximise the operational capacity of the port, to offer a continually improving service to customers, and to enhance and simplify the flow of information and documents, Mina Zayed has spent several million dollars on the purchase and installation of two state-of-the-art computer systems. These have helped offer port users greater security and a faster turnaround in cargo handling.

● **Courtesy Emirates News**
(Gray Mackenzie News)

Invitation to *The International Association of Ports and Harbors (IAPH)*

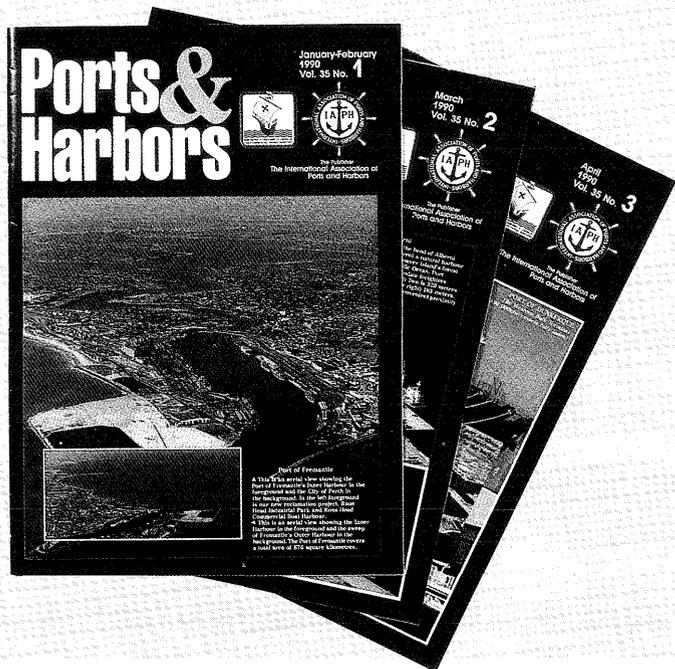
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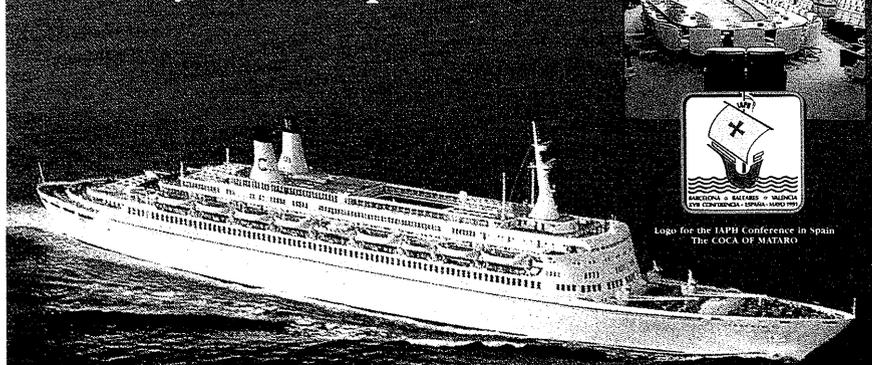
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The 17th World Ports Conference 4-10 May 1991 in Spain



The next World Ports Conference of IAPH, under the theme "The Challenges of Ports", is scheduled for the first week of May, 1991, with Spain's Public Works Ministry acting as the host. This will take place on a large, well-equipped cruise ship. By the end of the conference week,

participants will have debated many of the key issues facing ports in the 1990s and at the same time have experienced some of the most attractive islands in the Mediterranean plus the largest industrial harbors, Barcelona and Valencia.

IAPH welcomes all who are interested to join this "Ports Summit" Conference in May, 1991.

For further information about the Conference, membership, publications and the work of IAPH, please contact:

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昭和四十四年十一月十五日

第三十五卷第五

月二十日発行(毎月一回二十日発行)発所 東京都港区虎ノ門二丁目一〇の八 一〇五

国際港湾協会 定価六五〇円