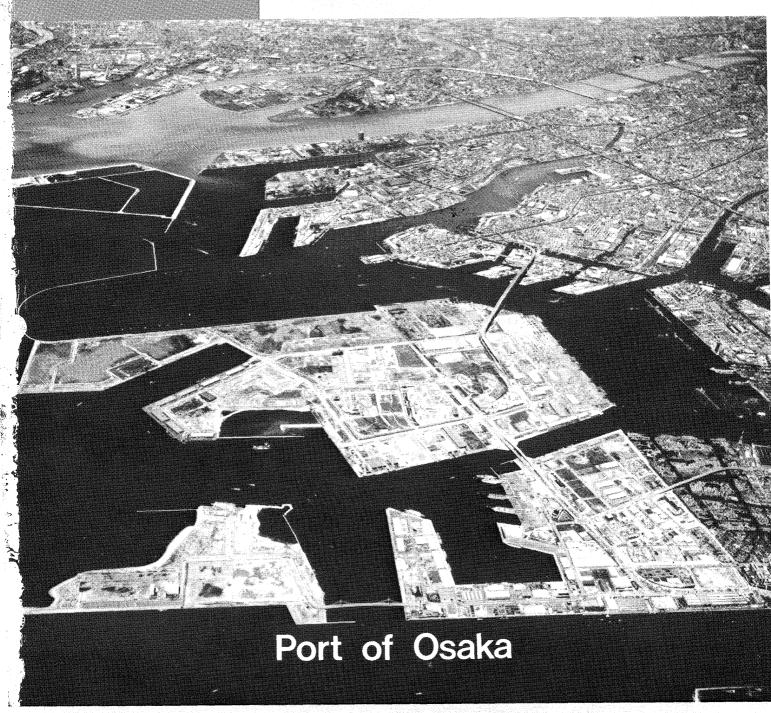


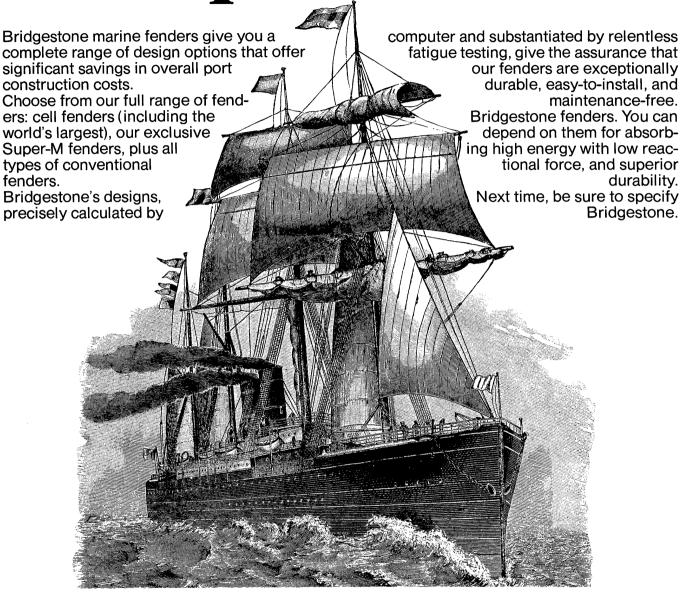
PORTS and HARBORS

Jan.-Feb., 1980 Vol. 25, No. 1-2

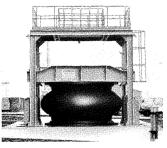


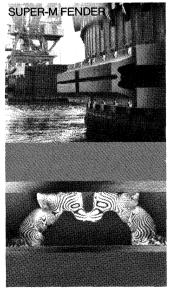
The Publisher: The International Association of Ports and Harbors

Tender loving care for the ships of the world.









BRIDGESTONE MARINE PRODUCTS

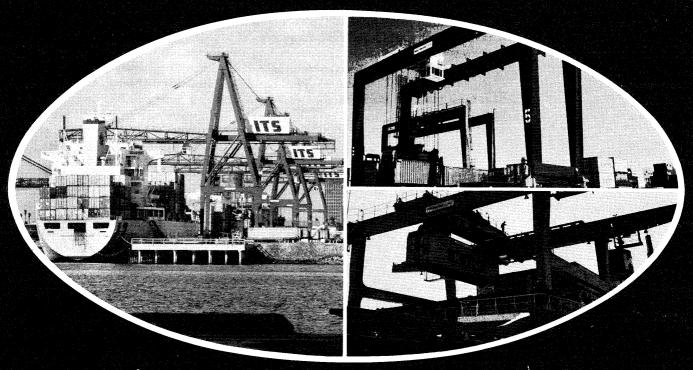
Marine Fenders • Marine Hose • Oil Fences • Dredging Hose • Others.

For further information, please write or call:

HEAD OFFICE Bridgestone Tire Co. Ltd.	10-1, Kyobashi, 1-chome, Chuo-ku, Tokyo, Japan Phone: 567-0111 Cable: "BSTIRE TOKYO"
Diregostorio Tiro Co., Eta.	Telex: J22217, J23207, J23227 BSTIRE
EUROPE	Lee House 15th Fl., Monkwell Sq., Wood St.,
Bridgestone Tire Co., Ltd. London Office	London Wall EC2, U.K. Phone: 606-1644-1647 Telex: 885495 BSTIREG
MIDDLE EAST	P.O. Box 45, Manama Bahrain
Bridgestone Tire Co., Ltd.	c/o Yusuf Bin Ahmed Kanoo
Bahrain Office	Phone: 230010 Telex: 8215 Kanoo BN.
SINGAPORE	Inchcape House 450/452, Alexandra Road,
The Borneo Company	Singapore 5, Singapore
Pte. Ltd.	Phone: 625388 Telex: BORNEO RS 21400
MALAYSIA	P.O. Box 1080, Jln. Semangat, P. Jaya,
The Borneo Company	Kuala Lumpur, Malaysia Phone: 773744 & 775722
(1975) Sdn. Bhd.	Telex: BORNEO MA 30334
NORTH AMERICA	1635 West 12th St., Erie. PA. 16512 U.S.A.
Lord Kinematics	Phone: 814-456-8511
Lord Corporation	Telex: 0914438 LORDCO ERI



CECO IS A WORL



In container handling crane's

PORTAINER® CRANES. Over 225 of these giant, latest state-of-the-art container handling cranes are in use in almost 100 ports world wide. Many in service two decades; repeat orders as ports expand; lowest cost per container handled; many designed for future automated operation.

Models include MACH (Modular Automated Container Handling), Modified 'A' Frame, Low Profile, Twin Lift, and Long span backreach. Economy designs for feeder and inland ports.

TRANSTAINER® CRANES. More than 250 operating in over 70 major terminals throughout the world. Up to 5 times more storage capacity, typical operating costs up to 80% less than chassis or carrier equipment.

Dual lift spreaders, minimum maintenance, lower container and trailer damage, highest reliability (many in service since 1960). Rubber Tired or Rail Mounted versions. MACH models are designed for automated service of the future.

SHIPSTAINER® CRANES. Over 85 of these high speed shipboard container cranes are in service. Essential where dockside cranes are not available. Our design experience allows criteria selection tailored to your exact needs.

If it doesn't come from PACECO or a PACECO licensee, it's not a PORTAINER, TRANSTAINER, or a SHIPSTAINER.

Put our world of experience to work for you.



PACECO, INC. The Only Manufacturer Offering A Complete Line Of Container Handling Systems And Equipment With World-Wide Sales And Service.



Contact PACECO or the office nearest you. Headquarters Office—PACECO, Alameda, CA 94501, (415) 522-6100, Telex 335-399 • New York Representative—ROBERT MOORE CORP., 350 Main St., Port Washington, N.Y. 11050 • PACECO European Sales Office—PACECO INTERNATIONAL LIMITED, London, Tel: 01-681-3031/4 • PACECO Licensees; Australia—VICKERS HOSKINS DIVISION, Perth. Canada—DOMINION BRIDGE COMPANY LIMITED, Montreal. France—ATELIERS ET CHANTIERS DE BRETAGNE, Paris. India—BRAITHWAITE & CO., LIMITED, Calcutta. Italy—REGGIANE O.M.I. S.P.A., Reggio Emilia. Japan—MITSUI ENGINEERING & SHIPBUILDING CO., LTD., Tokyo. Korea—HYUNDAI INTERNATIONAL, INC., Seoul. South Africa—DORMAN LONG VANDERBIJL CORPORATION LIMITED, Johannesburg. Spain—FRUEHAUF S.A., Madrid. United Kingdom—VICKERS ENGINEERING GROUP LIMITED, South Marston, Swindon Wiltshire.

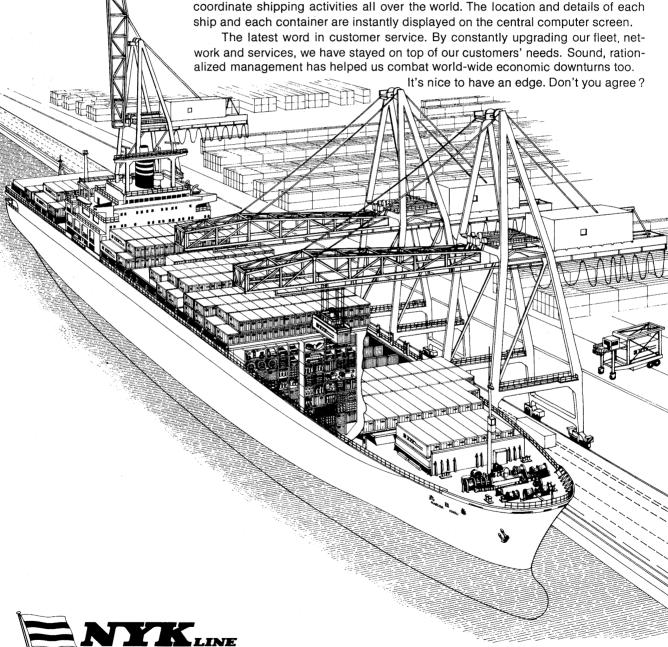
NYK's Edge Your Edg

Here you see a drawing of NYK's Kasuga Maru, one of the world's largest container ships.

Her total navigation system is a joy to the insurance companies. It combines computerized collision prevention equipment with the latest automatic navigation controls. The radar system can track up to 15 ships at one time. An alarm sounds if any vessel comes inside a predetermined danger zone.

We think of the Kasuga Maru as a symbol of our company's continuing modernization over the past 90 years. She exemplifies the go-ahead thinking here at NYK that has made us Japan's largest shipping firm, with 360 ships and 40,000 containers.

Now NYK offers another first. Our on-line computer system. We can now coordinate shipping activities all over the world. The location and details of each ship and each container are instantly displayed on the central computer screen.



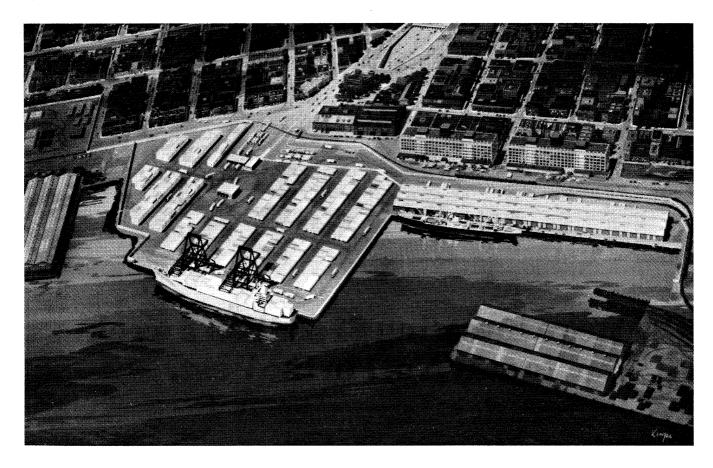
■ Head Office: Tokyo, Japan

■ London Branch Office: Beaufort House, 15 St. Botolph Street, London, EC3A 7NR., England Tel: (01) 283-2099
■ New York Branch Office: Suite 5031, One World Trade Center, New York, N.Y. 10048, U.S.A. Tel: (212) 466-2800

The New Red Hook Container Terminal

Atlantic Basin-Brooklyn

Another major project undertaken for the Port of New York/New Jersey



Through the combined efforts of the State of New York, the City of New York and the Port Authority of New York and New Jersey, construction has begun on the 1,000,000 ton capacity Red Hook Container Terminal. Designed with the newest container facilities available, it will provide over 1,200 new jobs, contributing \$13 million to the Port economy.

THE PORT AUTHORITY OF MY & N.J.

Marine Terminals Department



We're investing \$1 million a week to stay No.1 in the West.

Between now and 1982 Port of Los Angeles will invest \$250 million to keep a firm grip on its position as the cargo capital of the West.

Thirty-two major projects will be undertaken to improve services and expand land resources.

The main channel will be deepened from 35 ft. to 45 ft. and widened to help provide smooth handling and safe navigation for the world's largest ships. The 16 million cubic yards of material dredged up from the bottom will be used with landfill and backland development to create 1000 additional acres of land in the Port's Outer Harbor and double its shiphandling capability.

Part of this increase will come from the new Seaside Container Terminal complex now being developed. With a 5000 ft. all-concrete wharf, six cranes and 135 acres of backland, it easily handles six containerships at berth and will be one of the largest and most efficient terminals in the world.

Whether the investment creates new services or improves existing ones, the Port's modern cargo handling methods — including 14 giant container cranes with total estimated lift capacity of 360 containers/hour — will reduce ship turnaround time.



Katsuya Yokoyama Far East Representative Tel.(03)580-2697



PORTS and HARBORS

Published by Secretary General: Dr. Hajime Sato The International Association of Ports and Harbors Head Office: N.G.O. Consultative Status, United Nations (ECOSOC, UNCTAD, IMCO) Kotohira-Kaikan Bldg. President: 2-8, Toranomon 1-chome, Minato-ku PAUL BASTARD Tokyo 105, Japan Inspector-General for All Non-Autonomous French Ports Ministry of Transport, France Tel.: TOKYO (591) 4261 Cable: "IAPHCENTRAL TOKYO" **Executive Committee** Telex: 2222516 IAPH J Chairman: PAUL BASTARD President, IAPH Members: January-February, 1980 Vol. 25, No. 1-2 A.S. MAYNE 1st Vice-President, IAPH Chairman, Port of Melbourne Authority, Australia CONTENTS A.J. TOZZOLI 2nd Vice-President, IAPH Director, Marine Terminals Page The Port Authority of NY & NJ U.S.A. New Year's Messages from President and Secretary General-IAPH President P.K. KINYANJUI 3rd Vice-President, IAPH sends a goodwill message to the Seychelles meeting of East African ports-Chairman Your continued support requested-Members' Response to the Special Dues-Kenya Ports Authoriy, Kenya New Type of Contribution introduced—New Column ready for Your Voice— **FUMIO KOHMURA** Honorary Vice-President, IAPH Executive Vice-President IAPH Survey on Draft Convention on the Liability of International Terminal Operators sent to Board-The 10th meeting of the working party on customs Nagoya Port Authority, Japan G.W. ALTVATER applications of computers covered by Mr. Vleugels-Mr. Carr reports on the Immediate Past President, IAPH Former Executive Director Port of Houston, U.S.A. South Pacific Ports Conference-Dues payment in SDR: How to treat it?-Proceedings of the 11th Conference completed-JAL serves you as official R.W. CARR carrier for the Nagoya Conference-Visitors-Membership Notes-Conference Chairman Auckland Harbour Board, N.Z. & Symposium-Publications-Supplement to "International Survey of Port J.H.W. CAVEY Training, Advisory Facilities and Requirements, 3rd edition" Member, National Harbours Board, Canada J.P. DAVIDSON Open forum, Port releases: Dy. Chairman and Managing Director Clyde Port Authority, U.K. "Problems of Administration and Management in a Small Port" (by Mr. J. Heeney, General Manager, Waterfront Commission, J. DEN TOOM Managing Director Port Management of Amsterdam, The Netherlands Rarotonga)..... Annual Report 1978: Papua New Guinea Harbours Board..........15 W. DON WELCH The Independent Consortium of the Port of Naples-Its policy and role. . . . 17 Executive Director South Carolina State Ports International Maritime information: Authority, U.S.A. JACQUES DUBOIS World port news: General Manager Port of Le Havre Authority, France IMCO Long-Term Work Programme up to 1986 approved by KANG, CHANG SUNG Administrator Korea Maritime and Port IFSMA submits suggestions relating to port receiving Administration, Korea WILSON M. LOUBRIEL Executive Director, Puerto Rico Ports Authority, Puerto Rico JAMES H. McJUNKIN General Manager Port of Long Beach, U.S.A. F.J.N. SPOKE Rhine, Main, Danube-linked by ambitious 3,500 km project General Manager, Port of Vancouver, Canada **GENGO TSUBOI** Vice-President The Japanese Shipowners' Association, Japan ALHAJI B.M. TUKUR The Cover: Port of Osaka, Japan. See also sketch and details on page 46. General Manager

Price US \$3.50 per copy
US \$35.00 per year

Nigerian Ports Authority, Nigeria

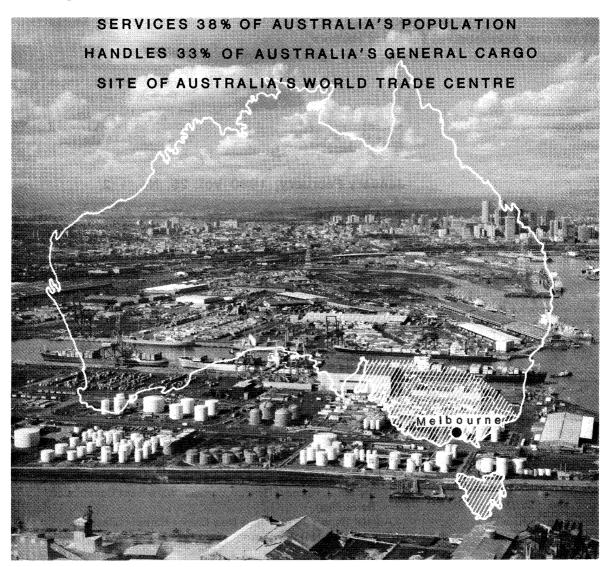
President, The Maritime Services Board of N.S.W., Australia

General Manager Port of Gothenburg, Sweden

SVEN ULLMAN

J.M. WALLACE

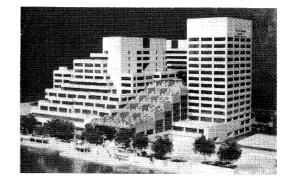
PORT OF MELBOURNE



Situated at the geographical heart of Victoria, the Port of Melbourne contributes substantially to the requirements and the increasing influence of the great city it serves.

The Port's position not only concentrates the movement of the State's goods to and from its city, but has made it an ideal entrepôt, commanding transfers of

cargoes to and from the smaller ports of New Zealand, some areas of South Australia, New South Wales and the island State of Tasmania.



All enquiries: The Secretary, Port of Melbourne Authority G.P.O. Box 2239T, Melbourne, Victoria, 3001, Australia.

IAPH announcements and news

New Year's Messages





From Mr. Paul Bastard President

Here we are less than 20 years before the end of the Century. Within 20 years our ports and harbors will live in the year 2000.

Meanwhile will they have seen their traffic double as Professor Leontief prophesied at the time of our last Conference held in Le Havre-Deauville? If so, can we imagine from now on the amount of efforts port authorities will have had to make and have made to meet the challenge? Little by little but permanently they have had to set up new facilities, perfect the methods of management, improve port operation. And above all never lose heart, never lose hope.

As far International Association of Ports and Harbors, it will have experienced 10 more conferences by that time. Being 25 years old, it will be in full possession of its faculties. Of course it will still experience financial problems (I have no illusion on that point) but thanks to these additional 20 years of efforts, its hearing by the public at large will have asserted itself. Its authority over the administration and big international organization and bodies will be undisputed. And, the bonds of friendship will have still strengthened among its members.

The year 1980 is the first of these 20 years of efforts which are still to come until year 2000. Years of efforts but of success too and of joys through the success.

I am looking forward to meeting very soon the friends who will be able to come to Brisbane. My sincere thanks

From Dr. Hajime Sato Secretary General

At the outset of the new decade of the 1980's, I cannot help renewing our determination that we must do our very best to further our position in the world's maritime field established by the Association during the first 25 years and win over the program defined at its Deauville-Le Havre Conference last year.

As may be the case with many others, the year 1980 will have a particular significance to our Association. The Association came into existence in 1955 at Los Angeles. During the subsequent quarter of a century, the volume of the world seaborne cargo quintpled. This prodigious growth was made possible only through the sweat and wisdom devoted by the port people of the world to the improvement of their individual port facilities and management and operation systems, abreast with their incessant endeavors

(Continued on page 8)

and appreciation go to our Japanese friends for the great pains they take to prepare the Nagoya Conference.

I wish this new year to be for IAPH, for all its members, be they Regular or Associate Members, for its head office for all those who contribute to it, and for all the ports of the world, a Year of Prosperity, of Progress and of Happiness.

To all of you, to your family, to all those you love, Happy New Year.

making other people realize how ports constitute indeed the essential infrastructure of a community, a region and a nation. I see no reason why we shouldn't let the rest of the world know more about ports and harbors and what the port people are prepared for in the new year to come.

On the other hand, considering the outlook of the current energy problems, inflation and other factors, the 1980's do not appear promising easy life to anybody. We are likely to be required, rather, to be determined to walk into a severer new decade. For one thing, as predicted by Professor Wassily Leontief in his paper "Future of the World Ports", we must keep on working for the improvement of the economic gaps between the developing and developed countries by way of increasing efficiency and dependability in the world ports alike.

To this end, we will have to work a great deal, under the spirit and principle of mutual understanding and cooperation, on gathering and exchanging views and advice useful for future port improvement. Interdependacy has never been felt so keenly necessary as it is felt today.

Taking this opportunity, I express my sincerest thanks and appreciation to the chairmen and members of our internal and technical committees for their active participation in enhancing the position of the world ports. Also, I thank you very much of the members who kindly contributed to the Special Port Development Technical Assistance Fund in helping us assist our friends of developing ports.

From the financial point of view, the Association will be able to attain its self-sufficiency before long thanks to the various counter measures including the adoption of the SDR system, which were taken successfully and timely enough with the support of the members. I am also much greatful to those who kindly contributed the temporary levy last year, and I am counting on as much cooperation of our members again for the new year.

This is the year for us to prepare the 12th Conference in Nagoya, Japan, and simultaneously to celebrate the 25th anniversary of the founding of IAPH. The Nagoya Conference falling in with such dual responsibility and functions, the Head Office, taking the advantage of being closely located to Nagoya, will act as a good partner of the organizer.

I, together with all staff members of this office, assure you that we shall do our best for the fulfillment of the Association's work and services, under the guidance of President, Vice-Presidents, Chairmen of Committees and Liaison Officers.

Last but not least, I extend to you all my very best wishes for your happy and prosperous 1980.

IAPH President sends a goodwill message to the Seychelles meeting of East African ports

Mr. Paul Bastard, President of IAPH and Inspector-General for all non-autonomous French ports, sent a message of goodwill to the 7th Council of the Port Management Association of Eastern Africa which was held in Seychelles from 26th to 30th November, 1979. The message President Bastard sent to Mr. P.K. Kinyanjui, IAPH 3rd Vice-President and Chairman of Kenya Ports Authority who chairs the said port management association is as follows.

"Just as the 7th Council Meeting of the Ports Management Association of Eastern Africa is opening, the Pre-

sident of the International Association of Ports and Harbors is happy to send you this message of friendship."

"The world, in a whirl, has never been so in need of friendship between volunteers as now. In this respect through their trade which leads them to have continuous contacts with all countries all over the world, through their international responsibilities, through the worldwide spread of a higher welfare, through their responsibility on a national scale as for the improvement of their fellow-country-men's way of living, port managers and all those who contribute to the international trade are bound to play a primordial part."

"I am sure that your meeting will still strengthen the bonds of friendship which already exist between the participants and I wish in advance a cordial welcome to those among you who would decide to join IAPH." "In this regard my friend Peter Kinyanjui will be in a position to provide them with any information they might require."

"Have a great success!"

Your Continued Support requested

I: Temporary Levy

In response to the request for paying 25% of 1979 dues, as decided at the Deauville-Le Havre Conference, some 80 members (American Region: 22, African/European Region: 22/Asian Region: 36) have remitted their levy to the head office. Total amount received as of December 18, 1979 was US\$28,110 + Yen 715,320, attaining nearly 80% of the target amount.

However, being authorized by the President and Vice-Presidents, Secretary-General further requests to those non-replying members to give their consideration to comply with the request by sending 25% of the 1979 annual membership dues.

II: Special Dues

Secretary-General announces with thanks and appreciation that the head office is in receipt of US\$17,190.00 in cash, as the special dues to be used for the IAPH's Special Port Development Technical Assistance Fund. List of doners is shown separately.

At the Officers' meeting held on November 9, 1979, at Hawaii, Mr. Toru Akiyama, Secretary-General Emeritus and President of the IAPH Foundation, stated that the IAPH Foundation would be prepared to donate two million yen, as previously committed.

Secretary-General further asks to those non-replying members to give their support of paying special dues so that the aforesaid Fund of the Association be much enriched. List of doners will explain how much others did contribute to the Fund.

Members' Response to the Special Dues

Dec. 18, 1979

I. Cash Receipt (As of Dec. 18, 1979)

i. Cush recorpt (i.i. of 200, i.e., i.e., i.e.,	
1. American Region	US\$
S. Carolina State Ports Authority, U.S.A.	1,000
Autorite Portuaire Nationale, Port de Port-au	
Prince, Haiti	350
Autoridad Portuaria de Guayaquil, Ecuador	350
The Port Authority of New York & New Jersey,	
U.S.A.	1,000
Port of Houston, U.S.A.	750

	Massachusetts Port Authority, U.S.A.	350
2.	African/European Region	
	Port of Gothenburg, Sweden	1,000
	Bremer Lagerhaus Gesellschaft, Germany	1,850
	British Transport Docks Board, U.K.	1,000
	The Helsingborg Harbor Board, Sweden	350
	Clyde Port Authority, U.K.	250
	Port of Aalborg Authority, Denmark	350
	Port of Arhus Authority, Denmark	345
	Oslo Port Authority, Norway	500
	Nigerian Ports Authority, Nigeria	750
	Port of Amsterdam, Netherlands	1,000
	Belfast Harbour Commissioners, U.K.	250
	Stockholms Hamn, Sweden	350
	Port of Copenhagen, Denmark	345
	National Port Authority, Liberia	500
	Port of London Authority, U.K.	200
	Ports Public Authority, Kuwait	1,000
2	Agian Dagian	

3. Asian Region

Port of Melbourne Authority, Australia	1,000
The Maritime Services Board of N.S.W., Australia	1,000
Tanjung Priok Port Administration, Indonesia	350
Belawan's Port Administration, Indonesia	500
Kelang Port Authority, Malaysia	200
The Japan Port and Harbour Association, Japan	300
Total:	17,190

II. Pledges

Port of Kobe, Japan	2,000
Port of Tokyo, Japan	1,500
Port of Nagoya, Japan	1,500
Port of Yokohama, Japan	1,500
Total:	6,500

III. Donation by the IAPH Foundation

Two Million Yen

New Type of Contribution introduced

With consultation with and consent by Mr. J.K. Stuart, Chairman of Committee on International Port Development, Mr. Claude Mandray, General Manager of Port of Rouen offers the following availability as the Port of Rouen's contribution to the IAPH Technical Assistance Fund. He states:—

"Arising from the special appeal to IAPH Members for contributions to the IAPH Port Development Technical Assistance Fund, the Port Autonome de Rouen have generously offered to provide training at their port to the value of US\$1,000. The Port of Rouen can provide a wide range of training to the nominees.

The IAPH Bursary now being made available could accommodate 1 person for a 1 month course (or possibly 2 persons if they were studying on the same course) or a total of 2 persons for two separate 2 week courses.

This service will be available to personnel from any IAPH Member Port in a developing country. A good knowledge of French language is desirable. The conditions to be fulfilled to allow consideration for the IAPH Bursary are the same as those announced in the December 1979 issue of "Ports & Harbors", with the exception only that the Port of Rouen will meet the costs of training (excluding travel and hotel accommodation)."

(Details of the available training course are listed on page 12.)

New Column ready for Your Voice

As a part of the renovation plan for the journal "Ports and Harbors" as published in February 1979 issue, we newly introduce the column called VOICE—"I would like to know", starting from this issue. (See page 48)

IAPH member ports and readers are encouraged to use this "question and answers" column, should they have any question or problematic points to be answered or commented by other IAPH member ports and experts.

We believe that the accumulation of question and answers will constitute a very useful reference to others who have similar problems. Please utilize the availability at its full extent.

Followings are the conditions for the use of the column:

- a: Enquiry should be addressed to the Secretary-General, specifying his problematic points as clearly and comprehensively as possible.
- b: Those replies contributed to the enquiry should be addressed to the enquirer directly with a copy of such replies to the Secretary-General for inclusion in the journal.
- c: Head Office reserves the rights to edit, re-write, abridge or omit such enquiries and replies to be carried in the journal.

IAPH Survey on Draft Convention on the Liability of International Terminal Operators sent to Board

As previously reported, represented by Mr. Lennart Bergfelt, Legal Advisor of Port of Gothenburg and Member of IAPH Committee on Legal Protection of Port Interests, IAPH has been taking part in the study work on Draft Convention on the Liability of International Terminal Operators by UNIDROIT (International Institute for the Unification of Private Laws).

At its recent meeting in October 1979 in Oakland, California, the study group concluded that the draft convention would be placed before the attention of the port authorities all over the world via the IAPH Board for comments and presentation of factual documents at this moment.

Survey circular was sent to all IAPH Board Members for replying comments and advice, setting the date of closing of replies by the end of January 1980. (rin)

The 10th meeting of the working party on customs applications of computers covered by Mr. Vleugels

Mr. Robert L.M. Vleugels, General Manager, Port of Antwerp who is the Chairman of IAPH Committee on Trade Facilitation had one of his staff attend the 10th meeting of the working party on customs applications of computers held in Brussels on Tuesday, September 11, 1979 and made available to us the following report with his comments that reads "although the subjects discussed at this meeting are exclusively customs, I presume that the attendance of these meetings is a suitable way of keeping informed with the evolution in customs declaration techniques, which are so important for the functioning of ports.

Report of the 10th meeting of the working party on customs applications of computers

The working party deals mainly with the problems as they arise for the customs' administration.

Special attention is given to the validation of data, authentication of goods, declaration and credibility checks when using computers. One of the main problems is the lack of a signature on data transmitted by computer. Customs in France therefore send a hardcopy of the transmitted data to the forwarding agent responsible for the declaration.

During the discussion of the problems of interfacing with other users of processing systems and other institutions, it became clear that a study of comparable data protection legislation in different countries should be very useful. Up to now such legislation if existing was not yet a hindrance for projects on hand but it might become in the future.

The representative of SITPRO announced that SITPRO actually prepares a manual with Programming Guidelines taking into account the Syntax Rules recommended by UNTDI for messages transactions. This manual is of use where an interface between different systems is necessary. IATA from its side is ready to put its experience in data standardisation at the disposal of CCC members.

Although the CCC activity is aimed at customs' declaration of goods, it creates at the same time an interesting forum for all organisations involved in transportation.

For the ports it is of the greatest interest that they should be kept informed regularly on the development of customs applications of computers.

Mr. Carr reports on the South Pacific Ports Conference

Mr. R.W. Carr, Chairman of Auckland Harbours Board and a member of IAPH Executive Committee attended the 6th South Pacific Ports Conference at Rarotonga, Cook Islands, October 17-19, 1979 and contributed the following report.

SIXTH SOUTH PACIFIC PORTS CONFERENCE, RAROTONGA, 17–19 OCTOBER 1979

I attended the Sixth South Pacific Ports Conference at Rarotonga in my capacity as President of the Harbours Association of New Zealand, and, on behalf of Mr. Paul Bastard and Dr. Hajime Sato, President and Secretary-General of I.A.P.H. respectively, extended greetings to the Conference.

Attendance

There were fourteen countries represented at the Conference together with a representative from the South Pacific Commission and representatives of interested shipping companies, together with the Hydrographers from the United Kingdom, Australia and New Zealand.

Papers

A total of fourteen papers were presented giving a wide cross-section of interested areas for the Port Authorities in the Pacific Islands. I think it fair to say that it became quite clear that the problems confronting ports internationally are similar, irrespective of the size of the Port and in this regard I attach a copy of the paper presented by Mr. J. Heeney, General Manager, Waterfront Commission,

Rarotonga which may be of interest. The Port of Awarua, which is the main port in Rarotonga, is probably one of the smallest ports in the world but the problems outlined in Mr. Heeney's paper will, I am sure, be familiar to the Port Authorities in major ports.

There were four papers presented on the subject of hydrographic surveys which were of obvious interest to those present.

South Pacific Ports Association

The Constitution of the South Pacific Ports Association had previously been adopted and this Conference appointed a Steering Committee to act for an interim period of one year until the next Conference when financial and administrative matters are expected to be finalized.

The provisional President of the South Pacific Ports Association is Mr. Oliver Hunkin, Director, Department of Ports Administration, American Samoa and the Vice-President, Mr. Richard C. Chapman, Secretary of Trade, Industries, Labour and Commerce, Cook Islands.

General

All delegates expressed appreciation of the hospitality and organisation of the hosts and there was no doubt in my mind that those attending the Conference will have gained great benefit.

Dues Payment in SDR: How to treat it?

- 1: Due to the change in the By-Laws, the annual member ship dues shall be charged with the SDR units and payable, of its equivalent amount, in the US dollars.
- 2: Invoice from the head office will be expressed as follows:

SDR 660.00 (1SDR=US\$1.30671, as of Dec. 10, 1979) (Per unit)

- 3: Therefore, the actual amount payable in US Dollar is \$862.43 (Being 1.30671 x 660).
- 4: Should the current SDR rate is not available at member's office, at the time of his making remittance, this office entertains his quoting the above said rate of Dec. 10, 1979, if the remittance will be made before the end of January 1980. For the remittance after that time, members will be requested to quote the current rate from the monetary authority in the region or from this office.

Proceedings of the 11th Conference completed

The Proceedings of the 11th Conference of IAPH held in Deauville, France May 12-19 was published in December, 1979. Due to the extraordinary process of making the English version of transcription from the tapes originally spoken in French, the compilation work has slightly been delayed, for which we express our apology to the members.

Volume 1 encompasses all sessions of the Conference, the Working Sessions, Plenary Sessions, Secretary General's Report on financial affairs, and social events as well as Exhibition, Volume 2, on the other hand, comprises the reports prepared by the four technical committees which our host published and pre-distributed to the participants for their preliminary review prior to the discussion at Deauville.

Additional copies will be available by writing to the Tokyo Secretariat at US\$40 excluding mailing charge.

JAL serves you as official carrier for the Nagoya Conference

Japan Air Lines, Japan's national carrier with worldwide network was recently designated as the official carrier for the 12th Conference of IAPH to be held in Nagoya, Japan, from May 23-30, 1981.

JAL's experienced staff at the respective offices spreading all over the world will be ready to serve you concerning your trip to Japan.

Visitors

- Mr. John A. Raven, Vice-President of SITPRO UK Board and Special Advisor of IAPH Committee on Trade Facilitation, visited the Head Office on November 16 and was received by Mr. Hiroshi Kusaka, Dy. Secretary-General, on his business trip to S. East countries. He also visited World Trade Center of Japan to meet Mr. Tadayoshi Yamada, President and exchanged views on the present situation of the trade facilitation services in both countries.
- Mr. Y.P. Remond, Director of Commercial of Port Authority of Marseille, visited the Head Office on November 19 during his port promotion tour around the world. He, in the evening of the same day, organized a film presentation gathering inviting representatives of various business interests related to Port of Marseille. On November 20, he visited Port of Kashima to observe the industrial port complex developed along the Pacific coast.
- On November 20, Mr. L.G. Schouten, Managing Director, and Mr. Naismith of Voith Australia Pty., Ltd., visited Tokyo on their business trip to Japan. Mr. Schouten is a member of COLS. They visited ports of Tokyo, Yokohama and Chiba to observe the operations of VLCC in Tokyo Bay area. In Yokohama and Chiba, they visited pilots association and tug operators to exchange information. On November 21, they met Mr. Kiichi Okubo, a resident member of COLS to exchange views.
- On December 5, Hon. Mr. Mario Flores Theresin, Minister of Transport of Honduras, accompanying Mr. Rene Becerra, Advisor to Minister, and Hon. Dr. Cesar Mossi Sorto, Ambassador of Honduras, visited Port of Tokyo. Mr. Theresin was in Japan to conclude a governmetal assistance programme for development of a new international airport at Puerto Cortes.
- On December 7, World Trade Mission of the Port Authority of New York & New Jersey, headed by Mr. Alan Sagner, Chairman, composed of 25 members from various business interests of New York and New Jersey, held a reception in Tokyo. He disclosed that the Mission had visited Peking as the first trade mission of the States of New Jersey and New York.

Membership Notes

New Members

Regular Member:

Brisbane Wharves & Wool Dumping Pty. Ltd. 482 Kingsford Smith Drive, Hamilton Brisbane, Queensland. 4007, Australia

Office Phone: 268 4922

Telex: AA40377 Cable: BRISWHARVES

(Capt. R.G. Simpson, General Manager)

Associate Member:

Kuwait Oil Company (KSC) (Class A)

Ahmadi - 22, Kuwait

Office Phone: 989111

Telex: KUOCO 4211 KUWAIT Cable: KUOCO KUWAIT

(Mr. F.T. Al-Ghanim, Deputy Director, Operations)

Conference & Symposium

 "Inter Island Shipping" Conference and Exhibition sponsored by United Nations ESCAP and Maritime Industry Authority of the Philippines.
 Ramada Hotel, Manila, Philippines, March 11-14, 1980 Themes: "Current issues in Inter Island Shipping"; "Regional Co-operation in Shipping"; "Efficient Ports for Inter Island Shipping".

Details from:

MarIntec S.E.A. (Pte) Ltd., 84, World Trade Centre, Telok Blangah Road, Singapore 0409.

"Petroleum Tankship Operations"—A Course for Shore-side Personnel. The World Trade Institute at the World Trade Center; February 4-8, 1980/New York; March 24-28, 1980/San Francisco; April 28—May 2, 1980/New York.

Details from:

Details from:

The World Trade Institute, One World Trade Center, 55W, New York, New York 10048, U.S.A.

3. "BARGECON 80"—An International Conference on Barge-Carrying Vessels, Large Tug/Barge Combinations and Large Barge Modules-sponsored by Shipping World & Shipbuilder and Marine Engineering/Log. Fairmont Hotel, New Orleans, May 13-15, 1980.

BARGECON 80 Conference Office, 69 High Street, Lindfield, Haywards Heath, Sussex RH 16 2HN, England.

4. "The 6th International Symposium on the Transport of Dangerous Goods by Sea and Inland Waterways" sponsored by Ministry of Transport of Japan, Japanese Maritime Safety Agency and others.

Themes: Problems relating to Intermodal Carriage of Dangerous Goods; Procedures and Problems in Ports and Harbors in relation to Dangerous Goods, Risk Analysis, Hazard Evaluation and Emergency Response; Design and Equipment of Ships Carrying Dangerous Goods; Packing Materials for Dangerous Goods and Their Use; Offshore Storage System of Crude Oil; Other Related Topics. Tokyo, Japan, October 13-17, 1980.

Details from:

Secretariat, The 6th International Symposium on the Transport Dangerous Goods by Sea and Inland Waterways, c/o Nippon Kaiji Kentei Kyokai, 9-7, Hatchobori 1-chome, Chuo-ku, Tokyo 104, Japan.

Publications

 "Guidebook on the Use of Small Scale Computers for Industrial Managers in Developing Countries" prepared by the Factory Establishment and Management Section of UNIDO in co-operation with EXEC AG, Basel, Switzerland, and the International Institute for Applied Systems Analysis (IIASA), Laxenburg, Austria. The Guidebook is available (at present, in English only) on request from the Editor, UNIDO Newsletter, quoting symbol UNIDO/IOD. 260.

United Nations Industrial Development Organization P.O. Box 707, A-1011. Vienna, Austria.

2. "Safety Inspection Guidelines and Terminal Safety (Continued on next page bottom)

Supplement to "International Survey of Port Training, Advisory Facilities and Requirements, 3rd edition"

by the Committee on International Port Development, IAPH

Port Autonome of Rouen

PORT AUTONOME OF ROUEN SECTION I – TRAINING FACILITIES AVAILABLE PORT OPERATION-MARINE

(Legend: DETAILS/LENGTH OF COURSE/LEVEL OF WORKERS FOR WHOM COURSE DESIGNED/GENERAL COMMENTS)

Dredging/3 weeks/People at all levels/Improving and preservation of dredging engine (bucket-lader; trailing suction hopper; cutter-suction dredge)—all works of dredging on estuary and channel.

Pilotage/1 month/Pilots and Port Officers.

Training for Port Officers and marine controllers/2 weeks/Port Officers.

Hydrography draughters/2 weeks/Personnel with some expérience of surveying carthography and drawing expérience.

CONVENTIONAL

Handling Equipment warehouses and storages/3 weeks. Terminal heavy loads operations/2 weeks.

UNIT LOADS

Container and ro-ro terminals/2 weeks/Spécialists in these fields.

MANAGEMENT AND ADMINISTRATION

Port Management, Staff management, Warehousing management, Finance, Traffic and trade développement, Planning research computer application, Port economy/ 2 weeks/All levels/By spécific arrangement with the P.A.R.

ENGINEERING

Portuary master plans—channels—estuary management—quays, berths—network—Access channel—Sea defenses—building—transit sheds—warehouse—wharf fendering/ 2 weeks/Engineering staff.

MECHANICAL AND ELECTRICAL

Maintenance of all mechanical and electrical systems/ 2 weeks.

-Maintenance of dredging engines/2 weeks.

SECURITY

Safety, Control and regulation of port/1 month/all levels.

FINANCE

Financial management/2 weeks/specialists in these fields. Analytical accounts.

MISCELLANEOUS

Relations between river and maritime port/1 week/all levels.

SECTION II – TECHNICAL ADVISERS AVAILABLE PORT OPERATIONS-MARINE

Pilotage/2 months/Pilots and Port's Officers/—practical training in ship handling—practical training in new ship handling (containers)—Systematic use of radar. Training for port officers and marine controllers./2 weeks/Port officers.

Hydrography draughtsmen/2 weeks/Personnel with some experience of surveying carthography and drawing.

(Continued from page 11)

Check List for Gas Carriers (1st Edition—May 1979)"* ISBN 0 900886 43 9 Price: £3.50 net.

"Guidelines and Recommendations for the Safe Mooring of Large Ships at Piers and Sea Islands"*

ISBN 0 900886 33 1 Price: £10.50 net.

"International Safety Guide for Oil Tankers & Terminals"**

ISBN 0 900886 36 6 Price: £18.00 net.

* issued by Oil Companies International Marine Forum.

**issued jointly by The International Chamber of Shipping and Oil Companies International Marine Forum.

Witherby & Co. Ltd., 32-36 Aylesbury Street, London EC1R OET, England.

Prices include the cost, packing and postage via surface mail.

 "Manual de Gestion de Puertos" (Spanish edition of the 1978-published "Port Management Textbook" by the German Institute of Shipping Economics.

Price: DM 48.00 plus postage.

Institut fur Seeverkehrswirtschaft, D-2800, Bremen,

Federal Rep. of Germany.

- 4. "ICHCA XIV Biennial Conference Helsinki 1979 Proceedings"
 - Vol. I (Bulk Cargo Forest Products), Vol. II (General Cargo Port Administration)—available immediately
 - Vol. III (3 delayed papers, discussions, speeches) when printed during autumn 1979.

Price £25.00 or \$50.00/set, excl. postage.

The payment has been remitted to ICHCA-FINLAND Bankers, Kansallis-Osake-Pankki, Helsinki, Account No. 103150-202301-8.

Airmail/postage rates per set: Scandinavia £3.00 or \$6.00, Europe £4.00 or \$8.00, Non-European countries £7.00 or \$14.00.

ICHCA-FINLAND, P.O. Box 290,

SF-00131 Helsinki 13

Finland.

5. "The Role of China in International Seaborne Trade and Shipping"

Price: Overseas @ US\$95.00 UK only @£40.00 per copy. H P D Shipping Publications, 34 Brook Street, Mayfair, London, W1Y 2LL, U.K.

MECHANICAL AND ELECTRICAL

Maintenance of all mechanical and electrical systems/ 2 weeks.

SECURITY

Safety Control and regulation of port/1 month/All levels.

Financial Management/2 weeks/Specialists in these fields. Analytical Accounts.

On your request, a complete list of the training courses carried out by PORT AUTONOME OF ROUEN, will be send to you. Write to: PORT AUTONOME OF ROUEN, 34 Bld de Boisguilbert, 76037 ROUEN CEDEX-FRANCE.

Port of Bremen and Bremerhaven (Bremer Lagerhaus-Gesellschaft)

Section I

Port Operations Conventional Bremen/Bremerhaven

Bremen port operating company (Bremer Lagerhaus-Gesellschaft), 2800 Bremen, Überseehafen. Telex: 0244840/ training of quay side crane drivers and forklift drivers/length of course: 2 - 4 weeks/licenced drivers/charges and further details to be negotiated.

Port management seminar twice a year together with Institute of Shipping Economics, see page 102, participants of developing countries are invited.

Section I

Port Operation Unit Loads

Company: see above

Training of container gantry crane drivers and straddle carrier drivers/length of course: 2 - 4 weeks/licenced drivers/ charges and further details to be negotiated.

Container seminar together with the Institute of Shipping Economics. Participants of developing countries are invited.

Section I

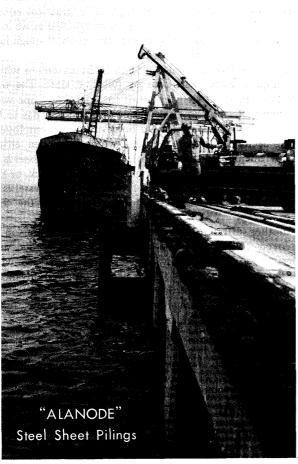
Engineering (Mechanical and Electrical)

Company: see above

Preventive maintenance and repair of port mechanical and electrical systems/length of course: 2 - 4 weeks/middle management, electricians and mechanics/charges and further details to be negotiated.

All above mentioned courses will be performed in English.

If you need any further information please do not hesitate to contact. Bremer Lagerhaus-Gesellschaft, P.O. Box 10 79 65, 2800 Bremen 1.



Cathodic Protection

LANODE

ALUMINUM – GALVANIC – ANODE

PAT. No. 254043 PAT. No. 446504

Applications:

- Steel Sheet PilingsSteel Pile Piers
- · Sea Berth, Platform, Rig

Advantages :

- · Most economical compared with other anticorrosion devices
- Simple application
- · No maintenance and power cost required after installation
- No danger of short circuiting or power leakage



THE NIPPON CORROSION ENGINEERING CO., LTD. (NIHON BOSHOKU KOGYO K.K.)

Head Office: J.T.B. Bldg., 1-6-4 Marunouchi, Chiyoda-ku,

Tokyo, Japan

Telex: Tokyo 222-3085 Phone: Tokyo 211-5641

Sole Agent: MITSUBISHI CORPORATION

Open forum: Port releases:

"Problems of Administration and Management in a Small Port"

Paper presented to the 6th South Pacific Ports Conference by Mr. J. Heeney, General Manager, Waterfront Commission, Rarotonga

Introduction

When first asked to give this paper I was somewhat disturbed. Who was I, with my limited experience, to address a gathering of highly qualified and professional people. On reflection a certain wisdom became apparent. In the past I have noted with gratitude the mutual trust and helpfulness shown and given by people from both within and outside our organisation. The realisation also came that you would be only too happy to continue this pattern and, in your own way, contribute to the growth of a small port by either confirming the direction we are taking, or alternatively guiding us towards different approaches and outlooks.

The Problems

These are three in number and are not so much problems as inescapable facts of life. As such they could almost be called principles of action, for they influence decisions as to modes of action and priorities.

- Lack of cargo volume and the resultant lack or revenue.
- 2. Stemming from the above is the need to compress the functions of personnel whereby they must act as a "jack of all trades".
- Lack of finance for the major capital development of the port.

Cargo Volume

The term lack of cargo volume should be modified to lack of continuous cargo movement.

The first consideration must be that the small port becomes, or at least has the capacity of becoming, an economical viable entity whereby it can maintain itself and in addition put money aside for capital replacement.

To achieve this end it must have sufficient revenue. Where a small port caters for a small population the trade is not there and shipping schedules have to be spaced. A situation then arises where the port has to gear itself towards peak periods of efficiently and speedily handling cargo. These peaks are then followed by a lull and slackness awaiting the next vessel.

Any businessman will tell you that the secret is in the speed with which you can turn over your stock. This enables the cutting of prices and consequently greater sales and greater profits. If the turnover is not there the only alternative is to increase the markup on cost and sell at a

higher price.

The small port is caught on the "horns of a dilemma". On the one hand it needs to be a viable economic unit and on the other hand it needs to hold one of its main attractions—lower stevedoring costs and port charges. Increased charges can only be reflected in increased freight rates and inflated cost of cargo, import and export.

One curious problem that occasionally arises in a small port and which is costly is port congestion. Shipping movements and their changes need to be known. Just because a port is small and not a busy one does not necessarily imply that a vessel will be fully worked on arrival. Clashes of E.T.A. do happen.

Personnel

In a large port there is the ports manager, harbour-master, engineer, accountant, stevedore, ships owner/agent, mechanical section, security service; in fact all sections required, each containing professional people in their own field. In a small port this is not possible. While some people may be trained or qualified in one area they are forced through circumstances to undertake other positions as well. These other areas are ones of continuing practical education. A Conference such as this is most valuable as we look to the experts for advice in those areas which, through lack of training, we are only novices.

A further difficulty encountered is the extent to which you employ either part-time or full-time staff. The first priority is to have sufficient staff to be able to cope with movement of cargo at peak periods. A decision has to be made as to which staff should be permanently employed. Having decided this there are then two options open, either the staff member fulfills his correct role when a vessel is in port and in between ships is employed in other work, or the staff member changes his work function when a vessel is in port and then reverts to his correct role when the ship leaves.

Another difficulty is one of training. If a person is employed full-time in one capacity his knowledge and expertise should gradually and naturally increase with experience. If promise is shown he can be given advanced training. In a small port there is not always the continuity of work and even though the skills may be there, they, through lack of exercise, are slow in development.

Finance

Money may be the root of all evil but, in small ports insofar as harbour development and capital improvement is concerned, the evil is in the lack of it. Harbour revenue is insufficient for it to be in the position of sustaining the amount of finance required and then trading its way to better footing. Government aid, whether local or overseas,

(Continued on next page bottom)

Annual Report 1978: Papua New Guinea Harbours Board

CHAIRMAN'S REPORT (extract)

GENERAL OPERATIONS

Dry cargo traffic and oil over Harbours facilities at all ports increased from 1,310,000 tonnes in the period January to December 1977 to 1,977,090 tonnes during 1978 which was far above expectations. Noteworthy increases occurred at Lae 312,000 tonnes 65.7%; Port Moresby 88,000 tonnes 26.4%; Kieta 48,000 tonnes 45.7%.

Significant quantities of construction materials shipped in overseas ships are now passing through Oro Bay as the

(Continued from page 14)

is definitely required.

Reports may be written on port development but are themselves valueless unless backed by the financial resources needed to implement them. This does not decry the importance of reports. They are the first stepping stone in arousing awareness as to what currently needs to be developed and even more importantly what requires to be done for future developments to handle changing shipping patterns. These changes can be more rapid than the port's ability to cope. The consequences are serious to the economy if direct access to overseas markets currently enjoyed are, in the future, lost.

Rarotonga

Rarotonga has seen the change from a lighterage port to one where small overseas vessels can be berthed. In 1974, the Waterfront Commission was formed for control of cargo, stevedoring and agency work. The incredible part of its early years was that it began with largely part-time staff and no cash capital. The attendant operational and financial problems generated are obvious. There was no working capital, in fact a deficit. This was not remedied until 1977/78 and that by the twin approach of increasing charges and the curtailing of expenditure. One of these items of expenditure deserves special mention.

Insurance

Accidents must and will happen. The worries caused by non insurance or under insurance are not warranted. One major accident could almost bankrupt an operation.

It is particularly pleasing to see an insurance related paper to be presented at this Conference. It is essential that exact liabilities be known and steps be taken to reduce the cost of insurance cover. The problem in a small port can arise that, through lack of expertise, liabilities may not be fully known and hence provided for.

Lighterage

No paper on small ports would be complete without mention of lighterage work at the roadstead. Some small ports are blessed by nature with deep water harbours, others less so till the other end of the scale is reached and there is the anchorage port where cargo is worked by lighter. Here again nature steps in and the capability of working cargo and the speed of work are dependent on sea and wind conditions prevailing at the time.

Higaturu Oil Palm Scheme gets under way. The first shipment of palm oil is expected in mid 1980; a scheduled direct service between Australia and Oro Bay is to commence shortly.

Lorengau has fallen off as expected and formal management has not yet been established at Buka. Few changes took place in the operational field during the year as it was more a period of consolidation of the swing to containerisation which took place in the second half of 1977. Handling methods were improved and unstuffing and deliveries speeded up. One noticeable feature was the increasing numbers of FCL's being delivered direct to warehouses without unstuffing in the ports, reducing the amount of handling to be done in the transit sheds; this trend was further accentuated at Port Moresby with the opening of a container freight station at Lawes Road to which all containers from certain vessels are taken directly from the ships' side.

Whilst the Australia/PNG trade is now almost totally containerised there is still no clear indication when the Japanese and South East Asia trades will follow but such a change is inevitable. The Bank Line and the New Zealand trade are becoming increasingly containerised. The Lash service between U.S. and Australia with calls at Lae and Rabaul will cease in March leading to further containerization.

The greatest changes have taken place in the field of coastal shipping; one of the major groups has gone out of business and many obsolete vessels have gone out of service; the PNG Shipping Corporation has bought a substantial share in Mainport Cargoes and are replacing older vessels with newer and larger ships.

There has been a re-grouping of the smaller companies to form Consort Express Line which is also bringing in new tonnage. South Seas Line has changed hands; Lutheran Shipping is reequipping with new and larger ships. Provided an over-tonnaging situation does not arise again, these changes should bring about more efficient services. Some of the additional tonnage will undoubtedly be utilised to carry containers on through bills of lading between major and minor ports, thus reducing the number of ports at which the overseas ships will call. This will necessitate larger coastal vessels having to use overseas wharf facilities. During the past year only 7 coastal ships berthed at the Board's wharves at Madang and four at Rabaul.

At Port Moresby early in the year an investigation was undertaken into threatened congestion in the transit sheds. This revealed a combination of causes leading to slow deliveries of import cargoes and remedial measures were instigated by most parties concerned. Also revealed were weaknesses in some security aspects and the Board has taken steps, including the introduction of its own delivery dockets, to rectify the deficiencies.

Late in 1977, an investigation was undertaken into the handling of exports, mainly coffee, at Lae as there had been many unsatisfactory aspects of the previous seasons handling of coffee. As a result of this, with the support of the coffee shippers, shipowners and stevedores, a greatly improved system evolved and the 1978 season went extremely well.

PORT MORESBY DEVELOPMENT PROJECT

By the beginning of the year all impediments to the construction of the container terminal at Port Moresby had been overcome and in early March formal negotiations took place with the World Bank, the Kuwait Fund for Arab Economic Development and the PNG Government.

Both lending agencies agreed to contribute 32% (US\$3.5 million) of the cost of the project for which the total cost would be approximately K5.5 million; the Harbours Board is contributing one third of the capital cost from its own resources. The terms of the loans are that in the first instance the loans are to the Government at an annual interest rate of 3.5% per annum in the case of the Kuwait Fund and 7.45% in the case of the World Bank; these amounts are on-lent to the Harbours Board at 7.5% per annum with repayment over twenty years.

Included in the Loan Agreements is provision for the purchase of three pilot launches at a cost of K220,000. Other provisions are for a training study and subsequent costs of training of port personnel. A study must also be conducted early in 1979 to examine the Board's cost/revenue structure and to take necessary measures to rectify tariff anomalies. The Board is required, from 1980 onwards, to show an overall rate of return on the value of operational assets of 7%.

Following on finalising financial arrangements, the construction contract was put out to tender. The contractor has until May, 1980 to complete the works but progress has been good todate and there is hope that the completion date may be earlier.

INDUSTRIAL RELATIONS

Industrial relations have remained good at all ports with the marked exception of Port Moresby where stoppages, often in support of criminal acts, have caused frequent stoppages and delays to shipping at considerable cost to the economy; indirectly as increasing costs are reflected in costlier imports and lower export prices to producers and directly through delays to the nationally-owned Shipping Corporation and Mainport Cargoes.

Turning to more general aspects, steps are currently being taken to form one Union to cover waterside workers throughout the country. The effects of this will have to assessed whether for good or bad; it is hoped the result will not be infection of the other ports by the deplorable atmosphere in Port Moresby. What is alarming is that the new nationwide union will also include seamen.

The Board sincerely hopes that the formation of one handling cmpany in Port Moresby will lead to a better and more responsible atmosphere in that port.

P.F. TARUA Chairman

Balance Sheet as at 31 December, 1978

	31 Dec. 1978	31 Dec. 1977
Equity Capital Profit & Loss Account	7,830,000 6,310,140	7,830,000 4,912,649
RESERVES & PROVISIONS: Loan Redemption Sinking Fund	373,640	326,400

Asset Insurance Reserve	750,000	668,893
R.B.F. Provision	5,448	5,448
Asset Revaluation Reserve Surplus on Revaluation	293,000	293,000
of Fixed Assets	5,460,140	5,460,140
LONG TERM LIABILITIES:		
Government Loans	1,457,000	1,457,000
I.D.A. Credits	6,047,542	6,240,714
CLIP DENT LLA DILLITIES	1 212 622	275 405
CURRENT LIABILITIES:	1,212,633	375,485
	K29,739,543	K27,569,729
	31 Dec.	31 Dec.
	1978	1977
FIXED ASSETS:		
Fixed Assets	27,100,530	26,877,454
Less: Provision for		
Depreciation	3,833,188	3,040,632
	23,267,342	23,836,822
WORK IN PROGRESS:	3,692,642	214,847
INVESTMENTS:	1,973,640	2,981,640
CURRENT ASSETS:	805,919	536,420
_	K29,739,543	K27,569,729

Profit and Loss Statement for the year ended 31 December, 1978

31 December, 1978	
	31 Dec.
	1978
Revenue of the Board under the Act	
Wharfage	2,240,797
Berthage	1,207,624
Storage	489,747
Port Dues	152,436
Berth Reservations	39,945
Licences	63,064
Pilotage	458,422
Sundry	343,317
	4,995,352
Expenditure of the Board under the Act	
Depreciation Fixed Assets	803,998
Interest – Loans	533,478
Other Expenditure	2,459,344
	3,796,820
Operating Profit	1,198,532
Non Operating Income	327,306
Net Profit for the Year	1,525,838
Less: Transfer to Asset	
Insurance Reserve	250,000
Transfer to Sinking Fund	
Loan Redemption Reserve	47,240
	297,240
Retained Profits for the Year	1,228,598
Plus: Retained Profits	1,220,000
Brought Forward	4,912,649
Transfer from Asset	.,,,,,,,,
Insurance Reserve	168,893
	6,310,140

The Independent Consortium of the Port of Naples—its policy and role

by Prof. Avv. S. Riccio, president

The assertion that the Italian port organization (system) should be considered as belonging to the European Community is by now taken for granted this is based on a geographical fact, that is on the bridge like position which our country has between North-Central Europe and the Mediterranean area.

The irreversable development of maritime transport, moreover, has brought about a corresponding development of integrated system of transport by rail and by land.

The Neapolitan integrated transport field can assume a new importance; and its range of attractions can spread to faroff places in as much as the relationships of the different components of the cost of a complete shipment, change from one to the other and these are not only segments from land transportation to sea transportation and again to land transportation, increased by the relative transhipment rates, but they must justly keep in mind other components; in particular, the lenghth of time for transportation which fundamentally reduces interest rates and the return on idle capital, which is represented by the flow of goods. Even if we can see that the single figure can change, depending on whether the goods are F.O.B. or C.I.F., the fact remains that the seller, from the various possible combinations of shipping his goods, will choose the one which obtains for him the best economic results.

There is no doubt that sea transport, from the Mediterranean area to the ports of the Nord Sea, via the Straits Gibralter, not only requires much more time than over-land transport along the Italian Peninsula, but it is also longer. If the revenue of the total cost by sea, of the distance to be covered amounts the cost of land transportation, or inland waterways from the unloading port to the final destination is greater than the consultant total cost by land for the same distance (including the cost of the relative items of insurance, interest transhipment will mean that the users choice will fall on the latter solution. In the light of this the Italian ports can carry out an economically interesting sale for the principle countries of the economic Community. This is the aim which the independant consortium of the Port of Naples, (the first and only example of an integrated system of eight ports in Italy) was pursued since it was formed. This would mean making the port of Naples a territorial connecting instrument of the policies of the E.E.C. extending towards the necessary integration of the markets grouped in the same basin, which are the Middle East, North Africa, Europe, and linked together by way of Suez and by way of the Atlantic routes, to a much larger exchange network.

Naples the Med. Port of Europe, Naples a distribution and connection point between the Med and the Oceanic routes. These are ambitions but undoubtably rational aims, which are not the least bit foolish when related, to the geographical figures; to the trends which we already have on insight towards an evolution of inter exchange, to the traditional, even if still restricted nature of the operations of the port of Naples (the level of which corresponds between its regional connections); to the opposition of

Italian economic politics in the Southern key. The realisation of this objective would be over a medium to long term period, but the choices, in accordance with this type of management are realised in the short term. At the end of which the Consortium has already some precise operative guidelines which aim to shape the development of the port by way of politics directed towards the improvement of all the economic sectors on coast positions and which require landing structures. From this it has been decerned that one of the primary aims of CAP has been the specialisation and integration of single ports, on the basis of their specific dedication, leaving the port of Naples with its multi-functional role, so as to include in the system the Port Consortium in the economic context of the whole Southern Italy.

In this light the Consortium has worked out a rationalisation plan of the port administration, which, when approved by a meeting of the CAP, will constitute the first example of port politics put into operation, which will be aimed at planning the management of resources in accordance with economic principles, and will try and establish a link with the general system of transport. Furthermore, to offset the effects of urban congestion and of the resulting shortage of space, railway like connections on rubber and rail networks for an exclusive use are being created. Therefore, between each of the Consortium ports there will be special Customs procedure. At the office there is a plan for the creation of a large "interport" on the inland areas of Naples with annexed warehouse and goods distribution areas, which adhere to the Custom procedures of the Port of Naples. Things are proceeding in accordance with the opinion expressed by the Planning Control Commission, to apply the following objectives:

- a) Port Security, obtained by the application of the proper technical solutions necessary.
- b) Adjustment to Container Traffic, for a predicted short term demand of about 170.000 containers a year with the construction of a second container terminal.
- c) Improvement in the movement of RO/RO by the pre-arranged flow of this traffic to the new eastern dock in phase of construction.
- d) Reorganisation of the Oil Dock through the construction of an oil terminal linked to refineries by underwater pipelines.
- e) The Creation of specialised terminals for the loading of cars and special goods.
- f) A continuous improvement of transport connections and of tools and equipment. The new operations advisable for maximum utility and development of the port system are those which are also recommended in "The special plan for the metropilitan area of Naples" and they aim at exalting the role of Naples as being a balanced metropolis on a national scale, and to present the port system as a natural and functional Mediterranean rung of the E.E.C.

The promotional policy of the Consortium is based on contacts with official bodies of different countries, who are, or who could be interested in more cordial maritime relationships with Naples. It is not a policy in competition

with other national sectors, it is a line of action destined to assure new movements of traffic towards Italy, and to make them converge on Naples. The port of Naples energetically demands its rights all the more as it is conscious of its own capability of being the Southern part of the E.E.C.

This awareness derives from the efficiency with which it has operated in response to the sudden change in the operational reality of the port. In fact, even though the Independent Consortium of the port of Naples has only been able to operate as an Ordinary Administration organisation from February 1977, it has quickly adapted to market demands.

In this way the need was arisen for an efficient container terminal to give to the port the necessary requirements for it to be able to reach a place in the fore-court of the Med. area, assuming the role of a collecting centre, receiving and sending out integrated traffic from and to the Mediterranean. Ports of Europe, other than those of Africa and Asia, receiving also transoceanic full-container traffic.

Consequently we have carried on keeping in mind technical factors, the high specialisation of the equipment; operative, the necessity to provide large parking areas; free movement of containers; various services; and other facilities etc; economical, so as to maximumly reduce port costs, and to increase the rate of movement of the containers.

The containers terminal at the Bausan Pier at the Port of Naples arose in this way with an equipped area of $42.000 \, \text{mg}^2$., with about 650 linear docking metres, two container cranes already operational and two others which are similar expected in the short term, which are suitable for ship containers of any size and several efficient and quick means of transport on land.

Such equipment allows the handling of about 100 containers an hour and, it is interesting, without doubt because of the remarkable saving in time and money, 50 containers an hour per mooring.

The stockage capacity in the terminal area further foresees that within the port there will be about 7.000 units a day. Besides together with the containers, other kinds of goods are posed with the problem of space within the port. It is a problem of primary importance in the sphere of which emerges the necessity for a coordination of the different levels, to improve or construct new terminals appropriately equipped and capable of coping with the real needs of the traffic which use the system. The transportation of wood is carried out in noticeable quantities through the port of Naples (About tons 150.000 in 1977); it is one of the goods which require large appropriately equipped areas. The importance of wood, (as a raw material) and its exportation (finished article) is linked to our old tradition of being furniture craftsmen, and to the new plants for the industrial transformation of the wood.

The wood processing sector in Campania is very wide and it takes in 4,000 businesses with a value of production of several billions of lire.

The wood which is imported for its valued rarity, from Africa and South America assumes a great and fundamental importance for the regional industry which it needs in large quantities.

The Consortium, to aid the traffic of wood, and other even more famous cellulose materials, has provided services of a better quality and larger capacity with the provision of a terminal at Piscacane Pier and they are offering a closed tariff for the commercial operations.

The positive result of this experimental terminal and the forecasts of a substantial increase in the flow of these products has induced the Consortium to bring forward the construction of a second bigger terminal at Vittorio Emanuele Bridge.

Similar space and receiving in flow capacity problems, are presented by the exportation motor vehicles to other countries of the Mediterranean Basin and on the Oceanic routes.

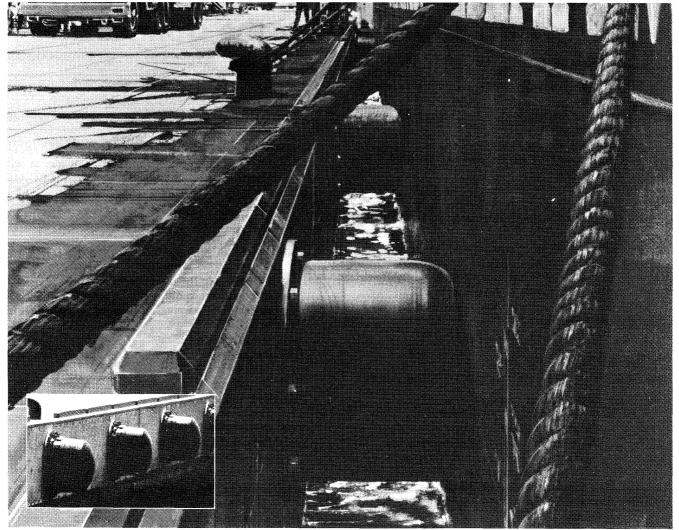
The presence of the FIAT factory at Cassino, Grottaminarda and Lecce, and the factory of Alfa Sud at Pomigliano d'Arco should naturally bring about a noticeable flow for the Consortium ports and in particular for the port of Naples.

SUMMARY

In conclusion, the goal to be obtained reflects the need to create by means of expansion, (dimension wise) and a working organisation, a body capable of proposing a valid reply to whatever could be the demands of Mediterranean maritime transport and oceanic transport, in order to create of Naples and the Campania the front-door of Europe.

However, more in the future, the Neapolitan Port system will have to be the finest example of a new way of looking at the relationship between man and the sea. A relationship in which man, in the future will have to depend live on the sea and on its resources, which is still an untapped container. (pcol)

Air Block Fenders Assure Perfect Berthing & Mooring



Developed by Yokohama Rubber, ABF's (Air Block Fenders) are epoch-making pneumatic rubber fenders featuring bolt installation on the quay wall.

The low reaction force of ABF's assure less stress to quay wall and vessel, inclined berthing can be enlarged, while contact pressure performance is outstanding.

ABF's are excellent against rolling, swaying, yawing and all other forceful movements of wind and waves.

This means maximum safety and shock-protection whether berthing or mooring—with no possibility of

damage to the ship hull or berthing structure.

Several years of severe testing in Japan under adverse conditions has proven the quality and performance of this important harbor equipment.

An additional advantage is that problems inherent in solid type fenders are solved by the new ABF design.

Yokohama Rubber's ABF's are the most advanced types available today. They enjoy wide use and give users complete satisfaction.



For further information, please contact your local agent of Yokohama Marine Products or write to; THE YOKOHAMA RUBBER COMPANY LTD.

HEAD OFFICE: C.P.O. Box 1842 Tokyo 100-91, Japan. Tel: Tokyo 432-7111 Telex: J24673, J24196 YOKORUCO Cable Address: YOKORUCO TOKYO HOUSTON OFFICE: One Houston Center, Suite 1910 Houston, Texas 77002 U.S.A. Tel: 713-654-8123 Telex: 77-5472 YOKORUCO HOU LONDON OFFICE: 3rd Floor Standbrook House, 2-5, Old Bond, Street London W1X3T.B, England. Tel: 01-499-7134/5 Telex: 885223 YOKOCO G

International maritime information: World port news:

IMCO Long-Term Work Programme up to 1986 approved by the Council

1. Legal Committee

- (i) possible convention on wreck removal and related issues;
- (ii) possible convention on the régime of vessels in foreign ports;
- (iii) arrest of sea-going ships;
- (iv) legal status of Ocean Data Acquisition Systems (ODAS);
- (v) possible review of the 1926 Brussels Convention for the Unification of Certain Rules Relating to Maritime Liens and Mortgages, and the 1967 revision thereof;
- (vi) civil liability in connexion with drilling rigs;
- (vii) possible review of the CMI "Brussels" Conventions with a view to their being replaced by up-dated conventions under the auspices of IMCO;
- (viii) draft convention on off-shore mobile craft; and
- (ix) any subjects consideration of which could not be completed in the 1980/81 biennium.

2. Maritime Safety Committee

(a) SUB-COMMITTEE ON SAFETY OF NAVIGATION

Items under continuous review

- (i) Routeing of ships:
 - General Principles;
 - Adoption of new and amended schemes;
 - Revision of Regulation 8, Chapter V of the 1974 SOLAS Convention.
- (ii) Matters related to the 1972 Collision Regulations.
- (iii) Amendments to the Standard Marine Navigational Vocabulary.
- (iv) Amendments to the International Code of Signals (to assist the Sub-Committee on Radiocommunications, if necessary).
- (v) Matters related to search and rescue (except those concerning life-saving appliances):
 - harmonization of aeronautical and maritime search and rescue and procedures (in co-operation with ICAO);
 - amendments to the MERSAR Manual;
 - amendments to the INCOSAR Manual:
 - matters related to the Convention on Maritime Search and Rescue.

Items of higher priority

- (vi) Carriage requirement and performance standards for collision avoidance systems and associated equipment.
- (vii) Ship movement reporting systems.
- (viii) Operationa requirements and technical specifications for Omega differential correction systems.

- (ix) Accuracy requirements for and harmonization of radionavigation systems.
- (x) Review of international requirements and recommendations for navigational aids.
- (xi) Performance standards for navigational aids and related equipment.

Items of lower priority

- (xii) Maritime buoyage systems (in co-operation with IALA).
- (xiii) Navigational problems related to dumping and incineration operations.

(b) SUB-COMMITTEE ON RADIOCOMMUNICATIONS

- *(i) Maritime distress system, e.g.:
 - revision of Resolution A.283(VIII);
 - replies to Questionnaire on casualties.
- *(ii) International co-ordination of promulgating navigational warnings to shipping (in co-ordination with IHO).
- *(iii) Use of selective calling.
- *(iv) Operational requirements for survival craft radio equipment.
- *(v) Operational requirements for EPIRBs.
- *(vi) Operational standards for shipborne radio equip-
- (vii) Preparation for WARC 1979.
- (viii) Preparation for CCIR Study Group 8, e.g.:
 - -*operational requirements for a global distress system;
 - -*use of high frequencies for distress and safety purposes;
 - -*use of A3A and A3J emissions for distress and safety purposes;
 - numerical identification of stations in maritime telecommunications.
- (ix) Operational requirements for Omega differential correction systems.
- (x) International common MF channels.
- (xi) Ship-aircraft distress communications.
- (xii) On board communications.
- (xiii) International Code of Signals.

* Priority items

(c) SUB-COMMITTEE ON LIEE-SAVING APPLIANCES

- (i) Revision of Chapter III of the SOLAS Convention.
- (ii) Measures to prevent hypothermia (in co-ordination with the Sub-Committee on Standards of Training and Watchkeeping).
- (iii) Carriage and operational requirements for EPIRBs (in co-ordination with the Sub-Committee on Radiocommunications).

- (iv) Consideration of parameters other than tonnage.
- (v) Symbols for emergency and operational purposes on board ships.
- (vi) Stability of inflatable liferafts.
- (vii) Fabrics for inflatable liferafts.
- (viii) Compatibility of life-saving appliances with search and rescue operations.

(d) SUB-COMMITTEE ON STANDARDS OF TRAINING AND WATCHKEEPING

- Mandatory minimum manning requirements for sea-going ships.
- (ii) Training and qualifications of crews serving on mobile off-shore units.
- (iii) Requirements for certification of combined deck/ engine officers in charge of a navigational watch and engine room watch.
- (iv) Minimum knowledge for certification of electricians and/or electrical officers.
- (v) Requirements for training of crews in fire-fighting.
- (vi) Training and certification of crews of fishing vessels (in co-operation with the Sub-Committee on Safety of Fishing Vessels).
- (vii) Training in prevention of hypothermia (in cooperation with the Sub-Committee on Life-Saving Appliances).
- (viii) Medical training.
- (ix) Follow-up actions of Resolutions of the Conference on Training and Certification of Seafarers, 1978 in particular Resolutions 11, 13 20 and 21.

(e) SUB-COMMITTEE ON THE CARRIAGE OF DANGEROUS GOODS

Items in order of priority

- (i) Amendments to the International Maritime Dangerous Goods (IMDG) Code and its Annexes.
- (ii) Amendments to the Recommendations on Safe Practice on Dangerous Goods in Ports and Harbours.
- (iii) Amendments to the Recommendations on Safe Use of Pesticides in Ships.
- (iv) Amendments to the Medical First Aid Guide for Use in Accidents involving Dangerous Goods.
- (v) Portable Tanks and Road Tank Vehicles for Dangerous Goods—Revision of Section 13.
- (vi) Emergency Procedures for Ships Carrying Dangerous Goods.
- (vii) Fire Safety Measures for Ships Carrying Dangerous Goods.
- (viii) Carriage of Solid Dangerous Materials in Bulk.
- (ix) Inclusion of Pollutants in the IMDG Code (Updating of MEPC/Circ.50).
- (x) Identification of Areas on Board Ships where Signs and Symbols are needed for Emergency and Operational Purposes—as appropriate.

(f) SUB-COMMITTEE ON CONTAINERS AND CARGOES

Items of high priority

- (i) International Convention for Safe Containers (CSC 1972)—interpretations, implementation procedures and amendments.
- (ii) Complete revision of the Code of Safe Practice for

- Bulk Cargoes to include inter alia solid dangerous materials in bulk.
- (iii) Handling of bulk solid dangerous materials in ports.
- (iv) Angle of repose as a criterion for shifting bulk cargoes having a grain size greater than 10 mm.

Iteras of low priority

- (v) Safe stowage and securing of cargo, cargo units and vehicles, including the securing of cargo in cargo units to vehicles and other entities carried on deck and under deck.
- (vi) Trimming procedures.
- (vii) Flow moisture point tests.
- (viii) Sampling procedures.
- (ix) Periodic consideration of amendments to the Bulk Cargoes Code.
- (x) Code of Safe Practice for Ships Carrying Timber Deck Cargo—Amendments and implementation.
- (xi) Implementation of the IMCO Grain Rules.
- (xii) Identification of Areas on Board Ships where Sings and Symbols are needed for Emergency and Operational Purposes—as appropriate.

(g) SUB-COMMITTEE ON FIRE PROTECTION

Items of higher priority

- (i) Fire safety measures for ships carrying dangerous goods for the following modes of transport:
 - their carriage in packaged forms in the manner of general cargo;
 - in containers and portable tanks on ships not specifically designed for such carriage;
 - in containers and portable tanks on ships specially designed for such carriage;
 - on Roll-on/Roll-off ships carrying dangerous goods;
 - carriage of solid dangerous substances in bulk or in very large quantities in packaged forms;
 - carriage of dangerous goods in ship-borne barges and barge carriers.
- (ii) Fire safety measures for special purpose ships.
- (iii) Extinguishing media and systems for chemical carriers.
- (iv) Harmonization of fire safety requirements for oil tankers, chemical tankers and gas carriers.
- (v) Safety measures for tankers, combination carriers and product carriers against fire and/or explosion, including improvement of Regulation 62 of Chapter II-2 of SOLAS 1974.
- (vi) Fire safety measures for Roll-on/Roll-off vessels.
- (vii) Formulation of fire test procedures for:
 - non-combustibility of materials;
 - flame-spread characteristics;
 - smoke hazard;
 - toxic hazard;
 - flammability of floor covering.
- (viii) Consideration of tonnage parameters in Chapter II-2 of SOLA 1974 and their probable replacement by more suitable parameters.
- (ix) Use of SI units in rounded figures in Chapter II-2 of SOLAS 1974.

Items of lower priority

- (x) Improvements of Chapter II-2 of the 1974 SOLAS Convention, including firemen's outfits.
- (xi) Future concepts of fire protection of machinery
 PORTS and HARBORS—JANUARY-FEBRUARY 1980 21

- spaces and general review of fixed fire detection systems in all types of ships.
- (xii) Fire safety measures for ship-borne barges and barge carriers.
- (xiii) Fire safety measures for nuclear merchant ships.

 Items under continuous review
- (xiv) Collection and analysis of fire casualty records.
- (xv) Excharge of information on fire safety measures in general.

(h) SUB-COMMITTEE ON SHIP DESIGN AND EQUIPMENT

- **(i) Requirements for machinery and electrical installations in general including harmonization of such requirements in various documents.
- *(ii) Requirements for manoeuvrability of ships.
- * Items of higher priority.
- ** Items under continuous review.
 - (iii) Safety measures for special purpose ships:
 - -*training, research, expedition and survey vessels, whale and fish factory ships;
 - -*mobile off-shore drilling units;
 - -*off-shore supply vessels;
 - -***any other types of special purpose ships, including pipe-laying vessels;
 - -**co-ordination of work done by various subcommittees.
- ***(iv) Up-dating of the Code for Dynamically Supported Craft.
 - **(v) Safety measures for ship-borne barges and barge carriers.
- ***(vi) Safety measures for container ships.
 - *(vii) Draught requirements for segregated ballast tankers below 150 metres in length.
 - *(viii) Safety requirements for nuclear merchant ships.
- **(ix) Unification of definitions and provisions used in the same context in various IMCO Instruments.
- **(x) Consideration of tonnage and/or other parameters in Resolution A.325(IX).
- *(xi) Safety measures for diving systems.
- **(xii) Safety measures for Roll-on/Roll-off ships.
- *(xiii) Noise vibration levels aboard ships.
- * Items of higher priority.
- ** Items under continuous review.
- *** Items not included in the agendas for the nineteenth and/or twentieth sessions.

(i) SUB-COMMITTEE ON SUBDIVISION, STABILITY AND LOAD LINES

- ***(i) Review of experience of applying the subdivision and damage stability regulations for passenger ships.
 - *(ii) Subdivision and damage stability of dry cargo ships including Roll-on/Roll-off ships.
 - *(iii) Harmonization of subdivision and stability requirements in various conventions and codes.
 - (iv) Intact stability:
 - -***review of IMCO criteria;
 - -**improved criteria taking into account external forces and other factors affecting stability of ships as well as systematic model tests;
 - -*stability of ships not fully loaded (including ballast condition).

- * Items of higher priority.
- ** Items of lower priority.
- *** Items under continuous review.
 - *(v) Stability of segregated ballast oil tankers below 150 metres in length.
- ***(vi) Improvement of the 1966 Load Line Convention.
 - (vii) Subdivision, stability and load lines of special purpose ships:
 - -*provisions for supply vessels carrying personnel to and from off-shore installations;
 - -***any other types of special purpose ships.
- *(viii) Review of technical terms used in the International Convention on Tonnage Measurement of Ships, 1969.
- ***(ix) Provisions for the necessary degree of accuracy of subdivision, damage stability and intact stability calculations and uniform interpretation and application of such calculations.
- ***(x) Collection and analysis of damage cards and intact stability casualty records.
 - *(xi) Parameters used in the 1974 SOLAS Convention.
 - *(xii) Units of measurement used in the 1974 SOLAS Convention and the equivalent SI units.
 - (xiii) Improvement of the protective location formula for ballast tanks in segregated ballast tankers.
 - (xiv) Possible replacement of "Deadweight" by another parameter in the 1978 Protocol.
 - (xv) Subdivision and stability requirements of nuclear merchant ships.
- * Items of higher priority.
- ** Items of lower priority.
- *** Items under continuous review.

(j) SUB-COMMITTEE ON SAFETY OF FISHING VESSELS

- *(i) Guidelines for the design, construction and equipment of small fishing vessels.
- **(ii) Code of Safety for Fishermen and Fishing Vessels:
 - alignment of Part B with the 1977 Torremolinos Convention;
 - updating of Part A.
- *(iii) Stability of fishing vessels1/:
 - external forces influencing the stability of a vessel under way and when fishing;
 - further improvements of stability provisions for fishing vessels.
- **(iv) Standards and practices on icing of fishing vessels.
- **(v) Requirements for fishing vessels of novel design.
- **(vi) Consideration of non-toxic and non-flammable refrigerants for use on board fishing vessels. 1
- **(vii) Harmonization of Chapter VII of the 1977 Torremolinos Convention and its Appendix 2 on life-saving appliances with the revised Chapter II of the 1974 SOLAS Convention. 1/
- **(viii) Training and certification of crews of fishing vessels. 1/
- ***(ix) Collection and analysis of intact stability casualty records and intact stability calculations, especially for decked fishing vessels of less than 24 metres in length.
- * Items of higher priority.
- ** Items of lower priority.
- *** Items under continuous review.
- 1/ Items to be considered in co-operation with other subcommittees.

(k) SUB-COMMITTEE ON BULK CHEMICALS

- ***(i) Evaluation of hazards of chemical substances.
- ***(ii) Review and updating of the Bulk Chemical Code.
- ***(iii) Review and updating of the Gas Carrier Code.
- ***(iv) Review of the status of the Bulk Chemical and Gas Carrier Codes.
 - *(v) Harmonization of the Bulk Chemical Code with the Gas Carrier Code.
 - *(vi) Extension of the Bulk Chemical Code to cover pollution aspects.
- **(vii) Carriage of bulk chemicals in deep tanks of dry cargo ships.
- **(viii) Evaluation of hazards of mixed or diluted substances
- **(ix) Bulk chemical barges engaged in international seagoing and inland navigation.
- * Items of higher priority.
- ** Items of lower priority.
- *** Items continuous review.
 - **(x) Ship-borne barges and barge carriers.
 - *(xi) Overflow control of liquid chemicals and liquefied gases.
 - *(xii) Handling in ports of liquid chemicals and liquefied gases in bulk.
 - **(xiii) Review and updating of the lists of substances in Annex II of the 1973 Pollution Convention and the Intervention Protocol.
 - *(xiv) Provision of reception facilities for noxious liquid substances.
 - *(xv) Procedures and arrangements for the discharge of noxious liquid substances.
- **(xvi) Prevention of pollution from ships carrying noxious solid substances in bulk.
- **(xvii)Bulk carriage of hazardous solid substances in purpose-built ships.
- **(xviii) Development of guidelines for technical assessment for intervention under the Intervention Protocol.
- *(xix) Safety requirements of ships engaged in dumping and incineration at sea.
- *(xx)\(\frac{1}{2}\)Ships used for carrying Annex I and Annex II substances.
- *(xxi)^{1/} Guidelines for the carriage of new substances not listed in the Bulk Chemical Code or Annex II of the 1973 Convention.
- **(xxii)¹/Possible designation of the Mediterranean as a special area.
- (xxiii) Consideration of alternatives for making the Gas and Chemical Codes mandatory.
- * Items of higher priority.
- ** Items of lower priority.
- 1/ Added by MEPC IX.

3. Marine Environment Protection Committee

- (a) Principal objectives
 - (i) Solution of technical problems involved in the implementation of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, including examination of the problems of the implementation of these instruments in relation to the protection of the marine environment in the special areas;

- (ii) development of suitable procedures for the enforcement of conventions relating to marine pollution; and
- (iii) promotion of technical co-operation, including the development of regional arrangements on co-operation to combat pollution in cases of emergency.

(b) Specific subjects

- (i) Matters related to the implementation of the International Convention for the Prevention of Pollution of the Sea by Oil, 1954, as amended in 1969;
- (ii) uniform interpretation and application of the provisions of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto;
- (iii) reception facilities for residues;
- (iv) oil discharge and control systems, including those for light refined oils;
- (v) development and updating of specifications and manual for crude oil washing systems and dedicated clean ballast tanks;
- (vi) procedures for the control of discharges from ships;
- (vii) surveys and certification of ships under the 1978

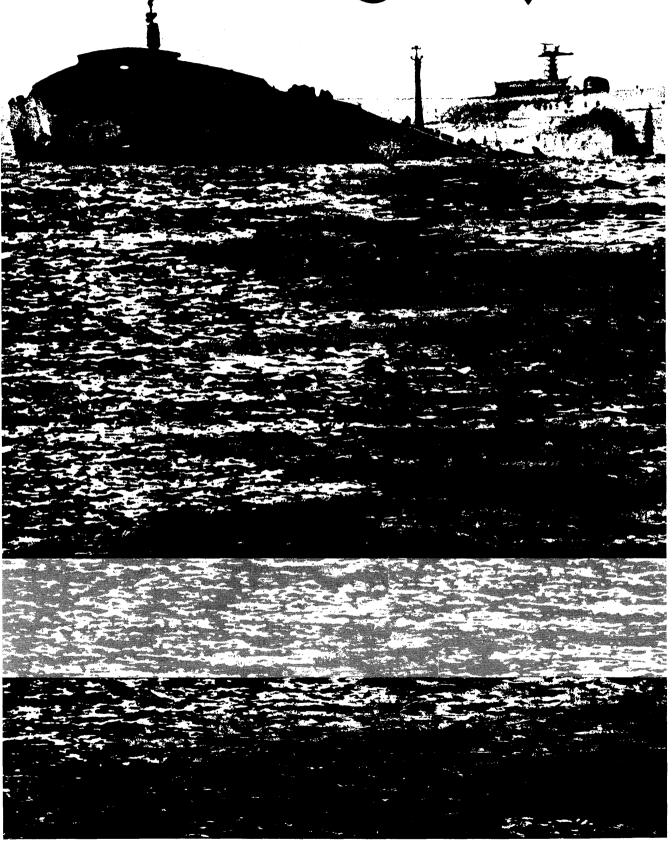
 Protocol
- (viii) penalties for infringement of the Conventions;
- (ix) casualty investigations in relation to marine pollution:
- (x) promotion of regional arrangements for combating marine pollution;
- (xi) development of anti-pollution manual;
- (xii) identification of the source of discharged oil;
- (xiii) reporting system of incidents to ships causing pollution or threat of pollution;
- (xiv) identification of particularly sensitive sea areas;
- (xv) development of manual on intervention under the 1969 Convention relating to Intervention on the High Seas in Cases of Oil Pollution Casualties and the 1973 Protocol relating to Intervention on the High Seas in Cases of Marine Pollution by Substances other than Oil;
- (xvi) categorization of liquid substances;
- (xvii) procedures and arrangements for the discharge of liquid substances; and
- (xviii) Prevention of pollution by noxious solid substances in bulk.

4. Facilitation Committee

- (i) To monitor the status of the Convention and its Annex:
- (ii) to conducts the facilitation activities within the Organization, including promotional activities, in co-operation with Member Governments/Contracting Governments, and with Organizations concerned;
- (iii) consideration of IMCO policy on electronic data processing of shipping documents and documents used for clearance of ships;
- (iv) to consider proposed amendments to the Convention and/or its Annex;
- (v) to consider formalities connected with the arrival,

(Continued on page 26)

Just dredgers, no.



Solutions, yes.

Because the IHC Slicktrail is built for the job.

With the volume of crude oil and board at all times. petroleum products which daily moves around the world, tanker accidents are an ever present hazard. And like lightning, they never strike twice in the same place. Nor are they restricted to loading and discharging terminals; many major spillages have occurred in open water, where in bad weather (and somehow Fate always seems to pick a particularly rough period) inflatable booms, detergent spraying vessels and other antipollution devices are difficult or impossible to operate.

In theory, every port at which tankers call, or which lies on a main tanker route, should have a fully seaworthy pollution control vessel standing by.

If only for reasons of cost, however, this is not feasible.

But what if a seaworthy vessel could be designed which under normal circumstances performed a utilitarian role, but which could instantly be transformed into a highly efficient collector of spilled oil?

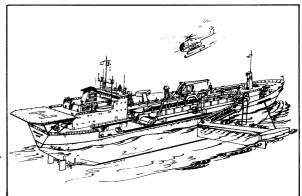
IHC Holland has designed just such a vessel. It is a trailing-suction hopper dredger, but one with a difference - several differences in fact. Boom-type collector arms, which can quickly be rigged, are carried on

The vessel has a helicopter deck on which a team of experts can be landed, and a fullyequipped "disaster centre" from which they can control operations. The vessel can be directed to the site of a spillage within a matter of minutes, the metamorphosis being effected en route. The hopper, which normally holds

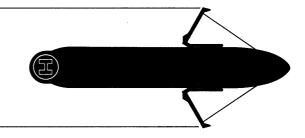
5,000 m³ of spoil, is a reservoir for five million litres (more than a million gallons) of oil-polluted water. The oil and water are separated in centrifuges, the oil then being either stored in tanks on board or transferred to a tanker steaming alongside.

This IHC solution means that very large spillages can be dealt with effectively and, since the method is faster than any in use to date, the pollution of beaches and the destruction of marine life can be prevented.

An order for a vessel of this type has already been placed with IHC Holland. Construction will be ready by the end of this year. Fast, because at IHC we don't just sell dredgers. We sell solutions.



Artist's impression of combined trailing-suction hopper dredger/pollution control vessel. Equipped with boom-type collector arms, helicopter deck, disaster control room with full communications facilities, oil/water separation plant and oil storage tanks, this vessel is the most powerful and economically viable weapon so far developed to deal with the threat of oil pollution.





(Continued from page 23)

stay and departure of ships:

- to monitor the implementation of the Standardized IMCO Model Forms (FAL 1-6);
- to consider difficulties in implementing the Model Forms, reported by Governments;
- to monitor and disseminate information on shipping documentation available in different countries;
- to consider non-acceptability of "foreign printed" FAL Forms in countries where the Model Forms have been implemented in the national format:
- (vi) to consider formalities connected with the arrival, stay and departure of cargo:
 - facilitation aspects of the intermodal transport of dangerous goods;
 - facilitation measures pertaining to transport operations with ship-borne barges;
- (viii) to consider facilitation aspects of forms and pertificates emanating from other activities of the _ ,anization:
- (ix) to consider Governments' information on Implementation of individual provisions of the Annex to the Convention.

Program of meetings 1980: IMCO

28 January -	SUB-COMMITTEE ON RADIOCOM-
1 February	MUNICATIONS-21st session
11-15 February	SUB-COMMITTEE ON CONTAINERS
,	AND CARGOES—21st session
18-22 February	LEGAL COMMITTEE—42nd session
25-29 February	SUB-COMMITTEE ON SAFETY OF
Ž	NAVIGATION—24th session
3-7 March	SUB-COMMITTEE ON FIRE PROTEC-
	TION-24th session
17-21 March	THE INTERNATIONAL OIL POLLU-
	TION COMPENSATION FUND-AS-
	SEMBLY-3rd session
24-28 March	SUB-COMMITTEE ON BULK CHEMI-
	CALS—7th session
21-25 April	SUB-COMMITTEE ON STANDARDS OF
	TRAINING AND WATCHKEEPING-
	13th session
28 April -	SUB-COMMITTEE ON THE CARRIAGE
2 May	OF DANGEROUS GOODS-31st session
19-23 May	MARITIME SAFETY COMMITTEE-
	42nd session
2-6 June	COUNCIL-44th session
5 June	COMMITTEE ON TECHNICAL CO-
	OPERATION-18th session
9-13 June	MARINE ENVIRONMENT PROTEC-
	TION COMMITTEE-13th session
23-27 June	LEGAL COMMITTEE—43rd session
7-11 July	SUB-COMMITTEE ON SHIP DESIGN
•	AND EQUIPMENT-22nd session
14-18 July	SUB-COMMITTEE ON LIFE-SAVING
Ž	APPLIANCES-15th session
15-19 September	SUB-COMMITTEE ON SUBDIVISION,
•	STABILITY AND LOAD LINES-25th

22-26 September	FIFTH	CONSULT	CATIVE M	MEETING	G OF
-	CONTR	ACTING	PARTIE	S TO	THE
	LONDO	N DUMPI	NG CONV	ENTIO	N

29 September - *SUB-COMMITTEE ON RADIOCOM-3 October MUNICATIONS-22nd session

20-24 October *COUNCIL-45th session

*COMMITTEE ON TECHNICAL CO-23 October OPERATION-19th session

*WORKING GROUP ON ASSESSMENT 27-31 October OF IMCO CONTRIBUTIONS

3-7 November *SUB-COMMITTEE ON FIRE PROTEC-TION-25th session

10-14 November*MARINE ENVIRONMENT PROTEC-TION COMMITTEE-14th session

17-21 November*LEGAL COMMITTEE-44th session

24-28 November*SUB-COMMITTEE ON BULK CHEMI-CALS-8th session

1-5 December *MARITIME SAFETY COMMITTEE-43rd session

8-12 December *SUB-COMMITTEE ON SAFETY OF FISHING VESSELS-23rd session

PROGRAME OF INTERSESSIONAL WORKING **GROUPS FOR THE YEAR 1980** AS APPROVED BY THE 11th ASSEMBLY

4-8 February Working Group on Amendments to the 1974 SOLAS Convention

4-8 February Working Group on Maritime Distress System

18-22 February Working Group on Surveys and Inspections

30 June - 4 July Working Group on Nuclear Merchant

Ships Date to be Working Group on Inert Gas Systems

determined later

IFSMA submits suggestions relating to port receiving facilities to IMCO

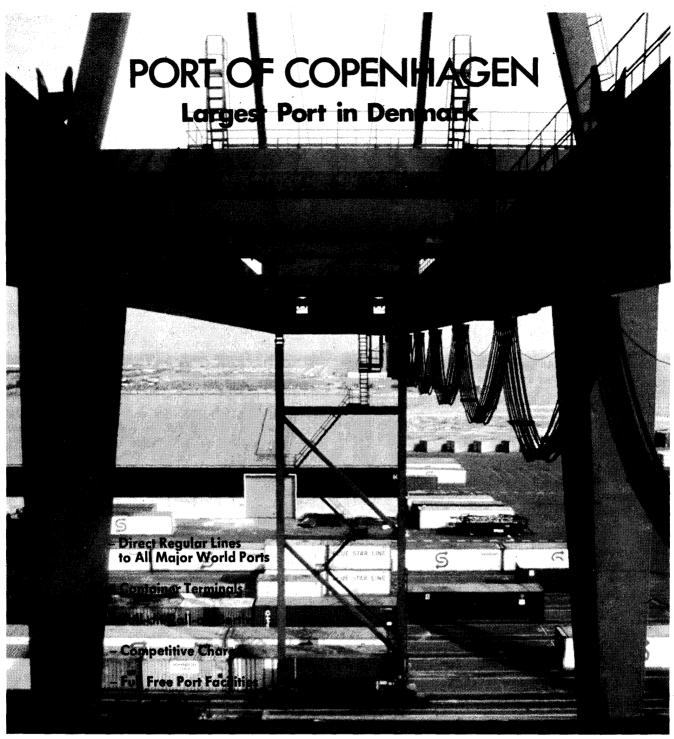
The International Federation of Shipmaster's Associations, having regard to the Shipmaster's responsibility in the prevention of marine pollution and being concerned at reports from its members of poor receiving facilities of many ports around the world, asks that consideration be given to the introduction of a document to safeguard Masters who are thereby unable to comply with the law and are forced to discharge wastes into the sea.

It is suggested that when in port a ship has chemical and/ or oily residues to discharge and the necessary receptacles or other means of disposal are unavailable, forcing the ship to take the residues to sea again, the port authorities should be required to give the Captain a document stating the amount and nature of the residues offered by the ship for discharge and the reason why it is impossible for the port to receive them.

Alternatively the port authorities could be required to countersign a statement entered in the oil-logbook by the Captain.

session

^{*} Tentative.





PORT OF COPENHAGEN AUTHORITY

Nordre Toldbod 7

DK 1259 Copenhagen K.

Clifford B. O'Hara elected president of AAPA

Clifford B. O'Hara, director of port commerce of The Port Authority of New York-New Jersey, was elected president of the American Association of Port Authorities at the annual convention held at Honolulu, November 4-8, 1979. The Association represents port authorities in the United States, Canada, Central and South America and the Caribbean.

Port economic impact

The Maritime Administration has announced publication of a 140-page volume detailing step-by-step procedure that ports can use in evaluating how valuable they are to their local communities.

The "Port Economic Impact" kit, as it has come to be known, was developed by MarAd in cooperation with the Canadian Authorities. The kit was tested in four west coast ports and includes an overview of economic impact theory, an evaluation of impact methodologies and instructions for following a 40-step procedure for conducting economic impact on local communities. The economic impact methodology is aimed at enabling "small and medium sized" ports to produce their own studies at reduced cost and increased clarity and credibility.

At the time MarAd announced publication of the kit, it also announced it has awarded a research contract to the Planning and Development Department of the Port Authority of New York-New Jersey. The purpose of the research is to develop a regional port economic impact model and enable the larger ports to utilize it. MarAd expects the research to be completed in mid-1981.

Copies of the "Port Economic Impact" kit may be obtained from MarAd's Office of Port and Intermodal Development, Room 4888, Commerce Department, Washington, D.C. 20230.

Brasilian ports news in brief

- Two electric cranes are scheduled to start operating with 18 months at the Container Terminal of the Port of Santos.
- Minister Eliseu Resends stated that the decision to build canal locks will permit the waterway formed by the Rivers Tocantins and Araguaia to become at medium term the main transportation corridor of Central Brasil.
- Companhia Docas do Pará has just installed in the Port of Belém a modern wheat suction equipment with a capacity to discharge 100 tons per hour.

The Port and the Community

The Port of Nanaimo and the surrounding communities need to work closely together to obtain the maximum benefit for everyone. Frank discussions and an understanding of all the problems involved can help achieve this co-operation, said Lloyd Bingham, Port Manager, in an interview recently.

Mr. Bingham said that the problem had been raised at an international level at the International Association of Ports and Harbors annual meeting in Le Havre.

In the last decade or so there have been dramatic changes in ports because of new transportation techniques, larger vessels requiring deep water facilities, greatly increased traffic flows and the large scale introduction of modern industries dependent on deep water and hinterland networks

"Changes and physical expansion of port areas have often evoked reactions on the part of people" comments the committee. "Local action groups resent the ongoing development of port areas, the continual changes and the various types of pollution. As a result it is becoming increasingly difficult for ports to realize plans necessary to adapt themselves to the changing needs of world trade."

"While Nanaimo doesn't have all these problems, we have to be continually alert to keep City Council, the Regional Council, and citizen's groups and the public in general informed about what is happening out there on the waterfront

The decision to allow a new \$16 million sawmill to be built on the Assembly Wharf by Mayo Forest Products was a good example." said Mr. Bingham.

Mr. Bingham pointed out that the Harbour Commission kept the media informed, appointed Commissioners for liaison with the City Council and the Regional District and organized displays and audio visual presentations for clubs, schools and in public centers such as shopping malls.

"If anyone has a question about the Port of Nanaimo's activities, we are always pleased to hear from them either by telephone or in writing.", he said.

Another good year for the Port: Nanaimo Harbour Commission

Both 1977 and 1978 were record years for the Port of Nanaimo with 673,000 tons and 686,000 tons shipped respectively. 1979 will not see last year's record figures repeated, however we can anticipate results which are very near this mark.

The strongest segment of 1979 shipments has been lumber. Shipments in this sector have increased throughout the year while pulp tonnage declined substantially in the face of labour problems in the forest industry.

It is encouraging to note a steady increase in barge trans-shipments of lumber through the port during the year. Coming from the mainland and other parts of the island, barges are unloaded either directly at shipside or for storage on the Assembly Wharf. We estimate that by year's end about 25 percent of lumber exports now reach the port by barge.

Throughout the year the Harbour Commission has made significant investments in maintaining and upgrading port facilities and a total capital expenditure of over \$1 million represents our determination to maintain Nanaimo as one of the most efficient and cost competitive ports on Canada's west coast.

During the year 1979, two major developments were announced. The G.W. Dorman Pulp Chip Company's operations on the Assembly Wharf were acquired by Mayo Forest Products. The old mill has now been dismantled and in its place the new Mayo mill, costing nearly \$20 million, has been built and with operations to commence early in 1980.

In June, 1979, the Government of Canada, the Province of British Columbia and the Nanaimo Harbour Commission signed an agreement committing them to the development of a shipping terminal at Duke Point. This commitment provides the Port of Nanaimo with the expansion potential so critical to the future of this important and growing port.

Gordon C. Mouland elected president of Canadian Port and Harbour Association

Gordon C. Mouland, general manager of the Port of Saint John has been elected President of the Canadian Port and Harbour Association. The election took place during the twenty-first annual meeting of the association in Quebec City.

Two hundred delegates attended, representing ports across the country with various forms of administration.

Saint John to get \$7.5 million container terminal expansion

The Port of Saint John will receive a loan of \$7.5 million for expansion of the Rodney Container Terminal from the Canadian Federal Government which will increase container handling capacity by 55,000 units annually.

This message was brought by the Hon. J. Robert Howie, Minister of State (Transport), at the annual Port Days conference held Oct. 1979 in Saint John.

"Saint John met the 'coming of the container' and was successful," said Mr. Howie. "The success of Rodney... has been phenomenal... and now we have the green light for an expansion project."

He said that design plans for the terminal would be ready this month with tenders to be called by December. The construction will start in 1980 and will be completed by 1981.

Toronto to get hydrofoil service

A hydrofoil service, first-ever in the Great Lakes, is scheduled to start between Toronto and Youngstown, N.Y. in May, 1980, according to Joel Rahn, president of Royal Hydrofoil Cruises.

The three hydrofoils which will be used in the service will each carry a 10-man crew and be able to accommodate 225 passengers. Capable of speeds up to 40 mph, the hydrofoils are each expected to cover the 30-mile distance across Lake Ontario in just under 40 minutes.

Need early planning start for longer Seaway season

Planning must start now on the investment decisions necessary for lengthening the St. Lawrence Seaway season from 8½ to 9½ months if the waterway is to handle the projected growth in Canadian and U.S. grain exports during the next decade, says Canada's top marine civil servant.

Any extension of navigation must be based on sound economic planning, Gordon Sinclair, marine transportation administrator, told shipping industry representatives attending a Seaway seminar at the Toronto.

He said that consideration of a longer season must follow three basic steps:

- No extension until the present cargo volume can no longer be handled effectively within the existing season.
- ullet A gradual increase to $9\frac{1}{2}$ months when the limit is reached.
- No extension to the maximum possible season of 10½ months without a realistic assessment of economic tradeoffs and other drawbacks.

Mr. Sinclair noted that year-round operations will remain out of reach because, like the ships it serves, the



Looking for a forwarder in Amsterdam?

- A stevedore in Antwerp?
- A service to Damman?
- Information about shipping to the Middle East?

The WORLD WIDE SHIPPING GUIDE will help you! You will save hours of research time with this two-volume book that contains all you need to know about steamship lines and agents, freight forwarders and customs brokers, stevedores, terminal operators, port authorities and government agencies, airlines and railroads, charterers and agents—all transportation categories needed by foreign traders. More than 1,500 world ports are covered. Listings include name, address, telephone number, service, telex, cable and key executive with over 45,000 firms servicing the import, export market. A complete international banking section is also included.

With WORLD WIDE SHIPPING GUIDE at hand you don't have to leave your desk or wait for a search to be completed. It's all there—the world of international trade—at your fingertips!

MAKE SURE you have this essential working tool on your desk. Order additional copies for others in your firm. Use this coupon now (If your check accompanies the order, we'll pay the postage, taxes, and handling charges and you save \$5. off the purchase price. The 2 Volume set will cost you only \$30.00 postpaid.

WRITE TO: Lee di Paci
WORLD WIDE SHIPPING GUIDE
77 Moehring Drive
Blauvelt. NY 10913
Please rush the 2 Volume set- WORLD WIDE SHIPPING GUIDE. En-
closed is my check for U.S. \$30.00.
NAME
ADDRESS
CITY
STATE ZTP

waterway must be withdrawn from service for between four and six weeks each year for maintenance.

Robert E. Naegele, president of Dow Chemical of Canada Limited, told the seminar sponsored by the Financial Post that the Seaway is a "mammoth utility" in the same sense as Ontario Hydro, a pipeline or the Trans-Canada Highway.

"It is inconceivable that they would be shut down four months of the year because weather conditions made operations difficult," he said.

Mr. Sinclair said that operating costs of keeping the Seaway open beyond its current closing date of December 15, will have to be borne by the users. He said the government will have to decide what portion of the capital costs it is prepared to shoulder as an investment in national development.

He pointed out that the soon-to-be-formed Seaway Advisory Council, which will give users and Seaway communities a say in future policy decisions, will play a part in the season extension process.

Mr. Naegele said that governments would perhaps be able to justify their involvement in the season extension process by considering the energy consumption in marine transport.

"Energy is big news these days and water transport is an energy bargain," he said.

He explained that it takes 8,000 gallons of fuel to transport 10,000 freight tons of caustic soda 500 miles by water, or 70,000 gallons of fuel to take the same tonnage the same distance by truck, and 20,000 gallons by rail.

He urged that research activity be intensified to find practical solutions to ice control in the St. Lawrence River sector to overcome hydro electric and environmental problems.

Most of the panelists agreed that a longer shipping season would be a real help in handling the projected increases in cargo volume in the coming years.

Combined Canadian and U.S. grain movements via the Seaway could reach 39 million metric tons by 1985, compared with 26.5 million tonnes last year and a probable 1979 total of 29 million tonnes, according to Roger Murray, president of Cargill Grain Co. Ltd. of Winnipeg, Man.

U.S. customs revenues up

The U.S. Customs Service collections rose 12 per cent from \$7,525,009,485 in the Fiscal Year 1978 to \$8,460,479,388 in 1979. The top 12 Customs collection districts and areas were as follows:

New York Seaport, Los Angeles, JFK Airport, Detroit, New Orleans, Philadelphia, San Francisco, Boston, Baltimore, Chicao, Seattle, Houston.

"Potential for continued high growth of containerization is substantial": James P. Gray

The head of a major American steamship company predicted a twofold increase in United States container volume in the next decade. James P. Gray, president of Matson Navigational Company, said the predicted growth would mean an additional seven million annual handlings to U.S. container terminals.

Gray spoke at the 68th annual convention of the

American Association of Port Authorities held in Honolulu, Hawaii. The Matson executive, speaking on a panel discussing "Container Terminal Design," admitted that the numbers seem to be large, but contended they "tend to be confirmed by other sources."

Some may think that we have seen the end of expansion in this field because of the rapid growth in worldwide containerization during the past 10 years, but according to Gray, "nothing could be further from the truth for several reasons." First, he said, there is substantial amount of conventional cargo still not containerized and, secondly, steady growth of developing countries and world trade in general continues.

"To give you a measure of what lies ahead for container shipping," he said, "... is the tonnage required to supply food, clothing and shelter, and manitain light industry in an advanced country. This amount of cargo provides ... the replacement ... and growth" equal to four tons for every man, woman and child per year. The economies of developing countries, he added, "would require an average of eight billion tons of cargo annually or four million container loads."

Another indication of how much cargo needs of developing countries is growing comes from the current national cargo movement history which shows that cargo for these countries amounts to 36 percent of total U.S. exports, up from less than 20 percent just a few years ago, Gray said. This statistic, he added, indicates "the potential for the continued high growth of containerization is substantial."

More data enhances prospects for Georgetown improvements

New developments should enhance the possibility of effecting major harbor improvements at Georgetown, State Ports Authority Executive Director W. Don Welch has announced.

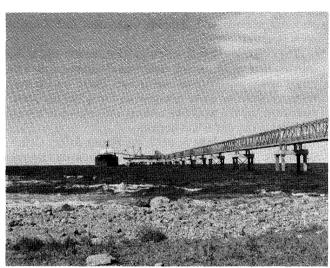
A study commissioned by the SPA on the economic feasibility of expanded facilities has been revised to conform with COE requirements. A report of that study showing a favorable benefit/cost ratio presently is under review by the U.S. Army Corps of Engineers.

After preparing additional and more detailed information requested by the Corps, the SPA continued to pursue the port improvements sought.

At issue has been the question of economic justification for constructing a new, 35-foot channel into the lower harbor.

Business and governmental support for the expanded navigation project has mounted steadily during the past two years. The SPA and other groups also have advocated dredging the present 27-foot channel twice annually and deepening it to 35 feet.

First ship loaded at multi-oriented offshore terminal



Punta Colorada Terminal

The first ship was successfully loaded at Punta Colorada, the first multiple-oriented offshore ore terminal, designed by Soros Associates of New York. Located on the Gulf of San Matias in Patagonia, Argentina, the terminal loads iron ore pellets for shipping to the steel mills located 800 miles to the north, on the River Plate and its tributaries.

One of the largest Argentine-flag ships, the 62,000 DWT ore carrier ZONDA I, arrived at Punta Colorada on September 9, 1979. Although the weather conditions were severe, with up to 30-knot winds and 6-foot waves, the ship docked at the offshore berth without difficulty and was loaded with 30,000 tons of pellets. With this cargo, the ship's draft was 27 feet, the maximum allowable for the Parana River at this time.

The docking and departing maneuvers at this open-sea berth were greatly helped by the arrangement of mooring buoys and breasting dolphins which are grouped in a semi-circle for the positioning of the ship along either one of three alternative berthing faces. The ship's orientation can be selected to suit the direction of wind and waves. A further operational advantage is that ships have a choice of docking against the dolphins or be held at a distance of up to 30 feet during loading.

The shiploading terminal extends 4,500 feet into the sea. The iron ore pellets are conveyed from the shore to the shiploader by a belt conveyor at the rate of 2,000 long tons per hour.

The owner of the shiploading terminal, Hierro Patogonico de Sierra Grande, S.A.M. (HIPASAM) produces the pellets in a plant adjacent to the terminal. Iron ore concentrates arrive at the pellet plant in a slurry pipeline originating at the concentrating plant operated by HIPASAM 20 miles inland. Expected yearly production is 2,000,000 long tons, most of which will be used by the Argentine steel making industry.

Port Corpus Christi news

• Port digging back to 40 feet

Work is underway on returning full water depth to all general cargo docks at the Port of Corpus Christi.

C.F. Bean Corporation's dredge has been churning away since Oct. 17, removing the port's most serious shoaling problem and restoring part of the Inner Harbor to a 40-foot operating depth.

At the same time, a contract has been awarded and construction begun on the Tule Lake dredge material disposal site, a key component in the overall maintenance dredging package. Levees at this site must be completed before the second phase of maintenance dredging can bring 40-foot water back to the Inner Harbor's busy oil, grain and ore docks.

When the first phase is completed in March, advance maintenance will have increased main channel depth to more than 42 feet.

Completion of the entire 9½-miles of Inner Harbor maintenance dredging is scheduled in early 1981.

Authority aimed at industry, jobs

Port Commissioners have set up a new industrial development corporation as part of the Navigation District's on-going effort to attract new industry and jobs to South Texas.

Using a new state law, the commissioners created the Port of Corpus Christi Industrial Development Authority which can issue tax-exempt bonds to help finance plant construction.

The action came after Airco Inc., a New Jersey manufacturer of medical products, requested the Port's help in building a \$6 million plant here to manufacture inhalation agents used to administer anesthesia.

The new law permits such special authorities to issue tax-exempt bonds to relatively small, labor-intense industries as an incentive for bringing new employment to the community.

JAXPORT's new color brochures

The Jacksonville Port Authority now has two new brochures available. A four-color six-page folder has color aerial photos and descriptions of eight of the major terminals and shipyards in the Port of Jacksonville plus listings of the various maritime and distribution services available in the port. A two-color Harbor and Facilities Map locates 58 different references along the 25-mile stretch of the St. Johns River channel from Downtown Jacksonville to the Atlantic Ocean.

Many faces of the Marine Safety Office in Baltimore

From the moment a vessel comes into the port to the time it leaves, there is a good chance that in one way or another it will come into contact with the U.S. Coast Guard's Marine Safety Office in Baltimore.

Headquartered in the Baltimore Custom House, the 91-man office polices a zone that includes not only the port of Baltimore but the Chesapeake Bay, the Chesapeake and Delaware Canal, Maryland's Atlantic Coastline, and the Potomac River.

The responsibilities of the Baltimore Marine Safety Office, and every other such office in the U.S., are to oversee the safe operation of any U.S. flag vessel as well as the marine facilities, in its designated zone.

For example, the safety office inspects those U.S. flag vessel in the port which are due for their six month inspection. This involves insuring that life-saving and fire-fighting equipment as well as the vessel's basic structure meet federal standards.

The most familiar products of this scrutiny are the certificates of inspection which large commercial vessels must be awarded every two years in order to call on American ports.

The safety office also handles the documentation of U.S. commercial vessels and yachts over five net tons.

But the safety office's inspections begin even before a vessel reaches the water—during construction. In Baltimore five officers are permanently stationed at Sparrow's Point shipyard and another nine at smaller area facilities for this purpose. Similar monitoring takes place in shipyards throughout the country.

Another function of the safety office is pollution control. In Baltimore, the eleven investigators working in this area received about 1,200 calls last year, resulting in 427 cases. Most of the cases involved oil spills, ranging in size from a few cans of motor oil dumped down a storm sewer to a spill of 176,000 gallons of turbine fuel from a severed pipeline—the year's biggest case.

Baltimore's pollution control unit makes use of two 32-foot boats stationed at Curtis Bay. The vessels double as port security boats.

Also from the Baltimore Marine Safety Office, another group of seven inspectors are responsible for seeing that hazardous materials are shipped properly. Divided into two regular and one reserve team, these inspectors try to board 50 per cent of the vessels docking in the port of Baltimore, or an average of six ships a day.

These inspections, which can take from one to four hours, involve checking not only the packing and handling of the hazardous cargoes, but also certificates, officers' licenses, compliance with pollution regulations, and navigational equipment and charts. This team inspects port facilities too.

And there is more. Three of the petty officers at the Marine Safety Office are designated as shipping commissioners. Their job: to see that all seamen shipping out of Baltimore on American flag vessels sign the required documents. They are also responsible for arbitrating disputes

between seamen and shipping companies and inspecting crew facilities.

The office also has an investigations division which looks into nautical accidents and violations. In addition the safety office issues navigational restrictions based on ice conditions, oil spills or other emergencies for safety purposes. It even gives tests to would-be officers and seamen in the area, classifies them, and issues licenses.

Established on June 3, 1976, the Marine Safety Office in Baltimore was formed by the consolidation of two previously separate Coast Guard offices; the Captain of the Port of Baltimore, (COTP), and the Captain of Marine Inspection Office, (MIO).

Working hand in hand with Baltimore's maritime community, including the Maryland Port Administration in coordinating port safety activities and training programs, the Marine Safety Office in Baltimore is a very busy place.

Jacksonville sets new revenue records

The Jacksonville Port Authority marine and aviation divisions again set new revenue and operational records in the fiscal year which ended September 30, 1979. Combined revenue from JPA's two marine terminals and three airports totaled \$14,173,934, up 13.1% from last year, and resulted in a net income of \$5,557,428, an increase of 44.4%.

Cargo tonnage handled over all JPA terminal facilities increased more than 3% to 2,386,316 tons while the air passenger traffic count at Jacksonville International Airport climbed to 941,735, a 7.7% rise over last year.

JPA Managing Director John R. Mackroth said growing container traffic and general cargo exports accounted for the tonnage increase which offset a near 10% drop in petroleum products imports in fiscal 78/79. Container traffic was up 23% to 570,332 tons while imports of petroleum and other bulk products dropped 9.6%, to 660,171 tons.

To keep ahead of the growing demand for container facilities and storage space at its Blount Island and Talleyrand Terminals, the JPA has updated its long range expansion plans and now will spend more than \$40 million on improvements in the next three years alone.

Los Angeles' gross operating income for the first quarter of 1979-80 reaches \$125 million

Port of Los Angeles Executive Director Ernest L. Perry recently reported on first quarter operating results for the Port. Gross operating income for the first quarter of the 1979-80 fiscal year reached \$12.5 million, a \$2.9 million increase over same period in 1978.

This 30.2% increase is principally the result of a tariff increase that went into effect November 1, 1978, together with an increase in revenue tons billed. Tons billed for the past quarter were just under 11 million tons, almost one million revenue tons more than for the first quarter in 1978.

Increases in revenue from wharfage totalled \$1.6 million, while dockage fees accounted for an additional \$1.5 million.

Accelerated maintenance expenditures accounted for some of the \$1.5 million increase in operating and administrative expenses for the quarter. Total maintenance costs were \$1.1 million compared to \$4 million for 1978. Also part of the increase was the inclusion of \$400,000 for fire service payment and an increase in major maintenance expenses of \$550,000 for revenue facilities expenses.

The Port of Los Angeles' net income for the first quarter operation totalled \$7.7 million, compared to \$5.8 million in the prior fiscal year.

Funds derived from Harbor income are used for required capital construction to put into effect the Port's massive, five-year, \$405 million capital development project undertaken in 1979.

The Port's gross operating revenue for the fiscal Year is projected at \$60 million, with net income estimated at \$38 million.

Citizen participation

"Build a better mousetrap and the world will beat a path to your door" goes the old proverb. If you want to plan a better recreational complex in a public harbor today, you had better include the local citizens in your plans or you may find them beating on your door.

In a new approach to port planning, the Los Angeles Board of Harbor Commissioners has appointed a 30-member committee to provide the Harbor Department and its consulting firm with community input in the planning of the new West Channel/Cabrillo Beach Recreational Complex.

Called the Cabrillo Beach Citizens Advisory Committee, the group includes representatives from community organizations, local businesses, boaters, homeowner groups, labor and environmental activists. It is expected that this group will help provide solutions to the questions that have delayed development of a marina and recreational complex in that area of Los Angeles Harbor for 15 years.

Since the Harbor Commission approved the funding for a \$25 million marina and recreational complex a year ago, a Harbor Department team has been working on the project. It calls for the creation of a variety of recreational facilities and a 950-slip small boat marina.

This will be the first time that such a citizens group has been asked by the Port to take an active part in planning a Harbor Department project, but according to the Harbor's project manager, Pete Mandia, it portends the future.

"This is the era of citizen participation, a trend that is becoming more and more evident in all public and even many private agencies," Mandia said. "It is particularly appropriate for a multiuse facility such as this where there is a need for the public to be involved.

"The Harbor Department doesn't have all the answers, and we have found that citizens with a broad range of backgrounds and expertise can come up with some good ideas."

Through the years, several marina plans have come and gone after encountering opposition from various groups and individuals on a variety of grounds.

Some feared for the environment. Others opposed the locations and some expressed fear that it would turn into

an overly commerical development with high-rise hotels and condominiums creating traffic and disrupting the tranquility of the community.

Harbor officials believe that most of the early complaints and fears have been answered through ordinance or reconsideration, but this time the Harbor Commission has decided to bring the community into the picture at the earliest stages.

It is expected that in addition to the 950-slip small boat marina, the recreational complex will contain such features as a multi-purpose community park with playing fields, a quiet beach area, youth camping facilities, a four-lane launching ramp, dry-boat storage, boat hoists and other water-related amenities.

Harbor Commission President Frederic A. Heim has indicated that the Commission will rely strongly on recommendations that the committee makes for the future of the recreational complex and will not make its final decisions until the public input is seriously and thoroughly studied.

Joint Port intermodal container transfer facility site selected

A 104-acre site for the Intermodal Container Transfer Facility to be developed jointly by the Port of Los Angeles and the Port of Long Beach has been approved by a feasibility committee which has been co-chaired by Robert W. Weir, Acting Planning and Research Director, Port of Los Angeles and Dean J. Petersen, Director of Trade Development, Port of Long Beach. This committee represents the two harbors of San Pedro.

The joint Committee, comprised of representatives from the Planning and Research, Engineering, Trade Development and Operations Divisions of both harbors, has also reached agreement on numerous other factors designed to lead to early development of an ICTF in the harbor district.

Engineering staffs of both ports have been directed to draft a preliminary design for the facility's physical layout. Necessary environmental and governmental permit and grant processes have also been assigned to appropriate port personnel for further action.

The joint POLB/POLA effort is directed at gaining a suitable rail facility to expeditiously handle the current and projected volume of containerized intermodal traffic moving via the Ports. Both Ports agree it is imperative that a modern facility be developed and operated in close proximity to the harbors if they are to keep pace with the growing volume of Import/Export container business being generated via the landbridge, mini and microbridge commerce moving through Southern California.

The Pacific is the ocean of the . . . future': Ford

The following speech was delivered by Seattle Port Executive Director Richard D. Ford at the recent West Coast conference of the National Association of Marine Surveyors in Seattle.

Maritime activity is one of the nation's most dynamic industries—and all of us here in some way are a part of it. We stand at the beginning of a new decade, with the challenge of the seas to national security and welfare as one of our highest priorities.

For 200 years the United States enjoyed an economic independence unparalleled in the history of nations. Events of the 1970s have, however, brought into focus dramatic changes that make our country economically interdependent with the rest of the world in a way that we have never experienced before. The energy crisis has brought home to each of us, in a very direct way, the "life and death" need for trade. Wiser men have known of this need for trade for more than 200 years. Adam Smith wrote, "By means of water carriage a more extensive market is open to every sort of industry . . . so that industry of every kind begins to subdivide and improve itself." The truth of this economic axiom has never been more correct than it is for the United States today.

If we look across the nations of the world, we can see the dynamics of trade in this era. World exports have grown fivefold since 1967 to \$1.28 trillion. Exports as a share of gross world products have grown in the same period from 9.6 percent to 13.3 percent, or an increase of about 40 percent in 11 years. In short, a substantially larger share of the goods and products produced within the nations of the world is now sold in external markets.

But the need for exports can be demonstrated another way. For example, while many of our citizens may malign imports, the United States is dependent on foreign sources for many of its critical products. For example: oil, 45 percent; manganese, 98 percent; chromium, 89 percent; aluminum, 87 percent; tin, 85 percent; zinc, 59 percent; and the list could go on. If you turn it around and look at it another way, two-thirds of the farm products produced within the State of Washington are exported, as are about half of the Boeing aircraft. In all, 18 percent of the labor force in this state derives its livelihood from exports. Nationally over 80 percent of the work force depend on exports for their jobs.

Trade of the United States has grown dramatically along with the growth of trade throughout the world. Since 1967, exports of merchandise from the United States have grown from \$31 billion to \$143.6 billion in 1978. As a percentage of the gross national product they have risen from 3.9 percent to 6.7 percent; and if you add service exports in 1978, about 8.3 percent of the U.S. Gross National Product was exported.

Against this background of trade activity and growth, we are also experiencing a shift of trade within the United States. The great industrial heartland of the United States is shifting from the Midwest and Northeast, to the South, Southwest and Pacific, and with it there is also a shift of population.

If we look at the aggregate of United States imports and exports, using current dollars for comparative purposes, we find that the United States' total trade (imports and exports) with the rest of the world grew from \$36.3 billion in 1967 to an estimated \$207.2 billion in 1979. That growth hasn't been uniform. The importance of our trading ranges has just about reversed in the last 12 years. In 1967, 38 percent of our trade was with Europe and 30 percent with Asia. By 1979, 30 percent of the United States' trade was with Europe and 37 percent with Asia. And there has been a dramatic shift in the importance of port ranges within the United States.

In these 12 years, Pacific Coast ports' share of total United States trade has grown from 16.2 percent to 23.4 percent. Pacific ports handled 33 percent of the Asian trade in 1967 but by 1979, 51 percent of that trade will transit the West Coast.

The Pacific is the ocean of the present and the near-term future. And we here on the West Coast stand to be the principal beneficiaries of this change.

In this setting, then, I come to my favorite subject—Seattle. In our own case not only have we enjoyed the growth of Pacific Coast trade but our share of West Coast trade with Asia has grown from 5 percent in 1967 to 28 percent in 1979. This growth has been made possible only because this community has been willing to invest heavily in the facilities that make trade possible.

Now, what of the future? The futurists claim that we are now feeling the first throbbings of the "Pacific Century." The opening of the People's Republic of China is, of course, the most dramatic of events that gives credibility to these predictions. From trade of less than \$100 million in 1972, the U.S/PRC trade grew to more than \$1 billion in 1978 and will approach \$2 billion in 1979; it can realistically reach \$5 billion by the mid-1980s. The other important emerging nations of the Pacific will also contribute mightily to the total potential for growth and prosperity on the West Coast.

We can see that we are part of one of the dynamic industries of this time, and we live in the region that will benefit most from the changes of the past decade. But we face many important hurdles to realize the potential that lies ahead of us. To name a few:

- 1. Most favored nation status for the PRC—the tariff differentials without most favored nation status, depending on commodity, range from 33 percent to over 100 percent more than if such status were granted. Hopefully, Congress will not defer action on this matter much longer. I am pleased to note that Vice President Mondale said that this would be a matter of the highest priority.
- 2. We must develop a coherent maritime policy. I will not dwell on this subject but simply note that the United States foreign policymakers must recognize that this country can no longer afford to bargain away its merchant fleet for other political concessions; and the Justice Department must get off the idea that domestic U.S. anti-trust policy can be imposed on sovereign nations; and finally,

3. Protectionism must be fought at every turn. The short-term requirements or special interests of self-serving businesses and labor organizations cannot form the basis for national policy. The interests of the whole citizenry must come first. Protectionism, at its best, is a kind of Robin Hood mentality that believes that by taking from one group you can help others. If we are ever to defeat inflation, we must have access to world markets and other nations must have access to our markets. The competition of trade is the only way to assure the highest levels of productivity. And only by improved productivity, forged on the anvil of competition, will we bring inflation under control.

I hope that you share my excitement for the future. Each of us in our daily work serves only a part of a greater whole. Yet, we must also work together to serve the broader interests of the total industry of which we are a part. Only in an environment where strong, two-way trade flourishes, can the maritime industry and the nation as a whole prosper. Much remains to be done. I urge that we all share in the tasks ahead of us. In this way we'll contribute to the greater good.

Use of synthetic lubricants reduces fuel consumption: Los Angeles

In line with the Harbor Department's continuing efforts to conserve energy and reduce operating costs, use of an energy efficient, synthetic lubricant at the Port of Los Angeles was outlined to the Board of Harbor Commissioners at its regular meeting recently.

Delvac I, a Mobil Oil product designed for fleet users, has been the subject of a six-month pilot program by the Port's maintenance division. Goals of the conversion to the synthetic substance included a reduction in fuel consumption and a decrease in the number of different engine oils needed for the Harbor's equipment.

The maintenance division reports that savings of over \$24,000 were realized for the preliminary test which involved a dozen pieces of equipment.

Results of the pilot program indicate that fuel consumption for four gasoline powered units was reduced by three percent. For all test engines, lubricant consumption/make up was reduced by an average of 72%. A total of 34.7 oil changes were eliminated for 10 of the test units, saving the Harbor Department \$17,398 in down time and labor.

Preliminary research into the use of synthetic lubricants suggested that an extension of oil change intervals from 3,000 miles/6 months to 12,000 miles/24 months on gasoline units and from 150 hours to 1,500 hours on diesel equipment could be expected.

Average yearly consumption at the Port has been estimated at 5,000 gallons of oil for the almost 300 engines of various types.

As part of the system-wide conversion to Delvac I, all diesel powered equipment has already been changed to the synthetic product. Conversions of gasoline powered construction equipment and newer gasoline powered vehicles is being completed as regular oil changes are required by those vehicles.

Conversion of the balance of the equipment units is expected by the end of March 1980. As per bid specifications, an integral part of the conversion project is a lubricant analysis program to be provided by the manufacturer on an ongoing basis.

Portland plans Terminal 6 container expansion

Rapid growth in containerization through the Port of Portland caused the Port Commission to approve a \$16.5 million project for the expansion of John M. Fulton Terminal 6. Terminal 6 is the Port's facility for full containerships on the Columbia River in Rivergate Industrial District.

Marine Director Peter Norwood recently reported the container complex has been operating at near capacity and the Port's five-year plan to expand Terminal 6 should be compressed within the next 18 months.

"Feasibility studies done in 1971 projected a tonnage capacity for the present facility to be 874,000 tons, and figures for the first seven months of 1979, when annualized, show a volume of 864,000 tons," Norwood said. "Those same 1971 studies predicted vessel calls of about 146 per year. Current annualized figures indicate we will reach 326 calls by the end of 1979."

Because of a trend toward total containerization of liner cargoes and the dramatic growth of container barge traffic on the Columbia/Snake river system, Norwood said the growth pattern at Terminal 6 will continue to rise.

The expansion will include construction of an additional 900-foot berth, two container cranes and 17 acres of paved backup container yard. The facility will be purchased on an installment sales contract to be repaid from Port general revenues and does not involve local taxes.

Bigger boats, richer waters: Port prepares for fishing-industry needs

Over the past several years, the Port Commission has approved a number of specific staff recommendations and actions which have contributed to improving facilities at the Port for various aspects of the fishing industry.

Since the recent so-called 200-Mile Limit Law has become a household word, greater attention has been directed toward the United States' potential for recapturing its share of seafood in its neighboring waters. The remarkable fishing grounds and the richness of the waters off the coasts of Washington and Alaska give the Port of Seattle a grandstand seat for the big show coming up.

New vessel construction is geared right now to larger and far more sophisticated vessels than ever before. A recent and local christening of the 160-foot American No. 1 brought home this fact emphatically. The vessel is a combination trawler-catcher-processor.

Because of the increasing sizes of these super-fishing vessels (now approaching the \$10 million class), the pressures to provide adequate berthing and servicing space have become intensified. Not only berth lengths, but also berth depths are of concern; the American No. 1 draws 19 feet (loaded) for example.

The growth of the fishing industry—especially locally—dictates definite need for a detailed study and plan of action to insure that the Port is carrying out its public responsibility to serve this valuable industry efficiency and effectively.

The term "Gateway to Alaska" has been used for years by the Port of Seattle. It has to have special meaning for the fishing and processing industry since Alaska's fishing resources (richest in the U.S. for domestic fishermen) are as important to us as Washington's resources.

Rhine, Main, Danube—linked by ambitious 3,500 km project

by Col. H.R. Haar, Jr., associate port director of the Port of New Orleans

One of the most ambitious waterways projects in the world, one which has inspired the imaginations of famous European leaders and economists for centuries, leaders such as Charlemagne, Napoleon and King Ludwig I of Bavaria, is nearing completion.

The Europakanal, also known as the Rhine-Main-Danube (RMD) Canal, reaches across the heart of the Black Sea with the North Sea. A sophisticated series of canals and locks connects the three European rivers—Rhine, Main, and Danube, forming this 3,500 kilometer waterway system. The implementation of this great project is as unique as it is ambitious.

The vast agricultural and industrial productivity of Europe, much like that of the United States, is dependent upon an economical and efficient transportation system for its viability. With escalating cost of fuel for planes, trucks, trains, and boats a major factor in present and future transportation systems, investments in well planned waterway projects are extremely important. Cargo moved via waterways on barges travels much more economically than does cargo carried by truck and rail. In the United States waterways industry proponents like to point out that one gallon of diesel fuel will move a ton of cargo 70 miles by truck, 270 miles by rail, or 408 miles by barge.

The Europakanal project has not come into existence simply in response to the critical energy problems of the last decade, however. Prudent, innovative planning has been going on since 1921. In that year construction of the Rhine-Main-Danube connection was planned under the direction of the Rhine-Main-Donau Aktiengesselschaft (RMD AG). The RMD AG was formed on the basis of government agreements and entrusted with the task of building the waterway.

Learning from past mistakes of waterway projects, the RMD AG designed the Europakanal using a generous scale to accommodate large vessels and tows, so that the system would not be obsolete before it was completed. The channels in the 3,500 kilometer waterway system are four meters (13 feet) deep, and between 43 and 55 meters (139-178 feet) wide. The 60 locks in the system, 51 of which are now completed, are 12 meters (39 feet) wide, 190 meters (618 feet) long, except in the Main River portion, where the locks are 300 meters (975 feet) long. The Europakanal will accommodate vessels of 1,500 tons with beams up to 11.4 meters (37 feet), and a total single ton capacity of 3,300 tons.

Iron and steel, coal, building materials, petroleum products, chemicals, fertilizers, grain, ores, and feeds are expected to be the major commodities moving on the Europakanal when it is completed in 1985. At that time 18 million tons of cargo a year will move on the waterway, a figure which could more than double when and if the second locks (forming a double lock system at each site) are built.

To finance this imense project, RMD AG was granted

the right to exploit the water power of the Aschaffenburg-Bamberg stretch of the Main, the Bavarian Danube, the Altmul, the Regnitz, and the lower Lech, until the year 2050. The main shareholders of the company, whose stock capital is DM 170 million, are the Federal government, which has an interest of 64%; Bavaria, which has 33%; and the City of Nuremberg and others, which account for the remaining 3%.

Is spite of interruptions due to economic crises and World War, II, by 1962 RMD AG had developed the Main up to Bamberg with the help of dams. The southern branch of the Rhine-Main-Danube connection, the Danube stretch from Regensburg to the German-Austrian border, was also canalized. Here the shipping channel was improved by low-water regulation, i.e. by groins and training works, and by dredging. A dangerous rock-strewn stretch above Passau was deepened in the 1920's by the Katchlet dam. After World War II the Jochenstein dam below Passau was built in collaboration with Austria, canalizing a further section of the Danube.

In 1959 work began on construction of the Main-Danube connecting canal, which reaches from Bamberg to Regensburg. The route of this canal runs between Bamberg and Nuremburg in a roughly north-south direction. The entire section from the Bamberg port to the Nuremberg port is 70 kilometers and has a height difference of 82 meters.

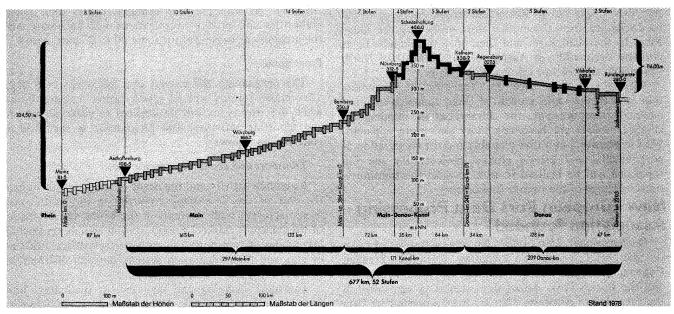
Seven locks are involved in the Bamberg-Nuremberg stretch of the waterway, six of them with water-saving design features. To reduce water consumption during lock operations, the contents of the lock chambers do not flow entirely into the downstream reach of the river, but into ponds lying at the sides of the lock chambers. To fill the locks, first the water from these ponds is used, and the remainder needed for complete filling is then taken from the upstream canal reaches. By using this method, up to 60% of the water used in the lockage process can be conserved.

Since the Autumn of 1972 the entire canal section up to Nuremberg has been open to traffic. All that is lacking to complete the 3,500 kilometer long connection between the North Sea and the Black Sea is the 133 kilometer section between Nuremberg and Regensburg. Dam construction is underway below Regensburg to fully maintain the required depth regulation and standards of the Danube Commission. Once completed the new dam will also afford significant flood protection for the region.

Three sections remain to be completed to enable the waterway between the Rhine and the Danube rivers to be opened: a 64-kilometer canal with seven locks between Nuremberg and Dierfurt; a 34-kilometer development with two dams between Dietfurt and Kelheim; and an 87-kilometer stretch canalization on the Danube between Kelheim and Straubing.

The Europakanal presents a number of challenging engineering feats. The waterway reaches its highest point at Hilpostein, where it reaches 406 meters (1,320 feet) above





sea level. This is the watershed divide between the Rhine and Danube rivers. The level difference at three locks is approximately 25 meters (81 feet), making them the highest locks on earth with water saving ponds. Pump stations are being built to meet lockage water needs and to improve water flow in tributaries of the Main River. Near the summit reach a one-week storage reservoir is being built. Another noteworthy project is the construction planned by the Bavarian Water Board of the Altmuhl compensating reservoir and two dams in the valley of the

Brombach and Kleine Roth. This project will permit transfer of large volumes of water from the basin of the Danube to that of the Main, and will also give protection against five-hundred-year record flood levels.

All along the Europakanal special attention is devoted to landscaping and creation of recreational areas. In 1974 the RMD AG published a landscape plan for waterway construction in the Altmuhl valley, and similar plans have been commissioned for all stretches between Nuremburg and Strausbing.

The Europakanal project will represent perhaps the most innovative and technically advanced waterway system in the world. The DM 3.62 billion investment, financed with Federal, State, local and private participation, features the innovative arrangement of revenue earnings from hydroelectric power plants built into the project, presenting interesting and workable solutions to economic problems which inevitably face such ambitious undertakings. The water saving, water storage, channel lining, beautification measures, local development of port facilities in conjunction with the project, and other special features of the waterway are all elements which deserve sepcial attention of both proponents and opponents of updating and expanding the vast United States waterways system.

Situated at the base of the nation's most significant waterway system—the Mississippi River and its tributaries the Port of New Orleans is the focus of interfacing of inland waterway traffic with ocean waterborne traffic. This geographic advantage has made New Orleans the natural gateway to the vast productivity and markets of the heartland of the United States. Shippers have taken advantage of the low cost of shipping cargoes to and from industrial and agricultural centers in the Mississippi Valley via New Orleans for more than 200 years, using economical, fuelefficient barge lines to carry their products. It will be interesting to follow the growth of barge-carrying ship traffic between the Port of New Orleans and Europe, once the Europakanal is completed in 1985. It will then be possible for cargo to be loaded in Peoria, Illinois, aboard a LASH or Seabee barge, pushed down the Illinois River to the Mississippi River and into the Port of New Orleans, where it will be loaded aboard a barge-carrying ship. The ship then might sail to Rotterdam where the barge would be discharged from the mother ship, pushed up the Rhine River to the Main River and then onto the Danube to its ultimate destination in Austria-from the heart of North America to the heart of Europe, all by water.

With the serious need for fuel-efficient, economic solutions to the rapid growth of cargo tonnages in international transportation, the advantages of shipping via all-water routes are becoming more and more apparent. With responsive, innovative planning and the cooperation of governmental and private groups, projects like the Europakanal will be realized in time to meet the transportation challenges of the twenty-first century.

New European Port Data Processing Association founded

On September 25th, 1979, the representatives of ports of the E.E.C. countries including Antwerp, Bremen, Copenhagen, Cork, Genoa, Hamburg, Le Havre, Rotterdam and the British Ports Association, signed an agreement in the City Hall of Antwerp, whereby the European Port Data Processing Association* was founded.

*(President: Mr. Robert L.M. Vleugels, Director-General, Port of Autwerp).

The objectives of the Association named E.V.H.A. (Europese Vereniging voor Haveninformatica) are:

- 1. to undertake for the commission of the European Communities an extensive data processing project within the framework of European port data systems, as agreed with the commission, comprising three elements:
 - a pilot data communication system connecting a few

- European ports together through a computer network:
- the study of the distribution of dangerous goods data
- the study of a permanent data communication and automatic processing system linking ports
- 2. to undertake other projects of general interest to the association.

The E.E.C. Commission indeed is furthering the facilitation of the data flow between the ports which will result in more efficiency and greater security in the maritime transport and the management of cargo traffics. The Association is born out of the cooperation which has already existed for some years between these ports. Their studyteams have worked on different pilot projects in the above fields and now want to develop them in practice.

The support given by the Commission of the E.E.C. under the auspices of Viscount E. Davignon, Commissioner for internal market and industrial affairs, will greatly foster the realization of the projects, which finally should become available for use in all ports interested in this essential and important matter of port operation.

New A.P.E.C. training program in port management, harbor organization techniques in Antwerp

From February till April 1980, A.P.E.C. (Antwerp Port Engineering and Consulting) will organize a second long term training programme for English speaking participants. It will be the fourth training programme of this kind given by A.P.E.C. with the aim of conveying to the developing countries the vast know how available in the port of Antwerp. As with previous training courses both public authorities and private organizations will cooperate with the programme, organized for some 20 to 25 participants.

Programme

The programme will extend over 10 weeks of 5 days. Theoretical courses will be given during morning hours, while the afternoons will be devoted to visits, discussions and reporting activities. The programme as such will be conceived as follows:

- Transport and economic development:

Economic activity and the needs of transport (including: the part of the developing countries in the world's economic activity; trade currents in the world; characteristics of the transport market) Transportation techniques (including: modes of transportation with characteristics, structure of cost and their adaptation system; physical distribution; the port as a place of transhipment).

Transport planning and management (including: integrated transport planning, transport policy, approvisal of investment projects, organization of the transport sector).

- Port economy:

The various port functions (including: the distribution, transport, industrial and commercial functions and related functions such as banking, insurance, arbitration chambers, consulates).

Port policy (including: the international character of ports and their connections with national or local politics;

(Continued on page 40)

Marketing in Germany.

Call Mr.Tsuyama

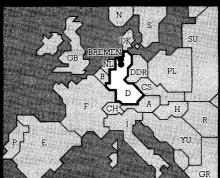
Do you want to start up business in Germany? Are you looking for someone reliable to import and distribute your goods?
And is quick low-cost transport essential? Then contact Mr. Tsuyama, the representative of the Ports of Bremen and Bremerhaven and the Bremer Lagerhaus-

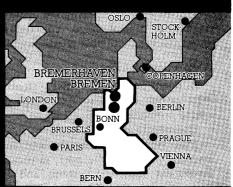


Tokyo (03) 431-8012

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-Mori 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.

Fast. Safe. Economical. For your benefit.



Bremer Lagerhaus-Gesellschaft Port Operating Company Bremen/Bremerhaven



(Continued from page 38)

ports in their national or regional context; port management in public or private ports with regard to centralization or decentralization, coordination).

- Technique of maritime transport:

Including following topics: the principles ruling the concept of different types of cargo vessels; the methodology of selecting cargo vessels, including aspects of freight calculation and cargo handling; the ship's documents and certificates; techniques of goods transport by sea and the different methods of loading; average marine insurance and the clubs; the conferences, discrimination of flags and governmental subsidies; ship's operation and budget.

- Port planning:

General plan of port development (including: long term prospects; geographical factors and techniques; the location of ports and of port infrastructures; financial aspects of port planning).

Planning inside the port entity (including general planning principles; master planning; subdivision of the plan).

Distribution, equipment and operation specific terminals (including: general cargo, containers, Ro/Ro, perishable goods, timber, solid bulk goods, liquids bulk).

- Port organization:

Different port management systems Organization (of authorities, employers, employees and related problems).

Consultation structures.

Port finance: tarification and investment (including: financial policy of the port, tarification; checking of port investment; Customs systems and free ports (including: customs systems, different kinds free ports; organization of a free port).

Forwarding (including: documents; various intermediairies).

Detailed information can be obtained with A.P.E.C., Van Schoonbekeplein 6, B-2000 Antwerp.

Identity card of dangerous products on microfilm—Recordak-apparatus at the Antwerp Police Brigade

The port of Antwerp is an important world centre for the distribution of chemical products. Together with fertilizers they amounted to about 8 million tons in 1977 of which 65%—i.e. ca. 5.2 million tons—were chemical products. For 1978 the corresponding figures are being estimated at 8.5 and 5.5 million tons respectively.

Lack of international standardization

The number and variety of these products passing in transit via the port of Antwerp are very comprehensive and divergent, each of them having typical danger characteristics and peculiar handling regulations. The names of the products occur in several languages, and sometimes: though in contradiction with the regulations—under their trademark, which often differs completely from the actual chemical denomination. As far as indications have been made on the products, they vary considerably and often occur only as a code number.

All this depends on the relevant regulations which are in force in various countries. Besides, uniformity with a view

to the classification and the labelling of dangerous products is lacking as well. Tough improvements have been made in this field—there are uniform regulations in force in several groups of countries (as within the EC)—international standardization has not yet been achieved.

Necessity of accurate information

The necessity of disposing of quick and exact information appeared incidently in 1970 in the port of Antwerp area, where a number of drums came down from a lorry. A yellow liquid oozed from the bursted drums and spread a breath-taking smell. The product in question appeared to be telone, which is also called: Dichlorpropen; Allylene Dichloride; y-Chloroallyl-chloride; Epidichlorohydrin-beta; Dichloropropylene Alpha and Epsylon.

Its danger label indicates: caustic and inflammable liquid; its oxidation produces a gas which is heavier than oxygen; it is explosive and set on fire at the least spark. Its fumes affect the eyes and the respiratory organs.

The accident produced an enormous traffic congestion at the time. Therefore, the Antwerp Police has worked out a system in order to collect systematically all necessary information on dangerous products, at anyone's disposal night and day and which will enable to be looked up quicly.

Recordak-apparatus

A recordak-apparatus installed in 1976 in the telecommunication-room of the Antwerp Police/Mobile Brigade, proved then to be right solution. This apparatus actually picks up the comprehensive information and after selecting, accumulates them on a microfilm. The information on dangerous products the Antwerp Police compiled in the recordak-apparatus for the greater part rests upon both the regulations in force and books of reference. The microfilmer with which the apparatus is equipped, makes it possible to photograph 60 documents in a minute, each sequence being optically marked for later automatic selecting. Thus on a 30 m film, 2,500 documents can be accumulated. This film moves in the apparatus at a speed of 3 m/sec., so that 10 seconds will do for testing and spooling a complete film.

When composing the relevant classification number, which appears as a digital on the screen, the document wanted can be performed within a few seconds. An electronic controlling-system excludes any failure. Moreover, the microfilm-selector is fitted with a printer, photocopying the document wanted in 10 seconds. Via the police station networks the information needed can be quickly dispatched. Thanks to a quick identification of the product and the knowledge resulting from it, the auxiliary services can intervene adequately.

Computerhelp

On account of the steady increase of this microfilm-databank, the Antwerp Police takes into consideration to add a computer service to the actual system. In the brain of the computer of the municipal data-handling system, there is enough room available for containing the index of all dangerous products.

The information recorded statically on the microfilm can be combined with the dynamic information in the brain of the computer. In order to answer a question made on the keyboard, the computerterminal returns the relevant film-cassette as well as the classification number.

After inserting this cassette, the computer picks out the sequence in question and relevant changes as well as additional information are produced on the screen and possibly printed. If the computer of the municipal data-handling system could be slightly adapted, it would be possible to dispatch electronically data to all 38 terminals installed in the various municipal port services.

J.F. CRETEN Superintendent of police

Young people in Antwerp draw their port

With tongue pressed between lips in concentration over 500 Antwerp schoolboys and girls aged between 9 and 10 have drawn (their) port in gay colours, the port which their teachers had talked about during the school year and which most of the pupils had visited, either on board the school barge (De Gerlache) or on board one or other of the pleasure boats of the (Flandria) Company, two names which have been given to many of the ships which feature as the dominant element in many of the drawings. The names given to the ships are also frequently related to well-known T.V. personalities, which only goes to show what impact that medium has on present-day youth.

Many of the young people were impressed by the vast size and scale of everything in the port: cranes, gantries and large ships reflect the impression received and expressed in the drawings. Ships' equipment too (jibs, mas's etc.) have impressed the minds of many of the young artists as complicated structures. However, man himself has not been

forgotten: dockers, bargees and seamen are there as well as those manning locks and bridges.

Another aspect of daily life is illustrated by the ((No Smoking)) notices which can perhaps be understood as the result of the complaints expressed at home about the prohibition of smoking in the port by fathers who work there.

The relation between city and port is expressed in many a drawing by including houses and churches in the picture of the port. It is also heartwarming to view the large number of (poetic) evocations of the port which is depicted as something cheerful and happy.

To conclude: Flanders certainly seems to possess promising artists. The average quality of the drawings entered is more than satisfactory, which is without doubt a feather in the cap of teachers who have taught their pupils the necessary enthusiasm, techniques and an aesthetic feeling for colour and form.

J.F. WILLEMSENS

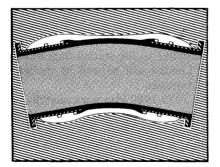
Structure of Antwerp container traffic

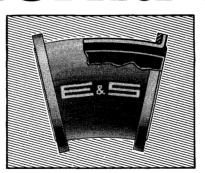
The arrival in March 1966 of the 13,000 dwt "American Racer" marked the beginning of container traffic in Antwerp which was to take an ever increasing part in overall maritime traffic.

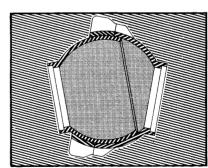
Ever since then container traffic has been growing by leaps and bounds and in 1978 already a number of 359,317 containers (477,304 TEU) was reached.

Parallel with this evolution the volume of containerized general cargo rose from 296,000 tons in 1966 to 5,738,000 tons in 1978.

Consider the alternatives...

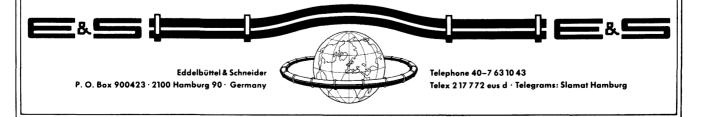






... and then buy 💳 🛎 💳 FLEXIBLE HOSE

We have produced an excellent catalogue/ handbook if you require further information.



Destination and origin of the containers clearly point out that specialization and modern transport techniques more rapidly developed on some overseas routes than on others.

From data covering 1978, provided by the General Management of the port it appears that containers, handled in Antwerp for the greater part originate from or are bound for North America with a share in the total container traffic of 75.7% and 61.3% respectively.

16% of the containers loaded in Antwerp aboard seagoing vessels is bound for Europe. The remaining outgoing container traffic can be split up as follows: 11.6% to the Far East, 3.7% to the Persian Gulf, 2.2% to West Africa and 5.2% to several other destinations.

Considering incoming container traffic—more than three quater of which originates from North America—a similar market share as with outgoing container traffic can be noted.

Of all containers discharged in Antwerp 13.7% originate from European countries, 6.9% from the Far East, 1.3% from West Africa, 0.4% from the Persian Gulf while the remaining 2% originate from various countries.

New bulk terminal planned in Antwerp

The firm Stocatra, specialized in the handling of ores, coal and other bulk cargo has decided to locate a large bulk terminal at the New Harbour dock.

The concession to be granted by the City Council is located at the North side of the New Harbour Dock where the water depth reaches 58' thus enabling to receive fully laden vessel of 100 up to 125,000 tdw.

It concerns a site with a width of 800 m and a quay length of 1000 m; in all covering 80 ha.

In a first phase (by 1981) a stretch of some 200 m. will be adapted to install two new loading bridges, each with a lifting capacity of 40 up to 50 tons.

In a second phase another 200 m. stretch will be adapted and in a last phase the remaining 400 m.

NPC publishes "An Outline of the Law relating to Harbours in Great Britain managed under Statutory Powers"

What is believed to be the first "plain man's guide" to the complixities of Harbour Law in Britain has been produced by Mr. R.P.A. Douglas, Solicitor to the National Ports Council. Entitled "An Outline of the Law Relating to Harbours in Great Britain Managed under Statutory Powers"* the book has been published by the Council in a strictly limited edition.

The aim of the book is to provide in clear and concise form a general picture of the legal framework within which harbour authorities operate (including some examples of typical harbour statutes). It should be particularly helpful to non—lawyers who are employed by, or whose work involves them closely with, harbour authorities, and also to legal practitioners who do not specialise in this area but who may be called upon from time for time to deal with matters relating to harbour authorities.

After a general consideration of harbour authorities, the book has sections covering the following areas: Types of Harbour Authorities; Basic Duties, Powers and Liabilities of Harbour Authorities; Provision of Harbour Facilities by Harbour Authorities and Others; Conservancy Functions; Powers of Harbour Authorities to Regulate Activities of other Persons in Harbours; Cargo Handling; Warehousing; Embarking and Disembarking of Passengers; Towage; Pilotage; Oil Pollution; Policing; Charges; Borrowing; Financial Assistance; Accounts; and National Involvement in the Activities of Harbour Authorities. A substantial section of the book is devoted to a series of examples of local statutes, and a table of case law relevant to the subject is also included.

*Available from the National Ports Council, Commonwealth House, 1-19 New Oxford Street, London. WC1A 1DZ. Price £15.00

Review of short term and five year plans for Port of London

The Government has approved an action plan agreed by the Port of London Authority and the trades union to see the Port of London through the difficult reorganisation needs of 1979-1980.

This plan is an integral part of a Five Year Strategic Plan 1979-1983 prepared by the PLA, which is designed to produce a streamlined, efficient, economically viable port, and which is still being examined by the new Conservative Government.

The document, which has already secured government acceptance, is called the Short-Term Trade and Manpower Target Plan 1979-1980. A similar Plan for 1978-1979 opened the way for substantial progress in reorganising the Port and the lessons learned have been incorporated in the Five Year Strategic Plan.

'Progress with the first Short Term Plan has been considerable', the PLA stated. 'The year from May 1978 was marked by a new sense of common purpose between trades union representatives and PLA management through the Joint Committee, and there have been a number of positive achievements. Negotiations are well advanced on revised working arrangements for imports at Tilbury and at the Royal Docks, and there has been considerable progress in manpower reductions.'

These achievements provide the foundation upon which it is hoped to build during the year ahead. If the increasing spirit of goodwill, co-operation and realism which has been created can now be applied to the second stage of reorganisation, the Port of London will be well on the way to a transformation of its fortunes.

If the Short Term 1979-1980 Plan is successfully carried through, it will set the course for the Five Year Strategic Plan, subject to government approval.

The Five Year Plan is related to what the PLA calls a Base Forecast of future trade levels, which assumes that the pattern of recent years does not change fundamentally. The implications for PLA's market share are a continued decline in conventional general cargoes, though at a slower rate than in recent years, and stability in the unitised general cargo area.

But there is a stated objective to reach, by 1983, greater market shares represented by a Target Forecast, which is based upon the upper limit of PLA expectations, assuming a significant improvement in its competitive position in terms of level of service to customers.

(Continued on page 44)

SAVE TIME, SAVE MONEY.

ONLY 15 MINUTES
To and From Haneda Airport

Monorail leaves every 7 minutes daytime

¥230 per person



TOKYO MONORAIL

TEL. TOKYO (03) 434-3171

(Continued from page 42)

There is also, in the PLA Five Year Plan, as a cautionary warning of the dangers, a Low Forecast, which takes a pessimistic view of the prospects and assumes a continued deterioration in performance and further losses of traffic. The implication emerges clearly that that way lies complete disaster

Working, then, on its Base Forecast of probable trade, the PLA has decided that there are two possible alternative courses of action open to it.

The first, which it calls the Concentration Option, is to secure the maximum concentration of berths in the smallest possible areas of the two Upper Docks systems.

The second, which it calls the Transfer Option, is to transfer PLA cargo handling operations from one of the Upper Docks systems into Tilbury and the remaining Upper Docks system.

The arguments, according to the Five Year Strategic Plan evidence, are finely balanced between these two options. Both are considered to involve risks of failing to achieve the substantial improvements and cost reductions aimed at.

Interim Report for Jan.-Jun. 1979: Port of Manchester

The tonnage of cargo passing through the port during the first half of the year was slightly lower than in 1978 but for the first five weeks we had problems associated with the national disruption of movements by road of fuel and goods. We have since made a reasonable recovery and our operating profit is up by almost 6%.

Whilst we have incurred marked increases in the costs of fuel and rates of pay the more stable conditions in the Eastham approach channel have resulted in much reduced expenditure on dredging.

The directors have decided to pay the full dividend on the preference shares and as regards the ordinary shares an interim dividend of 7.5% together with a supplementary dividend of 0.487% as an adjustment to the 1978 final dividend in consequence of tax changes.

Greek port study project for PLA consultancy

The PLA consultancy subsidiary, PLACON Limited, has assembled an eight-man team of experienced senior port officials to carry out a major port study for the Port of Piraeus Authority and the Greek Government.

The study is expected to take five months to complete and will embrace areas of Port Organisation, Planning, Cargo Handling Operations for conventional and container traffic, Engineering, Port Charges, Data Processing, Security and Training.

New ro-ro berth, compound for Renault cars at Southampton

The British Transport Docks Board are to provide a new roll-on/roll-off berth and an additional storage compound for Renault cars at the Port of Southampton.

Renault Ltd. have been using Southampton for a number of years for importing their cars from France and the new facility will provide them with improved ship discharging and vehicle storage capability.

The new ro/ro berth is being installed at Berth 105 in Southampton's Western Docks. It will include a steel access bridge carried at the seaward end by a floating pontoon and joined to the existing quay wall by a cantilever platform. The BTDB are adapting an already existing pontoon and access bridge from elsewhere in the port to equip the new berth, and the work should be completed by January, 1980.

Dunkerque trade seen reaching 40 million tons

With an increase of 27% over October 1978, October 1979 has been one of the best months of the year.

Over a period of 10 months in 1979, there has been an increase of 16%, with 33,744,255 tons.

Trade in 1979 should, therefore, reach a figure of 40 million tons.

Dunkerque being placed at the level of first French Port,

first half 1070 first half 1078 full year 1078

Unaudited revenue summary for the six months ended 30th June 1979

mrst nam 1979	iirst naif 1978	run year 1978
£'000	£'000	£'000
13,334	13,009	24,486
1,722	1,628	1,734
585	439	949
337	344	692
1,020	894	970
950	829	1,021
42	32	83
140	140	140
282	244(6	.5%) 653(17.38%)
18	5(0	.137%) 5
468	408	140
950	829	1,021
23·4p	20·2p	23·4p
9,413	9,213	8,945
	£'000 13,334 1,722 585 337 1,020 950 42 140 282 18 468 950 23·4p	13,334 13,009 1,722 1,628 585 439 337 344 1,020 894 950 829 42 32 140 140 282 244(6 18 5(0 468 408 950 829 23·4p 20·2p

^{*}Adjustment to 1978 final dividend following the reduction in the basic rate of income tax to 30%. Dividends will be payable on 8th October to shareholders on the register on 7th September 1979.

except for hydrocarbons, it is interesting to note that trade for the first 10 months has, excluding crude oil and crude oil products, reached 22,364,745 tons, i.e. an increase of 12% on 1978.

In total, the growth of imports is due to ore and coal. In exports, oil products and coke continue to progress.

"Liner Shipping in the Eighties" symposium in Bremen

Scepticism-as reflected in the Bremen Port Senator's (Oswald Brinkmann) opening speech-as to whether the "difficult theme" of the international 'Liner Shipping in the Eighties' symposium in Bremen could lead at all to any 'serviceable result' was unquestionably justified. Nevertheless this second large international symposium on the future of world liner-shipping produced much valuable information, well-based, critical, first-hand opinions and many fertile contacts. Other effects remain to be seen. 330 liner-shipping experts, representatives of shipping companies, firms, ports, shipyards, banks and insurances; representatives of governments, administrations, international organisations, press, radio and TV, from 43 countries throughout the 5 continents; from industrial nations, developing countries and socialistic peoples' republics, all met for three days, at the end of October 1979, in Bremen-invited by the 3 European shipping institutes of Bergen/Norway, Danzig/Poland and Bremen/Germany.

G.A. Maslov, Sovinflat/Moscow president, reported that in the 80'ies the USSR merchant fleet will expand in the conventional sphere only between 10 and 15%; in roro/ container sectors by appr. 30%. The Soviet merchant marine policy will be accented in the coming decade by extensive modernisation of fleet and ports. Additionally heavy-lift and timber tonnage, certainly, will be increased greatly and will even treble for ice-breakers by 1990-to 1.5 million tdw.

Repeated criticism was voiced, within the framework of the lectures, discussions and consultations, of U.S.A. shipping legislation, particularly the Anti-Rebating Act and the Anti-Trust procedure. State-Secretary Heinz Ruhnau, Bonn, doubted the possibility of agreement for Atlantic liner-shipping between the USA and Western Europe on this basis. He suggested striking new paths, such as regulating ship-trading separately in each direction.

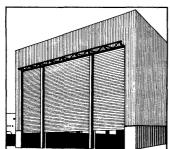
Ruhnau advised that the liner-shipping compromisesolution reached by UNCTAD in Manila and already ratified by 43 countries possessing 17.27% of world merchant-tonnage, is now also to be accepted by Bonn. Respective legislation is being formulated. Earlier, the State-Secretary commented that 31% of international merchant shipping was registered under the cheap flags and, despite all the efforts made in Manila, this group is enjoying an annual 6% growth.

Suez Canal to 18 m depth by 1983

The Suez Canal Authority (employing 20,000-including 400 pilots) is to deepen, by 1983, the Canal from its present 14, to 18 metres, so that giant tankers on ballast voyages can then take the shorter-by-half route from Europe to the Arabian Gulf through the Canal. 300,000-

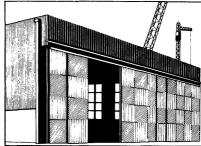
Matex manufactures and installs industrial doors

rolling doors - sliding doors - overhead doors - folding doors Matex also manufactures outsize doors:

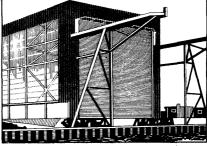


rolling door 27,3 meters wide and 17 meters high, on the premises of B.V. Scheepswerf-& Machinefabriek de Merwede, in Hardixveld-Giessendam.

Matex designs, manufactures and mounts the most exceptional door



sliding door 40 meters wide and 10 meters high, at Nieuwe Noordnederlandse Scheepswerven in Groningen.



rolling door 18 meters wide and 18 meters high with small doors above the rail for gantry installation, without gale strut, at Scheepswerf Jac, den Breejen & Zn, Hardinxveld-Giessendam

Please enquire without obligation.

Matex deuren b.V. Telex No. 47779 Head office:

constructions.

Zandweg 82 - 3454 JX De Meern (Utr.) tel. 03406-2543

Vonderweg - 7468 DC Enter (Ov.) tel. 05478-1875

tonners with part cargoes will then be able to negotiate all sections of this artificial waterway.

Biggest cold storage warehouse capacity of the European ports: Hamburg

Some 18,000 ocean-going ships per year put in at the Port of Hamburg, the home port of 80 per cent of all vessels flying the flag of the Federal Republic of Germany. They transport per annum about 55 million tons of cargo of every kind from and to Hamburg: general and bagged cargo as well as bulk cargo. A not unimportant share is taken up by deep frozen goods, between 250,000 and 300,000 tons a year.

Correspondingly large are the storage capacities of the eight cold storage warehouses in the Port of Hamburg. Their storage space amounts to some 250,000 cubic metres, which is about one tenth of the storage capacity for deep frozen goods in the Federal Republic totalling 2.44 million cubic metres. Hamburg itself has a cold storage total capacity of about 580,000 cubic metres. Hamburg is thus Europe's biggest "deep freeze unit".

All the port cold storage warehouses provide interim storage possibilities for the most varied refrigerated and deep frozen goods, with temperatures between plus 5 degrees and minus 30 degrees Centigrade. For instance, while pork and beef, fish, offal, game, poultry and butter are stored at minus temperatures, fruit such as apples, pears, grapes require a few degrees above freezing point. Cargoes sensitive to temperature are protected here in summer against the heat, and in winter against the cold. The cold storage warehouses provide the guarantee that all the goods pass through the transport chain from shipper to recipient without interruption and thus without damage to their quality.

The advantages to the client are: cost saving by direct storage possibilities from the reefer ship into the cold storage warehouse and thus no interim transport, no temperature loss to the goods and no waiting times for lorries or railway waggons. The cold storage warehouses also make it easier to effect temporary storage of exports to overseas.

Gothenburg expands ferry terminals to meet the new generation of larger ferries

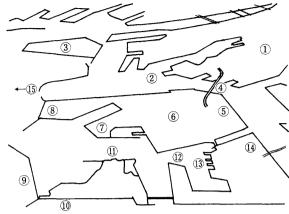
When the large ferries ordered by the Stena as well as the Sessan Line are delivered in 1981 and 1982, the ferry terminals of the two companies have had to be enlarged a good deal.

Some 3.7 m. of passengers and half a million cars and lorries are now yearly arriving at or leaving the Gothenburg-based ferry terminals of Stena, Sessan and Tor. A considerable growth in these figures is estimated when the new larger ferries are put into service.

The new 8 ferries—6 Stena and 2 Sessan—will have accommodation for between 2,000 and 2,500 passengers each and car decks for 600-900 cars and lorries. Their main dimensions will be considerably larger than those of the older ones. The larger draught means that the Port will have to carry through an extensive dredging program at some of the ferry berths. The berths will also be lengthened and rebuilt as a result of the larger ship dimensions and the

required depth of water.

Port of Osaka (front cover)



Port of Osaka (Sketch)

- 1 Osaka City
- ② Central Pier
- 3 North Port under construction
- 4 Bay Bridge
- (5) Container Terminal
- (6) Port Town
- 7 Liner Terminal
- (8) Natural Bird Sanctuary
- Fishing Park
- 10 Food Wharf
- 1 Ferry Terminal
- 12 Domestic Trade Area
- (13) Ferry Terminal
- 14 Intermodal Terminal
- 15 Osaka Bay

Osaka South Port

Third quarter loans total \$128 million: ADB

Asian Development Bank loan approvals during the third quarter of 1979 totalled \$128.05 million (11 loans).

These loans will finance development projects in Burma, Fiji, Republic of Korea, Papua New Guinea and Philippines.

Also approved during the quarter were eight technical assistance grants amounting to \$1.068 million. The seven countries which received the technical assistance were Burma, Indonesia, Republic of Korea, Nepal, Papua New Guinea, Philippines and Sri Lanka.

The following are brief descriptions of port-related projects assisted by the Bank during the quarter:

• Fiji LOAN

Suva Port: \$7 million from ordinary capital resources for the rehabilitation and upgrading of facilities at Suva Port. The main wharf facilities at Suva Port—constructed 16 years ago, and consisting of King's Wharf, Walu Bay Wharf and Princes Wharf—have been deteriorating rapidly and are in urgent need of repair. At the same time, to meet the changing requirements of shipping (with the development of containerization), upgrading of facilities has become necessary.

An earlier Bank-financed feasibility study revealed extensive structural damage, particularly to King's wharf, and identified the improvements needed in the Port facili-

ties

Philippines LOANS

• Manila Port: \$27 million loan from ordinary capital resources for the development of a fully operative container terminal at Manila International Port through berth improvements, reclamation works, container yard construction and utilities supply.

Of the total foreign exchange cost of the Project, \$35.23 million is to be cofinanced by the Bank (\$22.98 million), exclusive of financing technical assistance for Domestic Container Terminal and interest on other charges during construction, and the Kreditanstalt fur Wiederaufvau (KfW) of the Federal Republic of Germany (\$12.25 million). All other costs will be met by the Government and the Manila International Port Terminals, Inc.

TECHNICAL ASSISTANCE

• Manila Domestic Container Terminal: \$150,000 grant to finance project preparations for the development of a Domestic Container Terminal.

Bert Field reelected president of Queensland Harbour Boards' Association

Mr. A.G. "Bert" Field of Townsville was re-elected president of the Queensland Harbour Boards' Association at the association's 33rd conference held in Brisbane.

It will be his ninth consecutive time.

New security safeguards needed for Queensland ports

Minister for Maritime Services and Tourism (Mr. Max Hooper) wants to see Queensland ports adopt even tighter security and safety procedures for the handling of dangerous ships' cargoes.

Officially opening the 33rd conference of the Queensland Harbour Boards' Association, Mr. Hooper said he had no wish to imply that he did not appreciate the efforts made by the state's ports in the area of security.

However, there was an increasing volume of explosives and other potentially dangerous goods coming into the ports, particularly to service the mining industries.

A wide variety of petro-chemicals, toxic materials, and a range of radio-active substances, also could be listed as "potentially dangerous".

Therefore, greater care was necessary to avoid accidents and sabotage.

Mr. Hooper said new regulations (under the Marine Act) had been drawn up for the handling of dangerous goods and a model set of by-laws aimed at tightening security (under the Harbours Act) had been circulated. He hoped—and urged—that Harbour Boards would adopt the procedures and implement them as soon as time and money permitted. He added: "The consequences of ignoring such recommendations are frightening.

"It is essential that everything be done to ensure the highest possible safety within our ports."

Looking to the future, he said it was possible that the world's fuel and energy crisis would change the operation of harbour boards in that they might have to provide stockpiles of "alternative fuels" for the ships coming to their ports.

Landscape study commissioned: Port of Melbourne

A leading firm of landscape designers has been commissioned by the Port of Melbourne Authority to prepare a landscape strategy study which will, following its adoption, be used to co-ordinate works in different areas of the Port in years to come.

The landscape strategy, and its accompanying set of development guidelines, is to be presented to the Authority in February next year. It will be prepared within the framework of the Authority's policy that public access to the Port area for the purposes of viewing Port activities, or for other passive recreation, should be made available where and when possible, subject to the requirements of Port security, operations, safety and efficiency.

The progressive upgrading of existing leaseholds and other areas under the Authority's control to improve the visual impact of the Port area will also be included in the study.

The guidelines developed will take account of long-term development strategies which the Authority has under consideration.

It is anticipated the landscape guidelines will include potential viewing areas, public access strategies, planting recommendations by area, building form and finish and treatment of the river banks. In addition the guidelines are to include vehicular access and car parking provisions, fencing, signs and noticeboards, lighting and planting and maintenance techniques for recommended species of trees and shrubs.

Rebuilt Opua Wharf can add impetus to Northland export expectations

New Zealand's historic port of Opua was closed in 1977 so that a major maintenance programme could be undertaken. New beams and piles were replaced, where necessary, and the wharf was given a complete new concrete deck into which shipside rail tracks were set.

"Looking ahead, the Northland Harbour Board sees the port coming back into its own—both as partner to the port of Whangarei in handling the area's increasing volume of primary products.

For farmers and producer organisations in the area, it immediately offers a closer shipping base for exports with resultant savings in transport costs.

The Opua wharf can now handle vessels up to 214 metres and with a maximum draft of 8.53 metres, said the boards chairman, Mr. J. Camey.

Farmer organisation spokesmen have greeted the revitalising of Opua with enthusiasm and hope to see a reasonable proportion of Northland production being directed through their own area ports.

"The Northland Harbour Board's decision to restore the Opua wharf to full working condition was made on the basis of its belief in future requirements and the realisation that allowing an asset to be lost through obsolescence was foolish," said the board's general manager, Mr. A.G. McHugh.

The Northland Harbour Board makes no charges for primary produce passing over its wharves, so producers in the area see money saved on the cost of internal transport as money in their pockets and a natural boost to the economy of the whole area.

VOICE — "I would like to know"

Question 8001:

The Cyprus Ports Authority is currently reviewing its systems and procedures regarding the warehousing of goods in the ports stores. I should, therefore, be obliged if you could give us details on the following matters as applicable in your organization:

- 1. What is the relation between your Authority and the customs authorities in connection with the receiving, movement and warehousing of cargo (in and out) and in particular the responsibility of each one of them.
- Whether the period for which cargo remains in the warehouses or other storage areas of the port is determined by the port authorities or by the customs authorities.
- 3. What is the procedure concerning the submission and delivery of the manifest of the ship upon arrival at the port and in particular the involvement of the customs authorities with this regard.
- 4. What are the procedure and methods concerning the collection of duty on inward cargo and the responsibility of the port authorities in this connection.
- 5. What are the particular functions of the customs authorities in the port area and to what degree do they involve themselves in the port operations.
- 6. Literature, laws, by-laws, regulations, forms e.tc. governing the above.

Yours sincerely,

General Manager Cyprus Ports Authority P.O. Box 2007, Nicosia Cyprus

Question 8002:

I am directed to state that, Railway facilities are available in the Chittagong Port Authority. The Railway tracks in the Port area are maintained by our National Railway Authority. But the other functions such as loading, booking etc. are done by the Port Authority. The Chittagong Port Authority intends to re-view the above all Railway operational system in the Port Area.

In the circumstances we will appreciate your advise/information if any on the following issues being practised in defferent port under your Association.

Briefly the following points will be of particular interest to us:—

- The existing Railway system and working in different ports.
- 2. The responsibility of the Railway Authority visa-vis the Port Authority.
- 3. The booking, loading and unloading systems of wagons and its expenditure whether made by the Port or Rly. or by the owner of the cargo.
- 4. Payment of Railway freights whether made directly to the Railway Authority or through Port.
- 5. The merits and demerits of the existing system.

In the context of above, you are requested to communicate your views at the earliest.

Thanking you in anticipation, we will look forward for your co-operation in the matter.

Yours faithfully,

Secretary Chittagong Port Authority Bandar Bhaban, Chittagong P.O. Box 2013, Chittagong Bangladesh

Question 8003:

I am directed to state that, the Chittagong Port Authority maintains a contingent of Police personnel hired from the Ministry of Home Affairs including officers to assist the Port's own Security Forces in guarding Port Installations and also to deal with above all law and order situation in the Port Protected Area.

Although the expenditure towards this Port Police establishment is brone by the Port Administration, we do not get their full time services as they (Police Force) remain very busy with routine police duties in an area much larger than the Port Area. For this reason it has become necessary to review the existing Port Police relationship, with a view to Streamlining Port Security Measures more smoothly and efficiently.

In the circumstances we will appreciate your advise/information if any on the following issues being practised in different Ports under your Association.

Briefly the following Points will be of particular interest to us:

- 1. Set up of Port Police Establishment with number of Police personnel including officers who work with the Port Management.
- 2. Facilities extended to them (Police) by the Port Management besides their annual establishment cost.
- 3. Extent of control exercised by the Port Management over such Police Establishment elaborating the line of control
- 4. Functions and powers of police contingent if any deployed in the Port Area high lighting the difference between National Police and Port Police.
- 5. Recuitment/deputation rules that governs the police establishment in the Port Area.

In the context of above, you are requested to communicate your views at the earliest.

Thanking you in anticipation, we will look forward for your co-operation in the matter.

Yours faithfully,

Secretary Chittagong Port Authority Bandar Bhaban, Chittagong P.O. Box 2013, Chittagong Bangladesh



Thoughtfulness. It's part of our tradition.

One word says it all:
"Okyakusama."
It means you're an honored
quest first, a customer second.



You'll feel the difference it makes the moment you step aboard JAL. Thoughtfulness in providing a hot oshibori towel to freshen up with, a soft pillow you don't have to ask for, a happi coat to relax in. It's our way of showing sincere concern for your every need. Because thoughtfulness for your comfort is part of the traditional service of Japan Air Lines. Worldwide.

The way we are is the way we fly.



Official Carrier for the 12th Conference of IAPH May 23-30, 1981, Nagoya, Japan.



MITSUI Automated Container Terminal System

The Mitsui System can speed up and rationalize container handling to give increased benefits from container transportation. Developed in 1972, this system has proved its efficiency at the busy Ohi Pier, Port of Tokyo, and it could be working for you in solving your container terminal problems, particularly those in the fields of cargo information and operations systems.

- 1. Yard Plan Computer System
- 2. Yard Operation Computer System
- Data Transmission and Oral Communication System
- 4. Transtainer® Automatic Steering System
- Transtainer® Operation Supervising System
- 6. Portainer® Operation Supervising System

- Computer Room
- Gate Office
- Operation Room
- Portainer®
- 6 Rail-Mounted Transtainer®

「大行所の門」「Company」を持ちている。 できる 一年一日のから

E

6 Rubber-Tired Transtainer®



MITSUI ENGINEERING & SHIPBUILDING CO., LTD.

Head Office: 6-4, Tsukiji 5-chome, Chuo-ku, Tokyo, 104 Japan
Cable: "MITUIZOSEN TOKYO", Telex: J22924, J22821
Material Handling Machinery Sales Department Tel. (03) 544-3677
Systems Headquarters Marketing Dept. Tel (03) 544-3272
Overseas Office: New York, Los Angeles, Mexico, London, Duesseldorf,
Vienna, Singapore, Hong Kong, Rio de Janeiro