Ports Harbors

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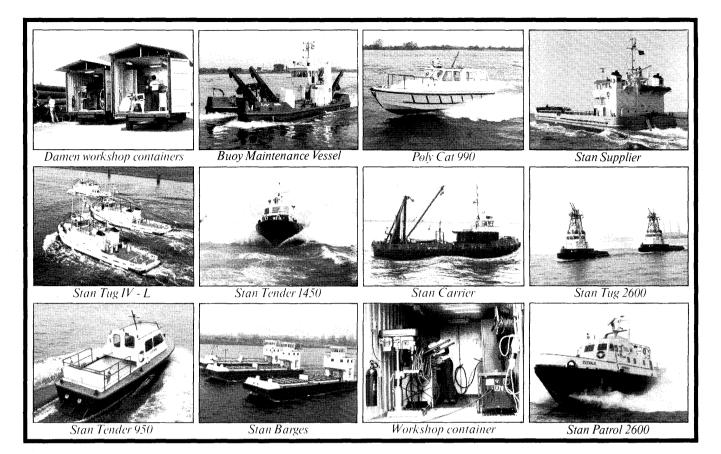
May, 1987 Vol. 32, No.5



The Publisher The International Association of Ports and Harbors

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- * Damen Shipyards have a flexible production flow with the possibility of easily covering peak periods.
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- * Capital investment and loss of interest are kept to a minimum.
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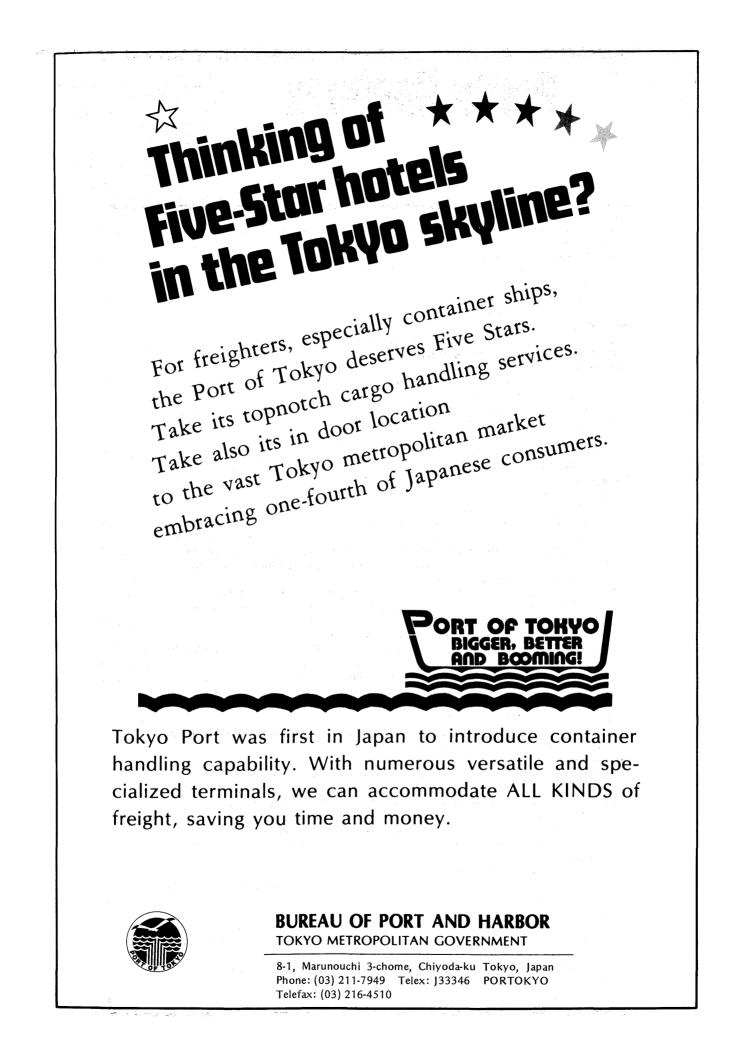
Ports & Harbors May, 1987 Vol. 32 No. 5

Ports Harbors

Published by The International Association of Ports and Harbors NGO Consultative Status, United Nations (ECOSOC, UNCTAD, CCC, IMO) Secretary General: Dr. Hajime Sato Head Office: Kotohira-Kaikan Bldg., 2-8, Toranomon 1-chome, Minato-ku, Tokyo 105, Japan Tel: TOKYO (591) 4261 Cable: "IAPHCENTRAL TOKYO" Telex: 2222516 IAPH J

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When you know all the facts about our port... We'll both do more business

We're First in Rotation

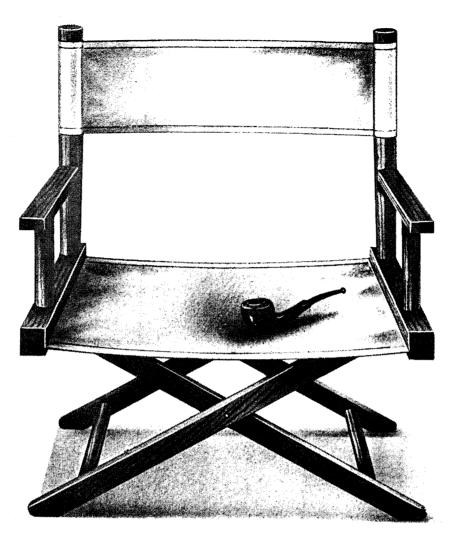
It's a fact, at our port we have more first inbound and last outbound than any other North Atlantic port. This means shipments are received three to four days faster. Not only are we first in rotation, but we also have more frequent sailings. Nearly 100 scheduled steamship lines offer direct service to major ports around the globe. Last year over 6000 vessels called at our port from 370 ports in 120 countries throughout the world. First in rotation, more sailings...faster shipments. These benefits, coupled with a half-billion dollar investment to expand our facilities, and you have a port like no other port in the world.

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115,952,000t This is the amount of the confidence in us.

We at the Port of Yokohama have rendered excellent services to ships from all over the world with 127 years' tradition and ripe knowledge, since its opening in 1859. And the port has ranked first in Japan about the amount of trade value for many years. We provide the unified arrangement of tugboats, pilots, and line-handling, and have introduced the effective computer system. Furthermore, the port has far fewer entry and exit restrictions. Seeing is believing. We are sure that you will note the Port of Yokohama as soon as you use it once.





essenhal? Then coard unsport essenhal? Then contact Mr. Tsuyama, the representative of the Ports of Bremen and Bremerhaven and the Bremer Lagerhaus-



Gesellschaft (one of the largest port operating companies in the world). He knows all the right people. In Japan. In Germany. In Bremen. Give him a ring. He'll have time to talk to you. In his office or yours. You can find him in the Sanko-Mon Building 3–1, Atago 1-chome. Minato-ku. Tokyo.

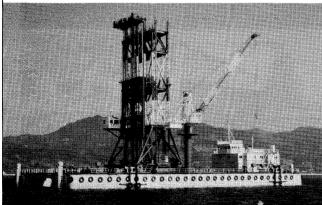
Bremen and Bremerhaven are among the most efficient all-round ports. There are 12,000 sailings a year to 1,000 ports all over the world. Ship your cargo via Bremen and Bremerhaven: it takes only one day to reach its destination anywhere in West Germany.

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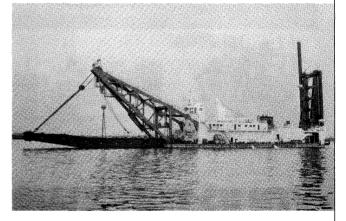




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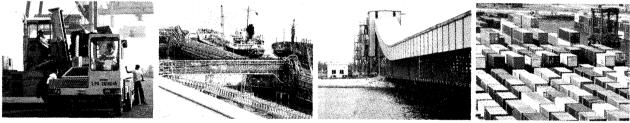


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Kelang Port Authority: Jalan Pelabuhan, 42005 Port Klang, Malaysia. Tel: 03-3688211 (20 lines). Telex: MA 39524.

IAPH ANNOUNCEMENTS AND NEWS

THE 15TH CONFERENCE

Nominating Committee Members Appointed by the Board

Out of the five conference committees provided in the By-Laws, the members of the Nominating Committee are to be appointed by the Board, while those of the other four committees—the Credentials, Budget, Resolutions and Bills and Honorary Membership Committees—are to be appointed by the President.

It has been proposed that the Board appoint the following individuals, whose participation in the Seoul Conference has reportedly been confirmed, to serve on the Nominating Committee.

African/European Region

J. den Toom, Port Management of Amsterdam, the Netherlands (as Chairman)

P.O. Okundi, Kenya Ports Authority, Kenya

J. Rommerskirchen, Port of Hamburg, Fed. Rep. of Germany

American Region

J.M. Kirk, Port Authority of New York & New Jersey, U.S.A.

A. Krygsman, Stockton Port District, U.S.A. D.J. Taddeo, Port of Montreal, Canada

Color Pictures of Your Ports Invited for the Front Cover Page

As our members and readers might have noted, starting from the April issue the newly designed "Ports and Harbors" has carried color pictures of our member ports on its front cover page. It is the ardent hope of all the editorial staff at the Head Office to continue decorating the journal's front cover page with color pictures of various ports. Please send recent color pictures of your port to the IAPH Head Office in Tokyo, preferably with a brief explanation of the photographs concerned so as to enable us to prepare them for future issues of the journal in the most appropriate way. Members are encouraged to send several color pictures—for instance, one showing an overall view of the port and the others focussing on particular facilities. Selection of the pictures to be used will be entirely at the discretion of the editorial staff.

All pictures and materials to be provided for the above purpose should be either in the form of film or color prints, and the costs incurred for mailing and delivery should be borne by the sender.

We urge all members' positive cooperation in supplying the

Asian Region

- R. Cooper, Auckland Harbour Board, New Zealand
- F. Kohmura, Nagoya Container Berth Co., Japan
- J. Leech, Department of Harbours & Marine, Australia

The Nominating Committee is to prepare the nominations of President, First Vice-President, Second Vice-President and Third Vice-President of this Association for the next term and present them to the Board Meeting. The Board shall further present the nominations to a plenary session of the Conference. At the Secoul Conference, the Nominating Committee is scheduled to meet on the afternoon of Saturday, April 25. The nominations thus processed will be reported and duly acted upon at the Second Plenary (Closing) Session on Friday, May 1.

Board Approves the Agenda For the 15th Conference in Seoul

As a result of the meeting by correspondence of the Board of Directors held on April 5, 1987, the agenda for the 15th Conference has been finalized. It is the same as that outlined in the previous issue of this journal as the "provisional agenda."

news, pictures and articles illustrating the latest situations concerning their ports, which we will introduce in appropriate issues of the journal.

Besides the provision of color pictures, we would equally value members' continued cooperation in sending us articles and pictures in black and white for insertion in the text pages.

Moreover, members are invited to run their advertisements in the journal at reasonable rates as shown in the following table.

Ad Rates			
Space/Location	Height	Width	Price
Inside 1 page (B&W)	250mm x	175mm	¥76,000
'' 1/2 page (B&W)	120mm x	175mm	¥44,000
'' 1/4 page (B&W)	120mm x	85mm	¥25,000
'' 1/4 page (B&W)	60mm x	175mm	¥25,000
Cover 2 Page (Color)	250mm x	175mm	¥220,000
Cover 3 Page (Color)	250mm x	175mm	¥200,000
Cover 4 Page (Color)	250mm x	175mm	¥260,000

IPD Fund: Contribution Report

The contributions from members to the Special Port Development Technical Assistance Fund (the "Special Fund") as of April 10, 1987 are listed in the box below. There has been a slight increase in the total amount since the last announcement made in the previous issue, which was US\$69,175 against our original target of US\$70,000. As for the direction of the fundraising campaign for the new term, the Committee on International Port Development, chaired by Mr. Kruk, will come up with a policy based on the discussions which will take place in Seoul at the relevant sessions.

CONTRIBUTIONS TO THE SPECIAL FUND (As of April 10, 1987) (in US\$) (*:Pledged)

1

(AS OI April	10, 196
Australia	
Port of Melbourne	1,000
Maritime Services Board of NSW	:250
Benin	
Port Autonome de Cotonou	250
Canada	
Port of Halifax	750
Port Alberni Harbour Commission	200
Fraser River Harbour Commission	300
Port of Vancouver	500
Port of Montreal	1,000
Ports Canada	2,000
Cyprus	
Cyprus Ports Authority	500
Denmark	
Port of Copenhagen	350
Germany (West)	
Port of Hamburg	3,086
Guana	이 이 지수 있습니다.
Ghana Ports Authority	500
Indonesia	
Public Port Corporation	1200
Public Port Corporation II	200
Iran	
Ports & Shipping Organization	1,000
Japan	
Pacific Consultants Int'l	630
Mr. Susumu Maeda	70
Mr. Toru Akiyama	500
Japan Warehousing Association	250
Yokohama Port Terminal Corp.	500
Tokyo Port Terminal Corp.	500
Nagoya Container Berth Co.	500
Shimizu Construction Co., Ltd.	250
Nakagawa Corrosion Protecting K.K.	250
Niigata Prefecture	250
Toyama Prefecture	250
Rinkai Construction Co., Ltd.	250
Osaka Prefecture	500
Saeki Kensetsu Kogyo Co., Ltd.	250
Japanese Shipowners' Association	250
Daito Kogyo Co., Ltd.	1,000
Port of Kawasaki	1,252
Port of Kobe	3,756
Kitakyushu Port & Harbor Bureau	2,502
Nagoya Port Authority	3,125
Penta-Ocean Construction K.K.	1,000
Toyo Construction Co., Ltd.	250
Kobe Port Development Corp.	641
Japan Port Consultants Association	210
Japan Port & Harbor Association	303
Osaka Port Terminal Development Corp.	646

남한 - 2012년 - 2012년 201	
Port of Osaka	3,371
Port of Hakata (Fukuoka)	1.007
Port of Yokohama	4,535
Port of Tokyo	3,571
Iordan	-,
Ports Corporation	1,000
Korea	-,
Korea Dredging Corporation	200
Korea Maritime & Port Admin.	3,000
Malaysia	0,000
Kelang Port	200
Johor Port Authority	100
Rajang Port Authority	100
Mauritius	100
Mauritius Marine Authority	1,000
Netherlands	1,000
	1.000
Port of Amsterdam	1,000
Port of Rotterdam	3,000
Delfzijl/Eemshaven Port Authority	250
Shipping & Maritime Directorate	720*
New Zealand	
The Harbours Association of	
New Zealand & 9 Harbours	2,000
Nigeria	An Astron
Nigerian Ports Authority	500
Oman	
Port Services Corp.	500
Papua New Guinea	
Papua New Guinea Harbours Board	200
Taiwan, ROC	
Hualien Harbor Bureau	200
Thailand	
Port Authority of Thailand	100
Trinidad & Tobago	
Point Lisas Industrial Port Development	
Corporation Ltd. (PLIPDECO)	100
U.K.	te da la comp
Port of London	750
Associated British Ports	3,000
Belfast Harbour Commissioners	300
Clyde Port	1,000
Peter Fraenkel Int'l Ltd.	100
U.S.A.	100
Port of Houston	1,000
Port of Tacoma	1,000
Port Authority of NY & NJ	1,000
S. Carolina State Ports Authority	500
Port of Redwood City	100
Port of Los Angeles	1,000
Zaire	000
Office National des Transport	800
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8 PORTS AND HARBORS May, 1987

IAPH Publication "Port Administration and Management" Still Available

Orders for copies of the English version of the book entitled "Port Administration and Management" authored by Professor Jean-Georges Baudelaire, which IAPH published in 1986, are continuously reaching the Tokyo Head Office both from the Association's members and non-members. This book is based on the latest version of the lectures on port administration and management the author has delivered over the past twenty years at the International Institute for Hydraulic and Environmental Engineering in Delft and the Port Study Centre of Le Havre, which is known as IPER.

In the foreword, the author says, "I have taken advantage of this book to put forward a plea for cooperation between ports. Almost all sectors of the

 Port ADMINISTRATION AND MANAGEMENT

 Management<

shipping markets are in a parlous condition. A recent investigation disclosed an abnormally low utilization, worldwide, of container terminals and an inefficient use of containers. Despite the lip-service dutifully paid to the scarcity of resources—I do not think there is a single paper in which the word 'resources' is not associated with the adjective 'scarce'—over-capacity is prevalent in all sectors of the transport industry. I earnestly believe that ports should get together regionally to try to introduce a measure of rationality in the shipping services they cater for, coordinate their investments and perhaps stem the sometimes untimely introduction of containerization."

Copies are available from the IAPH Head Office at US\$20 per copy plus mailing charge.

OBITUARY



Mr. Sven Ullman of Sweden

Sad news has arrived at the Tokyo Head Office from Mrs. Evy Ullman informing us that her husband, Mr. Sven Ullman, an Honorary Member of IAPH and former General Manager of the Port of Gothenburg, passed away recently. Mrs. Ullman says in her letter dated February 25, 1987 and addressed to Secretary General Sato:

"It is with the deepest mourning I must notify that my husband Sven Ullman passed away from a sudden heart attack on the 12th of February. I would like to express the gratitude he felt for the tie of friendships and for the understanding of his ideals he met within the Organization."

Throughout his term of office as General Manager of the Port of Gothenburg, Mr. Ullman enthusiastically supported the activities of IAPH. From 1967 until the 13th Conference held in Vancouver, he served on various committees—the Executive Committee, Constitution and By-Laws, International Port Development, Large Ships, Containerization while he also served on committees for the Association's biennial conferences. It was under his chairmanship that the idea of the IAPH Award Scheme, an essay contest, was first conceived by the International Port Development Committee, which saw the first such occasion for the top prize winner being invited to the conference held in Deauville, France, in 1979.

At the 13th Conference held in Vancouver in 1983, which turned out to be the last conference for IAPH members to enjoy his presence, Mr. Ullman was elected an Honorary Member of IAPH for his long-standing meritorious contributions to the Association's development.

Secretary General Sato has sent a letter of condolence to Mrs. Ullman at the following address:

Midsommaransen 4, S-43139 Moelndal, Sweden

Membership Directory 1988: Entry Form to Be Sent in Late May

Towards the end of May, all IAPH members will receive a circular from the Tokyo Head Office requesting the members' cooperation concerning the 1988 edition of the IAPH Membership Directory.

Upon receipt of the circular from the Head Office, all members are requested to check the information which will be attached to the entry form and to make the necessary corrections and changes for the given items including:

- 1) name of organization
- 2) annual volume of cargo handled (in metric tons) covering both general and bulk cargo in the case of Regular members3) address
- 4) mailing addressee
- 5) contacts (telex number and answer-back code, facsimile, telephone numbers and cable address)
- 6) names and positions of principal officers
- 7) sister-ports affiliation, if any

The Head Office strongly urges all members not to waste this once-a-year opportunity to acquaint the world ports and port-related businesses which receive the Membership Directory with up-to-date details concerning members' organizations. Moreover, members are invited to run their advertisements in the Directory at reasonable rates, US\$450 for a full page and US\$270 for a half-page.

OPEN FORUM

Technical Assistance to Be Provided by the International Labour Office in the Port Industry

Background

The ILO's interest in ports has its origin in the standardsetting activities of the Organisation, and in the discussions of social and working conditions, including safety, health and welfare of port and dockworkers, held in ILO for more than 60 years.

Several ILO Conventions directly related to safety and health in dockwork have been adopted. These are the Marking of Weight (Packages Transported by Vessels) Convention, 1929 (No. 27), the Protection against Accidents (Dockers) Convention, 1932 (No. 32), and the Occupational Safety and Health in Dock Work Convention, 1979 (No. 152). In addition guidelines have been issued both for vocational training and for the safety and health of dockworkers.

Another important instrument which relates to the vocational training of dockworkers is the Social Repercussions of New Methods of Cargo Handling in Docks Convention, 1973 (No. 137). Article 6 of this Convention lays down that: "Each member shall ensure that appropriate safety, health, welfare and vocational training provisions apply to dockworkers."

It was natural for the ILO, as part of its efforts to improve working conditions and promote social justice for dockworkers, to enter into technical co-operation programmes for upgrading the skills of all categories of port personnel. This programme is now a well-established tradition.

Organisation

The Maritime Industries Branch of the ILO is responsible for the activities related to ports, shipping, inland waterways and fisheries. The Branch is based at ILO Headquarters in Geneva and is assisted in the field by regional advisers, who develop and backstop technical assistance programmes, in addition to advising ILO members in their respective regions on maritime labour matters. Further support by international experts and consultants is provided on an ad hoc basis when necessary.

Training, New Cargo-handling Techniques

Recognising the vital importance of ports as a meeting point for different modes of transport, resolutions regularising the employment and welfare of port labour and the organisation of work and output in ports have been adopted by the ILO Inland Transport Committee. Considering the introduction of new cargo-handling methods in the developed countries, and foreseeing the losses in employment that this would cause in the ports industry in the future, a Convention and a related Recommendation were adopted by the International Labour Conference in 1973 concerning the social repercussions of the new methods of cargo handling in

docks.

One of the Convention's main articles stresses the importance of appropriate safety, health, welfare and vocational training provisions being applied to the port labour force, which was obviously an anticipatory measure to cope with the development of intermodal transport as foreseen at the time.

Since the adoption of these instruments, the ILO's technical assistance programme has been geared towards assisting governments to establish port training centres. Such assistance has been provided, among others, to Singapore, the Philippines and Peru, where the established training centres are operating effectively at national and, in the cases of Singapore and Peru, at regional and sometimes international level.

Areas and Forms of Assistance

1. Recruitment and placement

Assistance is provided in setting up guidance and selection systems, including employment and career counselling services and employment offices for port personnel. The ILO can also provide advice on decasualisation and registration. This is particularly applicable to work in the port industry where the introduction of new cargo-handling methods has caused a need to reorganise the port labour force.

Advice is available on recruitment, hiring, systems of payment, regularisation of employment and stabilisation of earnings, welfare activities and training. Experts search for the best ways to improve conditions of employment of port labour, giving due consideration to the social consequences of the introduction of new methods of cargo handling. Assistance could also include the drafting of labour legislation and regulations governing portworkers' conditions. 2. Occupational safety and health

Advice can be provided in this field to develop national programmes for the prevention of occupational accidents to port personnel as well as for the health protection in employment of these workers.

3. Labour management co-operation

The ILO can provide advice on the role of Governments in industrial relations, methods of collective bargaining, contents of collective agreements, settlement of labour disputes and grievance procedures.

4. Organisation of work in ports

Advice is available to port authorities on the organisation of cargo handling, in particular regarding labour standards, incentives and cargo-handling methods, with the object of raising the productivity of port labour and streamlining cargo-handling operations. Assistance is also given in the organisation of sheds and warehouses and in examining possibilities for rationalisation and increased work mechanisation. **5. Assessment of training needs**

At the request of governments, short-term consultancy services can be provided by the ILO. These may lead to the design of a project document for receiving technical assistance in the training needs identified. The project document prepared would be included in a technical memorandum containing the ILO's recommendation which is submitted to the government.

6. Curricula development

These are prepared in accordance with established priorities for target groups to be trained in a port following recommendations made on this matter. The curricula and teaching methodology techniques will depend on the level of education of the target group to be trained, and for low-literacy groups will need to rely largely on audio-visual techniques tailored to individual situations.

7. Training of instructors

Depending on its duration and objectives, a programme for the training of instructors may include:

- training and methodology;
- audio-visual aids technology;
- curriculum development;
- skill upgrading;

methodologies to be used for the practical training of cargo-handling operators, including winch and crane drivers, and preventive maintenance personnel;

- management of training institutions;
- design, production, printing and reproduction of training material;
- curricula development related to conventional cargo, container and roll-on/roll-off operations;
- bulk cargo operations;
- hazardous goods and the use of appropriate protective devices;
- preparation, planning and the proper execution of loading and discharging goods from ships to warehouses or vice versa;
- safety and health in port operations;
- the use of computers in port operations.

The training of instructors may be undertaken through: (a) Fellowship programmes

(a) Fellowship programmes

These are arranged as far as possible with recognised port training institutes where environments and methods of work bear some resemblance to those existing in the ports of the country requesting the assistance, and/or at the ILO's International Centre for Advanced Technical and Vocational training in Turin, Italy.

(b) Projects on site in the requesting country

These are undertaken with the assistance of ILO experts in the field of port training, and interrelated with other project activities such as training, curricula development, preparation of audio-visual aids, and the conducting of courses at the project site for validation of the curricula developed. This may or may not be complementary to training received during a fellowship programme.

8. Assistance in port training centres

Assistance in this field would cover:

- design in accordance with requirements;
- purchasing, shipment and installation of equipment required for the training of different disciplines of personnel at the Centre;

- organisation and management.

9. Manpower development

The ILO offers its experience in assisting in the preparation of manpower development programmes, which create incentives for port personnel to attend the courses offered by the port training centre. Such a manpower development scheme may also interrelate with each function in the port industry with a number of training courses for each function. In this context, it may also provide for horizontal and vertical mobility of personnel coupled to training packages completed satisfactorily.

10. Supervisory training

Based on an analysis of supervisory training programmes throughout the world to identify their common features, the ILO has completed a series of 34 modules for supervisory training. The modules have been subjected to rigorous testing in widely different locations and contain:

Introduction (what is meant by supervisions, supervision organisation);

Supervisory techniques (how to supervise, plan, organise, control, direct and make decisions);

Main supervisory areas (when to concentrate supervisory efforts, equipment, material, energy, safety, etc.);

Supervising people (with whom to work: leading people, motivating, training, maintaining a good general climate, etc.).

This modular programme for supervisory development contains a trainer's guide which explains how to use the modular programme. Each of the 34 modules contains a number of learning elements. Various combinations of modules and learning elements can be put together to form a number of training packages adapted to a wide range of different conditions and training needs. The ILO undertakes to train the trainers of established training institutions in ports who then deliver the packaged course repeatedly as needed.

In addition the ILO's International Centre for Advanced Technical and Vocational Training can, in conjunction with the relevant technical services of the ILO, assist in the elaboration of tailor-made courses which may be required for port personnel including middle management training.

11. Funding of technical assistance service

The ILO's technical assistance activities are generally funded by:

- technical assistance field programmes of international organisations and banks such as the United Nations Development Programme (UNDP), the International Bank for Reconstruction and Development (IBRD) and Regional Development Banks;
- governments or enterprises, and regional development bodies;
- multibilateral aid projects;
- Regular Budget Technical Co-operation programmes of the ILO.

12. Assistance in the preparation of projects

The ILO can provide assistance in the design of projects with a view to presenting the project in a proper way to donor while making sure that the project is capable of achieving its objectives. Assistance at the project design stage may be of great importance as efforts at that stage greatly improve the chances of success at the implementation stage.

13. Special service

The ILO can provide quality service in the identification, preparation of detailed technical specifications, procurement and despatch of both capital project equipment and equipment for training. This service can provide substantial savings and can ensure that quality equipment is supplied and installed in time.

14. Modern training techniques

The training of operators for all the highly sophisticated and high-cost equipment of modern port terminals falls within the ILO's field of competence. Because of the lack of any but on-the-job methods using terminal equipment, the ILO is actively promoting the development of suitable computer-based training simulators for all major equipment of container, bulk cargo and conventional terminals.

15. Welfare

Advice can be given on the organisation and promotion of special welfare schemes including facilities and services of a recreational, cultural and educational nature provided to port personnel.

16. Social security

The ILO has an extensive programme of technical assistance in the field of social security and can offer assistance in the planning and preparation of social security schemes for port workers within the framework of national economic and social development.

Experts make an appraisal of the situation and recommend social security measures which are feasible and desirable, bearing in mind the political, economic, demographic and social factors involved and the resources available. They may then assist in the preparation of draft legislation, rules and regulations to implement the scheme together with elaborating the required administrative organisation, including the training of personnel.

A Survey of Recent ILO Port Projects

With finance from various national and international sources, the ILO has assisted a number of ports including, among others, the following:

Latin American region

1. Regional advisory services

As from January 1987 an ILO Regional Adviser in Maritime Activities for the Latin American region will be assigned to provide advisory services, particularly for the port industry.

2. Costa Rica

In 1982 a project was initiated in Costa Rica covering a three-year training scheme for course developers and in-

Visitors to the Head Office

-On March 10, 1987, **Mr. Jean-Joseph Regent**, Chairman, Port of Nantes-Saint Nazaire and the Atlantic International Zone, Nantes, France, was the host of a seminar on the promotion of the aforesaid trade zone, organized and held at the World Trade Center of Tokyo. The Atlantic International Zone is an industrial development located since December 1985 on and along the River Loire and facing the Atlantic Ocean. According to the presentation by Mr. Regent, the project is expected to attract hi-tech industries from various corners of the world including Japan, and it could one day become the Europoort of the Atlantic. The seminar was attended by Mr. R. Kondoh of IAPH. (*Photo shows Mr. Jean-Joseph Regent, left, and Mr. R. Kondoh at the AIZ seminar*)

-On March 10, 1987, **Mr. J. Parkinson**, Managing Director, Lloyd's of London Press Limited, and **Mr. Nicholas R. Elliott**, Publisher of Maritime Asia, visited the Head Office and were received by Mr. R. Kondoh of IAPH. Views and comments were exchanged on the current trends concerning maritime and port affairs in the region and how to deepen the ties of mutual cooperation among the parties involved.

-On March 11, 1987, **Mr. Arthur H. Coleman**, President, San Francisco Port Commission, and **Mr. Ronald L. Stone**, Director, Maritime Affairs, Port of San Francisco, accompanied by **Mr. S. Satoh** of the Tokyo Office of the Port, visited the Head Office and were received by Mr. Hiroshi Kusaka, Dy. Secretary General, and his Head Office staff. In response to the hope expressed by Mr. Kusaka for reviving the Port's membership in IAPH, Mr. Coleman commented that it was a pity that San Francisco was not with IAPH but that the matter would be given continued consideration.

-On March 17, 1987, under the hostship of the Dutch Ambas-



sador, a special seminar for the promotion of tourism and conventions in Holland was held at the Dutch Embassy. **Drs, G.A. Bosscher**, Director of the Netherlands Congress Bureau, told the audience comprising a variety of agencies for tourism and conventions that the Netherlands was trying to become more and more active in inviting tourists and conventions of all kinds. The reception was attended by Mr. R. Kondoh of IAPH.

It was learned that **Ir. D.R.A. Stapel**, who had been involved in the organization of IAPH's 8th Conference in Amsterdam/Rotterdam in 1973 as Deputy Managing Director of the Port of Amsterdam and had been working for Schiphol Airport until March 1987, was to be working for the Maastricht Congress Center.

-On March 25, 1987, **Mr. Rich Craig**, Group Manager, Marketing, North Asia, Cahners Exhibitions Ltd. (an IAPH Associate Member), visited the Head Office and was received by Mr. R. Kondoh, Under Secretary. He was visiting Tokyo for the promotion of the forthcoming Conference and Exhibition to be organized by them in China in December this year. structors, and the elaboration of training programmes for the port industry in Costa Rica, with a view to creating a national port training centre. The project was completed in 1986 and a port training centre is now fully operational.

3. Honduras and Guatemala

In 1985, ILO consultancy services were provided to the countries to assist in the determination of port training requirements.

4. Panama

In January 1986 a project was initiated to strengthen the training department of the Port Authority of Panama. This project, which entails the training of managers, supervisors, maintenance personnel, port workers and safety inspectors, is being executed by the ILO in association with IMO and UNCTAD. Training facilities are being made available in the ports of Balboa and Cristobal. To a great extent, project activities are being undertaken within a framework of horizontal co-operation between the project and the Port Training Institute of Peru which was originated with ILO assistance.

5. Paraguay

In 1985 preparatory assistance was provided by the ILO to the Port Authority of Paraguay to determine ways and means for introducing and developing a port training programme. During this preparatory assistance period, an occupational analysis was undertaken of the different port functions in the port of Asuncion. The results of this analysis determined the activities to be undertaken by the project, which was designed to establish a training unit as a department of the Port Authority.

The project became operational in the last quarter of 1985. This ILO-executed project is presently co-ordinating horizontal co-operation between Peru, Argentina, Uruguay and Paraguay for the purpose of assisting Argentina and Paraguay in their objectives to establish training facilities and programmes for upgrading middle management, supervisors and port workers of the ports of Buenos Aires and Montevideo.

6. Peru (Callao)

A fully fledged training institution was completed in 1980 to conduct courses for all categories of dockworkers. The preparatory assistance for this project was provided by the ILO during 1975.

Caribbean region

In 1979 an ILO Regional Consultant on Port Operations and Training of Port Labour for the Caribbean Region was stationed at the ILO Caribbean Office in Port of Spain. He provided advice in his field of competence to the authorities of the Caribbean ports and prepared project proposals for Regional Port Training Programmes for the East Caribbean countries, a proposal for the Government of Barbados for introducing port training and a proposal for Port Development and Training in Trinidad and Tobago.

7. Trinidad and Tobago

A Port Development and Training project was signed in March 1986 to be executed by the ILO. Designed by the ILO, this project will be executed with the principal objective of training supervisors of conventional cargo-handling and container-handling activities, and supervisors of maintenance personnel. By means of seminars, which will be organised in co-ordination with IMO and UNCTAD, the project will also contribute to port management development. During the lifetime of the project a group of instructors will be trained in course development and teaching. **African region**

8. East African ports

An ILO Regional Adviser assisted during 1976 and 1978 the East African countries to upgrade their effectiveness and prepare for the introduction of new cargo-handling techniques. As from January 1987 a Regional Adviser in Maritime Activities will be stationed in Dar es Salaam.

9. Cameroon

In 1981 a technical memorandum was submitted to the Government of the Cameroon, containing new draft labour legislation for the port workers of that country, including a proposed new draft regulation for improving safety and health in the ports of Cameroon.

10. Guinea (Conakry)

Between 1969 and 1972, ILO experts provided assistance for the complete reorganisation of the port.

11. Ivory Coast

Technical memoranda containing an assessment of training needs for the port workers were submitted to the Government of the Ivory Coast in 1981 and 1982.

12. Mauritius

- (1) An ILO study was carried out to identify the reasons as to why workers in Port Louis preferred to finish quotas of tasks in less than half a shift and go home foregoing very attractive incentive wages for production over the quotas.
- (2) An ILO study was made in 1983 resulting in a technical memorandum on requirements for establishing a cargohandling corporation for the port industry. This corporation has since been established by an ILO-executed project completed in 1986 for improving port operations and establishing a training centre.

13. Mozambique

In April 1985, NORAD commissioned the ILO to prepare a comprehensive project document for establishing a Port Training Institute in Maputo with capacity to provide the Mozambican ports with adequately trained staff for all required port functions and levels.

In September 1985 the ILO submitted to NORAD the following documents:

- a report on the preparation of a project document for Establishing a Port Training School in Maputo, Mozambique;
- (2) a project document on the Establishment of a Port Training Institute; and
- (3) a project document on the Construction of Port Training Institute Buildings.

These documents have been submitted by NORAD to the Government of Mozambique. Discussions are presently taking place for the reaching of an agreement between the Governments of Norway and Mozambique for establishing the Port Training Institute in Maputo on the basis of the proposals designed by the ILO.

14. Sierra Leone (Freetown)

At the request of the Port Management Association of Central and West Africa, the ILO executed and financed a survey of the training needs of the Port of Freetown. The survey was completed in December 1985 and the technical memorandum to the Port Management Association of Central and West Africa on Training Needs for the Port of Freetown was submitted by the ILO in January 1986.

15. Tanzania

In July 1985, NORAD commissioned the ILO in the preparation of comprehensive project proposals to upgrade the existing port training centre in Dar es Salaam, known as the Mandari College.

In November of that same year the ILO submitted to NORAD the following documents:

- a report on the Improvement and Development of Port Training, Tanzanian Harbours Authority, Dar es Salaam, Tanzania;
- (2) a project document entitled "Improvement and Development of Port Training Needs"; and
- (3) a project document for Repairs, Modification and Completion of Unfinished Works of Training College Buildings and Infrastructure.

These documents were sent by NORAD to the competent authorities in Tanzania and form the basis of present discussions being held between the Governments of Norway and Tanzania for an agreement of technical assistance to upgrade the existing port training centre in Dar es Salaam. Asia

16. Regional advisory services

Since 1983 an ILO Regional Adviser in Maritime Activities stationed in Bangkok has provided technical advisory services for the Asian and Pacific regions.

17. Bangladesh (Chittagong)

A project proposal is under consideration by the Government for the ILO to assist in providing training facilities and preparing courses for dock workers of various categories, including maintenance personnel, to suit the needs of the Port of Chittagong.

18. China

During 1986 the ILO Regional Adviser in Maritime Activities for the Asian region undertook a mission to China for the purpose of providing advice to the competent authorities in the establishment of training centres for port workers.

As a result of that mission a tour is being undertaken by port officials to study port training centres in the Asian region. This fellowship programme is being financed by the ILO.

Following the study tour discussions will be held for technical assistance in the establishing of port training centres in China.

A seminar on the use of simulation techniques for training of heavy cargo-handling equipment operators will be organised in China in December 1986.

The workshop, which is financed by the Government, is being conducted with ILO assistance and that of SEAGULL—a Norwegian firm specialising in simulation techniques.

19. India

An ILO expert carried out a study of the training needs of Indian ports. The expert's recommendations, made in 1983, have been accepted by the Indian Government and the construction of six new training institutions for operating and maintenance personnel are scheduled to be completed in 1986. The Government has requested the ILO for assistance in setting up these Workers' Training Centres. A project is awaiting the availability of funds to carry out the technical assistance component and supply of training equipment for these centres.

In February 1985 the ILO entered into an agreement with the Indian Institute of Port Management in Calcutta for collaboration in the development of a set of modules, based on the ILO Modular Programme for Supervisory Development, for the training of supervisors of cargo handling and equipment maintenance of ports. The IIPM is carrying out the work, assisted by ILO experts. Thirteen modules have been adapted.

In collaboration with SEAGULL/NORWAY, the ILO organised a workshop on practices in the use of simulation techniques for training of heavy cargo-handling equipment operations.

20. Indonesia

A project proposal for assistance to the Port Training Centre at Palembang and the Palembang Port Authorities was prepared by the ILO Regional Adviser in Maritime Activities during 1985.

21. Pakistan

The Karachi Dock Labour Board has decided to establish a port worker training centre. To assist them in their objective, a project designed by the ILO was approved in May 1986 which will become operational in November of that year as an ILO-executed project.

Project activities will be undertaken to train instructors in developing and conducting of training courses for port supervisors, port workers and operators of cargo-handling equipment. A training rig will be established for practical training of winch drivers and dockworkers.

22. Philippines

In 1976 an ILO-executed project was completed, accomplishing the establishment of a port training centre. Project activities included curricula development, instructor training, training of port workers and their supervisors and training of operators of cargo-handling equipment. During 1982 the training centre received ILO assistance for curricula development in container-handling operations.

23. Solomon Islands

In September 1984 the ILO Regional Adviser in Maritime Activities for the Asian Region provided advice to the Solomon Islands Ports Authority for introducing a two-shift working system. During 1986, ILO consultancy services were provided to the Solomon Islands Ports Authority for conducting a training needs survey for the Port of Honiara. 24. Sri Lanka

In 1981 an ILO expert made recommendations concerning training of port workers in Sri Lanka. The recommendations have been followed, and a joint ILO/UNCTAD project which started in early 1985 will assist the Sri Lanka Ports Authority to set up a permanent port training centre in Colombo. **Europe**

25. Cyprus

A technical memorandum on labour arrangements in ports and related problems was drafted by an ILO expert.

26. Malta

In 1983, at the request of the Government of Malta, an ILO advisory mission was carried out to make recommendations on how the present dock safety regulations in that country could be improved, taking into account the methods of work introduced in the ports since these regulations were adopted.

27. Turkey

A rehabilitation programme for the ports of Turkey was executed by the ILO with the objective of establishing a training centre in Istanbul to be responsible for the manpower development of Turkish port workers. The project was executed between 1980 and 1984.

International Maritime Information **VYORLD PORT NEVYS**

Relations with Non-Governmental Organizations: IMO

(Extract from the IMO document: C 58/19(b))

Annex 1 to this document gives a list of the non-governmental organizations at present enjoying consultative status with IMO.

Annex 2 to this document contains information on:

- (a) the participation of the various non-governmental organizations in the work of IMO from 1 March 1985 to 28 February 1987.
- (b) the meetings of non-governmental organizations in consultative status which have been attended by representatives of the IMO Secretariat from 1 March 1985 to 28 February 1987.

ANNEX 1

NON-GOVERNMENTAL ORGANIZATIONS WHICH HAVE BEEN GRANTED CONSULTATIVE STATUS WITH IMO

	Date consult	ative
	status gra	inted
1.	International Chamber of Shipping (ICS)	1961
	International Organization for Standardization (ISO)	
	International Shipping Federation Ltd (ISF)	
	International Electrotechnical Commission (IEC).	
	International Chamber of Commerce (ICC)	
7.	International Confederation of Free Trade Unions (ICFTU)	1961
8.	International Association of Lighthouse Authorities (IALA)	1961
	International Radio-Maritime Committee (CIRM)	
10.	Permanent International Association of Navigation Congresses (PIANC)	1967
11.	International Fertilizer Industry Association (IFA)	1967
	jointly with	
	European Nitrogen Producers' Association (APEA)	
	International Maritime Committee (CMI)	
	International Association of Ports and Harbors (IAPH)	
	The Baltic and International Maritime Council (BIMCO)	
	International Association of Classification Societies (IACS)	
	International Law Association (ILA)	
	International Cargo Handling Co-ordination Association (ICHCA)	
	European Council of Chemical Manufacturers' Federations (CEFIC)	
	Latin American Shipowners' Association (LASA)	
	Oil Companies International Marine Forum (OCIMF)	
	European Tugowners' Association (ETA)	
	International Maritime Pilots' Association (IMPA)	
	International Shipowners' Association (INSA)	
	Engineering Committee on Oceanic Resources (ECOR).	
26.	Friends of the Earth International (FOEI)	1973

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	Institute of International Container Lessors (IICL)	
	International Association of Drilling Contractors (IADC)	
29.	International Association of Institutes of Navigation (IAIN)	1975
30.	International Association of Producers of Insurance and Reinsurance (BIPAR)	1975
31.	International Council of Marine Industry Associations (ICOMIA)	1975
32.	International Federation of Shipmasters' Association (IFSMA)	1975
	International Life-Saving Appliances Manufacturers' Association (ILAMA)	
34.	International Salvage Union (ISU)	1975
35.	Oil Industry International Exploration and Production Forum (E and P Forum)	1975
36.	Association of West European Shipbuilders (AWES)	1979
	(on a provisional basis)	
37.	International Association of Independent Tanker Owners (INTERTANKO) International Group of P and I Associations (P and I)	1979
38.	International Group of P and I Associations (P and I)	1979
39.	The International Tanker Owners Pollution Federation Ltd (ITOPF)	1981
40.	International Union for Conservation of Nature and Natural Resources (IUCN)	1981
41.	Advisory Committee on Pollution of the Sea (ACOPS)	1983
42.	Society of International Gas Tanker and Terminal Operators Limited (SIGTTO)	1983
43.	International Life-Boat Conference (ILC)	1985
	(on a provisional basis)	
44.	International Road Transport Union (IRU)	1986*
	(for limited period)	
	*Subject to final approval by the Assembly	

ANNEX 2

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Prevention of Illicit Drug Trafficking

(Extracts from the IMO document: FAL 17/INF.3)

The following is a model agreement between the United States Customs Service and a steamship company on prevention of narcotics smuggling into the United States via commercial carriers.

Introduction

In recent years, drug smuggling into the United States has increased significantly. Drug traffickers have frequently used commercial vessels to enter narcotics into the country in cargo, with passengers or concealed within the vessel. Many vessel carriers have asked for Customs assistance in preventing the use of their vessel as a vehicle for smuggling drugs.

In recognition of the costs to society of drug trafficking, drug abuse, and drug crime, the United States Customs Service and ____ _Steamship Company enter into this agreement to increase efforts for preventing drug smuggling on commercial vessels. This agreement provides general guidelines which carriers, as corporate citizens, will use to implement procedures to reduce drug trafficking on other vessels. The process of increasing active carrier involvement and substantive support of efforts against narcotics trafficking will be based on a series of agreements between the U.S. Customs Service and individual carriers. These agreements will necessarily vary from carrier to carrier, but will generally conform to national guidelines. Each agreement will contain both a formalized general commitment by the carrier to actively support Customs in its efforts aimed at narcotics trafficking, as well as more specific agreements implementing this corporate policy on a port-by-port basis.

Objectives

Customs objectives in entering this agreement are:

-To encourage active carrier involvement in increasing security and reducing narcotics contraband smuggling.

-To restrict narcotics smugglers access to and utilization of commercial transportation channels. -To increase Customs ability to detect and interdict specific attempts to smuggle narcotics on board vessels or by passengers or cargo shipments being carried.

-To increase Customs ability to identify and develop substantive investigative cases involving conspiracies to smuggle narcotics.

-To expand and improve information available to Customs from ocean carriers beyond that required by law or regulation which may be of use for interdictory, investigative or intelligence purposes.

The carriers' objectives in entering this agreement are:

-To reduce the illegal access and use of their company and equipment by criminal elements engaged in narcotics smuggling.

-To assist Customs and the law enforcement community as a whole in its efforts against these criminal elements.

-To facilitate, to the greatest extent possible, their legitimate business concerns of transporting merchandise and people for hire.

General Agreement

In order to provide for as much consistency and uniformity as possible, the following framework is provided:

-Carriers' prime responsibility lies in the safe and expeditious movement of cargo and people.

-Carriers will not be asked to act as law enforcement entities but rather to exercise "police powers."

-Agreements will be voluntary and will be based on carriers' recognition of the scope, gravity, impact and consequences of narcotics trafficking on their operations.

-Certain items may not be incorporated in formal written agreements because of security considerations.

-Initial agreements will be general in nature and serve as corporate endorsement and support for developing and implementing specific localized agreements. More extensive and private discussions will be necessary at the local level.

- The terms of agreement on specific items will vary from carrier to carrier and with individual carriers from location to location based on the nature, extent, and the risk of the narcotics threat. - Customs will supply all possible assistance and appropriate training to individual companies to: help them assess their vulnerability for use as a conduit for narcotics smuggling; develop concrete plans to reduce their vulnerability; and implement these plans.

-Customs will not request or require the carrier to initiate any actions at an overseas location which would conflict with the laws, regulations or control requirements of that country.

-Carrier and Customs personnel at each U.S. port will develop specific local agreements within the context of this general agreement.

Specific Corporate Agreement

The carrier representative will initial in the space provided each of the items to which the carrier agrees.

Vessel Security

- 1. —Vessels should be searched prior to arrival in the U.S. Searches should be conducted prior to sailing from identified high risk source and transit countries and on the high seas prior to arrival in the U.S.
- 2. —Vessel log entries should be made for each search, indicating areas searched, results and who conducted the search.
- 3. —Any contraband located during vessel searches in foreign countries would be taken into custody by the government official participating in the search.
- 4. —Any contraband located during vessel searches on the high seas should be secured by the master with minimal handling, promptly reported to Customs prior to or upon arrival, and preserved for appropriate followup action by U.S. Customs.

No penalty action will be taken by Customs against the company or the vessel master in these cases.

- 5. —A complete set of keys for all compartments and locks to be prepared, clearly labeled and kept in the master's custody. This set of keys is specifically for the use of Customs officers conducting vessel searches.
- 6. —Whenever Customs are going to search a vessel a ships's officer, with

the complete set of keys, should be assigned to accompany the search team.

- 7. —A current set of vessel documents (crew list, crew effects list, stores list, etc.) beyond those needed for vessel entry should be maintained on board the vessel for use whenever a vessel search is conducted.
- 8. —Masters of vessels should be instructed to provide Customs with any information available concerning suspicious crew members or smuggling methods. Penalty liability will exist by the co-operation, and the value of information provided by the master will be key factors in the mitigations process.
- 9. —Customs should be notified of all crew changes and new crew members joining ships at U.S. ports.
- 10.—Customs should be notified of the presence of stowaways prior to vessel docking and, where possible, the carrier will provide Customs with copies or extracts of any documents found on stowaways which have been removed from vessels prior to arrival at U.S. ports.
- 11. —The carrier will assist Customs with hands-on training in search methods for those vessel types the carrier operates.
- 12. —The carrier will promptly notify Customs of major structural repairs or remodeling or reconfiguration of any vessel (interior or exterior).
- 13. —The carrier will increase its security and control procedures to make it more difficult for unauthorized persons to gain access to vessels both overseas and in the U.S.
- 14. —The carrier will notify all masters, officers, agents, and crew members of these procedures and instruct them to comply with them fully.

Cargo Security

- 15. —Customs should be provided with advance information on vessel arrivals including crew and passenger lists and cargo manifest information.
- 16. —Customs should be provided access to telex and cable traffic on upcoming vessel arrivals especially those pertaining to changes in destination, consignee or special handling instructions.
- Notify Customs of any unusual or suspicious cargo shipments or requests for information on shipments.

- 18. —All containers, including empty containers, should be sealed prior to loading and the seal numbers should be recorded on the vessel manifest.
- 19. —Where possible, a numerical list of all containers and seal numbers should be prepared and given to Customs for each vessel arrival.
- 20. —Upon request, train Customs officers in the use of company containers and cargo tracking and information systems and give Customs access to these systems.
- 21. —Upon discharge of containers, verify seal numbers and notify Customs of any unsealed containers or containers with broken seals.
- 22. —Immediately notify Customs wherever, after discharge, an unsealed container or a container found with a broken seal is discovered.
- 23. —The carrier will train security and cargo personnel to recognize and report cases where the circumstances fit Customs smuggling profiles, e.g., weight discrepancies, disappearances, incongruities in payment, package construction, routing.
- 24. —The carrier will increase its security and control procedures to make it more difficult for unauthorized persons to gain access to cargo shipments or for authorized persons to improperly manipulate, move or handle such shipments.
- 25. —The carrier will increase its use of and control over accountable numbered seals and tamper-resistant cargo coverings.

Terminal Security

- 26. —The carrier will limit private vehicle access to cargo locations and pier facilities.
- 27. —The carrier will provide a list of all approved vehicles and of all individuals allowed regular access to cargo locations and pier facilities.
- 28. —The carrier will limit parking of all vehicles to designated areas removed from active cargo areas and vessels.
- 29. —Any vehicle allowed one-time entry to a cargo or pier location should be issued a dated gate pass and parking should be restricted to designated areas. Vehicles' license plate numbers should be recorded for Customs review.
- 30. -Where the carrier has electronic

security systems, such as closedcircuit TVs, at cargo or pier locations, these resources should be made available to Customs upon request.

- 31. —The carrier will permit only employees and vehicles displaying proper identification within its cargo holding areas and in proximity to its vessels, and will permit such employee access only when required by their assignments.
- 32. —The carrier will periodically conduct a comprehensive review of existing control and security measures at both overseas and U.S. locations, and take steps to correct any identified deficiencies. This review will focus specifically on those measures designed to: restrict access to vessels, facilities, and cargo shipments by unauthorized persons; and, restrict or control employee access to sensitive areas on other than official business.
- 33. —The carrier will provide timely notification to Customs when employees discover suspect packages or unaccounted cargo. Potential contraband packages will remain undisturbed pending decision to attempt controlled delivery.
- 34. —The carrier will post warning signs on its vessels and at its facilities describing criminal penalties for narcotics trafficking.
- 35. —The carrier will provide detailed (Continued on Page 33, Col. 1)

Guidelines Adopted on Disposal of Dredged Materials

Guidelines concerning the disposal of dredged materials were adopted by the Consulative Meeting. They are designed to assist in the application of the annexes to the London Dumping Convention.

The resolution adopting the guidelines note that most of the materials dredged from the water-ways of the world are either not polluted or may possess mitigative properties that diminish the development of adverse environmental impacts after disposal at sea. It also notes that the major cause

The gidelines state that: "In the special case of dredged materials, sea disposal is often an acceptable disposal option, though opportunities should be

(Continued on Page 21, Col. 1)

The Crisis in Container Shipping - Report from Ocean Shipping Consultants -

Despite the relatively buoyant nearterm prognoses for deep-sea liner trade traffic growth, the container shipping industry is likely to experience a period of continuing instability according to a new report from Ocean Shipping Consultants entitled "The Crisis in Container Shipping."

In a wide ranging appraisal of forward deep-sea vessel supply and demand balances on twelve of the world's major container trades over the period 1975/1990, the report charts the relentless growth of surplus slot capacity eventualising on a number of the major trades in the recent past, noting that "with slot supply continuing to run at levels well in excess of concurrent demand growth throughout much of the forward study period, and particularly during 1984/1987, average rates of vessel utilisation significantly lower than those registered in the immediate past are indicated in the period to 1990." The study puts the effective volume of deep-sea slot capacity in 1990 at a level of some 34.9 million TEU-a 49.2% increase on the 23.3 million TEU deployed in 1984. Concurrent deep-sea container traffic growth, rising from 17.5 million TEU to 24.9 million TEU. is forecast at a lower 42.3%.

Average rates of vessel slot utilisation are expected to have declined by no less than 11.9% over the period 1984/1987 although a degree of improvement in underlying deep-sea containership supply/demand balances is posited thereafter as the realities of the market "reassert their pre-eminence."

The report comments that "overcapacity will continue to bedevil most sectors of the market...overcapacity is projected at a level of some 18.6% in 1987 and a lower 9.8% in 1990, the corresponding volumes of surplus slots deployed equating to some 4.6 million TEU and 3.1 million TEU respectively." The survey goes on to note that "the corresponding overcapacity figures registered historically are considerably lower-5.8% in 1975, zero in 1978, 1.9% in 1981 and 4.5% in 1984. The upward trend discernible in the period since 1981 is most

pronounced ... "

The report makes the telling point that "massive debt service requirements are already placing an intolerable burden on certain disadvantaged major operators, and even those marginally better placed with well written down ships may well prove too large to deal with the exigencies of the market thought likely to prevail in the period to 1990." Enlarging on this, the study ventures that "a considerable premium will accrue to the smaller independent whose minimal exposure and flexible policies, which may involve a deal of 'cut and run' tactics, will make the best of the difficult situation foreseen over the next four to five years."

(Ocean Shipping Consultants)

IMB Div. to Offer Advice On Port, Ship Security

Much has been heard recently of the increasing problems caused to the transportation industry by the threat of terrorism, piracy and inadequate port security. As a result the International Maritime Bureau has consolidated the security aspect of its services to the industry in a specialist Technical Services Division. This is available to give advice on all matters of port and onborad ship security. In particular, members of the Division will be entitled to the following services:

- (a) An initial comprehensive security survey as recommended by the IMO, balanced against the specific conditions applying.
- (b) periodic surveys to match changes in the threat, and in techniques and technology.
- (c) Advice on written security plans.
- (d) Security seminars, workshops and courses either centrally, on site or at sea.
- (e) "Quality control" to ensure that measures or equipment are satisfactory and meet specifications before payment is made for them.

The Division is the special responsibility of Brigadier (Retired) Brian Parritt CBE, Assistant Director of the IMB.

BTESHIP: A Model For Estimating Ship Operating Costs

The Federal Bureau of Transport Economics, Australia, has recently developed a computer model for estimating the operating costs of bulk and non-bulk cargo ships. This paper briefly covers the basis of the model, possible uses and availability of the program.

The model, BTESHIP, calculates the long run average costs to a ship owner/ operator for a voyage from port A to port B. The costs are an average over an analysis period specified by the user. This period might typically be set equal to the remaining life of the vessel. The resulting costs are output in total dollars for the voyage and in dollars per unit of cargo carried.

Any ship type can be costed by the model if all the necessary ship characteristics are known. However, given ship type and deadweight, the model can itself generate various ship characteristics for the following ship types:

*container

- *roll-on roll-off
- *general cargo
- *bulk/container
- *bulk *ore

BTESHIP calculates the vessel operating costs incurred between the time loading commences at port A and the time unloading ceases at port B. Options exist within the model to allow the user to add canal charges, port charges and/or stevedoring charges to the vessel operating costs if this is desired. The components of vessel operating costs are:

- *capital
- *fuel
- *crew
- *repairs and maintenance
- *insurance
- *victuals and stores
- *administration.

Capital, fuel and crew costs are the largest of the components. Capital costs are calculated as a long run average over the analysis period, using discounting and annualising methods. This includes allowances for vessel and container replacement where necessary. Fuel costs are calculated from fuel

^{*}tanker.

prices and consumption rates for both the main and auxiliary engines. Crew costs are calculated from the crewing level and a cost per berth.

If canal charges are included, they are input as a single dollar charge each time a canal is traversed.

If port charges are included for a single-leg voyage from port A to port B then the model will add the following items to the vessel operating costs:

*charges on the vessel at port A, eg tonnage;

*charges on the cargo at port A, eg wharfage;

*charges to exit port A, eg tug and launch charges;

*charges to enter port B;

*charges on the cargo at port B; and *charges on the vessel at port B.

Charges to enter port A and exit port B are not included by the model as they are assumed to be allocated to other voyages (the voyage arriving at port A and the voyage departing port B respectively). Similarly, charges on the cargo relate only to the amount of cargo loaded at port A and unloaded at port B.

If the option to add stevedoring charges is used, then charges relating to the amount of cargo loaded at port A and unloaded at port B are included.

BTESHIP is designed to enable single-leg and multi-leg voyages to be examined. If, for example, a triangular sailing pattern is to be costed then the model can be run separately for the voyages A to B, B to C and C to A and the resulting costs added to get a total cost. No costs will be double counted if correct input procedures are followed.

One major use of the model is to ex-

Guidelines Adopted

(Continued from Page 19, Col. 3) taken to encourage the productive use of dredged material for, for example, marsh creation, beach nourishment, land reclamation or use in aggregates.

"For contaminated dredged materials, consideration should be given to the use of special methods to mitigate their impact, in particular with respect to contaminant inputs. In extreme cases of pollution, containment methods (including land-based disposal) may be required but very careful consideration should be given to the comparative assessment of the factors listed above in selecting the most appropriate option."

Most dredging is carried out in order

amine the changes in costs with varying inputs. BTESHIP has been designed so that these changes can be made very easily. Areas of interest may include: capital cost, fuel prices, crew size, ship speed, cargo load, cargo handling rates and costs of extra time in port. In fact, any of the inputs may be varied in this way.

Sensitivity testing of ship operating costs to factors such as vessel size, crewing level or fuel consumption is also facilitated by the fact that as many as four similar vessels can be costed in one run of BTESHIP.

Finally, BTESHIP has the capacity to analyse the effect on cost of varying the parameters of a vessel such as the fuel consumption rate or crewing level during the analysis period. This facility is particularly useful for examining the difference in cost between modifying a vessel early in the analysis period and delaying the modification until later in the period.

The program has been designed to be easy to use, and yet still handle reasonably complex analyses. A comprehensive documentation for the model is in the final stages of preparation. The Bureau will seek to make both the program and its documentation readily available to transport researchers and others involved in the transport industry. BTESHIP is a FORTRAN program which will be made available on a floppy disc, compatible with IBM personal computers. The documentation and floppy disc will be available as a package from Australian Government Publishing Service bookshops in each State.

to keep harbours and hsipping lanes open and the resolution recognizes the importance ensuring that the interpretation and application of the Convention should be made as easy as possible.

The dumping of dredged materials is controlled primarily by annex III of the Convention.

The guidelines adopted by the Contracting Parties are mainly concerned with giving abvice on implementing this annex. They cover such matters as the conditions under which permits for dumping of dredged material may be issued; assessment of the characteristics and composition of dredged material; and management techniques for waste disposal. *(IMO News)*

New Publications

"A Guide to Contingency Planning for the Gas Carrier Alongside and Within Port Limits" by:

International Chamber of Shipping, Oil Companies International Marine Forum and Society of International Gas Tanker & Terminal Operators Ltd. (SIGTTO) London Liaison Office, SIGTTO: Staple Hall, 87-90 Houndsditch, London, EC3A, 7AX, England Tel: 01-621-1422

Telex: 894525 SIGTTO-G

This Guide of Contingency Planning for the Gas Carrier Alongside and in Port Limits has been compiled by an Inter-Industry Working Group with participation from members of the International Chamber of Shipping, the Oil Companies International Marine Forum and the Society of International Gas Tanker and Terminal Operators Ltd.

The purpose of the guide is to provide a reference which may be useful to port authorities, operating managements of liquefied gas terminals and operating managements of liquefied gas carriers in developing or reviewing their planning aimed at minimising the possibilities of accident and at controlling the consequences of such accident as might occur while a gas carrier is within port limits.

The guide is not intended as a comprehensive manual on contingency planning for all types of accident which may befall ships while entering/leaving port or berthed alongside. Nor should it be construed as a recommended Code of Practice. It confines itself to those aspects which are particularly relevant to the circumstances of the carriage and ship/ shore handling of liquefied gases.

Circumstances bearing on appropriate contingency planning for liquefied gases vary widely from port to port in such matters as the size and types of cargoes handled, nautical and weather considerations, industrial and local authority or governmental resources, etc.

The detail of planning and regulation for any port or terminal therefore is essentially a matter for local formulation and application. However, in providing a listing and some discussion of aspects which in various contexts have been found worthy of consideration, the guide may be found a useful aide memoire to such local formulation of appropriate and specific planning.

* * * * * *

"Beneficial Uses of Dredged Material"

304 pages. Tables, illustrations, appendices, bibliography.

Order from: Ms. Kay L. Heiberg, Water Resources Support Center, Dredging Division, Casey Building, Fort Belvoir, VA 22060. No charge.

Turning a problem into an asset might very well be the subtitle for this manual. "Dredged material disposal," notes the introduction, "provides opportunities for a number of environmental, economic, and aesthetic beneficial uses." The objective in this case is to provide "guidance for planning, designing, developing, and managing dredged material for beneficial uses, incorporating ecological concepts and engineering designs with biological, economical, and social feasibilities."

The study identifies ten categories of beneficial uses: habitat development, beach nourishment: aquaculture: parks and recreation; agriculture, forestry, and horticulture; strip mine reclamation and solid waste management; shoreline stabilization and erosion control; construction and industrial use (including port development, airports, urban, and residential); material transfer (fill, dikes, leevees, parking lots, roads); and multiple purpose use concepts. The chapters also include discussions of logistical considerations, baseline and monitoring studies, and site valuation. Additional helpful information is provided in the five appendices, which include a bibliography, glossary, plant materials for beneficial use sites, examples of beneficial use development on dredged material sites in North American waterways, and an alphabetical listing of the common and scientific names of plants and animals mentioned in the text.

Incidentally, copies of the proceedings from a Corps-sponsored workshop, also entitled, "*Beneficial Uses of Dredged Material*," may be ordered from the same source.

* * * * *

"World Bulk Ports": Ocean Shipping Consultants

£225, inclusive of airmail postage and packing.

Study Sales Department, Ocean Shipping Consultants, P.O. Box 33,

Feltham, Middlesex TW13 4JB, England. Telephone: 01-890 2207 Telex: 8950511 oneone g (ref. 22231001)

In additon to analysing the background to major bulk commodity port development, the 187-page report includes a highly detailed listing of the world's existing and planned port facilities for large bulk carriers, split down by commodity, facility type, country, and individual port.

It therefore constitutes the most comprehensive and up-to-date report on bulk ports available, and is thus essential reading for all parties involved in the bulk shipping and handling sectors.

Sales No.354.86.15.E, price £3.00 (English) To: IMO Secretariat, Publications Section, 4, Albert Embankment,

London SEI 7SR

☆ ☆ ☆ ☆ "List of Sea Parameters" by PIANC

Price: US\$12.00 A.A. BALKEMA Book Distributors Postbus 1675 NL-3000 BR Rotterdam, Nederland Telefoon: 010-4145822; K.v.K.: Rotterdam 119272

"Port Handbook for Estimating Marine Terminal Cargo Handling Capability"

Two Volumes: Executive Summary and Main Report. (Washington, D.C.: U.S. Maritime Administration, Office of Port and Intermodal Development, November 1986). Order from: National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22151. Phone: (703) 487-4650. Prices: Executive Summary (PB87-121133/AS)—\$11.95; Main Report (PB87-121125/AS)—\$18.95.

Published originally in 1979, the updated Port Handbook for Estimating Marine Terminal Cargo Handling Capability provides a method for estimating the annual cargo throughput capability of marine terminals based on standardized berthing modules. Modules were developed for each cargo transfer mode—break-bulk, containers, dry bulk, and liquid bulk cargo. The methodology provides three different levels of capacity estimation. The choice of level depends on the user's objective and the availability of data. For users requiring a general estimate, the *Handbook* provides a typical annual cargo throughput figure for each terminal module. Those requiring more detailed capacity estimates can apply the methodology using actual terminal data. The values contained in the methodology were developed on the basis of surveys of actual U.S. terminals. The *Handbook* methodology can be used in planning terminal facilities, developing expansion plans, or for evaluating current performance of exisitng facilities.

_☆ ☆ ☆ ☆ ☆

"Chartering Annual 1986."

128 pages. Graphs, tables, glossary. Order from: Maritime Research, Inc. 499 Ernston Road, P.O. Box 805, Parlin, N.J. 08859. Phone: (201) 727-0243. Price: \$75.

This fine publication provides a comprehensive listing of charter fixtures reported throughout the world during 1986. The data are arranged by commodity, trade route, and date. Trends are discussed in the opening summary and depicted graphically. Monthly averages for the major trade routes are plotted over a four-year period. Also included for historical reference are general freight, time charter freight, grain freight, and "miscellaneous" freight indices and graphs. The markets for which vessel fixtures are reported include coal (and petroleum coke), grain, sugar, ore, time, tanker, and 'miscellaneous."

The typical fixture identifies the loading and unloading ports, the vessel, cargo size, loading dates, charter terms, rates, and the source of the report. The data are presented chronologically, week by week, for the entire calendar year. For ports contemplating improvements (such as dredging) predicated on the bulk trades and bulk shipping, the *Chartering Annual* is an essential data source. It can be used in analyzing actual rate spreads betwee, for example, Panamax and Cape-size coal deliveries on specific routes.

Before spending a lot of money on improvements predicated on the assumption that bigger ships are somehow more economical than smaller ones, it would be a good idea to find out what charterers are actually paying, rather than relying on the theoretical musings of some computer model.

The Americas

Long Beach Launches Three-tiered Program To Bridge Info Gap

It seems like an international shipping hub such as the Port of Long Beach would be hard to miss.

One of the world's most modern ports, among the busiest harbors anywhere, the Port of Long Beach has been thriving in San Pedro Bay for 76 years. Still, the fact remains that a great many Southern Californians (and yes, even Long Beach residents) know little or nothing about the impact their neighbor port has on their lives.

Through its recent community relations program, the Port of Long Beach has set out to bridge that information gap.

The Port's community awareness campaign, which began February 15 and will culminate during World Trade Week (May 17-23), is part of "Operation COM SEE," a campaign designed to create support for the Port's programs by educating its publics.

More than anything else however, this comprehensive program is aimed at bringing into the public consciousness the substantial impact the Port of Long Beach and its tenants have on the daily lives of not just Long Beach residents, but on Southern Californians and the entire country.

To realize the goal of increased citizen awareness, the Port adopted a three-tiered program. Utilizing outdoor, transit and newspaper advertising, the Long Beach market was saturated with one of three alluring questions:

*"Who's responsible for 200,000 jobs and 2 billion bananas?"

*"Who brings a fortune to town without costing taxpayers a dime?" *"Who is 76 years old and lifts 219,000 tons a day?"

The questions, which were placed in Long Beach-based advertising mediums, first appeared by themselves. After a two-week period the "Port of Long Beach" answer accompanied the ads.

It is estimated that over 33,000 people a day are seeing the billboards alone. Throughout the course of the program the Port hopes to reach over 3



Long Beach Container Terminal recently moved to a new enlarged \$77 million 88-acre terminal at Berths 6-10 on Pier A. This latest container facility in Long Beach Harbor was created by filling in 24 acres of water and by removing five huge transit sheds and warehouses in order to use those sites for more productive cargo handling. The new LBCT facility boasts the four largest gantry cranes in the world, with a fifth to be added. This brings Long Beach's container capability to more than 500 acres, employing 26 gantry cranes, with several more on order.

million Southern Californians with the Port of Long Beach message.

During World Trade Week, the Port will follow up on the groundwork laid through the media campaign by giving Long Beach groups access to free harbor cruises. The Port expects some 4,000 Long Beach citizens, business groups, senior citizens, students and City employees to learn more about the Port via these informative tours.

A large percentage of the consumer

goods Southern Californians use daily—not to mention raw materials for business and industry—first pass through the Port of Long Beach.

The Port of Long Beach is proud to be this vital link and through its current community campaign, is confident that Long Beach and all of Southern California will be equally proud of their internationally-respected shipping port once they become aware of its not-sosudden impact.

Highlights of the Five-year Capital Program: Port Authority of NY & NJ

The past decade has marked an impressive economic turnaround for the New York-New Jersey metropolitan area, with population, employment growth and new public and private sector development still gaining momentum. Through this pivotal era, the region has relied heavily on the efficient performance of the Port Authority's vital transportation systems and its ability to finance their renewal and improvement as state and local governments have moved from fiscal crisis to fiscal health.

To sustain and expand the benefits of regional growth, The Port Authority of New York and New Jersey has proposed to both states a comprehensive capital investment strategy to rehabilitate and expand its core transportation facilities, and to fulfill the economic development commitments proposed in 1978 vhen the agency responded to the need for new investment to help rekindle commercial development and infrastructure renewal in the Port District. The proposed capital program elements for the next five years total more than \$5.8 billion, of which approximately \$4 billion actually would be expended from 1987 through 1991, with additional spending for some projects which will not be completed until the mid-Nineties.

This is a strategic agenda for an economically unified region which must address expanding local transportation needs and intensifying worldwide competition. The goals of the capital program are—

•To upgrade and expand the interstate linkage in the roadway and transit networks on which the region relies for moving people and goods throughout the bi-state Port District;

•To expand the passenger-and cargohandling capacity and improve the level of service at the region's airport system, responding to growing demand and emerging competition from other metropolitan aviation "gateways";

•To modernize the terminals, channels, and related facilities of the bi-state port in light of maritime-industry changes and competition from other Atlantic coast harbors;

•To carry out the maintenance and rehabilitation projects essential to assuring safe, reliable, and efficient operation of many vital but aging Port Authority transportation facilities, generally without interrupting service; and

•To stimulate private-sector investment and job creation, especially in business sectors that relate closely to the Port Authority's basic functions or that enhance the region's role as a center of world commerce, and in communities that have not yet shared fully on the region's economic renewal.

The new capital strategy incorporates and expands upon several previously announced agency capital programs including substantial renewal of the PATH system, modernization of maritime terminals and deepening of harbor channels, construction of new economic development projects in both states, and agencywide rehabilitation projects at vehicular crossings and other Port Authority facilities. The program also includes funds for the completion of regional development and bus programs undertaken pursuant to earlier agreements with the two states.

Many of the projects outlined in this summary have already been discussed publicly by the agency. Some already are underway. New initiatives proposed in this document include—

• Investment in PATH's Newark to World Trade Center service to accommodate trains up to 10 cars in length as demand warrants (8-car trains already are scheduled to be in service in 1988);

•Capital investment by the Port Authority to permit introduction of new passenger-only commuter ferry service between Hoboken and Battery Park City;

• Capital support for a new exclusive bus lane feeding the Lincoln Tunnel to relive congestion on the existing "XBL," in conjunction with other New Jersey transportation agencies;

•Recognition of the central terminal at JFK International Airport to improve ground circulation, baggage handling, and other services in anticipation of growing passenger volumes projected to the Year 2000;

•Commencement of comprehensive on-airport circulation improvement and parking expansion at Newark International Airport, including upgraded connections with local rail services;

•Development of additional terminal facilities at the east end of LaGuardia Airport, to improve its ground circulation and passenger capacity.

This is the most ambitious capital program ever outlined for the Port Authority. Even so, it is but one component of an unprecedented level of publicsector infrastructure investment in both states projected for the coming decade. During this period, estimated capital investment by state and local governments and transportation authorities may approach \$60 billion, including \$8.3 billion by the Metropolitan Transportation Authority, \$3.5 billion by New Jersey Transit and the New Jersey Department of Transportation, and \$30 billion by the city of New York.

Unlike some of these other government entities, the Port Authority's system of facilities must be selfsupporting and the agency does not have the power to tax, pledge the states' credit, or draw on most federal capital grant programs. While commercial tenants share in the costs of some facility improvements under lease arrangements, implementation of the program depends on availability of adequate revenues from tolls, fares, other user charges, and rents to support both operating costs and debt service on Port Authority bonds-those currently outstanding and those issued to support the capital program.

Capital Program Summary 1987-1991

(in millions)

Interstate Transportation System

PATH Improvement Program ¹	760
Hudson River Tunnels, Bridges & PABT System Improvement	380
PATH Station Improvements and Additional Cars	70
Hoboken/Battery Park City Ferry Service	150
Staten Island Bridge Improvements ²	65
Holland/Lincoln Tunnel Busway	25
Manhattan CBD Distribution Improvements	25
1	,475

Aviation

JFK 2000 ³	
Other JFK	
Newark 2000 ⁴	
Other Newark	
LaGuardia	
	2,410

Economic Development

Waterfront Development ⁵	175
Resource Recovery	300
Industrial Parks	75
	550
World Trade	110

n

Port	
Newark & Elizabeth	
Howland Hook	90
Dredging	
Other Projects	110
	510
Allocation for Regional Development Projects	150
Allowance for Projects in Development	225
TOTAL	\$5,430
Balance-Bus Program	50
Balance-Bank for Regional Development	235
Provision for Emergency Repairs	70
TOTAL CAPITAL PLAN	\$5,785

1. Includes expansion to 8-car trains, Newark Service, and 7-car trains, JSTC/33rd St. Service

2. Includes up to \$20 million for preliminary stages of possible SIB Expansion

3. Total Project Cost: \$2.7 Billion

4. Total Project Cost: \$1.35 Billion

5. Total Project Cost: \$250 Million

New York/New Jersey Slashes Assessments On Labor-Intensive Cargo

Assessments at the Port of New York and New Jersey will be dropped by more than 50 percent on certain laborintensive cargoes to increase work opportunities for longshoremen, officials said.

The reductions, effective April 1, fulfill pledges in the current contract in which waterfront workers agreed to concessions reducing labor costs and management said it would take steps to lower assessments on labor-intensive operations, according to a joint announcement by the New York Shipping Association and the International Longshoremen's Association, AFL-CIO.

NYSA President Anthony J. Tozzoli and ILA President Thomas W. Gleason said the reductions in assessmentslevies that fund workers' benefit package—will go far toward attracting the kinds of cargo the bi-state port needs to keep its longshoremen working and control its Guaranteed Annual Income costs.

GAI is a program designed to cushion the impact of dockside automation by paying eligible longshoremen even when no work is available. Mr. Tozzoli and Mr. Gleason hailed the assessment reductions as heralding "a new era of cooperation between labor and management in the Port of New York and New Jersey."

Under the plan, the current assessment of \$5.85 per ton will be reduced to \$2.85 per ton for cargo that is loaded into or discharged from containers by ILA workers; for breakbulk cargo, general commodities that are not carried in containers; and for military cargo. It eliminates the current \$65 container-unit assessment on military cargo.

The agreement drops charges on bananas to 1 cent per box from the current 5 cents per box.

The reductions on military goods also were spurred by a decision by the Military Traffic Management Command to increase the amount of cargo it moves through the bi-state port, Mr. Tozzoli and Mr. Gleason said.

"Both labor and management want this port to continue to be No. 1 in the nation, and this shows we're both willing to work hard to keep it that way," (Continued on Page 33, Col. 2)

U.S. Congress Approves Channel Improvements For Oakland

Major dredging projects including the deepening of channels in the Oakland Outer Harbor and the Oakland Estuary have been authorized by Congress with the passage of the first federal harbor improvement legislation since 1970.

Included in the \$16.3 billion Water Resources Act of 1986, passed by both the House and the Senate on the eve of their adjournment in October, were proposals to widen and deepen both the Oakland Outer Harbor and Inner Harbor channels from a present depth of 35 feet below mean lower low water (MLLW) to 42 feet below MLLW. All of Oakland's container terminals will be served by deepened channels. Also approved was the construction of new turning basins to serve the latest generation of deep-draft containerships.

Work on the Port of Oakland channel projects will begin within a year. All federal and state environmental regulatory approvals have already been secured.

The enlarged channels and turning basin will serve 25 berths and more than 500 acres of marine terminal facilities constructed by the Port of Oakland at a cost of more than \$200 million over the past 20 years.

The legislation, according to Oakland Board of Port Commissioners President G. William Hunter, assures Oakland's ability to accommodate the largest merchant vessels afloat today, and will remain adequate until well into the next century. President Reagan signed this historical harbor improvement legislation into law on November 17, 1986. (BRIEFS)

Cargo Records Set At Port of Long Beach

"Record breaking" is a long-standing tradition at the Port of Long Beach and during the port's 75th year of service to Southern California and to all of the nation, the 1985-86 fiscal period produced new highs in virtually every cargo category.

In the 12 months ending June 30, Long Beach's total cargo tonnage reached 57,008,946 metric revenue tons, an impressive seven percent increase over the previous fiscal period. For the sixth straight year, Long Beach handled more cargo than any other U.S. West Coast port.

Total inbound movements accounted for 39,953,521 mrt, outbound for 17,055,425 mrt. Estimated value of these commodities was in excess of \$25 billion.

Another all-time high for Pacific Coast ports is the 1,277,851 TEU container count achieved during the year, up nearly 12 percent from the 1,141,466 TEU record established the fiscal year previous.

Port officials estimate that during the fiscal period, 82 percent of all general cargo handled was carried in containers, with the balance being breakbulk commodities. Container tonnage imported was 16,353,775 mrt, while export container movements totaled 3,999,974 mrt. Tonnage of all containerized cargo reached a record 20,353,749 mrt.

Record Volume in Foreign General Cargo at NY/NJ

For the third consecutive year the Port of New York and New Jersey achieved a record volume in foreign oceanborne general cargo, Port Authority Chairman Philip D. Kaltenbacher reported in an analysis of foreign trade for 1986 released by the bi-state agency.

Foreign oceanborne general cargo volume rose to 13,888,608 long tons, up 1.0 percent over 1985, which was itself a record-breaking year. Value of this cargo was \$44.6 billion, up 8.3 percent from the \$41.2 billion for the preceding year.

"It is important to note that the bistate Port's general cargo tonnages continue to climb and have risen 33.6 percent since 1982," said Chairman Kaltenbacher. "Total tonnage reached record volume for the past year, despite the increasing weakness of the U.S. dollar and a pattern of diversions from our Port that began during the third quarter. These diversions were due to shippers' concerns about an unsettled longshore labor agreement which led to a brief maritime strike," he stated.

Chairman Kaltenbacher further noted the New York/New Jersey Port handled a total of 57.1 million long tons of oceanborne foreign trade, general cargo and bulk, up 11.2 percent from 51.2 million long tons in 1985. The value of this cargo reached \$49.9 billion, an increase of 2.3 percent over the \$48.8 billion of the previous year.

Europe remained the New York/New Jersey Port's leading general cargo trading partner with a 42.1 percent share and the Far East second with a 31.5 percent share. Europe, the Far East and Latin America accounted for 90 percent of the Port's general cargo volume. The Port's general cargo trade with the Far East climbed 12.4 percent to 4.4 million long tons while Europe eased down 0.3 percent to 5.8 million long tons in 1986.

Competitively, the Port's general cargo gain was below the United States ports' collective 2.7 percent gain and the North Atlantic ports' 3.4 percent rise. As a result this Port's share of total U.S. oceanborne general cargo trade edged down from 10.7 percent to 10.5 percent and its North Atlantic share declined from 46.0 percent to 45.0 percent in 1986.

Record Container Cargo in Charleston

"We handled 350,000 tons of container cargo in December, a record container month and an 80,000 ton jump compared to December a year ago,' says Mr. W. Don Welch, executive director of the Port of Charleston. "This is strong growth over and above even our normal pattern," said he. "South East is experiencing a healthy economic expansion and the strong lines at Charleston have captured the cargo resulting from this growth. A 31% rise in the December total speaks well for our container lines' capacity and their aggressive marketing," he added.

"These figures substantiate our port's decision to undergo a major strategic planning effort which involved two years of intense self-examination," Mr. Welch said.

"We consider ourselves in fighting trim to face today's challenging international shipping arena. We know where we are and we know where we are going: Charleston added 14 new lines last fiscal year to areas of the world which our Marketing and Sales staff had earmarked for strengthening," Mr. Welch added.

Charleston Set to Deepen, Extend Harbor

The deepening of Charleston Harbor moved one step closer with President Reagan's signature on the Water Resources Development Act of 1986. Charleston Harbor is one of 50 navigation projects included in the act which begins a new era in the Army Civil Works program.

The authorized project provides for deepening the harbor to 40 feet and extending it two miles along the existing channel in the Wando River to the Wando River Terminal. In addition, the federal government will assume the responsibility for deepening and maintaining the Wando River Channel, which was built by the South Carolina State Ports Authority.

The bill, H.R. 6, requires state and local governments to pay part of the cost of the projects. Under the cost share formula, the Authority will be required to pay 25 percent of the cost of the Charleston Harbor project. Plans are to dredge to 42 feet in order to maintain a 40 foot project depth.

Col. Stewart H. Bornhoft, the district engineer for the Charleston District of the U.S. Army Corps of Engineers said, "It's an important step for the future in that the beneficiary must help pay the cost of the projects.

"This new partnership will help meet water resource needs and federal dollars will go further. Moreover, smaller projects with more individual tailoring can be designed," he said.

Preliminary estimates for deepening the harbor to 40 feet had been as high as \$88.5 million, but recent revisions to the plan indicate that the cost will be much less.

The Water Resources Development Act authorizes the projects, but does not appropriate funds for the work. After the Corps obtains the necessary funds, the deepening project could begin as early as October 1, 1987.

"If we are to hold our position as the leading container port on the South Atlantic," said Mr. W. Don Welch, executive director of the Ports Authority, "it is absolutely necessary that we be able to deepen Charleston Harbor and maintain its channel efficiently. We applaud the Water Resources Bill as a step to help us achieve our goal."

Necessity is the Mother of Invention

As early as 1850, Charleston was a major port in the Southeast, but its continued dominance depended on providing a deeper channel. So, a Charleston native invented the first hydraulic dredge.

Even in 1850, silting in the harbor channels was a major concern. To combat the problem, a Charleston citizen invented the first hydraulic dredge, revolutionizing harbor dredging methods.

In 1850, Charleston was a major port in the Southeast, but its continued dominance depended on providing a deeper channel. The main navigational impediment was a sand bar blocking the harbor entrance.

Determined to have a deeper entrance channel, the Charleston Chamber of Commerce invited a committee to examine the existing channels and report those most feasible to improve. In 1852, the committee recommended improving Maffitt's Channel with a cut through the shoal separating its deep water portion from that of the northwest approach to the North Channel.

Capt. Albert Bowman, engineer in charge of the project, contacted nationally recognized dredge builder James Osgood. Osgood designed the first hopper dredge in the United States capable of steaming at 8 mph and dredging 100 cubic yards of bottom material per hour. A hopper dredge eliminated mud-boat tenders which would have been swamped working beside a dredge during swells at open'sea.

Unfortunately, the powerful, gigantic new dredge was a failure. During the trial period it never succeeded in dredging more than 450 yards per day.

Nathaniel H. Lebby, an inventive Charlestonian, designed a new concept for dredging based on his patented centrifugal pump used in draining rice fields. He probably had observed considerable silt being entrained in the water and perhaps even a hole in the drained field where the pump had been. Lebby designed the world's first hydraulic suction dredge.

During negotiations between Lebby and Capt. George W. Cullum, engineer in charge, James M. Eason and his brother Thomas became owners of Lebby's design.

The new dredge, the "General Moultrie," was built in New York and began operating in Charleston in February 1857.

This hydraulic or suction dredge was a radical departure from the previous mechanical dredges that relied on cumbersome dippers or ladder buckets. Suction hopper dredges used today in coastal waters are all based on the invention of Charleston's Nathaniel H. Lebby. (Port News)

5-Day Advance Release For Cargoes at Savannah

The latest feature added to the Port of Savannah's sophisticated COBRA paperless processing system is advance release for inbound cargoes. Under the program, import goods can be released by U.S. Customs and Department of Agriculture up to five days in advance of the actual docking of the vessel.

Customs/USDA release is only one step in the process of expediting the inland delivery of cargo. For this reason, COBRA also permits the pre-arrival issuance of steamship line releases. As a final step, motor carriers can be notified which containers they will be picking up for a given vessel before it makes port. This comprehensive package assures that prompt release translates to timely equipment positioning and inland delivery.

Shippers, brokers, government entities and the Georgia Ports Authority will derive benefits from these new refinements to COBRA:

- 1. Brokers will have more time to plan for examinations.
- 2. Receivers and consignees will be notified in advance of upcoming inspections.
- 3. U.S. Customs and USDA will experience a smoother work flow with entries spread over a five day period.
- 4. GPA will have a better planning tool to maximize space, equipment and manpower utilization.
- 5. Equipment can be scheduled in advance for draying containers for Customs/USDA inspections.

Port of Seattle Opts for 2 More Portainer* Cranes

Paceco, Inc., a subsidiary of the Fruehauf Corporation, has received an order from the Port of Seattle for two 50 long ton capacity ship-to-shore container cranes identical to the four recently delivered. The order stems from an order placed in 1984, which included an option for two additional cranes.

The new cranes, the largest of their type, were designed specifically to service the new generation "Beyond Panamax" ships which call for faster speeds, a longer outreach, more clear underspreader height, and more lifting capacity.

To satisfy the new parameters without adding unnecessary weight, Paceco engineers were required to optimize the design. The result was a bigger, stronger and faster crane weighing several hundred thousand pounds less than a similar size crane of previous designs. In addition to having a longer operating life expectancy, the new cranes are designed for easier maintenance.

The principle dimensions include an outreach of 145', a backreach of 50', a span of 100' and a total lifting height of 145'. The hoist speed with the load is 165 fpm and 385 without. The trolley speed is 500 fpm while the cranes gantry speed is 150 fpm. *Registered trade name

Port Traffic in US

Waterborne commerce at U.S. ports in 1985 totaled 1,176,111,891 tons, according to the U.S. Army Corps of Engineers. That total, which includes both foreign and domestic cargoes, was down slightly from the 1,209,000,759 tons reported for 1984. Imports in 1985 amounted to 412.7 million tons (compared to 427.1 million tons in 1984 and 387.9 million tons in 1983). Exports stood at 361.6 million tons (down from 376.2 million tons in 1984 and 363.3 million tons in 1983).

Coastwise volumes were 309.8 million tons in 1985, 307.7 million tons in 1984, and 309.6 million tons in 1983. Cargo moving between U.S. Great Lakes ports totaled 92.0 million tons (versus 98.0 million tons in 1984 and 83.5 million tons in 1983).



Two of the four "New Generation" Paceco Portainers recently put into operation at the Port of Seattle, Washington. The two cranes recently ordered by the port will be identical to these cranes. All six of the cranes will be capable of handling the wider "Beyond Panamax".ships currently on order.

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Tacoma Longshoremen Set New Productivity Record

The Port of Tacoma, the first port on the West Coast to have an on-dock intermodal yard, continues to lead the industry in intermodal productivity.

On February 3, 14 straddle carrier drivers and related support personnel of ILWU Local 23 performed 937 container lifts in one shift, setting what is believed to be a new world record.

"Two of the major factors that have helped this Port be successful over the last few years have been our excellent longshore labor force and our intermodal yards," said Port Commission President Joe Faker. "This new record proves again how important both of these elements are to the Tacoma Advantage."

Faker made his comments during the presentation of a plaque to the longshoremen in recognition of their achievement. The Port also presented each individual with a hat bearing the insignia "937" and a certificate commemorating the event.

Tracing Lost Cargoes and Containers

By Rebecca Elliott

In an industry that often seems dominated by mountains of paperwork and computer printouts, it is surprising how often shipping containers are lost and goods aren't delivered.

The past two years, an international organization, Data Tracer International A/S, has been developing its system to combat the losses of cargo and containers by importers and exporters, shippers, and carriers. While the exact amount is difficult to compute, annual losses are estimated to be in excess of one billion U.S. dollars, not including consequential losses.

A Norwegian-based organization, Data Tracer helps reduce financial losses by tracing goods, containers, and equipment through a worldwide network of "finders" and agents in more than 160 countries and a data base comprising in excess of 25,000 boxes. All jobs are carried out on a "no cureno pay" principle.

Mr. Robert Bambino, vice president of Data Tracer's U.S. subsidiary in New York, explained that most containers and chassis are lost through poor reporting.

"It falls out of a computer system or hasn't been redelivered properly...someone doesn't report a change in the container's position," he said.

"We get most cases from developed nations," he added. "Most losses occur in developing nations, basically because of the unsophistication of the system in these areas."

Data Tracer agents and finders, specialists in international transportation, insurance, and commerce, search for lost cargo and equipment by starting with its last known location, given by the reporting company. The detective work is carried out through phone calls and fieldwork.

(Continued on Page 33, Col. 2)

Tacoma Is First Port On West Coast With New Customs System

The U.S. Customs Service has selected the Port of Tacoma as the first port on the U.S. West Coast to install its Automated Manifest System (AMS).

AMS is a segment of Customs' overall program for reducing its paperwork. Because of the unprecedented growth in the rate of imports to the U.S., formal Customs entries are expected to jump from 4.4 million in 1980 to 9 million by 1990, a Customs document states. A "paperless" system is the agency's ultimate goal, and Customs has declared the AMS module "a first step in that direction."

With the system, a customer's manifests are electronically transmitted directly to Customs. AMS allows the majority of cargo to be pre-cleared before it ever arrives at the terminal.

A major reason why Customs selected Tacoma for this program is the Port's Marine Terminals Automated Management System (MTAMS). First installed at the Port in 1983, MTAMS facilitates the Port's ability to track container movements through its container terminals and gatehouse.

MTAMS has since been expanded to provide its data base to shippers, allowing them to monitor their cargo minuteto-minute.

"The system ensures that Port customers have the most accurate and timely information possible," said Port executive director Larry Killeen.

Master Plan to Take Port of Corpus Christi Into 21st Century

A far-reaching master plan to take the Port of Corpus Christi well into the 21st Century was given careful consideration by the port's commissioners in the final quarter of 1986.

Principal author of the comprehensive blueprint is Colonel Nolan C. Rhodes, the Port's Director of Engineering Services, who stated that the plan's key goals for the port are to:

- *Continue the growth, progress and service that have constituted the port's trademark for the last half century.
- *Seek and exploit the economic opportunities which will enhance and generate waterborne cargo.
- *Work with port and port-related industries to create job opportunities for the maximum number of personnel, and
- *Diversify the port's cargo base with the view of reducing its dependency on a single commodity.
- *Colonel Rhodes divided the master plan into near-term (five years), mid-term (10-15 years) and longterm (15-25 years) objectives.
- The near-term objectives are to com-

Mr. Knecht New Pres. of Board of Commissioners Of Port of New Orleans

Mr. Joe Knecht, president of the Greater New Orleans AFL-CIO, was elected president of the Board of Commissioners of the Port of New Orleans at the board's regular meeting February 26.

Mr. Knecht, whose term as president of the seven-member dock board runs one year, currently serves as chairman of the Industrial Development Board of the City of New Orleans and as a member of the New Orleans Aviation Board.

He serves, too, on the Mayor's Business Development Council, the executive committee of the Metropolitan Area Committee, and on the board of the United Way for the Greater New Orleans Area.

He is also secretary of the Metropolitan Council for Lifelong Learning of the University of New Orleans Metropolitan College. (AAPA Advisory) plete the 45-foot project, support and sustain the petroleum/petrochemical business, initiate "people's projects" to make the port area more attractive to tourists, buy land on a selective basis, put the Foreign Trade Zone into major earning status, establish container service, build a multi-purpose cargo dock, bring Navy on board with Homeport, and vigorously market earning centers.

In general, the port staff seeks to meet the needs of area industries, and to respond to the changes in world markets. By acting with the same forethought as the original planners, present day port officials will be able to pass on to the future a superior, viable facility geared for growth.

(Port Book Then & Now)

CH2M HILL, Associate Member of IAPH

CH2M HILL.

It isn't a formula. It's the combination of five men's names: Holly Cornell, James Howland, T. Burke Hayes and Fred Merryfield, who formed an engineering firm in 1946; and Clair A. Hill, who began his own engineering business that same year.

Today, CH2M HILL stands for excellence in consulting engineering, planning, economics and the environmental sciences. Over the past 17 years, it received more than 60 national achievement awards for its efforts to provide the best possible solutions to meet its clients' needs. CH2M HILL has enjoyed 39 years of growth and now numbers more than 2,300 men and women.

What is its formula?

Employee Ownership: CH2M HILL is the largest employee-owned consulting engineering firm in the United States. Everyone at CH2M HILL has a stake in the successful completion of its clients' projects.

70% Repeat Business: Most of CH2M HILL's projects are carried out for clients who have used its services before.

Decentralization: Although *Engineering News-Record* consistently ranks CH2M HILL as one of the top ten engineering firms in the United States, the firm has not forgotten that local understanding and close proximity make a difference. To provide personalized services, it has over 40 offices located throughout the United States and abroad.

Technological and Managerial Excellence: Through its work on over 30,000 projects, CH2M HILL has advanced the state of the art in technology and in project and program management. Its track record has enabled it to attract dedicated, creative professionals to CH2M HILL.

CH2M HILL offers a full range of port services, from planning through construction.

Management: Project Management, Program Management, Construction Management

Design: Terminals—Bulk, General, Cargo, Container; Foundations, Dredging, Corrosion Control, Industrial Plants and Processes, Traffic and Cargo Flow, Breakwaters, Marinas

Planning and Economic Feasibility: Master Plans, Market Research, Cost and Technical Feasibility Studies, Aerial Photography, Surveying, Soils Investigations

Environmental Studies and Permits: Environmental Assessments. Hazardous Materials Studies and Design, Ocean Engineering, Permits

Patent for Hopper Car Door Opener Received

A patent has been received for a device that saves the Port of Houston Authority an estimated \$15,000 to \$20,000 a year at its Bulk Materials Handling Plant. The Bulk Materials Handling Plant is a public facility at the Port of Houston operated by the Port of Houston Authority (PHA) and handles dry bulk materials such as fertilizers.

The device, an arm arrangement which facilitates opening of railroad hopper car doors in congested areas, has speeded unloading procedures at the plant, cutting the time required to prepare a hopper car for unloading by 10 to 15 percent, according to Mr. James D. Pugh, executive director, Port of Houston Authority.

Using the arm arrangement, a single worker can easily use a multivane air motor to open the door of a hopper car, even in small or congested areas.

The patent was issued in the name of Mr. Melvin L. Tullos, a port authority employee who developed the device, but port authority as assignee.

Port of Jacksonville: Outstanding Intermodal Capability

Comprising a 25-mile stretch of the St. Johns River from downtown Jacksonville to the Atlantic Ocean, the Port of Jacksonville is ideally located for servicing the markets of Europe, South America and Africa, as well as those of the Southeastern United States.

Among the considerable amenities afforded by "Jaxport" are direct access to the major Atlantic sea lanes, significant capacity for growth and mild weather that ensures unhampered operations throughtout the year.

The Jacksonville Port Authority (JPA), an independent city agency chartered by the State of Florida, owns and operates two seaport terminals at Jaxport, Talleyrand Docks & Terminals near the downtown area, and Blount Island Terminal, approximately eight miles from the ocean.

Most of the other seaport facilities, which include container, general, liquid and dry-bulk cargo terminals, shipbuilding and repair yards and manufacturing plants, are privately owned and operated.

As a distribution center, Jacksonville offers economically feasible air, rail,

10-Year Plan Completed To Revitalize Boston Port

A ten-year plan to revitalize the Port of Boston by improving existing facilities and stabilizing cargo volumes has been successfully completed, according to the Fiscal Year 1986 Annual Report recently issued by the Massachusetts Port Authority (Massport). Now, to provide opportunities for additional growth in the future, Massport is moving to access and reactivate underutilized waterfront properties which are uniquely suited to maritimerelated uses.

"Although we have seen significant gains in the past decade, future successes require that we have the ability to physically handle increased maritime activity in the Port of Boston," explained Mr. David W. Davis, Massport's executive director. "Through judicious use of our available resources, we are in a unique position to take the initiative in preserving water and trucking coverage of all of Florida, west to the city of New Orleans, northwest through the states of Georgia, Tennessee, Kentucky and West Virginia, and north through the mid-Atlantic states on the eastern seaboard.

Recognized as one of the largest rolloff/roll-on ports on the eastern seaboard of the United States, the port presently accommodates over 150 firms engaged in marine-related industries, from ship building and repair to ship's stores.

Jaxport offers outstanding intermodal capability, provided by three railroads, over 100 trucking companies and the air cargo operators at Jacksonville International Airport.



waterfront sites that offer the deepwater berthing necessary for marine industrial uses."

Examples of this broad-based policy were Massport's recent purchases of two waterfront properties. In the winter of 1985, Massport acquired the 18.5-acre former Boston Shipyard site for \$10 million. After spending over \$1 million for an environmental clean-up and maintenance of on-site equipment and structures, Massport awarded a 25-year lease to J.M. Cashman, Inc., a North Weymouth contracting and dredging firm, to develop a combination ship repair facility and marina on the property.

A second opportunity to maintain the marine-related character of a waterfront site was cemented with the December 31, 1986 purchase of the former Revere Sugar property on the Charlestown waterfront for \$5,990,000. Since the site has the deep-water capacity needed for cargo handling, Massport anticipates that it will best complement its other maritime operations within the Port of Boston. According to Massport's annual report, the three public terminals in the Port of Boston handled 1.1 million tons of general cargo, valued at \$3.8 billion. Moran Terminal in Charlestown handled 44,847 containers; Conley Terminal in South Boston handled 41,093 containers and 47,510 automobiles; Harbor Gateway Terminal handled 51,998 automobiles at Massport Marine Terminal and 19 cruise vessels at the Black Falcon Cruise Terminal.

"The growth in cargo handled at Massport's marine terminals benefits not only the port-related industries, but also assists in strengthening the regional economy. As the gateway to New England's market of 13 million consumers, the Port of Boston is an integral link in maintaining our international trade balance," Mr. Davis said.

In terms of maritime-related capital improvements undertaken in FY 1986, the May 1986 grand opening of Massport's year-round passenger facility, the Black Falcon Cruise Terminal, contributed over 7 million tourist-

(Continued on Page. 44, Col. 1)

Replices of Columbus' Ships to Anchor At Port Canaveral

Port Canaveral was recently selected as the port where replicas of the Nina, Pinta, and Santa Maria are to be built in recognition of the 1992 Quincentennial celebration of Christopher Colubus' discovery of the Americas.

At a cost of about \$12 million The Fleet fo Discovery will be constructed by Geo/Arts Associates, according to Mr. Rockwell Stensrud, managing director. Geo/Arts Associates is a limited partnership founded to produce largescale projects for the 500th anniversary celebration. The ships will be full-size, seaworthy replicas built to resemble as closely as possible the original shipsfrom the wood used to the rigging and stores on board. "Every effort will be made to achieve authenticity in scale, design, and overall appearance," said Mr. Stensrud.

Geo/Arts originally looked at 15 possible port sites for construction of the fleet. Port Canaveral was chosen for three main reasons. First, the weather at Port Canaveral is conducive to a year-round construction schedule.

Secondly, Port Canaveral is only 60 miles form Walt Disney World, the world's most popular tourist attraction, which helps in attributing 25 million annual visitors to the area. Visitors will be encouraged to watch the actual building of the ships and because of Port Canaveral's location and growing cruise industry, additional spectators are anticipated.

Lastly, because The Fleet of Discovery is being compared to the ongoing U.S. efforts in exploring space, Port Canaveral's proximity to the Kennedy Space Center will help bring about a comparison in the two.

The port authority commission is scheduled to grant Geo/Arts a shortterm lease for approximately ten acres of land located on the west side of the West Turning Basin. Actual construction of the ships is scheduled to begin in 1987 and take approximately three years to complete. "We are very pleased at the prospects of this project and what it will mean for Port Canaveral and its community," said commission chairman Mac McLouth.

Geo/Arts is currently looking for the

remaining sponsorship for the event. "We are seeking up to five corporate sponsors, companies with the vision and marketing skills to capitalize on the Fleet's construction and tour," said Mr. Stensrud. *(Port Canaveral Capsules)*

User Charge Law Welcomed by Ports

A dark cloud which threatened the future of many American ports and waterway has turned out to have a silver lining.

It came in the form of waterway user charge legislation that was recently signed into law by the President.

Passage of the federal cost-recovery measure allows the development of national waterway projects which have been delayed for over a decade—including those which will upgrade the Columbia River as a navigable highway.

This highly important victory for the national came about as the result of a compromis in which Oregon Senators Mark Hatfield and Bob Packwood had lead roles.

The user charge law originally proposed by the Reagan Administration called for a system of port-specific user charges for deep-draft vessels to recover costs of development and maintenance expended by the federal government. For shallow-draft vessels, the original administration proposal called for the doubing of the current barge fuel tax to develop and maintain the nation's inland waterway systems.

Under such a system, shippers would have been assessed for the costs of operating and maintaining coastal and inland waterways.

For the Port of Portland, this would have resulted in an estimated loss of up to 5 million tons of cargo worth about \$750 million to the region's economy and affect some 15,000 jobs.

The compromise provides for a nationally administered uniform system of fees for deep-draft vessels. This would prevent any single port from achieving an unfair competitive advantage.

The fees would be assessed on an ad valorem basis, reflecting the cargo's ability to pay.

For shallow-draft vessels, the compromise provides for a gradual increase to the exisiting 10-cent barge fuel tax, a penny a year for ten years beginning in 1988. This tax would supplement the trust fund out of which 50 percent of the financing for the inland waterway projects come.

User charges will allow the continued development of American ports and waterways, including the Columbia River navigation system. One of the most criticl projects to improve that system is the construction of a new lock at Bonneville Dam. Currently the narrowest and oldest on the system, it is the site of barge congestion. A total of \$190 million was appropriated in the last Congress for the new lock.

Another project which could be made possible through user charges is the establishment and msintenance of a series of anchorage areas on the Columbia River for grain an other deepdraft vessels.

These projects will complement the improvements which have already been made on the systm, including the deepening of the Columbia River bar to 55 feet, which was completed in 1983, and the annual dredging of the 40-foot shipping channel to the Pacific Ocean. (PORTSIDE)

Mr. Zador Appointed Soros Associates VP



Soros Associates, Consulting Engineers, New York, New York, announces the appointment of Andrew T. Zador, as Vice President. Mr. Zador was

Mr. A. T. Zador responsible for developing Soros Associates' computer programs—PORTLOG, YARDLOG, and TRANSLOG—that can simulate the operations of ports, storage and transport systems. Soros Associates subsequently applied these programs for investigating over 100 port installations and transport-systems around the world.

Mr. Zador participated in the logistical planning of some of the world's largest bulk ports including Tubarao, Carajas, Cerrejon, Port Hedland and several U.S. coal loading ports and railroad operations. He is the author of a number of technical papers on computer simulation for port planning and on stacking, reclaiming, blending and continuous ship unloading technology.

Drug Trafficking

(Continued from Page 19, Col. 3)

information on stevedore companies which lade vessels overseas as well as similar information on any contract companies which provide vessel related services overseas.

Personnel Security

- 36. —The carrier will permit only properly identified employees to handle cargo and vessel operational information and will permit such employee access only to the degree required by their assignments.
- 37. —The carrier will provide identifying data given by current employees and applicants for employment, upon Customs request.
- 38. —The carrier will train security personnel to recognize and report cases where anomalies indicate possible internal conspiracy.
- The carrier will train security personnel to recognize and report indications that an employee is vulnerable to criminal coercion.

General

- 40. —The carrier will provide clearly identified and readily accessible local points of contact for all matters identified as of enforcement interest to Customs (cargo bookings, reservations check, cargo tracking, employee information, etc.).
- 41. —The carrier will establish a system of rewards for employees who furnish information on narcotic smuggling or who discover and report finding narcotics.
- 42. —The carrier will establish, as a matter of company policy, a requirement that all of its managers, supervisors and employees co-operate fully with U.S. Customs in implementing the various actions and initiatives growing out of this agreement.
- 43. —The carrier will encourage the opening of an on-going exchange of information between its employees and U.S. Customs.
- 44. —Whenever the carrier requests Customs' assistance at an overseas location, such assistance will be at the carriers' expense.

Carriers who abide by this agreement cannot, by law, be exempted from statutory sanctions in the event narcotics are uncovered by Customs and evidence indicates vessel employee involvement. However, the extent to which the carrier has evidenced compliance with the terms of this agreement will be favourably used by Customs in arriving at its decisions in determining final case disposition.

New York/New Jersey

(Continued from Page 25, Col. 3)

Mr. Gleason said.

"These operations require extensive hands-on work by longshoremen," Mr. Tozzoli added. "The more of this cargo we handle, the more people we'll put back to work and the fewer we'll have on Guaranteed Annual Income."

Mr. Tozzoli and Mr. Gleason also announced that a new management-labor panel called the Work Practices Committee has been formed to explore further ways of boosting the bi-state port's productivity. The two association presidents will chair the committee.

The reduced assessments and the Work Practices Committee are the latest in a series of efforts aimed at promoting efficiency on the New York-New Jersey waterfront. New collectivebargaining agreements reached last fall froze longshoremen's wages for two years, reduced the number of hours in the GAI program, resulted in more than 700 recent retirements and cut manning levels.

(NYSA-ILA Contract Board)

Tracing Lost Cargoes

(Continued from Page 29, Col. 2)

As well as lost cargo, Data Tracer, at times, finds out cargo was never shipped or the consignee received the cargo later than expected, but "forgot" to inform the insurance company.

Mr. Bambino said, "The finding actually comes down to people. The computer is a tool to help keep track of numbers."

With a successful search, Data Tracer charges one-third of the value of the cargo or equipment, with a \$200 minimum for a box or chassis.

Shippers often write off a loss quickly, Mr. Bambino said. Insurers bear the brunt of the monetary loss, which is reflected in insurance premiums. Data Tracer implemented the "no cure-no pay" policy to increase awareness of its services and benefits for insurers.

In one successful search, Data Tracer saved one British insurance company US\$45,000 by locating a partial shipment of computer parts being shipped from Los Angeles to Beijing. Another case, involving a loaded container lost in the northern part of Norway, took Data Tracer one and one-half hours to solve, while the insurance company had tried for over a month to find the box. The British insurer saved 3,500 pounds.

As with any detection work, tracing cargoes and containers is easier with a fresh trail. Losses need to be reported as soon as they occur. Insurers and others are encouraged to input decal numbers and other identifying details into the Data Tracer data base—at no cost.

A quick search through field information determines if missing items have already been registered as "found." If not, the information is stored as "lost" data, until a match may be made with details supplied by the "finder" network.

Data Tracer also offers a range of supporting services such as arranging surveys; ascertaining what storage and other charges are due before recovery can be made; and managing the recovery, sale, and shipment of items located. Data Tracer also advises the owner of a local or national authority's political attitude that might affect the recovery and shipment of goods and containers. *(Port News)*

Mrs. Frith Elected PCAPA 3rd VP

During the business session of the recent Pacific Coast Association of Port Authorities midyear meeting in Palm Springs, California, the Board of Directors elected Mrs. Irene Frith to the office of PCAPA 3rd Vice-President. Mrs. Frith fills the vacancy created by the resignation of Mr. Glen MacRae whose resignation was accepted by the PCAPA Board with regret.

Mrs. Frith, chairman of the North Fraser Harbour Commission, made Harbour Commission history, when on October 30, 1986 she became the first woman in Canada ever to chair a Harbour Commission. Elected to the chair by her fellow Commissioners she replaced Mr. Glen MacRae who chaired the Commission for two years.

Irene has also been appointed by PCAPA President, Mr. Louise DuVall, as Chairman of the PCAPA Economics Committee. Following the normal turn of events, North Fraser will host the PCAPA convention in 1990.

Record Number of Containers Handled at Montreal

The Port of Montreal handled for the

first more than half a million containers in a single year; it handled exactly 531,525 containers in 1986. Containerized traffic increased by 11.7% to reach 4.9 million tonnes in 1986, a fourth consecutive record year. Seen in front of a large banner showing the record number of containers handled are Ronald Corey (right), Chairman of the Board of Directors of the Port of Montreal, and Dominic J. Taddeo, General Manager and Chief Executive Officer.



Saint John Reports 41% Increase in Tonnage

Cargo handled at the Port of Saint John, N.B, in 1986 was up 41% over 1985, from 8,662,000 tonnes to 12,223,000 tonnes. Saint John Port Corporation General Manager Ken Krauter reported most of the increase occurred in bulk cargo.

Saint John registered a 17% increase in foreign-trading vessels calling at the port in 1986, from 535 to 624.

The newly-formed Saint John Port Corporation is working on the development of a new marketing strategy and implementation of a plan to expand the Port's traffic base and market share.

"Changes in world trading patterns and domestic markets need to be identified and assessed in an overall program to improve the competitive position of the Port of Saint John," says Mr. Krauter. "We are operating in an increasingly competitive and changing global and continental environment and we need to start taking action now if we are going to be successful in the future."

1987: Year of Recovery At Port of Quebec

With a new collective agreement signed February 4 by the Maritime Employers Association (MEA) and International Longshoremen's Association (ILA, Local 1739), 1987 will be a year of recovery at the Port of Quebec.

"A renewed emphasis will be placed on our marketing programs, clearly demonstrating that the recent labour dispute has been resolved to the benefit of shippers," says Port of Quebec General Manager and Chief Executive Officer Jean-Michel Tessier.

A lock-out declared September 16, 1986, by the MEA virtually halted port activity during the last quarter of the year, causing a 15% decline in traffic to 12.5 million tonnes, compared to 14.7 million tonnes in 1985. All principal commodities were adversely affected by the dispute, with the exception of petroleum and chemical products. Ultramar of Canada intensified shipments of crude oil and finished products at its pier serving the St. Romuald refinery, following the purchase of Gulf Canada and its network of service stations in Eastern Canada.

Despite the drop in overall tonnage, 1986 was also marked by positive developments which should favour future traffic volume.

The Port of Quebec signed a declaration of cooperation with the ports of Le Havre, Rouen and Honfleur, in France. These ports of the Lower Seine River serve one of the most heavily populated, industrialized regions of Europe, handling 75 million tonnes of cargo annually. The agreement offers many possibilities for the exchange of commercial information and technical expertise.

"We will further strengthen ties with our French colleagues in 1987, with the objective of increasing trade in the near future," adds Mr. Tessier.

In cruise shipping, 1986 was a record year, with 70 calls by vessels principally sailing from the United States' east coast. An increase in this type of business is expected in 1987.

"These are factors which encourage optimism for port traffic in the coming year. The port administration has set its sights on a full recovery for 1987," concludes Mr. Tessier.

(Port de Quebec)

Africa/Europe

Antwerp, Driving Force Of the Belgian Economy; Port Modernization Urged

The Municipal Administration of Antwerp and the private port sector have published a white book which illustrates the importance of Antwerp as the driving force of the national economy. In it they energetically urge the Belgian Government to make the necessary funds available so that in the future the development and modernization of the port can be continued.

The following works are considered to have priority:

- 1. Deepening of the Scheldt (50'/48'/43' programme) and the completion in due course of the Berendrecht Lock;
- 2. The container terminal alongside the Scheldt;
- 3. Renovation of out-dated infrastructure and superstructure; and
- 4. The Baalhoek Canal, including its sea lock for the further opening up of the port on the Left Bank.

The Antwerp port community has sufficient arguments to convince the Belgian authorities of the validity of its claims.

With its annual traffic volume of 85 to 90 million tons Antwerp is by far the most important Belgian port. With 75,000 employed it is the largest employer in the country. The overall added value which is created here equals 205,000 million BF and as a result of this every year 75,000 million BF flow into the Belgian treasury under the form of taxes. Finally the port has a beneficial influence on the national balance of payments since the actual port activity in Antwerp earns a minimum of 40,000 million BF in foreign currency.

The execution of these priority works should not constitute a problem within the framework of the restricted expenditure plan of the Belgian Government.

The Antwerp port community considers that in the future—as it has been in the past—large-scale infrastructure works (maritime access, locks, etc.) will have to be fully supported by the State. However, the superstructure in the Belgian sea-ports should be paid for by the private sector.

In this respect the Antwerp private sector has been giving the good example.

By making purposeful investments in superstructure which meet the specific requirements of the various traffics, the Antwerp port companies are able to offer the shippers a first class service package.

The fact that the foreign clients highly appreciate this is proven by the fact that transit traffic represents over 45% of the overall port traffic.

(Hinterland)

New Cargoveyor for Fruit Terminal at Antwerp Port

Belgian New Fruit Wharf (B.N.F.W.) has placed an order with a Dutch engineering works for the supply of a "continuous unloading equipment" or "cargoveyor." This is the fourth unloading unit of this type the fruit handling company intends to put into operation at its terminal at the Albert Dock. The first unit was supplied in 1980.

The cargoveyor enables fruit boxes to be unloaded and moved with a minimum of shock and under all weather conditions from the hold to the warehouse via a spiral-shaped conveyor belt. The order which will be delivered early April 1987 calls for an investment of BF 75 million.

Belgian New Fruit Wharf has also taken an option on two additional unloading conveyors.

(Hinterland)

Unique Training for Transport Management

By organising an excellent conference on the position of Rotterdam as a distribution centre, the Higher Port and Transport Training Department of the Higher School of Economics in Rotterdam showed that the students are able to cope with the demanding nature of management functions.

As early as 1965, the Port and Transport Training Foundation set up a Higher Training Course, which lasted two years and was intended for students who had completed preuniversity school and similar institutions. In the long term it appeared to be necessary to root this course in the structure of the legally regulated higher vocational education.

In 1981 the Rotterdam municipal authorities issued a report on the port's general cargo sector. This contained a plea for higher vocational education status.

In 1982 the Port and Transport Training Foundation, the Foundation for Higher Commercial Education in Rotterdam and the Association Academy for Visual Arts and the Technical Sciences (HTS) arrived at a joint initiative which led in 1983 to the Port and Transport department at the Higher School of Economics, which is now based in the complex of the Erasmus University.

The aim is to investigate all the aspects involved in transport and the integral management of the flow of goods and to become acquainted with the main management methods.

The training course is not intended as a specialisation for a particular function or company. It is aimed at the practical requirements of both transfer and haulage and the storage and handling of goods at ports and airports.

The course lasts 4 years. The fourth year includes a period of work experience with a final assignment.

(Rotterdam Europoort Delta)

New Ro-Ro Link Between Stockholm and Gdynia

Since February 5, Trans-Baltic AB has introduced a new ro-ro link between Stockholm and the Polish port of Gdynia. The line is being served by the m.v. Misida which can take 65 trailers under deck as well as unit loads above the weather deck. The vessel also has good accommodation for a number of drivers.

Trans-Baltic have also reached agreement with the Polish State Railways on the introduction of direct unit trains with piggyback wagons between Gdynia and Vienna, coordinated with the arrival and sailing times of the Misida.

Furthermore, co-operation with Polish United Baltic Corp. (PUBC) enables Trans-Baltic to offer transit at Gdynia for units to or from the UK ports of Purfleet and Middlesbrough.

New Radar Chain for Traffic Control Soon Operational at Amsterdam

Shipping in the Gateway to Europe will be guaranteed even greater safety and smoother progress when the first phase of the new Traffic Control System (TCS)—the most modern system of its kind in the world—comes into service at the beginning of next year.

The new radar chain, which consists of 26 radar stations along a length of 19 kilometres, is expected to be operational by January. Later, probably in the course of 1988, it will be joined by the new Information Processing System, or IPS.

The new installations will provide an extremely safe and efficient navigation monitoring system which will prevent accidents, ensure faster through-times, and enable the traffic controllers to predict traffic situations in the New Waterway area. The advanced tracking system will give them reliable information on every movement of every ship.

"The old chain of nine radar stations is still operational," says Mr. J.C.M. de Keijser, Project Leader of Projektbureau Walradar, which is providing the new system. "But most of the new radar stations have been ready for some time."

Data of All Vessels

Thanks to the new IPS, shipping data can be processed fully automatically. The Port Coordination Centre already possesses an extensive shipping file on cards. The IPS stores the data of all ocean-going vessels which are registered with Lloyds of London. Lloyds sends an update on tape once a month. Mr. de Keijser says that the only ships whose data are not stored in the computer are vessels which will almost certainly never enter the Port of Rotterdam, like a small Japanese fishing boat. The computer's memory bank also stores the Rhine Shipping file. The idea is to register as many inland vessels as possible.

A traffic controller can call up the data of a vessel appearing on the screen merely by touching it with a light pen. Via the keyboard, he can obtain additional data, right down to information on the vessel's propellers.

Integration of Systems

The EEC's COST 301 project foresees a traffic control system for shipping between the North Cape and the Mediterranean. "I am a member of a working party which is advising the Community on the project," says Mr. de Keijser.

"It is an admirable idea, but it is illusory to think that there will ever be a system which can keep track of every ship over such a wide area, or that it will be possible to know where every dangerous cargo is at a given time, and so avoid a disaster like the Amoco Cadiz.

"Another EEC undertaking is the European Port Data Processing Association, which aims to facilitate the exchange of data between European ports, especially data on substandard ships and ships carrying dangerous cargoes. Rotterdam will occupy a central position in the computer network. But I can't say with any certainty that the project will ever get off the ground."

Mr. de Keijser is more optimistic about an integrated TCS along the Dutch coast, which could be created by linking the systems in use in Rotterdam, I Jmuiden and the Western Scheldt. "We've always maintained that the systems will have to be able to communicate with one another. It can only be a good thing."

A system which would make it possible to communicate with the Department of Public Works' "report and follow" system for inland shipping is also now under development. Mr. de Keijser explains that the system is based on a computer network which registers ships' data at locks and certain other places. This system, too, should be capable of integration.

(Rotterdam Europoort Delta)

Bordeaux Throughput Up

In 1986 the Port of Bordeaux achieved an overall throughput of 9,210,000 t, composed of 4,420,000 t of mineral oils and 4,790,000 t of other commodities. This represents an increase of 23% for traffic other than oil, which for the first time in thirty years is greater than the oil trade. Growth has been both in imports (+10%) and exports (+35%).

The Port traffic in 1986 was characterized by the rebalancing of the oil trade (4,420,000 t) and the trade other than oil, (4,790,000 t),

Director of Amsterdam Port Management Named



The Amsterdam City Council has named Mr. K. d'Angremond managing director of the Amsterdam Port Management (Gemeentelijk Havenbedrijf) with

effect from 1 July. Mr. d'Angremond will succeed Mr. J. den Toom, who is taking advantage of the VUT early retirement regulation on the same date, after about 22 years in the position. Mr. d'Angremond joined the Port Management staff on 1 March to prepare himself for the new position.

After obtaining a civil engineering degree from the Delft Technical University, Mr. d'Angremond joined the Waterways Management Laboratory of Delft in 1963. As project engineer and later as head of the Laboratory's Maritime Construction Department, he was charged with research into sand transport, water purification, flood control, locks, ports, harbour mouths, waves and the like. As head of the Dredging Techniques Department in 1970, he directed research into specialised dredging techniques.

In 1975 Mr. d'Angremond was appointed department head for the Volker-Stevin dredging company, where he helped set up the engineering consultancy "Aveco." While working for Volker-Stevin, Mr. d'Angremond was seconded to the Dosbouw construction group and to the Public Works Ministry's Delta project, where he was involved in the design of the Oosterschelde storm surge flood barrier. From 1980, he was sector director, and in charge of all the company's activities in Europe and the Far East.

Both during his time with the Delft Laboratory and with Volker-Stevin, Mr. d'Angremond spent long periods of time abroad, including two years in India, a year in Burma and finally in Singapore.

Mr. d'Angremond has a number of publications to his name including works on water action, dams and sills of locks, shoreline protection and the environmental aspects of dredging.

Quick Turnround Project For Container Traffic

The Port of Le Havre Authority's Board meeting was mainly devoted to the investment programme for the next five years, a programme which for the time being gives priority over the plans for a new lock to four basic ideas:

- 1) To make the most of Le Havre's privileged position as an easyaccess port right on the coast and give priority to new facilities in the tidal docks, as part of the drive to make us more competitive by cutting costs and turnround time, both for vessels and for the cargoes aboard them.
- 2) To bring into operation high performance equipment that makes use of the most advanced technology and can provide Le Havre with container facilities that will still be up to date in the year 2000. This needs to be done in collaboration with private companies, after preliminary studies carried out jointly with them.
- 3) To create fully integrated contain-

er terminals, with the financial backing of private companies and new management systems, so as to give customers (i.e. shippers and owners) a genuine 5-Star high-speed service.

4) To programme all these projects into a stage-by-stage timetable so that the rate of investment can be adjusted to the rate at which profits can be ploughed back, remembering that increasing our competitiveness is the underlying aim of every budget.

With this in mind, the Board gave final approval to the Florida Point development, which is to take the form of a 12ha/30-acre combi terminal at the harbour entrance, to be laid out during 1987.

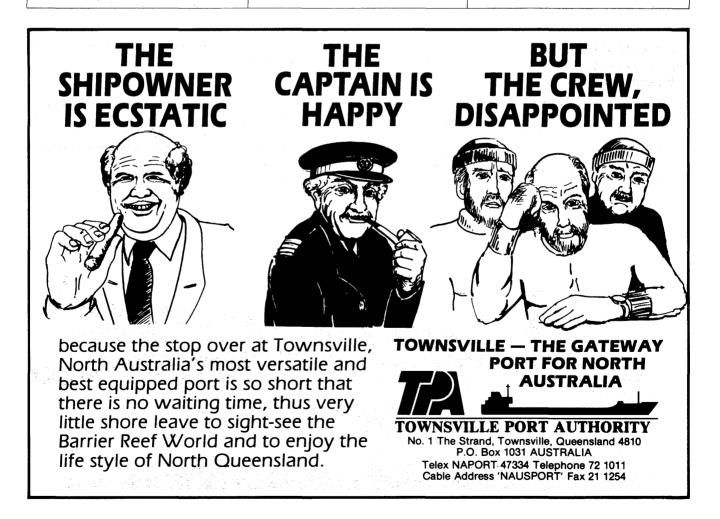
The Board also unanimously approved the completely new project of a Rapid Turnround Port for container traffic. This will consist of new facilities on the north and south sides of the René Coty Dock, at the seaward end of the Francois I Lock, and fully accords with the aims set out above.

(Port of Le Havre Flashes)

Containers Surge Ahead Again in 1986 in Hamburg

The advance of containers in seaborne traffic is unstoppable. With 1.246 m TEUs the Port of Hamburg set another new record in 1986. This amounted to a 7.5% increase on 1985 when the million mark was passed for a second time with 1.159 m TEUs. Of the 1986 record figure, 643,000 TEUs came into the Port (up by 6.5%) and 603,000 TEUs were shipped (8.6%).

There was a remarkable trend to loaded containers where an increase of 12.4% to 1.012 m TEUs was recorded in 1986. At the same time, the 40' container increased in significance. Whereas the number of loaded 20' containers rose by 8.8% to 587,000 TEUs, the 40' units increased by as much as 17.8% to reach 212,500. This development is the reason why the weight of all loaded containers passing through Hamburg last year rose much more sharply than the number of 20' containers—by 12.7% to 12.145 m t.



Record Export Consignment of Grain at Tilbury

Thamesgrain Elevators has recently handled its largest export consignment of grain at the PLA's Tilbury Grain Terminal. Some 47,000 tonnes of English Wheat was loaded on to the 49,446 dwt bulk carrier mv *Capetan Costis.* The wheat, loaded on behalf of Cargill (UK) Ltd, was bound for South Korea and was the first ever consignment to pass through Thamesgrain Elevators' intake facility for that country.

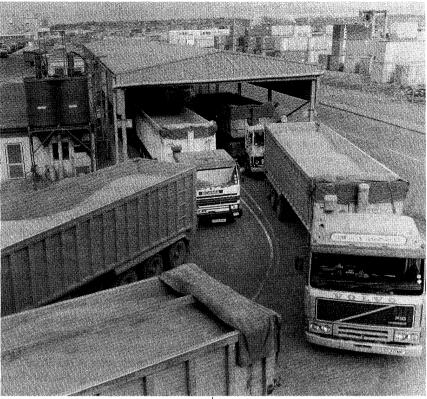
Thamesgrain Elevators, part of the Mardorf Peach Group, are currently experiencing their busiest ever period since the opening of the export facility in 1983. In February they received 120,000 tonnes and on one day alone tipped 356 lorries in just over 12 hours for a total of 8,170.6 tonnes. The PLA's highest daily tonnage loaded out to a single vessel was also bettered during the month and now stands at 10,450 tonnes.

Thamesgrain Elevators is ideally

New Passenger Business for Southampton

Fred Olsen Line's *Black Prince* (photo) sailed from ABP's Port of Southampton at the weekend on her maiden cruise to the Canary Islands the first in a new programme of cruises starting at Southampton.

Following a £10 million refit in Fin-



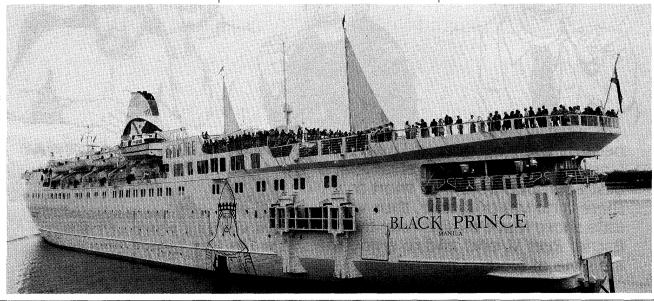
situated at Tilbury in the heart of the Eastern and South Eastern grain producing areas of England and is

land, the *Black Prince* (9,500 grt) returned to service in February with new accommodation and modernised passenger facilities. These include an innovative floating marina park where passengers can enjoy a wide range of water sports.

Other cruises from Southampton this year include trips of 14 and 16 days to the western Mediterranean and Adriatbenefiting from the excellent motorway links in the region which provide easy access to their export facility.

ic, and an 11-day cruise to Portugal, Spain and Morocco.

Recent years have seen a rise in the number of passengers using Southampton, which is the home port for P & O Cruises and the Cunard Line. ABP is currently spending over a quarter of a million pounds on upgrading passenger facilities at the port.



Asia/Oceania

Melbourne Committee Concerned About Over-height Containers

The Port of Melbourne Cargo Facilitation Committee has expressed serious concern about the small but growing number of 9ft 6in high containers passing through the Port.

The Committee wishes to alert importers, exporters and those involved in selecting containers for particular consignments, to the considerable problems associated with these nonstandard height containers.

The Committee urges that the use of these over-height containers be discontinued or kept to an absolute minimum.

Under existing Victorian road legislation it is not possible for 40ft length 9ft 6in height containers to be received directly into the premises of importers and exporters by using conventional road vehicle trailers.

The Committee indicated that permits may be issued to allow these containers to travel on public roads, but only between the wharf and a depot in the wharf area. This could result in additional unpacking or packing costs for full container loads (FCL's) plus increased delay times.

Containers of 20ft length and 9ft 6in height are subject to similar problems as the 40ft over-height containers unless a drop-frame type trailer is used and allowable axle loads are not exceeded. However, this solution creates its own problems with respect to communication, organisation and the availability of equipment, the Committee believes.

As a separate issue the Committee emphasised that the increased use of 9ft 6in containers inevitably increases the risk of damage to bridges and other overhanging objects. Through lack of communication or incomplete paperwork a truck driver may be unaware that the container being carried is different from normal standard 8ft or 8ft 6in height.

The Committee has been lobbying both nationally and internationally for some time for a differentiating mark to be painted on 9ft 6in height containers, but has not achieved any real success to date.

The Melbourne Cargo Facilitation Committee, established in 1974, includes representatives of all major organisations associated with the Melbourne waterfront.

(Port Panorama)

Port of Melbourne to Meet Customers' Needs

As a service-oriented commercial organisation, the Port of Melbourne Authority is committed to encourage the development of the Victorian economy through trade by facilitating efficiency in the total transport chain for current and potential exporters.

To this aim a business development survey of the Sunraysia and Riverland areas on the Victorian-NSW-South Australian border was undertaken by the PMA late last year.

Objectives of the survey included establishing the size, composition and transport arrangements for exports from the areas, assessing new business for the Port of Melbourne, and identifying port and land transport services utilised.

The survey also gathered service perceptions of exporters already using the Port and this information will assist the Authority in providing smooth passage of exports through Melbourne.

The changing role of the PMA requires the Authority to consider the total transport needs of exporters through direct interface with exporting industries.

The Sunraysia and Riverland survey, one of several conducted to date, provided vital information about costs, efficiency and services/facilities available and those considered necessary to customers in those areas.

The volume of containerised trade in the region was some 4,768 TEU's per annum of which Melbourne shipped 74 per cent.

The biggest industry in the area was that of dried vine fruit which exported 2,480 TEU's per year through Melbourne; citrus fruit accounted for 825 TEU's, beverages for 136 and grapes for 40.

As a result of the survey, several steps will be taken by the Authority to meet customer requirements. Amongst those is the aim to jointly develop a strategy with V/Line and terminal operators to expedite the transfer of loaded, railed containers from Melbourne yards to the terminals.

A medium-term strategy to attract additional citrus business to Melbourne is also being considered and will involve discussions with South East Asia operators on developing Melbourne as their transshipment center.

(Port Panorama)

Dredging Operation Costs at Melbourne Port To Fall by 60%

A major overhaul of the Port of Melbourne Authority's dredging activities is expected to reduce operating costs by 60 per cent.

The restructure of dredging operations became necessary with the end of new dredging projects and the future need for maintenance works only.

As a result, a number of streamlining initiatives were introduced by a consultative committee, set up by the Board.

The committee was established after the Board considered a comprehensive report on "Medium Term Planning Options for Major Ports Dredging," in 1985, and included representation from the Seamen's Union of Australia, Merchant Service Guild of Australia, Australian Institute of Marine and Power Engineers, Municipal Officers' Association, Department of Labour, Ministry of Transport and the PMA.

Initiatives included the paying-off of the Authority's seven-vessel bucket dredging fleet on December 19, 1986; signing of an agreement on December 23 to purchase the trailer suction dredger ADGeopotes from 1 Australian Dredging and General Works Ptv. Ltd.; and the acceptance of voluntary redundancy applications from 69 floating plant employees with personnel leaving progressively between December 1986 and March 1987.

(Port Panorama)

Discussion Paper Highlights Potential Of Port Kembla

The development potential of Port Kembla in New South Wales is high-(Continued on Next Page)

(Continued from Page 39)

lighted in a study of the port carried out by the Maritime Services Board.

The MSB released for public comment a discussion paper, Development Strategy for Port Kembla, on the options for the future growth of the port.

MSB General Manager Les Mac-Donald said the discussion paper clearly identified the potential of the port.

"The berth capacity is more than satisfactory for most purposes and can be adapted to meet the predictable needs for the short to medium term," Mr. MacDonald said.

"Port Kembla will continue its traditional role as the outlet for coal from southern and western NSW, and the potential exists to further increase the capacity of the Coal Loader as coal exports warrant it.

"The development of coal storage and blending facilities south of the Coal Loader will provide additional marketing opportunities for the coal industry and provide a real alternative to existing storages on a potential development site on the western side of the port.

"The trade in iron and steel products and their associated raw materials is expected to expand as the industry comes out of its downturn.

"The construction of the new Grain Terminal will provide an additional major trade commodity for the port.

"Additionally, we have the prospect of attracting new export cargoes of wool, fruit and vegetables, rice and other farm products."

The discussion paper identifies large areas of vacant land close to the port which provide the opportunities for port-related industrial development: behind Nos 3, 4 and 6 Outer Harbour, behind the Multi-Purpose Berth and surrounding the ANL Terminal in the Inner Harbour. "Development of these areas would expand the industrial base of the Illawarra region and help to diversify the range of trades through the port," Mr. MacDonald said.

"It is important that they are protected in the interim until suitable major developments arise."

The discussion paper traces the development of the port, Since 1978, when the Maritime Services Board took complete responsibility for the port, it has built the \$142 million Coal Loader and \$16 million multi-purpose berth, upgraded the Inflammable Liquids Berth and undertaken \$17 million worth of dredging and berth construction for the Grain Terminal.

The dredging of the Inner Harbour Channel during the 1970s to a depth of 15.25 metres enables the port to accommodate ships of up to 175,000 deadweight tonnes, and the specifically designed 232,000 dwt bulk carrier Iron Pacific.

Over the years, cargo movement through the port has increased steadily to its current level of over 17 million tonnes a year, of which coal exports contribute about 10 million tonnes.

Total trade is expected to rise to 25 million tonnes a year in the mid-1990s, based almost totally on increases in exports.

The discussion paper was prepared by the Maritime Services Board in consultation with the Port Kembla Advisory Board, established to provide a local input to the MSB into decisions on the development and continued growth of the port.

It is being made available to Government and industry groups, unions, residents and the general community.

"The discussion paper is aimed at providing the factual base for a rational discussion of the options and strategies for the development of Port Kembla," Mr. MacDonald said.

"All of these groups with an interest and involvement in port development are invited to treat the paper as providing an opportunity for them to contribute to the preparation of a plan for the port."

The closing date for written responses to the discussion paper is 2 February 1987. Mr. MacDonald said the MSB hoped to finalise the strategy as early as possible.

The preparation of the Development Strategy for Port Kembla follows the release of similar development strategies earlier this year for the Port of Sydney and Port of Newcastle.

A development strategy for the Port of Botany Bay is also being prepared.

Auckland Committee for America's Cup Formed

The Auckland Harbour Board has established a special subcommittee to develop proposals for possible port facilities and organisational requirements in the event of Auckland hosting an America's Cup defence in 1990.

The subcommittee, headed by the Chairman, Mr. Bob Carr, and comprising the Deputy Chairman, Mr. Ian Forrest; the Chairman of Boatharbours Committee, Mr. Paul Titchener; Board Member, Mr. Richard Holden; and the General Manager, Mr. Robert Cooper has a brief which includes liaising with the challenge organisers regarding their likely requirements, liaising with Government and other local bodies and organisations with a Cup interest, and planning for future long-term uses of any new facilities.

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Port Hedland Port Authority Management

The Port Hedland Port Authority is a corporate body established by the Port Hedland Port Authority Act of 1970, proclaimed on the 15th June, 1971.

The Authority consists of a Chairman and four Members, appointed by His Excellency the Governor. With effect from 1st November, 1985, His Excellency approved the following appointments and re-appointments for a term expiring on 31st October, 1988:

John Alister HAYNES, Chairman (re-appointed)

Walter Alfred KOBER, Member (re-appointed)

George William STUART, Member (re-appointed)

Peter George HARDIE, Member (re-appointed)

Paul Richard SUMMERS, Member (appointed)

Derek John MILLER, Deputy Member (re-appointed) Leonard Antony DEAN, Deputy

Member (re-appointed) Mr. Denis William O'Meara, an

Authority Member since 1st November, 1973, who is now no longer resident in the Pilbara, was not re-appointed and Mr. Summers, a local tug company employee and Union organiser, was appointed in his stead.

In April and June respectively Messrs. Dean and Stuart resigned their appointments and as at 30th June no replacements have been effected.

The exclusive control of the port, the operation of port services and the maintenance and preservation of all port property are the chief responsibilities of the Authority. The Functional and Organisational Charts opposite show the main areas of endeavour together with the personnel who are charged with carrying them out.

In approaching its port management tasks, the Authority is guided by the following philosophy.

We intend to enhance in every practical way the growth and development prospects of the port. We explicitly recognise the competitive nature of the business in which we are engaged and the need for efficient and cost effective management.

We intend that the port's activities

and policies should reflect community values, such that we move with the times, and fulfil the role of a "good corporate citizen."

We acknowledge as a goal that the port should be a good employer, providing interesting and intrinsically satisfying work to its varied employees and dealing fairly and responsibly with all.

In respect to the role of port development, it is important to note that the Authority is not normally an originator of development but rather, as we are essentially a service organisation, a facilitator and co-ordinator of the development aspirations of others, such as users, potential users, shipowners and traders. We have in the past applied the principle of "user pays" for developmental work and this principle continues to be central to our management philosophy. It follows from the foregoing that market forces for the products of port users are thus the final determinant of port development now and in the future.

With regard to the day-to-day functions which together comprise the management of port operations, the Authority chooses, by analysis, to identify those which are best run "in-House" and those that are best contracted out. In this way, competitive tenders are periodically called and let for such functions as:

Navigation Aid Maintenance Hydrographic Surveys Pilot Boat and Helicopter Operation Port Maintenance.

Other functions, such as:

Piloting

Port Communications

Wharf Stevedoring

Mooring and Unmooring of Vessels are currently performed "in-house."

As can be seen from this brief resume, the Authority sees and endeavours to fulfil a function of service to the Pilbara region, in particular to the mining companies, their customers, offshore oil and gas explorers, shipowners, consignees of cargo, port lessees and all the other users of a vital regional facility.

A prime objective is to provide prompt, efficient and economic service in such a way that the necessary balance is maintained, ensuring that no port user is disadvantaged by the activities of another and that crosssubsidisation between users is avoided.

The Authority's revenue derives from charges in respect to the services which it provides and our normal financial strategy is to endeavour to break even over a number of years, bearing in mind the periodic nature of some of the port's activities. Capital and developmental works such as dredging of channels, provision of wharves, etc. may be undertaken by the Authority subject to the prior approval of the Hon. Minister for Transport.

The main sources of funds for capital works are:

- User Finance
- Private Borrowing
- Retained Funds

State General Loan Funds.

Hong Kong to Construct 7th Container Terminal

The Government is to invite tenders from September for the construction of the seventh container terminal in Kwai Chung to cope with the phenomenal growth in container traffic, the Director of Marine, Mr. Gerry Higginson, said on March 2.

Speaking at a press briefing, Mr. Higginson said that although the No. 6 container terminal was scheduled to be completed in 1989, the pressure had been such that the Government must begin work for a No. 7 terminal. He said a possible 32 hectares would be allocated for the project.

Last year, Hong Kong handled more than 2.7 million 20-foot-equivalent container units, representing a growth of 21 per cent over the previous year.

"I am sure that we must be now number two in the world, in terms of container throughput, after Rotterdam —a remarkable record for a place with such scarce land resources," Mr. Higginson said.

He estimated that when the seventh terminal was completed, Hong Kong would have the capacity to cope with about 3.5 million 20-foot-equivalent units a year.

(The Week in Hong Kong)

Committee to Oversee Sydney Efficiency Drive

A joint union/management Steering Committee has been established to oversee moves to upgrade the efficiency of the Board's operations and services in the Port of Sydney and Head Office.

MSB General Manager Mr. Les MacDonald has described the efficiency drive as the second phase of the reorganisation of the Board, following on the regionalisation and establishment of the Ports as business units.

"These changes have been and will continue to be essential for the viability of the organisation, and hence for job security for all employees," Mr. MacDonald said.

"We must achieve increased efficiency and cost reductions if we are to meet the challenges of the future.

"It is intended to review management and work practices which reduce our ability to provide an efficient service to our clients and a reasonable work environment for our staff."

The Steering Committee will oversee the process of evaluating and implementing measures designed to improve efficiency, reduce costs and protect job security.

"Both the unions and the Board believe that proper consultation will minimise the concern and disruption that such a process can create," Mr. MacDonald said.

"The existence of the Steering Committee will not affect the right of unions or management to seek resolution of any disputes in the normal way."

The Steering Committee is chaired by Stan Beevor (Deputy General manager). Members are Peter Sams (Labor Council), John Benson (Seamen's Union of Australia), Bruce MacLeod (Amalgamated Metal Workers' Union), Tony Morison (MSB Officers' Association), Wal Lyneham (Director, Strategic Development and Assessment), Terry Page (Director, Personnel and Industrial Relations), Ron Gow (Acting Manager, Industrial Relations), Murray Fox (Manager, Works and Projects) and Ruth Tait (Manager, Management Review and Audit).

The Steering Committee has endorsed the secondment of Mr. Nayler to the position of Committee Coordinator, providing the communication link between the management and union members of the Committee.

To assist in the process, the Board is carrying out a survey inviting staff members to identify management and work practices which they believe can be improved, together with suggested changes. (MSB News)

Answers Provided on Worth of Brisbane Port

Results of a just released in-depth "value" study show that more than 5,000 people are in direct, full employment because Brisbane has a port.

This group comprises 2,752 people who are connected with the many port activities, and another 2,269 who provide various services and goods to the port and its workers.

Another fact to emerge was that port activities and related industries generated \$418,300,000 a year in goods and services plus another \$141,500,000 in household incomes.

The investigation—known as the Port of Brisbane Economic Impact Study—was commissioned by the Port of Brisbane Authority.

It was conducted by economics experts from the University of Queensland over a spread of nine months.

The Authority's Executive Chairman (Hon. A.M. Hodges) said the research had finally settled the age-old argument of the port's value to the city.

Mr. Hodges said:

"Our experience had told us the influence was considerable—but, no one knew the truth. Now we have the facts.

"And—what everyone should bear in mind when looking at the results in general, is that our investigators were deliberately conservative.

"For instance, they did not go behind the range of the first ripple effect. That's where they obtained the 5,000 employed figure.

"However, our own records reveal that in 1985-86, almost 4,000 companies, organisations and individual traders used the port to move cargo in or out. How many are employed by those groups?

"More than 40 per cent of all the goods and general cargo needed by the city, or exported, moves through the port. It is the city's biggest single transport mode.

"Thus, we can see that the impact of the port is absolutely enormous."

Mr. Hodges said that for every tonne of cargo passing through the port, the community in general benefited by almost \$30.00 a tonne. In 1985-86, the port's total trade was about 13,200,000 tonnes.)

He added:

"We know now that wholesalers and retailers are major flow-on benefactors of the port, focusing 21.9 per cent of the industries' jobs and 13.7 per cent of output (goods/services) on port business.

"Individuals' services recorded 10 per cent of the jobs and output for the port.

"Mr. Hodges said the study identified and used 36 industrial sectors (which were related directly or indirectly to the port) in its input-output analysis.

Direct employment in the port had an output of \$220 million, plus a flow-on of \$199 million.

Although general cargo amounted to only 13 per cent of the port's tonnage, it accounted for 67 per cent of the economic impact.

Inland transport had the next largest impact with about 500 jobs and, indirectly, another 450, he said.

(Brisbane Portrait)

Major Facelift for POGA Head Office

A major "facelift" to the Port of Geelong Authority's Brougham Street head office has enhanced the streetscape of the city's historic woolstore precinct.

A reflective glass facade now mirrors the buildings that once housed a large portion of Victoria's rural prosperity during the 19th and early 20th centuries.

The new external appearance is part of a \$1.3 million program completed late last year to upgrade and refurbish the 28-year-old building.

The building was gutted, its ceilings lowered, airconditioning and full fire protection services installed, as well as an extensive office redesign to cater for the new technology and work practices of the 1980's.

The three-storey building retains its commanding views over Corio Bay and the activity of one of the busiest regional ports in Australia.

(Portside)

Darwin Fishing Harbour Mooring Basin Operating

The long-awaited event of 1986 was the opening of the Darwin Fishing Harbour Mooring Basin.

It attracted a great deal of local attention because, following the bulldozing of a mangrove swamp on Frances Bay Drive a short walk from the Darwin city centre, early in 1986, it was for most of the year, a very noticeable "hole in the ground."

However, it now has several vessels in it for the duration of the closed prawning season and the tropical cyclone season.

The \$7 million project of the Northern Territory Government is aimed at capturing a large share of the supply, maintenance, repair and refit business of the northern fishing fleet.

It is estimated that this work could be worth \$3.5 million per year to Darwin

businesses on 50 trawlers alone.

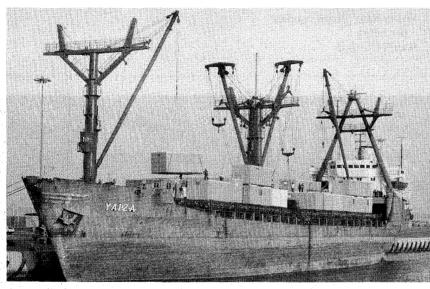
The total Basin site covers 11 hectares and 5 hectares of reclaimed land will be made available for development by fishing-related or support service companies.

Jebel Ali to Establish Vehicle Distribution Center

The Port Authority of Jebel Ali has announced that they have reached an agreement with Al Habtoor Motors, for the establishment of a vehicle distribution center in the Jebel Ali Free Zone.

The first vehicles to arrive under this new agreement will be a shipment of Mitsubishi cars and light trucks. The carrier will be NYK Line.

Port officials stated that they were very pleased with this new development, and that they were looking forward to welcoming this new business as well as the new line to Jebel Ali.



Increasing Use of Jebel Ali Port

The M. V. Yaiza is seen pictured loading a total of 102 assorted building units in Dubai's Port of Jebel Ali recently. This cargo, part of a total consignment of 175 units, is destined for Hodeidah, N. Yemen, and comprises an entire staff camp for the Yemen Hunt project, to support the company's oil exploration and development work in the country.

The movement of this cargo through Jebel Ali reflects the increasing use of the Port over recent months for three main categories of cargo—project cargo, both import and export; transit cargo, imported via Jebel Ali to other Gulf and Arabian States; and cargo requiring long-term storage, such as speculative consignments, transshipment cargoes and cargoes for regional distribution to the upper Gulf, the Sub-continent and E. Africa.

The Port, with 15 km of quay space and 67 berths, was completed in 1979 to cater for the future needs of Dubai and the Emirates. After nearly 7 years of operation and impressive year-on-year growth, Jebel Ali is now a considerable way toward achieving its original plan of becoming the Gulf's busiest Port.

What's in a Name —'Authority'

Queensland's Maritime Services Minister (Hon. Martin Tenni, M.L.A.) is urging the state's ports' administrations to be more like Brisbane and Cairns.

He believes the time is right for the "harbour boards' to adopt the word 'authority' in their name descriptions...e.g., "Port of Brisbane Authority."

Queensland has six harbour boards—Townsville, Bowen, Mackay, Rockhampton, Gladstone and Bundaberg.

Mr. Tenni believes the name change would more accurately reflect the wider role played by harbour boards today in promoting both trade and tourism.

He said the 'authority' term was widely used internationally and would echo the growing entrepreneurial roles of harbour administrations in the '80's.

The Port of Brisbane Authority had set a good example in promoting both trade and tourism and had played a major role in seeking new shipping links for Queensland, he added.

Mr. Tenni said that the Cairns Port Authority was responsible for management of both the port and the town's international airport—another example of the widening influence and activities of today's harbour administrations.

2 Million TEUs Achieved In '86: Port of Singapore

In December last year, the total annual throughput at the Tanjong Pagar Terminal hit the 2-millionth-TEU mark for the first time. This was double the throughput achieved in 1982 when 1 million TEUs were handled.

The Tanjong Pagar Terminal had been enjoying buoyant growth since it became operational in June 72. Today it ranks sixth in the world in terms of container throughput (TEUs). More than 140 shipping lines call at the Terminal day and night. Her strategic position has attracted many liner services to include it as one of their ports of call, including round-the-world services.

To assist buyers and sellers in meeting deadlines, the Terminal is able to (Continued on Page 44, Col. 2)

10-Year Plan Completed

(Continued from Page 31, Col. 3) related dollars to the local economy. Also, the modernization of Mystic Pier, as well as the electrification of Moran Terminal's diesel-powered cranes, guaranteed users of the Port smoother and speedier cargo handling services. To insure the Port's future competitive position, another Maritime Department FY 1986 initiative was to study the feasibility of installing a computerized cargo release system for local shippers and consignees.

Massport, a quasi-governmental authority supported entirely by revenues from its own facilities, also owns and operates Logan International Airport, Hanscom Field, the Tobin Memorial Bridge, the Boston Fish Pier, Commonwealth Pier (site of the World Trade Center Boston), and several other development properties. The Maritime Division of Massport is responsible for the planning, development, operations, maintenance and marketing of the public terminals of the Port of Boston. Massport's FY 1986 Annual Report covers the period from July 1985 through June 1986.

2 Million TEUs Achieved

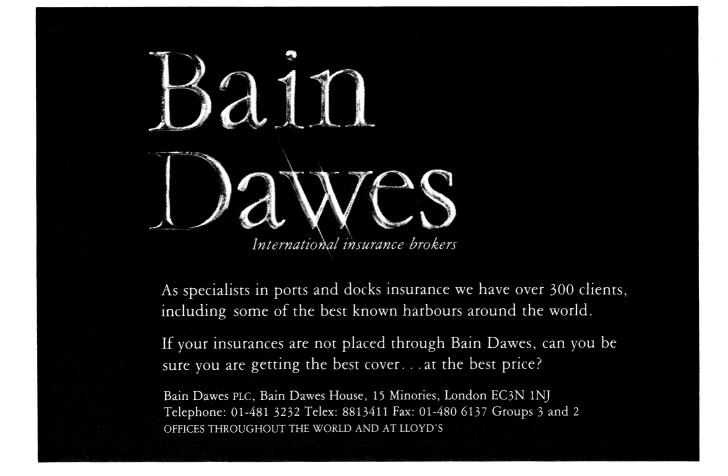
(Continued from Page 43, Col. 3)

relay containers from one ship to another within 8 hours or less and, where stowage permits, in between vessels' arrival. Through the use of sophisticated equipment and improved work systems, the average vessel stay is now only 7 1/2 hours as compared to 16 1/2 hours in 1980. Furthermore, an efficient computerised information system and a dedicated and skilled work force ensure that port users are provided with fast, flexible and reliable service.

New services have also been introduced for the convenience of port users. These include the Express and Night Delivery Services, the Databox system which involves the electronic despatch of operational information between PSA and shipping lines and freight forwarders, advance customs clearance for import containers and reduced closing time for export FCL containers.

Tanjong Pagar Terminal's continuing efforts to improve its services are aimed at lowering operational costs for port users. In addition, PSA has since 1985 offered a series of rebates which will make it even more economical for shipping lines to call at Singapore. (PSA News)

AT TANJONG PAGAR TERMINAL (1980-86)		
	1980	1986 (estimates)
Total Annual Throughput		
(TEUs)	865,045	2,050,000
Average Vessel Turnround		
Time (hours)	16.5	7.5
Vessel Rate (Boxes handled		
per hour)	20	47
Staff/TEU ratio	1:607	1:1253





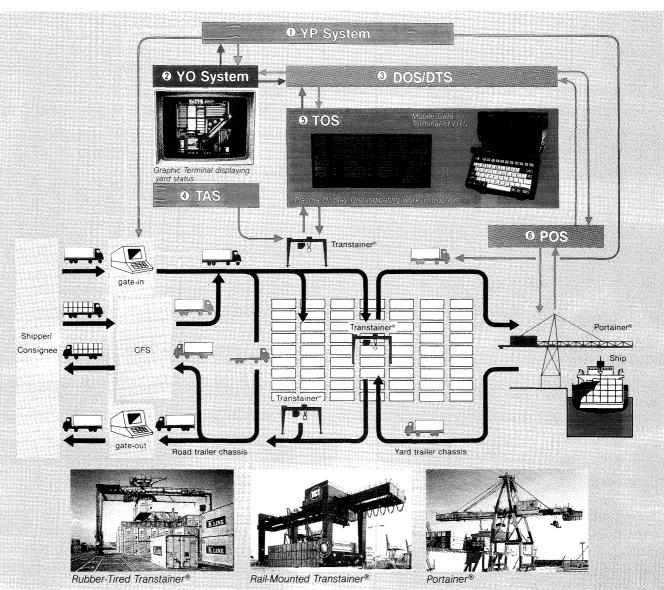
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